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**168 North Edwards Street**  
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RECIRCULATED  
DRAFT MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT AND  
INITIAL STUDY

**PROJECT TITLE:** Renewable Energy Permit 2022-02/Barker-Trona 4

**PROJECT LOCATION:** The Project site is located approximately 3 miles north of the unincorporated community of Trona, California. The property is on private land owned by Robbie Barker, Assessor parcel numbers 038-330-32, 038-330-33 and 038-330-34.

**PROJECT DESCRIPTION:** The applicant is applying for a Renewable Energy Permit to construct a 3.0 Megawatt (MW) photovoltaic solar facility using approximately 6,000 fixed single-axis tracker solar panels. The project site is located on 15-acres that are previously graded, flat or gently sloped, highly disturbed and has no natural vegetation, habitat, water features or structures. Prior uses include a private dirt track and a junk yard, both recently removed. The site is approximately 0.03 miles west of Trona Wildrose Road.

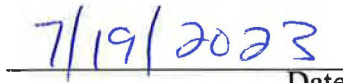
**FINDINGS:**

- A. The proposed project is consistent with goals and objectives of the Inyo County General Plan.
- B. The proposed project is consistent with the provisions of the Inyo County Zoning Ordinance.
- C. Potential adverse environmental impacts will not exceed thresholds of significance, either individually or cumulatively.
- D. Based upon the environmental evaluation of the proposed project, the Planning Department finds that the project does not have the potential to create a significant adverse impact on flora or fauna; natural, scenic, and historic resources; the local economy; public health, safety, and welfare. This constitutes a Mitigated Negative Finding for the Mandatory Findings required by Section 15065 of the CEQA Guidelines.

The 30-day public review period for this Draft Mitigated Negative Declaration will expire on August 20, 2022. Inyo County is not required to respond to any comments received after this date.

Additional information is available from the Inyo County Planning Department. Please contact Project Planner Cynthia Draper (760-878-0265) if you have any questions regarding this project.

  
Cathreen Richards  
Director, Inyo County Planning Department

  
Date



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## **INYO COUNTY PLANNING DEPARTMENT**

### **APPENDIX G: CEQA INITIAL STUDY & ENVIRONMENTAL CHECKLIST FORM**

1. Project title: Renewable Energy Permit 2022-02/Barker- Trona 4
2. Lead agency name and address: Inyo County Planning Department, PO Drawer L, Independence, CA 93526
3. Contact person and phone number: Cynthia Draper: (760) 878-0265
4. Project location: The property is on private land owned by Robbie Barker, Assessor parcel numbers 038-330-32,038-330-33,038-330-34.
5. Project sponsor's name and address: Robbie Barker 82740 Trona Rd., Trona, CA 93562
6. General Plan designation: Residential Estate (RE), SEDA overlay
7. Zoning: Rural Residential (RR-5.0)
8. Description of project: The applicant is applying for a Renewable Energy Permit to construct a 3.0 Megawatt (MW) photovoltaic solar facility using approximately 6,000 fixed single-axis tracker solar panels. The project site is located on 15-acres that are previously graded, flat or gently sloped, highly disturbed and has no natural vegetation, habitat, water features or structures. Prior uses include a private dirt track and a junk yard, both recently removed. The site is approximately 0.03 miles west of Trona Wildrose Road.
9. Surrounding land uses and setting: The property is surrounded by undeveloped land, sparse residential dwellings, and commercial uses (such as equipment storage). Developed areas include the Trona Airport, scattered residences, and scrap yards. The surrounding parcels are highly disturbed, devoid of plants or native habitat. Weed abatement has been performed throughout the area.

<b>Location:</b>	<b>Use:</b>	<b>Gen. Plan Designation</b>	<b>Zoning</b>
North	Vacant	Residential Estate (RE)	Rural Residential (RR-5.0-MH)
South	Developed/Solar	Residential Estate (RE)	Rural Residential (RR-5.0-MH)
East	Vacant/ BLM	State and Federal lands (SFL)/Open space rec (OSR)	Open Space (OS-40)
West	Vacant/ (MS) Misc structure	Residential Estate (RE)	Rural Residential (RR-5.0-MH)

10. Other public agencies whose approval is required: Inyo County Building and Safety, Inyo County Environmental Health, Inyo County Public Works

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

In compliance with AB 52 and Public Resource Code Section 21080.3.1(b), tribes identified as being local to Inyo County were notified via certified letter about the project and the opportunity for consultation on this project. The tribes notified were as follows: The Cabazon Band of Mission Indians, the Torres Martinez Desert Cahuilla Indians, the Twenty-Nine Palms Band of Mission Indians, the Big Pine Paiute Tribe, the Fort Independence Paiute Tribe, the Lone Pine Paiute Tribe, and the Timbisha Shoshone Tribe.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics Resources        | <input type="checkbox"/> Agriculture & Forestry   | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources        | <input type="checkbox"/> Cultural Resources       | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology /Soils              | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology/Water Quality     | <input type="checkbox"/> Land Use / Planning      | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                       | <input type="checkbox"/> Population / Housing     | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                  | <input type="checkbox"/> Transportation           | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire                 | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION**

On the basis of this initial evaluation:

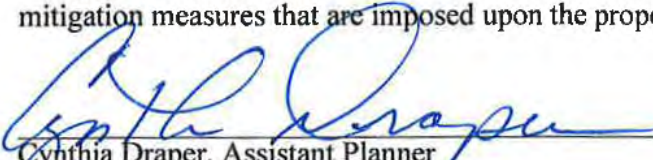
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Cynthia Draper, Assistant Planner  
Inyo County Planning Department

Date 7/19/23

**RECIRCULATED INITIAL STUDY with MITIGATED NEGATIVE DECLARATION  
ENVIRONMENTAL CHECKLIST FORM**

**Renewable Energy Permit 2022-02/Barker- Trona 4**

**REGULATORY BACKGROUND**

The Inyo County General Plan provides a vision for Inyo County’s long-range physical and economic development, including resource development and conservation. The General Plan contains implementing strategies, policies and programs enabling this vision to be accomplished. On March 24, 2015, the Board of Supervisors adopted an amendment to the General Plan known as the Renewable Energy General Plan Amendment (“REGPA”). The REGPA regulates the type, siting, and size of renewable energy solar development projects in the County through adoption of land use policies consistent with the broader goals in the General Plan.

The REGPA differentiates renewable energy solar facilities based on their size and output. It defines “utility-scale” facilities as those generating at least 20 megawatts (MW) for off-site use, consumption or sale. Facilities that generate less than 20 MW may include “commercial-scale” or “community-scale” facilities, depending on whether electricity is produced for off-site use or for use by a specific community. The REGPA states that the County “shall encourage the development of” commercial and community-scale facilities.

The REGPA also designated seven different areas of the County, known as Solar Energy Development Areas (SEDAs), where renewable energy solar facilities would be allowed. Policy LU-1.17 permits utility-scale and commercial-scale facilities to be considered in SEDAs, subject to any necessary environmental review. Renewable energy solar development within a SEDA is allowed in any zoning classification. The Trona SEDA covers an approximately 7.1-mile area in the Searles Valley, north of the unincorporated community of Trona. The REGPA allows 600 acres of renewable energy development in the Trona SEDA.

When the County adopted the REGPA in 2015, it certified a Programmatic Environmental Impact Report (PEIR). The PEIR analyzed the impacts of renewable energy solar development throughout the County. It identified less-than-significant environmental impacts to agriculture and forestry resources, air quality, geology, and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, socioeconomics, transportation and circulation, and utilities and service systems. The PEIR identified potentially significant and unavoidable impacts to aesthetics, biological resources, and cultural resources, and included mitigation measures to reduce these impacts to the extent feasible.

**ENVIRONMENTAL SETTING**

Inyo County covers approximately 10,200 square miles and is located on the east side of the Sierra Nevada Mountain range, within the east-central part of California. The County is primarily rural and undeveloped, characterized by open expanses, wide valleys and mountains ranging from low hills to jagged peaks. Elevations are from 282 feet below sea level within Death Valley National Park to 14,505 feet above sea level (amsl) in the Sierra Nevada

mountains. The climate typically is arid to semi-arid, marked by low precipitation, abundant sunshine, frequent winds, moderate to low humidity, and high evapotranspiration.

The Project is located in the Searles Valley, at the southern edge of the County, north of the unincorporated Trona community, and in the Trona SEDA. As noted above, the SEDA covers approximately 7.1 square miles (4,550 acres). Most of the SEDA is undeveloped. Roughly 60 percent is managed by BLM, with the remainder under private ownership. Developed features include Trona Airport, scattered rural residences, and scrap yards. North of the airport lies Valley Wells, a state historical landmark, consisting of small buildings, abandoned recreational facilities, a desert golf course and well field. The Trona area is sparsely populated, containing less than 2,000 people.

Elevations within the Trona SEDA range from 2,100 feet to 1,650 feet amsl. The average January temperatures range from 32-58 degrees Fahrenheit, and in July from 73-105 degrees. Annual precipitation is low, averaging 3.98 inches. The habitat consists mainly of alkali desert scrub flats with ephemeral washes, with an open composition and canopy cover less than 50 percent.

Topography in the Trona SEDA, within the center of the northern Searles Valley, is generally level or gently sloped. Steeper terrain occurs to the west (the Argus Range), east, and north (the Slate Range). Surface exposures consist predominantly of late Quaternary alluvial/lake deposits, sandy to loamy topsoil with Mesozoic granitic intrusive rocks to the west, and areas to the east and north exhibiting an assemblage of Precambrian/Paleozoic metasediments, Mesozoic granitic intrusives, Mesozoic and Tertiary volcanics, and older Quaternary alluvial/sedimentary deposits. No mapped faults exist in the Searles Valley. The nearest mapped fault is the Panamint Fault, approximately 10 miles east.

The Trona SEDA is within the South Lahontan Basin, as designated in the 1995 (as amended) Lahontan RWQCB Water Quality Control Plan for the Lahontan Region (Basin Plan). The Trona SEDA is within the areal extent of the Searles Valley Groundwater Basin (Searles Basin), which includes an area of approximately 197,000 acres, and a water-bearing strata consisting of a thick (at least 750 feet) sequence of younger unconsolidated alluvial deposits and underlying (locally semi-consolidated) older alluvium.

Average reported municipal/irrigation well depths in the Searles Basin are approximately 300 feet (DWR 2003). Estimated groundwater storage capacity is 2.1 million acre-feet. Groundwater is characterized mainly as calcium-sodium-bicarbonate or sodium-calcium bicarbonate in nature, with groundwater near Searles Lake described as sodium-chloride in nature. The northwestern and southwestern portions of the Searles Basin exhibit generally good water quality (with locally elevated fluoride and nitrate levels), while areas near Searles Lake have poor water quality with TDS levels of between 12,000 and 420,000 mg/l (DWR 2003).

The Trona SEDA is within the Great Basin Valleys Air Basin (Air Basin). The Air Basin is named for its geological formation of valleys surrounded by mountains. Air rises and sinks due to the heat in the valleys and height of the mountains, which causes the air to settle in the valleys and low-lying areas. Areas in the Air Basin are under the jurisdiction of the Great Basin Unified Air Pollution Control District (GBUAPCD), which regulates air pollutant emissions for all stationary sources within the Air Basin.

In 1987, the Trona area was designated as a PM-10 nonattainment area by the United States EPA. The main source of PM-10 emissions in the region is the dry Owens Lake lakebed, which is located approximately 50 miles northwest of the Project. At the time, the Trona area was part of the Coso Junction Planning Area. In 2002, the US EPA redesignated the Searles Valley into three separate areas, and made a finding of attainment for Trona. (Federal Register, 2002a, 2002b.)

## **PROJECT DESCRIPTION**

The applicant has applied for two renewable energy permits for two separate photovoltaic (PV) solar facilities on contiguous land (“Project”). The applicant submitted two separate applications because each facility would separately connect to the existing Southern California Edison (SCE) 33-kV transmission line passing through the area. This Initial Study studies the impacts of both applications as one Project because both facilities have a common applicant, are in proximity to each other, and would have similar impacts.

The first application (No. 2022-01), known to the applicant as “Trona 7,” proposes a PV solar facility on a five-acre parcel, consisting of approximately 2,300 single-axis tracker solar panels that will produce approximately 1.2 megawatts (MW) of electricity. The five-acre site is graded and highly disturbed, flat or gently sloped, and has no natural vegetation, habitat, water features or structures. The site is approximately 0.3 miles west of Trona Wildrose Road, which is not a designated scenic highway or scenic corridor.

**The second application (No. 2022-02), also known as Trona 4, proposes a PV solar facility within a 15-acre parcel that is contiguous (i.e., has a common corner) with the Trona 7 site. The facility would generate 3.0 MW of electricity utilizing approximately 6,000 single-axis tracker solar panels. The site also is previously graded, flat or gently sloped, highly disturbed and has no natural vegetation, habitat, water features or structures. Prior uses include a private dirt track and a junk yard, both recently removed. The site is approximately 0.03 miles west of Trona Wildrose Road.**

Both proposed facilities (collectively, the 20-acre “Project Area”) are located approximately three miles north of the Trona community and one mile west of the Trona Airport. The elevation of the Project Area is approximately 1,700 feet amsl. It has no history of agricultural use and is not federally managed. According to FEMA, the Project Area is within an Area of Minimal Flood Hazard.

Zoning in the Project Area is rural residential. Approximately five residential structures are within 0.5 miles of the Project Area, located mostly south and west. Two of these structures are approximately 400 feet from the edge of the Project Area (most of the Project Area is farther to the east and extends up to approximately 2,300 feet distant from these structures). Other land use in 0.5 miles of the Project Area include storage of equipment and vehicles, scrap yards and storage units. Representative photographs are included in Appendix A. Agricultural use of surrounding land is minimal. Agriculture and farming are not significant land uses in the area.

Construction will consist of limited grading in some areas, as the Project Area is already predominantly level and graded. Appendix B (Biological Resources Evaluation) documents the onsite conditions. Shallow trenching will be required for underground conduits, and one 20x20-foot concrete pad will be placed on each site to support the transformers. Following grading and

trenching, metal poles or masts will be installed into the ground to support the solar panels. Grading and trenching will require approximately two days. Pole and panel installation will take an estimated two months. Appendix C contains an equipment list, operating hours and projected air emissions.

Dust control measures will be used at all times during construction, and during Project operations (the control of fugitive dust is critical to solar operations, as panels coated by dust do not function at full capacity). Dust controls during construction will consist of a watering truck, the application of crushed limestone to the ground, and application of a non-toxic clay polymer known as EarthGlue (specifications in Appendix D). Stabilized construction entrance and exits will be used to reduce sediment trackout onto the adjacent public roadway. During operations, limestone and EarthGlue will control dust.

Once installed, the solar panels will reach a maximum height of 12 feet above the ground (or less, as the panels change slightly in height as they rotate slowly throughout the day to track the sun). Panels will feature anti-reflective coatings to reduce daytime glare and reflectivity. Each facility will be fenced to prevent unauthorized access. Representative photographs of the panels and tracker supports are in Appendix E, showing a recently constructed solar project located on adjacent land (described in more detail below) that uses the same equipment design and components to be used by the Project.

The Project is the second renewable energy solar project proposed for the Trona SEDA. The prior project, on 10 acres adjacent to the Project Area, was approved and has been constructed by the applicant (Nos. 2018-01 and 2021-01). Another 10-acre project is reportedly in development to the south. Combined, the existing, proposed and potential future renewable solar projects are 40 acres, and account for a small part of the 600 acres allocated by the REGPA to solar projects in the Trona SEDA. Future solar projects in the Trona SEDA may not be possible, however, according to the applicant, until SCE improves its transmission infrastructure to increase its transmission capacity.

## **AGENCY COORDINATION AND PUBLIC INVOLVEMENT**

Public notifications concerning the Project began approximately seven months ago. On November 14, 2022, the County gave public notice of the availability of a Draft Initial Study and Negative Declaration for each of the two applications. The 30-day review period ended on December 17, 2022. No comments were received.

A public hearing was set before the Planning Commission on March 23, 2023 to approve both applications. Two days before the hearing, the County received public comments from a nearby landowner, and as a result, the County postponed the hearing to May 3, 2023. Prior to the May hearing, the County received additional public comments. As a result, the County postponed the hearing again, revised the Initial Study and Mitigated Negative Declaration, and has recirculated the Initial Study and Mitigated Negative Declaration pursuant to Section 15073.5 of the CEQA Guidelines.

## **TRIBAL OUTREACH**

In accordance with AB 52 and Public Resource Code Section 21081.3.1(b) tribes identified as being local to Inyo County were notified via certified letter about the project and the opportunity for consultation on this project. The tribes were notified as follows: The Cabazon Band of



Mission Indians, the Torres Martinez Desert Cahuilla Indians, the Twenty-Nine Palms Band of Mission Indians, the Big Pine Paiute Tribe, the Fort Independence Paiute Tribe, the Lone Pine Paiute Tribe, and the Timbisha Shoshone Tribe.

## **TIERED DOCUMENT**

A program EIR evaluates the environmental consequences of a series of actions that together constitute a large project and share common geographic, regulatory and environmental attributes. (Cal. Code of Regs., tit. 14, § 15168(a).) If the program EIR facilitates the approval of activities within a program, the agency must scrutinize those activities, as they arise for approval, to determine if additional environmental review is needed.

An agency's assessment of the adequacy of a prior program EIR for the approval of specific activities involves an analysis of whether the activity falls within the scope of the prior EIR and whether the activity will give rise to environmental impacts that were not previously analyzed in the program EIR. (Cal. Code of Regs., tit. 14, § 15168(c).) If impacts were adequately assessed, the agency can avoid further environmental documentation. (Id., tit. 14, § 15168(c).) If further review is needed, the "tiered" document should analyze only those effects that may be significant but were not analyzed in the program EIR, or that were considered significant but can be mitigated or avoided through further analysis. (Id., tit. 14, § 15152(d); see also Pub. Resources Code, §§ 21081(a)(1), 21094(c).)

The PEIR was a program EIR pursuant to section 15168 of the CEQA Guidelines. The County has determined that certain of the Project's potential impacts are adequately addressed in the PEIR. Others require site-specific analysis and are properly assessed in a Mitigated Negative Declaration that will integrate enforceable mitigation measures from the PEIR to ensure that they are enforced at the Project level. The County is treating the Mitigated Negative Declaration as a tiered document under the PEIR. The PEIR can be found at the following website link, or by typing or pasting the following text into an internet browser:

<https://www.inyocounty.us/sites/default/files/2023-04/Final%20PEIR%20Volme%20II.pdf>

## CHECKLIST

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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**I. AESTHETICS** – Would the project:

a) Have a substantial adverse effect on a scenic vista?                       

*No. The Project is not located near a scenic vista. The Project is near the valley floor within an area that is visually characterized by junk yards, and outdoor storage of vehicles and equipment in a high desert environment. The Project is within the Trona SEDA, which has its location and boundaries in an area that lacks an abundance of scenic resources. (PEIR, 4.1-15.)*

*The Project is consistent with the PEIR analysis and mitigation measures. The potentially-applicable mitigation measures (AES-1 through 6, and 9) require that site-specific visual studies be prepared for utility-scale projects (i.e., generating greater than 20 MW) and for smaller-scale projects determined by a qualified county planner to have a potential to impact visual resources in individual SEDAs. Here, the Project involves a small, commercial-scale facilities that, due to its size and location, have been determined by a qualified planner to not have a potential to impact visual resources, including a scenic vista.*  
<https://www.inyocounty.us/sites/default/files/2023-04/Final%20PEIR%20Volme%20II.pdf>

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?                       

*No. The Project Area has previously been disturbed with roads, storage units, and weed abatement. It has previously been graded and is devoid of natural resources such as rock outcroppings and trees. No removal of vegetative life, rock outcroppings, or historic buildings within a scenic state highway will occur. It is not located within or adjacent to any designated scenic highways mapped by the California Department of Transportation. The Project involves the placement of PV solar panels that reach a maximum height of 12 feet.*

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly-accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?                       

*No. The Project will not affect the overall scenic integrity of the area. The Project Area is barren of natural resources that provide scenic value. The Project is in a rural, non-urbanized area and surrounded by property owners that frequently use the area for storage and scrap yards. Public views are mainly from Trona-Wildrose Road, and the Project will not substantially*

*degrade the existing visual character of the area from the perspective of passing motorists as the area is characterized by scrap yards and outdoor storage of materials. (Appendix A.) The low height of the panels (12 foot maximum, comparable to a single-story house) would not obstruct views of the Argus range to the west or the Slate range to the east.*

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

*No. Due to the small size of the facilities, and their location and design, the Project will not significantly impact daytime or nighttime views. Construction will take place during the daytime hours only. Operation will not involve new light sources that affect nighttime views. The Project will use solar panels that integrate anti-reflective technology to minimize daytime glare, which is consistent with PEIR Mitigation Measure AES-6 (requiring that certain projects treat solar panels with anti-reflective coating). The boundaries and locations of SEDAs, including the Trona SEDA, were sited in areas without an abundance of scenic resources. (PEIR, 4.1-15.)*

\* \* \*

**II. AGRICULTURAL AND FOREST RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use?

*No, the Project is not located on land designated as farmland.*

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

*No, the Project is not located on land zoned exclusively for agriculture. Inyo County has no Williamson Act contracts.*

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

*No, the Project Area does not include forest land or timberland, or land zoned for forest land, timberland, or Timberland Production.*

d) Result in the loss of forest land or conversion of forest land to non-forest use?

*No, the Project is not located on forest land.*

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

*No, the Project is not located on farmland and is not conducive to future use as farmland. The Project Area has no history of agricultural production. To the extent that agricultural activities may exist on surrounding properties, the Project would have no impact on or interference with those activities.*

\* \* \*

**III. AIR QUALITY:** Where available, the significant criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

*No. There is no applicable air quality plan for the area in which the Project is proposed. The Project is in an area considered to be in attainment for PM-10 in reference to National Ambient Air Quality Standards. The predominant air quality concern is windblown dust. The applicant will control dust during construction by standard techniques that include use of a water truck to wet down disturbed areas, the use of limestone to stabilize the ground surface, and application of dust suppressants including EarthGlue, which will ensure there are no significant impacts. (See Appendix C, Air Quality and Greenhouse Gas Memorandum). The applicant will be conditioned to obtain any required permits, and follow best management practices, required by the GBUAPCD.*

*Additionally, the Project is consistent with the PEIR analysis and mitigation measures. The GBUAPCD considers short-term construction equipment exhaust emissions to be less than significant. (See PEIR, p. 4.3-10.) The potentially-applicable air quality mitigation measures (AQS-1 through 3) applied to utility-scale projects of greater than 20 MW and did not apply to*

*smaller, commercial-scale projects unless determined to be needed on a case-by-case basis by a qualified County planner. Here, the Project involves a small commercial-scale facility that does not present significant air quality impacts. (See Appendix C.) Due to the size, location, low emissions well below all applicable thresholds (Appendix C) and design that incorporates dust controls and suppressants, AQS-1 through 3 are unnecessary to apply.*

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

*No. The Project is located in an area in attainment for PM-10. The Project will be in compliance with air quality standards, as the applicant is conditioned to obtain any required permits and to follow best management practices as set forth by GBUAPCD. The GBUAPCD considers short-term construction equipment exhaust emissions to be less than significant. PEIR, p. 4.3-10.) Project construction and operations will generate emissions that are well below all applicable air quality thresholds and standards. (See Appendix C.)*

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

*The Project is not in an area that is in non-attainment under any applicable standard. The operation of the solar project is not anticipated to result in a substantial increase in vehicular or stationary emissions once installed. As a result, long-term emissions resulting from Project operation are anticipated to be well below all applicable thresholds. (See Appendix C.) The GBUAPCD considers short-term construction equipment exhaust emissions to be less than significant. PEIR, p. 4.3-10.) The Project would not contribute to a cumulatively considerable net increase in non-attainment pollutants during operation, and impacts would be less than significant.*

d) Expose sensitive receptors to substantial pollutant concentrations?

*No, the proposed Project will not expose sensitive receptors to any new substantial pollutant concentrations. The construction process is low impact, involving minor leveling and digging of shallow trenches for placing underground conduits, and installation of a single 20'x20' concrete pad for a transformer. There are no nearby schools or hospitals. Few houses are in proximity to the Project Area. During construction, windblown dust will be controlled by watering, the application of limestone, and the application of a dust suppressant. Vehicle emissions will be well below applicable thresholds of significance during construction and operations. (See Appendix C.) During Project operation, the solar facility will not produce pollutants.*

e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

*The proposed Project will not produce objectionable odors during the life of the operation. The Project will use typical construction techniques and the odors would be typical of most construction sites and temporary in nature.*

\* \* \*

#### **IV. BIOLOGICAL RESOURCES:**

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

*No. The Project Area has been inspected by County planning staff and by a qualified biologist. No CDFW or USFWS designated special status species were found in Project Area. The Project Area is graded, cleared of any significant vegetation, and contains no native habitat. No impacts through habitat modification are anticipated.*

*A Biological Resource Evaluation (BRE) was performed by qualified biologists. (Appendix B.) The BRE surveyed the Project Area and a 250-foot buffer. No significant biological resources (plant or wildlife) were found present in the Project Area or buffer. In particular, the BRE found no evidence of desert tortoise (*Gopherus agassizii*) or suitable foraging habitat or other habitat for desert tortoise. The BRE also found no evidence of Mohave ground squirrel (*Xerospermophilus mohavensis*) or associated burrows and noted that the nearest population of Mohave ground squirrel is 8.2 miles southwest, and the nearest core population is 25 miles northwest.*

*The BRE concluded that the desert kit fox (*Vulpes macrotis arsipus*) could potentially visit the Project Area as a transient forager, but the Project Area and surroundings lack optimal denning habitat due to existing ground disturbance. The BRE also found a potential for nesting birds or raptors to forage and/or nest in the Project Area or buffer, using utility poles, although no active or inactive nests were observed. Nesting migratory birds and other raptors species, protected by the Migratory Bird Treaty Species Act, were not observed but have a potential to occur in or near the Project Area and surrounding areas. (Appendix B.)*

*To mitigate the potential for impacts to desert kit fox and protected bird species, the BRE recommended Best Management Practices and avoidance measures including: a pre-activity survey, a vehicle speed limit of 20mph, covering of trenches, and proper disposal of food items, as set forth more specifically in the BRE. With these measures, the Project is not expected to significantly impact candidate, sensitive, or special status species.*

*The Project is consistent with the PEIR. The biological resource mitigation measures identified in the PEIR apply to utility-scale projects with greater than 20 MW of generating capacity. The PEIR provides that "small scale solar energy projects are considered to result in no impacts under CEQA" and the mitigation measures in the PEIR do not apply to such projects unless a qualified County planner determines, on a case-by-case basis, that implementation of the PEIR mitigation measures is necessary. (PEIR, p. 4.4-122-123.) If the planner determines, after review, that a proposed commercial-scale project has a potential to impact biological resources, the PEIR mitigation measures shall be implemented "as determined necessary" by the planner. (PEIR, p. 4.4-123.) Here, the Project has no potential to impact biological resources other than potential impacts to desert kit fox and bird species. The mitigation measures in the BRE will ensure that the potential impacts to desert kit fox and bird species are less than significant, and it is unnecessary to implement any additional mitigation measures from the PEIR.*

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

*No, there is no identified riparian habitat or other sensitive natural community in the Project Area or in close proximity that would be affected by the Project. The USFWS National Wetlands Inventory (USFWS 2014b) shows no freshwater wetlands near the Project Area. No protected natural areas are located within the Trona SEDA.*

c) Have a substantial adverse effect on state or federal protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

*No, there are no federally protected wetlands in or near the Project Area, nor would the nature of the Project cause fill material or Project contaminants to enter flowing water.*

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

*No, although the Project Area could potentially have occurrences of wildlife species, the Project will not interfere with migratory fish or wildlife species. As stated in the BRE, there are no known wildlife movement corridors or habitat linkages that intersect the Project Area. The Project Area is within a highly disturbed area and provides minimal linkage between suitable natural habitats for most wildlife species. The BRE anticipates no substantial movement of wildlife onto or from the Project Area.*

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

*No, there are no local policies or ordinances in place protecting biological resources that pertain to the Project Area.*

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

*No, there are no adopted habitat or conservation plans that affect the Project Area. The proposed Project is within an area specifically designated for solar energy development pursuant to the REGPA.*

**Mitigation Measures:** *The applicant shall implement all Best Management Practices recommended in Section 6 of the BRE (i.e., pre-activity surveys; avoidance buffers for desert kit fox; Worker Environmental Awareness Training Program; speed limit of 20-mph; covering of trenches deeper than two feet at the close of work day; inspection of pipes and culverts greater than four inches before burial; trash and food items onsite must be discarded into closed containers; no pets should be permitted onsite).*

\* \* \*

**V. CULTURAL RESOURCES:** Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

*No, the Project will not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. The Project Area is vacant and undeveloped. It does not contain resources listed in, or determined to be eligible by, the State Historical Resources Commission for listing in, the California Register of Historical Resources, or any local register of historical resources. The Project Area also does not contain any known structures, features or sites that may be historically significant.*

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

*No, the Project does not contain any known archaeological resources, and will not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. Project construction requires limited ground-disturbance on land that is already flat, making the disturbance or discovery of unanticipated cultural, archaeological, or historical resources unlikely.*



*If any archaeological or cultural resources are inadvertently discovered in the Project Area, work shall immediately desist and County staff shall be immediately notified per Chapter 9.52, Disturbance of Archaeological, Paleontological and Historical Features of the Inyo County Code. The County will then work with the operator and local tribal members, including tribal THPOs, to develop a plan for preservation, protection, or relocation of the resource. With this mitigation measure, the Project will not cause an adverse change in the significance of an archaeological resource pursuant to Section 15064.5*

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

*No, there are no known human remains or burial sites in the Project Area. Additionally, it is unlikely that such remains would be discovered due to the minimal nature of earth-disturbance on the Project site. However, if human remains are uncovered, the discovery would be treated in the same manner as an archeological resource described in (V b) above (i.e., work would cease immediately and remain stopped until a plan was developed for preservation, protection, or removal).*

\* \* \*

**VI. ENERGY:** Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

*No, the Project is to construct a PV solar facility, totaling approximately 3.0 MW of generating capacity, that uses only a small amount of energy, and is required to meet California building standards including green and title 24 standards.*

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

*No, the Project is to construct a PV solar facility, totaling approximately 3 MW of generating capacity, located in one of the counties solar energy development areas (SEDAs), as identified by the General Plan. The project will generally advance state and local plans for renewable energy, rather than conflict with or obstruct such plans.*

\* \* \*

**VII. GEOLOGY AND SOILS:** Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

*No, the Project is not in an Alquist-Priolo zone. The Project operates with little human intervention and would not expose people to significant risk of injury. In addition, the nature of the solar panels, and their low height, does not make them readily susceptible to adverse effects during seismic activity. Also, subsequent to the approval of the permit, the applicant shall work with the Inyo County Department of Building and Safety to ensure any building activities meet State and County Codes.*

- ii) Strong seismic ground shaking?

*No, the State Geologist has not mapped any faults in the Searles Valley in the vicinity of the Project. In addition, seismic activity and ground shaking can occur anywhere in the region, but compared to much of the rest of California, this is a less than average seismically active area. The California Building Code ensures that structures be constructed to required seismic standards in order to withstand such shaking.*

- iii) Seismic-related ground failure, including liquefaction?

*No, the Project is not within an area of soils known to be subject to liquefaction.*

- iv) Landslides?

*No, the Project Area is flat or gently sloping, and is not in an area prone to landslides.*

- b) Result in substantial soil erosion or the loss of topsoil?

*No, Project construction is limited to trenching for conduits, and minor grading to level the ground surface as needed. The limited scale of ground disturbance is not expected to result in a risk of substantial soil erosion or loss of topsoil, and in addition, the placement of limestone will stabilize the surface to protect against the low risk of erosion.*

- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

*No, the proposed Project is not located in an area with a geologic unit or soil that is known to be unstable. If any questions arise about the quality of the soil during the development of the Project, the applicant shall work with Inyo County's Building and Safety Department to employ the proper design standards that mitigate for expansive soils.*

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

*No, the proposed Project is not located in an area with a known expansive soil type. If any questions arise about the quality of the soil during the development of the Project, the applicant shall work with Inyo County's Building and Safety Department to employ the proper design standards that mitigate for expansive soils.*

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

*No, the soils are compatible with septic tanks and other wastewater disposal systems, although the Project is not designed to have either septic tanks or wastewater disposal systems.*

f) Directly or indirectly destroy a unique paleontological resource or site unique geologic feature?

*No, the Project Area does not include any unique paleontological or geologic features.*

\* \* \*

**VIII. GREENHOUSE GAS EMISSIONS:** Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

*No. GHGs generated during the construction phase would be minimal and below all applicable thresholds. (See Appendix C.) GHGs during Project operation would be virtually non-existent, and not present a significant impact, because the solar facilities do not generate any GHGs except for occasionally visits (estimated weekly) by the applicant in a light vehicle to monitor the facilities.*

*The Project is consistent with the PEIR. The PEIR identified mitigation measures applicable mainly to utility-scale projects with greater than 20 MW of generating capacity. The PEIR provides that "small scale solar energy projects are considered to result in no impacts under*

*CEQA” and the mitigation measures in the PEIR do not apply to such projects unless a qualified County planner determines, on a case-by-case basis, that implementation of the PEIR mitigation measures is necessary. (PEIR, p. 4.7-12.) If the planner determines, after review, that a proposed commercial-scale project has a potential to generate a significant GHG impact, the PEIR mitigation measures shall be implemented “as determined necessary” by the planner. (PEIR, p. 4.7-12.) Here, the Project has no potentially significant GHG impacts, in light of the small scale of the Project and limited GHG emissions that would occur during construction. (Appendix C.)*

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

*No, the proposed Project will not conflict with any plan, policy or regulation adopted for the purpose of reducing GHG emissions. (Appendix C.)*

\* \* \*

**IX. HAZARDS AND HAZARDOUS MATERIALS:** Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

*No. The proposed Project will produce a small amount of waste associated with operational maintenance activities. PV wastes include broken and rusted metal, defective or malfunctioning modules, electrical materials, empty containers, and other miscellaneous solid materials. These wastes will be generated infrequently. Most of this material will be collected and delivered back to the manufacturer for recycling or disposed of according to legal requirements. The presence of such wastes onsite would not pose a risk to surrounding properties and transporting it off site poses no threat or risk due to the inert nature of the waste materials.*

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

*No. The proposed Project will not involve the use of a significant hazardous material. The operation of a PV solar facility does not involve the presence of any liquid wastes or hazardous materials readily capable of migrating to off-site properties. No battery storage will occur on site, or associated hazardous materials, as the solar facilities will connect directly to existing power lines operated by SCE. No significant hazard to the public or environment through a reasonably foreseeable upset or accident that could result in the release of hazardous materials is anticipated.*

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials,

substances, or waste within one-quarter mile of an existing or proposed school?

*No. The proposed Project is not within one-quarter mile of an existing or proposed school, nor will it emit hazardous emissions, nor involve the handling of acutely hazardous materials, substances, or waste.*

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

*No, the proposed Project is not located on a site included on a list of hazardous material sites compiled pursuant to Government Code section 65962.5.*

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the project area?

*No. The Project operates passively and with little human intervention, and there will be no people typically working in the Project Area that could be affected by airport operations. The Project also does not pose a danger to Trona Airport maintenance workers because the airport is not a public use airport. Additionally, the airport is not used with enough frequency to pose a danger to anyone working in the Project Area.*

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

*No, the project will not physically interfere with an adopted emergency plan or emergency evacuation plan.*

g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

*No, risk of loss, injury, and death involving wildland fires are not significant from this Project. Fire risks are identified as moderate at the Project Area, and no areas in proximity to it can be considered urbanized. Land surrounding the Project Area are not heavily vegetated and there are only a few residences in the proximity; therefore, the risk of loss, injury, or death involving*

wildland fires is less than significant, and any potential risk is further mitigated by compliance with California Building Standards.

\* \* \*

**X. HYDROLOGY AND WATER QUALITY:** Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

*No. The Project will not violate any water quality standards or waste discharge requirements. The Project Area is pre-disturbed. The Project Area is in a region characterized by a low level of precipitation. Project construction will involve some trenching and minor grading to level the land, which does not present a significant risk of violating any water quality standards or substantially degrading surface or groundwater quality. The applicant intends to use stabilized construction entrance and exits would be installed at driveways to reduce tracking of sediment onto adjacent public roadways. The Project is subject to regulation by the Lahontan Regional Water Quality Control Board and the Inyo County Environmental Health Department and will meet all applicable requirements.*

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

*No. The Project will not have any effect on local groundwater. The project will not use local groundwater for its water needs, which are limited to dust control. All groundwater needs will be supplied by mobile trucks supplying water to the job site. Water demands are estimated at 40,000 gallons/week for dust control and site preparation and water will be trucked in from the Searles Domestic Water Company, located in Trona. The Project will not introduce any significant new areas of impervious surfaces that will prevent groundwater recharge.*

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on or off-site?

*No. The Project proposes extremely minimal grading and no new impermeable or impervious surfaces. Other than installing a small concrete pad, no paving or other activities will increase the number of impermeable surfaces that could cause erosion or siltation. No drainage patterns*

*will be altered. Other than rare storm related overland run-off situations, no water passes over or through the Project Area.*

- ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?

*No. The Project will not significantly change the landscape or existing runoff patterns or redirect or block flood flows. No drainage patterns or rates of runoff will be altered by the Project.*

- iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

*No. The Project is proposed in an area that is already disturbed and will have no substantial changes to runoff patterns. No increase in stormwater runoff will occur as a result of the Project.*

- iv) impede or redirect flood flows?

*No, the Project is in an area that is already disturbed and is not located in a flood hazard area.*

- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

*No, the Project is in an area that is already disturbed, and is not located in a flood hazard, seiche or tsunami zone. Note that the BRE identified a potential surface water drainage based on prior mapping but no evidence of any such feature exists onsite and the mapping is therefore considered to be in error or outdated.*

- e) Conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan?

*No, the Project will not affect compliance with or implementation of the Lahontan Region water quality control plan and is not in an area included in a sustainable groundwater management plan.*

\* \* \*

**XI. LAND USE AND PLANNING:** Would the project:

a) Physically divide an established community?

*No, there is no established community in the vicinity of the Project, and the Project would not physically divide such a community.*

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

*No, the Project is consistent with the current zoning and advances the goals for renewable energy generation for the southern portion of the county, as described in the REGPA. This part of the Trona area also is explicitly called out and designated for solar energy generation as part of the southern Trona SEDA.*

\* \* \*

**XII. MINERAL RESOURCES:** Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

*No. The Project Area has no known mineral resources of value to the region or state. The Project Area is not in a mapped area of regional or statewide significance by the State Mining and Geology Board. Development of the surface for solar generation would not in any event result in the permanent loss of mineral resources unexpectedly in this location.*

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

*No, there are no known locally important mineral resources delineated in any land use plan that would be affected by the Project.*

\* \* \*

**XIII. NOISE:** Would the project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan



or noise ordinance, or other applicable standards of other agencies?

*All potential noise impacts are within the scope of the PEIR analysis and will be subject to the PEIR mitigation measures. The PEIR evaluated the impacts of construction noise, including the use of construction equipment for grading, trenching, mast installation, installation of concrete footings, movement of heavy equipment and transportation of materials by truck. The PEIR also listed the individual equipment types that would be used to install a solar panel array, and the estimated noise levels associated with each item of equipment. (See PEIR, pp. 4.12-16 – 4.12-18.) The Project would use construction equipment of the types listed in the PEIR, and follow a construction process consistent with, or less impactful than, that anticipated in the PEIR. In this regard, the PEIR focused on utility-scale solar projects. The Project is a smaller, commercial-scale Project that will utilize a construction process that is comparatively light and short term in comparison to utility-scale projects. Trenching and grading will take two days using one grader, one backhoe and a water truck. Panel installation will occur over an estimated two months. No nighttime construction will occur. The Project does not present noise impacts that substantially differ from, or that are more impactful than, those analyzed in the PEIR. As such, the Project is within the scope of the PEIR pursuant to CEQA Guidelines section 15168(c)(2).*

*The PEIR adopted Mitigation Measure MM NOI-2 (“Implement construction noise reduction measures”) to ensure that construction noise impacts are avoided or reduced below a level of significance and would have no significant unavoidable adverse impacts. (PEIR, pp. 4.12-18.) The PEIR listed the following five mitigation measures:*

*If utility scale solar development resulting from implementation of the REGPA is proposed within 500 feet of a residence or other noise sensitive receptor, the following measures, in addition to applicable BMPs and related information from REAT’s Best Management Practices and Guidance Manual (REAT 2010), shall be implemented to reduce construction noise to the extent feasible:*

- Whenever feasible, electrical power will be used to run air compressors and similar power tools.*
- Equipment staging areas will be located as far as feasible from occupied residences or schools.*
- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.*
- Stationary equipment shall be placed such that emitted noise is directed away from sensitive noise receptors.*
- Stockpiling and vehicle staging areas shall be located as far as practical from occupied dwellings.*

*NOI-2 incorporated certain best management practices (BMPs) from REAT’s Best Management Practices and Guidance Manual (REAT 2010) for desert renewable energy projects. In regard to potential noise impacts, the manual lists 10 BMPs:*

- 1) *Ensure noisy construction activities (including truck and rail deliveries, pile driving and blasting) are limited to the least noise-sensitive times of day (i.e., weekdays only 45 between 7 a.m. and 7 p.m.) for projects near residential or recreational areas.*
- 2) *Consider use of noise barriers such as berms and vegetation to limit ambient noise at plant property lines, especially where sensitive noise receptors may be present.*
- 3) *Ensure all project equipment has sound-control devices no less effective than those provided on the original equipment. All construction equipment used should be adequately muffled and maintained. Consider use of battery powered forklifts and other facility vehicles.*
- 4) *Ensure all stationary construction equipment (i.e., compressors and generators) is located as far as practicable from nearby residences.*
- 5) *If blasting or other noisy activities are required during the construction period, notify nearby residents and the permitting agencies 24 hours in advance.*
- 6) *Properly maintain mufflers, brakes and all loose items on construction and operation related vehicles to minimize noise and ensure safe operations. Keep truck operations to the quietest operating speeds. Advise about downshifting and vehicle operations in residential communities to keep truck noise to a minimum.*
- 7) *Use noise controls on standard construction equipment; shield impact tools. Consider use of flashing lights instead of audible back-up alarms on mobile equipment.*
- 8) *Install mufflers on air coolers and exhaust stacks of all diesel and gas-driven engines. Equip all emergency pressure relief valves and steam blow-down lines with silencers to limit noise levels.*
- 9) *Contain facilities within buildings or other types of effective noise enclosures.*
- 10) *Employ engineering controls, including sound-insulated equipment and control rooms, to reduce the average noise level in normal work areas.*

*The western and northwestern edge of the Project Area is approximately 400 feet from two residential structures located westerly of the Project Area. Under CEQA Guidelines section 15168(c)(3), the Project will be subject to MM NOI-2 for the portions of the Project Area within 500 feet of the residential structures.*

*Once the Project is constructed, operational noise sources will be limited to pad-mounted transformers and tracker array motors. Transformers will be located farther than 500 feet from a residence or other noise-sensitive land use and would not require further analysis under MM NOI-1 in the PEIR. Tracker motors generate low noise levels (see PEIR Table 4.12-4) and are sufficiently far from noise-sensitive land uses to have no potential noise-related impacts and to not require further noise study or mitigation. (See PEIR, p. 4.12-19.) As such, the operational impacts are expected to be less than significant.*

b) Generation of excessive groundborne vibration or groundborne noise levels?

*No, the Project involves relatively light ground disturbance with few vehicles. No excessive groundborne vibration or groundborne noise is expected. Considering the types of equipment that will be used, impacts associated with groundborne noise or vibration would be within the scope of the PEIR and less than significant. (See PEIR p. 4.12-15.)*

c) For a project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

*No. Trona Airport is not public, nor is it used with frequency, and it is typically used by light aircraft only. The proposed Project will have minimal noise levels due to its nature and will not create excessive noise levels for personnel working near the Project Area. The Project Area is not immediately below any established flight path and persons working at the Project Area would not be exposed to any significant level of aircraft noise.*

**Mitigation Measures:** *All potential impacts are within the scope of the PEIR analysis. The Project will be subject to MM NOI-2 for the portions of the Project Area within 500 feet of residential structures.*

\* \* \*

**XIV. POPULATION AND HOUSING:** Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

*No. The Project is not likely to induce any population growth. The Project Area requires few maintenance personnel and will be monitored mostly remotely from offsite locations. No new residents are expected to result from the Project.*

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

*No, the proposed Project will not displace existing housing or create a situation where replacement housing will be necessary. No housing currently exists in the Project Area. No existing housing will be removed to construct or operate the Project. The Project will have no effect on the level of housing in the Project Area or on surrounding properties.*

\* \* \*

**XV. PUBLIC SERVICES:** Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

*No. The Project is not considered to be located in a high-risk area for fire protection. The Project Area has no trees or established vegetation. The San Bernardino Fire Department (which provides fire protection services in the Trona community) was consulted on the Project. No concerns related to the Project Area were given.*

Police protection?

*No. No new police service will be required because of the Project. Offsite private security measures will mostly be used to monitor the Project Area.*

Schools?

*No, no new students or residents, or associated school services, will be required because of this Project.*

Parks?

*No, no new parks will be required because of the Project.*

Other public facilities?

*No, the proposed Project will not create substantial adverse physical impacts associated with a need for any other foreseeable public services.*

\* \* \*

**XVI. RECREATION:** Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

*No, the proposed Project will not increase the use of existing recreational facilities. It is not anticipated that any portion of this Project will result in a change in the level of service required to provide parks or other recreational facilities.*

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

*No, the proposed Project does not include recreational facilities, nor will it cause a need for an increase in parks or other recreational facilities that might have an adverse physical effect on the environment.*

\* \* \*

**XVII. TRANSPORTATION:**

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

*No. The connecting road, Trona Wildrose Road, is lightly traveled. The Project will add no more than a few vehicles per day to Trona Wildrose Road during the construction phase, and no regular vehicle traffic during operations. During operations, the solar facilities will be remotely monitored and visited only occasionally (weekly, on average) by a light vehicle for inspection or maintenance. The Project will not result in a significant increase in traffic that is substantial in relation to the existing traffic load or capacity of the existing road system. The Project will not conflict with any existing transit, roadway, bicycle, or pedestrian facilities.*

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3(b)?

*No. The project will not result in an adverse change with respect to vehicle miles traveled (VMT). The Project will not significantly increase passenger vehicle traffic or commuter traffic in the region. Construction related traffic generally will be light. When construction is complete, the Project will be remotely monitored and have maintenance personnel on-site as needed during daytime hours. The Project is not within one-half mile of either an existing major transit stop or high-quality transit corridor. The Project will result in less than significant impacts to this resource.*

c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

*No. The proposed Project will not result in any design features that increase transportation hazards. No changes will occur to public roads, including the Trona Wildrose Road. No curves or dangerous intersections will be added to the existing unpaved access road leading to the Project Area. Automobiles and trucks will be accommodated in the Project Area.*

d) Result in inadequate emergency access?

*No, the Project is proposed on properties that are directly adjacent to, and accessible from, Trona Wildrose Road and emergency access is and will continue to be available.*

\* \* \*

**XVIII. TRIBAL CULTURAL RESOURCES:** Would the project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- 

*No. The Project Area undeveloped and cleared of vegetation with no known tribal cultural resources. The proposed Project does not contain a resource eligible for listing in the California Register of Historical Resources, or in a local register for historical resources as defined in Public Resource Code section 5020.1(k). If any archeological or cultural resources are discovered on the site, work shall immediately stop, and Inyo County staff shall be immediately notified per Chapter 9.52 of the Inyo County Code.*

- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.
- 

*The Project Area is vacant and undeveloped. It does not contain any resource determined by the County to be significant pursuant to criteria set forth in subdivision (c) of the Public Resource Code section 5024.1 (i.e., is associated with events that made a significant contribution to the state's cultural patterns, is associated with the lives of persons important in our past, embodies the distinctive characteristics of a type or period, or has yielded or may yield information important in prehistory or history).*

\* \* \*

**XIX. UTILITIES AND SERVICE SYSTEMS:** Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

*No. The proposed Project is for the approval of a PV solar facility that will primarily be remotely monitored and involve no continuous human presence. The Project will not result in the construction or relocation of new or expanded utility, wastewater, or other utility service systems. The goal of the Project is to create a sustainable supply of electric power, and it will not increase demand for utilities whatsoever.*

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

*No impact. During operation, water needs will be no more than 1.0-acre feet per year and will be utilized primarily for panel washing 2-4 times annually. During active construction, light water consumption (relative to other construction uses) will be required for dust suppression. All water needs will be covered via trucking it in from Searles Domestic Water Company, located in Trona. No landscaping water will be required.*

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

*No. The Project would not generate wastewater requiring disposal or contribute to demand for wastewater treatment.*

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of soil infrastructure, or otherwise impair the attainment of solid waste reduction goals?

*No. The Project will not require changes to the current solid waste capacity to accommodate them. Solid waste needs for the project will be minimal. Most of the volume of solid waste (scrap metals, electrical equipment, and proprietary solar array features) will be collected and recycled.*



e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

*No impact. The Project and any future development will comply with Inyo County's solid waste standards, as required by the Inyo County Department of Environmental Health.*

\* \* \*

**XX. WILDFIRE:**

a) Substantially impact an adopted emergency response plan or emergency evacuation plan?

*No. There is not an adopted emergency response or evacuation plan for the area in which the Project is proposed.*

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

*No. The Project Area is on flat or gently-sloped land. It lacks vegetation and vegetation is sparse in the area, characterized mainly by desert scrub, making wildfire risks moderate to low. There will be no project occupants, and the project area is physically separated from surrounding structures. The proposed Project does little to add to the wildfire risk in the area. The risk of loss, injury or death involving wildland fires is less than significant at this site, and any potential risk is further mitigated by compliance with California Building Standards.*

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel break, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

*No. The Project will not cause the need for additional wildfire associated infrastructure.*

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

*No. The Project is on already graded and disturbed land. The addition of solar facilities will not create downslope or downstream flooding or landslides.*

\* \* \*

**XXI. MANDATORY FINDINGS OF SIGNIFICANCE:**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

*No, the Project will not impact or degrade the quality of the environment. The limited impact to resources in the Project Area can be mitigated to less than significant levels. Minimization measures have been written into the Mitigation Monitoring and Reporting Program for the permits and include: pre-activity surveys; avoidance buffers for desert kit fox; noise control measures subject to MM NOI-2 for the portions of the Project Area within 500 feet of residential structures, dust mitigation measures to control air quality issues, and the monitoring efforts of a representative from local native American tribes in case native artifacts or human remains are uncovered.*

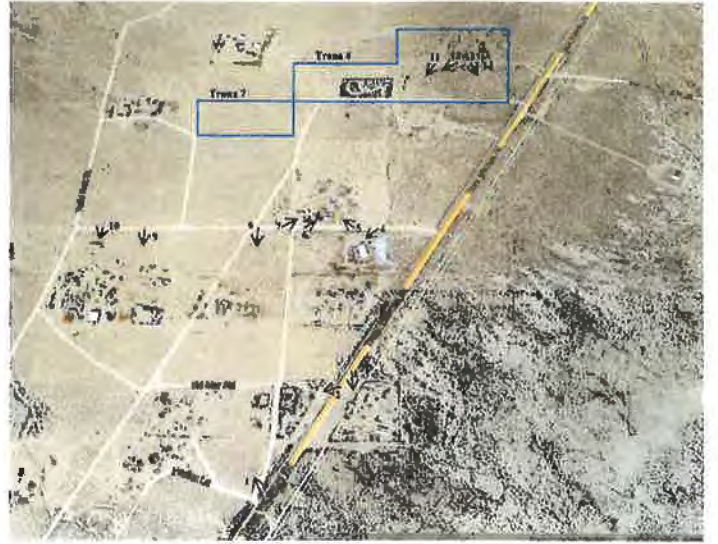
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?

*No. The proposed Project does not have impacts that are individually limited, but cumulatively considerable. The only existing and potentially future projects of note in the vicinity are PV solar projects within the Trona SEDA, but the overall number and size of these projects are likely to be less than analyzed in the PEIR. The Project is the second PV solar project in the SEDA as stated in the Project Description. Future solar projects in the Trona SEDA beyond those existing, proposed or planned, appear to be unlikely without significant improvements to offsite SCE transmission infrastructure.*

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

*No, the Project has no known environmental effects that will cause substantial adverse effects on human beings either directly or indirectly.*

**APPENDIX A**



**1**



**2**



3



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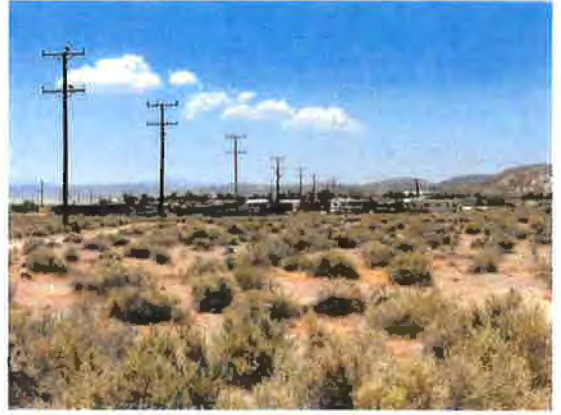
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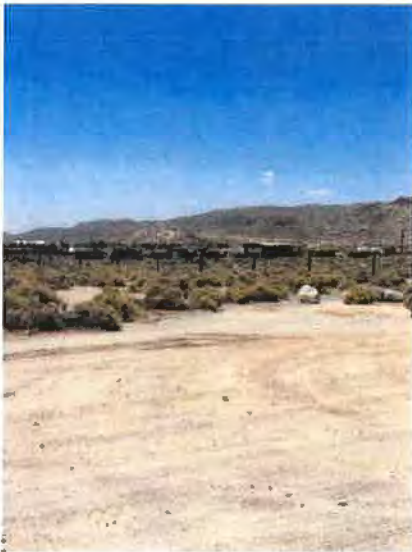
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**11**



**12**



**13**



**14**

## **APPENDIX B**

**BIOLOGICAL RESOURCE EVALUATION**

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**VALLEY WIDE CONSTRUCTION SERVICES  
TRONA 4 AND 7 SOLAR PROJECT**



**MAY 2023**

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# BIOLOGICAL RESOURCE EVALUATION

## TRONA 4 AND 7 SOLAR PROJECT

### **Prepared for:**

Valley Wide Construction Services  
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Trona, CA 93562  
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May 2023

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**EXECUTIVE SUMMARY**

This Biological Resource Evaluation (BRE) report provides the results of a biological survey conducted by QK for the Trona 4 and 7 Solar Projects (collectively, the Project) proposed by Valley Wide Construction Services. In order to comply with the California Environmental Quality Act (CEQA) a biological evaluation was conducted to identify the potential for sensitive biological resources to occur on or near the Project site.

The Project is located north of the unincorporated town of Trona, California (Figure 1-1). It consists of two separate applications for renewable energy permits, one covering approximately 15 acres (Trona 4) and the other covering approximately 5 acres (Trona 7) of contiguous land, all situated on Assessor Parcel Numbers (APNs) 038-330-32, 038-330-33, 038-330-34, and 038-330-46. The Project site, which for the purposes of this BRE consists of both the Trona 4 and Trona 7 project sites, is highly disturbed, has been disked and exhibits little native vegetation re-growth. The Project site is bordered by an existing solar facility to the south, scattered residential homes, abandoned vehicles, local trash and debris.

A review of available literature and agency databases was conducted to obtain information of the occurrences of natural communities, special-status plant and wildlife species known or have the potential to occur in the vicinity of the Project site. QK conducted a biological reconnaissance survey on May 8, 2023, to determine the locations and extent of current land use, natural vegetation communities, determine the potential for occurrences of special-status plant and wildlife species, and verify the presence or absence of wetlands and State and or federal jurisdictional waters.

No special-status plant species or special-status wildlife species, or diagnostic sign thereof, were observed during the survey, and one water feature, that intersects the Project site, was identified by the National Hydrology Database and National Wetlands Inventory databases.

Based on the literature and database search and the results current conditions of the survey, it was deemed that there is a potential for two special-status wildlife species to occur on the Project site: the desert kit fox (*Vulpes macrotis arsipus*), and foraging and nesting birds and raptors. Desert kit fox were not observed to be inhabitants on the Project site but may pass through as transients. There is a potential for nesting migratory birds and other raptors species, protected by the Migratory Bird Treaty Species Act, to occur on or near the Project site and surrounding areas. With the implementation of Best Management Practices and recommended avoidance measures, impacts during the construction of the Project are not expected or will be limited to special-status wildlife species and migratory birds and raptors. There is expected to be no impact to special-status plant species, sensitive natural communities, wetlands or water features, or any other sensitive biological resources. No operational impacts would occur because operations are passive and involve no ongoing land disturbance.

## **SECTION 1 - INTRODUCTION**

Valley Wide Construction Services proposes to construct and operate two solar facilities: Trona 4 is a 3 megawatt (MW) photovoltaic (PV) solar facility on approximately 15 acres; and Trona 7 is a 1 MW PV solar facility on approximately 5 acres located in Trona, Inyo County, California. For the analysis presented herein, the two contiguous sites have been combined into a single, 20-acre site for ease of discussion (Figures 1-1 and 1-2). The proposed solar project (Project) will include the vegetation removal, grading, trenching, and associated infrastructure to build the solar project. The Project would connect to the existing Southern California Edison (SCE) 33-kV transmission line that bisects the Project. To comply with the California Environmental Quality Act (CEQA), a biological evaluation was conducted to identify the potential for sensitive biological resources to occur on or near the Project site. This Biological Resource Evaluation (BRE) provides the basic biological information needed for the County of Inyo CEQA permitting process.

### **1.1 - Project Location**

The Project is located north of the town of Trona, California (Figure 1-1). It covers approximately 20 acres and is situated on Assessor Parcel Numbers (APNs) 038-330-32, 038-330-33, 038-330-34 (Trona 4), and 038-330-46 (Trona 7). The unincorporated town of Trona is located on the east side of the Searles Valley and is between the Panamint Range and Southern Sierra Mountain Range, and approximately 28-miles northeast of the City of Ridgecrest. The Project site is west of Trona Wildrose Road and south of Moses Lane (Figure 1-2). It is in the northeast  $\frac{1}{4}$  of Section 32, Township 24 South, Range 43 East, Mount Diablo Base and Meridian, and is within the *Trona East*, California U.S. Geological Survey (USGS) 7.5-minute quadrangle.

### **1.2 - Project Description**

The proposed Trona 4 Project will construct and operate a 3 MW PV solar facility on approximately 15 acres. The Project would install approximately 4,835 single-axis tracker solar panels on the site. The layout of the single axis tracker solar panels will be in an east-west direction. The maximum height of the would be up to 12 feet above grade at the beginning and end of each day. Each solar panel would be attached to embedded piers using a support structure. Module layout and spacing is typically optimized to balance energy production versus peak capacity and depends on the sun angles and shading due to the surrounding horizon of the site.

The proposed Trona 7 Project will construct and operate a 1 MW PV solar facility on approximately 5 acres. The Project would install approximately 2,300 single-axis tracker solar panels on the site.

### **1.3 - Purpose, Goals, and Objectives for this Report**

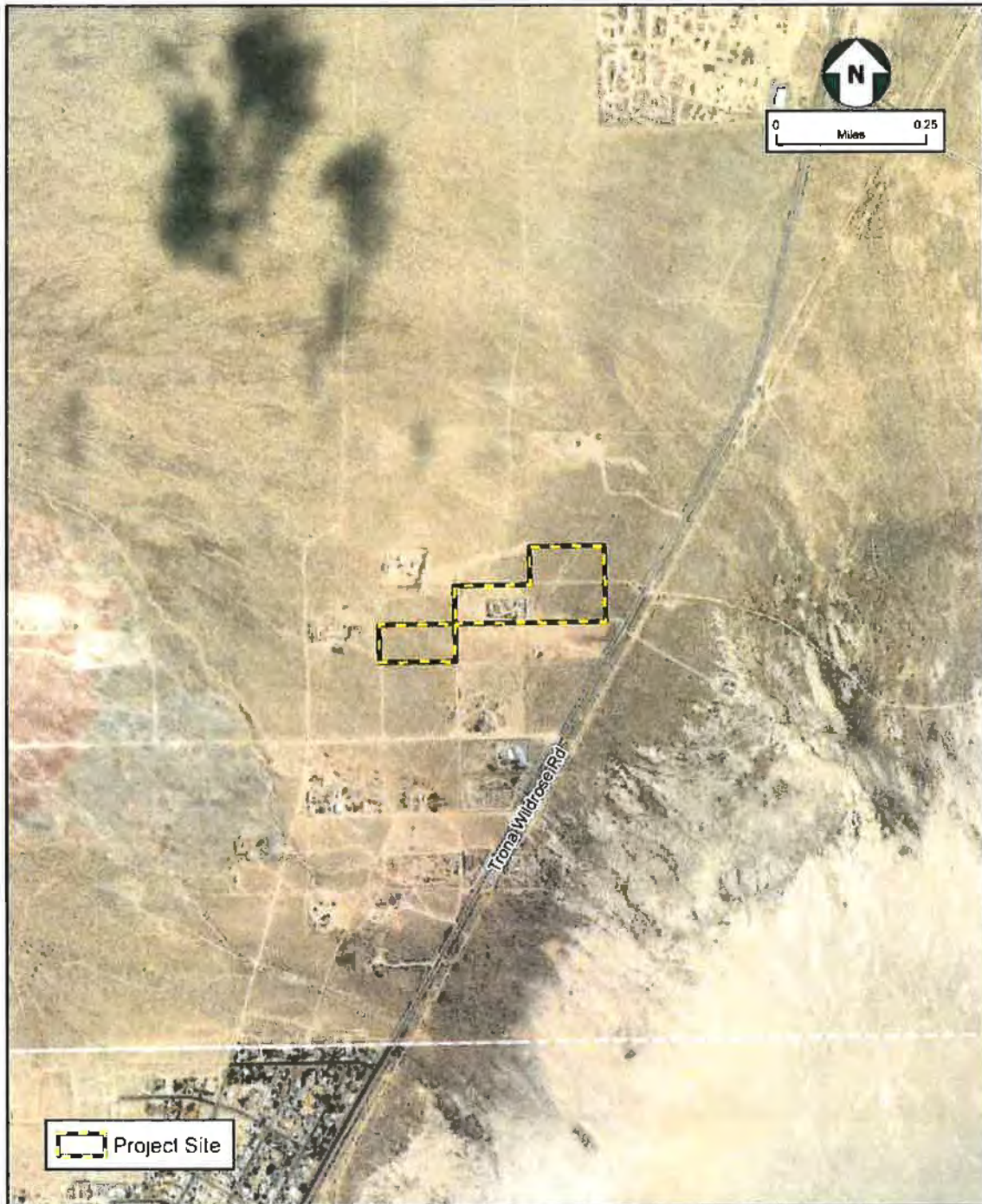
The BRE report includes the results of a biological reconnaissance survey and available biological and natural resource database search conducted by QK biologists at the Project

site. This report is consistent with the requirements for an analysis of impacts to biological resources.

The primary focus of this report is to provide information about the presence of sensitive biological resources on the Project and develop measures to avoid and minimize any potential impacts of the Project on those resources. To accomplish that goal, this BRE provides information on the condition and sensitivity of the sensitive biological resources potentially present on and adjacent to the Project site and evaluates Project impacts to those resources. This BRE focuses on providing information and sensitive natural communities, special-status species, wildlife movement corridors, and wetlands and waters by conducting a desktop analysis of site conditions and verifying those findings with an on-site biological survey.



**Figure 1-1**  
**Regional**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**



**Figure 1-2**  
**Project Location**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**



## **SECTION 2 - METHODS**

### **2.1 - Definition of Biological Study Area**

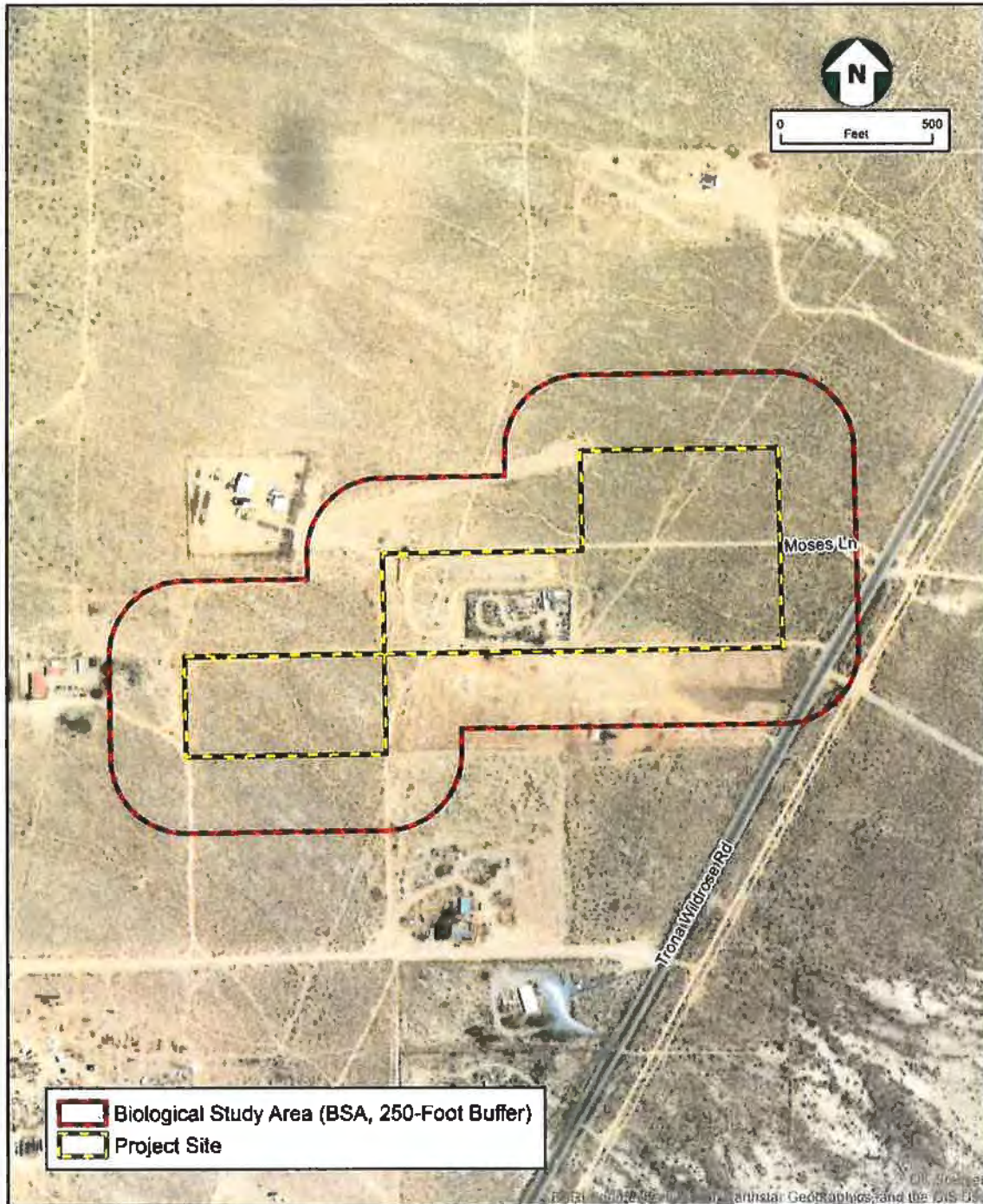
The Biological Study Area (BSA) includes the Project site and a 250-foot survey buffer surrounding the Project disturbance footprint (Figure 2-1).

### **2.2 - Literature Review and Database Analysis**

The following sources were reviewed for information on special-status biological resources in the Project vicinity:

- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB; CDFW 2023a).
- CDFW's Biogeographic Information and Observation System (BIOS; CDFW 2023b).
- CDFW's Special Animals List (CDFW 2023c).
- CDFW's California Wildlife Habitat Relationships (CWHR) System (Mayer and Laudenslayer 1988).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2023).
- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation System (IPaC; USFWS 2023a).
- USFWS Critical Habitat Mapper (USFWS 2023b).
- USFWS National Wetlands Inventory (NWI; USFWS 2023c).
- USGS National Hydrography Dataset (NHD; USGS 2023).
- Federal Emergency Management Agency (FEMA) flood zone maps (FEMA 2023).
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2023a)
- Current and historical aerial imagery (Google LLC 2023; Netroline 2023).

The CNDDDB and CNPS queries focused on the *Trona East* USGS 7.5-minute quadrangle in which the Project is located, plus the surrounding eight quadrangles: *Copper Queen Canyon*, *Homewood Canyon*, *Manly Fall*, *Slate Range Crossing*, *Westend*, *Layton Spring*, *Seales Lake*, and *Trona West*. To satisfy other standard search criteria, CNDDDB records within a 10-mile radius of the project site were queried separately from the broader database search.



**Figure 2-1**  
**Biological Study Area**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**

The CNDDDB provides element-specific spatial information on individual documented occurrences of special-status species and sensitive natural vegetation communities. The CNPS database provides similar information, but at a much lower spatial resolution, for additional sensitive plant species tracked by the CNPS. The CDFW Special Animals List and USFWS IPaC provide no spatial data on wildlife occurrences and provide only lists of species potentially present. Wildlife species designated as “Fully Protected” by California Fish and Game Code Sections 5050 (Fully Protected reptiles and amphibians), 3511 (Fully Protected birds), and 4700 (Fully Protected mammals) are also included on the final list of evaluated species. The database search results can be found in Appendix A.

A review of the NWI was completed to identify whether wetlands have previously been documented on or adjacent to the Project site. The NWI, which is operated by the USFWS, is a collection of wetland and riparian maps that depicts graphic representations of the type, size, and location of wetland, deep water, and riparian habitats in the United States. In addition to the NWI, regional hydrologic information from the NHD was obtained from the USGS to evaluate the potential occurrence of blueline streams within or near the Project site.

Soils data were obtained from the USDA NRCS Web Soil Survey, climate information was obtained from the Western Regional Climate Center, and land use information was obtained from available aerial imagery (NRCS 2023a; WRCC 2023; Google LLC 2023). Information about flood zones was obtained from the Federal Emergency Management Agency, Department of Homeland Security (FEMA 2023).

The results of the database inquiries were reviewed to extract pertinent information on site conditions and evaluate the potential for sensitive biological resources to occur within or near the proposed Project site. Only those resources with the potential to be present and affected by the Project were included and considered in this document. The potential presence of natural communities and special-status species was based on distributional ranges overlapping the Project site and the presence of habitat and/or primary constituent habitat elements.

### **2.3 - Reconnaissance-Level Field Surveys**

A biological reconnaissance survey of the BSA was conducted by QK Environmental Scientists Jeff Erway and Eric Madueno on May 8, 2023. The survey consisted of walking meandering pedestrian transects spaced 50 to 100 feet apart throughout the BSA, where accessible. Areas with suitable habitat that could not be accessed were surveyed by use of high-power binoculars.

Tasks completed during the survey included determining and documenting current land use, developing an inventory of plant species, wildlife species, and wildlife sign (e.g., scat, burrows, nests, feathers, tracks, etc.), characterizing vegetation associations and habitat conditions within the BSA, assessing the potential for federally, State-listed and other special-status plant and wildlife species that may occur on and near the Project site based on existing conditions, and assessing the potential for migratory birds and raptors to nest on and near the Project site. In addition, all historical wetland and water features documented

by NWI and NHD were field verified. All spatial data were recorded using Environmental Systems Research Institute (ESRI) Collector for ArcGIS software installed on an iPad. Site conditions were documented with representative photographs (Appendix B).

**SECTION 3 - ENVIRONMENTAL SETTING**

This section identifies the regional and local environmental setting of the Project and describes existing baseline conditions. The environmental setting of the BSA was obtained from various sources of literature, databases, and aerial photographs. Site conditions were verified and updated during the site reconnaissance survey conducted by QK Environmental Scientists (Table 3-1).

**Table 3-1  
Field Survey Personnel and Timing**

<b>Date</b>	<b>Personnel</b>	<b>Time</b>	<b>Weather Conditions</b>	<b>Temperature</b>
05/08/2023	Jeff Erway, and Eric Madueno	0947 - 1045	Sunny, Clear	61 - 67°F

**3.1 - Topography**

The BSA is in the southwestern portion of Inyo County. The BSA is relatively flat with little variation in topography and an elevation of about 1,690 feet above mean sea level.

**3.2 - Climate**

The BSA is within an area that has a Mediterranean climate of hot summers and mild, wet winters. Average high temperatures range from 58.2°F in January to 105.5°F in July, with daily temperatures often exceeding 100°F several days in the summer (WRCC 2023). Average low temperatures range from 33.2°F in December to 73.3°F in July. Precipitation occurs primarily as rain, most of which falls from November to April, with an average of 3.94 inches of rainfall per year. Rain rarely falls during the summer months.

**3.3 - Land Use**

The Project site is located approximately 0.8-miles north of the unincorporated town of Trona, California and adjacent to the major public road known as Trona Wildrose Road. Currently, the Project site is highly disturbed from urbanization, previous disking, illegal trash and debris dumping, and by abandoned vehicles. The Project site is situated among scattered residential properties to the north and west, an existing solar facility to the south, Trona Wildrose Road to the east, and an unpaved road identified as Moses Lane to the north.

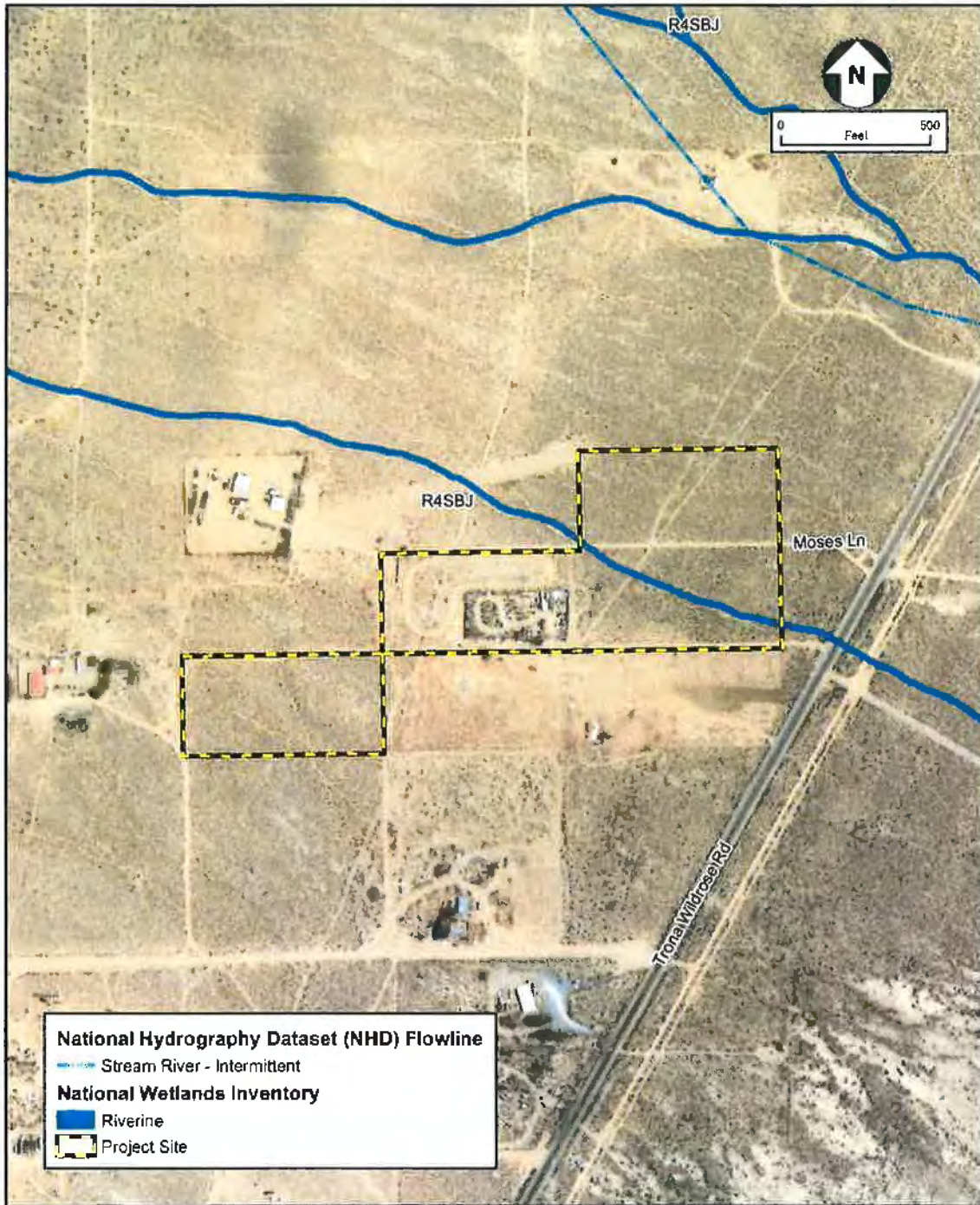
**3.4 - Soils**

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey database contains no digital data for the region the BSA is located.

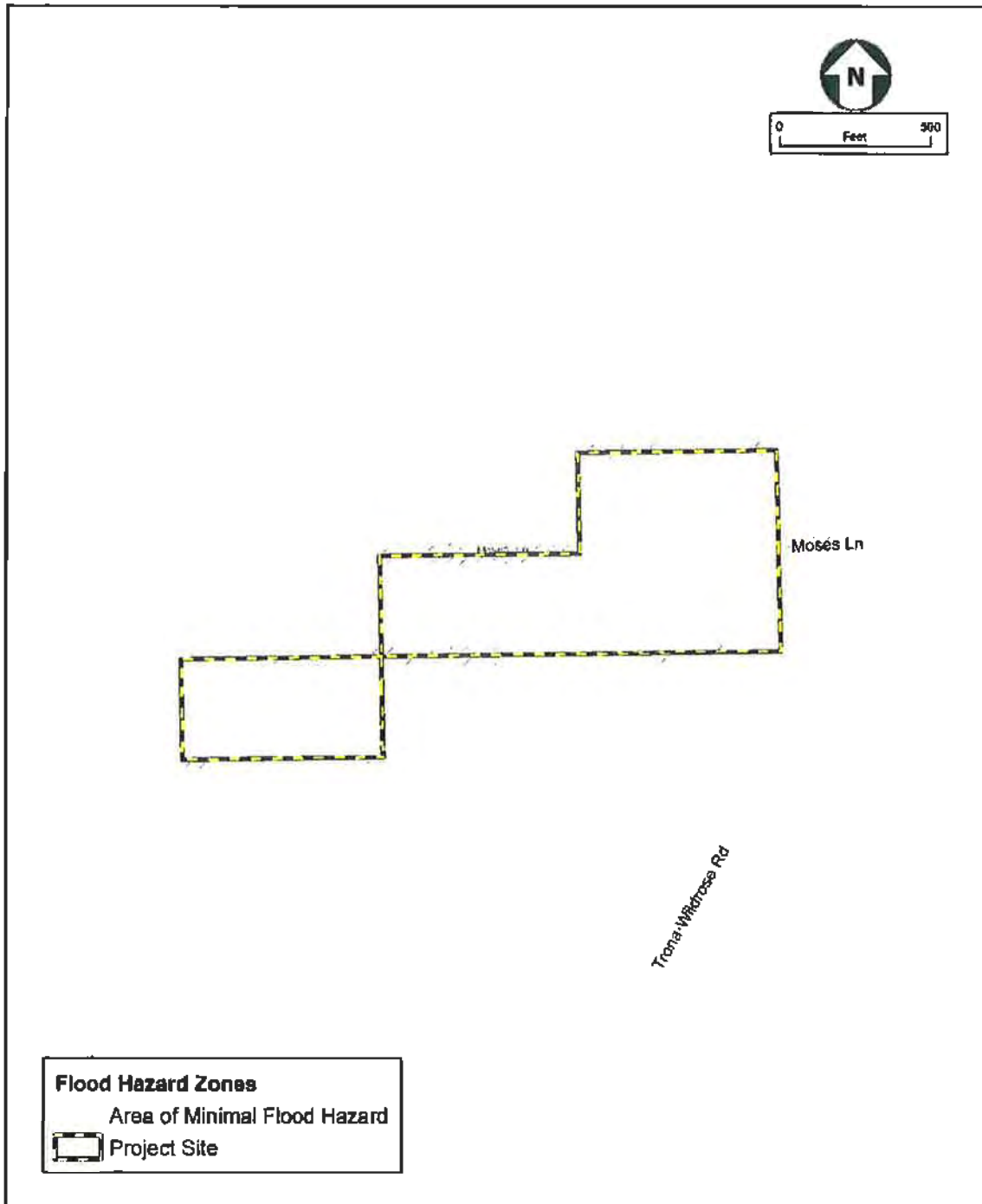
**3.5 - Hydrology**

There is one record of a jurisdictional wetland feature within the BSA, as defined by the NWI (USFWS 2023c) (Figure 3-1). The jurisdictional wetland bisects a portion of the BSA, known as Trona 4, starting in the middle of the northwest area flowing southeast towards Trona Wildrose Road. The feature is described as an intermittent riverine. Features under the Riverine system include all wetlands and deepwater habitats contained within a channel, with two exceptions: 1) wetlands dominated by trees, shrubs, persistent emergent, emergent mosses, or lichens, and 2) habitats with water containing ocean-derived salts of 0.5 ppt or greater.

According to FEMA, the BSA is within an Area of Minimal Flood Hazard (Figure 3-2).



**Figure 3-1**  
**NWI and NHD Records of Aquatic Resources**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**



**Figure 3-2**  
**FEMA Flood Zone Map**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**

### **3.6 - General Biological Conditions**

The entirety of the Project site consists of an open, previously disked desert and alkali desert scrub habitat that has been disturbed by urbanization and residential development. The Project site is bordered by scattered residential properties and Moses Lane to the north, and existing solar facility of the south, Trona Wildrose Road to the east, and scattered residential properties and open desert and alkali desert scrub habitat to the west.

No sensitive natural plant communities occur within the BSA. Vegetation observed included saltbush (*Atriplex polycarpa*), white bursage (*Ambrosia dumosa*), desert calico (*Loeseliastrum matthewsii*), desert five spot (*Eremalche rotundifolia*), and creosote (*Larrea tridentata*).

No avian nests were observed within the Project site, but the existing transmission and utility poles near the BSA could support nesting birds and/or raptors. A migratory bird species observed included common raven (*Corvus corax*).

No small mammal burrows, dens, or larger mammal dens that could be utilized by desert kit fox, Mohave ground squirrel (*Xerospermophilus mohavensis*) or desert tortoise (*Gopherus agassizii*) were observed within the BSA. A complete list of plant and wildlife species observed within the BSA during the biological reconnaissance survey is included in Appendix C.

## **SECTION 4 - FINDINGS**

### **4.1 - Sensitive Natural Communities**

#### **4.1.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES**

Literature results from the nine-quadrangle queries for the Project site were conducted and provide information for the potential of occurrence and verified during the field survey.

#### **4.1.2 - PRESENCE OF SENSITIVE NATURAL COMMUNITIES**

No sensitive natural vegetation communities were identified within the BSA. In addition, the BSA does not provide habitat that would support these communities.

### **4.2 - Special-Status Plants**

#### **4.2.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES**

There were 7 special-status plant species identified in the literature and database review that are known or have the potential to occur within the nine-quadrangle queries centered on the Project site (Table 4-1). There are no CNDDDB records of special-status plant species that overlap the BSA.



**Table 4-1  
Special-Status Plant Species Occurring in the Region of the BSA**

(Source: CNDDDB 2023, CNPS 2023,	Common Name	Status
<i>Aliciella ripleyi</i>	Ripley's Aliciella	2B.3
<i>Astragalus atratus var. mensanus</i>	Darwin Mesa milk-vetch	1B.1
<i>Castela emoryi</i>	Emory's crucifixion-thorn	2B.2
<i>Cryptantha clokeyi</i>	Clokey's cryptantha	1B.2
<i>Eremothera boothii ssp. boothii</i>	Booth's evening-primrose	2B.3
<i>Penstemon fruticiformis var. amargosae</i>	Amargosa beardtongue	1B.3
<i>Yucca brevifolia</i>	Joshua tree	SC

1A Presumed Extinct in California.

1B Rare, Threatened, or Endangered in California and elsewhere.

2A Plants presumed extirpated in California, but more common elsewhere.

2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

CRPR Threat Code Extension:

.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Fairly endangered in California (20-80% occurrences threatened)

.3 Not very endangered in California (<20% of occurrences threatened) Abbreviations:

Abbreviations:

FC Federal Candidate

FE Federal Endangered Species

FT Federal Threatened Species

SFP Fully Protected Animal, CDFW

SE California Endangered Species

ST California Threatened Species

SC California Candidate Species

SSC California Department of Fish and Game Species of Special Concern

#### **4.2.2 - PRESENCE OF SPECIAL-STATUS PLANTS**

No special-status plant species were observed within the BSA. The surveys coincided with some, but not all of the plant species' optimal blooming periods; however, none of the species identified in the database queries are expected to occur on-site due to the lack of suitable habitat conditions (disturbed site conditions, plant associations and soil types) and/or because the BSA is located outside of the species' known range. The Project site has been highly disturbed with urbanization and disking; however, a few native plant species have revegetated on site.

A complete list of plant species observed during the biological reconnaissance survey is included in Appendix C.

#### **4.3 - Special-Status Wildlife**

##### **4.3.1 - RESULTS OF LITERATURE REVIEW AND DATABASE SEARCHES**

There were 15 special-status wildlife species identified in the literature and database review that are known or have the potential to occur within the nine-quad search area centered on

the Project (Table 4-2). There is one historical CNDDDB record for prairie falcon (*Falco mexicanus*) that overlaps with the BSA.

**Table 4-2**  
**Special-Status Wildlife Species Occurring in the Region of the BSA**  
 (Source: CNDDDB 2023, and USFWS 2023)

Scientific Name	Common Name	Status
<b>Invertebrates</b>		
<i>Danaus plexippus</i>	monarch butterfly	FC, -
<b>Reptiles</b>		
<i>Elgaria panamintina</i>	Panamint alligator lizard	-, SSC
<i>Gopherus agassizii</i>	desert tortoise	FT, ST
<b>Birds</b>		
<i>Asio otus</i>	long-eared owl	-, SSC
<i>Athene cunicularia</i>	burrowing owl	-, SSC
<i>Charadrius nivosus nivosus</i>	western snowy plover	FT, SSC
<i>Falco mexicanus</i>	prairie falcon	-, WL
<i>Gymnogyps californianus</i>	California condor	FE, SE
<i>Pipilo crissalis eremophilus</i>	Inyo California towhee	FT, SE
<i>Toxostoma lecontei</i>	Le Conte's thrasher	-, ST
<b>Mammals</b>		
<i>Antrozous pallidus</i>	pallid bat	-, SSC
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-, SSC
<i>Eumops perotis californicus</i>	western mastiff bat	-, SSC
<i>Ovis canadensis nelsoni</i>	desert bighorn sheep	-, FP
<i>Xerospermophilus mohavensis</i>	Mohave ground squirrel	-, FT
<i>Vulpes macrotis arsipus</i>	desert kit fox	-, FGC

Abbreviations:

- FC Federal Candidate
- FE Federal Endangered Species
- FGC Fish and Game Code
- FT Federal Threatened Species
- SFP Fully Protected Animal, CDFW
- SE California Endangered Species
- ST California Threatened Species
- SSC California Department of Fish and Game Species of Special Concern

**4.3.2 - PRESENCE OF SPECIAL-STATUS WILDLIFE**

There is no roosting habitat for monarch butterfly (*Danaus plexippus*) present within the BSA, although this species may travel through the BSA as a transient. Additionally, no milkweed (*Asclepias* sp.) was observed within the BSA, which is a required food source for larval monarch butterflies. No wetland, marsh, or riparian habitat exists within the BSA to support nesting or foraging Inyo California towhee (*Pipilo crissalis eremophilus*) or

Panamint alligator lizard (*Elgaria panamintina*) which inhabits riparian areas in the desert at the bottom of rocky canyons, near streams and springs.

No desert tortoise sign (e.g., scat, tracks, or burrows) were observed within the BSA. The nearest CNDDDB recorded occurrence (EONDX 110170) is approximately 1.2-miles north of the BSA (CDFW 2023a). The occurrence was for an adult desert tortoise crossing a dirt road in March 2017. The BSA is highly disturbed from disking, construction of an existing solar field, and urbanization (e.g., dirt roads and debris) from the residences in the vicinity. The disturbance in the vicinity has resulted in historical ground disturbance that results in no potential for foraging, or habitation of desert tortoise in the BSA.

There are no dense woodlands with coniferous or broadleaved trees near a water source that could provide suitable habitat for long-eared owl (*Asio otus*). Burrowing owl (*Athene cunicularia*) inhabit grassland, open bare ground, and utilize existing small mammal burrows, typically created by California ground squirrel, for breeding and shelter. There were no burrows or diagnostic sign (e.g., whitewash, tracks, prey remains) of burrowing owl observed within the BSA. Due to a lack of suitable burrows on site and highly disturbed condition of the site the likelihood of a resident burrowing owl on site is extremely unlikely.

No suitable foraging or nesting habitat is present within the BSA, due to the highly disturbed condition of the BSA, for western snowy plover (*Charadrius nivosus nivosus*), California condor (*Gymnogyps californianus*), prairie falcon, or Le Conte's thrasher (*Toxostoma lecontei*). The CNDDDB recorded occurrence (EONDX 26139), for prairie falcon, that overlaps with the BSA is from 1975 which is presumed extant. No additional data was recorded for this occurrence. There are no rocky outcroppings, mines or caves, cliff faces, tree hollows, buildings, or bridges within the BSA that would support the pallid bat (*Antrozous pallidus*), the western mastiff bat (*Eumops perotis californicus*), or the Townsend's big-eared bat (*Corynorhinus townsendii*).

The BSA is too low in elevation and does not provide suitable foraging habitat for desert bighorn sheep (*Ovis canadensis nelsoni*). There are no steep, rugged mountainous terrain within the BSA that would provide climbing habitat for the desert bighorn sheep to avoid predators. Desert bighorn sheep are known to cross valley floors to neighboring mountainous regions but due to the urbanization and highly disturbed condition of the BSA it is unlikely for desert bighorn sheep to cross within the BSA.

No small mammal burrows, with appropriate configuration in size and shape, or diagnostic sign for Mohave ground squirrel (*Xerospermophilus mohavensis*) were observed within the BSA. According to CDFW, the closest known population is located approximately 8.2-miles southwest of the BSA (CDFW 2023b). This area surrounds the town of Ridgecrest and moves east on State Route (SR) 178 towards the area known as Pinnacles Entrance. Additionally, the closest core population of Mohave ground squirrel is the Coso Range-Olancha core population approximately 25.0-miles northwest of the BSA.

The desert kit fox (*Vulpes macrotis arsipus*) could be present as a transient forager within the BSA. There are no CNDDDB records of this species because CNDDDB does not record

sightings due to the species not being listed State or federally listed as endangered, threatened, or species of special concern. However, the species is protected as a fur-bearing mammal under Fish and Game Code § 4000.

The Project site lacks optimal suitable denning habitat for the species due to the past and current level of disturbance and the surrounding BSA has been similarly degraded. However, kit foxes, in general, are highly adaptable and can forage from the nearby residential houses. No desert kit fox or diagnostic sign of the species (e.g., tracks, dens, scat, prey remains) were observed during the field survey, and the lack of small mammal burrows observed indicates the site does not support an adequate prey base. Surrounding land use and habitat conditions make it unlikely that the desert kit fox would be present, other than as a transient forager.

#### **4.3.3 - NESTING MIGRATORY BIRDS AND RAPTORS**

There were no active nests observed within the BSA during the survey. The transmission and utility poles outside the BSA could support a variety of nesting bird species, including larger species such as raptors and common raven.

### **4.4 - Critical Habitat, Movement Corridors, and Linkages**

#### **4.4.1 - PRESENCE OF CRITICAL HABITAT**

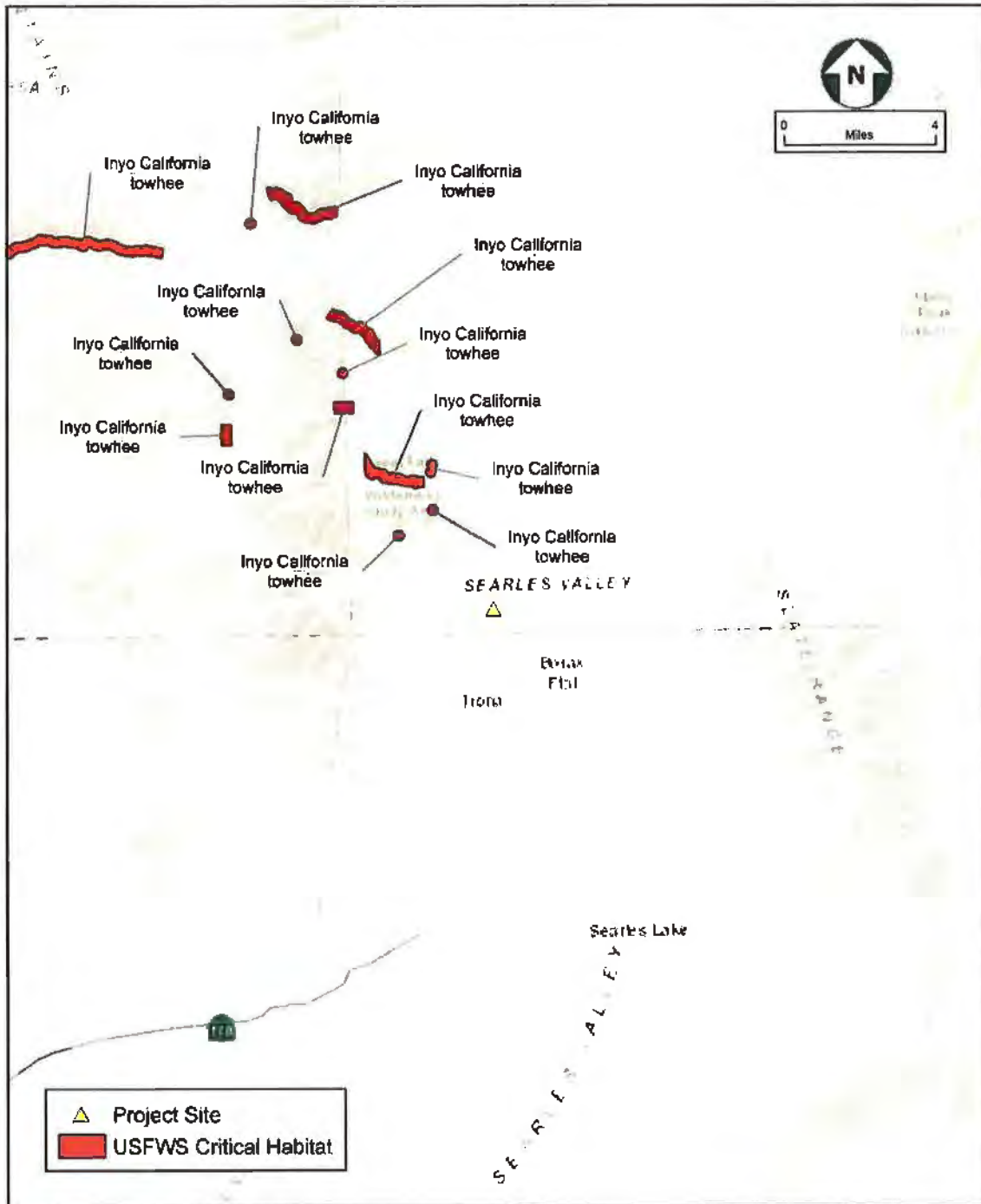
No designated critical habitat occurs within the BSA. The nearest USFWS designated critical habitat is for Inyo California towhee located approximately 3.1 miles northwest of the BSA (Figure 4-1).

#### **4.4.2 - PRESENCE OF MOVEMENT CORRIDORS AND LINKAGES**

There are no known wildlife movement corridors or habitat linkages that intersect the BSA. The Project is situated within a highly disturbed area that is predominately used for urban development and provides minimal linkage between suitable natural habitats for most wildlife species. Due to the highly disturbed condition of the Project, there is no substantial movement of wildlife onto or off of the BSA.

### **4.5 - Wetlands and Other Waters**

The feature identified by the NHD that bisects the portion of the BSA, known as Trona 4, through in the middle of the northwest area that flows southeast towards Trona Wildrose Road was not observed during the survey. No stream indicators such as mud cracks, bed, or bank were identified. No hydrologic, topographic features or aquatic plant species were observed to indicate an intermittent riverine feature. The feature described in the NHD data does not currently exist on the Project site.



**Figure 4-1**  
**Mapped Critical Habitat in the Project Vicinity**  
**Trona 4 and 7 Solar Project,**  
**Inyo County, California**

## **SECTION 5 - POTENTIAL PROJECT IMPACTS**

The purpose of this section is to present an evaluation of the potential for Project-related impacts to sensitive biological resources to occur resulting from Project construction activities. Although the potential for impacts of the Project is anticipated to be minor because the Project site is highly disturbed, there are some risks of Project impacts. These are discussed below.

### **5.1 - Potential Impacts to Sensitive Vegetation Communities**

No sensitive vegetation communities occur within the BSA. The Project would not impact sensitive natural communities.

### **5.2 - Potential Impacts to Special-Status Plant Species**

No special-status plant species occur within the BSA and there is no suitable habitat for any special-status plant species on or near the BSA. The Project would not impact any special-status plant species.

### **5.3 - Potential Impacts to Special-Status Wildlife Species**

Two special-status wildlife species, desert kit fox, and nesting birds were determined to have potential to occur within the BSA as transients. Available habitat within the BSA fulfilling the foraging requirements of these species is limited to none. No potential desert kit fox dens were observed within the BSA and the potential for future habitation by foxes is limited due to the highly disturbed condition of the site. There was no diagnostic sign of nesting birds or raptors during the survey; however, existing transmission and utility poles are located outside the BSA, which would not be affected by the Project, could provide suitable stick nest building structures for nesting birds.

Any special-status species that use the Project as a movement corridor could be indirectly impacted by Project activities, though little wildlife was observed in or near BSA during the reconnaissance survey conducted for the Project.

### **5.4 - Potential Impacts to Nesting Birds and Raptors**

No nests were observed within the BSA. There is potential for birds to forage and nest within the BSA in existing structures, and in tress and utility poles in the surrounding urban areas. If there are active nests present during Project activities, nests could be destroyed, and Project activities could interfere with normal breeding behaviors, which could discourage breeding or lead to nest abandonment or failure.

**5.5 - Potential Impacts to Critical Habitat, Movement Corridors and Linkages**

**5.5.1 - POTENTIAL IMPACTS TO CRITICAL HABITAT**

The Project would not impact any designated critical habitat.

**5.5.2 - POTENTIAL IMPACTS TO MOVEMENT CORRIDORS AND LINKAGES**

Project activities would not impact any movement corridors or habitat linkages.

**5.6 - Potential Impacts to Wetlands and Waters**

As noted previously, there is one record of a jurisdictional wetland feature within the BSA, as defined by the NWI (USFWS 2023c). However, this feature was not observed during the survey, and it is not currently present on the Project site. There were no other visible signs of waters or wetland features within the BSA, and there would be no impacts to wetland resources.

**SECTION 6 - RECOMMENDATIONS**

The Project is anticipated to have no impacts to sensitive natural communities, special-status plants, wetlands and water features, Critical Habitat, or migratory corridors. There is a low potential for Project activities to desert kit fox and nesting and foraging birds and raptors. To avoid or minimize impacts to these species and incidental impacts to other common, non-sensitive wildlife species, we recommend that the following measures be implemented as Best Management Practices (BMPs) during Project construction activities:

- A pre-activity survey of the Project and a 250-foot buffer for desert kit fox and nesting migratory birds and a 500-foot buffer for nesting raptors surrounding the Project footprint should be conducted. The survey should occur no less than 14 days prior to the start of construction activities and no more than 30 days prior to the start of construction activities. If construction is delayed beyond 30 days from the time of the survey, then another survey would need to be conducted. The survey should be conducted by a qualified biologist with adequate training and experience conducting surveys for special-status wildlife species.
- If dens or burrows that could support desert kit fox are discovered during the pre-activity survey, appropriate avoidance buffers, as outline in Table 6-1, should be established. No work should occur within these buffers unless a qualified biologist approves and monitors the activity.

**Table 6-1  
Disturbance Buffers for Desert Kit Fox Dens**

<b>Sensitive Resource</b>	<b>Buffer Zone from Disturbance (feet)</b>
Potential desert kit fox den	50
Known desert kit fox den	100
Natal desert kit fox den	500

- A Worker Environmental Awareness Training Program should be prepared and presented to all workers that will be on-site during construction activities to minimize or eliminate impacts to sensitive biological resources.
- Project-related vehicles should observe a 20-mph speed limit in all Project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes, and other animals are most active. To the extent possible, nighttime construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.
- To prevent inadvertent entrapment of kit foxes, and other wildlife species during work activities, the contractor should cover all excavated, steep-walled holes or trenches more than 2 feet deep at the close of each working day with plywood or similar materials or provide one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, the contractor should thoroughly inspect them for trapped wildlife.



- Kit foxes and other wildlife species are attracted to den-like structures such as pipes and may enter stored pipes, becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the designated biologist has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity until the fox has escaped.
- All trash and food items that attract wildlife should be discarded into closed containers and properly disposed of at the end of each workday.
- To prevent harassment or mortality of listed species, no pets should be permitted on the Project site.

To protect nesting migratory birds and raptors, it is recommended that:

- If Project activities are scheduled during the breeding bird season, from February 1 through September 15, then a preconstruction survey for nesting birds should be conducted within the Project site and within a 500-foot radius surrounding the Project site for active nesting sites. Construction activities should not be conducted within 250 feet of an active bird nest and within 500 feet of an active raptor nest. These avoidance distances may be reduced if the qualified biologist determines that activities are not affecting the breeding success of the nesting birds.

**SECTION 7 - SUMMARY AND CONCLUSIONS**

Land within the Project site is highly disturbed and contains no habitat that would support special-status plant species or sensitive natural communities. There are no designated Critical Habitats, movement corridors, wetlands, or water features that would be impacted by the Project.

Based on the literature and database searches and results of the site survey, there is potential for special-status species to occur on the site: desert kit fox and nesting birds. Due to the disturbed nature of the Project, surrounded by residential development, a main roadway and urban uses, and the lack of a suitable prey base, impacts to the desert kit fox are not anticipated to occur. Desert kit foxes would likely be only transient visitors to the Project site. If nesting birds were to nest in the vicinity of the Project, impacts to the species could occur. Implementation of the recommended BMPs and avoidance measures outlined in Section 6 would minimize any Project impacts to these species.

This BRE has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The findings and opinions conveyed in this report are based on findings derived from specified historical and literary sources and a biological survey of the Project site and surrounding area. The biological investigation was limited by the scope of work performed. The biological survey was also limited by the environmental conditions present at the time of the survey. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and would not be discovered in the future within the site. Mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. No other guarantees or warranties, expressed or implied, are provided.

**SECTION 8 - REFERENCES**

- California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Database (CNDDDB), Accessed via: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>.
- California Department of Fish and Wildlife (CDFW). 2023b. Biogeographic Information and Observation System (BIOS). Accessed via: [www.wildlife.ca.gov/data/BIOS](http://www.wildlife.ca.gov/data/BIOS).
- California Department of Fish and Wildlife (CDFW). 2023c. CDFW's Special Animals List
- California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants. Accessed via: [www.rareplants.cnps.org](http://www.rareplants.cnps.org).
- Federal Emergency Management Agency (FEMA) 2023. On-line Map Service Center.
- Google LLC. 2023. Google Earth Pro.
- Mayer, K.E. and W.F. Laudenslayer, Jr. 1988. *A guide to wildlife habitats of California. State of California*. Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp. Accessed via: <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>.
- Netronline. 2023. Historic Aerials Viewer. Accessed via: [www.historicaerials.com/viewer](http://www.historicaerials.com/viewer).
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Accessed via: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- United States Fish and Wildlife Service (USFWS). 2023a. Information for Planning and Consultation online project planning tool. Accessed via: <https://ecos.fws.gov/ipac/>.
- United States Fish and Wildlife Service (USFWS). 2023b. Critical Habitat Portal. Accessed via: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>.
- United States Fish and Wildlife Service (USFWS). 2023c. National Wetlands Inventory Wetlands Mapper (NWI). U.S. Geological Survey.
- United States Geological Survey (USGS). 2023. National Hydrography Dataset (NHD). Accessed via: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>.
- Western Regional Climate Center (WRCC). 2023. Cooperative Climatological Data Summaries, NOAA Cooperative Station Trona, California (049035). Accessed via: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0439>.

**APPENDIX A**

**SPECIAL-STATUS SPECIES DATABASE SEARCH RESULTS**

**TRONA 4 AND 7 SOLAR PROJECT**



**Selected Elements by Common Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



**Query Criteria:** `Quad=<span style="color:Red"> IS </span><span style="color:Red"> (Homewood Canyon (3511784)<span style="color:Red"> OR </span><span style="color:Red"> (Slate Range Crossing (3511783)<span style="color:Red"> OR </span><span style="color:Red"> (Manly Fall (3511782)<span style="color:Red"> OR </span><span style="color:Red"> (Trona East (3511773)<span style="color:Red"> OR </span><span style="color:Red"> (Trona West (3511774)<span style="color:Red"> OR </span><span style="color:Red"> (Copper Queen Canyon (3511772)<span style="color:Red"> OR </span><span style="color:Red"> (Wasland (3511764)<span style="color:Red"> OR </span><span style="color:Red"> (Searles Lake (3511763)<span style="color:Red"> OR </span><span style="color:Red"> (Layton Spring (3511762))`



Selected Elements by Common Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database






Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Amargosa beardtongue <i>Pensilanon fruticiformis</i> var. <i>amargosae</i>	PDSCR1L2F2	None	None	G4T3	S2	1B.3
Booth's evening-primrose <i>Eremothera boothii</i> ssp. <i>boothii</i>	PDONA03052	None	None	G5T4	S3	2B.3
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
Chesley's cryptantha <i>Cryptantha chesleyi</i>	PDBOR0A3M0	None	None	G3	S3	1B.2
Darwin Mesa milk-vetch <i>Astragalus atratus</i> var. <i>mensenius</i>	PDFAB0F0Z3	None	None	G4G5T2	S2	1B.1
desert bighorn sheep <i>Ovis canadensis nelsoni</i>	AMALE04013	None	None	G4T4	S3	FP
desert tortoise <i>Gopherus agassizii</i>	ARAAP01012	Threatened	Threatened	G3	S2S3	
Emory's crucifixion-thorn <i>Castela emoryi</i>	PDSIM03030	None	None	G3G4	S2S3	2B.2
Inyo California towhee <i>Melospiza crissalis ammophilus</i>	ABPBX74071	Threatened	Endangered	G4G5T2	S2	
Le Conte's thrasher <i>Toxostoma lecontei</i>	ABPBK06100	None	None	G4	S3	SSC
long-eared owl <i>Aelo clus</i>	ABNSB13010	None	None	G5	S3?	SSC
Mohave ground squirrel <i>Xerospemophilus mohavensis</i>	AMAFB05150	None	Threatened	G3	S2	
Morrison bumble bee <i>Bombus morrisoni</i>	IIHYM24460	None	None	G3	S1S2	
palled bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
Panamint alligator lizard <i>Eigania panamintina</i>	ARACB01050	None	None	G3	S3	SSC
prairie falcon <i>Falco mexicanus</i>	ABNKD08090	None	None	G5	S4	WL
Ripley's alciella <i>Alicella ripleyi</i>	PDPLM041E0	None	None	G3	S2	2B.3
Townsend's big-eared bat <i>Corynorhinus townsendi</i>	AMACC08010	None	None	G4	S2	SSC
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
western small-footed myotis <i>Myotis callobrum</i>	AMACC01230	None	None	G5	S3	
western snowy plover <i>Charadrius nivosus nivosus</i>	ABNNE03031	Threatened	None	G3T3	S3	SSC

Record Count: 21

**Search Results**

12 matches found. Click on scientific name for details

Search Criteria: 9-Quad Include [3511773:3511772:3511764:3511762:3511783:3511764:3511762:3511763:3511774]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLDMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<a href="#">Atriplex rigidifolia</a>	Ripley's attelella	Polemoniaceae	perennial herb	May-Jul	None	None	G3	S2	2B.3		1974-01-01	 © 2020 Joey Malone
<a href="#">Astragalus strabus</a> var. <i>merisaeus</i>	Darwin Mesa milk-vetch	Fabaceae	perennial herb	Apr-Jun	None	None	G4G5T2	S2	1B.1	Yes	1980-01-01	No Photo Available
<a href="#">Astragalus lentiginosus</a> var. <i>homerianus</i>	Bonego milk-vetch	Fabaceae	annual herb	Feb-May	None	None	G5T5?	S4	4.3		1974-01-01	No Photo Available
<a href="#">Castilleja erroyi</a>	Erroy's crucifixion-thorn	Simaroubaceae	perennial deciduous shrub	(Apr)Jun-Jul(Sep-Dec)	None	None	G3G4	S2S3	2B.2		1974-01-01	No Photo Available
<a href="#">Coryphantha eremicus</a> ssp. <i>eremicus</i>	desert birds-beak	Orobanchaceae	annual herb (hemiparasitic)	Jul-Oct	None	None	G3T3	S3	4.3	Yes	1980-01-01	No Photo Available
<a href="#">Cryptantha clokeyi</a>	Clokey's cryptantha	Boraginaceae	annual herb	Apr	None	None	G3	S3	1B.2	Yes	1994-01-01	No Photo Available
<a href="#">Dielisium cupulea</a>	Death Valley monkeyflower	Phytaceae	perennial herb	Feb-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	 © 2015 James Monfield
<a href="#">Eriophora boottii</a> ssp. <i>boottii</i>	Booth's evening-primrose	Onagraceae	annual herb	Apr-Sep	None	None	G5T4	S3	2B.3		1980-01-01	No Photo Available
<a href="#">Lychnis torreyi</a>	Torrey's box-thorn	Solanaceae	perennial shrub	(Jan-Feb)Mar-Jun(Sep-Nov)	None	None	G4G6	S3	4.2		2015-05-05	No Photo Available
<a href="#">Densimon barbiflorus</a> var. <i>amargosae</i>	Amargosa beardlongue	Plantaginaceae	perennial herb	Apr-Jun	None	None	G4T3	S2	1B.3		1980-01-01	 Steve Matson 2017

<i>Bryhymenoclema</i>	wine-colored	Bryaceae	moss	None	None	9364	5354	42	2014-06-10	No Photo Available
<i>Yucca brevifolia</i>	tufa moss			OC	GNR	SNR	CBR		2011-12-13	No Photo Available

Showing 1 to 12 of 12 entries

**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.careplantsociety.org> [accessed 8 May 2023].





United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901



In Reply Refer To:
Project Code: 2023-0079069
Project Name: Trona

May 08, 2023

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

To Whom It May Concern:

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

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

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

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

<https://www.fws.gov/endangered/what-we-do/faq.html>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 666(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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

05/09/2023

3

**Attachment(s):**

- Official Species List

## **OFFICIAL SPECIES LIST**

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

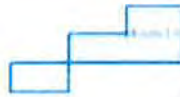
This species list is provided by:

**Carlsbad Fish And Wildlife Office**  
2177 Salk Avenue - Suite 250  
Carlsbad, CA 92008-7385  
(760) 431-9440

**PROJECT SUMMARY**

Project Code: 2023-0079069  
Project Name: Trona  
Project Type: New Constr - Above Ground  
Project Description: Trona Project  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.80623905,-117.350854358784,14z>



Counties: Inyo County, California

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

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

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

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

### BIRDS

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered
Inyo California Towhee <i>Pipilo crissalis eremophilus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3912">https://ecos.fws.gov/ecp/species/3912</a>	Threatened

### REPTILES

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4481">https://ecos.fws.gov/ecp/species/4481</a>	Threatened

### INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8743">https://ecos.fws.gov/ecp/species/8743</a>	Candidate

**CRITICAL HABITATS**

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

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

**IPAC USER CONTACT INFORMATION**

Agency: QK, Inc.  
Name: Karlissa Denney  
Address: 5080 California Avenue  
Address Line 2: Suite 220  
City: Bakersfield  
State: CA  
Zip: 93309  
Email: karlissa.denney@qkinc.com  
Phone: 6616162600



**APPENDIX B**  
**REPRESENTATIVE PHOTOGRAPHS OF THE**  
**TRONA 4 AND 7 SOLAR PROJECT**



**Photograph 1:** Northeast corner of the Project site, facing south.  
GPS Coordinates: 35.807173, -117.348633.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 2:** Northwest corner of the Project site, facing east.  
GPS Coordinates: 35.806347, -117.350748.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 3:** Center of the Project site, facing south.  
GPS Coordinates: 35.805690, -117.351008.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 4:** Southeast corner of the Project site, facing west.  
GPS Coordinates: 35.805503, -117.348542.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 5:** Southwest corner of the Project site, facing east.  
GPS Coordinates: 35.805426, -117.353007.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 6:** Southwest portion of the Project site, facing north.  
GPS Coordinates: 35.804793, -117.354196.  
Photograph taken by Eric Madueno on May 8, 2023.



**Photograph 7:** Northern portion of the Project site, facing north.  
GPS Coordinates: 35.807118, -117.349915.  
Photograph taken by Eric Madueno on May 8, 2023.

**APPENDIX C**  
**PLANT AND WILDLIFE SPECIES OBSERVED**  
**TRONA 4 AND 7 SOLAR PROJECT**

**Table C - 1  
Plant and Wildlife Species Observed within the BSA**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Status</b>
<b>Plants</b>		
<i>Ambrosia salsola</i>	cheesebush	None
<i>Chaenactis</i> sp.	pincushion	None
<i>Chylismia claviformis</i>	brown eyes	None
<i>Cryptantha</i> sp.	cryptantha	None
<i>Descurainia pinnata</i>	western tansymustard	None
<i>Grayia spinosa</i>	spiny hopsage	None
<i>Larrea tridentata</i>	creosote	None
<i>Lepidium flavum</i>	yellow pepper grass	None
<i>Loeseliastrum matthewsii</i>	desert calico	None
<i>Malacothrix glabrata</i>	desert dandelion	None
<i>Salsola</i> sp.	Russian thistle	None
<i>Suaeda nigra</i>	bush seepweed	None

## **APPENDIX C**



# MEMORANDUM

**Date:** June 21, 2023

**To:** Valley Wide Engineering & Construction Services

**From:** Graham Stephens; and, Andre Almeida, P.E. – Sespe Consulting, Inc.

**Re:** CEQA Air Quality and Greenhouse Gas Analysis Memorandum for the Barker Photovoltaic Solar Project in Inyo County, California

Sespe Consulting, Inc. (“Sespe”) has prepared the following memorandum to evaluate the potential air quality and greenhouse gas impacts resulting from the construction and operation of two proposed photovoltaic (PV) solar facilities located in Inyo County, California. Valley Wide Engineering & Construction Services (the “Applicant”) is proposing to develop the PV solar facilities on two separate parcels of land, specifically a 15-acre property referred to as the Trona 4 site, and a 5-acre property referred to as the Trona 7 site (collectively referred to herein as the “Project”). See Figure 1 in Attachment A which shows the Project Area boundaries, and the surrounding environmental setting.

The California Environmental Quality Act (CEQA) requires an environmental analysis, including those related to air quality and greenhouse gases (GHG), for projects requiring discretionary approval by a local lead agency with land use authority, which in this case is Inyo County (the “County”). Therefore, pursuant to CEQA, this memorandum describes and analyzes the proposed Project’s estimated air and GHG emissions and associated impacts. Potential air toxics emissions and associated health risks are also evaluated. Table 1 below summarizes the applicable CEQA Appendix G – Environmental Checklist Form questions that are used as criteria against which to evaluate the significance of the Project impacts related air quality and GHG resources, as well as the corresponding significance thresholds determinations.

**Table 1: Summary of CEQA Significance Determinations**

CEQA Threshold	Impact Determination
AIR QUALITY-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant
AIR QUALITY-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant
AIR QUALITY-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant
AIR QUALITY-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant

CEQA Threshold	Impact Determination
GREENHOUSE GAS EMISSIONS-1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant
GREENHOUSE GAS EMISSIONS-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

**PROJECT SUMMARY**

The Project is located on contiguous County parcels (assessor’s parcel numbers [APNs] 038-330-32, 038-330-33, 038-330-34 and 038-330-46), located north of the unincorporated town of Trona, California. The Project consists of two separate applications for renewable energy permits, one covering approximately 15 acres (referred to as the Trona 4 site) and the other covering approximately 5 acres (referred to as the Trona 7 site). Both the Trona 4 and Trona 7 solar arrays will connect to the existing Southern California Edison (SCE) 33-kilovolt (kV) transmission line that passes through the Project area with separate connections.

The Trona 7 PV solar facility would consist of approximately 2,300 single-axis tracker solar panels that will produce approximately 1.2 megawatts (MW) of electricity. The Trona 4 site would also generate approximately 3.0 MW of electricity utilizing approximately 6,000 single-axis tracker solar panels. Both sites are currently graded and highly disturbed with little to no natural vegetation, habitat, water features or structures. A private dirt track and a junk yard also existed within the western portion of the Trona 4 site, but both features have been recently removed.

The Project Area is located approximately 3.0 miles north of the unincorporated Trona community, and approximately 1.0 mile west of the Trona Airport. Surrounding areas are generally undeveloped, flat or gently sloped, graded and without significant vegetation. The Project Area is bordered by an existing solar facility to the south, scattered residential homes to the west, and miscellaneous abandoned vehicles, local trash and debris. Access to the site is provided by dirt roads connecting to Trona Wildrose Road to the east of the site. See Figure 1 (Attachment A) which shows the Project Area and adjacent land uses.

**Project Construction**

Project construction will involve minor land disturbance, consisting of minor leveling, digging of shallow trenches for placing underground conduits, and installation of a 20-foot by 20-foot concrete pad for a transformer. Site preparation will require approximately two days using a grader and a backhoe. Water trucks will also be utilized as needed to control dust throughout the construction phase. In addition to regular watering using the mobile water trucks, further dust controls will include the placement of crushed limestone on the ground, and the application of a non-toxic clay polymer compound, such as EarthGlue, to provide further dust suppression as needed. Stabilized construction entrance and exits will also be installed and maintained at driveways to reduce sediment track-out onto the adjacent public roadway.

Following the trenching and leveling, metal pole supports will be installed on which the solar panels will be mounted. Poles will be driven directly into the ground using a compact, lightweight pile driver. A forklift may also

be used onsite during this construction phase. Installation of the mounting poles, solar panels and related infrastructure (transformer, connection to adjacent SCE lines, etc.) will take approximately two months. Regular watering, limestone base, and chemical binders (e.g., EarthGlue) will continue to be used onsite to control dust during this phase of construction. Once operational, onsite control of fugitive dust is critical to solar operations, as solar panels coated by dust do not function at full capacity. As such, dust controls such the limestone base and/or EarthGlue binder will remain in place and be maintained post-construction.

Once installed, the solar panels will reach a maximum height of 12-feet above the ground surface (or less, as the panels change slightly in height as they rotate slowly throughout the day to track the sun). The solar panels will also feature anti-reflective coatings to minimize daytime glare and reflectivity. Both the Trona 4 and 7 sites will be fenced and gated to prevent unauthorized access.

Per information provided by the Applicant, Table 2 below summarizes the types of equipment that would operate onsite during the Project’s construction phase, as well as the activity levels. This information is utilized to quantify the Project’s air emissions resulting from onsite construction activities.

**Table 2: Project Construction Equipment List and Activity Level**

Equipment	Engine Tier	Total Duration of Operations		Onsite Location
		Total Weeks	Total Hours	
Grader	Tier 4	2	40	Trona 4 (former track area)
Bulldozer	Tier 4	2	40	Trona 4 (former track area)
Water truck (4,000 gal.)	Tier 4	8	150	Throughout Site
Water truck (4,000 gal.)	Tier 4	8	150	Throughout Site
Forklift (Reach)	Tier 4	8	150	Throughout Site
PD5 Pile Driver	Tier 4	8	150	Throughout Site
Light-Duty Pickups	Tier 4	8	150	Throughout Site
Light-Duty Pickups	Tier 4	8	150	Throughout Site

**Project Operations**

After construction is complete, the PV solar facilities will be placed into commercial operation. Unlike construction, operation of the PV Solar Facilities will not require permanent onsite personnel, as control of the solar array would be automated and/or controlled remotely. At times, operations staff would come to the site to conduct routine maintenance and inspections, but these activities would be infrequent, and would only require one light-duty work vehicle travelling to and from the site (assume approximately 15 vehicle miles travelled round trip per site inspection). At most, it’s assumed that up to one site inspection will occur per week during normal facility operations. Table 3 below summarizes the vehicle activity levels used to quantify operational emissions.

**Table 3: Project Operations Vehicle Activity Level**

Vehicle Type	Engine Tier	Roundtrips per Year	VMT's per Roundtrip	Notes / Assumptions
Light-Duty Pickup Truck	Tier 4	52	15	Assume vehicle would originate from nearby Ridgecrest (approximately 15 miles roundtrip). To conservatively estimate vehicle emissions, the analysis assumed up to one inspection/maintenance trip could occur per week (in reality, periodic inspections would most likely be far less).

Note that in addition to fuel combustion in off-road construction equipment and on-road vehicles, electricity consumption is also considered an indirect source of GHG emissions under CEQA. However, because the Project involves PV solar facilities, it would therefore be a net producer of renewable electricity, and the Project would therefore not produce indirect GHG's as a result of electricity consumption. See the discussion below for additional detail.

**APPLICABLE CEQA METHODOLOGIES AND SIGNIFICANCE THRESHOLDS**

The Project Area is located in the Great Basin Valleys Air Basin (GBVAB), and is within the jurisdictional boundaries of the Great Basin Unified Air Pollution Control District (GBUAPCD). While the GBUAPCD has regulatory authority over stationary air emissions sources and administers permits limiting emissions of criteria air pollutants and toxic air contaminants (TACs) within the GBVAB, they have yet to establish numerical significance thresholds or publish guidance for evaluating air quality and GHG impacts under CEQA. Similarly, Inyo County also has no established thresholds or CEQA guidance. Therefore, in lieu of appropriate local thresholds, numerical standards published by the Mojave Desert Air Quality Management District (MDAQMD) and the South Coast Air Quality Management District (SCAQMD) are utilized within this memorandum to determine the significance of Project impacts. Use of the MDAQMD and SCAQMD thresholds is also consistent with other CEQA documents certified by both the County and GBUAPCD, including the Environmental Impact Report (EIR) certified by the County in 2015 for their Renewable Energy General Plan Amendment (REGPA) (Inyo County, 2015).

MDAQMD's *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* (MDAQMD, 2020) contains various significance thresholds that can be applied to the Project. Specifically, MDAQMD guidance states that a project would have a potentially significant air quality impact under CEQA if it:

1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 4;
2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s)<sup>1</sup>;
4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.

<sup>1</sup> A project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold (MDAQMD, 2020).

**Table 4: MDAQMD CEQA Numeric Emissions Thresholds**

Criteria Pollutant	Annual Threshold (short tons)	Daily Threshold (pounds)
Greenhouse Gases (CO <sub>2</sub> e)	100,000	548,000
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO <sub>x</sub> )	25	137
Volatile Organic Compounds (VOC)	25	137
Oxides of Sulfur (SO <sub>x</sub> )	25	137
Particulate Matter (PM <sub>10</sub> )	15	82
Particulate Matter (PM <sub>2.5</sub> )	12	65
Hydrogen Sulfide (H <sub>2</sub> S)	10	54
Lead (Pb)	0.6	3

In addition to the MDAQMD thresholds summarized above, additional guidance and thresholds published by the SCAQMD are also utilized. Specifically, SCAQMD’s health risk screening tool is utilized to address CEQA Guidelines Appendix G, Air Quality Threshold Criteria (c) below.

With respect to GHG emissions, most requirements for sources and projects to reduce GHG emissions in California originate from the Assembly Bill (AB) 32 Scoping Plan (the “Scoping Plan”) and associated programs administered by the California Air Resources Control Board (CARB). The Scoping Plan is the State’s blueprint for how GHG reductions will be achieved. Local jurisdictions may have requirements as well, but the overall effort is centralized with CARB. Therefore, potential GHG impacts under CEQA can be determined based on whether a specific project may conflict with the current Scoping Plan.

In addition to the state-wide Scoping Plan, in 2008 the SCAQMD adopted the Interim GHG Significance Threshold which takes a tiered approach whereby individual projects can be “screened-out” and found to have less than significant CEQA GHG impacts by one of the following five methods: exemption from CEQA, GHG emissions already analyzed in GHG budgets from in approved regional plans, having emissions less than the 10,000 metric tons of CO<sub>2</sub> equivalent emissions per year (MT CO<sub>2</sub>e/year) screening level for industrial projects, meeting best performance standards, or purchase GHG emissions offsets by funding projects or buying them outright. Projects with incremental increases less than these thresholds can be screened out of further analysis and are not cumulatively considerable.

In the decade since the SCAQMD adopted this Interim GHG Significance Threshold, several new laws and executive orders were adopted that require additional reductions in years after 2020. For instance, Senate Bill 32 (Lara, 2016) requires that GHG emissions be 40% less than 1990 levels by 2030. Senate Bill 100 (de Leon, 2018), which was signed by the Governor, requires 100% zero-carbon electricity by 2045. On the day SB 100 was signed into law, the Governor also signed Executive Order B-55-18 which commits California to total, economy-wide carbon neutrality by 2045.

For these reasons, Project’s GHG emissions levels and the use of the MDAQMD and SCAQMD screening threshold presented below are for disclosure purposes as well as CEQA compliance, because this impact analysis for the Project follows the approach certified by SCAQMD for other projects. The approach used by SCAQMD to assess GHG impacts from those project recognized that consumers of electricity and transportation fuels are, in effect, regulated by requiring providers and importers of electricity and fuel to participate in the GHG Cap-and-Trade Program and other state/sector-wide programs (e.g., low carbon fuel standard, renewable portfolio standard, etc.). Each such sector-wide program exists within the framework of AB 32 and its descendant laws the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan.

**EMISSIONS QUANTIFICATION METHODOLOGIES**

This assessment incorporates the following methodologies in the quantification of criteria pollutant, toxic air contaminant (TAC) and GHG emissions during the Project’s construction and operation phases. Additionally, health risk screening was performed as outlined in this section. Detailed emissions calculations can be found in Attachment B, and documentation related to the health risk screening can be found in Attachment C.

Onsite Project construction phase emissions were determined using CARB’s California Emissions Estimator Model (CalEEMod®) and the equipment and activity levels summarized in Table 2 above. Attachment D contains the CalEEMod output results and documentation for the Project. Off-site construction phase vehicle exhaust emissions were calculated separately, assuming up to ten contractors would drive 15 miles round trip per day, for up to 25 total days of construction. Similarly, operation phase vehicle exhaust emissions were calculated assuming up to one employee trip per day, travelling a total of 1S miles to and from the site, as well as 1 mile within the site boundaries. Employee truck emissions were estimated using CARB’s Emissions Factors (EMFAC) 2021 model, assuming each employee would utilize a “light-duty truck (LDT2)” with a diesel engine vehicle. Lastly, road dust emissions from onsite vehicle traffic were calculated using the unpaved road emissions factor outlined in AP-42 Section 13.2.2 published by the Environmental Protection Agency (EPA). TACs from road dust emissions were quantified using San Diego Air Pollution Control District (SDAPCD) speciation profile R01 – *Haul Roads, General* (SDAPCD, 2021).

Health risk screening was performed using the SCAQMD Risk Tool V1.105 (the “Risk Tool”). A Tier 2 analysis was performed per SCAQMD Risk Assessment Procedures version 8.1. The analysis represents a highly conservative risk assessment used to determine if more complex assessment (i.e., modeling) is necessary. Per SCAQMD Risk Assessment Procedures version 8.1:

*Tier 2 is a screening risk assessment, which includes procedures for determining the level of risk from a source for cancer risk, cancer burden, HIA, HIC8, and HIC. If the estimated risk from Tier 2 screening is below Rule 1401 limits, then a more detailed evaluation is not necessary.*

In order to perform health risk screening for each risk type (e.g., cancer, chronic, and acute impacts) over the course of the Project, the screening analysis for the Project was divided into four phases as outlined in Table 5 below. Also see Attachment C for additional detail.

**Table 5: Screening Health Risk Assessment Phases**

Health Risk Screening Phase Title	Project Phase	Risk Type Assessed	Model Duration (Years)
Screen 1	Construction	Acute	2
Screen 2a	Construction	Cancer/Chronic	2
Screen 2b	Operation	Cancer/Chronic	30
Screen 3	Operation	Acute	2

Notes: Total Project cancer risk is determined by combining risk from Screen 2a and Screen 2b. Attachment B contains TAC emissions quantified by Project phase. Attachment C contains SCAQMD Risk Tool output documentation.

Model duration used in the health screening was conservatively chosen based on the available model duration options. Although onsite construction activities would not last longer than a single year (i.e., estimate to take approximately 2 months total), in the Risk Tool two years is the shortest duration available, and 30 years is the longest. Project health risk emissions were conservatively modeled using a point source in the Tier 2 analysis. Meteorological data from the “Desert Hot Springs Airport” was used in the risk tool, as the climate in Desert Hot

Springs area is similar to that of Inyo County. Residential receptor distance was set to 130 meters (i.e., 425-feet) and commercial distance was set to 1,000 meters (i.e., 3,280-feet).

### **CEQA IMPACT ANALYSIS**

The following section summarizes the Project's potential impacts with respects to air quality and GHGs, which address the specific impact statements outlined in the current CEQA Guidelines Appendix G Environmental Checklist Form (California Code of Regulations, Title 14). As discussed above, this analysis primarily uses the MDAQMD approved methods and thresholds to quantify the impacts associated with the Project. Methods or guidance provided by the SCAQMD were also used in certain cases to supplement MDAQMD guidance when applicable.

#### **Air Quality**

**Air Quality-1:** *Would the Project conflict with or obstruct implementation of the applicable air quality plan? (CEQA Guidelines Appendix G, Air Quality Threshold Criteria (a))*

The Project would be required to comply with regional air quality rules promulgated by the GBUAPCD and participate in reducing air pollutant emissions. As the local air district with jurisdiction over the Project, the GBUAPCD is the applicable agency tasked with implementing programs and regulations required by the Clean Air Act (CAA) and the California Clean Air Act (CCAA). In that capacity, the GBUAPCD has prepared plans to attain Federal and State ambient air quality standards. Pursuant to the CAA, the GBUAPCD is required to reduce emissions of criteria pollutants for which the GBVAB is in nonattainment. While portions of Inyo County are in nonattainment for particulate matter (i.e., PM<sub>10</sub>), the Project Area is located within the Coso Junction PM<sub>10</sub> State Implementation Plan (SIP) (GBUAPCD, 2021), which was redesignated as in attainment by the EPA in 2010 per the National Ambient Air Quality Standards (NAAQS). While the Project is not located in a nonattainment area for PM<sub>10</sub>, the GBUAPCD still maintains established thresholds of significance for criteria pollutant emissions for any new stationary source or modification of an existing stationary source as part of their "New Source Review Requirements for Determining Impact on Air Quality" (Rule 216).

As discussed above, the Project proposes to develop PV solar facilities on an approximately 20-acre Project Area, located north of the town of Trona. Project contractors and operators would be required to comply with regional air quality rules promulgated by the GBUAPCD, and participate in reducing air pollutant emissions, including those required under their new source review requirements. Further, development of renewable solar projects in Inyo County was contemplated as part of the County's REGPA, and the Project would comply with applicable goals and policies outlined in the REGPA that are meant to reduce air emissions during construction and operation.

The primary air emissions associated with the Project would be fugitive dust emissions during facility construction, and to a lesser extent fugitive dust due to vehicles travelling on unpaved roadways during facility operations. Fugitive dust is addressed under GBUAPCD Rules 401 and 402, and the Applicant would be required to comply with applicable provisions found therein. While some grading and clearing would be required to prepare the site for installation of the solar panels, because the site is already relatively flat, and because much of the site has already been prepared, only minimal grading would be required. In accordance with GBUAPCD rules, mobile water trucks will also be used onsite throughout the entirety of the construction phase to control fugitive dust. Limestone base materials and/or soil binders such as EarthGlue will also be used onsite to control dust emissions, and will remain on certain portions of the site to reduce dust once the facility is put into normal operation. Note,

implementation of these dust control measures is consistent with applicable GBUAPCD rules, as well as the standard mitigations measures described within the EIR prepared by Inyo County in support of the REGPA.

Through compliance with GBUAPCD's new source review for stationary sources, and through implementation of onsite fugitive dust control measures consistent with GBUAPCD's Rule 401 and 402 requirements, as well as the programmatic mitigations described within the EIR prepared by the County for their REGPA, the Project would be consistent with applicable air quality plans adopted by the GBUAPCD. Therefore, the Project would not obstruct implementation of applicable air quality plans, and impacts would therefore be less than significant with no mitigation required.

**Air Quality-2:** *Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (CEQA Guidelines Appendix G, Air Quality Threshold Criteria (b))*

CEQA defines cumulative impacts as two or more individual effects which, when considered together, are either significant or "cumulatively considerable", meaning they add considerably to a significant environmental impact. An adequate cumulative impact analysis considers a project over time and in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed.

By its very nature, air pollution is largely a cumulative impact, and is a result of past and present development. Similarly, the application of thresholds of significance for criteria pollutants, such as those promulgated by the MDAQMD, is also relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

A CEQA lead agency, in this case Inyo County, may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including but not limited to an air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (CCR §15064(h)(3)).

Thus, if project emissions (i.e., change from baseline) exceed the MDAQMD thresholds for carbon monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOC), Oxides of Sulfur (SO<sub>x</sub>), and particulate matter (PM<sub>10</sub> or PM<sub>2.5</sub>), hydrogen sulfide (H<sub>2</sub>S), or lead (Pb), summarized previously in Table 4 above, then a project would potentially result in a cumulatively considerable net increase of a criteria pollutant. The applicable MDAQMD significance criteria as well as the Project's worst-case annual and daily emissions are presented in Table 6 and Table 7 below. Note that the Project year and day with the maximum amount of emissions were compared to the applicable thresholds to determine the potential significance of Project criteria pollutant emissions. See the emissions summaries in Attachment B, as well as the CalEEMod output files in Attachment D, for additional detail.



**Table 6: Project Criteria Pollutant Increase (Annual Emissions)**

Pollutant	Maximum Project Emissions (tons/year)	Significance Threshold (tons/year)	Exceeds Criteria?
Carbon Monoxide (CO)	0.4	100	No
Oxides of Nitrogen (NO <sub>x</sub> )	0.2	25	No
Volatile Organic Compounds (VOC)	0.009	25	No
Oxides of Sulfur (SO <sub>x</sub> )	0.001	25	No
Particulate Matter (PM <sub>10</sub> )	0.13	15	No
Particulate Matter (PM <sub>2.5</sub> )	0.028	12	No
Hydrogen Sulfide (H <sub>2</sub> S)	0	10	No
Lead (Pb)	3.0E-06	0.6	No

Note, none of the Project's construction or operational emissions sources would emit Hydrogen Sulfide (H<sub>2</sub>S).

**Table 7: Project Criteria Pollutant Increase (Daily Emissions)**

Pollutant	Maximum Project Emissions (pounds/day)	Significance Threshold (pounds/day)	Exceeds Criteria?
Carbon Monoxide (CO)	32	548	No
Oxides of Nitrogen (NO <sub>x</sub> )	16	137	No
Volatile Organic Compounds (VOC)	0.8	137	No
Oxides of Sulfur (SO <sub>x</sub> )	0.1	137	No
Particulate Matter (PM <sub>10</sub> )	0.001	82	No
Particulate Matter (PM <sub>2.5</sub> )	0.5	65	No
Hydrogen Sulfide (H <sub>2</sub> S)	0	54	No
Lead (Pb)	0.0001	3	No

Note, none of the Project's construction or operational emissions sources would emit Hydrogen Sulfide (H<sub>2</sub>S).

Table 6 and Table 7 above show that the Project's estimated daily and annual emissions are well below established MDAQMD thresholds. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard, and impacts would be less than significant with no mitigation required.

**Air Quality-3: Would the Project expose sensitive receptors to substantial pollutant concentrations? (CEQA Guidelines Appendix G, Air Quality Threshold Criteria (c))**

Determination of whether project emissions would expose receptors to substantial pollutant concentrations is a function of assessing potential health risks. Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. When evaluating whether a project has the potential to result in localized impacts, the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography must be considered.

A Health Risk Screening was performed to evaluate the effects of TACs, including diesel particulate matter (DPM) from vehicle engines, and various substances found in fugitive dust emissions (i.e., metals and respirable crystalline silica). Health risks associated with the Project are presented in Table 8, which shows impacts are well

below applicable SCAQMD screening thresholds. Therefore, there would be no new or significant health risk impacts from the Project, with no mitigation required. See the health risk screening results in Attachment C for additional detail.

**Table 8: Project Health Risk Screening Results**

Health Risk Screening Phase	Risk Type Assessed	Risk Units	Maximum Risk Value	Risk Threshold	Threshold Exceeded?
Screen 1	Acute	Hazard Index	0.0003	1.0	No
Screen 2a	Chronic	Hazard Index	0.0009	1.0	No
	Cancer	MICR Per Million Exposed	1.9	10	No
Screen 2b	Chronic	Hazard Index	0.0006	1.0	No
	Cancer	MICR Per Million Exposed	0.009	10	No
Screen 2 (Total)	Cancer	MICR Per Million Exposed	1.9	10	No
Screen 3	Acute	Hazard Index	0.0007	1.0	No

Notes: See Attachment C for the risk tool output files. Values in the table above may differ slightly from the attached values due to rounding. MICR = "Maximum Individual Cancer Risk".

**Air Quality-4:** *Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?* (CEQA Guidelines Appendix G, Air Quality Threshold Criteria (d))

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Substantial odor-generating operations generally include wastewater treatment facilities, composting facilities, agricultural operations, and heavy industrial operations. Note, the Project would not involve any activities with the potential to generate odor impacts. While diesel exhaust from mobile equipment/vehicles, such as those that would be used onsite during construction, has a slight odor, odor intensity would decrease rapidly with distance and is not expected to be frequently (or at all) detectable at locations outside of the Project Area boundaries. No other potential source of odors are associated with the Project construction activities or ongoing operations. Further, the Project would comply with GBUAPCD's nuisance rules, including those related to odor. As such, the Project will not result in other emissions (such as those leading to odors) that could adversely affect a substantial number of people, and therefore the Project impacts were determined to be less than significant with no mitigation required.

**Greenhouse Gases**

**Greenhouse Gas Emissions-1:** *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* (CEQA Guidelines Appendix G, Greenhouse Gas Threshold Criteria (a))

In general, it is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature; however, the combination of GHG emissions from past, present, and future projects could contribute substantially to global climate change. GHG emissions, and their associated contribution to climate change, are inherently a cumulative impact issue.

This concept is also reflected in California’s 2022 *Scoping Plan for Achieving Carbon Neutrality* (CARB, 2022). Specifically, regulations are implemented in order to reduce the cumulative impact of GHG emissions on a statewide level, and generally not at the project-level. Sources of GHG emission associated with the Project include fuel combustion within construction equipment and vehicles travelling to and from the site, and indirect GHG’s emitted through electricity consumption. Fuel is regulated at a level in the supply chain above an individual project, such that any project has no choice but to purchase and use fuel energy in California which is already regulated. The Project therefore is simply a location in which GHG emissions are emitted by consuming fuel that was already regulated through Cap-and-Trade, applicable Low-Carbon Fuel Standards (GHG) and other applicable regulations higher up the supply chain.

To comply with CEQA, GHG emissions impacts from implementing the Project were calculated at the Project-specific level for construction and operations, and compared to applicable significance thresholds published by the MDAQMD and the SCAQMD. Impact analysis for the Project follows the approach certified by SCAQMD for other projects, which takes into account the cumulative nature of the energy industry and recognizes that consumers of electricity and diesel fuel are, in effect, regulated by higher level emissions restrictions on the producers of these energy sources. As shown in Table 9 below, the Project’s worst case annual GHG emissions are well below the applicable MDAQMD and the SCAQMD screening thresholds.

**Table 9: Project GHG Emissions**

Source / Parameter	CO <sub>2</sub> e (MT/year)
Total Project Emissions	63
MDAQMD Screening Threshold	100,000
Exceed?	No
SCAQMD Screening Threshold	10,000
Exceed?	No

For the reasons outlined above, the proposed Project would have a less than significant GHG impact, with no mitigation measures required.

**Greenhouse Gas Emissions-2: *Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*** (CEQA Guidelines Appendix G, Greenhouse Gas Threshold Criteria (b))

Project emissions of GHGs are presented in Table 9 above. The Project would emit GHGs from fuel burned in mobile equipment and vehicle engines; however, the quantity of fuel consumed would be minimal. Specifically, onsite construction activities would be temporary in nature (take approximately two months to complete). Similarly, because the facility would be monitored remotely once placed into operation, operational fuel consumption would also be minimal (estimate a maximum of up to one inspection per week). Transportation fuel suppliers and importers, such as the ones the Applicant would use during both construction and operation, are required to report emissions under the Cap-and-Trade which is designed to reduce GHG emissions as needed to achieve emissions reductions described in related planning documents, which primarily consists of the AB 32 Scoping Plan(s), described previously. Thus, the emissions reductions will occur at a level in the supply chain above

the Project which will have no choice but to use fuels with GHG intensities that are consistent with the CARB's Scoping Plan.

Furthermore, because the Project involves renewable PV solar facilities, development of the Project would help California meet their state-wide climate change goals by producing clean renewable electricity within Inyo County. Energy generated by the Project likely would replace energy produced by the burning of fossil fuels elsewhere in the region, thereby resulting in a net reduction of GHG emissions. For example, based upon data described within the EIR published for the County's REGPA, a renewable solar project with a capacity of 900 MW could offset up to 1 million MT of CO<sub>2</sub>e per year. As noted above, collectively the Project would have a total capacity of approximately 4.2 MW, which would result in significant GHG offsets per the REGPA methodology.

In summary, the GHGs associated with the Project would be consistent with the AB 32 Scoping Plan and applicable County and GBUAPCD policies. Conversely, by generating sustainable solar electricity, the Project is expected to offset GHG emissions that would otherwise result due to the burning of fossil fuels at other power generating facilities, which would therefore result in a beneficial impact. Therefore, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and there would be no impact.

#### **CONCLUSIONS**

In summary, the Project would generate a small amount of air quality and GHG emissions due to fuel combustion within offroad construction equipment and on-road vehicles. These impacts will be less than significant per the applicable CEQA guidance and significance thresholds. Specifically, onsite equipment and offsite vehicles travelling to and from the site during the Project's construction phase would generate minimal and short-term air emissions over an approximately two month period, and onsite construction emissions were found to be below applicable numeric thresholds.

Once the facility is constructed and put into operation, long-term air emissions would also be minimal and well below applicable CEQA thresholds. Because the solar facilities would be monitored remotely and would generally operate without the need for a permanent onsite staff, at most is estimated that a single-light duty truck would travel to and from the site no more than once per week to conduct routine inspections and maintenance. As such, air emissions associated with ongoing operations were also found to be less than significant.

In addition to combustion emissions, fugitive dust due to ground disturbing activities and vehicles/equipment travelling on unpaved roadways were also quantified. Water trucks will be utilized as needed throughout the Project construction phase to control dust, and crushed limestone and/or non-toxic clay polymer compounds will be applied to exposed surfaces during construction and operations to further ensure fugitive dust is sufficiently controlled. Stabilized entrance and exits will be installed and maintained at driveways to reduce sediment track-out onto the adjacent public roadway. As stated above, the control of fugitive dust is critical to solar operations, as panels coated by dust do not function at full capacity. Therefore, dust controls will remain in place throughout the life of the Project, which will in turn ensure impacts remain less than significant.

Lastly, because the proposed facility is a renewable energy project, the Project would have a beneficial impact related to GHG emissions and climate change. The County, through adoption of their REGPA, is promoting

renewable solar development to reduce GHG emissions and help the region and state meet their aggressive climate change goals. Once operational, the Project would provide a renewable source of electricity that would offset existing electrical generating facilities that rely upon the combustion of fossil fuels. As such, the Project would be consistent with the County's REGPA and would have a beneficial effect related to GHG.

#### **REFERENCES**

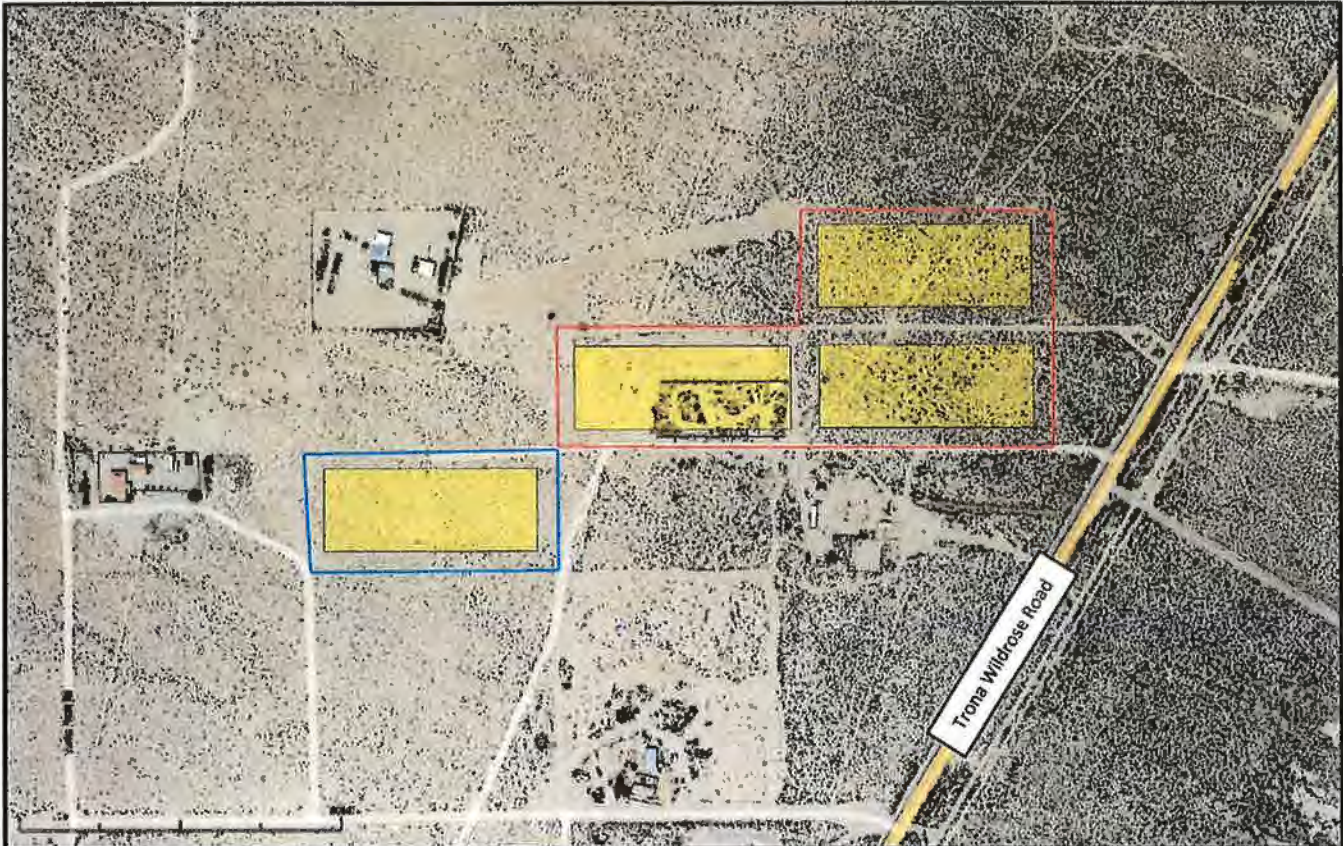
- CARB. (2022). *2022 Scoping Plan for Achieving Carbon Neutrality*. Sacramento, CA: California Air Resources Board. Retrieved from <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>
- GBUAPCD. (2021). *Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan*. Bishop, CA: Great Basin Unified Air Pollution Control District. Retrieved from <https://gbuapcd.org/Docs/District/AirQualityPlans/Coso/2021FINALCosoPM10SecondMaintenancePlan20210709-w-Appendices-Rdcd.pdf>
- Inyo County. (2015). *Renewable Energy General Plan Amendment - EIR*. Independence, CA: Inyo County. Retrieved from <https://www.inyocounty.us/sites/default/files/2023-06/Final%20DRAFT%20PEIR.pdf>
- MDAQMD. (2020). *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*. Victorville, CA: MDAQMD. Retrieved from <https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000>
- SDAPCD. (2021). *Haul Roads, General, Paved & Unpaved, with Default Trace Metal Composition*. San Diego, CA: San Diego County Air Pollution Control District. Retrieved from <https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/haul-road-emissions/R01-HAUL-ROADS-GENERAL-PAVED-&-UNPAVED-DEFAULT-TRACE-METAL-COMPOSITION-POST-Rev.pdf>

#### **ATTACHMENTS**

- A. Figures
- B. Project Emissions Summary (Construction and Operations)
- C. SCAQMD's Health Risk Screening Tool Output File/Results
- D. CalEEMod Output File/Results

**ATTACHMENT A**

Figures



Source: Google Earth™ (2023)

- ▭ Project Site Boundary - Trona 4 (approx.)
- ▭ Project Site Boundary - Trona 7 (approx.)
- ▭ Proposed Solar Array Footprint/Construction Area (approx.)



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FIGURE

1

PROJECT OVERVIEW

Inyo County Solar Project  
Trona Wildrose Road  
Inyo County, California

PROJECT #:	230510-0036	DATE:	6/5/23
SCALE:	See Above	DRAWN BY:	GPS

**ATTACHMENT B**

Project Emissions Summary (Construction and Operations)



Summary of Project Emissions						
Criteria Pollutant	Annual Threshold (short tons) <sup>A</sup>	Maximum Year Project Emissions (short tons)	Annual Threshold Exceeded?	Daily Threshold (pounds) <sup>A</sup>	Max Day Project Emissions (pounds)	Daily Threshold Exceeded?
Greenhouse Gases (CO <sub>2</sub> e)	100,000	63	No	548,000	6,388	No
Carbon Monoxide (CO)	100	0.4	No	548	32	No
Oxides of Nitrogen (NO <sub>x</sub> )	25	0.2	No	137	16	No
Volatile Organic Compounds (VOC)	25	0.009	No	137	0.8	No
Oxides of Sulfur (SO <sub>x</sub> )	25	0.001	No	137	0.1	No
Particulate Matter (PM <sub>10</sub> )	15	0.130	No	82	0.001	No
Particulate Matter (PM <sub>2.5</sub> )	12	0.028	No	65	0.5	No
Hydrogen Sulfide (H <sub>2</sub> S) <sup>B</sup>	10	0	No	54	0	No
Lead (Pb)	0.6	3.0E-06	No	3	0.0001	No

Footnotes:

A - Annual and daily thresholds taken from MDAQMD's *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* (February 2020).

B - Note, none of the Project's construction or operational emissions sources would emit Hydrogen Sulfide (H<sub>2</sub>S).



**On-Road Vehicle Emissions Factors (EMFAC DATA):**

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Inyo (GBV)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	
Inyo (GBV)	2024	LDT2	Aggregate	Aggregate	Diesel	50,696,886.3	2134,2364	2134,2364		0	241,24064	0

NOx_TOTEX	PM2.5_TOTAL	PM10_TOTAL	CO2_TOTEX	CH4_TOTEX	N2O_TOTEX	ROG_TOTAL	TOG_TOTAL	CO_RUNEX	CO_TOTEX	SOx_TOTEX	NH3_RUNEX
0.000112978	2.26845E-05	4.88404E-05	0.7532384	2.017E-06	0.00011867	4.3417E-05	4.943E-05	0.0004332	0.0004332	7.137E-06	7.29304E-06

**Calculated Emissions Factors (lb/vmt)**

PM10	PM2.5	NOx	CO2	N2O	ROG	TOG	CO	SOx
4.57685E-05	2.12577E-05	0.000105872	0.7058622	1.89E-06	0.00011121	4.0687E-05	4.632E-05	0.0004059

**Haul Road Fugitive Dust Factors**

**Fugitive Dust Speciation Profile**

Pollutant	Concentration (ppm)	Concentration
Arsenic	20	0.00002
Beryllium	1	0.000001
Cadmium	1	0.000001
Copper	100	0.0001
Lead	50	0.00005
Manganese	500	0.0005
Nickel	20	0.00002
Selenium	5	0.000005
Zinc	200	0.0002

Source: San Diego APCD Table R01 - HAUL ROADS, GENERAL, PAVED & UNPAVED, WITH DEFAULT TRACE METAL COMPOSITION

Note: The table above includes toxic air contaminants presented in both the SDAPCD speciation profile, and the SCAQMD Risk Tool

**Unpaved Road Emission Factors**

Unpaved Road emissions factor from AP42 Section 13.2.2

$$EF (lb/VMT) = 4.9 * (S/12)^{0.7} * (W/3)^{0.45}$$

S = silt content (%) =

W = avg truck weight

EF (lb/VMT) =

Control Efficiency =

Emission Factor (lb/VMT) =

Silt content based on mean Sand and Gravel Processing from AP-42 Table 13.2.2-1.

PM2.5 emissions are 21.2% of PM10 for unpaved roads (SCAQMD Updated CEDARS Table)

On-Road Light Truck	
PM10	PM2.5
4.8	
3	
2.58	0.55
0%	0%
2.58	0.55

**ATTACHMENT C**

SCAQMD's Health Risk Screening Tool Output

**TIER 1/TIER 2 SCREENING RISK ASSESSMENT DATA INPUT**

*(Procedure Version 8.1 & Package N, September 1, 2017) - Risk Tool V1.105*

Application Deemed Complete Date	06/08/23
A/N	N/A
Facility Name	HTHJ Inyo Solar

1. Stack Data	Input	Units
Hours/Day	24	hrs/day
Days/Week	7	days/wk
Weeks/Year	52	wks/yr
Control Efficiency	0.000	
Does source have T-BACT?	NO	
Source type (Point or Volume)	P	P or V
Stack Height or Building Height	20	feet
	5000	
Distance-Residential	130	meters
Distance-Commercial	1000	meters
Meteorological Station	Desert Hot Springs Airport	
Project Duration (Short term options: 2, 5, or 9 years; Else 30 years)	2	years

Conversion Units (select unit)

From  feet

To  meter

Source Type	Other
Screening Mode (NO = Tier 1 or Tier 2; YES = Tier 3)	NO

FOR SOURCE TYPE OTHER THAN BOILER, CREMATORY, ICE, PRESSURE WASHER, OR SPRAY BOOTH, FILL IN THE USER DEFINED TABLE BELOW

Fac Name: HTHJ Inyo Solar A/N: N/A

TAC Code	Compound	Emission Rate (lbs/hr)	Molecular Weight	R1 - Uncontrolled (lbs/hr)	Efficiency Factor (Fraction range 0-1)	R2-Controlled (lbs/hr)
A11	Arsenic and Compounds (Inorganic)	3.73E-07	74.92	3.73E-07	0.00000	3.73317E-07
B8	Beryllium and Compounds	1.87E-08	9.012	1.87E-08	0.00000	1.86658E-08
C1	Cadmium and Compounds	1.87E-08	112.41	1.87E-08	0.00000	1.86658E-08
C23	Copper and Compounds	1.87E-06	63.55	1.87E-06	0.00000	1.86658E-06
L1	Lead and Compounds (Inorganic)	9.33E-07	207.2	9.33E-07	0.00000	9.33292E-07
M2	Manganese and Compounds	9.33E-06	54.938	9.33E-06	0.00000	9.33292E-06
N12	Nickel and Compounds	3.73E-07	58.71	3.73E-07	0.00000	3.73317E-07
S1	Selenium and Compounds	9.33E-08	78.96	9.33E-08	0.00000	9.33292E-08
P1	Particulate Emissions from Diesel-Fueled Engines	1.44E-02	350	1.44E-02	0.00000	0.014372816

6. Hazard Index Summary

A/N: N/A

Application deemed complete date: 06/08/21

$HIA = [Q(\text{lb/hr}) * (X/Q)_{\text{max}} * MWAF] / \text{Acute REL}$

$HIC = [Q(\text{ton/yr}) * (X/Q) * MP * MWAF] / \text{Chronic REL}$

$HIC\ 8\text{-hr} = [Q(\text{ton/yr}) * (X/Q) * WAF * MWAF] / 8\text{-hr Chronic REL}$

Target Organs	Acute	Chronic	8-hr Chronic	Acute Pass/Fail	Chronic Pass/Fail	8-hr Chronic Pass/Fail
Alimentary system (liver) - AL		6.97E-05		Pass	Pass	Pass
Bones and teeth - BN				Pass	Pass	Pass
Cardiovascular system - CV	2.53E-04	4.27E-02	4.85E-04	Pass	Pass	Pass
Developmental - DEV	2.53E-04	4.32E-02	4.85E-04	Pass	Pass	Pass
Endocrine system - END				Pass	Pass	Pass
Eye				Pass	Pass	Pass
Hematopoietic systems - HEM		5.19E-04		Pass	Pass	Pass
Immune system - IMM	2.53E-04	5.19E-05	1.21E-04	Pass	Pass	Pass
Kidney - KID		3.59E-05		Pass	Pass	Pass
Nervous system - NS	2.53E-04	4.47E-02	1.55E-03	Pass	Pass	Pass
Reproductive system - REP	2.53E-04	4.32E-02	4.85E-04	Pass	Pass	Pass
Respiratory system - RESP	2.53E-06	9.93E-02	6.06E-04	Pass	Pass	Pass
Skin		4.27E-02	4.85E-04	Pass	Pass	Pass

**TIER 1/TIER 2 SCREENING RISK ASSESSMENT DATA INPUT**

*(Procedure Version 8.1 & Package N, September 1, 2017) - Risk Tool VI.105*

Application Deemed Complete Date	06/08/23
A/N	N/A
Facility Name	HTHJ Inyo Solar

1. Stack Data	Input	Units
Hours/Day	24	hrs/day
Days/Week	7	days/wk
Weeks/Year	52	wks/yr
Control Efficiency	0.000	
Does source have T-BACT?	YES	
Source type (Point or Volume)	P	P or V
Stack Height or Building Height	20	feet
	5000	ft
Distance-Residential	130	meters
Distance-Commercial	1000	meters
Meteorological Station	Desert Hot Springs Airport	
Project Duration (Short term options: 2, 5, or 9 years; Else 30 years)	2	years

**Conversion Units (select units)**  
 From  feet  
 To  meter

Source Type	Other
Screening Mode (NO = Tier 1 or Tier 2; YES = Tier 3)	NO

**FOR SOURCE TYPE OTHER THAN BOILER, CREMATORY, ICE, PRESSURE WASHER, OR SPRAY BOOTH, FILL IN THE USER DEFINED TABLE BELOW**

Fac Name: HTHJ Inyo Solar A/N: N/A

TAC Code	Compound	Emission Rate (lbs/hr)	Molecular Weight	R1 - Uncontrolled (lbs/hr)	Efficiency Factor (Fraction range 0-1)	R2-Controlled (lbs/hr)
A11	Arsenic and Compounds (Inorganic)	7.34E-09	74.92	7.34E-09	0.00000	7.34124E-09
B8	Beryllium and Compounds	3.67E-10	9.012	3.67E-10	0.00000	3.67062E-10
C1	Cadmium and Compounds	3.67E-10	112.41	3.67E-10	0.00000	3.67062E-10
C23	Copper and Compounds	3.67E-08	63.55	3.67E-08	0.00000	3.67062E-08
L1	Lead and Compounds (Inorganic)	1.84E-08	207.2	1.84E-08	0.00000	1.83531E-08
M2	Manganese and Compounds	1.84E-07	54.938	1.84E-07	0.00000	1.83531E-07
N12	Nickel and Compounds	7.34E-09	58.71	7.34E-09	0.00000	7.34124E-09
S1	Selenium and Compounds	1.84E-09	78.96	1.84E-09	0.00000	1.83531E-09
P1	Particulate Emissions from Diesel-Fueled Engines	2.83E-04	350	2.83E-04	0.00000	0.000283404





6. Hazard Index Summary

A/N: N/A

Application deemed complete date: 06/04/23

HIA = [C(lb/hr)] \* (X/Q)urs \* MWAF / Acute REL

HIC = [C(ton/yr)] \* (X/Q) \* MF \* MWAF / Chronic REL

HIC 3-hr = [C(ton/yr)] \* (X/Q) \* WAF \* MWAF / 3-hr Chronic REL

Target Organs	Acute	Chronic	3-hr Chronic	Acute Pass/Fail	Chronic Pass/Fail	3-hr Chronic Pass/Fail
Alimentary system (liver) - AL		1.37E-06		Pass	Pass	Pass
Bones and teeth - BN				Pass	Pass	Pass
Cardiovascular system - CV	4.98E-06	4.40E-04	9.53E-06	Pass	Pass	Pass
Developmental - DEV	4.98E-06	4.50E-04	9.53E-06	Pass	Pass	Pass
Endocrine system - END				Pass	Pass	Pass
Eye				Pass	Pass	Pass
Hematopoietic system - HEM		1.02E-05		Pass	Pass	Pass
Immune system - IMM	4.98E-06	1.02E-06	2.38E-06	Pass	Pass	Pass
Kidney - KID		7.05E-07		Pass	Pass	Pass
Nervous system - NS	4.98E-06	2.79E-04	3.06E-05	Pass	Pass	Pass
Reproductive system - REP	4.98E-06	8.50E-04	9.53E-06	Pass	Pass	Pass
Respiratory system - RESP	4.98E-06	1.96E-03	1.19E-05	Pass	Pass	Pass
Skin		8.39E-04	9.53E-06	Pass	Pass	Pass

**TIER 1/TIER 2 SCREENING RISK ASSESSMENT DATA INPUT**

*(Procedure Version 8.1 & Package N, September 1, 2017) - Risk Tool V1.105*

Application Deemed Complete Date	06/08/23
A/N	N/A
Facility Name	HTHJ Inyo Solar

I. Stack Data	Input	Units
Hours/Day	24	hrs/day
Days/Week	7	days/wk
Weeks/Year	52	wks/yr
Control Efficiency	0.000	
Does source have T-BACT?	NO	
Source type (Point or Volume)	P	P or V
Stack Height or Building Height	20	feet
Building Area		
Distance-Residential	1000	meters
Distance-Commercial	1000	meters
Meteorological Station	Desert Hot Springs Airport	
Project Duration (Short term options: 2, 5, or 9 years; Else 30 years)	30	years

Conversion Units (select units:  
From  feet  
To  meter

Source Type	Other
Screening Mode (NO = Tier 1 or Tier 2; YES = Tier 3)	NO

FOR SOURCE TYPE OTHER THAN BOILER, CREMATORY, ICE, PRESSURE WASHER, OR SPRAY BOOTH, FILL IN THE USER DEFINED TABLE BELOW

Fac Name: HTHJ Inyo Solar A/N: N/A

TAC Code	Compound	Emission Rate (lbs/hr)	Molecular Weight	R1 - Uncontrolled (lbs/hr)	Efficiency Factor (Fraction range 0-1)	R2-Controlled (lbs/hr)
A11	Arsenic and Compounds (Inorganic)	2.74E-07	74.92	2.74E-07	0.00000	2.73973E-07
B8	Beryllium and Compounds	1.37E-08	9.012	1.37E-08	0.00000	1.36986E-08
C1	Cadmium and Compounds	1.37E-08	112.41	1.37E-08	0.00000	1.36986E-08
C23	Copper and Compounds	1.37E-06	63.55	1.37E-06	0.00000	1.36986E-06
L1	Lead and Compounds (Inorganic)	6.85E-07	207.2	6.85E-07	0.00000	6.84932E-07
M2	Manganese and Compounds	6.85E-06	54.938	6.85E-06	0.00000	6.84932E-06
N12	Nickel and Compounds	2.74E-07	58.71	2.74E-07	0.00000	2.73973E-07
S1	Selenium and Compounds	6.85E-08	78.96	6.85E-08	0.00000	6.84932E-08
P1	Particulate Emissions from Diesel-Fueled Engines	1.36E-06	350	1.36E-06	0.00000	1.35843E-06

**5a. MICH**

MICR Resident =  $CP \text{ (mg/kg-day)}^{-1} \cdot Q \text{ (ton/yr)} \cdot (X/Q) \text{ Resident} \cdot CEF \text{ Resident} \cdot MP \text{ Resident} \cdot 10^{-6} \cdot MWAF$

MICR Worker =  $CP \text{ (mg/kg-day)}^{-1} \cdot Q \text{ (ton/yr)} \cdot (X/Q) \text{ Worker} \cdot CEF \text{ Worker} \cdot MP \text{ Worker} \cdot WAF \text{ Worker} \cdot 10^{-6} \cdot MWAF$

Compound	Residential	Commercial
Arsenic and Compounds (Inorganic)	8.50E-09	3.26E-10
Beryllium and Compounds	3.06E-11	2.53E-12
Cadmium and Compounds	5.47E-11	4.51E-12
Copper and Compounds		
Lead and Compounds (Inorganic)	8.74E-11	3.68E-12
Manganese and Compounds		
Nickel and Compounds	6.64E-11	5.47E-12
Selenium and Compounds		
Particulate Emissions from Diesel-Fueled Ev	3.98E-10	3.28E-11
Total	9.14E-09	3.75E-10
	PASS	PASS

5b. Is Cancer Burden Calculation Needed (MICH > 1E-6)?

NO

New X/Q at which MICR<sub>99</sub> is one-in-a-million (ug/m<sup>3</sup>)(ton/yr):

New Distance, interpolated from X/Q table using New X/Q (meter):

Zone Impact Area (km<sup>2</sup>):

Zone of Impact Population (7000 persons/km<sup>2</sup>):

Cancer Burden:

6. Hazard Index Summary

A/N: N/A

Application deemed complete date: 06/08/23

HIA =  $[C(b/hr) * (X/Q)_{max} * MAAF] / \text{Acute REL}$

HIC =  $[C(ton/yr) * (X/Q) * MP * MAAF] / \text{Chronic REL}$

HIC 8-hr =  $[C(ton/yr) * (X/Q) * MAF * MAAF] / \text{8-hr Chronic REL}$

Target Organs	Acute	Chronic	8-hr Chronic	Acute Pass/Fail	Chronic Pass/Fail	8-hr Chronic Pass/Fail
Alimentary system (liver) - AL		1.03E-06		Pass	Pass	Pass
Bones and teeth - BN				Pass	Pass	Pass
Cardiovascular system - CV	3.67E-06	6.32E-04	7.18E-06	Pass	Pass	Pass
Developmental - DEV	3.67E-06	6.40E-04	7.18E-06	Pass	Pass	Pass
Endocrine system - END				Pass	Pass	Pass
Eye				Pass	Pass	Pass
Hematopoietic system - HEM		7.69E-06		Pass	Pass	Pass
Immune system - IMM	3.67E-06	7.69E-07	1.80E-06	Pass	Pass	Pass
Kidney - KID		4.32E-07		Pass	Pass	Pass
Nervous system - NS	3.67E-06	6.62E-04	2.30E-05	Pass	Pass	Pass
Reproductive system - REP	3.67E-06	6.40E-04	7.18E-06	Pass	Pass	Pass
Respiratory system - RESP	3.67E-06	6.41E-04	8.98E-06	Pass	Pass	Pass
Skin		6.32E-04	7.18E-06	Pass	Pass	Pass

**TIER 1/TIER 2 SCREENING RISK ASSESSMENT DATA INPUT**

*(Procedure Version 8.1 & Package N, September 1, 2017) - Risk Tool VI.105*

Application Deemed Complete Date	06/08/23
A/N	N/A
Facility Name	HTHJ Inyo Solar

1. Stack Data	Input	Units
Hours/Day	24	hrs/day
Days/Week	7	days/wk
Weeks/Year	52	wka/yr
Control Efficiency	0.000	
Does source have T-BACT?	NO	
Source type (Point or Volume)	P	P or V
Stack Height or Building Height	20	feet
Building Area		
Distance-Residential	1000	meters
Distance-Commercial	1000	meters
Meteorological Station	Desert Hot Springs Airport	
Project Duration (Short term options: 2, 5, or 9 years; Else 30 years)	2	years

Conversion Units (select unit)

From  feet

To  meter

Source Type	Other
Screening Mode (NO = Tier 1 or Tier 2; YES = Tier 3)	NO

FOR SOURCE TYPE OTHER THAN BOILER, CREMATORY, ICE, PRESSURE WASHER, OR SPRAY BOOTH, FILL IN THE USER DEFINED TABLE BELOW

Fac Name: HTHJ Inyo Solar A/N: N/A

TAC Code	Compound	Emission Rate (lbs/hr)	Molecular Weight	R1 - Uncontrolled (lbs/hr)	Efficiency Factor (Fraction range 0-1)	R2-Controlled (lbs/hr)
A11	Arsenic and Compounds (Inorganic)	5.16E-05	74.92	5.16E-05	0.00000	5.16022E-05
B8	Beryllium and Compounds	2.58E-06	9.012	2.58E-06	0.00000	2.58011E-06
C1	Cadmium and Compounds	2.58E-06	112.41	2.58E-06	0.00000	2.58011E-06
C23	Copper and Compounds	2.58E-04	63.55	2.58E-04	0.00000	0.000258011
L1	Lead and Compounds (Inorganic)	1.29E-04	207.2	1.29E-04	0.00000	0.000129005
M2	Manganese and Compounds	1.29E-03	54.938	1.29E-03	0.00000	0.001290055
N12	Nickel and Compounds	5.16E-05	58.71	5.16E-05	0.00000	5.16022E-05
S1	Selenium and Compounds	1.29E-05	78.96	1.29E-05	0.00000	1.29005E-05
P1	Particulate Emissions from Diesel-Fueled Engines	4.58E-05	350	4.58E-05	0.00000	4.57685E-05

6. Hazard Index Summary

A/N: N/A

Application deemed complete date: 06/08/23

HIA =  $[Q(\text{hr}) * (X/Q)_{\text{max}} * MWAF] / \text{Acute REL}$

ETC =  $[Q(\text{con}) * (X/Q) * MP * MWAF] / \text{Chronic REL}$

HIC 8-hr =  $[Q(\text{con}) * (X/Q) * WAF * MWAF] / \text{8-hr Chronic REL}$

Target Organs	Acute	Chronic	8-hr Chronic	Acute Pass/Fail	Chronic Pass/Fail	8-hr Chronic Pass/Fail
Alimentary system (Liver) - AL		1.94E-04		Pass	Pass	Pass
Bones and teeth - BN				Pass	Pass	Pass
Cardiovascular system - CV	6.91E-04	1.19E-01	1.35E-03	Pass	Pass	Pass
Developmental - DEV	6.91E-04	1.20E-01	1.35E-03	Pass	Pass	Pass
Endocrine system - END				Pass	Pass	Pass
Eye				Pass	Pass	Pass
Hematopoietic system - HEM		1.45E-03		Pass	Pass	Pass
Immune system - IMM	6.51E-04	1.45E-04	3.38E-04	Pass	Pass	Pass
Kidney - KID		1.00E-04		Pass	Pass	Pass
Nervous system - NS	6.91E-04	1.25E-03	4.34E-03	Pass	Pass	Pass
Reproductive system - REP	6.91E-04	1.20E-01	1.35E-03	Pass	Pass	Pass
Respiratory system - RESP	6.91E-06	1.21E-01	1.69E-03	Pass	Pass	Pass
Skin		1.19E-01	1.35E-03	Pass	Pass	Pass

A/N: N/A

Application deemed complete date: 05/08/23

6a. Hazard Index Acute - Resident  
 HIA =  $(Q/Th) * (C/Q)_{max\ resident} * MWAF / Acute\ REL$

Compound	HIA - Residential									
	AL	CV	DEV	EYE	HBM	IMM	NS	REP	RESP	SKIN
Arsenic and Compounds (Inorganic)		6.91E-04	6.91E-04				6.91E-04	6.91E-04		
Beryllium and Compounds										
Cadmium and Compounds										
Copper and Compounds									6.91E-06	
Lead and Compounds (Inorganic)										
Manganese and Compounds										
Nickel and Compounds						6.91E-04				
Selenium and Compounds										
Particulate Emissions from Diesel-Fueled En										
<b>Total</b>		6.91E-04	6.91E-04			6.91E-04	6.91E-04	6.91E-04	6.91E-06	

**ATTACHMENT D**

CalEEMod Output Files



# Inyo Solar Summary Report

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  - 7.5. Evaluation Scorecard

## 1. Basic Project Information

### 1.1. Basic Project Information

Data Field	Value
Project Name	Inyo Solar
Construction Start Date	1/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.70
Precipitation (days)	9.60
Location	100 Moses Ln, Trona, CA 93562, USA
County	Inyo
City	Unincorporated
Air District	Great Basin UAPCD
Air Basin	Great Basin Valleys
TAZ	3013
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	—
App Version	2022.1.1.14

### 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	20.0	User Defined Unit	20.0	0.00	0.00	—	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.82	0.81	16.0	32.4	0.00	0.11	0.15	0.28	0.11	0.04	0.15	—	6,260	6,260	0.25	0.06	0.02	6,283	
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.05	0.98	1.92	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	370	370	0.02	< 0.005	0.02	371	
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.17	0.35	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	61.2	61.2	< 0.005	< 0.005	< 0.005	61.5	

## 6. Climate Risk Detailed Report

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 7. Health and Equity Details

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0

Healthy Places Index Score for Project Location (b)	51.0
Project Located In a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located In a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.