

DOCKETED	
Docket Number:	23-AFC-03
Project Title:	Black Rock Geothermal Project (BRGP)
TN #:	258936
Document Title:	Exhibit C UAW comments on Black Rock Geothermal Project PSA
Description:	N/A
Filer:	Matthew Maclear
Organization:	Aqua Terra Aeris Law Group
Submitter Role:	Intervenor Representative
Submission Date:	9/4/2024 1:48:16 PM
Docketed Date:	9/4/2024

Exhibit C

UAW Comments on Black Rock Geothermal Project PSA

**Imperial County
Planning & Development Services Department
NOTICE OF PREPARATION OF DRAFT PROGRAM EIR FOR THE
LITHIUM VALLEY SPECIFIC PLAN
NOTICE OF PUBLIC SCOPING MEETING**

The Imperial County Planning & Development Services Department intends to prepare a Program Environmental Impact Report (PEIR) for the proposed Lithium Valley Specific Plan Project (Project), as described below. A public scoping meeting for the proposed PEIR will be held by the Imperial County Planning & Development Services Department at **6:00 PM on December 14, 2023**. The scoping meeting will be held at the Board of Supervisors Chambers, 2nd Floor, County Administration Center located at 940 Main Street, El Centro, CA 92243. Comments regarding the scope of the PEIR will be accepted at this meeting. Additionally, comments may be sent to the Planning & Development Services Department, 801 Main Street, El Centro, California 92243, attention Jim Minnick, Director.

SUBJECT: Lithium Valley Specific Plan

BOARD OF SUPERVISORS CONSIDERATION: Winter 2023/2024.

PROJECT LOCATION: The Lithium Valley Specific Plan (Project) is located in Imperial County, California, specifically covering an approximate area of 51,786 acres adjacent to the southeastern shore of the Salton Sea (see Figure 1). This area is in unincorporated Imperial County land, situated within the basin of the Salton Sea, with the Alamo River channel running through the center of the Study Area, draining into the Salton Sea. The Study Area extends from the Imperial Wildlife Area Wister Unit in the north to the City of Calipatria in the south, bounded by the New River on the southwest. It covers shoreline and open water portions of the Salton Sea and extends slightly into the alluvial fans at the base of the Chocolate Mountains. The topography is generally flat but sloping from east to west towards the Salton Sea, and below sea level. The land use in the Study Area primarily consists of agriculture, the Salton Sea, existing geothermal energy facilities, with some limited residential, and recreational uses. The proximity to the Salton Sea, National Wildlife Refuges, and abundant open space promotes recreational and commercial farming activities.

The Project is located in the Section, Range, and Townships within the U.S. Geological Survey (USGS) quadrangles of Frink, Iris Wash, Niland, Obsidian Butte, Westmorland East, Westmoreland West and Wister Quadrangles.

PROJECT DESCRIPTION: On June 30, 2022, Governor Gavin Newsom signed into law Senate Bill (SB) 125 authorizing the state to assist in developing Imperial County's lithium resource in an area that is a part of the Salton Sea Known Geothermal Resource Area, known as Lithium Valley. Among other provisions, SB 125 appropriated funding to develop a Lithium Valley Specific Plan and PEIR and to distribute grants to local community-based organizations to conduct engagement related to the Specific Plan and PEIR. The Lithium Valley Specific Plan and PEIR is intended to provide a framework and guidance for the necessary infrastructure and facilities and streamline the development and permitting of additional renewable energy facilities, mineral recovery, lithium battery manufacturing, and other renewable industries within an approximately 51,786-acre area adjacent to the Salton Sea. The Specific Plan aims to facilitate the existing and future renewable energy development, lithium extraction, associated infrastructure, commercial, and related manufacturing industries investment that provides quality local jobs, while minimizing adverse effects on the environment and public health. This Project would be a pivotal step for Imperial Valley towards a more sustainable and localized economy and support the nations' ability to produce sustainable technologies.

To-date, the Land Use Alternatives have been developed with public and stakeholder input. The proposed Land Use Alternative included herein as Figure 2, consists of a revised version of the Alternative 2

presented to the November 7, 2023 BOS, reflecting comments received at that meeting. Figure 3 provides a summary of the proposed land use designations.

GENERAL PLAN DESIGNATIONS AND ZONING: The Project area is designated as “Recreation and Open Space” as well as “Agriculture” by the Imperial County General Plan.

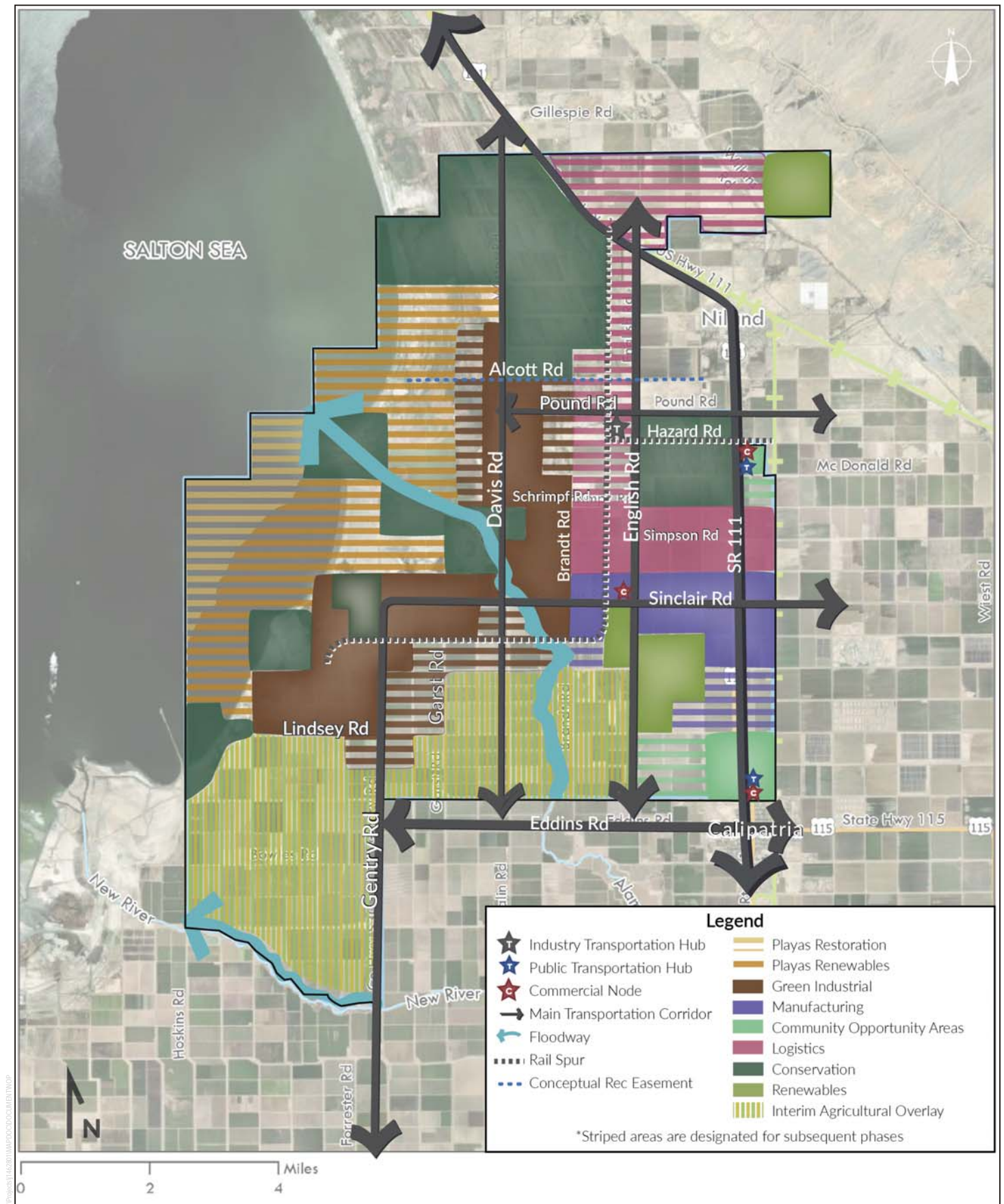
BOARD OF SUPERVISORS DISTRICT: District 4, Supervisor, Ryan E. Kelly.

ANTICIPATED SIGNIFICANT EFFECTS: The PEIR will analyze potential impacts associated with all CEQA topics as follows: Aesthetics, Agriculture/Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, Wildfire and Mandatory Findings of Significance.

COMMENTS REQUESTED: The Imperial County Planning & Development Services Department would like to know your ideas about the effects this project might have on the environment and your suggestions as to alternatives, mitigation or ways the project may be revised to reduce or avoid any significant environmental impacts. Your comments will guide the scope and content of environmental issues to be examined in the EIR. Your comments may be submitted in writing to: Jim Minnick, Director, Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243. Available project information may be reviewed at this location. Due to the limits mandated by State law, your response must be sent at the earliest possible date but no later than 35 days after receipt of this notice.

AVAILABILITY: Copies of this NOP and the associated Initial Study are available at the County of Imperial Planning and Development Services offices at 801 Main Street El Centro, CA 92243, and online at: <https://lithiumvalley.imperialcounty.org/>

NOTICE OF PREPARATION REVIEW PERIOD: December 7, 2023 – January 12, 2024



SOURCE: Imperial County

FIGURE 2

Proposed Land Use Alternative

Salton Sea Lithium Specific Plan

COMMUNITY OPPORTUNITY AREAS: This land use designation intends to promote the development of critical public facilities and services to support public health near the communities of Niland and Calipatria. These areas act as large-scale buffers between residents and industrial-type land uses. The Community Opportunity Areas may be further refined and planned in collaboration with the neighboring communities of Niland and Calipatria through the Specific Plan process to ensure these area properly meet the community's needs. Allowed uses may include, but are not limited to, markets, civic uses, parks, commercial recreational uses, health care facilities, childcare facilities, public services, workforce education and training centers, office, hotels, entertainment, gasoline and EV charging stations, and public transportation hubs.

GREEN INDUSTRIAL: These has areas have a focus on geothermal energy production plants, however, would allow for additional industrial uses that support the goal of decarbonizing the energy industry. This designation may allow for industrial plants, and storage, distribution, and administrative facilities, including uses conducted outside of an enclosed building. The Specific Plan may restrict the use of certain products, processes, or manufacturing equipment due to external effects. Allowed uses may include, but not limited to, geothermal energy production and mineral recovery, biofuel generation, and green hydrogen. Ancillary uses may include, but not limited to, supportive manufacturing, commercial, logistics, and battery manufacturing and storage.

MANUFACTURING: This designation provides suitable industrial, office, and warehouse space for manufacturers of goods. Manufacturing may include compounding, processing, assembling, packaging, treatment or fabrication of materials and products such as electric vehicle batteries. Allowed uses may include, but not limited to, manufacturing, research and development, workforce training, industrial parks, and temporary construction housing. Ancillary uses may include, but not limited to, geothermal and mineral recovery, logistics, office, commercial, and battery storage.

LOGISTICS: The areas identified for Logistics provide suitable space for the warehousing and distribution that allows for a variety of suppliers and services. Logistics activities may include, but not limited to, logistic facilities, industrial transportation hubs, outdoor storage of trucks, trailers, and shipping containers, and temporary construction housing. Ancillary uses may include, but not limited to, geothermal and mineral recovery, manufacturing facilities, office, employee services and property management facilities.

PLAYAS RENEWABLES: This designation recognizes the unique relationship to the Salton Sea and the possibly restrictive geologic conditions, including the clays and seismic activity. As such, geologic testing will be needed with any proposed structures within the Playas Renewables designation to determine the viability of development on the proposed site. This designation will require a certain percentage of the site be dedicated for dust suppression via natural vegetation and restoration techniques, beyond what is required to mitigated onsite surface impacts. Allowed uses may include, but not limited to, geothermal energy operations and mineral recovery, subsurface geothermal wells, pipes and mineral rights, habitat restoration, and dust suppression and public health mitigation projects. Ancillary uses may include, but not limited to, solar photovoltaics structures or floating structures (floatovoltaics).

PLAYAS RESTORATION: Due to the sensitive resources, valuable habitat, and public health needs to limit dust, this designation mainly allows for subsurface geothermal activities and above-surface environmental restoration activities. Other allowed uses include subsurface mineral rights, air quality monitor structures, and photovoltaics. Exception within this designation may be allowed with Director of Planning approval.

RENEWABLES: This designation is located over two existing and planned solar farm developments. As this use is aligned with the overall intent of the Lithium Valley Specific Plan vision, the use of solar is intended to remain until the end of its project lifespan. Once the project life span has past the subsequent land use shall revert to the land use designation surrounding the majority of the site.

CONSERVATION: The conservation land use intends to provide area for conserved and/or restored critical habitat, Salton Sea rehabilitation projects, and mitigation lands. This designation currently contains areas under existing contract by the Imperial Irrigation District (IID) for restoration and mitigation efforts. Allowed uses may include, but are not limited to, subsurface geothermal wells, subsurface mineral rights, and passive use trails that provide connections to the Salton Sea. Additional uses could be allowed by the Director of Planning pending ecological or cultural performance studies.

FLOODWAY: This designation identifies a floodplain area associated with the New River and Alamo River which flow south to north into the Salton Sea. The Floodway designation covers an approximately 950-foot buffer (475 feet on each side) on the Alamo River and a 785-foot buffer (392.5 feet on each side) on the New River. This designation will serve as permanent open space within the Specific Plan area. Allowed uses may include riparian restoration, native riparian habitat, and passive recreation such as picnic areas and trails.

INTERIM AGRICULTURAL OVERLAY: The overlay designation intends to be retained as agriculture until there is sufficient need to transition to industry-driven uses outside their initial land use designated areas. Interim uses include solar, agrivoltaics, and agricultural lands that are actively involved with agricultural crop production and animal keeping, including aquaculture, dairies, feed lots, and animal sales yards as a primary use. Subsequent phases allowed used include green industrial, manufacturing, and commercial along Forrester Road. Subsequent phases allowed uses will be considered once infrastructure has been expanded to support such uses.

SOURCE: Imperial County

Initial Study

Imperial County Lithium Valley Specific Plan

DECEMBER 2023

Prepared for:

IMPERIAL COUNTY

801 Main Street

El Centro, California 92243

Contact: Jim Minnick

Prepared by:

DUDEK

605 Third Street

Encinitas, California 92024

Contact: Matt Valerio

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ACEC	Areas of Critical Environmental Concern
AFY	Acre-Feet per Year
BLM	Bureau of Land Management
CEQA	California Environmental Quality Act
CGS	California Geologic Survey
DRECP	Desert Renewable Energy Conservation Plan
EIR	Environmental Impact Report
GSP	Groundwater Sustainability Plan
HCP	Habitat Conservation Plan
IID	Imperial Irrigation District
IVRMA	Imperial Valley Resource Management Agency
KGRA	Known Geothermal Resource Area
LRA	Local Responsibility Area
LUST	Leaky Underground Storage Tank
NCCP	Natural Community Conservation Plan
PPA	Project Planning Area
RWQCB	Regional Water Quality Control Board
SCH	Species Conservation Habitat
SFHA	Special Flood Hazard Area
SHA	Seismic Hazard Area
SGMA	Sustainable Groundwater Management Act
SPA	Specific Plan Area
SSAB	Salton Sea Air Basin
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TIA	Transportation Impact Analysis
TMDL	Total Maximum Daily Load
TSA	Transportation Study Area
USEPA	United States Environmental Protection Agency

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1 Introduction

1.1 Purpose

This document is a policy level Initial Study for evaluations of the potential impacts resulting from implementation of the proposed Lithium Valley Specific Plan.

1.2 California Environmental Quality Act (CEQA) Requirements and The Imperial County's Guidelines for Implementing CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "CEQA Regulations Guidelines for the Implementation of CEQA, as amended", an Initial Study is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed Project.

- ☒ According to Section 15065, an EIR is deemed appropriate for a particular proposal if the following conditions occur:
- The proposal has the potential to substantially degrade quality of the environment.
 - The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
 - The proposal has possible environmental effects that are individually limited but cumulatively considerable.
 - The proposal could cause direct or indirect adverse effects on human beings.
- ☐ According to Section 15070(a), a Negative Declaration is deemed appropriate if the proposal would not result in any significant effect on the environment.
- ☐ According to Section 15070(b), a Mitigated Negative Declaration is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will result in potentially significant environmental impacts and therefore, an Environmental Impact Report is deemed as the appropriate document to provide necessary environmental evaluations and clearance as identified hereinafter.

This Initial Study (IS) is prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

1.3 Intended Uses Of Initial Study

This IS and Notice of Preparation (NOP) are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed Specific Plan implementation. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals. The IS and NOP prepared for the Project will be circulated for a period of 35 days for public and agency review and comments.

1.4 Project Overview

The Lithium Valley Specific Plan (Project) aims to develop a Specific Plan (SP) in the northern portion of the Imperial Valley, specifically along the southeastern part of the Salton Sea, that plans for the continued development of renewable energy and related industries including the extraction, refinement and manufacturing use of lithium. The SP Area (SPA) covers approximately 51,786 acres and consists primarily of existing agricultural properties, wetlands, wildlife areas, open spaces, and energy facilities. A first phase or focus area of approximately 10,000 acres has been identified and is intended to include the most near-term development and uses. The goal of the Project is to frame and guide the development of renewable energy sources, such as geothermal and solar energy, as well as lithium extraction and associated industrial uses and infrastructure improvements. The development is driven by federal and state renewable energy and greenhouse gas reduction goals, with a focus of providing resources for battery-powered vehicles. The Project will require the construction of facilities and infrastructure to support these developments.

To-date, the Land Use Alternatives have been developed with public and stakeholder input. The proposed Land Use Alternative is a revised version of the Alternative 2 presented to the County Board of Supervisors (BOS) on November 7, 2023 as an informational item. Public comments were made during the November 7, 2023 BOS public meeting requesting revision to the proposed Land Use Alternative, which have been accommodated herein.

1.5 Project Planning Setting

The Project Planning Area encompasses the SP Area (SPA), and the adjacent communities including the Cities of Calipatria, Niland, and Brawley, where indirect effects of implementation of the SP can be reasonably expected. The SPA spans from the Imperial Wildlife Area Wister Unit in the north to Calipatria in the south. It includes the shoreline and open water portions of the Salton Sea, along with adjacent agricultural properties, wetlands, wildlife areas, open spaces, and energy facilities. The planning area is characterized by a desert landscape, prime soils, and the presence of the Colorado River water, which supports the region's agricultural activity. The area experiences

extremely hot and dry summers and moderately cold winters. Existing land uses in the area are primarily agricultural, residential, urban, and recreational.

1.6 Public Review Process

In accordance with CEQA, a good faith effort has been made during the preparation of this IS to contact affected agencies, organizations, and persons who may have an interest in this Project.

This IS is prepared in support of the Notice of Preparation (NOP), which will be available for a 35-day public review. The assessment of public input received during the NOP public review regarding the scoping of issues and alternatives will be considered and evaluated within the Environmental Impact Report (EIR). Ongoing and extensive public workshops, advisory group meetings, and stakeholder meetings have been integrated into the development of the SP Land Use alternatives. These sessions have allowed for input, feedback, and discussions to ensure transparency and inclusivity in the decision-making process, ultimately addressing community needs and priorities as part of development of the SP.

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2 Project Description

2.1 Project Location

The Project is located in the northern part of the Imperial Valley, specifically along the southeastern portion of the Salton Sea (see Figure 1. Project Location). The SPA spans from the Imperial Wildlife Area Wister Unity in the north to Calipatria in the south. It is bounded by the New River on the southwest and includes the shoreline and open water portions of the Salton Sea. The planning area falls within the USGS quadrangles of Frink, Iris Wash, Niland, Obsidian Butte, Westmorland West, Westmorland East, and Wister. The first phase or Focus Area includes approximately 10,000 acres, which while not necessarily contiguous, represents those areas for earliest development and conservation (see Figure 1. Project Location).

2.2 Environmental Setting

The SPA is in northern Imperial County, characterized by high year-round daytime temperatures and low precipitation, immediately north of the U.S. – Mexico international border. The SPA is characterized by a desert landscape and notable topographic features, including volcanic domes/deposits. It is primarily below sea level and features flat topography sloping from east to west towards the Salton Sea. The Salton Sea to the north, a feature that exists below sea level and is declining (shrinking) through natural evaporation and reduced feed waters. The SPA is most notable for the Known Geothermal Resource Area (KGRA) as a unique area where geothermal resources can be accessed at relatively shallow depths below grade. The SPA is biologically diverse and includes various vegetation communities, such as agriculture, desert scrub, freshwater emergent wetland, Salton Sea playa, and Salton Sea open water. The SPA and surrounding region also includes environmentally sensitive areas designated by public agencies and entities, such as critical habitat, national wildlife refuges, notable geologic features, Tribal cultural resources, and areas of critical environmental concern.

2.3 Project Characteristics

The Project involves the development of a SP to support the existing and future renewable energy development, lithium extraction, and associated infrastructure and industrial uses in the Planning Area. The area's agricultural properties have historically been used for crops and have irrigation ditches for water supply, with large drains and canals owned and operated by the Imperial Irrigation District (IID) serving the area. The Salton Sea, being the major water feature in the County, is a closed basin with a drainage area of approximately 8,000 square miles. Construction near the Salton Sea below the 220-foot contour requires a permit. The Project is aligned with federal and state renewable energy sources and raw materials for battery-powered vehicles. The development of the SP will frame and guide the land uses, infrastructure, and facilities necessary for these objectives. Figure 2, Proposed Land Use Alternative, presents the locations of the drafted land use designations of the SP, and Figure 3, General Description of Proposed Land Use Designations, provides a summary of those proposed land use designations.

2.4 Project Approvals

No approvals beyond the Imperial County's approval of the SP, associated General Plan and Zoning Code amendments, along with Certification of the EIR, are necessary. However, individual projects that build out the SP

may require additional permits depending on the site and project specific characteristics. Furthermore, the successful implementation of the SP would necessitate changes or approvals by/from other agencies considered Responsible Agencies, including but not limited to, the Imperial Irrigation District (IID), Southern California Association of Governments (SCAG), California State Lands Commission, California Department of Transportation (Caltrans) California Department of Fish and Wildlife (CDFW), and U.S Department of Fish and Wildlife (USFW).

3 Initial Study Checklist

1. Project title:

Lithium Valley Specific Plan

2. Lead agency name and address:

Imperial County
801 Main Street
El Centro, California 92243

3. Contact person and phone number:

Jim Minnick / Diana Robinson
801 Main Street
El Centro, California 92243

4. Project location:

The Project is located in the northern part of the Imperial Valley, specifically along the southeastern portion of the Salton Sea. The SPA spans from the Imperial Wildlife Area Wister Unity in the north to Calipatria in the south. It is bounded by the New River on the southwest and includes the shoreline and open water portions of the Salton Sea. The SPA falls within the USGS quadrangles of Frink, Iris Wash, Niland, Obsidian Butte, Westmorland West, Westmorland East, and Wister.

5. Project sponsor's name and address:

Imperial County
801 Main Street
El Centro, California 92243

6. General plan designation:

The existing General Plan Designations incorporated into this Project encompass a range of land use categories, each contributing to the Project's overall vision and purpose. These designations consist of "Recreation/Open Space," emphasizing the creation of recreational areas and open spaces for community benefit. Additionally, "Government/Special Public" designations designate areas suitable for public and government-related facilities and services. Finally, for areas falling under the "Agriculture" designation, the Project aligns with the preservation and promotion of agricultural activities and open land, maintaining the rural character of the region.

7. Zoning:

The list of existing zoning codes included in the Project Area have various designations, each denoting specific land use categories. These zoning codes are: S-1-RE (Single-Family Residential), A-1-G (Agricultural

General), S-2-RE (Single-Family Residential), A-1-RE (Residential Estate), A-2-RE (Residential Estate), A-2-G (Agricultural General), A-2-R-G (Residential General with Agricultural Overlay), M-2-G-PE (General Manufacturing with Greenbelt and Planned Development Overlay), A-2-G-U (Agricultural General with Urban Reserve Overlay), A-3-G (Agricultural General), M-2-G (General Manufacturing), A-3 (Agricultural), A-3-RE (Residential Estate), S-1-G (Single-Family Residential), M-2-RE (Single-Family Residential), A-2-R-G (Residential General with Agricultural Overlay), S-2 (Single-Family Residential), and GS-G (Government Services General).

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The Project aims to develop a SP to facilitate the existing and future renewable energy development, lithium extraction, and associated infrastructure, commercial, and industrial uses within the SPA. The agricultural properties in the SPA have historically been utilized for crop cultivation and are equipped with irrigation ditches for water supply. The Salton Sea, as the primary water feature in the County, is a closed basin with a drainage area of 8,000 square miles. Any construction near the Salton Sea below the 220-foot contour necessitates a permit. The Project aligns with federal and state objectives for renewable energy sources and the procurement of raw materials for battery-powered vehicles. The development of the SP will provide a framework and guidance for the necessary infrastructure and facilities to achieve these objectives.

By leveraging the unique environmental characteristics of the Imperial Valley, this Project aims to harness renewable energy resources, extract lithium and potentially other available minerals, develop manufacturing and distribution of related products (electric batteries, capacitors, vehicles, components etc.), other innovative renewable resources industries, and develop the associated infrastructure in a sustainable and environmentally conscious manner. Through careful planning and adherence to regulatory requirements, the Project seeks to foster economic growth, support clean energy initiatives, and preserve the region's natural resources and biodiversity.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The Project site is encompassed by areas dedicated to Agriculture, Recreation/Open Space, and Residential communities (Calipatria, Niland, Brawley).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

No approvals beyond the Imperial County's approval of the SP, associated General Plan and Zoning Code amendments, along with Certification of the EIR, are necessary. However, individual projects that build out the SP may require additional permits depending on the site and project specific characteristics. Furthermore, the successful implementation of the SP would necessitate changes or approvals by/from other agencies, including but not limited to, the Imperial Irrigation District (IID), Southern California Association of Governments (SCAG), and California Department of Fish and Wildlife, U.S Department of Fish and Wildlife.

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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The County has contacted all Native American Tribes in the area and continues to communicate with representatives and share information regarding the Project.

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 21080.3.2.) 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 checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology and Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input checked="" type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination (To be completed by the Lead Agency)

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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Would the project have a substantial adverse effect on a scenic vista?

Potential Significant Impact. While the Imperial County General Plan Conservation and Open Space Element (Imperial County 2016) does not specifically address scenic vistas, the Project's extensive development, including a significant amount of warehouse-style construction, industrial apparent facilities such as geothermal and manufacturing facilities, may introduce a potential for heightened visibility. This visibility could affect existing recreational areas, roadways, and adjacent communities.

In the Project Area, characterized by agricultural uses/fields and limited multi-story vertical development generally consisting of existing geothermal energy facilities, there are long-distance background views of scenic mountain topography, primarily featuring the Chocolate Mountains to the east and the Superstition Mountains (along with the Fish Creek Mountains) across the agricultural fields. While these mountains typically appear low on the horizon due to the considerable distance from the SPA, there may be occasional obstructions such as electrical distribution line poles and mature trees on private property, causing brief interruptions.

Considering the substantial development proposed in the SPA, it is possible that the Project could have a significant impact on scenic vistas. Therefore, the impact on scenic vistas may be potentially significant and this issue will be addressed in the EIR.

- b) ***Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

Potentially Significant Impact. The Project Area is not discernible or visually prominent from designated scenic segments of highways, namely southbound State Route 111 near Avenue A/Bombay Beach located approximately 10 miles southeast of the Project Area, State Route 78 located approximately 12 miles east of the Project Area, and Interstate 8 located approximately 35 miles northeast of the Project Area. Thus, it can be inferred that the scenic resources within these state scenic highways, including trees, rock outcroppings, and historic buildings, would not be substantially damaged by the Project (Google Earth, 2023).

It is important to note, however, that County Highway S-22, known as the "Borrego-Salton Seaway," holds the designation of a County-designated scenic highway between Salton City and Borrego Springs (County of Imperial Circulation and Scenic Highways Element, 2008).

For a thorough evaluation of the impact on scenic resources within a state scenic highway or County Highway S-22, an in-depth analysis is imperative, considering precise Project coordinates, comprehensive design specifications, and potential effects on the aforementioned resources. The anticipated impacts on these resources have the possibility to be potentially significant. This issue will be addressed in the EIR.

- c) ***In non-urbanized areas, would the project 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 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?***

Potentially Significant Impact. In non-urbanized areas, the existing visual character or quality of public views of the site and its surroundings may be substantially degraded depending on various factors. According to the information provided in the Imperial County General Plan Conservation and Open Space Element, the visual landscape in the Imperial Valley is predominantly characterized by agricultural uses. These agricultural areas consist of square or rectangular fields, typically ranging from 40 to 80 acres in size, interspersed with scattered farmhouses, agricultural structures, and mature trees serving as windbreaks.

Within the Project Area, agricultural uses and features are dominant, except for specific sections. The westernmost portion extends into the Salton Sea, encompassing a shoreline characterized by shrubs and exposed dirt. The Sonny Bono Salton Sea National Wildlife Refuge is also present in this general vicinity. The northern part of the Project Area includes scattered wetlands, while a portion consists of cleared/disturbed lands and geothermal facilities, notably the John L. Featherstone Geothermal Power Plant and other geothermal facilities like the CalEnergy plants. These geothermal facilities are characterized by above-ground tanks, structures, pipelines, turbine buildings, and outdoor reservoirs/plants for brine treatment.

The agricultural fields, which commonly cultivate vegetable and field crops, are intersected by irrigation canals and occasionally by tall and narrow wood poles supporting electrical distribution lines. These lines often run parallel or perpendicular to unimproved dirt roads. Additionally, a large cattle feed yard is located northwest of Calipatria, and several solar farms featuring ground-mounted solar panels arranged in repeating rows of racks are situated in the Project Area west of State Route 111, south of Sinclair Road, east of Hatfield Road, and north of Young Road. It is worth noting that while there are no incorporated cities

within the Project Area, scattered primarily single-story residences can be found on agricultural properties throughout the region.

Considering the Project's location is a non-urbanized area raises the potential for significant changes to the visual character or quality of public views. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

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

Potentially Significant Impact. The creation of a new source of substantial light or glare in the Project Area that would adversely affect day or nighttime views is very likely due to the Project's potential for significant changes to the visual character of the Project Area. Throughout the County, various residential, commercial, and industrial uses contribute to the generation of light and glare, both during the day and night. However, in the Project Area, potential fixed sources of daytime glare mainly arise from surface water, paved surfaces, building windows, and photovoltaic panels at solar facilities.

During nighttime, lighting sources in the Project Area are generally limited and primarily include accent and security lighting on buildings and structures, such as residential properties, commercial businesses, and industrial facilities. Consequently, the introduction of a new source of substantial light or glare that would significantly diminish day or nighttime views in the area may result from the Project as the scale of build out proposed developed uses (industrial, renewable energy, commercial, etc.) is potentially substantially greater than that existing. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FORESTRY 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. 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:</p>				
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 of the California Resources Agency, to non-agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project 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 of the California Resources Agency, to non-agricultural use?***

Potentially Significant Impact. The Project would entail the conversion of significant portions of land classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, as identified on the maps prepared in accordance with the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use for lithium brine extraction. Specifically, Prime Farmland spans 7,782.21 acres, Farmland of Statewide Importance comprises 16,012.86 acres, and Unique Farmland accounts for 12.26 acres within the Specific Plan Area (SPA) (Lithium Valley Draft Baseline Report, 2023).

Additionally, while the Project aims to convert a substantial portion of this agricultural land to non-agricultural use, it's essential to note that some areas will be preserved as part of the SP as well. Given the magnitude of this proposed land use conversion, which affects a total of 23,807.33 acres encompassing Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, this impact is regarded as potentially significant (Lithium Valley Draft Baseline Report, 2023). Therefore, this matter necessitates further detailed evaluation in the EIR. The EIR will comprehensively assess the potential implications of the land use conversion, taking into account the acreages involved, and will also explore potential mitigation measures to address this potentially significant impact on valuable agricultural resources within the SPA.

- b) ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

Potentially Significant Impact. The Project could potentially conflict with existing zoning for agricultural use within the SP area. The SP encompasses significant agricultural land, including Prime Farmland, covering 7,782.21 acres, Farmland of Statewide Importance spanning 16,012.86 acres, Unique Farmland comprising

12.26 acres, and Farmland of Local Importance totaling 2,286.80 acres (Lithium Valley Draft Baseline Report, 2023). These agricultural designations account for a substantial portion of the SPA's total acreage.

Furthermore, there are no active Williamson Act contracts within the area, the County placed all Williamson Act contracts into nonrenewal in 2011. Given the potential conflict with existing agricultural zoning and the significant acreage designated for agricultural use within the SPA, this matter is considered potentially significant. Therefore, a more comprehensive assessment of this potential conflict will be necessary in the EIR.

- c) ***Would the project 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 Impact. The Project is not located in an area zoned as forest land or timberland. Therefore, this impact would be deemed as no impact. This issue will not be further evaluated or discussed in the EIR, as it poses no environmental concern.

- d) ***Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

No Impact. The Project is not located in an area deemed as forest land. Therefore, this impact would be deemed as no impact. This issue will not be further evaluated or discussed in the EIR, as it poses no environmental concern.

- e) ***Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

Potentially Significant Impact. The Project aims to support existing and future renewable energy (i.e., geothermal and solar) development, lithium extraction, renewable resource innovation, related manufacturing, distribution and associated infrastructure. Due to the nature of this Project, it would likely involve changes in the existing environment resulting in the conversion of Farmland to non-agricultural uses. This issue will be further evaluated in the EIR.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Potentially Significant Impact. The SPA is located within the jurisdiction of the Imperial County Air Pollution Control District, in the Salton Sea Air Basin (SSAB). The SSAB is classified by the State as a nonattainment area for ozone (O3) as well as a nonattainment area for the State standards pertaining to particulate matter less than 10 microns (PM10). In addition, the SSAB is classified as a serious nonattainment area for the PM10 standard (Lithium Valley Baseline Report, 2023).

Project construction activities would generate ozone precursor emissions as well as CO, PM2.5, and PM10 emissions that could result in significant impacts on regional air quality. Emissions sources would include heavy equipment used for excavation and grading, cranes, tractors, loaders, backhoes, pavers and on-road motor vehicles for equipment and material deliveries as well as construction workers' vehicles. Grading and activities on unpaved roads would contribute to fugitive PM10 and PM2.5 emissions. SP implementation activities would include other emissions sources such as transportation and logistics, manufacturing, and commercial services. Therefore, potentially significant impacts could result and will be addressed in the EIR.

b) *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?*

Potentially Significant Impact. SSAB is classified by the States as a nonattainment area for O3 as well as a nonattainment area for State standards pertaining to particulate matter less than PM10. In addition, the SSAB is classified as a serious nonattainment area for the PM10 standard.

ICAPCD rules and regulations would apply to all cumulative Project activities within the SSAB. Construction emissions will be analyzed in the EIR as well as short- and long- term emissions from implementation of the SP. SP implementation activities would include other emissions sources such as transportation and logistics, manufacturing, and commercial services cumulative contributions of emissions to the SSAB from Projects construction and operations would be potentially significant and will be evaluated further in the EIR.

c) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Potentially Significant Impact. At present the SPA does not contain a substantial number of persons or sensitive receptors. However, the communities of Niland and Calipatria are adjacent to the SPA and other communities are nearby (i.e. Brawley). In addition, there are scattered residences throughout the SPA on agricultural lands. Construction and operational activities would result in fugitive dust and diesel exhaust

and emissions that could adversely affect air quality exposing sensitive receptors to substantial pollutant concentrations. These impacts are potentially significant and will be evaluated in the EIR.

- d) ***Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

Potentially Significant Impact. At present the SPA does not contain a substantial number of persons or sensitive receptors. However, the communities of Niland and Calipatria are adjacent to the SP area and other communities are nearby (i.e. Brawley). In addition, there are scattered residences throughout the SP area on agricultural lands. Construction and operational activities would result in fugitive dust and diesel exhaust and emissions that could adversely affect air quality exposing sensitive receptors to substantial pollutant concentrations. Mitigation measures recommended by the ICAPCD for diesel equipment and dust control will be evaluated as part of the EIR to avoid or reduce impacts. These impacts are potentially significant and will be evaluated in the EIR.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project 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 Wildlife or U.S. Fish and Wildlife Service?***

Potentially Significant Impact. The Project could potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The Planning Area includes the Salton Sea, the New River, and the Alamo River which all support a diverse invertebrate community serving as the forage base for numerous migratory and breeding shorebirds. The area consists of various vegetation communities, including wetlands, riparian areas, desert scrub, and barren/rock outcrop. These habitats provide habitat for a variety of wildlife species, including aquatic invertebrates, fish, waterbirds, wading birds, shorebirds, songbirds, reptiles, and mammals. The sensitive or regulated habitats in the planning area include wetlands, riparian areas, and non-wetland waters, which may be subject to the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife. These habitats support various plant and wildlife species, including the desert pupfish, burrowing owl, mountain plover, snowy plover, gull-billed tern, least bittern, loggerhead shrike, black rail, pelicans, Yuma Ridgway's rail, and others.

Special-status plant species evaluated for potential occurrence in the planning area include Harwood's milk-vetch, iodine bush scrub, saltgrass flat, arrowweed thickets, and mesquite thickets. Special-status wildlife species evaluated include birds such as burrowing owl, redhead, mountain plover, snowy plover, gull-billed tern, least bittern, loggerhead shrike, California black rail, American white pelican, Yuma Ridgway's rail, black skimmer, desert pupfish, and others. The presence of sensitive habitats, special-status plant species, and special-status wildlife species indicates the ecological significance of the area. Therefore, any Project in the planning area would need to consider and mitigate potential impacts to these species and their habitats to avoid substantial adverse effects. Compliance with relevant regulations and coordination with regulatory agencies would be necessary to ensure the protection of these species. The impacts from the Project on special-status species are potentially significant and will be further addressed in the EIR.

- b) ***Would the project 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 Wildlife or U.S. Fish and Wildlife Service?***

Potentially Significant Impact. The Project could potentially have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The Planning Area includes various vegetation communities, including riparian areas, wetlands, desert scrub, and barren/rock outcrop, which are sensitive or regulated habitats. These habitats support a variety of plant and wildlife species, including special-status plant species like Harwood's milk-vetch, iodine bush scrub, saltgrass flat, arrowweed thickets, and mesquite thickets. Special-status wildlife species such as the burrowing owl, redhead, mountain plover, snowy plover, gull-billed tern, least bittern, loggerhead shrike, California black rail, American white pelican, Yuma Ridgway's rail, black skimmer, and desert pupfish also rely on these habitats.

Considering the presence of these sensitive habitats, plant species, and wildlife species, it is crucial to assess and mitigate potential impacts to avoid substantial adverse effects. Compliance with relevant regulations and coordination with regulatory agencies, such as the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, would be necessary to ensure the protection of these species and their habitats. The impacts of the Project on riparian habitat and other sensitive natural communities are potentially significant and will be further evaluated in the EIR.

- c) ***Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

Potentially Significant Impact. The Project could potentially have a substantial adverse effect on state or federally protected wetlands, including marshes, vernal pools, coastal wetlands, and other types of wetland habitats. These wetlands are considered sensitive or regulated habitats and are subject to protection under local, state, and federal plans, policies, and regulations, as well as by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. The Project's activities, such as development of uses resulting in direct removal, filling, hydrological interruption, or other means, could directly impact the integrity and functionality of these wetland ecosystems. Wetlands are crucial for supporting diverse plant and wildlife species, including aquatic invertebrates, fish, waterbirds, wading birds, shorebirds, songbirds, reptiles, and mammals. They also provide important habitat for state or federally protected species, such as the desert pupfish, burrowing owl, mountain plover, snowy plover, gull-billed tern, least bittern, loggerhead shrike, black rail, pelicans, Yuma Ridgway's rail, and others.

Considering the ecological significance of state or federally protected wetlands and the potential adverse effects of the Project, it is essential to evaluate and implement appropriate mitigations to minimize impacts. Compliance with relevant regulations and coordination with regulatory agencies, including the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, would be necessary to ensure the protection of these wetlands and the species that depend on them. The identified impacts are potentially significant and will be further evaluated in the EIR.

- d) ***Would the project 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?***

Potentially Significant Impact. The Project could potentially interfere substantially with the movement of native resident or migratory fish or wildlife species, as well as established wildlife corridors. The Planning Area includes various habitats, such as wetlands, riparian areas, and desert scrub, which serve as important pathways for the movement and migration of wildlife. These habitats support a diverse range of species, including aquatic invertebrates, fish, waterbirds, wading birds, shorebirds, songbirds, reptiles, and mammals.

The Project's activities may disrupt or impede the natural movement patterns of these species by introducing barriers, altering habitat connectivity, or causing habitat loss. Additionally, the Project's location within or near established wildlife corridors could further hinder the movement of wildlife populations. It is also possible that the Project could encroach upon native wildlife nursery sites, which are essential for the survival and reproductive success of many species. The impacts from the Project are potentially significant and will be addressed in the EIR.

- e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Potentially Significant Impact. The policies within the County General Plan's Conservation and Open Space Element mandate the preservation of natural habitats for sensitive plants and animals. This preservation can be achieved through the dedication of open space easements or alternative methods that guarantee the long-term protection and survival of these species. Any adverse effects on the native habitats of sensitive plants and animals as a result of the Project may potentially lead to significant conflicts with County plans or policies. While the analysis suggests that the Project is not anticipated to conflict with the Imperial County General Plan, it also states that the Imperial County Board of Supervisors will provide the ultimate determination regarding the Project's consistency with the General Plan. Furthermore, the Project development area is not covered by any adopted Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved HCPs, indicating that the Project should have no impact on conflicting with such plans. In addition, the SP is envisioned to include conservation areas promoting natural resources conservation. To disclose compatibility of proposed uses, and conservation policies to protect biological resources, this impact will be addressed in the EIR.

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

Potentially Significant Impact. The Project may conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. Imperial County has implemented various HCPs to protect and manage its natural resources. One notable HCP is the Species Conservation Habitat (SCH) Project, which is part of the 10-year Plan for implementing projects around the Salton Sea. The SCH Project aims to create an environment with suitable habitat for maintaining aquatic and avian wildlife while minimizing fine particle dust emissions. Additionally, Imperial County is a part of the Desert Renewable Energy Conservation Plan (DRECP), a comprehensive conservation plan that provides guidance on renewable energy development while ensuring the protection of desert ecosystems and sensitive species. The DRECP identifies conservation areas, including those within Imperial County, to safeguard important habitats and wildlife corridors.

Furthermore, the Imperial Irrigation District (IID) plays a crucial role in managing water resources in Imperial County. As water management can have significant implications for habitat conservation, IID's policies and plans related to water usage and conservation also contribute to the overall habitat conservation efforts in the region. Therefore, any project in Imperial County would need to ensure it does not conflict with the provisions of the SCH Project, the DRECP, the IID's policies, or any other adopted HCPs. These plans are essential for the conservation and management of sensitive habitats, species, and the overall ecosystem in the region.

In addition to the local policies and ordinances protecting biological resources in Imperial County near the Salton Sea, it is worth noting that partial areas of the SPA are located within designated conservation planning areas, biological conservation planning areas, and Bureau of Land Management (BLM) Areas of Critical Environmental Concern (ACEC). These designations signify the ecological importance of these areas and the need for their conservation and management. The evaluation of the Project's potential conflicts with the provisions of these HCPs, including the SCH Project, the DRECP, and the IID's policies, will be further assessed in the EIR as impacts are potentially significant.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

Potentially Significant Impact. Project-related ground disturbing activities could cause a substantial adverse change in a historical. There is a potential for historical resources within the SPA. Furthermore, build out of planned land uses may result in earthwork activities that could disturb unknown resources. Therefore, a potentially significant impact is identified and this topic will be addressed in the EIR.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

Potentially Significant Impact. Project-related ground disturbing activities could cause a substantial adverse change in an archaeological resource. Based on archival review, resources known in the SPA vary in

sensitivity from moderately sensitive resources such as small historic refuse scatters to extremely sensitive resources like large prehistoric habitation sites. As such there is a potential for archaeological resources within the SPA and build out of planned land uses may result in earthwork activities that could disturb unknown resources.. Therefore, a potentially significant impact is identified and this topic will be addressed in the EIR.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Potentially Significant Impact. Based on archival review, prehistoric habitation sites with recorded human remains exist within the SPA. As such there is a potential for archaeological resources within the SPA and build out of planned land uses may result in earthwork activities that could disturb unknown resources. Resources will require an additional evaluation and avoidance if warranted may be built into the SP. Therefore, a potentially significant impact is identified and this topic will be addressed in the EIR.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Potentially Significant. While the SP is intended to facilitate development that maximizes the generation, use, and exporting of renewable energy and renewable energy using products, the construction and development of the large area may result in inefficient consumption of energy resources. As such this topic will be further evaluated in the EIR.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. Implementation of the SP is intended as a realization of a crucial part of federal and state renewable energy goals and plans with the generation of renewable energy, innovation in renewable resources use, and the extraction of lithium and use in manufacturing for renewable energy consuming products (electric vehicles, batteries etc.). As such, the Project is consistent with and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and no impacts would occur under these criteria. This topic will not be addressed further in the EIR.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) ***Would the project directly or indirectly cause 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.***

Potentially Significant Impact. There are no Alquist-Priolo Earthquake Fault Zones that traverse the SPA (presumably referring to a specific area), as of the California Geologic Survey (CGS) 2022. There is, however, the presence of the northwest-southeast-trending Brawley Seismic Zone in the southwest portion of the SPA. This seismic zone accommodates continental plate motion and rifting along the Pacific-North American plate boundary and extends across the Salton Trough, from the southern tip of the San Andreas Fault to the Imperial Fault in the south.

The Brawley Seismic Zone traverses the southwest portion of the SPA. Seismic activity within this zone primarily consists of short-duration earthquake sequences, including foreshocks, mainshocks, and aftershocks. The presence of right lateral offset along the seismic zone and volcanic activity in the form of the Salton Buttes within the SPA indicates rift tectonics and recent volcanic activity near the south shore of the Salton Sea. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

ii) ***Strong seismic ground shaking?***

Potentially Significant Impact. The Project could potentially cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. The area where the Project is located, specifically the SHA (Seismic Hazard Area) in Southern California, is known for being seismically active, with numerous Holocene-active faults capable of producing significant seismic events (earthquakes) (California Department of Conservation). Factors such as the size and type of earthquakes, distance from the epicenter, subsurface geologic conditions, and the type of construction can influence the level of ground shaking at a given location.

The information also highlights historical earthquake events in the region, including earthquakes with magnitudes up to 7.2 that have caused damage to structures, canals, and infrastructure. The presence of fault creep and aseismic slip in geothermal fields, such as the North Brawley Geothermal Field within the Brawley Seismic Zone, indicates that faults can slip without generating seismic waves, potentially leading to earthquake swarms and ground deformation.

Considering the potential for strong seismic ground shaking in the region and the Project's location within a seismically active area, there is a risk of substantial adverse effects, including the potential for loss, injury, or death resulting from strong seismic ground shaking. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

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

Potentially Significant Impact. The Project could potentially cause substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, specifically liquefaction. Liquefaction refers to the sudden loss of strength in saturated, cohesionless soils during ground shaking, transforming the soil into a fluid-like mass. This phenomenon occurs when certain conditions are met, including ground

shaking of sufficient magnitude and duration, a groundwater level at or above the level of susceptible soils, and the presence of soils that are susceptible to liquefaction.

Although the specific Project location has not been included in regional liquefaction analyses conducted by the California Geological Survey (Lithium Valley Baseline Report, 2023), it is noted that shallow groundwater is prevalent in the SHA. The unconsolidated sediments in the Salton Trough, especially in saturated areas like irrigated lands, are susceptible to liquefaction-induced failure during earthquakes.

The Lithium Valley Baseline Report identifies that the widespread liquefaction caused by the M7.2 El Mayor-Cucapah earthquake, resulted in ground motions of 0.3g to 0.6g in the majority of liquefaction areas in the southern Imperial Valley (Lithium Valley Baseline Report, 2023).

Considering the potential for liquefaction in the SPA, the Project could directly or indirectly lead to substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, specifically liquefaction. The presence of shallow groundwater and the susceptibility of the unconsolidated sediments to liquefaction in the region heighten the concern for this potential adverse effect. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

iv) *Landslides?*

Less Than Significant Impact. The Project is not expected to cause potential substantial adverse effects directly or indirectly, including the risk of loss, injury, or death involving landslides, across most of the SHA. The topography of the SPA is described as predominantly flat to gently sloping, which indicates a low potential for landslides and slope instability throughout the area.

However, it is noted that there are exceptions within the SPA, specifically at Obsidian Butte and Rock Hill (also known as Red Hill). These areas have historically been mined for pumice and contain steep natural and man-made slopes. Due to the presence of over steepened slopes in these specific locations, there may be a susceptibility to landslides and slope instability. However, Obsidian Butte is a recognized sensitive resource to be protected. While this area contains steep natural and man-made slopes, it is designated as a sensitive resource. Due to this status as a sensitive resource, measures will be put into place to protect and mitigate potential impacts to Obsidian Butte.

Therefore, the majority of the SPA, including all areas where development uses are proposed, does not pose a significant risk of landslides, and the presence of a recognized sensitive resource, Obsidian Butte, reinforces the conclusion that the impact on landslides is less than significant and will not be further evaluated in the EIR.

b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Potentially Significant Impact. The Project could potentially result in substantial soil erosion or the loss of topsoil within the SHA. The SPA encompasses various soil types, each with its own characteristics and susceptibilities to erosion.

The presence of various soil types, some of which have low permeability and moderate to poor drainage, suggests that the Project could potentially lead to soil erosion or loss of topsoil if appropriate erosion control measures are not implemented. Factors such as the Project's construction activities, grading, vegetation

removal, and inadequate erosion control practices could contribute to soil erosion and the loss of topsoil in the SPA.

It is important for the Project planners and developers to carefully consider and incorporate erosion control measures to mitigate the risk of substantial soil erosion or the loss of topsoil during and after Project implementation within the SHA. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- c) ***Would the project 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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

Potentially Significant Impact. The Project is situated within an area that presents potential geologic challenges, particularly related to soil stability. The topography of the SPA is predominantly flat to gently sloping, which reduces the potential for landslides and slope instability across most of the area. However, there are exceptions such as Obsidian Butte and Rock Hill (Red Hill), which have historically been mined for pumice and contain steep natural and manmade slopes. These steep slopes may be susceptible to landslide and slope instability.

Additionally, the Salton Trough region, encompassing the SPA, experiences natural subsidence averaging nearly two inches per year at the center of the Salton Sea. However, there have been no recorded instances of subsidence in the SPA associated with groundwater pumping, peat loss, or oil extraction. Satellite geodetic measurements indicate that subsidence rates near the southeastern shoreline of the Salton Sea, within the SPA, are greater than the background rate, primarily associated with ongoing geothermal fluid production. Geothermal fields can experience subsidence due to the decrease in pore pressure inside reservoirs caused by large fluid volume production. Proper management, such as re-injecting production water back into the aquifer and balancing groundwater recharge and discharge, can help mitigate subsidence.

Furthermore, the SPA has not been included in regional liquefaction analyses by the California Geological Survey. However, the unconsolidated sediments of the Salton Trough, especially in saturated areas such as irrigated lands, are susceptible to liquefaction during seismic events. Past earthquakes in the southern Imperial Valley have provided evidence of liquefaction, suggesting the potential for liquefaction hazards. Given the provided information and references to unstable banks along the New River and Alamo Rivers in the Seismic and Public Safety Element of the Imperial County General Plan, there is a significant likelihood of soil instability within the Project Area. Consequently, the Project carries potentially significant impacts associated with geologic instability, including the potential for landslides, subsidence, and liquefaction. As such, this topic will be evaluated in the EIR.

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

No Impact. The SPA does not mention expansive soil as a geologic constraint. There is no indication that the SPA is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property. As such, no impacts would result and this topic will not be evaluated in the EIR.

- e) **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

Potentially Significant Impact. The SPA does not provide specific information about the capacity of soils to support septic tanks or alternative wastewater disposal systems and it is unknown at this time whether such systems would be proposed. Additional geotechnical studies would be needed to determine if the soils in the area are capable of adequately supporting such systems. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- f) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Potentially Significant Impact. The presence of Lake Cahuilla sediments within the majority of the SPA indicated the potential for unique paleontological resources or sites. Therefore, ground-disturbing activities within the SPA have the potential to destroy unique paleontological resources or sites directly or indirectly. It is recommended to conduct a paleontological mitigation program for any Project within the SPA that involves ground disturbance extending into undisturbed Lake Cahuilla sediments. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Potentially Significant. Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (NO_x), and Fluorinated Gases. The transportation sector (e.g., on-road motor vehicles, off-highway vehicles, aircraft) is the single largest source of GHG emissions and accounts for one-half of GHG emissions globally. Short-term greenhouse gas emissions from construction could come from construction equipment, construction support vehicles, material truck trips, and worker vehicle trips. Long-term emissions would come from combustion of natural gas and diesel fuel (producing greenhouse gas emissions of CO₂ and CH₄), as well as from fugitive emissions (a component of fugitive emissions is methane). Indirect emissions associated with electrical generation and with worker and truck transportation offsite could also result. An air quality and greenhouse

gas emission analysis will be prepared for the Project and potentially significant impacts related to GHG emissions will be addressed in the EIR.

- b) ***Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Potentially Significant. The SP would be considered to have a significant impact if it would be in conflict with State plans, policies, or regulations adopted for the purpose of reducing GHG emissions. GHG emissions and the SP's consistency with applicable GHG plans, policies, and regulations will be evaluated in the EIR.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site that 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 or excessive noise for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Potentially Significant Impact. The proposed land uses would allow for industrial and renewable energy uses such as geothermal, lithium extraction, , various manufacturing, and logistics operations within the planning area, which may have the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. In addition, construction activities and grading in areas with soil impacts, such as potential soil contamination, compaction, erosion, and changes in soil stability may result from build out for proposed development uses. Furthermore, there is a risk of soil impacts stemming from stored petroleum products or other chemicals used at industrial facilities. Proper soil management and disposal of potentially hazardous waste would be necessary to mitigate these risks and prevent adverse effects on soil quality and composition.

Proposed industrial and renewable energy uses may involve use of various materials and processes that are subject to extensive regulation at the local, state, and federal levels to ensure environmental protection and public safety. Transportation, storage, and disposal/recycling of such products are extensively regulated at the local, state, and federal levels to prevent environmental harm and safeguard public health. Some examples of regulated geothermal products and processes include geothermal fluids to prevent groundwater contamination and brine management to prevent environmental impacts and protect water resources. The anticipated impacts are potentially significant and this topic will be further evaluated in the EIR.

- b) ***Would the project 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?***

Potentially Significant Impact. Reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment could pose a significant hazard to the public or the environment from build out and operation of proposed industrial and renewable energy uses. This includes potential wastewater discharge, chemical and petroleum storage, and hazardous waste generation. The anticipated impacts are potentially significant and will be further evaluated in the EIR.

- c) ***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

Potentially Significant Impact. Calipatria High School and Fremont Primary School both fall within a distance of one-quarter mile from the Project Area (Google Earth, 2023). This proximity raises concerns about the potential emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste in close proximity to a school. As such, there is a potential for significant impacts on

public safety and the environment in relation to the school. Given this proximity, a thorough evaluation of these potential impacts will be conducted as part of the EIR.

- d) ***Would the project be located on a site that 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?***

Potentially Significant Impact. Several sites in the vicinity of the Project, including those listed in GeoTracker, EnviroStor, and Cortese, are designated as Leaking Underground Storage Tank (LUST) cleanup sites. This implies the presence of hazardous materials and, consequently, the potential for a significant hazard to both the public and the environment. To comprehensively assess and address these potential significant impacts, this issue will be addressed in the EIR.

- 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 or excessive noise for people residing or working in the project area?***

Potentially Significant Impact. Calipatria Municipal Airport is located approximately 0.55 miles south of the Project site (Google Earth, 2023). This raises concern regarding the potential for safety hazards and excessive noise for people residing or working within the SPA. Given the proximity to the airport, there is a potential for these impacts to occur. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- f) ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Potentially Significant Impact. Implementation of the SP would generate construction trips and the potential for temporary roadway lane closures during construction of proposed traffic improvements, which could temporarily affect an emergency response or evacuation plan. This impact is potentially significant and will be addressed in the EIR.

- g) ***Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

Potentially Significant Impact. While the SPA is situated away from state responsibility areas or lands categorized as having very high hazard severity zones (Cal Fire Forestry Maps, 2016), and it lacks dense flammable vegetation and steep slopes, there is still a potential for wildfires in certain vegetation communities within the SPA. Although the fuel density is low, reducing the risk of substantial wildfire spread, the presence of any new development introduces potential ignition sources. Given the potential for wildfires within the SPA, the impact of the Project on exposing people or structures to a significant risk of loss, injury, or death involving wildland fires is considered to be potentially significant. This impact will be addressed in the EIR.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

Potentially Significant Impact. To ensure proper water quality management in the SPA, new developments and redevelopments must comply with established guidelines. These guidelines, known as Total Maximum Daily Loads (TMDLs), are designed to control sediment discharge and are enforced by the Colorado River Regional Water Quality Control Board. Incorporating recycled water as a means of augmenting the water

supply can enhance water management efforts, although that may result in changes in surface water runoff and drainage patterns can affect the local hydrology including discharges to the Salton Sea.

The Imperial Region consists of various groundwater basins, primarily located in the Central Irrigated Area. However, limited data is available due to poor water quality and potentially low or unpredictable yield. Although groundwater quality in the SPA may not be suitable for irrigation or domestic use, it could be considered for industrial process supply. Currently, reclaimed water is not a significant source of supply in the Imperial Valley. The groundwater basins in Imperial County are not adjudicated and have a low priority for implementing the Sustainable Groundwater Management Act. Groundwater usage is regulated by Imperial County's Groundwater Ordinance, which requires projects to obtain a Conditional Use Permit and undergo a CEQA review.

Water quality concerns in the area encompass elevated levels of total dissolved solids (TDS), nitrate, fluoride, sulfate, boron, and selenium. The primary source of water supply in Imperial County is the Colorado River, obtained from the All-American Canal and other supply canals managed by the IID. IID's Interim Water Supply Policy provides raw Colorado River water to municipal, industrial, and commercial customers, with a remaining allocation available for new non-agricultural projects (Lithium Valley Baseline Report, 2023). Water quality standards, permitting, and discharge requirements are regulated by the USEPA (United States Environmental Protection Agency) and the State of California under the Clean Water Act and Porter-Cologne Water Quality Control Act, respectively. The Colorado River Regional Water Quality Control Board is responsible for issuing waste discharge requirements, while the Department of Water Resources and Regional Water Quality Control Boards play vital roles in managing and protecting water resources at the state and regional levels.

In addition, the SWRCB (State Water Resources Control Board) has identified the heavy use of pesticides in the late 1900s and the closed-sink nature of the Salton Sea basin as the primary causes of water quality impairment in the area (Lithium Valley Baseline Report, 2023). Although pesticide use has significantly reduced over the past two decades, the SWRCB has implemented TMDL measures to address these water quality issues. Since many pollutants, including pesticides, are attached to sediments, effective sediment management practices play a crucial role in reducing these compounds. The potential to violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is a potentially significant impact and will be discussed in the EIR.

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

Potentially Significant Impact. The SPA is primarily underlain by the Imperial Valley Groundwater Basin and, in part, by the East Salton Sea Groundwater Basin. These basins are not adjudicated and are designated as having a very low priority under the Sustainable Groundwater Management Act (SGMA). Groundwater in the area has poor quality, with high levels of dissolved solids, fluoride, and boron, making it unsuitable for domestic or irrigation purposes. While the groundwater quality in the area may be unsuitable for most domestic and irrigation purposes, it may have the potential for utility for industrial process supply. The primary concern is the concentration of TDS in groundwater, which can be significantly high. The groundwater resources in the SPA are located in the Central Irrigation Area, which has limited data and potentially low or unpredictable yield. Although the groundwater may be suitable for industrial process supply, it is not currently a significant source of supply in the region. The SPA's development, which includes substantial impervious surfaces, may result in changes to drainage conditions. Water quality management

plans are required to comply with local, state, and federal requirements, including stormwater control measures, NPDES MS4 permit requirements, and SWRCB-approved TMDLs, while also preventing sediment discharge (Lithium Valley Baseline Report, 2023). Given the potential constraints on water supply availability, there is a potential for the Project to substantially decrease groundwater supplies or interfere with groundwater recharge. This potentially significant impact on sustainable groundwater management in the basin will undergo further evaluation in the EIR.

c) ***Would the project 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?***

Potentially Significant Impact. The Project within the SPA has the potential to alter the existing drainage pattern by introducing new infrastructure. The Project aims to support renewable energy (i.e., geothermal and solar) development, lithium extraction, renewable resource innovation, related manufacturing, distribution and associated infrastructure. Any significant modifications, such as the addition of impervious surfaces or changes to the natural flow of water, can potentially result in substantial erosion or siltation. An assessment of the Project's design and its impact on the drainage pattern would be necessary to evaluate the potential for erosion or siltation, both on- and off-site. These potential impacts on the existing drainage pattern, including substantial erosion or siltation, will be addressed in the EIR.

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

Potentially Significant Impact. The Project's impact on surface runoff and the potential for flooding depends on the specific changes to the drainage pattern and the introduction of impervious surfaces. If the Project significantly increases the rate or amount of surface runoff, it may result in localized or off-site flooding. A comprehensive hydrologic study that considers the changes in surface water runoff, as well as the existing drainage system, would be necessary to assess the potential for flooding accurately. The potential for increased surface runoff and resulting flooding will be more thoroughly assessed in the EIR to determine the Project's impact on flood risks.

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?***

Potentially Significant Impact. The Project being developed within the SPA has the potential to create or contribute to runoff water that could exceed the capacity of existing or planned stormwater drainage systems. The Project aims to support various industrial uses and infrastructure development, including renewable energy and lithium extraction. The addition of impervious surfaces and potential modifications to the drainage system can result in increased runoff volume. If the capacity of the existing or planned stormwater drainage systems is not adequately designed to handle the increased runoff, it may lead to localized flooding and exceed the system's capacity to manage the additional runoff. Furthermore, the Project may introduce substantial additional sources of polluted runoff, particularly if industrial activities are involved. Implementing stormwater control features and proper pollution management measures would be crucial to mitigate these potential impacts. The capacity of existing or planned stormwater drainage

systems to handle runoff and the potential for substantial additional sources of polluted runoff will be addressed in the EIR.

iv) *Impede or redirect flood flows?*

Potentially Significant Impact. Because the Project aims to support renewable energy development, industrial development, and infrastructure, it is important to assess potential effects on flood flows. Any alterations to the existing drainage pattern, such as modifying streams or rivers, could potentially impact flood flows by impeding or redirecting the natural flow of water. A comprehensive hydrologic study that considers the changes in drainage patterns and their potential effects on local hydrology, including discharges to the Salton Sea, would be necessary to evaluate the Project's impact on flood flows accurately. The potential for impeding or redirecting flood flows as a result of the Project's alterations to the drainage pattern will be addressed in the EIR.

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

Potentially Significant Impact. The SPA is located within a Special Flood Hazard Area (SFHA) that can be inundated by a 1% annual chance flood or base flood. While the floodway areas can discharge a 100-year flood without significant water surface elevation increase, the area outside the floodway (within the 100-year floodplain) can be obstructed without increasing the water surface elevation by more than 1 foot (Lithium Valley Baselines Report, 2022). If the Project is located within the floodplain and it gets inundated during a flood event, there is a possibility of pollutants being released. Seiches, which are oscillations of water in an enclosed body of water caused by seismic events, have not occurred to any significant recorded magnitude in the Salton Sea area. Therefore, the risk of pollutants being released due to seiches is considered low.

Considering the potential for flooding in the flood hazard zone and the absence of significant seiches, the Project's risk of releasing pollutants would mainly arise from flooding events rather than seiches or tsunamis. However, further evaluation and analysis of the specific Project's design will be evaluated in the EIR and would be necessary to accurately assess the risk of pollutant release in the event of Project inundation.

e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Potentially Significant Impact. The SPA primarily lies within the Imperial Valley Groundwater Basin (Basin No. 7-30), with a portion of its northern "arm" falling within the East Salton Sea Groundwater Basin (Basin No. 7-33). Currently, these basins are classified as low and very low priority, exempting them from the requirement to prepare groundwater sustainability plans (GSPs). Groundwater management in Imperial County is regulated by the County's Groundwater Ordinance outlined in Title 9, Division 22, of the Land Use Ordinance, specifically Section 92201 (Lithium Valley Baseline Report, 2023). It is important to note that groundwater within Imperial County is generally of poor quality and unsuitable for most domestic and irrigation uses.

Considering this information, there may not be a direct conflict or obstruction in implementing a water quality control plan or sustainable groundwater management plan in the SPA. However, the poor quality of groundwater in Imperial County poses a challenge for domestic and irrigation purposes, which may need to be addressed in any comprehensive water management strategy. These issues will be evaluated in the EIR.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Would the project physically divide an established community?

Potentially Significant Impact. The implementation of this large-scale Project is intended to avoid physical impacts on the established communities; however infrastructure and build out of development uses may result in physical changes near or within established communities. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

b) Would the project 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?

Potentially Significant Impact. While the SP is envisioned to be developed to enhance existing land use plans, the Project has the potential to cause a significant environmental impact due to conflicts with various land use plans, policies, and regulations adopted to avoid or mitigate environmental effects. Imperial County has implemented various HCPs to safeguard its natural resources. Notably, the SCH Project is part of the 10-year Plan aimed at implementing projects around the Salton Sea. Its objective is to create an environment with suitable habitat for maintaining aquatic and avian wildlife while minimizing fine particle dust emissions. Moreover, Imperial County is a participant in the DRECP, a comprehensive strategy that provides guidance on renewable energy development while ensuring the protection of desert ecosystems and sensitive species. The DRECP identifies conservation areas, including those within Imperial County, to protect vital habitats and wildlife corridors. Furthermore, the IID plays a pivotal role in water resource management in Imperial County. Given that water management can have substantial implications for habitat conservation, IID's policies and plans pertaining to water usage and conservation contribute to habitat conservation efforts in the region. Therefore, any proposed project in Imperial County must ensure that it aligns with and does not conflict with the provisions of the SCH Project, the DRECP, the IID's policies, or any other adopted HCPs. This potential significant impact will be addressed in the EIR.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project 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?***

Potentially Significant Impact. Although the Project site is situated within Imperial County, which currently does not have identified aggregate production areas or known mineral resources within the Project site itself, the situation is more complex. The SPA overlaps with the Salton Sea Known Geothermal Resource Area (KGRA), a region known for its high concentration of minerals, including lithium, found in its geothermal brines. These minerals are actively utilized by geothermal power plants in the area for electricity generation, involving processes such as flashing brine to steam and reinjecting brine into the reservoir. The SP's primary purpose is to facilitate the extraction of these minerals, which have gained importance due to their role in renewable resource commodities like lithium for electric vehicles and batteries. The Project's objective is to harness these resources, which could potentially have broader regional benefits. Given the inherent significance of mineral resources in the region and the Project's intent to extract and utilize them. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- b) ***Would the project 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?***

Potentially Significant Impact. There is a possibility that the Project could have a significant impact on the availability of a locally important mineral resource recovery site. While the SPA is currently primarily occupied by existing agricultural and geothermal power plant land uses, and there is no explicit mention of a locally designated mineral resource recovery site within the Project site or its immediate vicinity, it is worth noting that the Project includes the facilitation of lithium extraction, potentially affecting mineral resources in the region. As discussed in 3.12 a), the Project aims to extract lithium and potentially other mineral resources, with anticipated regional benefits. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
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 applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project result in 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 applicable standards of other agencies?***

Potentially Significant Impact. Construction activities for implementation of the SP development uses could result in activities that temporarily or periodically increase noise. Operation activities from development uses could result in short- and long-term increases in noise. Although implementation of the SP is not expected to expose people to excessive noise levels, further analysis is warranted, and impacts are considered potentially significant. A noise report will be prepared for the Project and included in the EIR.

- b) ***Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

Potentially Significant Impact. Construction activities for implementation of the SP development uses activities could result in activities that temporarily or periodically increase groundborne vibration or groundborne noise. Operation activities could result in short- and long-term increases in ground borne noise and vibration. Although implementation of the SP is not expected to expose people to excessive groundbourne noise or vibration levels, further analysis is warranted, and impacts are considered potentially significant. A noise report will be prepared for the Project and this topic addressed in the EIR.

- 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?*

Potentially Significant Impact. The Project's proximity to Calipatria Municipal Airport, located approximately 0.55 miles south of the Project site, raises concerns about the potential for excessive noise for people residing or working within the SPA. Given this proximity, there is a potential for these impacts to occur (Google Earth, 2023). Due to the potentially significant impacts this issue will be further evaluated within the EIR.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned 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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Would the project induce substantial unplanned 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)?*

Potentially Significant Impact. The Project has the potential to induce significant unplanned population growth in the area, both directly and indirectly, primarily due to the substantial number of jobs it would generate. Directly, the Project may lead to the construction of new homes and businesses, which could result in a notable increase in population. Indirectly, the expansion of infrastructure, such as roads, necessitated by the Project could further contribute to unplanned population growth. Therefore, the Project could potentially have a significant impact in inducing substantial unplanned population growth. This issue will be further evaluated within the EIR.

- b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact. There is not a substantial number of residents within the SPA that could potentially be displaced. This issue will not be evaluated in the EIR.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project 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?

Potentially Significant Impact. The Project could potentially result in significant impacts. Fire protection services in the SPA are currently provided by the County of Imperial Fire Department through the Calipatria Fire Department Station, which is located near the SPA. Additionally, during special events, on-site fire protection would be provided. Therefore, the Project has the potential to cause a potentially significant adverse physical impact or necessitate new or physically altered governmental facilities that could result in potentially significant environmental impacts. This will be further evaluated within the EIR.

Police protection?

Potentially Significant Impact. The Project has the potential to induce significant unplanned population growth in the area, driven by the substantial number of jobs it would generate and the resulting economic boom in the county. This growth could lead to increased demand for law enforcement services, potentially requiring the construction of new police stations, additional officers, and related resources to maintain acceptable service ratios and response times. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

Schools?

Potentially Significant Impact. Implementation of the SP could potentially have significant adverse physical impacts related to schools. The Project has the potential to induce significant unplanned population growth in the area, primarily due to the substantial number of jobs it would generate and the resulting economic

boom in the County. This growth could lead to an increased demand for educational facilities, potentially necessitating the construction of new schools or expanded infrastructure to accommodate the families of new employees. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

Parks?

Potentially Significant Impact. Implementation of the SP could potentially have significant adverse physical impacts related to parks and recreational facilities. While the Project may include open space or conservation uses and uses that provide opportunities for recreation with the SPA, the Project has the potential to induce significant unplanned population growth in the surrounding area, primarily due to the substantial number of jobs it would generate and the resulting economic boom in the County. This growth could lead to an increased demand for parks and recreational areas, potentially necessitating the construction of new parks, facilities, or expanded infrastructure to serve the needs of new residents. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

Other public facilities?

Potentially Significant Impact. Implementation of the SP could potentially have adverse physical impacts related to other public facilities. The Project has the potential to induce significant unplanned population growth in the area, primarily due to the substantial number of jobs it would generate and the resulting economic boom within the County. This growth could lead to an increase in demand for various public services, potentially requiring the construction of new public facilities, such as healthcare centers or community centers, to serve the needs of new residents. These potential developments may result in potentially significant environmental impacts. This will be further evaluated within the EIR.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project 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?*

Potentially Significant Impact. The Project includes conservation uses and uses that may provide opportunities for recreation, it may also result in increased use and demand for existing recreation facilities as a result of anticipated population growth in the surrounding area, which could result in the deterioration of those existing facilities. The EIR will assess the current state of the parks and recreational facilities in the SPA, their capacity, and any potential impacts that may arise from increased utilization. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- 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?*

Potentially Significant Impact. The Project includes conservation uses and uses that may provide opportunities for recreation (and/or its development), it may also result in increased use and demand for existing recreation facilities requiring expansion of those facilities, primarily as a result of anticipated population growth in the surrounding area. The construction or expansion of recreational facilities and therefore has the potential to have an adverse physical effect on the environment. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Potentially Significant Impact. Given the substantial development and infrastructure needs proposed in the SP, the existing plans in place may no longer be adequate and will likely require revision. Consequently, there is a potential for a significant impact on the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The increased number of vehicle trips generated by the Project, coupled with the

existing farm traffic within the SPA, may lead to a substantial increase in vehicular traffic, potentially affecting the VMT. Therefore, impacts are deemed to be potentially significant in whether the Project could result in a significant conflict with existing programs, plans, ordinances, or policies addressing the circulation system. This potential impact will be addressed in the EIR.

b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

Potentially Significant Impact. The anticipated impact on the local circulation system, encompassing both the increased vehicular traffic resulting from the Project and the existing farm traffic within the SPA, suggests a potential significant inconsistency with CEQA Guidelines Section 15064.3, subdivision (b). To address this, a transportation impact analysis (TIA) will be prepared for the SP. This TIA aims to ascertain and assess the traffic impacts brought about by the implementation of the SP. In compliance with Senate Bill 743 (SB 743) and CEQA Section 15064.3b, the TIA will also include an assessment of Project-related changes in vehicle miles traveled compared to existing conditions and the findings presented in the EIR. These potentially significant impacts on the circulation system will be addressed in the EIR.

c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Potentially Significant Impact. Currently, there is no specific mention or evaluation of hazards related to geometric design features such as sharp curves or dangerous intersections in the Transportation Study Area (TSA). Similarly, there is no mention of incompatible uses, such as conflicts between farm equipment and other road users. However, it is possible that the Project could introduce or exacerbate hazards related to geometric design features or incompatible uses. Therefore, further evaluation of these issues will be conducted in the EIR to assess the potential for significant impacts.

d) *Would the project result in inadequate emergency access?*

Potentially Significant Impact. Implementation of the SP would generate construction trips and the potential for temporary roadway lane closures exists. It is anticipated that emergency access would always be maintained, and appropriate detours would be provided, as necessary. Nonetheless, impacts related to emergency access are considered potentially significant and will be addressed in the EIR.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL RESOURCES

Would the project 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:

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would the project 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:

- a) ***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)?***

Potentially Significant Impact. As required by SB 18 and AB 52, the Imperial County Planning and Development Services Department sent consultation notices to Native American tribal representatives regarding the Project. Specifically, AB-52 Consultation notices were sent to the Quechan, Diegueno and Torres-Martinez Desert Cahuilla Indian Tribes. SB-18 Consultation Letters were sent to the tribes/tribal representatives listed below:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Mission Indians
- Barona Group of the Captain Grande
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Campo Band of Diegueno Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians

- La Posta Band of Diegueno Mission Indians
- Los Coyotes Band of Cahuilla and Cupeno Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueno Mission Indians
- Morongo Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- Ramona Band of Cahuilla
- San Pasqual Band of Diegueno Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians
- Viejas Band of Kumeyaay Indians

As of the date of this Initial Study, no Tribes have requested consultation. Results of any Native American consultation will be included in the EIR. As discussed under Response to Item V. Cultural Resources, implementation of the SP could have potentially significant impacts to archaeological resources, which could be considered a significant resource to a California Native American Tribe.

- b) *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.***

Potentially Significant Impact. The determination of potentially significant impact is based on the consideration of the resource's importance and its significance to California Native American tribes. In this case, all tribes that were contacted have expressed a clear and unified stance, requesting that Obsidian Butte remains untouched. Given this collective input and the resource's potential significance, while the SP will avoid development from that area, impacts will be addressed in the EIR.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the waste water 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) ***Would the project require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

Potentially Significant Impact. Based on the Project Area, which spans a total of 51,786 acres and for the first phase of the SP development water demand is estimated at approximately 100,000 AF, there is a high possibility that the Project may require the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage facilities, as well as electric power, natural gas, or telecommunications facilities. These infrastructure developments could potentially have significant environmental effects.

Within the Project Area, the Calipatria Water Treatment Plant has been identified as a facility that potentially requires expansion. To accommodate future conditions and average flow, an upgrade to the plant has been recommended by 2025. The potential expansion of this facility highlights the need for considering the environmental implications of such actions.

Given the large scale of the Project Area and the potential for various infrastructure developments, the potential for new and/or expanded water, wastewater, storm drainage, electric, natural gas and telecommunications may need to be constructed and or relocated. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

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

Potentially Significant Impact. The principal source of water supply in Imperial County is the Colorado River water, managed by the IID. Industrial users, including potential development of such per the Project, have equal access to this water supply. IID holds the water rights and ensures allocations meet the policy of the State of California for reasonable and beneficial use. Given the growing demands and potential impacts of prolonged droughts, new treatment facilities may be needed for water recycling on-site to supplement the available water sources.

Under IID's Interim Water Supply Policy for new Non-Agricultural Projects, a portion of IID's annual Colorado River water supply, specifically 25,000 AFY, has been made available for new projects. As of December 2021, 22,8000 AFY remained available under this policy (Lithium Valley Baseline Report, 2023). IID, as a senior Colorado River water rights holder, expects to have sufficient water supplies for its customers in perpetuity.

IID operates a water transmission system, including the All-American Canal and main canals, which facilitate water delivery to the SPA and throughout the region. IID's distribution system includes regulating and interceptor reservoirs, ensuring water storage capacity.

In addition to surface water, groundwater resources in the Imperial Valley Basin, including the Central Irrigated Area, may be accessed for industrial process supply. However, it should be noted that groundwater quality in the area is generally poor and unsuitable for most domestic and irrigation uses. Reclaimed water is not currently a significant source of supply in the Imperial Valley. The potential use of wastewater from the City of Calipatria Wastewater Treatment Plant has been evaluated previously but deemed not viable at this time compared to imported water or groundwater.

the scale of the potential development build of proposed industrial, renewable energy, commercial, and logistics uses may result in substantial demands for water not currently accounted for in water planning in the region. New treatment facilities and on-site water recycling may be proposed as part of build out of proposed development uses (industrial and renewable energy), and or the growth induced to maximize efficient of water use. However, the actual demand for construction and operational water is unknown at this time and may exceed supplies. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

c) *Would the project result in a determination by the waste water 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?*

Potentially Significant Impact. Potential sources of waste water treatment in the vicinity of the study area include the City of Calipatria Wastewater Treatment Plant, Seeley County Water District Wastewater Treatment Facility, and Niland County Sanitary District's Niland Colonia Sanitation District Wastewater

Treatment Plant, which serves the city of Niland. However, it is unlikely that these systems have sufficient capacity to accommodate the scale of proposed development that would result from the buildout of development uses with the Project. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

d) *Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Potentially Significant Impact. During the construction phase of the Project, there is a high risk of exceeding certain limits or caps, particularly related to waste generation. The scale of the development could potentially strain existing waste disposal options. The Imperial Valley Resource Management Agency (IVRMA) develops, implements, and supports efficient and sustainable programs for waste reduction, reuse, recycling, hazardous waste management, composting, and recycled content purchasing in accordance with local, state, and national mandates.

The infrastructure assessment identified that Imperial County was informed of being out of compliance with mandatory state recycling regulations and made a decision to close the Imperial Landfill, which was authorized to accept Class III solid waste. As a result, the Niland Solid Waste Site becomes the closest landfill for disposing of Class III non-hazardous solid wastes. Niland has an authorized capacity of 358,000 cubic yards, with approximately 200,000 cubic yards available for use as of 2020 (Draft Infrastructure Assessment, 2023).

In terms of hazardous waste disposal, the closest accepting facilities are Republic Services Allied Imperial Landfill and the South Yuma County Landfill. If the Republic Services Allied Imperial Landfill closes, hazardous wastes would need to be transported to the South Yuma County Landfill, which is over 300 miles away from the study area (Google Earth, 2023).

The Project implementation including construction and operation of build out of the proposed development uses (industrial, renewable energy, logistics and commercial) would be at a scale that may exceed the capacity of existing waste disposal infrastructure. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Potentially Significant Impact. All Applicants for development within the SP will comply with federal, state, and local statutes related to solid waste. Due to the fact that there is limited information available regarding the types of waste that will occur as a result of implementing the Project, impacts would be potentially significant and will be further evaluated within the EIR.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Potentially Significant Impact. As noted under Hazards and Hazardous Materials the Project would result in substantial development and infrastructure improvements, which may substantially impair an adopted emergency response plan or emergency evacuation plan. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

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

Less Than Significant Impact. The SPA is situated away from state responsibility areas or lands categorized as having very high hazard severity zones, as defined by the California Department of Forestry and Fire Protection (2007). Furthermore, the Project Area lacks dense flammable vegetation and steep slopes. Based on CAL FIRE's fire hazard maps, the Project Area is currently designated as Unzoned and Moderate Hazard, with the majority falling under the Unzoned category, according to OSFM (2007). The Project Area predominantly consists of Local Responsibility Areas (LRA), with only small portions classified as FRA, as per CAL FIRE (2021b). Because of the absence of dense flammable vegetation, the likelihood of wildfires is considered rare due to the limited presence of burnable fuels that can sustain a wildfire. While there is

potential for wildfires in certain vegetation communities within the SPA, the low fuel density significantly reduces the risk of substantial wildfire spread. Additionally, the Project Area lacks topographical features that could exacerbate wildfire hazards. Considering these factors, the impacts related to wildfire hazards are determined to be less than significant, and this issue will not be addressed in the EIR.

- c) ***Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, 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 Impact. The Project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). The Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that would result in temporary or ongoing impacts to the environment. No impact is identified and this topic will not be addressed in the EIR.

- d) ***Would the project 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?***

Less Than Significant. The Project Area is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). The Project would not 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. As such, impacts would be less than significant and this topic will not be evaluated in the EIR.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially 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, substantially 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Does the project have the potential to substantially 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, substantially 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?*

Potentially Significant Impact. As discussed in prior sections including 3.4, 3.5, and 3.18 implementation of the Project would result in potentially significant impacts to the environment affecting biological resources and cultural, including tribal cultural, resources. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

- 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.)*

Potentially Significant Impact. The Project has the potential to contribute to cumulative impacts related to air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hydrology and water quality, noise, population and housing, public services, transportation and traffic, tribal cultural resources, and utilities and service systems. As such, cumulative impacts in these topics would be potentially significant and will be evaluated in the EIR.

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

Potentially Significant Impact. The Project could potentially result in environmental effects that have adverse impacts on human beings, either directly or indirectly, specifically in relation to air quality, geology and soils, hazards and hazardous materials, water supply, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems. As such, impacts would be potentially significant and this topic will be evaluated in the EIR.

4 References and Preparers

4.1 References Cited

Rick Engineering Company. (2023) Draft Lithium Valley Baseline Report.

Aesthetics

Circulation and Scenic Highway Element (2008). Retrieved from [<https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf>].

Land Use

Airport Land Use Commission (1982). *Airport Land Use Compatibility Plan*. Retrieved from [<https://www.icpds.com/assets/hearings/airport-land-use-commission/aluc-compatibility-plan-1996-part-1.pdf>].

California Department of Conservation (CA DOC). *Land Conservation (Williamson Act) Questions and Answers*. Retrieved from [https://www.conservation.ca.gov/dlrp/wa/Pages/LCA_QandA.aspx].

Imperial County Planning and Development Services Department. (1993). *General Plan Overview*. Retrieved from [<https://www.icpds.com/assets/planning/general-plan-overview.pdf>].

Imperial County Planning and Development Services Department. (1993). *General Plan, Land Use Element*. Retrieved from [<https://www.icpds.com/assets/planning/land-use-element/land-use-element-2015.pdf>].

Imperial County Planning and Development Services Department. (1994). *Niland Urban Area Plan*. Retrieved from [<https://www.icpds.com/assets/planning/community-plans/niland-urban-area-plan.pdf>].

Imperial County Planning and Development Services Department. (2008). *General Plan, Circulation and Scenic Highways Element*. Retrieved from [<https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf>].

Imperial County Planning and Development Services Department. (2016). *General Plan, Conservation and Open Space Element*. Retrieved from [<https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf>].

Imperial County Planning and Development Services Department. (2015). *General Plan, Renewable Energy and Transmission Element*. Retrieved from [<https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf>].

Imperial County Planning and Development Services Department. (2015). *General Plan, Agricultural Element*. Retrieved from [<https://www.icpds.com/assets/planning/agricultural-element-2015.pdf>].

Imperial County. (2022). *Viking Solar Energy Generation and Storage Project Draft Environmental Impact Report. Volume I*. Retrieved from [<https://files.ceqanet.opr.ca.gov/269679-2/attachment/KzScjjRaS1SS3Zc6jsROREXL7hZ7FGsvGKclmeTWcHBiObc6C27mZ2wGAUX1VmhyC01j3eQ24xbJbXaN0>].

Imperial Irrigation District. (2006). Planning Agreement by and among IID, CDFG, and USFWS, regarding the Imperial Valley Natural Community Conservation Plan and Habitat Conservation Plan. Retrieved from [https://www.iid.com/home/showpublisheddocument/2260/635648001335730000].

Market Conditions

California Wind Energy Association (CalWEA). Data from California Wind Energy Association (CalWEA).

Electrek. (2022a). Renewables met 100% of the rise in global electricity demand in the first half of 2022.

Electrek. (2022b). California runs on 100% clean energy for the first time, with solar dominating.

Federal Consortium for Advanced Batteries. (2021). National Blueprint for Lithium Batteries.

Lithium Valley Commission. (2022). Draft Report of the Blue Ribbon Commission on Lithium Extraction in California.

Los Angeles Times. (2022). California just slashed rooftop solar incentives. What happens next?

McKinsey & Company (2022a). Lithium mining: How new production technologies could fuel the global EV revolution. Retrieved from [https://www.mckinsey.com/industries/metals-and-mining/our-insights/lithium-mining-how-new-production-technologies-could-fuel-the-global-ev-revolution].

McKinsey & Company. (2022b). Renewable-energy development in a net-zero world.

Pacific Northwest National Laboratory (PNNL). (2022). Salton Sea Geothermal Development: Nontechnical Barriers to Entry – Analysis and Perspectives.

Solar Energy Industries Association (SEIA). Data from California Solar/SEIA. Retrieved from [www.seia.org].

The Register. (2022). Wind, solar fulfill 10% of global electricity demand for first time.

U.S. Geological Survey (USGS). (2022). Mineral Commodity Summaries. Retrieved from [https://pubs.usgs.gov/periodicals/mcs2022/mcs2022.pdf].

World Economic Forum. (2022). IEA Expects Record Renewable Growth Despite Cost and Supply Problems.

World Resources Institute. (2021). Explaining the Exponential Growth of Renewable Energy.

Social Conditions

California Department of Environmental Health Hazards Assessment (OEHHA) (2022). CalEnviroScreen 4.0. <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

California Department of Housing and Community Development (HCD) (2021). *Identification of Low-Income Communities under AB 1550 Methodology and Documentation for Maps*. Retrieved from [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/kml/ab1550_maps_documentation.pdf]

California Department of Public Health Office of Health Equity (2017). *Climate Change and Health Profile Report: Imperial County*. Retrieved from [https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR025Imperial_County2-23-17.pdf].

- California Department of Public Health (CDPH) Office of Health Equity. (2017). *Climate Change and Health Profile Report Imperial County*. Retrieved from [https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR025Imperial_County2-23-17.pdf].
- California Environmental Protection Agency (CalEPA). (2018). Environmental Justice Task Force Imperial County Initiative Report. https://calepa.ca.gov/wp-content/uploads/sites/6/2019/10/Imperial_County_EJ_Initiative.a.sw_.hp_.pdf.
- CalEPA (2021). *Final Designation of Disadvantaged Communities (May 2022)*. Retrieved from [<https://calepa.ca.gov/envjustice/ghginvest/>].
- Center for Disease Control (CDC) National Center for Health Statistics. (2020). *Life Expectancy Estimates by U.S. Census Tract, 2010-2015*.
- De León. (2012). *SB-535: California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund*. Retrieved from [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535]
- Doede, A. L., & DeGuzman, P. B. (2020). *The Disappearing Lake: A Historical Analysis of Drought and the Salton Sea in the Context of the GeoHealth Framework*. *GeoHealth*, 4(9), e2020GH000271. Retrieved from [<https://doi.org/10.1029/2020GH000271>].
- Pacific Institute. (2014). *Hazard's Toll: The Costs of Inaction at the Salton Sea*. Retrieved from [https://pacinst.org/wp-content/uploads/2014/09/PacInst_HazardsToll-1.pdf].
- San Diego-Imperial Center of Excellence for Labor Market Research. (2021). *Imperial County Regional Profile*. Retrieved from [<https://www.imperial.edu/docs/research-planning/labor-market-reports-1/10997-imperial-county-regional-profile-july-2021/file>].
- U.S. Census Bureau. (2020). *2020 Census Redistricting Data (PL 94-171)*. Retrieved from [<https://www.census.gov/quickfacts/imperialcountycalifornia>].
- U.S. Census Bureau. (2020). *2020: DEC Redistricting Data (PL 94-171)*. Retrieved from [<https://rdp.scag.ca.gov/socal-atlas/>].
- U.S. Census Bureau. (2021). *2017-2021 ACS 5-Year Estimates*. Retrieved from [<https://www.census.gov/tribal/>]
- U.S. Census Bureau. (2021). *ACS 5-Year Estimates Subject Tables*. Retrieved from [<https://www.census.gov/quickfacts/fact/table/US/PST045222>].
- U.S. Department of Housing and Urban Development (HUD). (2019). *State Income Limits for 2019*. Retrieved from [<https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income-limits-2019.pdf>]
- UCR School of Medicine BREATHE Center and Center for Health Disparities Research Salton Sea Task Force. (2021). *Crisis at the Salton Sea: A Vital Role for Science*. Retrieved from [https://www.saltonseataaskforce.ucr.edu/_files/ugd/0d73bf_9b7cd361317743daa36d6ac0c383677d.pdf].

Public Services and Resources

City of Calipatria. (2018). *Service Area Plan*. Retrieved from [<https://www.iclafco.com/assets/cities/2018-city-of-calipatria-sap.pdf>].

Imperial County Planning and Development Services Department. (2008). *General Plan, Parks and Recreation Element*. Retrieved from [<https://www.icpds.com/assets/planning/land-use-element/land-use-element-2015.pdf>].

Imperial County. (2021). *Multi-Jurisdictional Hazard Mitigation Plan Update (MHMP)*. Retrieved from [https://firedept.imperialcounty.org/wp-content/uploads/2021/01/Imperial-County-MHMP-2021-Plan-Update-2021_01_11.pdf].

Renewable Resources

Air Products. (2023). *California Sustainable Aviation Fuel Facility*. Retrieved from [<https://www.airproducts.com/campaigns/casaf>]

Alternative Fuels Data Center (AFDC) (2022). *Renewable Hydrocarbon Biofuels*. Retrieved from [https://afdc.energy.gov/fuels/emerging_hydrocarbon.html].

American Clean Power. (2020). *AWEA: Wind Energy Now Top Source of Renewable Electricity*. Retrieved from [<https://cleanpower.org/news/awea-wind-energy-now-top-source-of-renewable-electricity/>].

American Clean Power. (2022). *Wind Power Facts*. Retrieved from [<https://cleanpower.org/facts/wind-power/>].

BHE Renewables. *Geothermal*. Retrieved from [<https://www.bherenewables.com/projects/geothermal>].

California Energy Commission (CEC) (2023). *Wind Energy in California*. Retrieved from [<https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/wind-energy-california>].

California Energy Commission (CEC) (2023b). *Biomass Energy in California*. Retrieved from [<https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/biomass/biomass-energy-california>].

California Energy Commission (CEC) (2023c). *Anaerobic Digestion*. Retrieved from [<https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/biomass/anaerobic-digestion>].

California Energy Commission (CEC). (2020). *Final Project Report; Selective Recovery of Lithium from Geothermal Brines*. Retrieved from [<https://www.energy.ca.gov/sites/default/files/2021-05/CEC-500-2020-020.pdf>].

California Energy Commission (CEC). (2021). *Hydrogen in California Fact Sheet*. Retrieved from [https://www.energy.ca.gov/sites/default/files/2021-06/CEC_Hydrogen_Fact_Sheet_June_2021_ADA.pdf].

California Energy Commission (CEC). (2021). *Lithium Valley Commission*. Retrieved from [<https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/geothermal-energy/lithium-valley>].

- California Energy Commission (CEC). (2022). *Draft Report of the Blue Ribbon Commission on Lithium Extraction in California*.
- California Energy Commission (CEC). (2022). *Utility-Scale Renewable Electrical Generation Totals by County*. Retrieved from [<https://cecgis-caenergy.opendata.arcgis.com/documents/CAEnergy::utility-scale-renewable-electrical-generation-totals-by-county/explore>].
- California Energy Commission (CEC). (2022b). *Hydrogen Refueling Stations in California*. Retrieved from [<https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/hydrogen-refueling>].
- California Energy Commission (CEC). (2023). *Biomass Energy in California*. Retrieved from [<https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/biomass/biomass-energy-california>].
- California Energy Commission (CEC). (2023a). *Biomass*. Retrieved from [<https://www.climatehubs.usda.gov/hubs/northwest/topic/agricultural-biomass-biofuel>].
- California Energy Commission (CEC). *Electricity From Wind Energy Statistics and Data*. Retrieved from [https://ww2.energy.ca.gov/almanac/renewables_data/wind/index cms.php].
- California Ethanol + Power, LLC. (2020). *Sugar Valley Energy*.
- Controlled Thermal Resources. *The power of California's Lithium Valley*. Retrieved from [<https://www.cthermal.com/projects#flowchart>].
- Daniel-Ivad, J. (2022). *Zinc Batteries Power Stationary Energy Storage*. Retrieved from [<https://www.powermag.com/zinc-batteries-power-stationary-energy-storage/>].
- Deloitte. (2023). *Challenges and opportunities of battery storage*. Retrieved from [<https://www2.deloitte.com/nl/nl/pages/energy-resources-industrials/articles/challenges-and-opportunities-of-battery-storage.html>].
- EMCOR. (2023). *Imperial Valley Resource Recovery*. Retrieved from [<https://www.dyna-sd.com/case-studies/industrial/imperial-valley-resource-recovery>].
- Environmental and Energy Study Institute (EESI). (2019). *Fact Sheet | Energy Storage (2019)*. Retrieved from [<https://www.eesi.org/papers/view/energy-storage-2019>].
- Fluence Energy. (2022). *Fluence Ecosystem Supplies 908 MWh Battery-Based Energy Storage Complex in California*. Retrieved from [<https://ir.fluenceenergy.com/news-releases/news-release-details/fluence-ecosystem-supplies-908-mwh-battery-based-energy-storage>].
- Governor's Office of Business and Economic Development (GO-Biz). (2022). *California Launches Statewide Alliance to Establish Federally Co-Funded Hydrogen Hub*. Retrieved from [<https://business.ca.gov/california-launches-statewide-alliance-to-establish-federally-co-founded-hydrogen-hub/>].
- Governor's Office of Business and Economic Development (GO-Biz). *Hydrogen*. Retrieved from [<https://business.ca.gov/industries/hydrogen/>].

- Greenleaf Power. (2021). *Desert View Power*. Retrieved from [<https://greenleaf-power.com/desert-view/>].
- Ideal Energy. (2020) *How Battery Energy Storage Works*. Retrieved from [<https://www.idealenergysolar.com/how-battery-energy-storage-works/>].
- IEA. (2021). *Biofuels*. Retrieved from [<https://www.iea.org/reports/renewables-2021/biofuels?mode=transport®ion=World&publication=2021&flow=Consumption&product=Biodiesel>].
- IHS Markit. (2021). *Top energy storage system integrators in 2021*. Retrieved from [<https://infogram.com/system-integrator-rankings-2021-1ho16vo3q8dz84n>].
- Imperial County Planning and Development Services Department. (2022). *Solar Power Maps*. Retrieved from [<https://www.icpds.com/planning/maps/renewable-energy-maps>].
- Imperial Irrigation District (IID). (2008). *Renewable Energy Feasibility Study Final Report*. Retrieved from [<https://www.iid.com/home/showpublisheddocument/3896/635648001335730000>].
- Imperial Valley Economic Development Corporation (IVEDC). (2022). *Biofuels. Biofuel Production in Imperial Valley*. Retrieved from [<https://www.ivedc.com/region/industries/biofuels>].
- Imperial Valley Press (2021) *Oberon Fuels plant begins commercial production*. Retrieved from [https://www.ivpressonline.com/open/oberon-fuels-plant-begins-commercial-production/article_f98148ca-ca73-11eb-a23a-fbd32061f60e.html].
- McKibben, M. A., & Hardie, L. A. (1997). *Ore-forming brines in active continental rifts*. In H. L. Barnes (Ed.). *Geochemistry of Hydrothermal Ore Deposits*, 3rd Edition (pp. 875–933). Wiley-Interscience
- McKibben, M. A., Williams, A. E., & Hall, G. E. M. (1990). *Solubility and transport of platinum-group elements and Au in saline hydrothermal fluids: constraints from geothermal brine data*. *Economic Geology*, 85(8), 1926–1934. <https://doi.org/10.2113/gsecongeo.85.8.1926>
- National Grid. (2021). *What is Battery Storage?* Retrieved from [<https://www.nationalgrid.com/stories/energy-explained/what-is-battery-storage>].
- National Renewable Energy Laboratory (NREL). (2010). *Solar Power and the Electric Grid*. Retrieved from [<https://www.nrel.gov/docs/fy10osti/45653.pdf>].
- National Renewable Energy Laboratory (NREL). (2010). *Solar Power and the Electric Grid*. Retrieved from [<https://www.nrel.gov/docs/fy10osti/45653.pdf>].
- National Renewable Energy Laboratory (NREL). (2013). *Land-Use Requirements for Solar Power Plants in the United States*.
- Neupane, G. and Wendt, D.S. (2017). *Assessment of Mineral Resources in Geothermal Brines in the US. Proceedings 42nd Workshop in Geothermal Resources Engineering, Stanford, CA*. Retrieved from [https://www.researchgate.net/publication/313904235_Assessment_of_Mineral_Resources_in_Geothermal_Brines_in_the_US].

- NextEra Energy Resources, LLC (NextEra Energy). (2020). *NextEra Energy Resources readies significant portfolio of California energy storage projects to enhance reliability and support the state's clean energy goals*. Retrieved from [<https://newsroom.nexteraenergy.com/2020-08-31-NextEra-Energy-Resources-readies-significant-portfolio-of-California-energy-storage-projects-to-enhance-reliability-and-support-the-states-clean-energy-goals>].
- NextEra Energy Resources, LLC (NextEra Energy). *North Valley Central Project*. Retrieved from [<https://www.nexteraenergyresources.com/north-central-valley-project.html>].
- Pattanaik et.al. (2019). *Second and Third Generation of Feedstocks. Chapter 5 - Biofuels from agricultural wastes*. Retrieved from [<https://doi.org/10.1016/B978-0-12-815162-4.00005-7>].
- Pattern Energy. (2022). *Ocotillo Wind*. Retrieved from [<https://patternenergy.com/projects/ocotillo-wind/>].
- PV Magazine. (2022). *As China expands energy storage manufacturing, the U.S. can step up to compete*. Retrieved from [<https://pv-magazine-usa.com/2022/11/01/as-china-expands-energy-storage-manufacturing-the-u-s-can-step-up-to-compete/>].
- PV Magazine. (2022a). *Battery manufacturing ramps up in the U.S.* Retrieved from [<https://www.pv-magazine.com/2022/09/23/battery-manufacturing-ramps-up-in-the-u-s/>].
- PV Magazine. (2022b). *As China expands energy storage manufacturing, the U.S. can step up to compete*. Retrieved from [<https://pv-magazine-usa.com/2022/11/01/as-china-expands-energy-storage-manufacturing-the-u-s-can-step-up-to-compete/>].
- Renewable Energy World. (2022). *PG&E's Tesla Megapack battery in California now operational*. Retrieved from [<https://www.renewableenergyworld.com/storage/pges-tesla-megapack-battery-in-california-now-operational/>].
- S&P Global, Inc. *Batteries*. Retrieved from [<https://www.spglobal.com/commodityinsights/en/ci/products/batteries.html>].
- SG H2 Energy. *Projects*. Retrieved from [<https://www.sgh2energy.com/projects/#proheader>].
- SoCalGas. (2022). *Angeles Link*. Retrieved from [<https://www.socalgas.com/sustainability/hydrogen/angeles-link>].
- Solar Energy Industries Association (SEIA). (2022) *Solar Industry Research Data*. Retrieved from [<https://www.seia.org/solar-industry-research-data>].
- Solar Energy Industries Association (SEIA). (2022). *Solar Industry Research Data*. Retrieved from [<https://www.seia.org/solar-industry-research-data>].
- Solar Energy Industries Association (SEIA). (2023). *Water Use Management*. Retrieved from [[https://www.seia.org/initiatives/water-use-management#:~:text=In%20general%2C%20all%20solar%20power,and%20photovoltaic%20\(PV\)%20panels](https://www.seia.org/initiatives/water-use-management#:~:text=In%20general%2C%20all%20solar%20power,and%20photovoltaic%20(PV)%20panels)].

- State of California. (2018). *Executive Order B-55-18 To Achieve Carbon Neutrality*. Retrieved from [https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf].
- State of California. (2020). *Executive Order N-79-20*. Retrieved from [https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf].
- State of California. (2021a). *SB-100*. Retrieved from [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB100].
- State of California. (2021b). *SB-32*. Retrieved from [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB32].
- State of California. (2022). *Senate Bill 154 (Skinner, Chapter 43, Statutes of 2022). Budget Act of 2022*. Retrieved from [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB154].
- Teslarati. (2022). *Tesla Energy to be part of ‘change in U.S. generation portfolio’: DOE*. Retrieved from [https://www.teslarati.com/tesla-energy-generation-doe/].
- TWI. (2023). *What are the Pros and Cons of Hydrogen Fuel Cells?* Retrieved from [https://www.twi-global.com/technical-knowledge/faqs/what-are-the-pros-and-cons-of-hydrogen-fuel-cells].
- U.S. Department of Agriculture (USDA) (2022). *Agricultural Biomass for Biofuel*. Retrieved from [https://www.climatehubs.usda.gov/hubs/northwest/topic/agricultural-biomass-biofuel].
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy (OEERE). (2023). *Hydrogen Fuel Basics*. Retrieved from [https://www.energy.gov/eere/fuelcells/hydrogen-fuel-basics].
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy (OEERE). (2022). *Geothermal FAQs*. Retrieved from [https://www.energy.gov/eere/geothermal/geothermal-faqs].
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy (OEERE). *Hydrogen Production: Biomass Gasification*. Retrieved from [https://www.energy.gov/eere/fuelcells/hydrogen-production-biomass-gasification].
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy Bioenergy Technologies Office (BETO). *Biofuel Basics*. Retrieved from [https://www.energy.gov/eere/bioenergy/biofuel-basics].
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy (OEERE). *Renewable Hydrocarbon Biofuels*. Retrieved from [https://afdc.energy.gov/fuels/emerging_hydrocarbon.html].
- U.S. Energy Information Administration (EIA) (2022). *Biofuels explained; Biodiesel, renewable diesel, and other biofuels. Use and Supply*. Retrieved from [https://www.eia.gov/energyexplained/biofuels/biodiesel-rd-other-use-supply.php].
- U.S. Energy Information Administration (U.S. EIA). (2022). *U.S. Fuel Ethanol Plant Production Capacity*. Retrieved from [https://www.eia.gov/petroleum/ethanolcapacity/].

U.S. Energy Information Administration (U.S. EIA). (2022). *U.S. Fuel Ethanol Plant Production Capacity*. Retrieved from [<https://www.eia.gov/petroleum/ethanolcapacity/>].

University of California Berkeley. (2020). *Introduction to the Hydrogen Market in California*. Retrieved from [https://bof.fire.ca.gov/media/10190/introduction-to-the-hydrogen-market-in-california-draft-for-comment_ada.pdf].

University of California Riverside (UCR). (2021). *Crisis at the Salton Sea The Vital Role of Science*. Retrieved from [https://www.saltonseataaskforce.ucr.edu/_files/ugd/0d73bf_f8133ee80a30473ca565ecab181e31a1.pdf].

Viridos. 2022. *Technology*. Retrieved from [<https://www.viridos.com/technology/>].

Yosemite Clean Energy. *Our Technology*. Retrieved from [<https://www.yosemiteclean.com/our-technology>]

Utilities

Imperial County Planning and Development Services Department (2008). *Imperial County General Plan*. Retrieved from [<https://www.icpds.com/planning/land-use-documents/general-plan>].

Circulation and Goods Movement

Imperial County Transportation Commission (ICTC) (2022). *Transportation Issues and Strategies Assessment*. Retrieved from [https://static1.squarespace.com/static/620ecdaae37afe48a2c8793e/t/6328ae7c2bf98a34dd411153/1663610526370/TRANSPORTATION+ISSUES+AND+STRATEGIES_09.15.22a.pdf].

San Diego Association of Governments (SANDAG) (2021). *2021 San Diego and Imperial Counties Freight Gateway Study Update*. Retrieved from [<https://www.sandag.org/-/media/SANDAG/Documents/PDF/projects-and-programs/goods-movement-planning/freight-gateway-study/goodsmovementplanningand2021sandiegoandimperialcountiesfreightgatewaystudyupdateappendix20211201.pdf>].

United States Department of Transportation (USDOT) Bureau of Transportation Statistics (2021). *Border Crossing/Entry Data*. Retrieved from [<https://www.bts.gov/browse-statistical-products-and-data/border-crossing-data/border-crossingentry-data>].

U.S. Department of Transportation, Bureau of Transportation Statistics Federal Highway Administration (FHWA) Office of Freight Management and Operations (2022). *Freight Analysis Framework Version 5*.

Biology

Beier, P., and B. Brost. (2010). *Use of land facets to plan for climate change: conserving the arenas, not the actors*. Conservation Biology. DOI: 10.1111/j.1523-1739.2009.01422.x

California Department of Fish and Game (CDFG). (1961). *The Ecology of the Salton Sea, California, in Relation to the Sportfishery*. Fish Bulletin No. 113. Retrieved from [<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=7607>].

- California Department of Fish and Game (CDFG). (1991). A Distribution Survey of Desert Pupfish (*Cyprinodon macularius*) around the Salton Sea, California. Prepared by Region 5 Inland Fisheries.
- California Department of Fish and Game (CDFG). (2003). *Atlas of the Biodiversity of California. Climate and Topography*. Retrieved from [https://www.coastal.ca.gov/coastalvoices/resources/Biodiversity_Atlas_Climate_and_Topography.pdf].
- California Department of Fish and Game (CDFG). (2007). *Salton Sea Fisheries Long-Term Monitoring. Draft Quarterly Report: Summer*. Salton Sea Program. Retrieved from [<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=6350>].
- Costa-Pierce, B. 2001. *Final synthesis document: Fish and fisheries of the Salton Sea*. University of Southern Mississippi. Institute of Marine Science. Retrieved from [<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=7534>].
- California Department of Fish and Wildlife (CDFW). (2020). *Survey of California Vegetation Classification and Mapping Standards*. Retrieved from [<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342>].
- California Department of Fish and Wildlife (CDFW). (2022a). *California Natural Community List*. Retrieved from [<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>].
- California Department of Fish and Wildlife (CDFW). (2022b). *California Sensitive Natural Communities List*. Retrieved from [<https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>].
- California Native Plant Society (CNPS). (2021b). *A Manual of California Vegetation, Online Edition*. Sacramento, California: CNPS. Retrieved from [<http://vegetation.cnps.org>].
- Dudek. (2010). Focused Least Bell's Vireo and Southwestern Willow Flycatcher Survey Report for the Salton Sea Species Conservation Habitat Project, Imperial County, California. Prepared for the California Department of Fish and Game and Department of Water Resources.
- California Department of Water Resources (DWR). (2018). *California Statewide Crop Mapping GIS dataset*.
- California Department of Water Resources (DWR) and California Department of Fish and Wildlife (CDFW). (2011). *Salton Sea Species Conservation Habitat Project Draft Environmental Impact Statement/Environmental impact Report*. Prepared for the U.S. Army Corps of Engineers and California Natural Resources Agency. Application No SPL-2010-00142-LLC and State Clearinghouse No. 2010061062.
- California Department of Water Resources (DWR) and California Department of Fish and Game (CDFG). (2007). *Salton Sea Ecosystem Restoration Program Final Programmatic Environmental Impact Report (PEIR)*.
- Hurlbert, A.H., T.W. Anderson, K.K. Sturm, S.H. Hurlbert. (2007). *Fish and fish-eating birds at the Salton Sea: a century of boom and bust*. Lake and Reservoir Management, 23:5, 469-499. Retrieved from [<https://www.tandfonline.com/doi/pdf/10.1080/07438140709354033>].
- Imperial Irrigation District (IID). (2002). *Imperial Irrigation District Water Conservation and Transfer Project Habitat Conservation Plan*.

- Imperial Irrigation District (IID). (2014). *IID Canals and Drains GIS dataset*.
- IID and Reclamation (U.S. Bureau of Reclamation). (2002). *IID Water Conservation and Transfer Project Final EIR/EIS*.
- Kuperman, B.I., V.E. Matey, D.M. Dexter, M.A. Tiffany. (2000). *Invertebrates of the Salton Sea: A Scanning Electron Microscopy Portfolio*. Center for Inland Waters and Department of Biology, San Diego State University.
- LLNL (Lawrence Livermore National Laboratory). (2008). *Groundwater Availability with the Salton Sea Basin. Final Report. LLNL-TR-400426*.
- Miles, A.K., Ricca, M.A., Meckstroth, A., and Spring, S.E. (2009). *Salton Sea Ecosystem Monitoring Project: U.S. Geological Survey*. Open-File Report 2009-1276, 150 p.
- PEC (Pacific Energy Center). (2006). The Pacific Energy Center's Guide to California Climate Zones and Bioclimatic Design. Retrieved from [https://www.pge.com/includes/docs/pdfs/about/edusafety/training/pec/toolbox/arch/climate/california_climate_zones_01-16.pdf].
- Penrod, K., P. Beier, E. Garding, and C. Cabanero. (2012). A Linkage Network for the California Deserts. Produced for the Bureau of Land Management and the Wildlands Conservancy. Fair Oaks, California and Flagstaff, Arizona: Science and Collaboration for Connected Wildlands and Northern Arizona University.
- Shuford, W. D., N. Warnock, K. C. Molina, B. Mulrooney, and A. E. Black. (2000). Avifauna of the Salton Sea: Abundance, distribution, and annual phenology. Contribution No. 931 of Point Reyes Bird Observatory. Final report for EPA Contract No. R826552-01-0 to the Salton Sea Authority.
- Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. (2010). *California Essential Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation and California Department of Fish and Game with funding from the Federal Highways Administration*.
- U.S. Army Corps of Engineers (USACE) Los Angeles District and California Natural Resources Agency (CNRA). (2022). *Salton Sea Management Program Phase 1: 10-Year Plan Environmental Assessment. Project Number SPL-2019-00951-KJD*.
- U.S. Climate Data. (2022). *Climate Imperial – California*. Retrieved from [<https://www.usclimatedata.com/climate/imperial/california/united-states/usca0508>].
- U.S. Department of Agriculture (USDA). (2022). Ecoregions of the United States" and associated GIS dataset. Retrieved from [<https://www.fs.usda.gov/rmrs/ecoregions-united-states>].
- U.S. Department of Agriculture (USDA). (2022). *Soil Survey Geographic Database (SSURGO). GIS dataset*.
- U.S. Geological Survey (USGS). (2022). *Watershed Boundary Dataset*. National Hydrography. Retrieved from [<https://www.usgs.gov/national-hydrography/watershed-boundary-dataset>].
- U.S. Fish and Wildlife Service (USFWS). (2021). *Desert Pupfish (Cyprinodon macularius) 5-Year Review: Summary and Evaluation*. Arizona Ecological Services Office.

U.S. Fish and Wildlife Service (USFWS). (2022). *National Wetlands Inventory: California Wetlands and California Riparian GIS datasets*.

Geology

Barbour, A.J. E.L. Evans, S.H. Hickman, M. Eneva. 2016. Subsidence Rates at the Southern Salton Sea Consistent with Reservoir Depletion. In AGU Advanced Earth and Science. Retrieved from [https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2016JB012903].

California Department of Conservation Geologic Energy Management (CalGEM). (2022). *Statutes & Regulations*. Retrieved from [https://www.conservation.ca.gov/index/Documents/CALGEM-SR-1%20Web%20Copy.pdf].

California DWR (Department of Water Resources). (2022a). *Well Completion Report Map Application*. Retrieved from [https://dwr.maps.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37].

California DWR (Department of Water Resources). (2022b). *SGMA Data Viewer, GPS Station ID: P507*. Retrieved from [SGMA Data Viewer (ca.gov)].

California Division of Mines and Geology (CDMG). (1966). *Geologic Map of Imperial County, California*. Retrieved from [https://ngmdb.usgs.gov/Prodesc/proddesc_408.htm].

California Division of Mines and Geology (CDMG). (1967). *Geologic Map of California, Salton Sea Sheet*.

California Geological Survey (CGS). (2002). *How Earthquakes and Their Effects are Measured*, CGS Note 32. Retrieved from [https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-32.pdf].

California Geological Survey (CGS). (2018). *Earthquake Fault Zones*. Special Publication 42, Revised 2018. Retrieved from [https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/SP_042.pdf].

California Geological Survey (CGS). (2019). *Big California Earthquakes*. Retrieved from [https://www.conservation.ca.gov/cgs/earthquakes/significant].

California Geological Survey (CGS). (2022). *CGS Information Warehouse: Regulatory Maps*. Retrieved from [https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/].

California Geology. (1988). *Earthquakes Strike Imperial Valley in "Superstition Hills Sequence."* Retrieved from [http://www.johnmartin.com/earthquakes/eqpapers/00000073.htm].

Dorsey, R.J. (2002). *San Jacinto Fault Zone in Southern California*. Retrieved from [https://pages.uoregon.edu/rdorsey/sanjacinto.html].

Eneva, M., D. Adams, G. Falorni, and J. Morgan. (2012). *Surface Deformation in Imperial Valley, CA, From Satellite Radar Interferometry*. In *GRC Transactions*. Vol. 36. Retrieved from [https://publications.mygeoenergynow.org/grc/1030405.pdf].

- Hauksson, E., M. Stock, and A.L. Husker. (2021). *Brawley Seismic Zone, Dextral Transcurrent and Rift Tectonics Connecting the San Andreas and Imperial Faults Across the Salton Trough, Southern California, USA*. In *Southern California Earthquake Center*. Retrieved from [https://www.scec.org/publication/11207].
- Imperial County Planning and Development Services. (1993a.) *General Plan EIR*. Retrieved from [https://www.icpds.com/assets/planning/general-plan-eir/d-environmental-analysis.pdf].
- Imperial County Planning and Development Services. (1993b.) *General Plan, Seismic and Public Safety Element*. Retrieved from [https://www.icpds.com/planning/land-use-documents/general-plan].
- Imperial County Planning and Development Services. (2015). *General Plan, Renewable Energy and Transmission Element*. Retrieved from [https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf].
- Li, C, Z. Peng, D. Yao, X. Meng, and Q. Zhai. (2022). *Temporal Changes of Seismicity in Salton Sea Geothermal Field Due to Distant Earthquakes and Geothermal Productions*. In *Southern California Earthquake Center*. Retrieved from [https://www.scec.org/publication/12646].
- Materna, K., A. Barbour, J. Jiang, and M. Eneva. (2022). *Detection of Aseismic Slip and Poroelastic Reservoir Deformation at the North Brawley Geothermal Field From 2009 to 2019*. In *Southern California Earthquake Center*. Retrieved from [https://www.scec.org/publication/11715].
- Sanders, C.O. (1993). Interaction of the San Jacinto and San Andreas Fault Zones, Southern California: Triggered Earthquake Migration and Coupled Recurrence Intervals. Retrieved from [https://pubmed.ncbi.nlm.nih.gov/17818388/].
- Scharer, K.M. and D. Yule. (2020). *A Maximum Rupture Model for the Southern San Andreas and San Jacinto Faults, California, Derived from Paleoseismic Earthquake Ages: Observations and Limitations*. Retrieved from [https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2020gl088532].
- Sektiawan, A. G.A. Prasetyo, D.P. Adli, and E. Yudiantoro. (2016). *Subsidence: Causes, Effects, and Mitigations in Geothermal Field*. Retrieved from [https://iopscience.iop.org/article/10.1088/1755-1315/42/1/012022].
- Southern California Earthquake Data Center (SCEDC). (2022). *Earthquake Information*. Retrieved from [https://scedc.caltech.edu/earthquake/sanjacinto.html].
- Treiman, J.A. (1999). *Imperial Fault (Class A) No. 132*. In *USGS Quaternary Fault and Fold Database of the United States*. Retrieved from [https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=132§ion_id=].
- United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). (2015). *National Cooperative Soil Survey*. Accessed November 10, 2022. https://soilseries.sc.egov.usda.gov/OSD_Docs/I/IMPERIAL.html.
- United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). (2022). *Web Soil Survey*. Retrieved from [https://websoilsurvey.nrcs.usda.gov/app/].

- United States Geological Survey (USGS). (2002). *Quaternary Fault and Fold Database of the United States, San Andreas Fault Zone, Coachella Section (Class A) No. 1j*. Retrieved from [<https://earthquake.usgs.gov/static/lfs/nshm/qfaults/Reports/1j.pdf>].
- United States Geological Survey (USGS). (2011a). *High Geologic Slip Rates Since Early Pleistocene Initiation of the San Jacinto and San Felipe Fault Zones in the San Andreas Fault System: Southern California, USA*. Retrieved from [<https://www.usgs.gov/publications/high-geologic-slip-rates-early-pleistocene-initiation-san-jacinto-and-san-felipe-fault>].
- United States Geological Survey (USGS). (2011b). *Liquefaction and Other Ground Failures in Imperial County, California*. Retrieved from [<https://pubs.usgs.gov/of/2011/1071/>].
- United States Geological Survey (USGS). (2012). *Subsidence in Sedimentary Basins Due to Groundwater Withdrawal for Geothermal Energy Development*. USGS Open File Report 601, Utah Geological Survey, by Mike Lowe. Retrieved from [https://ugspub.nr.utah.gov/publications/open_file_reports/ofr-601.pdf].
- United States Geological Survey (USGS). (2013). *Measuring Ground Movement in Geothermal Areas of Imperial Valley, California*. By B.E. Lofgren. In NTRS-NASA Technical Reports Server. Retrieved from [<https://ntrs.nasa.gov/citations/19750012770>].
- United States Geological Survey (USGS). (2022). *Areas of Land Subsidence in California*. Retrieved from [https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html].
- Wilkerson, G. (2018). *Geology and Mineral Development History of the Salton Sea Region, Including Portions of San Diego, Riverside, and Imperial Counties*. Part I, Field Trip Guidebook.

Agriculture/Forestry Resources

- Imperial County Planning and Development Services Department. (2015). *General Plan, Agricultural Element*. Retrieved from [<https://www.icpds.com/assets/planning/agricultural-element-2015.pdf>].
- Imperial County. (2023). *Chapter 5.56 Right to Farm Provisions*. Retrieved from [https://library.municode.com/ca/imperial_county/codes/code_of_ordinances?nodeId=TIT5BULIRE_CH5.56RIFAPR].
- Imperial County Local Agency Formation Commission (Imperial County LAFCO). *Imperial County Local Agency Formation Commission*. Retrieved from [<https://www.iclafco.com/>].
- Imperial Irrigation District (IID). (2020). *Service Area Plan 2020*. Retrieved from [<https://www.iid.com/home/showpublisheddocument/18842/637424388387170000>].
- Imperial Irrigation District (IID). (2023). *Water Supply*. Retrieved from [<https://www.iid.com/water/water-supply>].
- U.S. Department of Agriculture National Resource Conservation Service (USDA NRCS). (2023). *Web Soil Survey*. Retrieved from [<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>].

Hazards and Hazardous Materials

Arcadis. (2022). Closure Request, Former Unocal/GEMCOR Geothermal Facility, 950 West Lindsay Road, Calipatria, California. July 14

California Environmental Protection Agency (CalEPA). (2022). Cortese List [online database]. Retrieved from [https://calepa.ca.gov/sitecleanup/corteselist/].

California Fire Resource and Assessment Program (FRAP) Interactive Wildfire Map. Retrieved from [https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1].

California Geologic Energy Management Division (CalGEM). (2022). "Well Finder" [online database]. Retrieved from [https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx].

Department of Toxic Substances Control (DTSC). (2022). EnviroStor Database. Retrieved from [https://www.envirostor.dtsc.ca.gov/public/].

U.S. Environmental Protection Agency (EPA). (2022). Search for Superfund Sites Where You Live [online database]. Retrieved from [https://www.epa.gov/superfund/search-superfund-sites-where-you-live].

Fisher, A. (2017). Wister Basin Closure Report, Wister Basins 12-27 and 85-20, Niland, California. December 22.

Geo-Logic Associates. (2021). Water Quality Monitoring Report, Semiannual April-September 2021, Niland Waste Management Facility.

Geo-Logic Associates. (2022). Second Quarter 2022 Perimeter Landfill Gas Monitoring Report, Nine Solid Waste Management Facilities, Imperial County, California.

Iris Environmental. (2009). Preliminary Endangerment Assessment Report, CalEnergy Central Services Facility, 480 West Sinclair Road, Calipatria, California.

National Pipeline Mapping System (NPMS). (2022). NPMS Public Map Viewer [web-based mapping application]. Retrieved from [https://pvnpm.phmsa.dot.gov/PublicViewer].

Regional Water Quality Control Board (RWQCB). (2011). Cleanup and Abatement Order No. R7-2011-0006, Issued to Unocal Corporation Residue Processing Facility (GEMCOR), West of Calipatria, Imperial County.

State Water Resources Control Board (SWRCB). (2022a). GeoTracker Database. Retrieved from [https://geotracker.waterboards.ca.gov/].

State Water Resources Control Board (SWRCB). (2022b). Groundwater Information System. Retrieved from [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/].

U.S. Geological Survey (USGS). (2011). Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California.

Hydrology/Water Quality

- Colorado River Regional Water Quality Control Board (RWQCB). (2019). *Water Quality Control Plan for the Colorado River Basin Region. Includes amendments effective on or before January 8, 2019*. Retrieved from [https://www.waterboards.ca.gov/coloradriver/water_issues/programs/basin_planning/docs/2020/rb7bp_e2019.pdf].
- County of Imperial. (2021). *Draft Environmental Impact Report for the Energy Source Mineral ATLiS Project (Hydrology and Water Quality Chapter)*.
- California Department of Water Resources (DWR). (2004). *East Salton Sea Groundwater Basin (Basin No. 7-33) and "Imperial Valley Groundwater Basin (Basin No. 7-30)." In California's Groundwater, Bulletin 118*. Retrieved from [<https://data.cnra.ca.gov/dataset/bulletin-118-update-2003-basin-reports>].
- California Department of Water Resources (DWR). (2019). *Sustainable Groundwater Management Act 2019 Basin Prioritization – Process and Results*. Retrieved from [<https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>].
- California Department of Water Resources (DWR). (2022). *SGMA Data Viewer*. Retrieved from [<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>].
- Draft Environmental Impact Report for the Energy Source Mineral ATLiS Project (Hydrology and Water Quality Chapter).
- DWR (California Department of Water Resources). 2004. "East Salton Sea Groundwater Basin (Basin No. 7-33) and "Imperial Valley Groundwater Basin (Basin No. 7-30)." In California's Groundwater, Bulletin 118. Last updated February 27, 2004. <https://data.cnra.ca.gov/dataset/bulletin-118-update-2003-basin-reports>.
- DWR. 2019. *Sustainable Groundwater Management Act 2019 Basin Prioritization – Process and Results*. Accessed October 2020. <https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>.
- DWR. 2022. "SGMA Data Viewer." December 16, 2022. <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>.
- Imperial Water Forum. (2012). *Imperial Region Integrated Regional Water Management Plan*. Prepared by GEI Consultants. Retrieved from [<https://imperialirwmp.org/document-library-2/final-imperial-irwmp-volumes-1-2/>].
- Federal Emergency Management Agency (FEMA). (2008). *Flood Insurance Rate Map. Imperial County, California and Unincorporated Areas. FIRM Panel Nos 06025C0425C, 06025C0725C, 06025C0700C, 06025C1025C and 06025C1000C*. Retrieved from [<https://msc.fema.gov/portal/home>].
- State Water Resources Control Board (SWRCB). (2022). *Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List/305(b) Report)*. Retrieved from [<https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=e2def63cce54eedbee4ad726ab1552c>].
- U.S. Geological Survey (USGS). (2022). *The National Map - National Hydrography Dataset Viewer*. Retrieved from [<https://viewer.nationalmap.gov/viewer/nhd.html?p=nhd>].

Imperial Water Forum (2012). *Imperial Region Integrated Regional Water Management Plan*. Prepared by GEI Consultants. October 2012. <https://imperialirwmp.org/document-library-2/final-imperial-irwmp-volumes-1-2/>.

Mineral Resources

CalGEM (California Geologic Energy Management Division). 2023, Well Finder, Imperial County Accessed January 20, 2023. <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-115.61498/33.11977/12>.

County of Imperial. 2016. Imperial County General Plan, Conservation and Open Space Element. March 8, 2016.

California Geologic Survey (CGS), 2018. Aggregate Sustainability in California, Map Sheet 52, updated 2018.

CGS, 2022. Publications of the SMARA Mineral Land Classification Project Dealing with Mineral Resources in California, 2022.

Noise

Beranek & Ver. (1992). Noise and Vibration Control Engineering.

Caltrans. (2013). Technical Noise Supplement to the Traffic Noise Analysis Protocol. September. Retrieved from [<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>].

City of Calipatria. (2013). City of Calipatria 2035 General Plan. Retrieved from [<http://www.calipatria.com/media/managed/calipatria-2035-general-plan-september-20131.pdf>].

Bies & Hansen. (1996). Engineering Noise Control. 2nd edition. E & FN Spon.

Federal Highway Administration (FHWA). (2006). FHWA Roadway Construction Noise Model: User's Guide. Final Report. FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02. Cambridge, Massachusetts: DOT, Research and Innovative Technology Administration. August. Retrieved from [https://www.gsweventcenter.com/Draft_SEIR_References/2006_01_Roadway_Construction_Noise_Model_User_Guide_FHWA.pdf].

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. John A. Volpe National Transportation Systems Center. September. Retrieved from [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf].

Imperial County. (2015). General Plan Noise Element. Retrieved from [<https://www.icpds.com/assets/planning/noise-element-2015.pdf>].

Imperial County. Division 7 – Noise Abatement and Control. Retrieved from https://library.municode.com/ca/imperial_county/codes/code_of_ordinances?nodeId=TIT9LAUSCO_DIV7NOABCO

International Code Council (ICC). 2019. 2019 California Building Code. Retrieved from <https://codes.iccsafe.org/content/chapter/15426/>.

International Organization of Standardization (ISO). (1996). Standard 9613-2 (Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation). Geneva.

Naval Facilities Engineering Command. (2009). West Coast Basing of the MV-22 Final Environmental Impact Statement. Retrieved from [https://www.29palms.marines.mil/Portals/56/Docs/G4/NREA/MV-22_FEIS_Vol_II_Oct_2009.pdf].

Sonic Sentinel. (2022). Sonic Sentinel Model 14-1 Propane Sound Cannon. Retrieved from [<https://www.sonicsentinel.com/cannon.html>].

U.S. Department of Energy. (2011). Environmental Assessment - Ormat Nevada Northern Nevada Geothermal Power Plant Projects. Retrieved from [https://www.eesi.org/files/11_0729_ORMAT_FINAL_EA_2.pdf].

4.2 List of Preparers

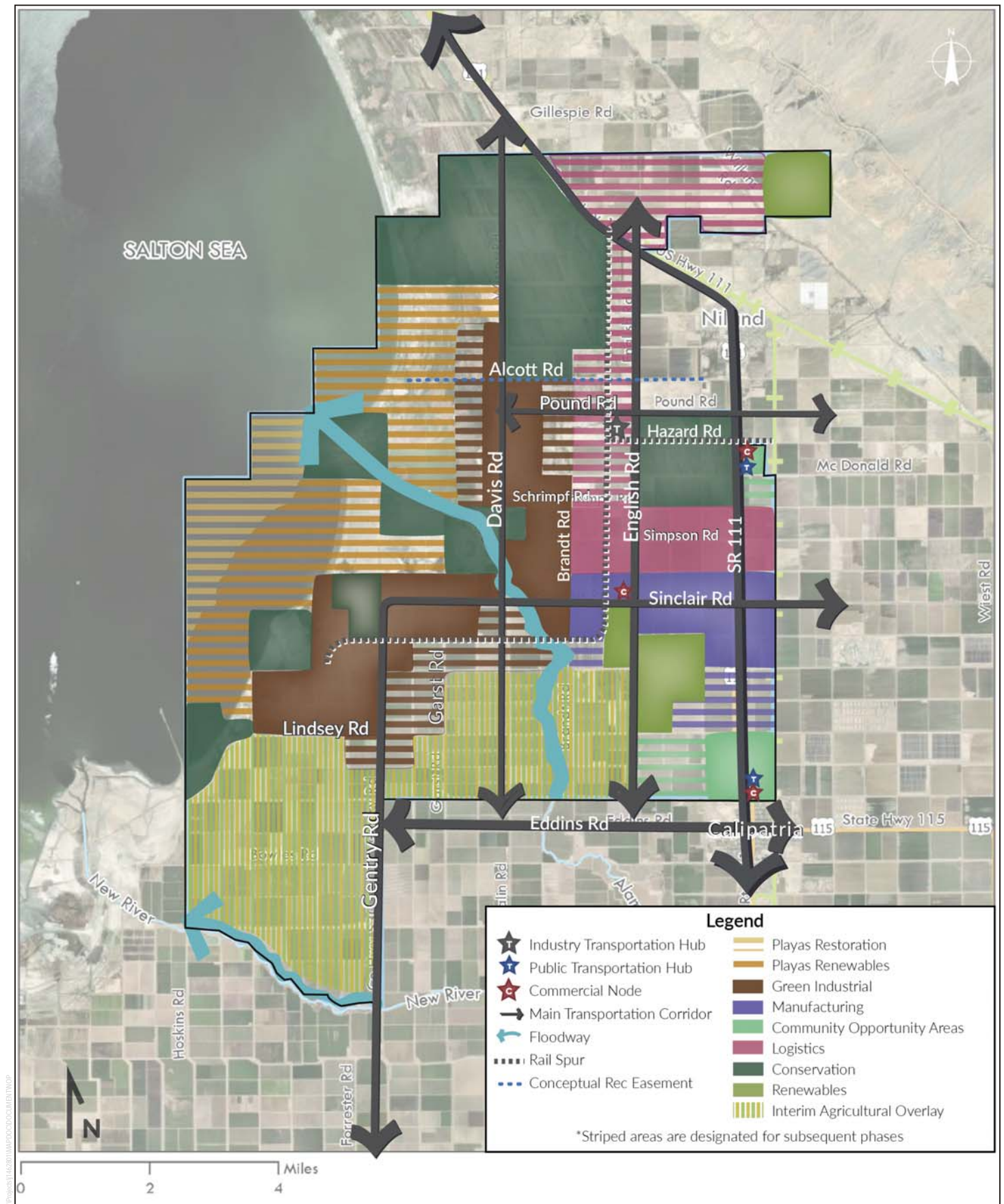
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John Gay,

Dudek

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SOURCE: Imperial County

FIGURE 2

Proposed Land Use Alternative

Salton Sea Lithium Specific Plan

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COMMUNITY OPPORTUNITY AREAS: This land use designation intends to promote the development of critical public facilities and services to support public health near the communities of Niland and Calipatria. These areas act as large-scale buffers between residents and industrial-type land uses. The Community Opportunity Areas may be further refined and planned in collaboration with the neighboring communities of Niland and Calipatria through the Specific Plan process to ensure these area properly meet the community's needs. Allowed uses may include, but are not limited to, markets, civic uses, parks, commercial recreational uses, health care facilities, childcare facilities, public services, workforce education and training centers, office, hotels, entertainment, gasoline and EV charging stations, and public transportation hubs.

GREEN INDUSTRIAL: These has areas have a focus on geothermal energy production plants, however, would allow for additional industrial uses that support the goal of decarbonizing the energy industry. This designation may allow for industrial plants, and storage, distribution, and administrative facilities, including uses conducted outside of an enclosed building. The Specific Plan may restrict the use of certain products, processes, or manufacturing equipment due to external effects. Allowed uses may include, but not limited to, geothermal energy production and mineral recovery, biofuel generation, and green hydrogen. Ancillary uses may include, but not limited to, supportive manufacturing, commercial, logistics, and battery manufacturing and storage.

MANUFACTURING: This designation provides suitable industrial, office, and warehouse space for manufacturers of goods. Manufacturing may include compounding, processing, assembling, packaging, treatment or fabrication of materials and products such as electric vehicle batteries. Allowed uses may include, but not limited to, manufacturing, research and development, workforce training, industrial parks, and temporary construction housing. Ancillary uses may include, but not limited to, geothermal and mineral recovery, logistics, office, commercial, and battery storage.

LOGISTICS: The areas identified for Logistics provide suitable space for the warehousing and distribution that allows for a variety of suppliers and services. Logistics activities may include, but not limited to, logistic facilities, industrial transportation hubs, outdoor storage of trucks, trailers, and shipping containers, and temporary construction housing. Ancillary uses may include, but not limited to, geothermal and mineral recovery, manufacturing facilities, office, employee services and property management facilities.

PLAYAS RENEWABLES: This designation recognizes the unique relationship to the Salton Sea and the possibly restrictive geologic conditions, including the clays and seismic activity. As such, geologic testing will be needed with any proposed structures within the Playas Renewables designation to determine the viability of development on the proposed site. This designation will require a certain percentage of the site be dedicated for dust suppression via natural vegetation and restoration techniques, beyond what is required to mitigated onsite surface impacts. Allowed uses may include, but not limited to, geothermal energy operations and mineral recovery, subsurface geothermal wells, pipes and mineral rights, habitat restoration, and dust suppression and public health mitigation projects. Ancillary uses may include, but not limited to, solar photovoltaics structures or floating structures (floatovoltaics).

PLAYAS RESTORATION: Due to the sensitive resources, valuable habitat, and public health needs to limit dust, this designation mainly allows for subsurface geothermal activities and above-surface environmental restoration activities. Other allowed uses include subsurface mineral rights, air quality monitor structures, and photovoltaics. Exception within this designation may be allowed with Director of Planning approval.

RENEWABLES: This designation is located over two existing and planned solar farm developments. As this use is aligned with the overall intent of the Lithium Valley Specific Plan vision, the use of solar is intended to remain until the end of its project lifespan. Once the project life span has past the subsequent land use shall revert to the land use designation surrounding the majority of the site.

CONSERVATION: The conservation land use intends to provide area for conserved and/or restored critical habitat, Salton Sea rehabilitation projects, and mitigation lands. This designation currently contains areas under existing contract by the Imperial Irrigation District (IID) for restoration and mitigation efforts. Allowed uses may include, but are not limited to, subsurface geothermal wells, subsurface mineral rights, and passive use trails that provide connections to the Salton Sea. Additional uses could be allowed by the Director of Planning pending ecological or cultural performance studies.

FLOODWAY: This designation identifies a floodplain area associated with the New River and Alamo River which flow south to north into the Salton Sea. The Floodway designation covers an approximately 950-foot buffer (475 feet on each side) on the Alamo River and a 785-foot buffer (392.5 feet on each side) on the New River. This designation will serve as permanent open space within the Specific Plan area. Allowed uses may include riparian restoration, native riparian habitat, and passive recreation such as picnic areas and trails.

INTERIM AGRICULTURAL OVERLAY: The overlay designation intends to be retained as agriculture until there is sufficient need to transition to industry-driven uses outside their initial land use designated areas. Interim uses include solar, agrivoltaics, and agricultural lands that are actively involved with agricultural crop production and animal keeping, including aquaculture, dairies, feed lots, and animal sales yards as a primary use. Subsequent phases allowed used include green industrial, manufacturing, and commercial along Forrester Road. Subsequent phases allowed uses will be considered once infrastructure has been expanded to support such uses.

SOURCE: Imperial County

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