

SECTION 4.13

PUBLIC SERVICES AND UTILITIES

4.13 PUBLIC SERVICES AND UTILITIES

This section discusses public services and utilities that would serve each of the solar field site parcels / CUP Areas under the Phased CUP Scenario, as well as the Project site collectively under the Full Build-out Scenario. Public services include fire protection and law enforcement. Public utilities include water service, wastewater service, solid waste, electricity, and telecommunications (telephone/internet). Each service is described with regard to existing resources available and potential impacts on each service or utility providers' ability to adequately respond to and serve the proposed Full Build-out Scenario, as well as each of the five phased CUP Areas, and whether such service would require an expansion of public facilities that would generate a new significant environmental impact.

4.13.1 FIRE PROTECTION

The following discussion pertains to impacts to fire protection with regard to the Imperial County Fire Department (ICFD). Hazards such as electro-magnetic fields (EMFs) and fire safety hazards associated with the proposed Gen-Tie are discussed in Section 4.10, Hazards and Hazardous Materials.

4.13.1.1 REGULATORY FRAMEWORK

A. STATE

Fire Codes and Guidelines

The 2016 California Fire Code (CFC; Title 24, Part 9 of the California Code of Regulations [CCR]) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The CFC also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the CFC apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The CFC includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas (California Building Standards Commission 2018).

The County of Imperial has adopted the CFC with amendments specific to Imperial County.

B. LOCAL

Imperial County Year 2006 Development Impact Fees Ordinance No. 1418

The Year 2006 Development Impact Fees Ordinance was enacted to address policies regarding New Development in both the Countywide and Unincorporated Areas of Imperial County. The policies require New Developments to supplement the fair share of the costs of public facilities, equipment and services that they necessitate, including public services such as those provided by the Imperial County Fire Department (ICFD). The ICFD serves residential and non-residential development in the unincorporated areas of the County. All Development Impact Fees are addressed based on the demand for services.

Imperial County Office of Emergency Services – Emergency Operations Plan

The Imperial County Office of Emergency Services (OES) provides emergency management services for the County/Operational Area including its seven cities/towns and special districts. OES is mandated by the California Emergency Services Act (Chapter 7, Division 1, Title 2 of Government Code) to serve as the liaison between the State and all the local government political subdivisions comprising Imperial County. The OES establishes the Imperial County /Operational Area Emergency Operations Center (EOC) from which centralized emergency management can be performed during a major emergency or disaster.

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The EOC is located in the Heber Public Services Center, where the space serves as the Fire/OES administrative area as well as a training facility. The OES facilitates implementation of the Imperial County Operational Area Emergency Plan (EOP; County of Imperial 2018).

The Imperial County EOP provides a comprehensive, single source of guidance and procedures for the County to prepare for and respond to significant or catastrophic natural, environmental, or conflict-related risks that produce situations requiring coordinated response. It further provides guidance regarding management concepts relating to response and abatement of various emergency situations, identifies organizational structures and relationships, and describes responsibilities and functions necessary to protect life and property (Imperial County OES 2007).

The EOP is consistent with the requirements of the Standardized Emergency Management System (SEMS) as defined in Government Code Section 8607(a) and the U.S. Department of Homeland Security National Incident Management System (NIMS) for managing response to multi-agency and multi-jurisdictional emergencies. The SEMS/NIMS incorporate the use of the Incident Command System (ICS), mutual aid agreements, the operational area concept, and multi/interagency coordination. The proposed Project will comply with all above-referenced regulations and policies.

Imperial County General Plan

The Seismic and Public Safety Element of the Imperial County General Plan includes goals, objectives, policies and programs for land use planning, public safety, emergency preparedness and the control of hazardous materials (County of Imperial 1997a). In addition, the Circulation and Scenic Highway Element includes a goal and objective regarding emergency access (County of Imperial 2008a). **Table 4.13-1** provides a consistency analysis of the applicable Imperial County General Plan goals and objectives relative to the proposed Project. While this EIR analyzes the Project’s consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
SEISMIC/PUBLIC SAFETY ELEMENT		
Land Use Planning and Public Safety		
<p>Goal 1 Include public health and safety considerations in land use planning.</p>	<p align="center">Yes</p>	<p>The proposed Project is a solar energy generating facility located on parcels designated for “Agricultural” uses and zoned either A-2 (Agricultural General), A-2-R (General Agricultural Rural Zone), or A-3 (Heavy Agriculture). Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed in Agricultural zones with a conditional use permit (CUP). The Applicant has applied for six CUPs for the five solar field site parcels to be developed</p>

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**TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
		as a solar energy center. A Fire Prevention and Response Plan (FPRP) would be developed and implemented during construction, operation and maintenance, and decommissioning of the Project. The FPRP would identify materials that are potential fire hazards, specify property handling and storage procedures, describe good housekeeping procedures, etc. associated with fire prevention and response. The Project would comply with all applicable health and safety considerations including provision of emergency access and fire water. Therefore, the proposed Project is consistent with this goal for both the Full Build-out Scenario and the Phased CUP Scenario.
Objective 1.8 Reduce fire hazards by the design of new developments.	Yes	The proposed Project would be designed to incorporate fire safety features including fire alarms on buildings, fire sprinklers in battery storage containers and use of nonflammable materials. The FPRP would also serve to reduce fire hazards. In addition, the ICFD would review all plans prior to Project approval for compliance with applicable CFC and local standards. The ICFD was contacted for input on the proposed Project to address any potential fire or emergency access hazards. Requirements identified in the July 30, 2018 response letter (ICFPB 2018) and all other applicable fire standards will be incorporated into the final Project design and implementation. Therefore, the proposed Project is consistent with this objective for both the Full Build-out Scenario and the Phased CUP Scenario.

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**TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
Emergency Preparedness		
<p>Goal 2 Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.</p>	Yes	<p>Refer to responses to Seismic and Public Safety Element Goal 1 and Objective 1.8, above. A FPRP will be developed and implemented, and the Project would be required to comply with all state and local fire codes and ordinances. Therefore, the Project is consistent with this goal for both the Full Build-out Scenario and the Phased CUP Scenario.</p>
<p>Objective 2.8 Prevent and reduce death, injuries, property damage, and economic and social dislocation resulting from natural hazards including flooding, land subsidence, earthquakes, other geologic phenomena, levee or dam failure, urban and wildland fires and building collapse by appropriate planning and emergency measures.</p>	Yes	<p>The solar field site parcels are located in a portion of the County characterized by rural agricultural and solar facility uses. According to the Fire Hazard Severity Zone (FHSM) maps prepared by the California Department of Forestry and Fire Protection, none of the solar field site parcels fall within an area characterized under the State Responsibility Area (SRA; CDF 2007b). On the 2007 Draft Map of Local Responsibility Area (LRA) all of the solar field site parcels except the southern half of the Phase 5 parcel (CUP#17-0035 and CUP#18-0001) are identified as areas of Moderate Risk (CDF 2007a). As noted above, a FPRP would be developed and implemented during construction, operation and maintenance, and decommissioning of the Project. Therefore, the proposed Project is consistent with this objective for both the Full Build-out Scenario and the Phased CUP Scenario.</p>
<p>Objective 2.5 Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.</p>	Yes	<p>Refer to responses to Seismic and Public Safety Element Goal 1 and Objective 1.8, above. A FPRP will be developed and implemented, and the Project would be required to comply with all state and local fire codes and ordinances. Therefore, the Project is consistent with this goal for both the Full Build-out Scenario and the Phased CUP Scenario.</p>

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**TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
CIRCULATION AND SCENIC HIGHWAY ELEMENT		
Safe, Convenient, and Efficient Transportation System		
<p>Goal 1 The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.</p>	Yes	<p>Multiple County maintained roads provide access throughout the Project Area and to each CUP (refer to Figure 2.0-3 in Chapter 2.0, Project Description). Access to the Project Area would primarily be via the following paved roads: SR 98, Drew Road, Kubler Road, and Pulliam Road. CUP areas may also be accessed via unpaved roads such as Mandrapa Road. The Project does not propose any features that would restrict access to nearby properties or the County’s transportation system for both the Full Build-out Scenario and the Phased CUP Scenario.</p>
<p>Objective 1.17 Assure that road systems are adequate to accommodate emergency situations and evacuation plans.</p>	Yes	<p>Therefore, the proposed Project is consistent with this Goal. Refer to Section 4.3, Transportation and Circulation, for a full discussion of transportation and access. The final site plan for each CUP Area and the Full Build-out Scenario would be designed, developed and implemented in consultation with the ICFD and would include an FPRP in accordance with ICFD requirements for access. Therefore, the proposed Project is consistent with this objective.</p>

4.13.1.2 EXISTING SETTING

The ICFD has eight stations and six contracting agencies serving all unincorporated areas of Imperial County. The eight stations are staffed by Imperial County Firefighters are on a three-shift system. The eight Imperial County Fire Department stations are located in the communities of Heber, Seeley, Ocotillo, Palo Verde, Niland, Winterhaven and the City of Imperial. The department contracts with Brawley, Calipatria, Holtville, Westmorland, Salton City and Salton Sea Beach (ICFD 2018).

Each of the county fire stations is staffed with a Captain, Firefighter and Reserve Firefighter with the only exception being the Palo Verde station that is staffed with a Firefighter and Reserve Firefighter. Every station has a Type I engine as its primary apparatus. The City of Imperial and Heber stations also house a Ladder Truck along with the Type I engine. The Seeley and Heber stations also house Type III engines (ICFD 2018).

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The Proposed Project would be primarily served by Imperial County Station #3 located at 1910 N Waterman Avenue in the City of El Centro. The Project may also be served by Station 1 located at 2514 La Brucherie Road in the City of Imperial, and /or Station 2 located at 1078 Dogwood Road in the unincorporated community of Heber. Responders from all three stations would utilize a 1,250 gallon per minute (gpm) Type I fire engine staffed with a minimum of three ICFD personnel (ICFPB 2018).

The ICFD estimates response times to the various portions of the Project site would be approximately as follows: 11 minutes to reach the northern portion; 24 minutes to reach the western portion; 12 minutes to reach the eastern portion (Malek pers. comm. 2018a). The Project would not be directly access from the south off of SR 98. Instead, a driveway off of SR 98 would connect with a frontage road paralleling SR 98 and connecting with emergency access driveways to the southern portion of the Project.

The ICFD is the first responder for emergency services for medical emergencies, including traffic accidents, to the Heber area. ICFD Station 2, also home to the ICFPB would provide fire prevention services (e.g. inspection of water tanks and sprinklers) to the solar field site parcels during construction and the Project operations. (Malek pers. comm. 2018a).

The ICFD has a response time goal of 10 minutes for rural areas such as the Project site. The ICFD has proper equipment to service the Project. During operations, the ICFD is required to send personnel to inspect each CUP Area once per year (Malek pers. comm., 2018a).

4.13.1.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The Project would have a significant impact to fire protection services if it would:

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

B. METHODOLOGY

Evaluation of potential impacts to fire service associated with construction, operation and maintenance, and decommissioning the proposed Project was based on consultation with ICFD staff, review of information provided by the Applicant, and the Applicant's proposed Best Management Practices and Design Features (refer to Table 2.0-6 in Chapter 2.0, Project Description). The Applicant also met with the ICFD at which time the ICFD provided access and design requirements. Impacts associated with provision of water pressure to support fire flow are addressed under the discussion of water supply in subsection 4.13.3, below.

C. PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to ICFD Services

Impact 4.13.1 The Proposed Project would develop a solar energy generation and storage facility on agricultural land in Imperial County. The location of the Project and the potential for development of individual CUP Areas over time could result in increased demand on the ICFD services. However, the Project would not cause a need to expand ICFD's public facilities. Therefore, impacts to ICFD services are **less than significant** for both the Full Build-out Scenario and the Phased CUP Scenario. Additionally, the proposed Project has been designed to incorporate fire safety features and would contribute to the agency to offset any costs associated with the Project.

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FULL BUILD-OUT SCENARIO/ ALL CUP AREAS AND PROJECT COMPONENTS

Construction

Whether constructed over one 18-month period (Full Build-out Scenario) or constructed in phases over up to ten years (Phased CUP Scenario), implementation of the Proposed Project involves construction of up to five solar field site parcels and associated operations support, transmission, and energy storage components on six parcels totaling approximately 762.8 net acres. The ICFD has indicated that it can respond to the site from Station #3 within 11 to 24 minutes depending on which portion of the Project site needs service (Malek pers. comm., 2018a).

Potential fire hazards associated with construction are low and would primarily be associated with sparks from equipment igniting dry vegetation or refueling or maintaining equipment. However, the Applicant also proposes to prepare a Fire Prevention and Response Plan to address safety and response procedures in the event of a fire (see Table 2.0-6 in Chapter 2.0, Project Description) during construction and operations. Further, the solar field site parcels would be cleared of all vegetation and all hazardous materials (including gasoline, diesel fuel and oil) would be required to be properly handled thereby reducing potential for fire in association with use of these materials. Installation of solar panels and equipment are not anticipated to create a fire hazard. Therefore, impacts to ICFD services are considered **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

Operation

Several Project components have the potential to be flammable. Transformers, inverters, power lines, and the O&M building(s) have the potential to catch on fire. The PCS structures which house the inverters and transformers will have fire extinguishers and fire alarms which are remotely monitored.

The proposed Project has been designed to incorporate fire prevention features such as utilizing PV modules and ancillary equipment made of fire-resistant material; implementing a vegetation management plan; locating buildings away from combustible items; applying emergency preparedness through fire alarms and a 10,000-gallon water tank for fire protection; and preparing and implementing a FPRP in accordance with ICFD requirements. The plan would identify materials that are potential fire hazards, specify property handling and storage procedures, describe good housekeeping procedures, etc. associated with fire prevention and response. In addition, the ICFD would have access to each CUP Area via ICFD-approved access mechanisms (i.e. Knox Box on gates). These features will minimize risk of fire and the potential need for ICFD services, and thus, represent a limited increase in the need for fire services to each CUP Area.

Each phase of the Project may have its own energy storage component. Energy Storage systems comprised of compressed air or pumped storage, lithium (ion, oxygen, polymer, phosphate, sulphur), Nickel Metal Hydride, Nickel Cadmium, Lead Acid, antiperovskites or other batteries include materials that run the risk of overheating and catching fire if equipment is not operated properly. These technologies include materials susceptible to overheating and catching fire if equipment is not operated properly. The Project would be operated in accordance with all applicable regulatory requirements which would mitigate the risk of fires and other hazardous events. Energy Storage Buildings/Containers are typically constructed out of non-combustible metal structures that are located away from other combustible materials. For example, may be stacked in metal racks on a concrete floor in a single building. Alternatively, the batteries may be located in prefabricated metal cargo containers and stacked several feet away from one another on dirt that has been graded and compacted.

The Project's weed management plan will ensure there is minimal or no vegetation surrounding the battery enclosures. The energy storage systems will be operated per the manufacturer's specifications

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and the facility and temperatures will be monitored continuously. The energy storage system will have alarms to alert personnel of any variations and increases in temperature that may be problematic. Both the solar fields and energy storage systems are closely monitored on a continual basis to ensure they are operating efficiently. In addition, O&M personnel performs maintenance on a regular basis to ensure the facility is producing at its optimal output. As part of operations protocol, O&M personnel will adhere to the following Handling Precautions:

- Avoid exposing lithium batteries to excessive vibration.
- Do not keep batteries in high or low temperatures.
- Always handle batteries with caution.
- Place batteries in storage after the building reaches compliant temperature levels.
- Do not use damaged batteries.
- In case of contact with fluid do not rub eyes. Immediately flush eyes.
- Wash hands after handling batteries.
- In the event of contact on clothing, change clothing immediately.

The ICFD has indicated that if the Project is constructed to include battery storage, ICFD operational tactics will change from wildland firefighting to structural firefighting (Malek, pers. comm. 2018a). The ICFD will work with the Applicant regarding any other specific design requirements, fees or personnel that may be required to serve the Project (Malek, pers. comm. 2018b). The Applicant also proposes to prepare a Fire Prevention and Response Plan to address safety and response procedures in the event of a fire (see Table 2.0-6 in Chapter 2.0, Project Description).

Overall, the facility will be designed and constructed in accordance with the latest version of the CBC, General Order 95 (GO 95) and the National Electrical Safety Code (NESC) along with other applicable industry standards. These industry standards ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation or use of the facilities and to the general public. The intensity of people on-site during operations would be less than the number during construction and would include two to six full-time personnel per CUP during operations and maintenance crew.

In compliance with applicable regulations, the proposed Project would take precautions for fire prevention including: maintenance of personal protective equipment and emergency equipment (spill containment kits, fire extinguishers, and other firefighting equipment), storage and appropriate labeling of flammable and combustible liquids, and routine weed abatement and landscape maintenance.

Additionally, the ICFD assesses fire impact fees for solar projects to mitigate costs in the event that services are needed. Finally, despite its increase in demand for ICFD's services, the Project will not cause ICFD to expand its public facilities. The Applicant will continue to work with the ICFD regarding the final site layout to ensure that two access points (primary and secondary for emergency access only) are provided for each CUP. Therefore, for construction, operations, and maintenance, the impacts associated with increased demand for ICFD services are anticipated to be **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Decommissioning involves activities similar to construction but would occur over a shorter period of time with less intense volumes of traffic. Moreover, the Project would be decommissioned in accordance with

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the CBC, GO 95 and the NESC along with other applicable industry standards. These industry standards ensure adequate service and secure safety to persons engaged in the decommissioning of the facilities.

Further, per ICFD requirements, emergency equipment, such as a 10,000-gallon fire suppression water tank are required to accompany O&M buildings for the life of the Project. As such, fire prevention and emergency preparedness will continue through decommissioning and emergency equipment would remain on-site until demolished.

Finally, despite its increase in demand for ICFD's services, the decommissioning the Project will not cause ICFD to expand its public facilities. Further, following reclamation, impacts to ICFD Services are be anticipated to be **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Impacts to ICFD Accessibility

Impact 4.13.2 The proposed Project will be designed to comply with ICFD access requirements. As such, impacts to ICFD accessibility are considered **less than significant** for both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction/Operation

Whether constructed over one 18-month period (Full Build-out Scenario) or constructed in phases over up to ten years (Phased CUP Scenario), implementation of the Proposed Project involves construction and operation of up to five solar field site parcels and associated operations support, transmission, and energy storage components on six parcels totaling approximately 762.8 acres net acres.

Multiple County maintained roads provide access throughout the Project Area. Access to the CUP Areas would be primarily via the following paved roads: Drew Road, Kubler Road, Pulliam Road and SR 98. The Project is not proposing to use any unpaved County roads. As identified in Table 2.0-6, Applicant-proposed measures incorporated into the Project include preparation of a Fire Prevention and Response Plan, a Traffic Control Plan for the Imperial County Department of Public Works, and a Traffic Management Plan for Caltrans for SR 98 encroachments prior to construction. The Project does not propose any features that would restrict emergency access, access to nearby properties or the County's transportation system during operations.

Proposed access locations are shown in Figure 4.3-11 in Section 4.3, Transportation and Circulation. The ICFD was contacted for input on the proposed Project to address any potential emergency access requirements. Requirements identified in the July 30, 2018 response letter (ICFPB 2018) and all other applicable fire standards will be incorporated into the final Project design and implementation. In addition, Deputy Chief Robert Malek indicated that the Applicant had met with the ICFD and was working on final site design. Internal circulation will be configured to avoid IID canals while still providing access for fire apparatus throughout the solar field site parcels. ICFD will review Project plans prior to issuance of a Building Permit to ensure that all access requirements are met (Malek pers. comm., 2018b).

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The ICFD requires two access points (one primary, one secondary used exclusively for emergency access) at each of the five CUP Areas / solar field site parcels as described below. The ICFD has an off-road fire truck available to drive on dirt roads to access the solar field site parcels if necessary.

CUP#17-0031 / Phase 1 / APN 052-170-056

The primary paved access to CUP Area 17-0031 is a driveway off of SR 98 on the south to one frontage road which connects to one primary and one emergency gate on the south side of the CUP (Refer to Figure 4.3-11 in Section 4.3, Transportation and Circulation). Therefore, impacts regarding ICFD access to CUP Area 17-0031 are considered **less than significant**.

CUP#17-0032 / Phase 2 / APN 052-170-037

The primary paved access to CUP Area 17-0032 is a driveway off of SR 98 on the south to one frontage road which connects to one primary and one emergency gate on the south side of the CUP (Refer to Figure 4.3-11 in Section 4.3, Transportation and Circulation). Therefore, impacts regarding ICFD access to CUP Area 17-0032 are considered **less than significant**.

CUP#17-0033 / Phase 3 / APN 052-170-032

The primary and emergency paved access points to CUP Area 17-0033 would be off of Pulliam Road along the eastern boundary of the CUP Area (Refer to Figure 4.3-11 in Section 4.3, Transportation and Circulation). The emergency access would be just south of Kubler Road (Refer to Figure 4.3-11 in Section 4.3, Transportation and Circulation). Therefore, impacts regarding ICFD access to CUP Area 17-0033 are considered **less than significant**.

CUP#17-0034 / Phase 4 / APN 052-170-031

The primary and emergency paved access point to CUP Area 17-0034 would be off of Kubler Road along the northern boundary of the CUP Area. The emergency access is just east of Drew Road (Refer to Figure 4.3-11 in Section 4.3, Transportation and Circulation). Therefore, impacts regarding ICFD access to CUP Area 17-0034 are considered **less than significant**.

CUP#17-0035 and CUP#18-0001 / Phase 5 / APNs 052-071-039 and 052-170-067

The primary paved access point to CUP Area 17-0035 would be off of Drew Road along the eastern boundary of the CUP Area just north of Mandrapa Road. The emergency access driveway is also off of Drew Road approximately mid-way along the eastern boundary of the CUP Area (Refer to Figure 4.3-11 in Section 4.3, Transportation). Therefore, impacts regarding ICFD access to CUP Area 17-0035 are considered **less than significant**.

The FPRP developed and implemented for the Project would address provision of emergency access, including identifying locations of access, gate and road widths, existing paved roads, secondary unpaved roads, and non-restrictive access to nearby properties. These provisions would apply whether the Project is built out at once over an 18-month period, or under the proposed phased buildout over a ten-year period (i.e. Phased CUP Scenario). Therefore, impacts to ICFD access are considered **less than significant** Project construction and operation under both the Full Build-out Scenario and Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the proposed Project would be removed and decommissioned and the CUP Areas would be restored to pre-Project soil conditions. The FPRP will require ICFD-approved access points and required road and gate widths through the life of the Project. As such, the FPRP requirements will remain through the decommissioning process. Thus, during Project

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decommissioning, impacts to ICFD accessibility are **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.1.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for fire protection is the service area of the ICFD. For emergency fire response, the proposed Project would be primarily served by Imperial County Fire Station #1.

A cumulative list of proposed, approved and reasonably foreseeable project in the region, is shown in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. Projects identified within Imperial County that are in the vicinity of the proposed solar field site parcels include: Centinela Solar, Acorn Solar, Imperial Solar South, and the Mount Signal and Calexico Solar Farms. Each of these projects is a PV solar facility either proposed, currently under construction, or in operation.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to ICFD Fire Protection and Emergency Response

Impact 4.13.3 Development of the proposed Project, in combination with proposed, approved and reasonably foreseeable projects in the ICFD service area, would increase demand for fire protection and emergency medical response. However, each individual project would be required to incorporate fire safety features, adequate access, and worker safety protocols in compliance with all applicable fire and occupational safety standards and codes. However, implementation of these projects would not cause ICFD to expand its public facilities. Therefore, environmental impacts related to fire protection and emergency response are considered **less than cumulatively considerable** for both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUPS (CUP#17-0031 THRU CUP#17-0035 AND CUP#18-0001)

Construction, Operation, and Decommissioning

The proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the region, as identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, would increase demand on existing fire facilities, equipment, and staffing in the ICFD service area. A number of projects are within the vicinity of the Project site. However, neither the proposed Project nor the other projects identified as part of cumulative conditions would result in the development of, or need for, additional residential development, structures, or population requiring ICFD fire protection and emergency response. The projects will not cause ICFD to expand its public facilities.

All new development in Imperial County is subject to fire safety standards, including state and local regulations. Furthermore, impacts to fire protection are mitigated on a project-by-project basis through review of individual projects by the ICFD to ensure that all fire safety requirements, including adequate access, are satisfied. Thus, the Project's contribution (whether implemented as the Full Build-out Scenario

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or the Phased CUP Scenario), to cumulative impacts to fire protection and emergency medical response would be **less than cumulatively considerable**. Likewise, because individual projects are required to meet federal, state and local requirements, as applicable, cumulative project impacts to fire protection and emergency response would be **less than cumulatively considerable** under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.2 LAW ENFORCEMENT

4.13.2.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County Year 2006 Development Impact Fees Ordinance No. 1418

The Year 2006 Development Impact Fees Ordinance was enacted to address policies regarding New Development in both the Countywide and Unincorporated Areas of Imperial County. The policies require New Developments to supplement the fair share of the costs of public facilities, equipment and services that individual development necessitates, including public services such as those provided by the Imperial County Sheriff's Office (ICSO). The ICSO provides police services to the unincorporated areas, while also operating the county jail and coroner's office in both unincorporated and incorporated areas of the County. All Development Impact Fees are addressed based on the demand for services.

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, policies and programs regarding public safety and provision of emergency access. The Circulation and Scenic Highway Element of the General Plan includes a goal and objective regarding emergency access applicable to the proposed Project. **Table 4.13-2** provides a consistency analysis of the applicable Imperial County General Plan goal and objective as they relate to the proposed Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

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**TABLE 4.13-2
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – LAW ENFORCEMENT**

General Plan Goal and Objective	Consistent with General Plan?	Analysis
CIRCULATION AND SCENIC HIGHWAY ELEMENT		
Safe, Convenient, and Efficient Transportation System		
<p>Goal 1 The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.</p>	Yes	<p>Various County maintained roads provide access throughout the Project Area. Access to the solar field site parcels would be primarily via the following paved roads: Drew Road, Kubler Road, Pulliam Road, and SR 98. Additionally, the Project may use County maintained unpaved roads (such as Mandrapa Road) when access from existing paved roads or internal Project area roads is unavailable. The Project does not propose any features which would restrict access to nearby properties or County transportation systems. Therefore, the Proposed Project is consistent with this Goal for both the Full Build-out Scenario and the Phased CUP Scenario. Refer to Section 4.3, Transportation and Circulation, for a full discussion of transportation.</p>
<p>Objective 1.17 Assure that road systems are adequate to accommodate emergency situations and evacuation plans.</p>	Yes	<p>The proposed Project includes primary and emergency access points for each CUP. Security gates will be located at each CUP Area to control entry. All driveways leading to the O&M building(s) will be surfaced with a minimum of three (3) inches of asphaltic concrete paving or higher quality material. Further, the Project will be designed in accordance with the FPRP which will require adequate access and road systems designed and implemented in compliance with applicable State and local emergency access requirements. Therefore, the proposed Project is consistent with this objective for both the Full Build-out Scenario and the Phased CUP Scenario.</p>

4.13.2.2 EXISTING SETTING

The ICSO is responsible for providing law enforcement services to all unincorporated areas for the County of Imperial and is the primary law enforcement agency for such service. The Project site falls within the area of the ICSO main office, commonly referred to as the El Centro Station, located at 328

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Applestill Road in El Centro. This station is approximately seven miles northeast of the Project site, and approximately 10 miles in driving distance (ICSO 2018).

The ICSO El Centro Station houses various units and personnel that serve a variety of functions. The patrol function primarily consists of a Sergeant and two deputies per shift, two shifts per day. This station is responsible for patrol duties covering the geographical area located from Keystone Road south to the US/Mexico International Border, and from the San Diego/Imperial County line east to the Brock Research Center. This area is generally divided between the two shift deputies to an east and west beat. The Project Area is encompassed within the west beat geographical area, which consists of the area from Dogwood Road west to the San Diego/Imperial County line (ICSO 2018).

4.13.2.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The Proposed Project would have a significant impact on law enforcement services if it would:

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

B. METHODOLOGY

Evaluation of potential impacts to law enforcement service impacts associated with construction, operation and maintenance, and decommissioning of the Proposed Project was based on review of the solar field site parcels and surrounding area and consultation with Chief Deputy Thomas Garcia of the Imperial County Sheriff's Office.

C. PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to ICSO Services

Impact 4.13.4 Implementation of the Project could negatively affect the ICSO's response times and ability to carry out patrol duties. However, implementation of the proposed Project would result in the need to expand ICSO's public facilities. Therefore, potential environmental impacts to law enforcement services are considered **less than significant** for both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction/Decommissioning

The Proposed Project would introduce a solar energy generation and storage facility to an area previously used for agricultural production. Whether constructed over one 18-month period (Full Build-out Scenario) or constructed in phases over up to ten years (Phased CUP Scenario), Project construction and decommissioning would increase the intensity of workers and activity present within the Project site and surrounding vicinity. During construction, access to each CUP Area would be controlled through security fencing and gates that will be installed at the roads entering each CUP Area. Private security would also be contracted to patrol the Project site.

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The eastern boundary of the Project area is approximately seven miles, or ten miles driving, from the ICSO El Centro Main Station. Despite the addition of private security, the added intensity of workers on-site may require the Sheriff's Main Office to respond to service calls to the Project site during construction and decommissioning and impact the ability of the ICSO's Main Station to provide adequate law enforcement services to the current service areas. However, construction and decommissioning activities would be temporary in nature. Further, the proposed Project would not cause the ICSO to expand its public facilities. Therefore, impacts to law enforcement services are anticipated to be **less than significant** during Project construction and decommissioning under both Full Build-out Scenario and as proposed under the Phased CUP Scenario.

Operation

According to the ICSO, although solar projects in general would not warrant additional staffing in terms of the daily patrol, they do create increased calls for service directly and indirectly. Direct calls for service include thefts, vandalism, reports of suspicious subjects or activity and other incidents. Indirectly, the increased activity and traffic in the area can increase calls for services from issues such as traffic accidents and vehicle code violations (ICSO 2018).

The ICSO notes that although proposed Project alone does not warrant additional staff, the increase of similar projects throughout the area increases use of the ICSO's minimal resources. As previously described, the Project Area is serviced by one patrol deputy covering a vast area. Anytime this deputy is actively working calls for service it will delay response time to other calls, as well as minimize important proactive patrol activity to deter crime. Further, should the west service area deputy be tied up for any length of time on a particular call, the east service area deputy would be required to respond to the west beat to assist, and therefore, service in the east service area would be severely reduced. The ICSO also notes a particular point of concern is night operations, which are conducted with the same staffing levels as daytime operations. Should an incident occur requiring a search during night hours, searching an area as large as the Project site can be very difficult and become an issue in respect to time required, limited resources and officer safety (ICSO 2018).

Therefore, despite the Project's security features and its close proximity to the ICSO's Main Station, the Project would take from the current ability of the staff to respond to the current level of service calls and complete patrol duties originating from the ICSO Main Station. However, implementation of the proposed Project would not cause the ICSO to expand its public facilities. Therefore, environmental impacts to law enforcement facilities are considered **less than significant** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.2.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for law enforcement is the service area of the ICSO which includes all of unincorporated Imperial County. Under cumulative conditions, the ICSO would continue to provide law enforcement services to Imperial County, as well as the proposed, approved and reasonably foreseeable projects in the region identified in Table 3.0-1, in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. This development would increase the number and acreage of renewable energy projects requiring law enforcement.

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B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to ICSO Services

Impact 4.13.5 Development of the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in Imperial County would result in an increased cumulative demand for law enforcement. However, cumulative projects would not cause the ICSO to expand its public facilities. Therefore, impacts to law enforcement services are **less than cumulatively considerable** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction, Operation and Decommissioning/Reclamation

Increased development in the County, including cumulative projects identified in Table 3.0-1 within Imperial County, would increase demand for law enforcement services under cumulative conditions. The ICSO has indicated that law enforcement will experience a cumulatively considerable impact due to the potential for the Project, along with other cumulative projects in the ICSO service area, to result in increased service calls in an already large service area (ICSO 2018). Specifically, responding to increased service calls to the Project Area would strain current service levels of the ICSO's Main Station in El Centro. However, the increase in calls would not cause the ICSO to expand its public facilities. Therefore, for the purpose of analyzing environmental impacts under CEQA, the Proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in Imperial County, would result in a **less than cumulatively considerable impact** to law enforcement services under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario.

Mitigation Measures

None required

Significance After Mitigation

Not applicable.

4.13.3 WATER SERVICE

4.13.3.1 REGULATORY FRAMEWORK

A. STATE

Urban Water Management Planning Act - Assembly Bill (AB) 797

The Urban Water Management Planning Act was established by Assembly Bill 797 (AB 797) on September 21, 1983. This law evidences recognition by state legislators of water as a limited resource. AB 797 is also a declaration that efficient water use and conservation should be actively pursued throughout the state. AB 797 requires water suppliers providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet per year (AF/Y) of water, to prepare and adopt a specific plan every five years. The purpose of the plan is to define the supplier's current and future water use, sources of supply and supply reliability, and existing conservation measures.

Senate Bill (SB) 610 and SB 221

SB 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain

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land use decisions made by cities and counties. SB 610 works in conjunction with SB 221 to promote more collaborative planning between local water suppliers and cities and counties. These statutes require submission of detailed water availability information to be provided to the city and county decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information to be included as part of the administrative record to substantiate an approval action by the city or county on such projects. Both SB 610 and SB 221 recognize local control and decision-making regarding the availability of water for projects and the approval of projects. Drew Solar qualifies as a “project” under Water Code section 10912 because it is a proposed industrial use occupying more than forty (40) acres of land (Fuscoe 2018b).

B. REGIONAL

IID Interim Water Supply Policy for Non-Agricultural Projects

The Imperial Irrigation District (IID) has adopted an Interim Water Supply Policy for Non-Agricultural Projects (IWSP), from which water supplies can be contracted to serve new developments within IID’s water service area. For applications processed under the IWSP, applicants are required to pay a processing fee and, after IID board approval of the corresponding agreement, are required to pay a reservation fee(s) and annual water supply development fees. The IWSP sets aside 25,000 acre-feet (AF) of IID’s Colorado River water supply to serve new non-agricultural projects. As of June 2017, a balance of 23,800 AF remains available under the IWSP for new non-agricultural projects ensuring reasonably sufficient supplies for such water users. The Project site lies within IID’s Imperial Unit and as such is eligible to receive water service (Fuscoe 2018b).

C. LOCAL

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, policies and programs regarding the preservation and use of water. **Table 4.13-3** provides a consistency analysis of the applicable Imperial County General Plan goals and objectives from the Conservation and Open Space Element and Renewable Energy and Transmission Element as they relate to the proposed Project. While this EIR analyzes the Project’s consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.13-3
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICE**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
CONSERVATION AND OPEN SPACE ELEMENT		
Conservation of Water Resources		
Goal 6: The County will conserve, protect, and enhance water resources in the County.	Yes	The Project proposes implementation of a solar energy generation and storage facility on land currently in active agricultural use. As compared to the water intensive needs for crop growth, the Project will only require limited water resources for panel washing as needed, dust control as needed, fire prevention,

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**TABLE 4.13-3
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICE**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
<p>Goal 6: The County will conserve, protect, and enhance water resources in the County.</p>	<p align="center">Yes</p>	<p>and for water and wastewater services at Project O&M Buildings for both the Full Build-out Scenario and the Phased CUP Scenario. Refer to Chapter 4.11, Hydrology and Water Quality, for discussion regarding protection of water quality.</p>
<p>Objective 6.10: Encourage water conservation and efficient water use among municipal and industrial water users, as well as reclamation and reuse of wastewater.</p>	<p align="center">Yes</p>	<p>Refer to analysis under Goal 6.</p>
<p>RENEWABLE ENERGY AND TRANSMISSION ELEMENT</p>		
<p>Efficient Water Use</p>		
<p>Goal 1 Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.</p>	<p align="center">Yes</p>	<p>Refer to analysis under Objective 1.6, below.</p>

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**TABLE 4.13-3
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICE**

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
<p>Objective 1.6 Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.</p>	<p>Yes</p>	<p>The proposed Project is a renewable energy generation facility proposed for development at a location currently under water-intensive agricultural production. The Project would use water from the IID canals during operation. According to the Water Supply Assessment (WSA) prepared for the Project, operation of the Project would require 60 AF/Y (2,340 AF amortized over a conservative 39-year operational lifetime of the Project). The WSA indicates that sufficient water is available, based on the fact Project water is lower than current agricultural demands and the availability of IWSP water set aside for new non-agricultural projects (Fuscoe 2018b, p. 42). The Project does not propose wasteful or inefficient use of water during construction, operation and maintenance, or decommissioning/reclamation activities. Therefore, the Proposed Project is consistent with this objective for both the Full Build-out Scenario and the Phased CUP Scenario.</p>

4.13.3.2 EXISTING SETTING

The Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Southern California Water Company with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers (Fuscoe 2018b, p. 14).

Industries outside the municipal areas treat the water to required standards of their industry. The IID Water Department tracks nearly 4,000 raw water service accounts required by the California Department of Public Health (CDPH) to have alternate drinking water service (Fuscoe 2018b, p. 14). The District maintains a small-acreage pipeline and drinking water database and provides an annual compliance update to CDPH (Fuscoe 2018b, p. 39).

The Project site is located in Imperial Valley, which is geographically synonymous with IID’s Imperial Unit. The area served by IID is located in Imperial Valley, which is generally geographically synonymous with

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IID's Imperial Unit, lying south of the Salton Sea, north of the United States /Mexico International Border 1and generally in the 658,942 acre area between IID's Westside Main and East Highline canals. **Figure 4.13-1** provides a map of the IID Imperial Unit boundary, as well as cities, communities and main canals.

IID's IWSP sets aside 25,000 acre-feet (AF) of IID's Colorado River water supply to serve new non-agricultural projects. Because the Project lies within IID's Imperial Unit it is eligible to receive water service (Fuscoe 2018b). As of June 2017, a balance of 23,800 AF remained available under the IWSP for new non-agricultural projects ensuring reasonably sufficient supplies for such water users (Fuscoe 2018b, p. 5).

The proposed Project is located on agricultural land owned by the IID. Water is supplied to the Project site via IID's via existing untreated irrigation canals. Historical water deliveries to the Project site for agricultural use averaged approximately 4,618 AFY between 2003 and 2017 (Fuscoe 2018b, p. 6).² **Table 4.13-4** identifies the IID source of historic agricultural water supplied to the Project by APN and associated CUP Area.

**TABLE 4.13-4
HISTORIC WATER DELIVERY DATA SOURCE BY PROJECT APN / CUP AREA**

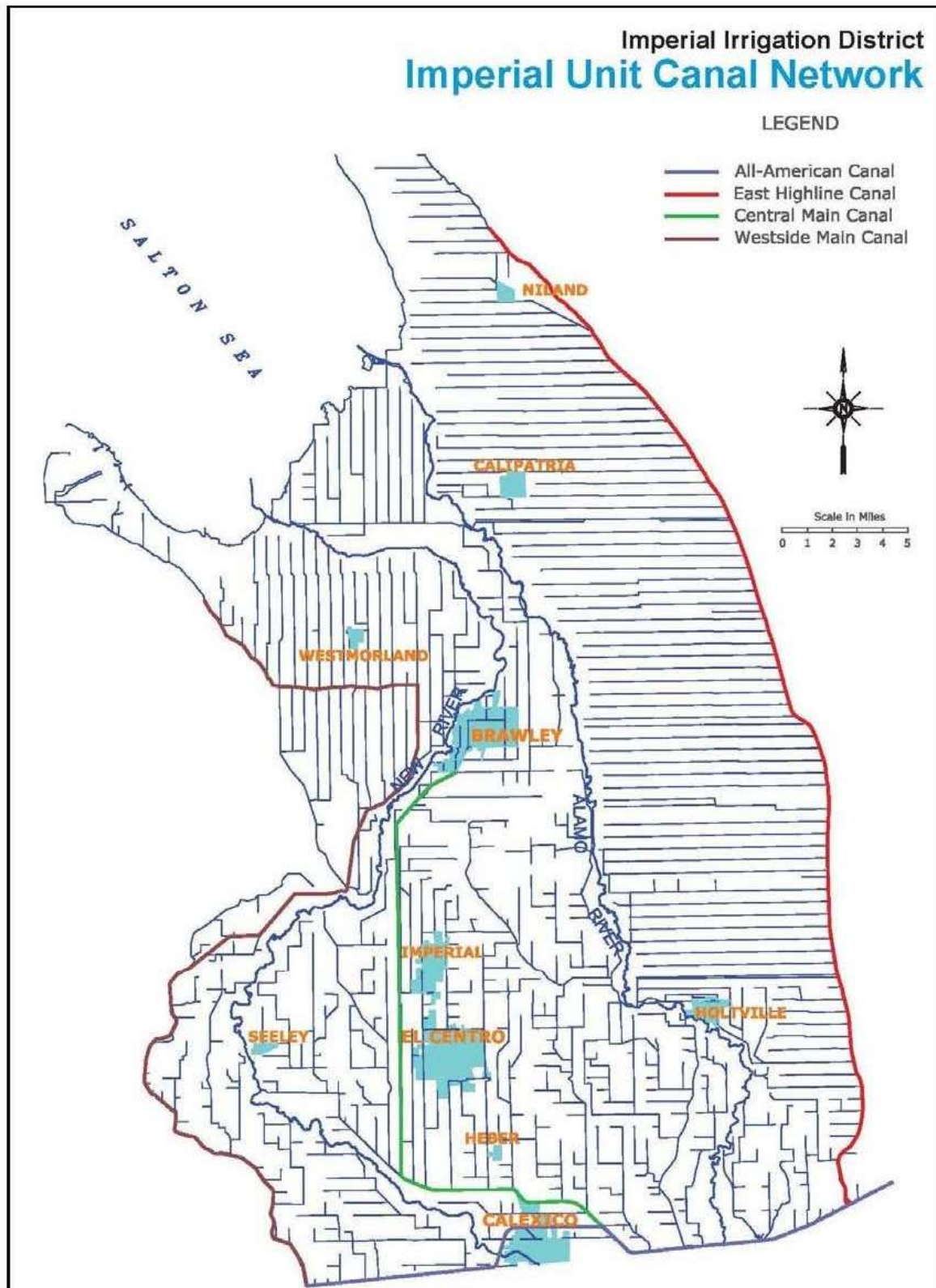
APN	CUP Area	Gross Acreage	Net Acreage	Water Deliver Canal / Gate
052-170-039	17-0035/18-0001	91.73	69.8	Wormwood 14
052-170-067	17-0035/18-0001	72.04	67.2	Wormwood 13
052-170-031	17-0034	168.61	157.1	Woodbine 57 & Wormwood 12
052-170-056	17-0031	178.07	152.2	Wormwood 11 & 11a
052-170-032	17-0033	176.24	158.6	Woodbine 43a & Woodbine 44
052-170-037	17-0032	168.31	157.9	Woodbine 41 & 42
Total		855.00	762.8	

Source: Fuscoe 2018b, p. 6.

¹ IID Annual Inventory of Areas Receiving Water Years 2016, 2015, 2014 (Fuscoe 2018b).

² Historic water delivery data to Project Site was provided by IID in February 2018 (Fuscoe 2018b).

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Source: Fuscoe 2018b.

**FIGURE 4.13-1
IMPERIAL IRRIGATION DISTRICT – IMPERIAL UNIT CANAL NETWORK**

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4.13.3.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Proposed Project would have a significant impact with regard to water service if it would:

- a) Require or result in the relocation or construction of new or expanded water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

B. METHODOLOGY

Evaluation of potential water supply and service impacts of the proposed Project were based on correspondence with the Applicant, and the Drew Solar Water Supply Assessment (Fusco 2018b). The Water Supply Assessment is provided as **Appendix L** on the attached CD of Technical Appendices to this EIR.

C. PROJECT IMPACTS AND MITIGATION MEASURES

Construction of New Water Facilities

Impact 4.13.6 The Project may install on-site water treatment facilities within each CUP that has an O&M Building Complex. The facilities would be constructed within the footprint of the CUP and would not disturb off-site lands. Therefore, impacts associated with provision of water treatment facilities are considered **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction

During construction, on-site water treatment facilities may also be constructed within each CUP where an O&M Building Complex is constructed (refer to Figure 2.0-11 in Chapter 2.0, Project Description to see the layout of an O&M Complex). Each CUP/ Project phase may have its own O&M Building Complex, and Phase 5 may have two O&M Building Complexes. Bottled water will be trucked to the site for drinking water. Construction related to on-site water treatment facilities would be limited to CUPs where they are to be installed, with no connection to existing public systems. Therefore, impacts resulting from potential construction of new water treatment facilities are considered **less significant** under both the Full Build-out Scenario and the proposed Phased CUP Scenario.

Operation

An on-site water treatment facility may be constructed at each CUP with an O&M Building Complex. Each phase may have its own O&M Building Complex, and Phase 5 may have two O&M Building Complexes. The on-site water treatment facilities would provide the appropriate panel wash water or potable water requirements to provide water during Project operation. The Imperial County Building Code requires potable water to be connected to all plumbing fixtures. However, IID does not allow its water to be consumed by humans. As such, while potable water will be connected to plumbing fixtures, bottled water will be provided for drinking water.

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The Project will also collect wastewater from sanitary facilities such as sinks and toilets in the O&M building(s). This waste stream will be sent to an on-site sanitary waste septic system and leach field to be installed in compliance with standards established by Imperial County Environmental Health Services. Alternatively, the Project may be designed to direct these waste streams to an underground tank for storage until it is pumped out, on a periodic or as-needed basis, and transported for disposal at a licensed waste treatment facility. Impacts relating to wastewater systems are addressed below under the discussion of Impact 4.13.9.

The proposed water treatment system(s) would be private and operated and maintained within the boundaries of each CUP Area (i.e. within the disturbed area of the Project site). No off-site expansion of a public water treatment facility would occur in order to provide water treatment during Project operation under the Full Build-out Scenario or the Phased CUP Scenario. Instead, the on-site private water treatment system(s) would comply with applicable water quality standards for treating raw water. Therefore, impacts resulting from operation of proposed water treatment facilities are considered **less significant** under both the Full Build-out Scenario and proposed Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project, including on-site water treatment system facilities would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. With removal of the O&M Building(s), on-site water treatment would no longer be necessary. Therefore, **no impact** would occur with regard to water treatment under the Full Build-out Scenario or the proposed Phased CUP Scenario during Project decommissioning. Once the site is reclaimed water treatment would not be required.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Water Supply Sufficiency

Impact 4.13.7 The Project proposes to obtain water from the IID canal network for construction, operation and maintenance, and decommissioning/reclamation activities. Project demands for water would be lower than current agricultural water supply requirements. The IID Canal system and water entitlements are adequate to meet the proposed water demands and the Project would not cause a need to expand water entitlements. Therefore, impacts to water supply are considered **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for the proposed Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios. This is due to the small effect rainfall has on water supply in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have a slight impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation), but does not impact the definition of a normal year, a single-dry year or a multiple-dry year scenario in this region for this supplier (Fusco 2018b, p. 33).

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IID Water Supply – Normal Year

IID is entitled to annual consumptive use of 3.1 million acre-feet (MAF) of Colorado River less its Quantification Settlement Agreement (QSA) transfer obligations. Imperial Dam located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona and Mexico. Water is transported to the IID water service area through the All-American Canal for use throughout the Imperial Valley.

IID historical and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 4.13-5**. Volumes for years 2003-2015 are adjusted for United States Bureau of Reclamation Decree Accounting historical records. Volumes for years 2016-2077 are from the CRWDA Exhibit B modified to reflect changes to the 1988 IID/ Metropolitan Water District of Southern California (MWD) Transfer the 2014 Letter of Agreement³ changes to the 1988 IID/MWD Water Conservation Agreement.

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID's water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for Consumptive Use (**Table 4.13-5**, Column 11). That annual volume is the IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 4.13-5**, Column 2) less the IID transfer program reductions for each year (**Table 4.13-5**, Columns 3-9). These volumes represent the supply available to IID at Imperial Dam.

The CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represent the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 150,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR (Fuscoe 2018b, p. 33).

IID Water Supply – Single Dry and Multiple Dry Years

When drought conditions exist within the IID water service area, as has been the case for the past decade or so, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID continues to rely on its entitlement for Colorado River water. Due to the priority of their water rights and other agreements, drought affecting Colorado River water supplies causes shortages for Arizona, Nevada and Mexico, not California or IID. Accordingly, the Net Available for Consumptive Use volumes in Table 4.13-5, Column 11 represent the water supply at Imperial Dam available for diversion by IID in a single-dry year and multiple-dry year scenarios (Fuscoe 2018b, p. 35).

Under CRWDA Inadvertent Overrun Payback Policy (IOPP), IID has some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order is permissible and IID has up to three years to pay water use above the annual water order. When Lake Mead's water level is at or below 1,125 feet or less on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report for Arizona, California, and Nevada (Decree Accounting Report), the IOPP prohibits additional overruns and requires that outstanding overruns are to be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, in the calendar year following publication of the overrun in the Decree Accounting report (Fuscoe 2018b, p. 35).

³ Letter Agreement for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 18, 2014
<http://www.iid.com/home/showdocument?id=9951>

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**TABLE 4.13-5
IID HISTORIC AND FORECAST NET CONSUMPTIVE USE FOR NORMAL YEAR,
SINGLE-DRY YEAR AND MULTIPLE-DRY YEAR WATER SUPPLY, 2003-2037, ET SEQ.**

IID Quantification and Transfers, Volumes in KAF at Imperial Dam ¹										
Col 1	2	3	4	5	6	7	8	9	10	11
Year	IID Priority 3(a)									
	IID 3(a) Quantified Amount	IID Reductions								IID Total Reduction (Σ Cols 3-9) ⁵
	1988 MWD Transfer ²	SDCWA Transfer	AAC Lining	Salton Sea Mitigation SDCWA Transfer ³	Intra- Priority ³ CVWD Transfer	MWD Transfer w\ Salton Sea Restoration ⁴	Misc. PPRs			
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.2	8.0	0.0	11.5	280.2	2566.7
2010	3,100	105.0	70.0	67.7	33.7	12.0	0.0	11.5	299.9	2545.6
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	246.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.8
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.32	2,480.9
2016	3,100	105	100	67.7	130	41	100	11.5	555.2	2,544.8
2017	3,100	105	100	67.7	150	45	91	11.5	570.2	2,529.8
2018	3,100	105	130	67.7	0	63	0	11.5	377.2	2,722.8
2019	3,100	105	160	67.7	0	68	0	11.5	412.2	2,687.8
2020	3,100	105	193	67.7	0	73	0	11.5	450.2	2,649.8
2021	3,100	105	205	67.7	0	78	0	11.5	467.2	2,632.8
2022	3,100	105	203	67.7	0	83	0	11.5	470.2	2,629.8
2023	3,100	105	200	67.7	0	88	0	11.5	472.2	2,627.8
2024	3,100	105	200	67.7	0	93	0	11.5	477.2	2,622.8
2025	3,100	105	200	67.7	0	98	0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
'29-37	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
'38-47 ⁶	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
'48-77 ⁷	3,100	105	200	67.7	0	50 ⁸	0	11.5	434.2	2,665.8

Source: Fusco 2018b, p. 24.

Note: Shaded columns represent volumes of water that may vary.

1. 2003 through 2015, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID use was not included in Exhibit B.
2. 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY; 2015 total amount of conserved water that will be available is 107,820 AF.
3. Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
4. This transfer is not likely given lack of progress on Salton Sea restoration as of 2016.
5. Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any), and Misc. PPRs. Amounts are independent of increases and reductions as allowed under the IOPP.
6. Assumes SDCWA does not elect termination in year 35.
7. Assumes SDCWA and IID mutually consent to renewal term of 30 years.
8. Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

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FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction

During construction of either the Full Build-out Scenario or the Phased CUP Scenario, water would be required for a variety of activities, including dust suppression, earth compaction, the creation of engineered fill, and concrete preparation. The Project proposes obtaining required water from the adjacent IID canal system.

Due to the proposed Project phasing under the development agreement, it is unknown which year within the first 10 years of the 40-year CUPs the Project will commence construction. It is possible that construction will commence in 2019 at one time, or over five phases over a 10-year period. Regardless of construction phasing, total construction and decommissioning water demands are anticipated to be 1,200 AF each. In order to provide a conservative assessment, the WSA assumed that all the CUPs will commence construction in 2019 at once to allow for the longest fully operational lifetime of the Project (39 years) (Fusco 2018b, p. 41). Decommissioning of the Project would occur immediately after the 40-year CUP term in year 41 and is assumed to take one year. Therefore, an amortized water demand of 116 AFY level for 41 years is assumed. This would result in a total water demand of 4,740 AF as shown in **Table 4.13-6** below (Fusco 2018b, p. 39).

**TABLE 4.13-6
AMORTIZED PROJECT WATER DEMAND 2019-2060**

Project Phase	Water Demand
Construction Water Usage – Year 1 (2019)	1,200 AF
Operational Water Usage – 60 AFY over 39 years (2020 – 2059)	2,340 AF
Decommissioning Water Usage – Year 41 (2060)	1,200 AF
Total Project Water Demands over 41 years	4,740 AF
Amortized Actual Water Demand – 4,740 AF over 41 years	116 AFY

Source: Fusco 2018b, p. 39.

Although this methodology over-estimates the Project's water demand, it allows the Imperial County Board of Supervisors to assess the water supply impacts of full construction of the Project at any time within the first 10 years of the CUP assumed approval date (2019) (Fusco 2018b, p. 39).

As of June 2017, IID's IWSP had a remaining balance of water equal to 23,800 AF available for new non-agricultural projects such as the Proposed Project (Fusco 2018b, p. 39). The estimated 1,200 AF (120 AF/Y divided over a ten-year construction period) required for Project construction is well below the existing and historic water-intensive agricultural uses on the solar field site parcels (approximately 4,618 AF/Y average between 2003 and 2017).⁴ Therefore, impacts to water supply during Project construction, under both the Full Build-out Scenario and Phased CUP Scenario, are considered **less than significant**.

Operation

The Project plans to secure water rights from the IID under the IID's Interim Water Supply Policy for Non-Agricultural Projects via a long-term Water Supply Agreement with a service pipe connection to an adjacent IID raw water canal. In the event this isn't feasible, the Project will truck water to the Project site for operational purposes or procure water from IID's applicable water policy/program at that time. As noted above, the IWSP sets aside 25,000 acre-feet (AF) of IID's Colorado River water supply to serve new non-agricultural projects. To date, a balance of 23,800 AF remains available under the IWSP for new non-

⁴ Historic water delivery data to Project site was provided by IID in February 2018.

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agricultural projects ensuring reasonably sufficient supplies for such water users (Fusco 2018b, p. 5). The Project is within IID's Imperial Unit and as such is eligible to receive water service (Fusco 2018b, p. 39).

The water for Project operation will be for domestic use and fire protection in addition to other uses. Water may also be used to wash the solar modules if determined to be beneficial to the Project. As shown below in **Table 4.13-7**, the Water Supply Assessment prepared for the Project anticipates a requirement of approximately 60 AF/Y during Project operations (Fusco 2018, p. 41). The operational water demand will be combined with water demands over construction and decommissioning phases of the Project to calculate an amortized water demand over the lifetime of the Project.

TABLE 4.13-7
OPERATION AND MAINTENANCE - ANNUAL OPERATIONAL WATER USAGE ESTIMATES

Source of Water Demand	Water Quantity Required (AF/Y)
Fire Protection	1.0
Sanitary Water	5.0
Panel Washing	14.0
Dust Suppression	35.0
Potable Water	5.0
Total	60.0

Source: Fusco 2018b, p. 41. AF/Y = Acre feet per year

Under the Full Build-out Scenario, operation and maintenance water use would not result in a significant decrease in water supply. The WSA estimates project operations and maintenance would require 60 AF/Y needed for Project operations (**Table 4.13-7**) and maintenance (2,340 AF total amortized over a 39-year operational period) (**Table 4.13-6**) needed for Project operations and maintenance is much less than the needs of existing and historic agricultural uses of an average of 4,618 AF/Y (average between 2003 and 2017).³ The estimated water demand inclusive of Project construction, operation and maintenance, and decommissioning is estimated at 116 AF/Y (**Table 4.13-6**), representing a 97 percent reduction from the water delivered for agricultural uses on the proposed solar field site parcels (Fusco 2018b, p. 42). Therefore, impacts to water supply during operations and maintenance, under both the Full Build-out Scenario and Phased CUP Scenario, are considered **less than significant**.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities and would occur immediately after the 40-year CUP term in year 41. Decommissioning is assumed to take one year. As such, demand for water supply during decommissioning is anticipated to be the similar to demand experienced during construction (1,200 AF) (**Table 4.13-6**). Therefore, impacts associated with water supply during decommissioning are anticipated to be **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario. Reclamation water demands are estimated to be similar to existing and historic agricultural uses (i.e. average of 4,618 AF/Y).

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

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4.13.3.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting and geographic scope for water service is the IID water service area, which includes nine cities and approximately 500,000 acres of agricultural, municipal and industrial use (IID 2018).

Other proposed, approved and reasonably foreseeable projects, identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, are located within the IID Canal system and seek water supply on an individual project basis.

As discussed in the analysis under Impact 4.13.6, above, the proposed Project would construct, operate and decommission an on-site, private water treatment system for all CUP Areas where an O&M Building is included. As such, the proposed Project would not impact a public water treatment system and therefore would not create a cumulatively considerable impact to a public water treatment system. Likewise, the proposed Project would not use groundwater as a water supply source or impact groundwater recharge. Therefore, the proposed Project would not create a cumulatively considerable impact to groundwater.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Water Supply Impacts

Impact 4.13.8 Development of the proposed Project would require use of surface water from the IID canal system. Requests for water supply are approved by the IID on a project-by-project basis. The proposed Project would require less water than current agricultural uses on the solar field site parcels. Therefore, the Project's contribution to cumulative water supply impacts is considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction, Operation, and Decommissioning/Reclamation

As discussed under Impact 4.13.6, the Project would need approximately 1,200 AF of water for construction of the Full Build-out Scenario, and 60 AF/Y for the Full Build-out Scenario during operation. At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Project decommissioning activities will also require approximately 1,200 AF of water. When returned to agricultural use, the water rights will be given back to the landowners of each parcel through a trust maintained with the IID.

Water for the Project construction and decommissioning would be obtained from the IID through a temporary water use permit that grants water usage on a project-by-project basis, subject to analysis of availability. Demand for water service for existing and historical agricultural uses is estimated at 97 percent greater than would be required for the Proposed Project (Fusco 2018b, p. 42). As such, impacts related to water supply for the proposed Project site are not expected to combine with similar impacts of approved, proposed, and reasonably foreseeable projects identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. Many of the other projects on the cumulative project list are solar development projects that will also use less water than their current use which is typically active agriculture. Therefore, under both the Full Build-out Scenario and the Phased CUP Scenario, the Project, combined with other proposed, approved and reasonably foreseeable projects in the regional would have a **less than cumulatively considerable impact** on water entitlements and

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would not require new water supply entitlements to accommodate construction, operation or decommissioning. Likewise, the Project's contribution to cumulative impacts to water supply would be **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario during project construction, operation and decommissioning. As each CUP is reclaimed, water rights will be given back to the landowners of each parcel through a trust maintained with the IID.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.4 WASTEWATER SERVICE

4.13.4.1 REGULATORY FRAMEWORK

A. FEDERAL

Clean Water Act

The Clean Water Act (CWA) was adopted in 1972 to protect the waters of the nation. The United States Environmental Protection Agency (EPA) and corresponding state agencies regulate public wastewater systems to ensure compliance with the CWA. The NPDES Permit Program was instituted to implement the CWA regulatory standards. All point sources (e.g., a discreet conveyance such as a pipe or ditch) discharging pollutants into Waters of the United States (WUS) are required to obtain an NPDES permit under the CWA. Facilities discharging directly to surface waters must also obtain an NPDES permit. The proposed Project will require an NPDES permit in association with both construction and operation. The NPDES permit is described in further detail in Section 4.11, Hydrology and Water Quality, under the Federal and State Regulatory Framework.

B. STATE

Porter-Cologne Water Quality Act

The California Legislature enacted the Porter-Cologne Water Quality Control Act in 1969 to preserve, enhance, and restore the quality of the State's water resources. The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) were established by the Act as the primary state agencies charged with controlling water quality in California. The Porter-Cologne Water Quality Control Act establishes water quality policy, enforces surface water and groundwater quality standards, and regulates point and non-point source pollutants. The Act also authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning including groundwater and surface water management programs and the control and use of recycled water.

State Water Resources Control Board

The SWRCB has dual authority to allocate and protect water. This two-fold responsibility enables the SWRCB to provide comprehensive protection for California's waters. Nine RWQCBs dispersed throughout California carry out the duties of the SWRCB. The RWQCBs develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the state's waters.

The proposed Project is within the jurisdiction of the Colorado River Basin Regional Water Quality Control Board, Region 7 (RWQCB-7). The RWQCB-7 regulates the discharge of waste to surface waters (rivers, streams, lakes, wetlands, and the Pacific Ocean) as well as to storm drains, to the ground surface, and to groundwater.

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Assembly Bill 885 - California Onsite Wastewater Treatment Systems

Assembly Bill (AB) 885 was signed into law in September 2000. AB 885 requires the SWRCB to develop statewide regulations for the permitting and operation of on-site wastewater treatment systems, better known as septic systems. These regulations are developed through consultation with the Department of Health Services (DHS), California Conference of Directors of Environmental Health (CCDEH), California Coastal Commission (CCC), counties, cities, and other interested parties. Individual disposal systems that use subsurface disposal are all included under AB 885 (Imperial County 2011, p. 3.11-5). The Project proposes an Onsite Wastewater Treatment System (OWTS).

C. LOCAL

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs that pertain to wastewater or on-site septic systems that are directly applicable to the proposed Project.

Imperial County Public Health Department, Section of Environmental Health & Consumer Protection Services

The Imperial County Public Health Department, Section of Environmental Health & Consumer Protection Services, is responsible for issuance of sanitation permits for private on-site sewage disposal systems in the County. Coordination of site design for proposed projects must occur with the Public Health Department to obtain final permits. The Project's proposed on-site septic system(s) and leach field(s) will be subject to review by the County Public Health Department.

Imperial County Land Use Ordinance, Division 10 Building, Grading and Sewage Regulations

Chapter 13, Sanitation Permits, of the Imperial County Land Use Ordinance, Division 10 Building, Grading and Sewage Regulations, regulates the construction, relocation, and alteration of sewage disposal systems in the unincorporated areas of Imperial County. Standards for such systems described in this chapter must be met for a permit to be issued by the County Public Health Department. The Project's proposed septic system(s) and leach field(s) will be subject to these standards.

4.13.4.2 EXISTING SETTING

Currently, as an active agricultural crop area, the Project site is not connected to a municipal sanitary sewer system and no wastewater is currently generated on the Project site.

4.13.4.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact to wastewater if it would:

- a) Require or result in the relocation of construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects; or
- b) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity within the collection system to serve the project's projected demand in addition to the provider's existing commitments.

B. ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

Note that one CEQA significance criterion was scoped out as part of the Initial Study. Criteria “b” was eliminated from further consideration because the Project wastewater generated from sanitary facilities such as sinks and toilets in the O&M buildings will be sent to an on-site sanitary waste septic system and leach field to be installed in compliance with standards established by Imperial County Environmental Health Services. Thus, no impact to a wastewater treatment provider would occur.

C. METHODOLOGY

Evaluation of potential wastewater impacts of the proposed Project were based on review of the Project Area, as well as the Preliminary Geotechnical and GeoHazards Report prepared for the proposed Project (LandMark 2018). The Project-specific geotechnical report is provided as **Appendix E** on the attached CD of Technical Appendices to this EIR.

D. IMPACTS AND MITIGATION MEASURES

Construction of New Wastewater Treatment and Wastewater Treatment Infrastructure

Impact 4.13.9 The Project area is not currently served by a wastewater system. On-site septic system(s) and leach field(s) are proposed for each CUP where an O&M Building will be constructed. Near-surface soils are considered good in supporting an on-site septic systems and leach fields for wastewater disposal. Therefore, impacts to wastewater treatment and wastewater conveyance infrastructure are considered **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS WITH AN O&M BUILDING

Construction

During construction, a temporary septic system for wastewater or a temporary storage holding tank would be utilized for wastewater and sewage at the solar field site parcels. Portable toilets would also be used throughout the solar field site parcels as needed. **No impact** would occur relating to wastewater systems during Project construction under both the Full Build-out Scenario and the Phased CUP Scenario.

Operation

During operations and maintenance of the Project, wastewater would be generated and collected from sinks and toilets in the O&M building(s). The Project Area is not currently served by a wastewater system, and as such the Project proposes development of on-site septic system(s) and leach field(s) to serve each CUP that has an O&M Building Complex. The Project will obtain a permit from the Imperial County Public Health Department to construct and operate septic system(s) and leach field(s) for the O&M building(s). Alternatively, wastewater will be treated and discharged pursuant to an operation and discharge permit from the Regional Water Quality Control Board (RWQCB).

On-site wastewater treatment systems (septic systems) are required to comply with the SWRCB’s Water Quality Control Policy for siting, design, operation, and maintenance of onsite wastewater treatment systems (OWTS Policy). In addition to State requirements, siting and design must also meet local regulatory requirements as described in Title 9 of Imperial County’s Codified Ordinance.

For non-residential facilities such as the proposed Project, wastewater facilities must also be designed in accordance with California Plumbing Code and Environmental Protection Agency requirements. The proposed wastewater system will be required to submit a wastewater treatment system application to

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the Imperial County Public Health Department, Division of Environmental Health for review and approval prior to construction. The Department's review will ensure that the proposed system is designed and constructed consistent with all applicable codes and standards. Alternatively, wastewater may be treated and discharged pursuant to an operation and discharge permit from the RWQCB (refer to Impact 4.6.6 and associated analysis in Section 4.6, Geology and Soils).

According to the Preliminary Geotechnical and GeoHazards Report prepared for the proposed Project, near-surface soils generally consist of silty clays and clays having a low infiltration rate. The near-surface soils are considered good in supporting an on-site septic systems and leach fields for wastewater disposal. Groundwater in the Project vicinity is typically encountered at a depth of 5 to 10 feet below ground surface (LandMark 2018, p. 3).

Site-specific studies will be required during the final design phase and prior to the issuance of building permits for each O&M building proposing the use of an on-site wastewater treatment system to determine that County Environmental Health Standards are met with regard to soil percolation rates and separation of leach fields from groundwater. In addition, any on-site wastewater treatment system must be designed and installed in compliance with all applicable provisions of the Imperial County Code, including the Plumbing Code and ordinances governing Regulation of Sewage Disposal Systems and Sanitation Permits, as set forth in Title 9, Division 10, Chapters 4, 12 and 13, and the Imperial County Uniform Policy and Method for Soils Evaluation, Testing and Reporting (Relative to Applications for Private Sewage System Permits). Following compliance with the findings of the site-specific study and local and state requirements, impacts with regard to supporting an on-site wastewater treatment system during Project operation are considered **less than significant** on all CUPs where an O&M Building is proposed under both the Full Build-out Scenario and the Phased CUP Scenario (refer also to analysis in Section 4.6, Geology and Soils).

Decommissioning/Reclamation

Temporary septic systems or holding tanks and portable toilets may be used at O&M building(s) during decommissioning to provide needed sanitary facilities for on-site workers. However, temporary and portable restroom facilities would be self-contained and would not release wastewater or require soils capable of supporting on-site wastewater treatment systems. Therefore, **no impact** would occur during decommissioning of the O&M buildings in regard to soil capability to support septic systems under both the Full Build-out Scenario and the Phased CUP Scenario. Likewise, no impacts would occur following reclamation for both the Full Build-out Scenario and the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

A. CUMULATIVE SETTING

Based on the absence of municipal wastewater infrastructure, the cumulative setting and geographic scope for wastewater service is limited to the Project Area.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Wastewater Impacts

Impact 4.13.10 Development of the proposed Project would generate demand for on-site wastewater treatment. Septic systems and leach fields are proposed at individual CUP Areas where an O&M building will be constructed to provide wastewater service. Therefore, cumulative wastewater impacts are considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction

The Project is proposed in a portion of the County that is characterized by agriculture and solar development. As such, no municipal wastewater infrastructure is located in the Project Area. Because the Project septic system(s)/leach field(s) would be independent of each other, and not connected to a municipal system, no cumulative impact would occur in association with other proposed, approved and reasonably foreseeable projects in the region. During construction, the Project proposes use of portable toilets throughout the Project site. **No cumulative impact** to wastewater systems would occur for either the Full Buildout Scenario or the Phased CUP Scenario.

Operation

As discussed under Impact 4.13.9, the solar field site parcels are not currently served by municipal wastewater service. Sanitary waste generated during Project operations would be collected and sent to on-site sanitary waste septic system(s) and leach field(s). Alternatively, the Project's wastewater will be treated and discharged pursuant to an operation and discharge permit from the RWQCB (refer to Impact 4.6.6 and associated analysis in Section 4.6, Geology and Soils).

Because of the separate function of the on-site septic system, and the lack of municipal infrastructure in the area, implementation of the Project would not contribute to a cumulative impact to wastewater facilities. The proposed wastewater facilities would be reviewed by the Imperial County Environmental Health Department to ensure that each facility is properly designed and that all wastewater requirements are satisfied. Therefore, cumulative impacts to wastewater service are **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be reclaimed to pre-Project soil conditions, which would not require provision of wastewater conveyance or treatment. Further, decommissioning of the on-site septic system would not have an impact on surrounding infrastructure as it functions independently. Portable toilets would be used throughout the Project Area as needed. Thus, impacts to wastewater treatment and infrastructure would be **less than cumulatively considerable** during decommissioning under both the Full Build-out Scenario and the Phased CUP Scenario. No wastewater systems would be needed as part of reclamation.

Mitigation Measures

None Required.

Significance After Mitigation

Not applicable.

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4.13.5 SOLID WASTE

4.13.5.1 REGULATORY FRAMEWORK

A. STATE

California Integrated Waste Management Act

The State of California Integrated Waste Management Act (CIWMA) of 1989 (California Assembly Bill [AB] 939), which is administered by the Department of Resources Recycling and Recovery (CalRecycle), requires each city and county to develop a source reduction and recycling element (SRRE) of an integrated waste management plan containing specified components, including a source reduction component, a recycling component, and a composting component. CalRecycle summarizes waste management problems specific to each county and provides an overview of actions that would be taken to achieve the SRRE implementation schedule (Pub. Res. Code § 41780). Under the SRRE, counties are required to demonstrate how they intend to achieve the mandated diversion goals through the implementation of various programs. The SRRE was approved by CalRecycle (formerly California Integrated Waste Management Board [CIWMB]) on November 17, 1993 and adopted in December 1993. The goal of the solid waste management efforts is not just to increase recycling, but to decrease the amount of waste entering landfills. With certain exceptions, the SRRE of that plan is required to divert a minimum 50 percent of all solid waste from landfill disposal, through source reduction, recycling, and composting activities.

B. LOCAL

Countywide Integrated Waste Management Plan for Imperial County

All California counties are required to prepare and submit to CalRecycle a Countywide Integrated Waste Management Plan (CIWMP). The CIWMP is to include all SRREs, all Household Hazardous Waste Elements, a Countywide Siting Element, all Non-disposal Facility Elements, all applicable regional SRREs, Household Hazardous Waste Elements, and an applicable Regional Siting Element (if regional agencies have been formed). Imperial County's CIWMP was approved by CalRecycle in May of 2000. The County of Imperial agreed to implement the following programs to meet the required diversion goals:

- | | |
|-----------------------------|------------------------------------|
| 1. Agriculture Plastic | 5. Commercial Source and Recycling |
| 2. Compost Operation | 6. Construction and Demolition |
| 3. Procurement Policy | 7. School Recycling |
| 4. Christmas Tree Diversion | 8. County Waste Reduction Policy |

County of Imperial Solid Waste Local Enforcement Agency (LEA)

The Imperial County Public Health Department provides details regarding solid waste handling. Enforcement of federal, state, and local laws and regulations within the jurisdiction of the County of Imperial protect public health safety and the environment by ensuring safe and proper solid waste management practices. Solid waste includes household trash and garbage, construction and demolition debris, commercial refuse, sludge, ash, discarded appliances and vehicles, manure, landscape clippings, and other discarded wastes (ICPHD 2019).

State law (Public Resources Code) requires every local jurisdiction to designate a solid waste Local Enforcement Agency (LEA), which is certified by the California Department of Resources Recycling and Recovery (Cal Recycle), to enforce federal and state laws and regulations for safe and proper handling of solid waste (ICPHD 2019).

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Responsibilities of the LEA include accepting and processing all new and revised solid waste facility permits, issuing permits, and conducting regular inspections of permitted facilities. Along with inspecting solid waste landfills, the LEA conducts inspections on transfer/processing facilities and operations, construction and demolition sites, and composting operations. The LEA also inspects and monitors closed, illegal, inactive and abandoned solid waste disposal sites, responds to complaints of illegal disposal of solid waste and conducts waste hauler inspections (ICPHD 2019).

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs pertaining to solid waste that are applicable to the proposed Project.

4.13.5.2 EXISTING SETTING

The Project site currently consist of agricultural land that is void of structures with the primary exception of IID irrigation facilities. As such, the Project site does not currently generate trash and therefore is not served by a solid waste disposal provider. The County has permitted nine landfills. The closest landfill is the Calexico Solid Waste Site (SWS) located at 133 West Highway 98 in Calexico, CA. This landfill is approximately 8 miles to the southeast. The second closest is the Imperial SWS located at 1705 West Worthington Road, Imperial, CA 92251. This landfill is approximately 12 miles to the north. The County has contracts with private collection companies (i.e. Republic Services) for solid waste pick-up.

As of the most recently available information on the CalRecycle website, the Calexico SWS had a remaining capacity of 1,808,802 cubic yards as of May 1, 2011. This facility accepts construction and demolition waste, agricultural waste and municipal waste. The facility accepts 150 tons of solid waste per day. The cease operation date is listed as November 11, 2077 (Calrecycle 2018).

The Imperial SWS had a remaining capacity of 180,000 cubic yards as of October 1, 2012. This facility accepts construction and demolition waste as well as municipal waste. The facility accepts 19 tons of solid waste per day. The cease operation date is listed as March 1, 2019 (Calrecycle 2018).

4.13.5.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance for Utilities and Service Systems criteria “d” and “e.” The proposed Project would have a significant impact to solid waste if it would:

- d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

In addition, the following County standards were analyzed to determine significant impacts. Based on these standards, the Project would have a significant impact if it would:

- a) Result in the need for new systems or supplies, or a substantial expansion or alteration to solid waste materials recovery or disposal; or
- b) Substantially affect the County’s ability to comply with solid waste source reduction programs.

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B. METHODOLOGY

Evaluation of potential solid waste impacts is based on similar projects, information provided by the Applicant, and research conducted on the CalRecycle website.

C. IMPACTS AND MITIGATION MEASURES

Generate Solid Waste in Excess of Standards or in Excess of Capacity of Local Infrastructure/Comply with Statutes and Regulations Related to Solid Waste

Impact 4.13.11 Solid waste would be generated during construction, operation and maintenance, and decommissioning of the proposed Project. Solid waste materials would be disposed of using a locally-licensed waste hauling service and disposed of at a local landfill with sufficient capacity to accept this waste. Thus, a **less than significant impact** is identified for this issue under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction/Decommissioning

Minor demolition would occur during construction to remove the private farm canals and drains (Ferrara pers. comm., 2018). Small amounts of trash would be generated during construction from packaging materials delivered to the Project site. If any solar modules are broken or damaged during construction, Drew Solar will collect and recycle or otherwise dispose of the modules in accordance with the Federal Resource Conservation and Recovery Act (RCRA).

Construction and demolition related waste would be transported to a local landfill authorized to accept this waste for disposal or an appropriate recycling center authorized to accept recyclable materials. Disposal of construction and demolition waste is required to comply with the State and County requirements.

Some hazardous waste (waste oil and lubricants, spill clean-ups, etc.) would be generated in association with Project construction and decommissioning. As part of the decommissioning process, Drew Solar will collect and recycle the solar modules and batteries or otherwise dispose of them in accordance with RCRA (Ferrara pers. comm., 2018).

The Project will be required to comply with State laws and County Ordinance restrictions which regulate and control hazardous materials. All hazardous materials onsite will be disposed of in accordance with the law, which may include recycling (refer to analysis in Section 4.10, Hazards and Hazardous Materials). Therefore, a **less than significant impact** regarding solid waste service and landfill capacity is anticipated to occur during Project construction and decommissioning for both the Full Build-out Scenario and Phased CUP Scenario.

Operation

Once Project operations begin, small amounts of trash are likely to be generated by up to six full-time staff dispersed throughout the Project site if O&M building(s) are constructed. A contract would be initiated with a local waste provider for pick-up and disposal. Waste generated during operations would be recycled where possible and disposed of at a local landfill.

Very little hazardous waste (waste oil and lubricants, spill clean-ups, etc.) is expected to be generated during Project operation. If during operations, any solar modules are broken, damaged or degraded, they would be recycled or otherwise disposed of in accordance with RCRA (Ferrara pers. comm., 2018). The same would apply for degraded batteries.

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The Project will be required to comply with State laws and County Ordinance restrictions which regulate and control hazardous materials. All hazardous materials onsite will be disposed of in accordance with the law, which may include recycling (refer to analysis in Section 4.10, Hazards and Hazardous Materials).

Therefore, a **less than significant impact** regarding solid waste service and landfill capacity is anticipated to occur during Project operation under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.5.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope for the cumulative setting for solid waste is the service area of the solid waste contractor chosen by each individual CUP owner or operator. For conservative purposes, this service area is assumed in this analysis to encompass the entire County of Imperial. As previously described in the Existing Setting, the County has permitted nine landfills and contracts with private collection companies for solid waste pick-up. Other proposed, approved and reasonably foreseeable projects in the region are identified in Table 3.0-1 in Chapter 3.0, Introduction to the Analysis and Assumptions Used. All of these projects are located within the cumulative setting for solid waste.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Solid Waste in Excess of Standards or in Excess of Capacity of Local Infrastructure/Comply with Statutes and Regulations Related to Solid Waste

Impact 4.13.12 Implementation of the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the County of Imperial, would result in cumulative demand for solid waste service and landfill capacity. However, the proposed Project would not generate a substantial quantity of waste, and disposal service is available to serve the Project. Therefore, cumulative solid waste impacts are considered **less than cumulatively considerable impact** under both the Full Build-out Scenario and Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO

Construction

During construction, the proposed Project would generate some demolition materials from removal of the private farm canals and drains as well as construction waste. Cumulative project development in Imperial County, as identified in Table 3.0-1, would generate an additional demand for solid waste pick-up and disposal services. Solid waste disposal services are provided under contract with private waste hauling companies. Each CUP Area owner/operator of within the Project Area would contract with a private waste hauling/disposal company. Accordingly, each private waste hauling company operator may need to add additional staff, trucks and refuse and recycling bins to accommodate the increase in demand.

As discussed in the Existing Setting, the two local landfills closest to the Project have remaining capacity. While the Imperial SWS would likely close in 2019, the Calxico SWS has remaining capacity through year 2077 to accommodate Project construction demolition and construction waste as well as serve cumulative development identified in Table 3.0-1 (Calrecycle 2018).

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Because no major demolition or waste would be generated during construction, the proposed Project would have a **less than cumulatively** considerable contribution to the cumulative solid waste impacts under both the Full Build-out Scenario and the Phased CUP Scenario. Because sites chosen for solar field development are typically desert or agricultural land void of structures, solar energy projects are not considered large waste generators and would not substantially increase demand for solid waste services or disposal. Therefore, under both the Full Build-out Scenario and Phased CUP Scenario, construction impacts to solid waste service and landfill capacity would be **less than cumulatively considerable**.

Operation

Once in operation, trash and waste generation would be minimal based on the small number of employees and lack of waste generating activities at each CUP. Solar energy projects do not generate large volumes of waste (based on the small number of employees and nature of the operation) and would not substantially increase demand for solid waste services or disposal. Therefore, it is anticipated that operational waste generation at other cumulative projects in the services area would also be minimal.

As discussed in the Existing Setting, the Imperial SWS would likely close in 2019. However, the Calexico SWS has remaining capacity through Year 2077 (Calrecycle 2018) to accommodate any Project operational waste as well as cumulative development identified in Table 3.0-1.

Therefore, during operation, the proposed Project would have a **less than cumulatively considerable** contribution to the cumulative solid waste impacts under both the Full Build-out Scenario and Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities and are not anticipated to last as long as the construction activities. Similar to construction, decommissioning would result in the generation of recyclable and non-recyclable solid waste materials. Materials requiring disposal during decommissioning include steel, copper, and concrete. These materials will be recycled/disposed of according to a decommissioning/reclamation plan subject to approval by the County. The solar modules and batteries will be recycled or otherwise disposed of in accordance with RCRA (Ferrara, pers. comm., 2018).

Therefore, during Project decommissioning, cumulative impacts to solid waste service and landfill capacity are anticipated to be **less than cumulatively considerable** under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.6 ELECTRICITY

4.13.6.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County General Plan

The Imperial County General Plan Land Use Element contains one goal and one objective that relate to electricity associated with the proposed Project. **Table 4.13-8** provides a consistency analysis of the applicable Imperial County General Plan goal and objective as they relate to the proposed Project. While this EIR analyzes the Project’s consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.13-6
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - ELECTRICITY**

General Plan Goal and Objective	Consistent with General Plan?	Analysis
LAND USE ELEMENT		
Public Facilities		
<p>Goal 8 Coordinate local land use planning activities among all local jurisdictions and state and federal agencies.</p>	<p>Yes</p>	<p>The proposed Project is being planned and designed in coordination with the County of Imperial as well as state and federal agencies as appropriate. Examples include but are not limited to the California Department of Fish and Wildlife, IID Water, IID Energy, Imperial County Planning and Development Services Department, Imperial County Public Works Department, Imperial County Air Pollution Control District, local landowners, and other solar project developers. Therefore, the proposed Project is consistent with this goal under both the Full Build-out Scenario and the Phased CUP Scenario.</p>

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**TABLE 4.13-6
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - ELECTRICITY**

General Plan Goal and Objective	Consistent with General Plan?	Analysis
<p>Objective 8.8 Ensure that the siting of future facilities for the transmission of electricity, gas, and telecommunications is compatible with the environment and County regulation.</p>	<p align="center">Yes</p>	<p>The proposed Project is compatible with the environment as evidenced by the presence of existing electrical infrastructure (i.e. Centinela Solar Gen-Tie line). The proposed Project is an allowed use on parcels designated for “Agricultural” uses and zoned either A-2 (Agricultural General), A-2-R (General Agricultural Rural Zone), or A-3 (Heavy Agriculture) with approval of a CUP. The Applicant has applied for six CUPs to develop the proposed solar energy generation and storage facilities. In addition, the Applicant has filed an application for a General Plan Amendment (GPA) for amendment of the Renewable Energy & Transmission Element to create an Island Overlay; a Zone Change to add the RE Overlay Zone to the Project site; and a variance because the proposed Gen-Tie structures would reach over 120 feet in height. Therefore, the proposed Project is consistent with this objective under both the Full Build-out Scenario and the Phased CUP Scenario.</p>

4.13.6.2 EXISTING SETTING

IID provides the primary electrical service for residential, commercial, and industrial customers in the vast majority of Imperial County and the Coachella Valley area of Riverside County. A small area in the northeastern portion of the County is served by Southern California Edison. IID currently provides electricity to the Project area. There are several existing solar energy generation facilities in the Project vicinity, as well as transmission infrastructure connecting into the California electricity grid. Most immediately, the Drew Switchyard is located directly south across SR 98 from the southern boundary of the Project site, and the Centinela Gen-Tie infrastructure is located immediate east of the eastern border of the Project site. Both of these facilities feed into SDG&E’s IIV Substation.

4.13.6.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact to electrical service if it would:

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- a) Require or result in the relocation or construction of new or expanded electric power facilities, the construction of which could cause significant environmental effects.

B. METHODOLOGY

The analysis of impacts to electricity and electrical infrastructure was based on information provided by the Applicant and correspondence with the IID.

C. IMPACTS AND MITIGATION MEASURES

Relocation or Construction of New or Expanded Electric Power Facilities

Impact 4.13.13 The proposed Project would increase the demand for electrical services from IID to operate the O&M building(s) and keeping inverters warm during the evening hours. Within its on-site disturbance area, the Project includes a substation feedback and transmission interconnection coordinated with IID through an Affected Systems Agreement and Back-feed and Station Power Service Agreement. No permanent expansion of IID electrical infrastructure is necessary for the proposed Project. Thus, the proposed Project's impacts to electricity and electrical infrastructure are **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction, Operation and Decommissioning

The Project will likely use temporary diesel generator power for construction and decommissioning work where on-site electrical lines are not available. At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions.

During operation, the Project would need to collect electricity from the various CUPs through the on-site collector lines. Electricity conveyed through the onsite collector lines would eventually be transmitted through the Centinela Solar Farm Gen-Tie. The collector lines and Gen-Tie would include both electric line crossings of IID facilities and crossings of Caltrans facilities that would be subject to agreements from these entities. Project crossings would not interfere with the function or purpose of the IID or Caltrans facilities.

IID does not have electric infrastructure in place to provide electric service to operate the proposed Project. However, no new electric infrastructure is needed because the Project will generate its own power supply during the day. The energy storage component could provide for nighttime energy demands (such as security lighting). Alternatively, the Project may import energy from the grid to provide on-site energy needs in the evening hours (Ferrara, pers. comm., 2018). Therefore, no relocation or construction of new or expanded IID infrastructure will be required to accommodate the proposed Project.

Any electricity required during Project decommissioning would likely be provided by temporary portable diesel generators. Therefore, construction, operation and maintenance-related impacts on electricity and electrical infrastructure are **less than significant** under both the Full Build-out Scenario and Phased CUP Scenario.

Mitigation Measures

None Required.

Significance After Mitigation

Not Applicable.

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4.13.6.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for electrical service is IID's service area, which encompasses almost all of Imperial County. Only a small portion of the northeast corner of the County receives service from Southern California Edison. The proposed Project and all proposed, approved and reasonably foreseeable projects in the region are identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis, are within IID's service area.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Electric Service

Impact 4.13.14 Implementation of the proposed Project, in combination with proposed, approved and reasonably foreseeable projects in the County of Imperial, would result in a minimal increase in the current use of IID electricity and a substantial increase in solar energy generation. The Project does not require the relocation or construction of new or expanded IID facilities. Therefore, cumulative impacts to electrical service are considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ ALL CUP AREAS

Construction

The proposed Project, in combination with the other proposed, approved and reasonably foreseeable projects in the region identified in Table 3.0-1, would obtain power from propane and diesel generators where on-site electrical lines are not available to power construction trailers and construction and decommissioning work.

The Proposed Project, as well as the projects identified in Table 3.0-1, may contribute to electricity demands in IID's service area during construction. However, once operational, the proposed Project would also generate a substantial amount of electricity for sale to the electrical grid. Therefore, the proposed Project would result in a beneficial contribution to electrical service through the addition of electricity to the IID grid. Other similar solar energy generation projects would also contribute additional electricity to the IID grid. Some cumulative projects may result in the need for relocation or construction of new or expanded IID facilities which would be addressed on a project-by-project basis. However, the Project does not require the relocation or construction of new or expanded IID facilities.

Thus, the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the region, in the County of Imperial would generate electricity, providing additional power to the IID electrical grid. Therefore, cumulative impacts to electric service during Project construction are considered **less than cumulatively considerable** under both the Full Build-out Scenario and by each individual CUP Area as proposed under the Phased CUP Scenario.

Operation

IID does not have electric infrastructure in place to provide electric service to operate the proposed Project or some of the projects identified in Table 3.0-1. However, no electrical service infrastructure is needed because the Project and the solar projects identified in Table 3.0-1 will generate their own power supply during the day. The energy storage component could provide for nighttime energy demands (such as security lighting). Alternatively, the Project may import energy from the grid to provide on-site energy

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needs in the evening hours (Ferrara, pers. comm., 2018). Therefore, no relocation or construction of new or expanded IID electric infrastructure will be required to accommodate the proposed Project. The facilities are powered through the proposed Project's design and designs of the solar projects identified in Table 3.0-1.

In addition, during operation, the proposed Full Build-out Scenario would contribute approximately 100 MW to the IID electrical grid. Likewise, the amount of electricity required to operate the Project under both the Full Build-out Scenario or by individual CUP Area under the Phased CUP Scenario would be more than off-set by the 100 MW the Project would generate.

While the proposed Project, as well as the projects identified in Table 3.0-1, will contribute to electricity demands in IID's service area, these solar energy generation facilities would also generate a substantial amount of electricity for sale to the electrical grid. Therefore, the proposed Project, and each individual solar energy generation facility identified in Table 3.0-1, would result in a beneficial contribution to electrical service through the addition of electricity to the IID grid.

Overall, the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the County of Imperial would generate electricity, providing additional power to the IID electrical grid without relocating or constructing new or expanded IID electric infrastructure. Therefore, cumulative impacts to electric service during Project operation are considered **less than cumulatively considerable** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, Project electricity components would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Therefore, cumulative impacts to electricity service during Project decommissioning are considered **less than cumulatively considerable** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario. Following reclamation, no impact with regard to relocating or constructing new or expanded IID electric infrastructure would occur.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.7 TELECOMMUNICATIONS

4.13.7.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs pertaining to telecommunications that are applicable to the Proposed Project.

4.13.7.2 EXISTING SETTING

The solar field site parcels currently consist of IID-owned agricultural land that is void of structures with the exception of IID irrigation facilities. As such, a telecommunications provider does not currently serve the Project site. Several internet and telephone companies provide service in Imperial County. The Applicant has indicated that AT&T would serve the project (Ferrara, pers. comm., 2018).

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4.13.7.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance for Utilities and Service Systems. The Proposed Project would have a significant impact to telecommunication service if it would:

- a) Require or result in the relocation or construction of new or expanded telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

B. METHODOLOGY

The analysis of impacts to telecommunications (telephone and internet) service was based on information provided by the Applicant.

C. IMPACTS AND MITIGATION MEASURES

Impacts to Telecommunications Facilities

Impact 4.13.15 The proposed Project and surrounding area is not currently served by telecommunications facilities. The proposed Project would increase the demand for telephone and internet services. AT&T is anticipated to provide service to the Project as needed in accordance with all applicable fees. Therefore, impacts to telecommunication facilities are considered **less than significant** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction, Operation

During construction and operation, the Project is anticipated to utilize telephone and internet services provided by AT&T. The Applicant would be responsible for contacting AT&T to request service and pay all applicable fees. Telephone and internet service is provided and approved on a project-by-project basis. Therefore, impacts to telecommunications facilities are considered **less than significant** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario.

Decommissioning/Reclamation

At the end of the Project's operational life, the components of the Project would be removed and decommissioned and the solar field site parcels / CUP Areas would be restored to agricultural use (i.e. pre-Project soil conditions) and telephone and internet services would no longer be needed. Therefore, during Project decommissioning, impacts to telecommunications facilities would be anticipated to be **less than significant** under both the Full Build-out Scenario and as proposed under the Phased CUP Scenario. Neither telephone or internet service would be required once the Project site is reclaimed.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.7.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for telephone and internet services is AT&T's service area in Imperial County. All of the cumulative projects identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis, within Imperial County are within AT&T's service area. However, other projects within the cumulative projects list may be served by other private companies offering high speed internet and telephone.

B. CUMULATIVE IMPACTS

Cumulative Impacts to Telecommunications Facilities

Impact 4.13.16 Implementation of the Proposed Project, in combination with other existing, proposed, approved and reasonably foreseeable projects in the region, would result in cumulative demands to telephone and internet service. Telecommunication service providers procure service to individual development projects on an as-needed basis. Therefore, cumulative impacts to telecommunication facilities are considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUP AREAS

Construction, Operation

AT&T as well as other internet and telephone service providers would provide service to individual projects on an as-needed basis. Infrastructure can be built or extended to service new projects as necessary. Therefore, the proposed Project's contribution to cumulative impacts to telephone and internet services is considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario. Likewise, because service can be provided on an as-needed basis, cumulative impacts to telecommunications services are considered **less than cumulatively considerable** under both the Full Build-out Scenario and the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP Areas would be restored to agricultural use (i.e. to pre-Project soil conditions) and telephone and internet services would no longer be needed. Therefore, during decommissioning of the Project, cumulative impacts to telecommunications facilities would be anticipated to be **less than cumulatively considerable** under both the Full Build-out Scenario and by each individual CUP Area as proposed under the Phased CUP Scenario. Neither telephone or internet service would be required once the Project site is reclaimed.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

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