

2.0 – EXECUTIVE SUMMARY

This chapter provides an overview of the proposed Project and the environmental analysis. For additional detail regarding specific issues, please consult Chapter 4.0 of the Draft PEIR and Section 4.0 (Revisions to the Draft EIR) of this Final PEIR.

2.1 PURPOSE AND SCOPE OF THE PEIR

This PEIR provides an analysis of the potential environmental effects associated with the implementation of the proposed Project, which identifies new opportunities for renewable energy development within Imperial County while remaining consistent with identified land use and environmental goals. The PEIR analysis focuses on potential impacts arising from future renewable energy facilities developed under the proposed Project. The EIR adopts this approach in order to provide a credible worst-case scenario of the impacts resulting from project implementation.

2.2 PROJECT CHARACTERISTICS

Section 2.2 of the Final PEIR presents Chapter 2.0 – Project Description of the Draft PEIR. Clarifications to the text of the Draft PEIR project description are shown with underline, and text removed from the Draft PEIR project description is shown with ~~striketrough~~. Minor formatting changes related to section numbering have not been tracked for ease of review.

2.2.1 Regional Setting

Imperial County is located within the southeastern corner of California and covers an area of approximately 2,942,080 acres (ICPDS 2009). The County is surrounded by Riverside County to the north, the Colorado River and the State of Arizona to the east, the International Boundary with the Republic of Mexico to the south, and San Diego County to the west. The proposed Project area includes all of Imperial County; however, the proposed Project includes a Renewable Energy Overlay Zone Map, Goals and Policies, and Implementation Ordinance that prioritizes areas for renewable energy development and which would reduce the amount of land that may be developed.

2.2.2 Project Objectives

The proposed Project has been developed to identify new opportunities for renewable energy and assures that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed Project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability. The purpose of the proposed Project is to provide a comprehensive document that contains the latest knowledge about the resources, feasible development technology, legal requirements, policies (County, State, and ~~f~~ederal), and implementation measures. Additionally, the proposed Project provides a framework for the review and approval of renewable energy projects in the County. Development projections for the proposed Project are based on forecasts obtained from the renewable energy industry, regional utilities, and the 2014 Draft Desert Renewable Energy Conservation Plan (DRECP).

Development of future renewable energy facilities associated with the proposed Project would provide the following benefits for Imperial County:

- Fiscal benefit of expanded property tax revenues
- Fiscal benefit of sales tax revenues from the purchase of equipment, goods, and services
- Royalty and lease benefits to local landowners and the County
- Social and fiscal benefits from increased economic activity and employment opportunities that do not threaten the economic viability of other industries
- Improvements in technology to reduce costs of electrical generation
- Reduction in potential greenhouse gases by displacing fossil-fuel-generated electricity with renewable energy power which does not add to the greenhouse effect
- Contributions toward meeting the State of California's Renewables Portfolio Standard (RPS)
- Minimization of impacts to local communities, agriculture, and sensitive environmental resources

Similarly, development of Electrical Transmission and Joint Use Corridors associated with the proposed Project would provide the following benefits for Imperial County:

- Increases regional transmission capacity to support regional energy demand while increasing regional reliability
- Provides infrastructure for additional capacity to transmit renewable energy generation to meet both local and regional demand for electric power
- Increases reliability of California's electrical system
- Reduces potential land conflicts between and among renewable energy developers, agriculture, environmental resources, and local landowners
- Provides increased certainty as to the future location and siting of electrical transmission facilities

2.2.3 Relationship To The 2014 Draft Desert Renewable Energy Conservation Plan

The 2014 Draft Desert Renewable Energy Conservation Plan (DRECP) provides a framework for the development of renewable energy and transmission projects and the conservation of sensitive species and ecosystems on desert lands within southeastern California (DRECP EIR/EIS 2014, I.O-1). The DRECP covers approximately 22,585,000 acres of private, State, and federal lands in the counties of Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino and San Diego, California. The DRECP was developed by the Bureau of Land Management (BLM), United States (U.S.) Fish and Wildlife Service (USFWS), California Energy Commission (CEC), and California Department of Fish and Wildlife (CDFW), collectively known as the Renewable Energy Action Team (REAT). The REAT developed the DRECP with the following primary goals:

1. Contribute to the conservation (recovery) of Covered Species, habitats, and natural communities, as well as to the physical, visual, cultural, and social resources in the Plan Area
2. Streamline future permitting efforts for the development of renewable energy in the Plan Area to help meet California's Renewables Portfolio Standard (RPS), California's greenhouse gas emission reduction targets, and other State and federal renewable energy and transmission goals

The DRECP identifies locations designated for future development of renewable energy, as well as areas that should be preserved in order to protect biological, cultural, and other valuable natural resources. Locations suitable for future development of renewable energy are identified in the DRECP as Development Focus Areas (DFAs). The DRECP identified DFAs within the plan through "...a collaborative process that considered and integrated state and federal renewable energy goals, natural resources conservation needs, culturally important areas, recreation, and visual resources in the Plan Area, and information from renewable energy, conservation, utility, military, tribes, recreationists, and affected local stakeholders...(DRECP EIR/EIS 2014, I.3-36)." During this process, the REAT utilized the following five principles to guide the identification of DFAs:

1. "...Generation should be developed either on already-disturbed land or in areas of lower biological value, and conflict with both biological and non-biological resources should be minimized.
2. Areas identified for generation should have high-quality solar, wind, and/or geothermal renewable energy resources.
3. Generation should be sited close to existing transmission and in areas where transmission could be expected as a reasonable extension of the existing transmission system and planned system upgrades, as identified by the Renewable Energy Transmission Initiative, or other transmission plans.
4. Generation should, to the maximum extent possible, be aggregated to avoid transmission sprawl, reduce cost, and reduce disturbance across the Plan Area. Again, this principle aims to minimize disturbance to biologically, culturally, recreation, and visual valuable areas.
5. The Plan should provide sufficient areas for development flexibility to ensure the Plan does not constrain competition within the market or unnecessarily result in distorted or environmentally incompatible incentives when implemented (i.e., where feasible, the Plan should remain market neutral between different technologies or different project configurations)...(DRECP EIR/EIS 2014, I.3-37)."

Through this process, the REAT developed several project alternatives documenting the locations of DFAs as well as conservation areas that would not be suitable for development of renewable energy and transmission facilities.

Upon release of the 2014 Draft DRECP, the County staff and consultants began reviewing the DRECP to determine which areas within Imperial County had been designated as DFAs under the various project alternatives that were presented. This review of DRECP project alternatives provided the County team with valuable information regarding where future development of renewable energy facilities could be located within Imperial County; however, the County and consultant team then executed an additional

constraints analysis to identify additional valuable resources within Imperial County. Although the DRECP does preserve numerous resources throughout the Plan Area, the conservation strategy developed for the plan does focus on biological resources. Consequently, the County team conducted additional research on the locations of valuable environmental resources, such as agriculture, and compared the DRECP alternatives to this expanded data set. Based on the results of this additional constraints analysis, the County team developed a new program alternative that reduced the DFA footprint of the DRECP Preferred Alternative in order to preserve valuable agricultural resources and ensure that the DFA was constrained by a 0.5-mile buffer around all urban areas. The results of this constraints analysis ~~are~~ is presented in the Renewable Energy (RE) Overlay Zone Map presented below (Figure 2.2-1). The Renewable Energy Overlay Zone Map is discussed in greater detail in Section 2.2.4 below.

2.2.4 Project Components

The proposed Project provides a comprehensive update of the existing 2006 Geothermal/Alternative Energy and Transmission Element and ~~would serve~~ serves as the primary policy statement by the County Board of Supervisors for implementing development policies for geothermal and other renewable energy land uses in Imperial County. The proposed Project consists of ~~three~~ four key elements that have been developed to guide future development of future renewable energy facilities in Imperial County: (1) The *Renewable Energy and Transmission Element Overlay Zone*, (2) The *Renewable Energy and Transmission Element Goals and Objectives*, ~~and~~ (3) The *Renewable Energy and Transmission Element Implementation Ordinance*, and (4) related minor consistency revisions to all of the other elements of the Imperial County General Plan. Each of these project components is described in greater detail below.

Renewable Energy and Transmission Element Overlay Zone Map

The County and consultant team developed a draft Renewable Energy (RE) Overlay Zone Map as described above in Section 2.2.3, which identifies locations within the County ~~authorized for future development and operation of renewable energy projects with an approved Renewable Energy Conditional Use Permit (RECUP) (Figure 2.2-1).~~ authorized for future development and operation of renewable energy projects with an approved Renewable Energy Conditional Use Permit (RECUP) (Figure 2.2-1). The RE Overlay Zone is concentrated in areas that were determined to be the most suitable for the development of renewable energy facilities while minimizing the impact to other established uses. The portion of the RE Overlay Zone that covers land and surface water within the Salton Sea consists of approximately 61,627.10 acres of land and surface water within the Salton Sea. ~~Renewable Energy Conditional Use Permit application(s) proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.~~

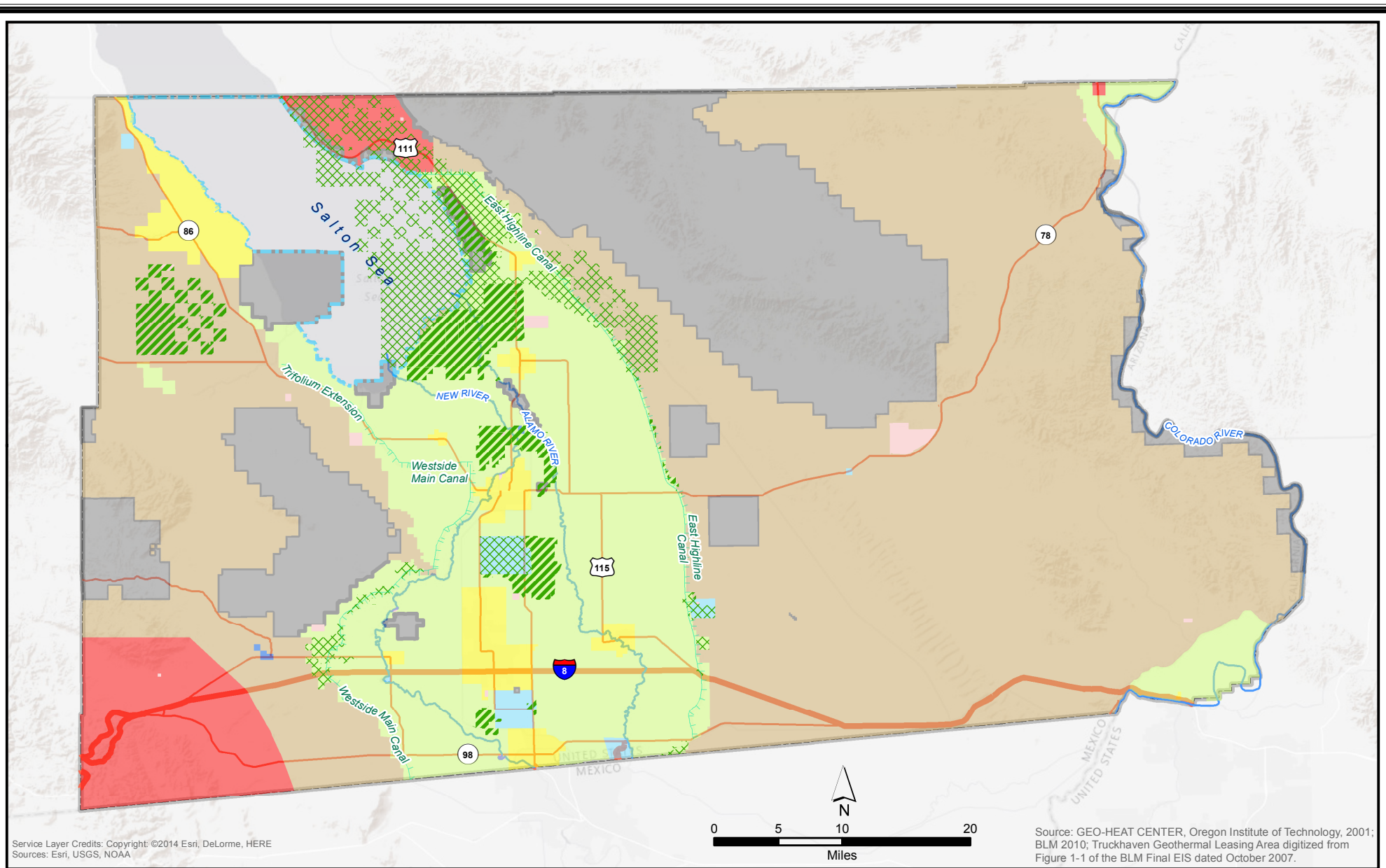
The size of the RE Overlay Zone Map has been reduced since circulation of the Draft PEIR. The majority of this reduction was due to the reclassification of some portions of the RE Overlay Zone Map to "Proposed Development Focus Areas on Land Managed by BLM," which is described in greater detail below on page 2-7. The reduction of the RE Overlay Zone Map also resulted from mapping refinements to ensure consistency with parcel boundaries, which removed numerous parcels that were only partially included on the Draft RE Overlay Zone Map. Although some partially included parcels on the Draft RE Overlay Zone Map are now completely included in the Final RE Overlay Zone Map, the process has resulted in a net reduction of the total acreage. Overall, the revisions to the RE Overlay Zone Map have reduced the total size from 339,194 acres in the Draft PEIR to 200,796 acres in the Final PEIR.

As set out in the proposed Implementation Ordinance, an amendment to the overlay zone would only be approved by the County Board of Supervisors if a future renewable energy project met one of the following two conditions:

- Adjacent to the Existing RE Overlay Zone: An amendment may be made to allow for development of a future renewable energy project located adjacent to the existing RE Overlay Zone if the project:
 - Is not located in a sensitive area
 - Does not have any significant biological or agricultural resources on-site
- “Island” Overlay: An amendment may be made to allow for development of a future renewable energy project that is not located adjacent to the existing RE Overlay Zone if the project:
 - Is located adjacent (sharing a common boundary) to an existing transmission source
 - Consists of the expansion of an existing renewable energy operation
 - Would not result in any significant environmental impacts.

Upon completion of the constraints analysis described in Section 2.2.3 above, the ~~County~~ team developed three categories for the Overlay Zone Map, each of which are described in detail below.

- **Geothermal:** The Geothermal overlay zone category was developed to identify areas where existing and future development has been environmentally reviewed for geothermal renewable energy facilities. The areas subject to this overlay zone category consist of reduced footprints of the existing geothermal overlay zones. These footprints were reduced from their original size to either provide a 0.5-mile buffer around existing urban areas or Government/Special Public areas, or to allow additional types of renewable energy development on the remainder of the existing geothermal overlay zone. Additionally, privately-owned properties within the easternmost portion of the East Brawley Known Geothermal Resource Area (KGRA) is located east of the East Highline Canal are subject to this overlay zone category. The remainder of the East Brawley KGRA is not included in any of the overlay zone categories developed for the proposed Project in order to preserve existing agricultural resources west of the East Highline Canal. Privately owned properties within the Truckhaven Geothermal Leasing Area are also subject to this overlay zone category.
- **Renewable Energy:** The Renewable Energy overlay zone category was developed to identify areas that could be developed with any form of renewable energy technology other than geothermal production. ~~This category is limited to a small portion of land in the southeast portion of Imperial County, south of Interstate 8 (I-8) based on mapping as identified within the DRECP's Preferred Alternative.~~ All land within the Renewable Energy overlay zone category has been removed from the revised Overlay Zone Map. These areas were removed from the overlay zone map based on comments from BLM indicating that they were not suitable for renewable energy development. Land may be subject to this overlay zone category in the future under an amendment.



Legend

Overlay Zones (Total Acres)

- Geothermal (69,146 acres)
- Renewable Energy/Geothermal (131,650 acres)

Land Use

- Agriculture
- Community Area
- Government/Special Public
- Industry

- Recreation/Open Space
- Salton Sea
- Special Purpose Facility
- Specific Plan Area
- Urban Area

Figure 2.2-1
Imperial County Renewable Energy
and Transmission Element Update
PEIR
Overlay Zone Map
County Lands

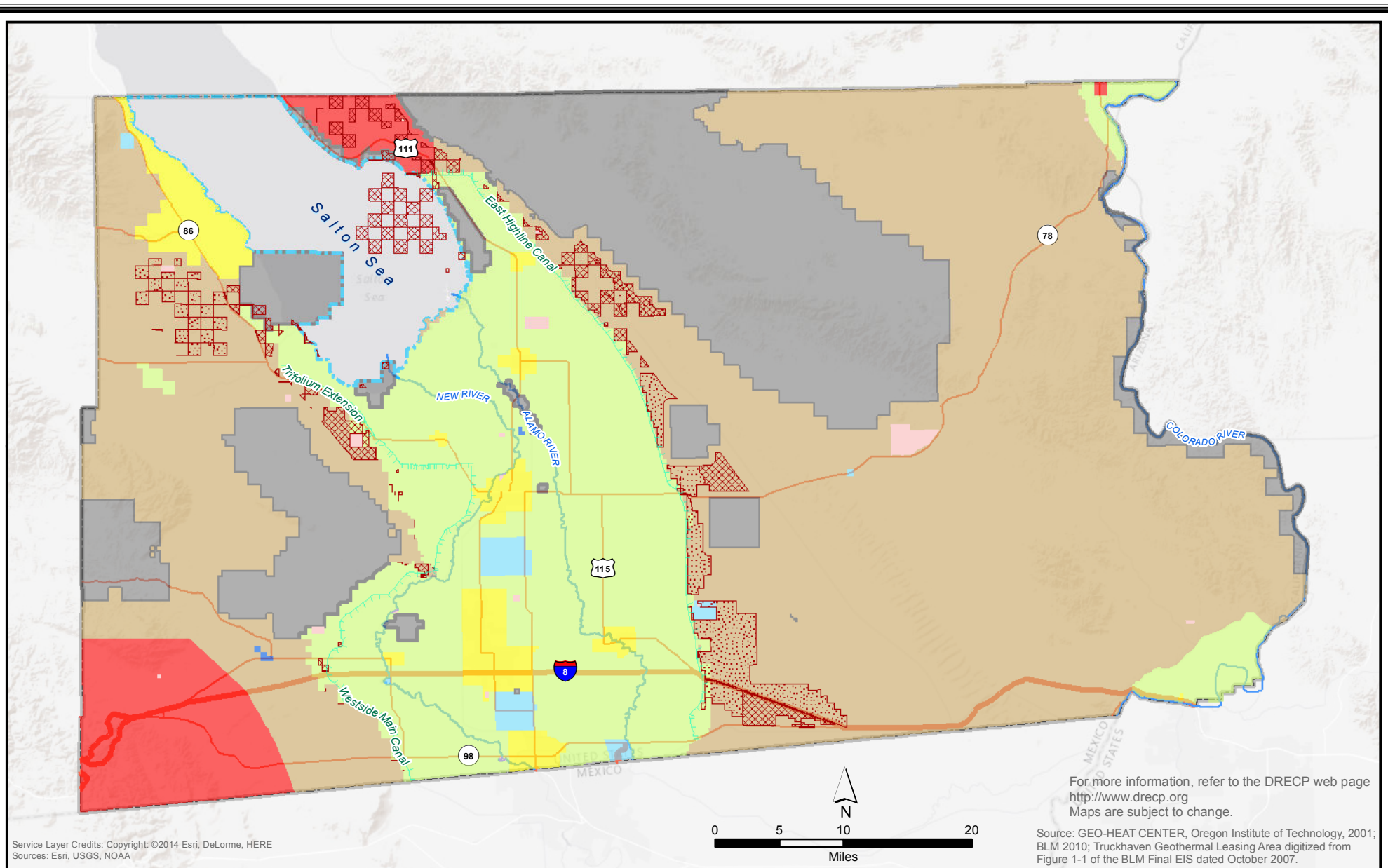
- **Renewable Energy/Geothermal:** The Renewable Energy/Geothermal overlay zone category was developed to identify areas that could be developed with any form of renewable energy technology, including geothermal production. This Renewable Energy overlay zone category provides the greatest range of opportunities for future development of renewable energy under the proposed Project. The areas subject to this overlay zone category consists of the following:
 - Privately owned properties within the Ssegments of the Truckhaven Geothermal Leasing Area, West Chocolate Mountains Renewable Energy Evaluation Area, and North Salton Sea Geothermal Area that are not located within 0.5 mile of existing urban areas.
 - Privately owned properties within the Ssegments of the Salton Sea and South Brawley geothermal overlay zones that are not included in the Geothermal overlay zone category and are not located within 0.5 mile of existing urban areas.
 - Privately owned properties within the Ssegments of the East Mesa KGRA located east of the East Highline Canal.
 - A contiguous strip of land east of the Truckhaven Geothermal Leasing Area and west of the Salton Sea.
 - AreasPrivately-owned properties west of the Westside Main Canal as identified in the 2014 Draft DRECP's Preferred Alternative and EIR/EIS.

Zoning requirements for the "Renewable Energy" and "Renewable Energy/Geothermal" overlay zone categories have been added to Land Use Ordinance, Divisions 5 and 17.

Proposed Development Focus Areas on Land Managed by BLM: Figure 2.2-2 presents land under the jurisdiction of BLM that may be utilized for development of renewable energy facilities. The locations shown in red on Figure 2.2-2 are Federally managed lands that were included in the 2014 Draft DRECP and EIR/EIS that were not excluded by the constraints analysis described in Section 2.2.3 described above.

Figure 2.2-2 utilizes the same overlay zone categories that are described above. It should be noted, however, that BLM has indicated that wind technology facilities would be prohibited on both Federal and private lands within the West Chocolate Mountain Renewable Energy Evaluation Area due to its location adjacent to the West Chocolate Mountain Arial Gunnery Range and training activities. The areas shown on Figure 2.2-2 are not subject to the proposed Project, and the map is being provided for "informational purposes" only. For information on development of renewable energy facilities on BLM land shown on Figure 2.2-2, please contact the BLM El Centro Field Office at (760) 337-4400.

Transmission System: The existing transmission system within Imperial County would need to be expanded in order to provide for the distribution of renewable energy generated by future facilities developed under the proposed Project. Existing and proposed transmission corridors and transmission lines are presented in Figure 2.2-23. The Imperial Irrigation District (IID), as a Balancing Authority, is the primary electrical Transmission Service Provider (TSP) in Imperial County and is the responsible entity for maintaining load-interchange-generation balance within their Balancing Authority Area and supports interconnection frequency in real time. As the



Legend

BLM Land (2014 DRECP)

- Geothermal - BLM (61,602 acres)
- Renewable Energy/ Geothermal - BLM (51,102 acres)

Land Use

- Agriculture
- Community Area
- Government/Special Public
- Industry

Recreation/Open Space

- Salton Sea
- Special Purpose Facility
- Specific Plan Area
- Urban Area

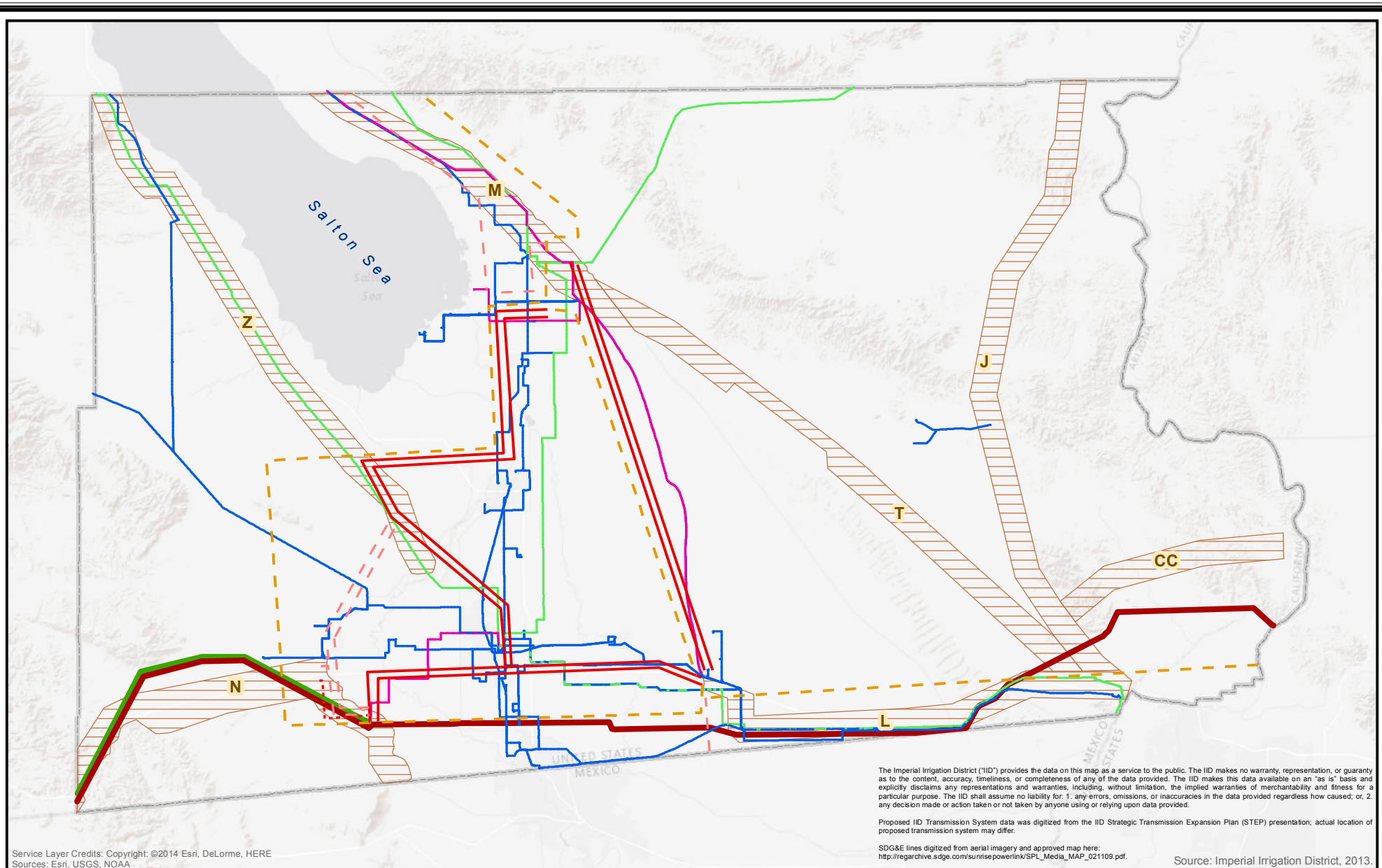
**For Informational
Purposes Only**

Figure 2.2-2

Imperial County Renewable Energy
and Transmission Element Update
PEIR

Proposed Development Focus Areas
on Land Managed by BLM

Name: 20674 EIR Fig 2.2-2 Overlay BLM DFA - Copy.Mxd
Date Saved: 6/15/2015, Author: msimmons



Service Layer Credits: Copyright: ©2014 Esri, DeLorme, HERE
 Sources: Esri, USGS, NOAA

Legend

| Existing IID Transmission System | Proposed IID Transmission System | Existing SDG&E Transmission System | Federal Transmission System |
|----------------------------------|----------------------------------|------------------------------------|-----------------------------|
| 230 kV Grounded Y | 230kV Upgrade | Sunrise Powerlink 500kV | CDCA Corridors |
| 161 kV Grounded Y | 230kV Proposed | Southwest Powerlink | |
| 92 kV Grounded Y | 230kV PPTO | | |
| | 500kV Proposed | | |



Figure 2.2-3
 Imperial County Renewable Energy and
 Transmission Element Update PEIR
 Transmission System Map

Balancing Authority, the IID maintains load-resource balance (generation, transmission, and load) within its metered boundary. IID's board of directors has ratemaking authority. Retaining local ratemaking authority enables lower energy rates. The IID is the primary owner of electrical transmission and the sole owner of the distribution network in Imperial County. IID also operates and maintains these systems. IID provides electrical service for residential, commercial, and industrial customers in Imperial and portions of Riverside and San Diego counties. Their transmission system consists of 500-kilovolt (kV), 230-kV, 161-kV, and 92-kV transmission lines and lower voltage distribution lines. The two existing 230-kV transmission lines provide for import/export of electrical power to their system in the County.

San Diego Gas and Electric (SDG&E) and IID have two 500-kV lines that traverse the southern part of Imperial County and interconnect with the transmission system in Arizona. These two 500-kV lines currently serve as the primary import lines for electrical power to be brought into SDG&E's system to supply power to San Diego County and the City of San Diego. These two 500-kV lines also provide import/export capacity to the IID service area. The Sunrise Powerlink, completed in June 2012, provides additional transmission capacity between Imperial and San Diego counties and throughout Imperial County.

Several 92-kV transmission lines provide interties between the renewable power plants in the County and tie these electrical generation sources into the IID transmission and distribution system, I.V. Substation, and the California grid. New interties and substations may be constructed to link new generation facilities into transmission lines if the renewable power generation facilities that are now in the planning stages are built.

An upgrade to the 230-kV IID line (Path 42) is currently being made, and a new 500-kV line is proposed to be located on the east side of the Salton Sea. This transmission upgrade would provide additional capacity to deliver energy generated in Imperial County from renewable resources to load centers in California. IID has also proposed a 500-kV Direct Current link between Imperial County and the San Onofre Nuclear Generation Station (SONGS) to facilitate the transmission of additional energy to compensate for the generation capacity lost when SONGS was shut down in 2013.

The remaining planned transmission lines are anticipated to be smaller and intended primarily to support power plant development. It is the intention of this Renewable Energy and Transmission Element to provide input and guidance to those developers and agencies that will plan and have regulatory siting authority over the proposed and potential transmission lines to be constructed in the County. Figure 2.2-23 shows the existing and proposed IID and SDG&E electrical transmission corridors described above.

The transmission portion of the *Renewable Energy and Transmission Element* update presents existing and proposed transmission corridors and transmission lines developed by other agencies who hold the principal responsibility for these facilities. The inclusion of this information is to assure that any proposed renewable energy facilities correspond with existing and proposed transmission corridors. Therefore, detailed analysis of potential impacts associated with future transmission lines is beyond the scope of this Programmatic EIR and will be environmentally reviewed on a "project-by-project" basis.

Renewable Energy and Transmission Element's Goals and Objectives

The *Renewable Energy and Transmission Element's* Goals and Objectives provide the framework for future renewable energy development within Imperial County (ICPDS 2015a). The Goals and Objectives were developed during the eElement update process based on community input, extensive collaboration with key regional stakeholders, identification of environmental issues, and balancing economic interests. The Goals and Objectives, together with the Implementation Programs and Policies described below, are the statements that shall provide direction for renewable energy development as well as future government actions and programs. Imperial County's Goals and Objectives are intended to serve as long-term principles and policy statements representing ideals which have been determined by the Board of Supervisors as being desirable and deserving of community time and resources to achieve. These Goals and Objectives are important guidelines for renewable energy projects and related land use decision-making. It is recognized that other social, economic, environmental, and legal considerations are involved in land use decisions and that these Goals and Objectives, and those of the other General Plan Elements, should be used as guidelines for reviewing individual projects overall conformance.

Goal 1 – Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.

Objective 1.1: The County of Imperial supports the overall goals and objectives of the Desert Renewable Energy Conservation Plan to ~~plan for, encourage, and facilitate~~ provide a balance between the full development of all renewable energy resources while preserving sensitive environmental resources within its jurisdiction.

Objective 1.2: Lessen impacts of site and design production facilities on agricultural, natural, and cultural resources.

Objective 1.3: Require the use of directional geothermal drilling and “islands” when technically advisable in irrigated agricultural soils and sensitive or unique biological areas.

Objective 1.4: Analyze potential impacts on agricultural, natural, and cultural resources, as appropriate.

Objective 1.5: Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities.

Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.

Objective 1.7: Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District's regulations and mitigation measures.

Goal 2 – Encourage development of electrical transmission lines along routes which minimize potential environmental effects.

Objective 2.1: To the extent practicable, maximize utilization of IID's transmission capacity in existing easements or rights-of-way. Encourage the location of all major transmission lines within designated corridors, easements, and rights-of-way.

Objective 2.2: Where practicable and cost-effective, design transmission lines to minimize impacts on agricultural, natural, and cultural resources, urban areas, military operation areas, and recreational activities.

Goal 3 – Support development of renewable energy resources that will contribute to and enhance the economic vitality of Imperial County.

Objective 3.1: Preserve IID's Balancing Authority and local rate-making authority which allows IID to continue to provide low-cost service. Lower energy rates enhance the economic vitality in Imperial County.

Objective 3.2: Encourage the continued development of the mineral extraction/production industry for job development using geothermal brines from the existing and future geothermal flash power plants.

Objective 3.3: Encourage the development of services and industries associated with renewable energy facilities.

Objective 3.4: Assure that revenues projected from proposed renewable energy facility developments are sufficient to offset operational costs to the County from that particular development.

Objective 3.5: Encourage employment of County residents by the renewable energy industries wherever and whenever possible.

Objective 3.6: Encourage the establishment of necessary and applicable renewable energy training programs in local school systems in association with the renewable energy industry.

Objective 3.7: Evaluate environmental justice issues associated with job creation and displacement when considering the approval of renewable energy projects.

Goal 4 – Support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea.

Objective 4.1: Prioritize the Salton Sea exposed seabed (playa) for renewable energy development.

Objective 4.2: Encourage the development of renewable energy facilities that will contribute to the reduction or elimination of airborne pollutants created by exposure of the seabed of the Salton Sea as it recedes.

Objective 4.3: Develop mitigation measures and monitoring programs to minimize impacts to avian species and other species that may be affected by renewable energy facilities constructed near the Salton Sea.

Goal 5 – Encourage development of innovative renewable energy technologies that will diversify Imperial County’s energy portfolio.

Objective 5.1: Support the implementation of pilot projects intended to test or demonstrate new and innovative renewable energy production technologies.

Objective 5.2: Encourage development of utility-scale distributed generation projects in the County.

Goal 6 – Support development of renewable energy while providing for the protection of military aviation and operations.

Objective 6.1: Assure that renewable energy facilities proposed in areas adjacent to military installations and training areas ~~would~~ will be compatible with these uses.

Objective 6.2: Facilitate the early exchange of project-related information with the military for proposed renewable energy facilities located within a military operations area (MOA) or within 1,000 feet of a military installation.

Objective 6.3: Assure that renewable energy facilities proposed within MOAs ~~would~~ will not jeopardize the safety of existing residents or impact military operations.

Goal 7 – ~~The County will actively~~ Actively minimize the potential for land subsidence to occur as a result of renewable energy operations.

Objective 7.1: Require that all renewable energy facilities, where deemed appropriate, include design features that ~~would~~ will prevent subsidence and other surface conditions from impacting existing land uses.

Objective 7.2: For geothermal energy development facilities, establish injection standards consistent with the requirements of the California Division of Oil, Gas, and Geothermal Resources (CDOGGR). Request a CDOGGR subsidence review, if necessary, for consideration prior to setting injection standards.

Objective 7.3: Require renewable energy facility permittees to establish and monitor subsidence detection networks in areas affected by permitted project activities.

Objective 7.4: Require monitoring programs for determining the possibility or extent of induced subsidence.

Objective 7.5: Require corrective measures, in proportion to each developer's activities, if evidence indicates that operation of geothermal energy facilities have caused, or will cause, surface impacts. In determining monitoring or mitigation requirements, the County shall consult with informed parties such as CDOGGR, County Department of Public Works, the IID, the permittee, other developers, and other experts as appropriate.

Objective 7.6: Where geothermal fields have been divided into units or developers have established a cooperative agreement for reservoir management, specific production

and injection requirements of individually permitted projects may be modified in accordance with ~~CDOGGR~~ both Federal and State requirements.

Objective 7.7: Require ~~that~~ seismic monitoring be performed in conjunction with major geothermal projects.

Objective 7.8: Require ~~that the~~ operators of geothermal facilities analyze seismic data to determine the effects of geothermal production and injection on seismic activities within the development area.

Objective 7.9: Consult with experts, such as CDOGGR, U.S. Geological Survey (USGS), geothermal industry representatives, permittees, and other developers to determine appropriate monitoring and mitigation requirements.

Objective 7.10: Require operators of geothermal facilities to establish a notification system to warn or notify surrounding residents of the accidental release of potentially harmful emissions as part of an emergency response plan.

Objective 7.11: Require all geothermal energy facilities to include operating procedures that would prevent detrimental impacts to geothermal reservoirs.

Goal 8 – ~~The County will develop~~ Develop overlay zones that ~~would~~ will facilitate the development of renewable energy resources while preserving and protecting agricultural, natural, and cultural resources. Development of overlay zones shall include coordination with Federal, State, County, Tribal governments, educational entities, the public and local industries.

Objective 8.1: Allow for County review with appropriate development and performance standards for development of local resources within the overlay zones.

Objective 8.2: Promote the exchange of information concerning renewable energy development to be circulated between industry, County staff, and the public.

Objective 8.3: Provide the public adequate opportunity to obtain information on the current status of renewable energy development and to provide input on matters related to the development of renewable energy resources.

Renewable Energy and Transmission Element's Implementation Ordinance

The *Renewable Energy and Transmission Element's Implementation Ordinance*, Land Use Ordinance, Division 17, would facilitate the beneficial use of renewable energy resources for the general welfare of the people of Imperial County and the State of California (ICPDS 2015b). The Implementation Ordinance would also protect renewable energy resources from wasteful or detrimental uses and protect people, property, and the environment from detriments that might result from the improper use of renewable energy resources.

The regulations presented in the Implementation Ordinance are intended to implement the Renewable Energy Overlay Zone established in the *Renewable Energy and Transmission Element* update and integrate, to the extent possible, Imperial County's regulations with those of other governmental agencies which regulate renewable energy development. It is further intended that the regulations

presented in the Implementation Ordinance would ensure that no gap in the protection of the public health, safety and general welfare would occur as the result of changes in the regulations or enforcement policies of those other agencies.

The Implementation Ordinance includes general and specific standards applicable to all future renewable energy facilities that would be developed under the proposed Project, as well as additional specific standards for future geothermal facilities. Additionally, zoning requirements for the “Renewable Energy” and “Renewable Energy/Geothermal” overlay zone categories have been added to Land Use Ordinance, Divisions 5 and 17.

Relationship Of The Proposed Project To Other Elements Of The General Plan

State law mandates seven “elements” for local government general plans. Although the *Renewable Energy and Transmission Element* is not mandatory, it must comply with requirements that are requisite to all parts within a general plan. Legislative intent must be fulfilled as set forth in Government Code, Section 65300.5: “...the General Plan and the parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency...”

The *Renewable Energy and Transmission Element* Policy Matrix presented below in Table 2.2-1 identifies the relationship between the *Renewable Energy and Transmission Element* Goals and Objectives to other Elements of the Imperial County General Plan. The Issue Area identifies the broader goals of the Element and the “Xs” identify that related objectives are contained in the corresponding Elements.

Table 2.2-1 : Renewable Energy and Transmission Element Policy Matrix

| Issue Area | Land Use | Housing | Circulation | Noise | Seismic/ Public Safety | Agricultural | Open Space Conservation | Water | Parks and Recreation |
|--------------------------------|----------|---------|-------------|-------|---------------------------|--------------|----------------------------|-------|-------------------------|
| Land Use Planning | X | | X | | | | X | | |
| Agriculture/ Biology | X | | | | | X | X | | |
| Water Use | | | | | | | X | X | |
| Land Subsidence | | | | | X | | X | | |
| Transmission Line Corridors | X | | X | | | | X | | |
| Use of Renewable Energy | X | | X | X | X | X | X | X | |
| Zoning | X | | | | | | | | |
| Natural Seismicity | | | | | X | | | | |

Additionally, the following minor edits have been made to all of the other Elements of the County of Imperial General Plan to assure consistency:

- Name changes from the Geothermal/Alternative Energy and Transmission Element to the Renewable Energy and Transmission Element
- A new Policy Matrix which includes the policies set out above
- Added discussions of both Trends and Issues and Assumptions relating to the need for renewable energy in the Agriculture and Land Use Elements, which discussions are the same as those in the proposed ordinance analyzed in the PEIR
- Updated objectives on where renewable energy would be allowed in association with balancing impacts as analyzed in this PEIR

2.2.5 Regulatory Requirements

The County, through the Planning and Development Services Department, regulates the use of land for renewable energy purposes through zoning and ~~Renewable Energy~~ Conditional Use Permits. The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which is approved by the Board of Supervisors, following a recommendation by the County Planning Commission. The County also acts as “lead agency” in the preparation of environmental documents for renewable energy projects within its jurisdiction. Additionally, the following agencies include, but are not limited to, those that would have permitting authority over renewable energy generation and transmission facilities developed under the proposed Project:

- Federal Energy Regulatory Commission (FERC) – Interstate electrical transmission lines where the primary intent of the line is to service interstate power interest and where no formal State environmental guidelines apply and where federal lands may also be impacted.
- Other federal agencies (Bureau of Land Management [BLM], U.S. Forest Service [USFS], U.S. Fish and Wildlife Service [USFWS], U.S. Army Corps of Engineers [USACE], Bureau of Indian Affairs [BIA], Department of Defense [DOD], etc.) – Lines that are within federal lands and are not being developed primarily for interstate transmission of electrical power.
- California Energy Commission (CEC) – Electrical transmission lines that are pertinent to a thermal power generation facility of equal to, or greater than, 50 megawatts (MW) in size from the facility to the first point of interconnection. It is important to note that the environmental review process implemented by CEC is a Certified Regulatory Program under CEQA (§21080.5) and results in a document that is the functional equivalent of an EIR.
- California Public Utilities Commission (CPUC) – Transmission lines that are being sited and developed by an electric corporation.
- California State Lands Commission – Lines that are primarily or exclusively within the boundaries of lands owned by the State of California.
- Municipal Utilities (which includes the Imperial Irrigation District) – Agencies that act as their own regulatory entities for the siting and permitting of electrical transmission lines. Municipal Utilities must follow CEQA Guidelines with respect to siting decision-making; however, they are

not subject to other extra territorial review and oversight, assuming none of the conditions apply as outlined for the agencies listed above.

In Imperial County, all of the agencies and governmental entities listed above could potentially be involved in the siting and permitting of electrical transmission lines; however, the agencies with the greatest potential for transmission line regulatory oversight and siting would likely be federal land and other resource management agencies (such as USACE, USFWS, BLM, BIA, DOD, and Bureau of Reclamation[BOR]), CEC, CPUC, the California State Lands Commission, or a local municipal utility (such as the Imperial Irrigation District). While the County would have some land use and zoning regulatory authority concerning the siting and construction of electrical transmission lines, environmental review would predominately be the responsibility of one or a combination of agencies listed above.

2.3 PROJECT ALTERNATIVE SUMMARY

CEQA Guidelines, Section 15126.6(a), states that an environmental impact report shall describe and analyze a range of reasonable alternatives to a project. These alternatives should feasibly attain most of the basic objectives of the project while avoiding or substantially lessening one or more of the significant environmental impacts of the project. An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. The discussion of alternatives shall focus on those capable of avoiding or substantially lessening any significant effects of the project, even if they impede the attainment of the project objectives to some degree or would be more costly (CEQA Guidelines, Section 15126.6(b)).

Chapter 5.0 – Alternatives of the Draft PEIR provides a qualitative analysis of two project alternatives that include:

- No Project Alternative
- DRECP Alternative

The County of Imperial has been identified as the lead agency for the proposed Project. The County prepared an Initial Study and subsequently issued a Notice of Preparation (NOP) for the preparation of environmental document on July 21, 2014. The NOP was distributed to city, County, State, and federal agencies; military bases; local Native American Tribes; other public agencies; and various interested private organizations and individuals to define the scope of the environmental document. The purpose of the NOP was to identify public agency and public concerns regarding the potential impacts of the proposed Project and the scope and content of environmental issues to be addressed in the environmental document. Circulation of the NOP for public comment ended on August 22, 2014. The NOP, Initial Study, and comments received from agencies and various interested private organizations and individuals were presented in Appendix A of the Draft PEIR.

2.4 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2.4-1 presents a summary of potential impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measure(s). For detailed discussions of all project impacts and mitigation measures, the reader is referred to the topical environmental analysis presented in Chapter 4.0 of the Draft PEIR.

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Aesthetics | | | |
| <p>Adverse Effect on a Scenic Vista or on Scenic Resources</p> <p>AESTH-1: Development of future renewable energy facilities under the proposed Project could have the potential to impact existing visual character and quality, including scenic vistas, natural environment and existing landscape, general built environment and historic buildings, and scenic highways.</p> | Potentially Significant | <p>AESTH-1a: Future renewable energy facilities would be required to assess conformance to VRM Class designations and identifying visual resource conflicts. Among the actions to be taken are consulting with BLM; factoring VRI Class values into project planning and design; including a qualified professional with VRM experience on the development team; consulting the local public to identify important visual resources <u>of record</u> in the area; consulting on viewshed protection with managers responsible for areas with special designations; evaluating impacts on historic trails; considering landscape setting observed from National Parks, National Historic Sites, and similar areas; using topographical data of engineering-design quality and digital terrain mapping for project planning and design; preparing simulations depicting project facilities as seen from key observation points and visual resource—sensitive locations; conducting public outreach to disseminate visual resource information; and performing visual mitigation planning and design based on field assessments and other means.</p> <p>AESTH-1b: Future solar facilities would be required to be sited and designed in a manner that would minimize night-sky effects. Identification of night-sky effects is to include assessing and quantifying potential lighting impacts and conducting assessments by using qualified individuals. Methods to minimize night-sky effects include using minimum intensity lighting of an appropriate color consistent with safety needs, prohibiting strobe lighting except where it is required for safety; shielding all permanent lighting unless otherwise required for safety; mounting lighting so that light is downward focused;</p> | Significant and Unavoidable |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p>controlling lighting with timers, sensors, and dimmers; and using vehicle-mounted lights for nighttime maintenance work rather than permanently mounted lighting.</p> <p>AESTH-1c: Future solar and related facilities would be required to be sited and designed in a manner that would explore and document means to reduce visual dominance in the viewshed and that the project comply with VRM Class objectives. Methods include conforming with VRM Class objectives (through use of BLM Handbook H-8431-1); determining the extent of the viewshed and selecting key observation points where people are expected to be observing the landscape; integrating visual design elements into plans, details, drawings, and specifications; and siting the facility to minimize the profile of all structures. Ways to minimize visual dominance include using existing topography and vegetation as screening; considering visual design elements when clearing vegetation and doing earthwork; siting projects outside of key observation point viewsheds; avoiding locating facilities near visually prominent landscape features; avoiding skylining of structures; designing linear features to follow natural land contours rather than straight lines; locating linear features at the edges of natural lines of transition between vegetation types and topography; using alternative means of access in visually sensitive areas to preserve landscape conditions; minimizing vegetation and ground disturbance; reducing cut and fill; shaping, staining, and vegetating excavations to conform with local conditions; creating natural-looking earthwork forms; repeating characteristics of naturally occurring openings in vegetation for roads, structures, and similar elements; burying linear utilities and</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p>lines along roads or paths; selecting appropriate materials and surface treatments for structures to reduce visual contrast; minimizing signage; delineating construction limits and minimizing area of surface disturbance; salvaging vegetation and topsoil for reuse; and removing stakes and flagging after construction.</p> <p>AESTH-1d: Future renewable energy facilities<u>Project developers</u> would be required to hold preconstruction meetings, if applicable, with affected agencies and designated specialists to coordinate the mitigation strategy <u>for all resources of record</u>. This includes a review of final design and construction documents with regard to visual impacts and mitigation.</p> <p>AESTH-1e: Project developers would be required to monitor compliance with mitigation requirements and consult with the affected agencies during operations and maintenance. Maintaining visual resource design elements would include maintaining revegetated surfaces until self-sustaining; keeping facilities in good repair and repainting as necessary; restoring lands as soon as possible after disturbance; controlling dust and noxious weeds; and operating so as to avoid high-intensity light (glare) being reflected off site.</p> <p>AESTH-1f: Immediate reclamation of the site, either on Federal, State or private land, would be required for renewable energy facilities after construction. These reclamation activities may include restoration of agricultural farmland to the prior condition. Methods for minimizing visual contrast during reclamation and decommission include undertaking treatments such as thinning and feathering vegetation at project edges, enhancing</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <p>contouring, salvaging landscape materials, and revegetating; restoring the project area to predevelopment visual conditions and the inventoried visual quality rating; removing aboveground and near-ground-level structures; contouring soil borrow areas and other features to approximate natural slopes; using native vegetation to establish form, line, color, and texture consistent with the surrounding undisturbed landscape; distributing stockpiled topsoil to disturbed areas and replanting; and removing or burying gravel or other surface treatments.</p> <p>AESTH-1g: Each future renewable energy facility developed under the proposed Project would require preparation of a visual impact assessment that would evaluate potential impacts described in mitigation measures AESTH-1a through AESTH-1f. Based on the results of the analysis, the visual impact assessment would be required to develop mitigation measures to address potential impacts. Examples of mitigation measures for each renewable energy technology are presented below based on recommendations provided in the DRECP EIR/EIS <u>(DRECP EIR/EIS 2014, IV.20-23)</u>:</p> <ul style="list-style-type: none"> Examples of visual mitigation measures applicable to solar projects include development and implementation of a glint and glare mitigation and monitoring plan; screening of solar collectors from roads; retaining vegetation beneath solar collector arrays; prohibiting commercial signs, logos, or messages on towers and arrays; and using visually compatible color treatments and nonreflective materials for support structures and other components. In addition to direct reduction in | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| | | <p>visual quality, visual quality degradation can compromise the integrity of historical resources or traditional cultural places. In cases where such visual impacts occur, compensatory mitigation can include requiring research, field inventories, worker training, and other efforts specific to the resource and groups affected.</p> <ul style="list-style-type: none"> Examples of visual mitigation measures for wind energy projects include siting to reduce visibility, clustering turbines, creating visual order and unity among groups of turbines, using radar-activated visual warning systems to reduce night-sky impacts, prohibiting signs and messages on towers, keeping turbines clean and in good repair, and promptly removing disused or abandoned equipment and parts. Examples of visual mitigation measures specific to geothermal energy projects include using air-cooled systems (to avoid plumes that water-cooled systems may generate under some conditions), minimizing drill rig and well test facility lighting, and screening of pipelines. | |
| <p>Substantially Degrade Existing Visual Character or Quality of the Site</p> <p>AESTH-2: The development of future renewable energy facilities associated with the proposed Project could have the potential to affect existing visual character by introducing new structures onto sites that are currently</p> | Potentially Significant | See Mitigation Measures AESTH-1a through AESTH-1g, above. | Significant and Unavoidable |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| undeveloped. | | | |
| <p>Create a New Source of Substantial Light or Glare</p> <p>AESTH-3: Future renewable energy facilities may create new sources of substantial light or glare which could adversely affect day or nighttime views in the area.</p> | Potentially Significant | <p>AESTH-3: Future renewable energy facilities would be required to consider siting and design features that would minimize glint and glare and take appropriate actions. These actions include identifying glint and glare effects, assessing and quantifying these effects to determine potential safety and visual impacts, and having qualified people conduct such assessments. Methods to minimize glint and glare include limiting use of signs; using reflective or luminescent markers instead of permanent lighting; minimizing offsite visibility of signs and lighting; using nonglare materials and appropriate colors; mitigating or offsetting visual impact by reclaiming unnecessary roads, removing abandoned buildings, using underground utility lines, and rehabilitating and revegetating disturbed areas; and other actions determined in consultation with BLM.</p> | Significant and Unavoidable |
| Agricultural Resources | | | |
| <p>Convert Important Farmland to Non-agricultural Use</p> <p>AG-1: Future solar and geothermal renewable energy facilities would likely convert all Important Farmland within the project areas to nonagricultural uses, while impacts associated with future wind facilities would be limited to the footprints of turbines, poles, and associated infrastructure.</p> | Potentially Significant | <p>AG-1a: Payment of Agricultural and Other Benefit Fees. Prior to the issuance of a grading permit or building permit (whichever is issued first) for a future renewable energy project, one of the following options included below must be implemented:</p> <ul style="list-style-type: none"> For Non-Prime Farmland: <ul style="list-style-type: none"> Option 1: The project proponent of a future renewable energy facility shall procure Agricultural Conservation Easements on a “one-to-one” basis | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p>on land of equal size, of equal quality of farmland, outside the development footprint. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits; <u>or</u></p> <ul style="list-style-type: none"> ○ Option 2: The project proponent of a future renewable energy facility shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or ○ Option 3: The project proponent of a future renewable energy facility and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is: (1) <u>is</u> consistent with Board Resolution 2012-005; and (2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation, and enhancement of | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p>agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.</p> <ul style="list-style-type: none"> For Prime Farmland: <ul style="list-style-type: none"> Option 1: The project proponent of a future renewable energy facility shall procure Agricultural Conservation Easements on a “two-to-one” basis on land of equal size, of equal quality farmland, outside of the development footprint. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits; or Option 2: The project proponent of a future renewable energy facility shall pay an “Agricultural In-Lieu Mitigation Fee” in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <p>County; <u>or</u></p> <ul style="list-style-type: none"> Option 3: The project proponent of a future renewable energy facility and County enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is (1) <u>is</u> consistent with Board Resolution 2012-005; <u>and</u> (2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation, and enhancement of agricultural lands within Imperial County, and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the future renewable energy project and other recipients of the future renewable energy project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of local economy for the purpose of off-setting jobs displaced by the future renewable energy project; <u>or</u> Option 4: The project proponent of a future renewable energy facility must revise their Renewable Energy Conditional Use Permit Application/Site Plan to avoid Prime Farmland. <p>Additional details regarding fee amounts and use of mitigation fees for mitigation measure AG-1a are presented in Section 4.2.4 <u>Chapter 4.0 Revisions to the Final PEIR</u>.</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| | | <p>AG-1b: Reclamation/Decommissioning Plan and Security. For solar energy facilities, the DOC and County have clarified the goal of a reclamation and decommissioning plan: the land must be restored to land which can be farmed. In addition to AG-1a for Prime Farmland and Non-Prime Farmland, the project proponent of future renewable energy facilities shall submit to Imperial County a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which each future Renewable Energy Conditional Use Permit will be returned to its current agricultural condition. The project proponent also shall provide financial assurance/bonding in an amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event project proponent fails to perform the Reclamation Plan.</p> <p>AG-1c: Prepare Economic Impact Analysis, Employment (Jobs) Impact Analysis, and Fiscal Impact Analysis. Project proponents of future renewable energy facilities would be required to prepare an Economic Impact Analysis (EIA), Employment (Jobs) Impact Analysis (JIA), Fiscal Impact Analysis (FIA) pursuant to County of Imperial requirements. These analyses would document potential socioeconomic impacts associated with future renewable energy facilities and identify strategies to mitigate any potential impacts to a level less than significant.</p> | |
| Conflict with Existing Zoning for Agricultural Use | Potentially Significant | See Mitigation Measures AG-1a through AG-1c. | Less than Significant |
| AG-2: Construction of renewable | | | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| energy facilities associated with the proposed Project would have the potential to be developed on properties zoned for agricultural uses and protected under Williamson Act contracts that are located within the proposed renewable energy overlay zones. | | | |
| Involve Other Change that Could Result in Conversion of Farmland AG-3: Construction and operation of future facilities could damage equipment, crops, water delivery or water drainage systems, or livestock on adjacent properties or inhibit crop growth through dispersal of fugitive dust. | Potentially Significant | See Mitigation Measures AG-1a through AG-1c. AG-3: Pest Management Plan. A Pest Management Plan to monitor for and control insects, weeds, vertebrates, and pathogens that could be injurious to the surrounding farmland must be in place for the duration of the project (until reclamation is complete and approved by the Planning and Development Services Department and the Agricultural Commissioner). <u>Should the population of unwanted species threaten to damage the area, the project operator shall implement controls that are consistent with applicable pest management requirements.</u> | Less than Significant |
| Air Quality | | | |
| Conflict with or Obstruct Applicable Air Quality Plan AQ-1: Construction and operation of renewable energy facilities associated with the proposed Project would generate emissions that could exacerbate existing nonattainment designations and or change the | Potentially Significant | AQ-1a: Prior to commencing construction, each project proponent shall submit a Dust Control Plan to the ICAPCD for approval identifying all sources of PM ₁₀ emissions and associated mitigation measures during the construction and operational phases of their future renewable energy project. The project proponent shall submit a "Construction Notification Form" to the ICAPCD 10 days prior to the commencement of any earthmoving activity. The Dust Control Plan submitted to the ICAPCD shall meet all | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| attainment status of other criteria pollutants in Imperial County. | | <p>applicable requirements for control of fugitive dust emissions, including the following measures designed to achieve the no greater than 20-percent opacity performance standard for dust control:</p> <ul style="list-style-type: none"> All disturbed areas, including bulk material storage that is not being actively used, shall be effectively stabilized; and visible emissions shall be limited to no greater than 20-percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material, such as vegetative groundcover. Bulk material is defined as earth, rock, silt, sediment, and other organic and/or inorganic material consisting of or containing PM with 5 percent or greater silt content. All on-site and off-site unpaved roads <u>segments with 50 or more average vehicle trips per day, shall be effectively stabilized; and so as to limit</u> visible emissions shall be limited to no greater than 20-percent opacity for dust emissions by <u>the use of restricting vehicle access, paving, chemical stabilizers, dust suppressants, and/or watering.</u> All unpaved traffic areas 1.0 acre or more in size with 75 or more average vehicle trips per day shall be effectively stabilized; and visible emissions shall be limited to no greater than 20-percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <ul style="list-style-type: none"> The transport of bulk materials <u>on public roads</u> shall be completely covered, unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks shall be cleaned and/or washed at the delivery site after removal of bulk material, <u>prior to using the trucks to haul material on public roadways.</u> All track-out or carry-out <u>on paved public roads</u>, which includes bulk materials that adhere to the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto the pavement, shall be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area. Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line <u>except where such material or activity is exempted from stabilization by the rules of ICAPCD.</u> The construction of new unpaved roads is prohibited within any area with a population of 500 or more, unless the road meets ICAPCD's definition of a "temporary unpaved road." Any temporary unpaved road shall be effectively stabilized and | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p>visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.</p> <p>AQ-1b: Each project proponent shall implement all applicable standard mitigation measures for construction combustion equipment for the reduction of excess NO_x emissions as contained in the Imperial County CEQA Air Quality Handbook and associated regulations. These measures include:</p> <ul style="list-style-type: none"> • Use alternative-fueled or catalyst-equipped diesel construction equipment, including all off-road and portable diesel powered equipment. • Minimize idling time, either by shutting equipment off when not in use or reducing the time of idling to five minutes at a maximum. • Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil-fueled equipment with electrically driven equivalents (assuming powered by a portable generator set and are available, cost effective, and capable of performing the task in an effective, timely manner). • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing construction activity during the peak hour of vehicular traffic on adjacent roadways. | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <ul style="list-style-type: none"> Implement activity management (e.g., rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts). <p>AQ-1c: Each project proponent shall use all available USEPA Tier 3 or better construction equipment.</p> <p>AQ-1d: Consistent with the requirements of ICAPCD Policy 5, each project proponent shall pay an emission mitigation fee sufficient to offset the amount by which the project's NO_x emissions exceed the 100 pounds per day threshold. ICAPCD allows a project to pay in-lieu impact fees using the most current Carl Moyer Cost Effective methodology to reduce excess NO_x emissions. Under the ICAPCD program, the exact amount of the fee cannot be calculated until the time of construction when more precise data regarding the construction equipment types and hours of operation are known, allowing ICAPCD to calculate the fee. Prior to any earthmoving activity, each project proponent shall submit to the ICAPCD a complete list of all construction equipment to be utilized during the construction phase identifying make, model, year, horsepower, and estimated hours of usage.</p> <p>AQ-1e: Future renewable energy facilities that utilize combustion sources during operation would be required to obtain a "Permit to Operate" from ICAPCD. Future project proponents would be required to demonstrate consistency with ICAPCD regulations regarding combustion activities prior to permit approval.</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| <p>Expose Sensitive Receptors to Substantial Pollutant Concentrations</p> <p>AQ-2: Construction and operation of renewable energy facilities associated with the proposed Project would generate emissions that could expose sensitive receptors to substantial pollutants concentrations.</p> | Potentially Significant | <p>See Mitigation Measures AQ-1a through AQ-1e.</p> <p>AQ-2a: New stationary air pollution point sources such as, but not limited to, combustion sources, emergency-use engines, geothermal wells or steam vents, and cooling towers shall be located away from residential areas and other air quality-sensitive land uses.</p> <p>AQ-2b: Depending on the size of individual future renewable energy facilities developed under the proposed Project, a health risk assessment may be required to identify potential impacts and mitigation measures to reduce impacts to a level less than significant.</p> | Less than Significant |
| <p>Create Objectionable Odors</p> <p>AQ-3: Construction of renewable energy facilities would result in diesel exhaust and/or application of asphalt pavement that may be considered offensive to some people. It is not anticipated that operation of solar or wind energy facilities would emit objectionable odors; however, operation of geothermal energy facilities associated with the proposed Project would generate odors that may be considered objectionable to people living within a mile of a geothermal project.</p> | Potentially Significant | See Mitigation Measures AQ-1b, AQ-1c, and AQ-2. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| Biological Resources | | | |
| <p>Have a substantial adverse effect on a listed species</p> <p>BIO-1: Future renewable energy facilities developed under the proposed Project would result in direct and indirect impacts to special status plant and animal species.</p> | Potentially Significant | <p>BIO-1a: Conduct Surveys for Special Status Plant Species. As a requirement of an application for a renewable energy facility, surveys for special status plant species shall be conducted by qualified and agency-approved botanists to determine the presence or absence of sensitive plant species within the project footprint. Surveys shall be conducted following CDFW or BLM survey guidelines and be appropriately timed to coincide with the blooming periods for these species. Special status plants identified within the construction disturbance area shall be avoided to the extent feasible. A qualified botanist shall supervise the installation of orange construction fencing or other visible material to establish buffer zones between special status plants and construction disturbance.</p> <p>BIO-1b: Conduct Surveys for Special Status Animal Species. As a requirement of an application for a future renewable energy facility, surveys for special status animal species shall be conducted by qualified and agency-approved biologists to determine the presence or absence of sensitive animal species within the footprint of a future renewable energy project. <u>Required surveys for special status animal species may include, but are not limited to, American badgers, burrowing owl, flat-tailed horned lizard, golden eagle, mountain plover, prairie falcons, Swainson's hawk, and Yuma Ridgway's rail, among others.</u> Any special status mammal, reptile, and amphibian species detected during surveys shall be passively relocated to areas outside the construction zone and prevented from reentering the future project area with the installation of silt fencing or other exclusion fencing. All fencing shall be periodically monitored</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <p>and maintained for the duration of construction. Passive relocation shall only be done in the nonbreeding season in accordance with guidelines and consultations with resource agencies. <u>This Depending on which special status species are present within the project boundaries, passive relocation measures may</u> includes covering or excavating all burrows or dens and installing one-way doors into occupied burrows. This would allow any animals inside to leave the burrow but would exclude any animals from reentering the burrow. The burrows shall then be excavated and filled in to prevent their reuse. <u>Other types of relocation measures may be required, depending on which special status species are present within the project boundaries.</u></p> <p>If direct impacts to special status species cannot be avoided, an agency-approved biologist shall prepare a species-specific Mitigation and Monitoring Plan that would detail the approved, site-specific methodology proposed to minimize and mitigate impacts to each species. Passive relocation, destruction of burrows, construction of artificial burrows, etc. shall be completed only upon prior approval by and in cooperation with CDFW and/or USFWS.</p> <p>BIO-1c: Mark Areas of Construction Boundaries. All areas to be disturbed during construction of future renewable energy facilities developed under the proposed Project would be required to flag disturbance boundaries prior to construction. All disturbances would be confined to these flagged areas, and all employees would be instructed that their activities must be confined to locations within the flagged areas. Project proponents of future renewable energy facilities developed under the proposed Project would be required to have environmental monitors on-site</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <p>during construction activities.</p> <p>BIO-1d: Power Wash Equipment Prior to Arrival On-Site. All construction equipment used during construction of future renewable energy facilities developed under the proposed Project would be required to be power washed prior to arrival at the future project site to prevent the transportation and establishment of noxious weeds in the project area.</p> <p>BIO-1e: Implement a Worker Environmental Awareness Program. A brief Worker Environmental Awareness Program (WEAP) would be implemented for construction crews prior to the commencement of project activities for future renewable energy facilities developed under the proposed Project. Training materials and briefings would include, but would not be limited to, discussion of the Federal and State ESAs, the consequences of noncompliance with these acts, identification and values of wildlife and natural plant communities, hazardous substance spill prevention and containment measures, and review of all required and recommended mitigation measures.</p> <p>BIO-1f: Additional Project Mitigation: Additional biological mitigation may be required based on the renewable energy technology to be developed at specific project locations. Project proponents for future renewable energy facilities would be required to evaluate how specific renewable energy facilities may impact sensitive species and how to mitigate impacts through site design and/or mitigation and monitoring activities. <u>Such mitigation may include, but is not limited to, developing strategies to reduce impacts to</u></p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <u>avian species related to a possible “lake-effect” associated with solar energy facilities and strategies to reduce the possibility for bird-strikes associated with wind energy facilities, if warranted.</u> Project-specific mitigation and monitoring for future renewable energy facilities may include, but would not be limited to, a Bird and Bat Conservation Strategy based on the type of renewable energy technology to be utilized for a future renewable project. | |
| <p>Have a Substantial Adverse Effect on Riparian Habitat or Sensitive Natural Community</p> <p>BIO-2: Future renewable energy facilities developed under the proposed Project that would be located within or adjacent to sensitive natural communities could cause an incremental loss of these community types.</p> | Potentially Significant | <p>BIO-2: Develop a Habitat Restoration Plan and Provide for Offsite Mitigation for Temporary or Permanent Impacts. As a requirement of an application for a future renewable energy facility, project proponents shall make an effort to minimize impacts on sensitive natural communities, especially riparian habitats, when designing and permitting projects in order to preserve both the habitat and the overall ecological functions of these areas. These efforts to minimize impacts on riparian habitats and other sensitive natural communities shall be done consistent with CDFW guidelines. Future project proponents shall minimize ground disturbance and construction footprints within and near such areas to the extent practicable. Where avoidance of these areas is not feasible, future project proponents shall arrange for offsite replacement of removed habitats in accordance with consultation with CDFW.</p> <p>Prior to construction, future project proponents shall develop a Habitat Restoration Plan (HRP) for review and approval by CDFW and the County of Imperial. The HRP shall be prepared by a qualified biologist and/or botanist and shall detail the methods for restoring or enhancing any</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | riparian habitats or other sensitive natural communities impacted within the project area. The goal of the HRP shall be to mitigate any temporary or permanent impacts to riparian habitats or other sensitive natural communities. Mitigation ratios would be developed through consultation with CDFW and the County of Imperial. | |
| <p>Have a substantially adverse effect on federally protected wetlands</p> <p>BIO-3: Future renewable energy facilities developed under the proposed Project may result in direct and/or indirect impacts to jurisdictional Waters of the United States including wetlands (i.e., areas regulated by the USACE, State and Regional Water Boards, and RWQCB and/or CDFW).</p> | Potentially Significant | <p>See Mitigation Measure HYDRO-3.</p> <p>BIO-3: Provide restoration/compensation for affected jurisdictional areas. Impacts to areas under the jurisdiction of the USACE, RWQCB Regional Water Boards, State Water Board, and CDFW shall be avoided to the extent feasible. Where avoidance of jurisdictional areas is not feasible, each applicant shall provide the necessary mitigation required as part of wetland permitting by creation/restoration/preservation of suitable jurisdictional or equivalent habitat along with adequate buffers to protect the function and values of jurisdictional area mitigation. The location(s) of the mitigation would be determined in consultation with USACE, CDFW, RWQCB, and BLM as part of the wetland permitting process. A jurisdictional delineation and impact assessment shall be prepared for each site based on the final alignment and final engineering plans when they are complete. Mitigation ratios would be developed through consultation with the wetland permitting agencies. The width of wetland buffers would also depend on the sensitivity of the jurisdictional habitat and on the requirements of the wetland permitting agencies.</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Interfere with the Movement of Fish and Wildlife Species</p> <p>BIO-4: Future renewable energy facilities developed under the proposed Project would have the potential to indirectly interfere with the movement of 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.</p> | Potentially Significant | <p>BIO-4: Minimize Impacts to Designated Linkage Networks. Impacts to identified linkage networks shall be avoided to the extent feasible. Where direct avoidance of these areas is not feasible, the applicant shall modify the proposed Project footprint to the extent practicable to allow broad (i.e., 2-km wide) swaths between project facilities for animal movement. Where such modifications are not feasible, the applicant shall consult with CDFW, BLM, and other land management agencies as appropriate to discuss other options such as wildlife crossing structures to facilitate wildlife movement in areas crossed by newly constructed roads. One or more crossing structures should be constructed at a crossing point to provide connectivity for species that are likely to use the area. Different species prefer different types of structures (Clevenger et al. 2001; Malta et al. 2005). For bighorn sheep or other ungulates, an open structure such as a bridge is crucial. For medium-sized mammals, large box culverts with natural earthen substrate flooring are optimal (Evink 2002). For small mammals and reptiles, pipe culverts are preferable (Clevenger et al. 2001). Additional mitigation may be required to offset impacts and would depend on the sensitivity of the area and on the individual requirements of land management agency.</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Conflict with Local Policies or Ordinances Protecting Biological Resources</p> <p>BIO-5: The proposed Project has developed goals and objectives that would preserve biological resources consistent with the goals of the Conservation and Open Space Element:</p> | Less than Significant | Mitigation Measures BIO-1a through BIO-4 would provide further consistency. | Less than Significant |
| <p>Conflict with the Provisions of a Habitat Conservation Plan</p> <p>BIO-6: Future renewable energy facilities developed under the proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.</p> | Less than Significant | Mitigation Measures BIO-1a through BIO-4 would provide further consistency. | Less than Significant |
| Cultural Resources | | | |
| <p>Cause a substantial adverse change in the significance of a historical or archaeological resource</p> <p>CUL-1: Future renewable energy facilities developed under the proposed project may impact historical and archaeological resources.</p> | Potentially Significant | CUL-1a: Agency Coordination. Project proponents of future renewable energy facilities developed under the proposed Project would be required to coordinate with appropriate agencies early in the planning process. Depending on the nature and intended location of a future renewable energy facility, coordination may be required with Federal, tribal, State, and local agencies. Consultation efforts should be made with the Native American Heritage Commission | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <p>(NAHC), the State Historic Preservation Office (SHPO), and stakeholders identified that may potentially be impacted by development of the future renewable energy facilities. Such coordination would elicit input and help define the parameters of future renewable energy facilities to better reduce or avoid impacts to cultural resources, including historic properties, archaeological resources, sacred sites, and cultural landscapes.</p> <p>CUL-1b: Cultural Resources Records Searches. Project proponents of future renewable energy facilities developed under the proposed Project would be required to conduct cultural resources records searches for future project sites. This should include a Sacred Lands File records search with the NAHC and a cultural resources records search with the CHRIS location that covers the project footprint. For Imperial County, the CHRIS records search will be conducted at the South Coastal Information Center (SCIC) located on the campus of San Diego State University.</p> <p>CUL-1c: Cultural Resources Record Searches Pedestrian Surveys. Project proponents of future renewable energy facilities developed under the proposed Project would be required to conduct cultural resource pedestrian surveys for future project sites. The cultural resource pedestrian survey would be conducted to identify resources that have not been previously discovered through past survey efforts and, therefore, would not be noted in the records search results. The survey should be conducted in accordance with Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (48 FR 44716, Sept. 29, 1983), <u>which serve as the industry standard guidance for pedestrian surveys for all cultural resource management</u></p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|--|---|
| | | <p><u>projects</u>. All cultural resources encountered during pedestrian surveys for future renewable energy facilities developed under the proposed Project would be mapped and recorded in detail in order to document cultural resources and potential impacts. Efforts should be made to relocate previously recorded resources and update information for the sites surveyed for future renewable energy facilities.</p> <p>CUL-1d: Site Characterization, Siting and Design, and Construction. The results of the coordination efforts, records searches, and pedestrian surveys conducted under mitigation measures CUL-1a through CUL-1c should be utilized to minimize or avoid impacts to cultural resources through project design of future renewable energy facilities. Preconstruction activities for the minimization or avoidance of impacts on cultural resources based on the results of mitigation measures CUL-1a through CUL-1c may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Avoid impacts to cultural resources by prohibiting subsurface activities in certain areas. • Areas of higher sensitivity should be tested for cultural content. The extent of the testing should be determined in concert with the design of the future renewable energy facility. • If testing is deemed necessary, all testing should be conducted by a qualified archaeological consultant and should include involvement by one or more of | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <p>the local Native American representatives.</p> <ul style="list-style-type: none"> • Areas of lower sensitivity should be targeted for improvements and areas of higher sensitivity (i.e., more dense cultural materials) should be protected, as deemed feasible. • Consultation should be maintained between the lead agency and the local Native American representatives and their respective concerns should be considered when formulating decisions. • Whenever possible, future renewable energy facilities should be developed on fill soil or in areas of previous ground disturbance. • Archaeological Monitoring: Prior to any ground-disturbing activities for future renewable energy facilities, project proponents should retain a qualified archaeologist to be present at all preconstruction meetings to advise construction contractors about the sensitive nature of cultural resources located on and/or in the vicinity of the future project site, as well as monitoring requirements. A qualified monitor should observe all onsite and offsite future construction activities that would result ground disturbance (including project-related offsite utility and roadway improvements). • Native American Monitor: During construction of future renewable energy facilities, a Native | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <p>American monitor should observe all ground-disturbing activities (including project-related offsite utility and roadway improvements). The Native American monitor should consult with the archaeological monitor regarding objects and remains encountered during grading or excavation that may be considered sacred or important.</p> <p>CUL-1e: Reclamation and Decommissioning. Project proponents of future renewable energy facilities should develop measures to confine reclamation and decommissioning activities to those areas previously disturbed by construction-related activities. Along with ensuring that the removal of structures would not result in further subsurface intrusion, measures should be developed to ensure that reclamation and decommissioning activities would utilize established access routes.</p> | |
| CUL-2: Future renewable energy facilities developed under the proposed project may impact paleontological resources. | Potentially Significant | <p>CUL-2: Paleontological Resource Assessment Report. Project proponents of future renewable energy facilities developed under the proposed Project shall document whether paleontological resources exist in a future project area in a paleontological resources assessment report based on the following: the geologic context of the region and future project site and its potential to contain paleontological resources (including the PFYCs on-site), a records search of institutions holding paleontological collections from California desert regions, a review of published and unpublished literature for past paleontological finds in the area, and coordination with paleontological researchers working locally in potentially affected geographic areas (or studying similar geologic strata).</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | <p>If the PFYC (or PFYCs) of the geologic units to be encountered during construction of the future renewable energy facility has not been determined, the project proponent shall use the best available data and field surveys, as applicable, to develop a site-specific map of the PFYC ratings. The PFYC map shall be at a scale equal to or more detailed than 1:100,000. Depending on the extent of existing information available and the sensitivity of the site, development of the resource assessment and PFYC map could require the completion of a paleontological survey.</p> <p>If paleontological resources are present at the future project site or if the geologic units to be encountered by the future renewable energy project (at the surface or the subsurface) have a PFYC Class of 3, 4, or 5, a Paleontological Resources Management Plan shall be developed. The elements of the plan shall be consistent with BLM IM 2009-11 and shall be prepared and implemented by a professional paleontologist as defined under Secretary of the Department of the Interior Standards. The plan shall include the following:</p> <ul style="list-style-type: none"> • The qualifications of the principal investigator and monitoring personnel • Construction crew awareness training content, procedures, and requirements • Any measures to prevent potential looting, vandalism, or erosion impacts • The location, frequency, and schedule for onsite | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <p>monitoring activities</p> <ul style="list-style-type: none"> Criteria for identifying and evaluating potential fossil specimens or localities A plan for the use of protective barriers and signs or implementation of other physical or administrative protection measures Collection and salvage procedures Identification of an institution or museum willing and able to accept any fossils discovered Compliance monitoring and reporting procedures If the Paleontological Resources Management Plan determines that all geologic units that would be affected by the future renewable energy project are within an area with a PFYC Class of 1 or 2, the lead agency shall include paleontological resources as an element in construction worker awareness training and shall include measures to be followed in the event of unanticipated discoveries, including suspension of construction activities in the vicinity. The measure shall stipulate that the future project site must be protected from further earth-moving or damage until a qualified paleontologist can assess the significance and importance of the find and until the fossil specimen or locality can be recorded and salvaged, if necessary. | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|--|---|
| | | <ul style="list-style-type: none"> The Paleontological Resources Management Plan shall evaluate all of the construction methodologies proposed on the future site, including destructive excavation techniques. Where applicable, the principal investigator shall include in the plan an evaluation of the potential for such techniques to disturb or destroy paleontological resources, an evaluation of whether loss of such fossils would represent a significant impact, and discussion of mitigation or compensatory measures (such as recordation/recovery of similar resources elsewhere on the site) that are necessary to avoid or substantially reduce the impact. | |
| <p>Disturb Human Remains</p> <p>CUL-3: Future renewable energy facilities developed under the proposed project may impact human remains.</p> | Potentially Significant | <p>CUL-3: Human Remains. <u>Prior to project implementation, local governments should consider working with tribes to develop an appropriate plan to address the identification and treatment of California Native American human remains should they be encountered (SB18 Public Resources Code §5097.98).</u> If, at any time, evidence of human remains are<u>is</u> identified during construction of future renewable energy facilities associated with the proposed Project, the County Coroner must be notified immediately and permitted to examine the remains. The discovery of human remains is always a possibility during ground disturbances. Human remains and associated cultural items refer to objects that fit into one of four types of items expressly protected under Native American Graves Protection and Repatriation Act (NAGPRA) (43 CFR 10), to include: (a) human remains, (b) funerary objects; (c) sacred objects; and (d) objects of cultural patrimony. Any significant confirmed</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | find should be evaluated to determine if an adverse effect to the resource has occurred. Such a discovery, <u>or probable likelihood of such a discovery as identified during an initial study</u> , would require a recommencement of consultation between the lead agency, the Imperial County Coroner's office, the NAHC, and the Most-Likely Descendant (MLD) identified by the NAHC, in order to address adverse effects <u>[AB 52.2(c)]</u> . Any potential human remains identified by a cultural resources monitor during construction of future renewable energy facilities should initially be treated according to California Health and Safety Code, Section 7050.5(b) and Public Resource Code, Section 5097.98(a-h); however, the archaeological monitor should be responsible for determining whether cultural items are associated. <u>In addition, future renewable energy facilities developed under the proposed Project would be required to implement the provisions of AB 52 (Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to, the Public Resources Code).</u> | |
| Geology and Soils | | | |
| Expose people or structures to adverse effects from seismic activity GEO-1: Development of future renewable energy facilities under the proposed Project may be subject to fault rupture, strong seismic ground shaking, or seismic-related ground failure during an earthquake. | Potentially Significant | GEO-1: Prepare Geotechnical Report(s) for the Projects and Implement Required Measures. Facility design for all project components of future renewable energy facilities developed under the proposed Project shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: <ul style="list-style-type: none"> Site preparation | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| | | <ul style="list-style-type: none"> • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Road, pavement, and parking areas • Structural foundations, including retaining-wall design • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils <p>In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by each project applicant. Design of future renewable energy facilities would need to be consistent with applicable CBC Seismic Design Categories based on site-specific soil characteristics and proximity to potential seismic hazards.</p> | |
| <p>Result in substantial soil loss or erosion of topsoil</p> <p>GEO-2: Impacts would result from the clearing of vegetation, excavation, salvage, stockpiling, and redistribution</p> | Potentially Significant | <p>GEO-2: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP). Future renewable energy facilities developed under the proposed Project would require a detailed SWPPP to be developed and implemented to minimize erosion during construction in compliance with the National Pollutant Discharge</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| of soils during construction and reclamation activities associated with solar arrays, wind turbine and well pad sites, access roads, and other proposed Project facilities. | | <p>Elimination System (NPDES) General Construction Permit. The SWPPP would be required to include the following:</p> <ul style="list-style-type: none"> • A detailed description of all Best Management Practices (BMPs) that will be employed • An outline of the areas on site that will be disturbed during construction of the project • An outline of all areas that will be stabilized by temporary or long-term erosion control measures • A proposed schedule for the implementation of erosion control measures <p>In addition, all surface water and drainage features within 1,000 feet of construction activities shall be identified. Construction activities within 100 feet of these resources shall implement the BMPs detailed in the SWPPP prepared for each project.</p> | |
| <p>Be located on an unstable geologic unit or soil that is unstable</p> <p>GEO-3: According to the Soil Survey of Imperial County, the proposed Project overlay zones contain some soils that are prone to liquefaction under certain conditions.</p> | Potentially Significant | See Mitigation Measure GEO-1. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Be located on expansive soil</p> <p>GEO-4: Many soil types within the County generally contain a high proportion of clay, which may exhibit a moderate to high potential for shrink-swell. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections to produce shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material.</p> | Potentially Significant | <p>See Mitigation Measures GEO-1 and GEO-2.</p> <p>GEO-4: Implement Corrosion Protection Measures. As determined appropriate by a licensed geotechnical or civil engineer, each project proponent shall ensure that all underground metallic fittings, appurtenances, and piping located in corrosive soils include a cathodic protection system to protect these facilities from corrosion for future renewable energy facilities developed under the proposed Project.</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Have soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems</p> <p>GEO-5: Septic systems for future renewable energy facilities would be engineered based on onsite soil characteristics and designed and installed in compliance with County Environmental Health Department standards. Notwithstanding these design requirements, potential equipment failures or wastewater loading rates in excess of the design capacity of the treatment and disposal system could lead to water quality degradation. Additionally, areas where a shallow groundwater table is present could render infiltration of wastewater into the soil column temporarily infeasible at certain times of the year.</p> | Potentially Significant | <p>GEO-5: Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. Wastewater treatment and disposal system(s) associated with future renewable energy facilities shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial County <i>Land Use Ordinance</i>. Prior to construction, and again prior to operation, each future project proponent would be required to obtain all necessary permits and/or approvals from Imperial County. Each future project proponent would be required to demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system would not conflict with the Regional Water Quality Control Board's (RWQCB) Anti-Degradation Policy.</p> | Less than Significant |
| Greenhouse Gases | | | |
| <p>Generate Greenhouse Gas Emissions that Could Have a Significant Effect on the Environment</p> <p>GHG-1: Site preparation activities, site grading, exhaust from vehicles transporting construction materials and personnel, and emissions from heavy-duty construction equipment could generate GHG emissions.</p> | Less than Significant | None required. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Conflict with Applicable Plan or Policy Regulating Greenhouse Gas Emissions</p> <p>GHG-2: The proposed Project would not conflict with any applicable plan, policy, or regulation adopted for reducing the emissions of GHGs.</p> | Less than Significant | None required. | Less than Significant |
| Hazards and Hazardous Materials | | | |
| <p>Create a significant hazard involving release of hazardous materials into the environment</p> <p>HAZ-1: Construction and decommissioning of future renewable energy facilities developed under the proposed Project would require the use of hazardous materials.</p> | Potentially Significant | <p>HAZ-1a: Implement hazardous materials and waste minimization measures including conducting a Phase I Environmental Site Assessment to determine the presence of hazardous materials from past site activities.</p> <p>HAZ-1b: Future renewable energy facilities developed under the proposed Project that would handle hazardous materials that exceed regulatory thresholds would need to prepare and submit a Business Emergency Response Plan for approval to the State Department of Toxic Substance Control <u>and County of Imperial Local Enforcement Agency</u>.</p> | Less than Significant |
| <p>Emit hazardous emissions or handle hazardous materials within 0.25-mile of a school</p> <p>HAZ-2: All future renewable energy facilities developed under the proposed Project would be located at least 0.5 mile from any urban area within Imperial County which, in turn, would prevent impacts to existing schools.</p> | Less than Significant | None required. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Be located on a site that is included on a list of hazardous materials sites</p> <p>HAZ-3: Future renewable energy facilities developed under the proposed Project would have the potential to be located on sites that possess hazardous materials which could be exposed during construction.</p> | Potentially Significant | See Mitigation Measure HAZ-1a. | Less than Significant |
| <p>Result in a Safety Hazard for People Working or Living in the Area of a Public or Private Airport</p> <p>HAZ-4: The proposed Renewable Energy Overlay Zones do not include areas within an airport land use plan or within 2.0 miles of public or private airport.</p> | Less than Significant | None required. | Less than Significant |
| <p>Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan.</p> <p>HAZ-5: Construction and decommissioning of future renewable energy facilities associated with the proposed Project could generate large numbers of vehicle trips that could interfere with an adopted emergency response or emergency evacuation plan by degrading traffic levels of service (LOS).</p> | Potentially Significant | See Mitigation Measures TR-1a through TR-1d and TR-4a through TR-4c. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| <p>Expose people to significant risk of loss, injury, or death involving wildland fires</p> <p>HAZ-6: Land in Imperial County consists primarily of urban areas, active farmlands, recreation areas, and undeveloped land; the County does not possess wildlands with the potential for fires.</p> | Less than Significant | None required. | Less than Significant |
| Hydrology and Water Quality | | | |
| <p>Violate any water quality standards or waste discharge requirements</p> <p>HYDRO-1: Hazardous materials associated with construction and operation of future renewable energy facilities would have the potential to impact water quality.</p> | Potentially Significant | <p>HYDRO-1a: Acquire Appropriate CWA Regulatory Permits, Prepare SWPPP, and Implement BMPs Prior to Construction and Site Restoration. Project proponents or project construction contractors for future renewable energy facilities would be required to prepare a project-specific SWPPP and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by each project applicant prior to commencement of work and shall be made conditions of the contract with each contractor selected to build and decommission future renewable energy facilities developed under the proposed Project. The SWPPP(s) shall, at a minimum, incorporate control measures in the following categories:</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <ul style="list-style-type: none"> • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching) • Dewatering and/or flow diversion practices, if required (see Mitigation Measure HYDRO-1b) • Sediment control practices (temporary sediment basins, fiber rolls) • Temporary and postconstruction on-site and off-site runoff controls • Special considerations and BMPs for water crossings, wetlands, and drainages • Monitoring protocols for discharge(s) and receiving waters, with emphasis placed on the following water quality objectives: dissolved oxygen, floating material, oil and grease, pH, and turbidity • Waste management, handling, and disposal control practices • Corrective action and spill contingency measures • Agency and responsible party contact information • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP <p>Each SWPPP shall be prepared by a qualified SWPPP practitioner with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|--|---|
| | | <p>depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. Given that Imperial Valley Drains would accept runoff from areas within the Salton Trough and are listed as impaired for sediment, the SWPPP shall include BMPs sufficient for Risk Level 2 projects. BMPs for soil stabilization and erosion control practices and sediment control practices would also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.</p> <p>HYDRO-1b: Properly Dispose of Construction Dewatering in Accordance with the Colorado River Basin Regional Water Quality Control Board. If required, all construction dewatering for future renewable energy facilities developed under the proposed Project shall be discharged to an approved land disposal area or drainage facility in accordance with Colorado River Basin RWCQB requirements. Each future project proponent or project construction contractor shall provide the Colorado River Basin RWQCB with the location, type of discharge, and methods of treatment and monitoring for all groundwater dewatering discharges. Emphasis shall be placed on those discharges that would occur directly or in proximity to surface water bodies and drainage facilities.</p> | |
| Substantially deplete groundwater supplies or interfere with groundwater | Potentially Significant | HYDRO-2a: Groundwater Monitoring and Mitigation Plan. A Groundwater Monitoring and Mitigation Plan (Plan) shall | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| <p>recharge</p> <p>HYDRO-2: Withdrawal of groundwater could lower water levels of the source aquifer. Creation of new impervious surfaces associated with future renewable energy facilities developed under the proposed Project, and in particular those associated with future solar facilities, could interfere with groundwater recharge by reducing the amount of surface area through which precipitation and surface water percolates to underlying aquifers.</p> | | <p>be prepared, reviewed, and approved by the County of Imperial prior to project approval and implementation. The County must approve the Plan prior to issuance of any groundwater well permits. The Plan shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California and submitted by the applicant to the County for approval.</p> <p>The Plan shall provide detailed methodology for monitoring and reporting procedures; locate monitoring, extraction, and survey points; define significance criteria; and identify mitigation measures in the event that adverse impacts occur that can be attributed to the proposed Project. The Plan shall include summarization of all monitoring data and would require submission of annual reports to the County. A comprehensive summary and analysis of data shall be included in a five-year report. Monitoring shall be performed during preconstruction, construction, and operation, with the intent to establish preconstruction and specific project-related groundwater level trends that can be quantitatively compared against observed and simulated trends near the pumping wells and near potentially affected existing private wells and sensitive water resources. Additionally, at each stage of reporting, the applicant would be required to reevaluate of the adequacy of the monitoring network and Plan.</p> <p>HYDRO-2b: Implement Water Conservation Measures. Project developers shall plan to implement water conservation measures related to renewable energy technology water needs in order to reduce project water requirements. Developers shall minimize the consumptive use of fresh water for power plant cooling by, for example,</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| | | using dry cooling, using recycled or impaired water, or selecting solar energy technologies that do not require cooling water. | |
| <p>Substantially alter the existing drainage pattern of the site that would result in flooding or erosion</p> <p>HYDRO-3: Construction and operation of future renewable energy facilities developed under the proposed Project could affect natural surface water and groundwater flow systems by diverting and/or channelizing onsite and nearby streams to accommodate access road and facility construction.</p> | Potentially Significant | <p>HYDRO-3: Comprehensive Drainage and Sedimentation Control Plan. Project proponents for future renewable energy facilities would be required to prepare a Comprehensive Drainage and Sedimentation Plan (Plan) prior to the initiation of construction (or decommissioning as relevant). Detailed hydrologic analysis shall be performed prior to final design of the specific future renewable energy project. Results of these analyses will be submitted to the County for review. All proposed grading and impervious surfaces on—site shall be reviewed and approved by the County with respect to its potential to cause or result in additional erosion and sedimentation, increased stormwater flows, or altered drainage patterns that could lead to unintentional ponding or flooding on—site or downstream, and/or additional erosion and sedimentation. The Plan shall include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> • Construction of access corridors and temporary and permanent access roads shall not block existing drainage channels and shall not significantly alter the existing topography. • The project proponent shall delineate the active drainage channels within each drainage avoidance area and avoid placement of proposed flood protection berms within active drainage channels. The drainage avoidance areas shall protect no less than 90 percent of the area of the active drainage | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|--|---|
| | | <p>channels from construction impacts.</p> <ul style="list-style-type: none"> The project proponent shall prepare hydraulic analyses that estimate the pre- and post-development peak discharges, water depths, and velocities for both smaller, more frequent events (2-, 5-, and 10-year events), as well as larger design storm events (100-year event) that would flow through each future project site, drainage avoidance area, and/or on either side of each proposed flood protection berm. <p>The project proponent shall provide the County design details for the flood protection berms including subgrade preparation, construction methods, and armoring or scour protection.</p> | |
| <p>Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems</p> <p>HYDRO-4: Construction activities including land disturbance-related soil erosion and sedimentation; fuel and chemical spills; storage and potential treatment of wastewater; and the potential application of pesticides, herbicides, and dust suppressant chemicals could result in polluted runoff, resulting in a significant impact.</p> | Potentially Significant | See Mitigation Measures HYDRO-1a and HYDRO-1b. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| <p>Otherwise substantially degrade water quality</p> <p>HYDRO-5: Construction and operation of future renewable energy facilities associated with the proposed Project could impact both groundwater and surface water quality.</p> | Potentially Significant | See Mitigation Measures HYDRO-1a and HYDRO-1b. | Less than Significant |
| <p>Place housing or structures within a 100-year flood hazard area</p> <p>HYDRO-6: Portions of the proposed overlay zones are located within areas delineated as 100-year flood zones, and development of future renewable energy facilities within these locations could impede or redirect the flood flows.</p> | Potentially Significant | See Mitigation Measure HYDRO-3 | Less than Significant |
| <p>Expose people or structures to risk of loss, injury, or death involving flooding</p> <p>HYDRO-7: Unless construction practices and procedures are managed carefully, construction period flooding could result in damages to onsite facilities, interference with the construction process, and potential exposure of employees to flood conditions.</p> | Potentially Significant | See Mitigation Measures HYDRO-1a and HYDRO-3. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---------------------|---|
| <p>Result in inundation by seiche, tsunami, or mudflow</p> <p>HYDRO-8: Substantial amounts of the topography of Imperial County is relatively flat and does not pose the risk of exposure to landslides. The proposed Renewable Energy Overlay Zones do not include areas with steep topography and avoid impacts associated with mudflow.</p> | Less than Significant | None required. | Less than Significant |
| Land Use and Planning | | | |
| <p>Physically divide an established community</p> <p>LU-1: The proposed Project has established overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for development of future renewable energy facilities. Development of these overlay zones included defining a 0.5-mile buffer around all urban areas to avoid land use conflicts with existing development.</p> | Less than Significant | None required. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| <p>Conflict with an applicable land use plan, policy, or regulation</p> <p>LU-2: The <i>Renewable Energy and Transmission Element</i> update has been developed with the intent of maintaining consistency with the other elements of the Imperial County General Plan and includes goals and policies to ensure this consistency.</p> | Less than Significant | None required. | Less than Significant |
| <p>Conflict with any applicable habitat conservation plan or natural community conservation plan</p> <p>LU-3: Development of future renewable energy facilities under the proposed Project would not conflict with the provisions of a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.</p> | Less than Significant | Mitigation Measures BIO-1a through BIO-4 would provide further consistency. | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Mineral Resources | | | |
| <p>Result in the loss of availability of a known mineral resource that would be of value to the region</p> <p>MR-1: Development of future renewable energy facilities under the proposed Project would have the potential to restrict existing mineral resources from being extracted. Similarly, future renewable energy facilities could also conflict with delineated locally important mineral resource recovery sites.</p> | Potentially Significant | <p>MR-1a: Project proponents of future renewable energy facilities shall identify potential impacts on mineral development activities and ways to minimize any potentially significant impacts during early phases of project planning. Impact assessments on mineral resources shall include, but are not limited to, the following actions:</p> <ul style="list-style-type: none"> Identify active mining claims or mineral development activities and potential for mineral development in proximity to a proposed renewable energy facility. In coordination with County staff, developers shall consult existing land use plans and updated inventories. Evaluate impacts on mineral development as part of the environmental impact analysis for the proposed renewable energy facility and consider options to avoid, minimize, and mitigate significant impacts. <p>MR-1b: Where valid mining claims or leases already exist, proponents of future renewable energy facilities shall engage in early coordination with claim or lease holders to determine the possibility of locating new facilities in or near these areas to avoid adverse effects on mineral development.</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Noise | | | |
| <p>Exposure of persons to or generation of noise levels in excess of established standards or existing levels</p> <p>NOI-1: Construction and operation of future renewable energy facilities associated with the proposed Project would have the potential to generate noise levels in excess of the standards established in the <i>Noise Element</i> of the Imperial County General Plan.</p> | Potentially Significant | <p>NOI-1a: Protect sensitive receptors from noise. Project proponents developing future renewable energy facilities shall demonstrate that the following requirements are implemented:</p> <ul style="list-style-type: none"> • Future renewable energy facilities developed under the proposed Project should be located more than 0.5 mile from noise-sensitive receptors, including residences, churches, medical care facilities, schools, child care facilities, public parks, public recreation areas, quiet recreation areas, and wildlife or wilderness areas. • Project proponents should take measurements to assess the existing background noise levels at sites and compare them with the anticipated noise levels associated with the project. • Project proponents should prepare a noise monitoring and mitigation plan including designs to (a) minimize noise impacts to noise-sensitive receptors, limit increases to less than a 5 to 10 dBA increase above ambient levels, and not exceed local noise standards; (b) address project-generated noise impacts; and (c) acquire lands to serve as buffers around the proposed facilities. <p>NOI-1b: Implement noise reduction techniques. Project proponents developing future renewable energy facilities shall implement the following requirements:</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|-------------------|---|---|---|
| | | <ul style="list-style-type: none"> Limit noisy construction activities (including truck and rail deliveries, pile driving, and blasting) to the least noise-sensitive times of day consistent with the requirements of the County of Imperial Noise Ordinance. Consider use of noise barriers such as berms and vegetation to limit ambient noise at plant property lines, especially where noise-sensitive receptors may be present. Ensure all project equipment has the appropriate sound-control devices and shield-impact tools. Use battery-powered forklifts and other facility vehicles and flashing lights instead of audible backup alarms on mobile equipment. Locate stationary construction equipment (such as compressors and generators) as far as practical from nearby residences. If blasting or other noisy activities are required during the construction period, notify nearby residents and the permitting agencies 24 hours in advance. Properly maintain mufflers, brakes, and all loose items on construction and operation-related vehicles to minimize noise and ensure safe operations. Operate trucks as quietly as possible, while considering local conditions. Advise about downshifting and vehicle operations in residential communities to keep truck noise to a minimum. Install mufflers on diesel and gas-driven engine air | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| | | <p>coolers and exhaust stacks. Equip emergency pressure relief valves and steam blow-down lines with silencers to limit noise levels.</p> <ul style="list-style-type: none"> • Contain project facilities within buildings or other types of effective noise enclosures, when necessary and feasible. • Employ engineering controls, including sound-insulated equipment and control rooms, to reduce the average noise level to appropriate levels in normal work areas. <p>NOI-1c: Protect residences from wind turbine noise. Project proponents developing future wind energy facilities shall demonstrate that the proposed wind energy conversion system complies with setbacks defined by the lead agency. Minimum setbacks are generally 1,800 feet from each generator to the nearest receptor. For future wind energy systems that would occur nearer than 3,000 feet from receptors (including habitable dwellings), acoustical studies shall be prepared to demonstrate compliance with local standards.</p> | |
| <p>Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels</p> <p>NOI-2: Construction of future renewable energy facilities under the proposed Project would generate groundborne vibrations associated with the movement of heavy equipment, earth movement, drilling, pile driving,</p> | Potentially Significant | <p>NOI-2: Evaluate Potential for Vibration Impacts. Project proponents of future renewable energy facilities would be required to evaluate the potential for vibration to impact sensitive receptors during construction and operation and develop appropriate mitigation measures if necessary.</p> | Less than Significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---------------------|---|
| rock breaking, and explosives blasting. Operation of wind, geothermal, and solar renewable energy facilities utilize high-speed rotating mechanical equipment, including turbines and generators, that may generate groundborne vibrations. | | | |
| Expose people residing or working in the project area to excessive noise levels within 2.0 miles of a public or private airport NOI-3: The proposed Project would not construct any new housing that could expose residents to excessive noise levels associated with nearby airports. Similarly, employees operating and maintaining future renewable energy facilities would not be exposed to excessive noise levels associated with nearby airports. | Less than Significant | None required. | Less than Significant |
| Population and Housing | | | |
| Induce substantial population growth in an area directly or indirectly POP-1: The proposed Project may increase the population on a temporary basis during construction. The Project would not construct any new housing or businesses and would not extend roads that will induce population growth. It is unlikely that a substantial | Less than significant | None required. | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---------------------|---|
| number of employees would relocate and affect housing ability | | | |
| Displace substantial numbers of existing housing or people. POP-2: Construction and operation of the proposed Project would be located at least 0.5 mile from any urban area thereby avoiding displacement of housing. | Less than significant | None required | Less than significant |
| Public Services | | | |
| Result in physical impacts associated with the provision of new or physically altered fire protection facilities or new facilities. PS-1: Future renewable energy facilities under the proposed Project may require specialized workers from outside the region during construction and operation. It is, however, unlikely that a substantial number of construction personnel would relocate to Imperial County at one time and thereby increase demand for fire protection services. | Less than significant | None required | Less than significant |
| Physical impacts associated with the provision of new or physically altered police facilities PS-2: As discussed in PS-1 above, it is unlikely that a substantial number of | Less than significant | None required. | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---------------------|---|
| construction personnel would relocate to Imperial County at one time and thereby increase demand for police protection. | | | |
| Physical impacts associated with the provision of new or physically altered school facilities PS-3: As described in PS-1, it is unlikely that a substantial number of construction personnel would relocate and require the construction of new schools. | Less than significant | None required. | Less than significant |
| Impacts associated with the provision of new or physically altered recreation facilities or new facilities. PS-4: Construction and operation of future renewable energy facilities developed would have low requirements in needing new workers and would not require construction of new recreation areas. | Less than significant | None required. | Less than significant |
| Physical impacts associated with the provision of new or physically altered public facilities, or new facilities. PS-5: The proposed Project will avoid impacts to libraries, post offices, and other public facilities. There will be minimal potential for displacement of libraries, post offices, or other existing | Less than significant | None required. | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|--|---|
| public facilities. Minimal new workers required would be low and not require construction of new public facilities. | | | |
| Recreation | | | |
| 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. REC-1: The proposed project would not construct any new housing that would result in an increase in population that could increase use of existing park or recreation facilities. | Less than significant. | None required. | Less than significant |
| Include recreational facilities or require the construction or expansion of recreational facilities. REC-2: The proposed project would not construct any recreation facilities. New workers required for construction and future operations would not require the construction or expansion of recreational facilities. | Less than significant | None required. | |
| Transportation/Traffic | | | |
| Conflict with an applicable plan, policy, or ordinance establishing measures of effectiveness for the performance of a circulation system, or conflict with an applicable congestion management | Potentially significant | TRA-1a: Implement a transportation plan. Project proponents shall prepare a transportation plan for implementation during all phases of future renewable energy facilities developed under the proposed Project. The transportation plan shall address methods for reducing | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| <p>program.</p> <p>TRA-1: The proposed Project could result in an increase in traffic due to vehicles transporting construction materials and personnel which could decrease the level of service on roadways and highways.</p> <p>Operations associated with the proposed Project would generate traffic due to operations and maintenance activities. Impacts would be less than traffic generated during construction.</p> | | <p>construction worker traffic volumes and project-related equipment and materials transport by implementing the following strategies: (1) provide a construction worker rideshare program; (2) schedule shift changes and deliveries to avoid conflict with peak-hour traffic patterns; (3) establish traffic controls for transport of facility hazardous and nonhazardous materials, components, main assembly cranes, and other large pieces of equipment; and (4) evaluate alternative transportation approaches depending on specific object sizes, weights, origin, destination, peak-hour traffic, and unique handling requirements.</p> <p>TRA-1b: Coordinate road improvements with local authorities. Project proponents shall consult with local planning authorities regarding increased traffic during the construction phase of future renewable energy facilities developed under the proposed Project. Each project proponent shall conduct a project-specific traffic impact assessment of the vehicle numbers per day, their size, and type to determine design for implementing local road improvements and multiple-site access locations for future renewable energy facilities developed under the proposed Project.</p> <p>TRA-1c: Implement traffic control measures. Project proponents shall prepare and implement traffic control measures, such as intersection realignment coupled with speed limit reduction; installation of traffic lights and/or other signage; and addition of acceleration, deceleration, and turn lanes on routes with site entrances for future renewable energy facilities developed under the proposed Project.</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | TRA-1d: Ensure proper signage and travel management. Project proponents shall ensure signs are placed along future construction roads to identify speed limits, travel restrictions, and other standard traffic control information. Consideration should be given to limiting construction vehicles traveling on public roadways during the morning and late afternoon commute times to minimize impacts on local commuters. | |
| Result in a change in air traffic patterns TRA-2: Development of future renewable energy facilities under the proposed Project may include uses such as windmills and concentrated solar voltaic structures, which may affect air traffic patterns due to their substantial height. Existing regulations would require future project proponents to coordinate with the Federal Aviation Administration, branches with the United States Military and other agencies to ensure facilities would not affect air traffic patterns. | Less than significant. | None required | Less than significant. |
| Substantially increase hazards due to a design feature or incompatible uses TRA-3: The proposed Project may have the potential to introduce incompatible uses or result in an increase in hazards. | Potentially significant | TRA-3a: Project proponents of future renewable energy facilities would be required to retain a professional civil engineer to survey and evaluate the conditions of roads along proposed haul routes prior to commencing construction. Preconstruction conditions shall be documented for each roadway with photo and text | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| Impacts may result due to temporary hazards with construction or permanent changes to existing roadways with facility design. Traffic increases during construction could damage existing roadways. Heavy truck loads with construction equipment may accelerate the deterioration of roadway surfaces. Roadways with pavement design and existing conditions that are unable to withstand future construction traffic could develop cracks, ruts, and pot-holes. | | <p>description. Video of haul routes may also be used to document preconstruction conditions. The photographs and/or videos are to include documentation of bridges and other appurtenances such as signs, striping, drainage, and other utilities as determined in consultation with the County. The report shall make a determination of the minimum road design criteria needed to support anticipated project traffic and whether the existing roadways comply. Each project proponent shall submit the completed report to Imperial County Department of Public Works for review and comment.</p> <p>TRA-3b: Project proponents of future renewable energy facilities shall enter into a Roadway Maintenance Agreement with the County of Imperial prior to issuance of a grading permit. Each project proponent shall pay its fair share of the responsibility to maintain future haul routes during construction and, if necessary, bring the roadways up to an appropriate minimum standard to handle the anticipated traffic.</p> <p>TRA-3c: Project proponents of future renewable energy facilities shall be responsible for roadway preparation work, pavement construction, and repairs to County-maintained roads, including County-maintained bridges and other roadway appurtenances for any other route that is subsequently used but not identified in the Programmatic EIR. This may include, but is not limited to, bridges, signs, striping, drainage improvements and roadway shoulders. Consideration shall also be given to improvements to other infrastructure, such as IID canal and drain crossings.</p> | |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| <p>Result in inadequate emergency access.</p> <p>TRA-4: Traffic increases during construction of future renewable energy facilities could generate large numbers of vehicle trips that could temporarily reduce LOS on roadways within Imperial County, which could in turn affect emergency access.</p> | Potentially Significant | <p>See Mitigation Measures TRA-1a through TRA-1d</p> <p>TRA-4a: Provide on-site laydown and staging. Project proponents shall ensure that their future renewable energy facility site contains adequate area for construction laydown and staging, parking for construction and operation worker vehicles, and site traffic circulation aisles.</p> <p>TRA-4b: Control site access. Project proponents shall restrict traffic to the roads specified for the future renewable energy facility. Use of other unimproved roads should be restricted to emergency situations involving potential injury or loss of life.</p> <p>TRA-4c: Repair project-related damage. Project proponents shall be responsible for repairing or reconstructing project-related access roads that are damaged during construction of future renewable energy facilities to return them to pre-project conditions.</p> | Less than Significant |
| <p>Conflict with plans, policies, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the safety or performance of such facilities.</p> <p>TRA-5: The proposed Project is not anticipated to conflict with adopted policies, plans, and programs regarding alternative transportation.</p> | Less than significant | None required. | Less than significant. |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---------------------|---|
| Utilities and Service Systems | | | |
| <p>Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board</p> <p>UTIL-1: The proposed Project would generate a minimal amount of wastewater during construction. Implementation of the proposed Project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board.</p> | Less than significant | None required. | Less than significant. |
| <p>Require/result in construction of new water or wastewater treatment facilities, or expansion of existing facilities</p> <p>UTIL-2: The proposed Project would not construct residential, commercial, or other uses that would require substantial amounts of water supply or generate substantial amounts of wastewater. Permanent resources would be limited to domestic use. It is not anticipated that these permanent water service needs would impact water supply within Imperial County.</p> | Less than significant | None required | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|---|---|---|
| <p>Require/result in the construction of new stormwater drainage facilities</p> <p>UTIL-3: As described in the impact analysis for HYDRO-3, the proposed Project could affect natural surface water and groundwater flow systems by diverting and/or channelizing onsite and nearby streams.</p> | Potentially Significant | Mitigation Measure HYDRO-3 would be implemented to reduce impacts associated with stormwater drainage facilities. | Less than significant. |
| <p>Have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed</p> <p>UTIL-4: The proposed Project would not construct residential, commercial, or other uses that would require substantial amounts of water supply. Permanent resources would be limited to domestic use. It is not anticipated that these permanent water service needs would impact water supply within the County.</p> | Less than significant | None required | Less than significant |
| <p>Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments</p> <p>UTIL-5: Development of future renewable energy facilities under the</p> | Less than significant | None required | Less than significant |

Table 2.4-1: Summary of Potential Impacts and Mitigation Measures

| Potential Impacts | Level of Impact/ Significance before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|--|---|
| proposed Project would generate minimal amount of wastewater during construction but would not increase the demands of a wastewater treatment provider. | | | |
| Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs UTIL-6: Development of future renewable energy facilities under the proposed Project would generate solid waste during construction and operation. Generated solid waste may exceed the permitted capacity of existing landfills within Imperial County. | Potentially significant | UTIL-6: Complete a Waste Management Plan for construction and decommissioning. Future renewable energy facilities developed under the proposed Project would be required to develop a Waste Management Plan that shall identify the projected waste generated by the activity and feasible methods to divert a minimum of 75 percent of waste from landfills, such as sorting and recycling of materials, reuse of materials, and waste reduction measures. | Less than significant |
| Comply with federal, State, and local statutes and regulations related to solid waste UTIL-7: Development of future renewable energy facilities under the proposed Project would generate solid waste and would be required to comply with the 1989 California Integrated Waste Management Act and AB-341. | Potentially Significant | Mitigation measure UTIL-6 would also be implemented to reduce impacts associated with solid waste regulations. | Less than significant |