# SECTION 4.9 AGRICULTURAL RESOURCES

This section provides a background discussion of the regulatory framework and the affected environment with respect to agricultural resources. The regulatory framework discussion focuses on the federal, state, and local regulations. The affected environment discussion describes the existing conditions of the Project site, important farmlands categories, zoning, agricultural soil classifications, Imperial County agricultural conversion, on-site soils, and Williamson Act lands.

This section also discloses the potential impacts on agricultural resources based on the Project site's existing state as desert lands or idle farmland. This section is based on the following resources: the Imperial County General Plan Agriculture Element; the Imperial County General Plan Environmental Impact Report; soil classifications designated by the United States Department of Agriculture's (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (WSS); the California Department of Conservation (DOC) Farmland Monitoring and Mapping Program (FMMP) data; the County's online GIS mapping to determine important farmlands and lands subject to Agricultural Land Conservation (i.e., Williamson Act) contracts; California Agricultural Land Evaluation and Site Assessment (LESA) Model; and aerial photography.

# 4.9.1 **REGULATORY FRAMEWORK**

A. FEDERAL

# Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact of federal programs on unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that—to the extent possible—federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. The FPPA is overseen by the USDA's NRCS.

# B. STATE

# California Land Conservation Act

The Williamson Act (California Land Conservation Act, California Government Code, Section 51200 et. seq.) is a statewide mechanism for the preservation of agricultural land and open space land. The Act provides a comprehensive method for local governments to protect farmland and open space by allowing lands in agricultural use to be placed under contract (agricultural preserve) between a local government and a landowner. Local governments are able to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Amendments to the Budget Act of 2009 reduced the Williamson Act subvention payments budget to \$1,000, essentially suspending the subvention payments to the Counties. While there are parcels throughout the County that are under Williamson Act contracts, none are located on or adjacent to the Project site. The status of Williamson Act Contracts in the County is discussed under item C. Local, "County of Imperial Williamson Act Rules and Procedures."

# C. LOCAL

# County of Imperial General Plan

Agriculture has been the single most important economic activity throughout the history of Imperial County. The County of Imperial General Plan Agricultural Element (Imperial County 2015c) demonstrates the long-term commitment by the County to the full promotion, management, use, and development and protection of agricultural production, while allowing logical, organized growth of urban areas. The

Imperial County Land Use Plan (Imperial County 2007) designates the Project site as "Agriculture" (refer to Figure 4.2-1 in Section 4.2 Land Use).

The Imperial County General Plan Agricultural Element (Imperial County 2015c) provides goals, objectives, policies and/or programs for conserving agricultural lands while minimizing or avoiding conflicts with urban and other land uses. **Table 4.9-1** provides a consistency analysis of Imperial County General Plan policies relating to agricultural resources applicable 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 on balance whether the Project is consistent overall with the County's General Plan.

General Plan Goals, Objectives and Policies	Consistent with General Plan?	Analysis				
AGRICULTURAL RESOURCES ELEMENT	Agricultural Resources Element					
Preservation of Important Farmland	1					
<b>Goal 1:</b> All Important Farmland, including the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as defined by Federal and State agencies, should be reserved for agricultural uses.	Yes	The Project site is designated "Agriculture" on the Imperial County General Land Use Plan (March 2007) and has a corresponding zoning of A-2 - General Agriculture. Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed as conditional uses in Agricultural zones. In complying with the zoning designations, the Applicant is seeking a CUP for the Seville 4 Solar Project. The proposed Project would not remove land from the Agricultural designation of the General Plan or seek a zoning change under the Zoning Ordinance. By allowing solar projects on land designated Agriculture with a CUP, the Board of Supervisors has determined on a case-by-case basis that solar energy electrical generator projects are consistent with agriculture-related zones. This policy allows agricultural land to be temporarily converted to a non- agricultural use where a clear and immediate need can be demonstrated. The County requires that a Reclamation Plan be prepared to return the site to its pre-Project condition of desert land and idle farmland. As a result, development of the proposed Project would be consistent with the overall intent of this goal.				

 TABLE 4.9-1

 IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goals, Objectives and Policies	Consistent with General Plan?	Analysis
<b>Objective 1.1</b> Maintain existing agricultural land uses outside of urbanizing areas and allow only those land uses in agricultural areas that are compatible with agricultural activities.	Yes	The proposed Project is in a remote portion of the County removed from urban areas. Temporary conversion of the Project site to a solar generation facility is allowable with a CUP. Lands adjacent to the Project site on the Allegretti Property are not currently being farmed. Further, the proposed solar generation facility use is not considered incompatible with agricultural activities. Therefore, the proposed Project is consistent with this objective.
<b>Objective 1.2</b> Encourage the continuation of irrigation agriculture on Important Farmland.	Yes	The proposed Project site would temporarily convert approximately 60 acres of idle farmland and low gradient desert to a solar generation facility. However, the Project site would be required to be reclaimed to its pre- Project agricultural condition of desert land and idle farmland at the end of the Project's useful life. Therefore, the proposed Project is consistent with this objective.
<b>Objective 1.3</b> Conserve Important Farmland for continued farm related (non-urban) use and development while ensuring its proper management and use.	Yes	The proposed Project is a temporary use that would not permanently convert important farmland. The proposed solar facility is an allowable use with a CUP. Therefore, the proposed Project is consistent with this objective.
<b>Objective 1.4</b> Discourage the location of development adjacent to productive agricultural lands.	Yes	Refer to the discussion under Objective 1.1. The proposed Project is consistent with this objective.
<b>Objective 1.8</b> Allow conversion of agricultural land to non-agricultural uses only where a clear and immediate need can be demonstrated, based on population projections and lack of other available land (including land within incorporated cities) for such non- agricultural uses. Such conversion shall also be allowed only where such uses have been identified for non-agricultural use in a city general plan or the County General Plan, and	Yes	Refer to the discussion under Objective 1.1 and 1.2. Even though the Project would not result in the permanent conversion of agricultural land to non-agricultural uses, it does serve clear and immediate needs for both the State and the County of Imperial. The proposed Project would assist the State of California in meeting its RPS goal to have 33% of its energy demand served by renewable energy sources by 2020. Furthermore, the proposed Project's use of groundwater from the Ocotillo-Clark Valley Groundwater Basin is substantially less than

 TABLE 4.9-1

 IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goals, Objectives and Policies	Consistent with General Plan?	Analysis
are supported by a study to show a lack of alternative sites.		the quantity of groundwater used for past agricultural production on the Property, which helps the County sustain groundwater levels in the Ocotillo-Clark Valley Groundwater Basin. Farming in the Project area has been in steady decline since the late 1970's due, in part, to poor soil and groundwater quality and the increased cost of electricity to pump groundwater. Therefore, the proposed Project is consistent with this objective.
Policy 1. Preservation of Important Farmland Policy The overall economy of Imperial County is expected to be dependent upon the agricultural industry for the foreseeable future. As such, all agricultural land in Imperial County is considered as Important Farmland, as defined by Federal and State agencies, and should be reserved for agricultural uses. Agricultural land may be converted to non-agricultural uses only where a clear and immediate need can be demonstrated, such as requirements for urban housing, commercial facilities, or employment opportunities. All existing agricultural land will be preserved for irrigation agriculture, livestock production, aquaculture, and other agriculture-related uses except for non-agricultural uses identified in this General Plan or in previously adopted City General Plans.	Yes	The proposed Project would convert approximately 60 acres of idle farmland and low gradient desert to a solar generation facility. A portion of the lands within the Project site have been disturbed in association with past agricultural activities and are currently in the process of reverting to open desert. Development of a solar generation facility on the Project site would create employment opportunities associated with construction (and to a lesser degree operation) while capitalizing on the County's sun exposure. Development of the Project at the proposed location is consistent with the General Plan which allows the issuance of CUPs for solar facilities in areas designated as "Agriculture." Moreover, placing a solar generation facility on the Project site would likely preserve other agricultural land in the County from the temporary conversion to solar facilities. Therefore, the proposed Project is consistent with this Policy.
Policy 2. Development Patterns and Locations on Agricultural Land "Leapfrogging" or "checkerboard" patterns of development have intensified recently and result in	Yes	The proposed Project would not involve construction or extension of water, sewer, or transportation infrastructure that would accommodate or encourage urban development and, thus, would not be

 TABLE 4.9-1

 IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goals, Objectives and Policies	Consistent with General Plan?	Analysis
significant impacts to the efficient		conducive to "leapfrogging" in the future.
and economic production of		The impact discussion below addresses the
adjacent agricultural land. It is a		environmental effect of temporarily
policy of the County that		converting the proposed Project site, which
leapfrogging will not be allowed in		has approximately 60 acres of idle farm land,
the future. All new non-agricultural		to a solar generation facility. None of the
development will be confined to		land surrounding the Project site could be
areas identified in this plan for such		farmed as it is either desert land, developed
purposes or in Cities' adopted		as a solar facility (Seville 1 Solar and Seville 2
Spheres of Influence, where new		Solar) or a proposed for development as a
development must adjoin existing		solar facility (Seville 3 Solar). Therefore, the
urban uses.		proposed Project is consistent with this
		Policy.

 TABLE 4.9-1

 IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

## Imperial County Zoning Ordinance

Imperial County's Zoning Ordinance establishes land use zones and regulations for the use of land and buildings in the unincorporated areas of the County. The Zoning Ordinance implements the County's General Plan and provides specific requirements in addition to those included in the General Plan. The Project site is zoned for Agriculture (A-2) and approximately 60 acres of the Project site has previously been in active agricultural production (i.e. irrigated and farmed).

#### County of Imperial Right to Farm Ordinance No. 1031

The County of Imperial Right to Farm Ordinance (No. 1031) was approved by the County Board of Supervisors on August 7, 1990. The purpose and intent of the Ordinance is to reduce the loss to the County of its agricultural resources by clarifying the circumstances under which agricultural operations may be considered a nuisance. The Ordinance permits operation of properly conducted agricultural operations within the County. The Ordinance promotes a good neighbor policy by disclosing to purchasers and users of adjacent properties the potential problems and inconveniences associated with agricultural operations. All agricultural activities within the Project area have been suspended within the last few years (a small area in the southeast corner of the Allegretti Property contained grain crops in 2012 and approximately 60 acres in the northwest portion of the proposed Project site appears to have been farmed no more recent than 2008.

#### County of Imperial Williamson Act Rules and Procedures

In 2000, the Imperial County Board of Supervisors adopted the Williamson Act and the provisions established by California Revenue and Taxation Code Section 423.3. The Board of Supervisors also adopted Resolution 200-084, which established the County of Imperial Rules of Procedure to Implement the California Land Conservation Act of 1965 (Rules). The Rules set forth eligibility criteria and standards for the establishment of an agricultural preserve, expansion of an agricultural preserve, and removal of land from an agricultural preserve. The Rules also establish requirements for Land Conservation Contracts and local monitoring requirements.

# 4.9 AGRICULTURAL RESOURCES

On February 23, 2010, the Imperial County Board of Supervisors voted to not accept any new Williamson Act contracts and not to renew existing contracts due to the elimination of the subvention funding from the state budget. The County reaffirmed this decision in a vote on October 12, 2010, and notices of nonrenewal were sent to landowners with Williamson Act contracts following that vote. The applicable deadlines for challenging the County's actions have expired, and therefore all Williamson Act contracts in Imperial County will terminate on or before December 31, 2018. No Williamson Act contracts are located on or in the vicinity of the Project site.

# 4.9.2 **ENVIRONMENTAL SETTING**

# A. REGIONAL SETTING

Imperial County covers an area of 4,597 square miles or 2,942,080 acres. Agricultural production has been the major economic industry in Imperial County since the 1900s. Several factors including climate, fertile soils, and the availability of irrigation water have resulted in Imperial County's agricultural productivity.

Approximately 20 percent of the County's land is irrigated for agricultural purposes. Three of the primary irrigated areas include the Imperial Valley (512,163 acres), Bard Valley (14,737 acres) in the southeast corner of the County, and Palo Verde Valley (7,428 acres) in the northeast corner (Imperial County 1996b). A diverse array of irrigated crops is cultivated in the County including lettuce, carrots, onions, tomatoes, cauliflower, and broccoli; alfalfa, Sudan grass, and other animal feed; sugar beets; wheat and other grains; melons; cotton; and various citrus, fruits, and nuts (Imperial County 1996b).

In recent years, several factors have significantly altered the agricultural conditions in the County. Expanded population has given rise to booming residential and commercial development, which in turn has substantially increased the value of land and the cost of water and labor necessary to sustain agricultural production. As urbanization expands throughout the County, there is a growing economic incentive for local farmers to sell agricultural lands or relocate. As a result, agricultural land within the County is gradually disappearing. However, during the recent housing slump and economic recession, the pace of agricultural conversion has slowed.

#### Important Farmlands

The DOC Farmland Mapping and Monitoring Program (FMMP) produces Important Farmland Maps which document resource quality and land use information. USDA Soil Survey information and the corresponding Important Farmland candidacy recommendations are used for assessing local land.

The FMMP is intended to assist decision-makers in assessing present status, reviewing trends, and planning for California's agricultural land resources in the future. According to the 2017 FMMP Map of Imperial County Important Farmland, the Project site contains land designated Other Land. The DOC definitions of each Important Farmland category (as noted on the 2017 FMMP Map of Imperial County Important Farmland) (DOC 2017) are provided below.

#### Prime Farmland

Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date (DOC 2017). The proposed Project site does not include Prime Farmland.

# Farmland of Local Importance

Farmland of Local Importance is defined as unirrigated and uncultivated lands with prime and statewide soils (DOC 2017). The western portion of the proposed Project site includes areas designated as Farmland of Local Importance (refer to **Table 4.9-3**, below).

#### Farmland of Statewide Importance

Farmland of Statewide Importance is similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date (DOC 2017). The proposed Project site does not include Farmland of Statewide Importance.

#### Unique Farmland

Unique farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may Include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date (DOC 2017). The proposed Project site does not include Unique Farmland.

#### Other Land

Other land is land not included in any other mapping category. Common Examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land (DOC 2017). The proposed Project site includes lands designated as Other Land (refer to **Table 4.9-3**, below).

#### Urban and Built-Up Land

Urban and built-up land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures (DOC 2017). The proposed Project site does not include areas designated Urban and Built-Up Land.

#### Imperial County Important Farmlands and Conversion of Farmlands

In 2015, solar development accounted for 33 percent of farmland conversion in Imperial County (DOC 2015). **Table 4.9-2** depicts the conversions of agricultural land to non-agricultural uses within Imperial County from 2014-2016. As depicted in this table, the 2016 inventory of important farmlands included 190,205 acres of Prime Farmland, 297,272 acres of Farmland of Statewide Importance, 2,070 of Unique Farmland, and 38,924 acres of Farmland of Local Importance.

As shown in **Table 4.9-2**, there was a net loss of 2,050 acres of Important Farmlands in Imperial County from 2014-2016. The majority of conversions of irrigated farmland to urban land occurred in the Calipatria, Niland and Ocotillo Wells areas. The largest conversions occurred near the City of Calipatria where approximately 160 acres were converted for the Calipatria Solar Farm I. Approximately 130 acres were converted for the Imperial Valley Solar II project near the town of Niland and approximately 60 acres were converted for the Seville Solar Farm Complex near the town of Ocotillo Wells. Conversions of non-irrigated land uses and other land to urban land were due to the expansion of urban development near the community of Dixieland, near the town of Ocotillo Wells and in the City of Imperial. The largest conversions occurred near the community of Dixieland where approximately 1,150 acres were converted for the Imperial Solar West project. Another 320 acres near the town of Ocotillo were converted for the

# 4.9 AGRICULTURAL RESOURCES

Seville Solar Fam Complex. Approximately 40 acres were converted in the City of Imperial for the Victoria Ranch neighborhood, Soleado neighborhood and other new homes. Conversions of irrigated farmland to non-irrigated land uses were due to plots of irrigated land having been fallow for three or more update cycles. Conversions of irrigated farmland to Other Land were due to a combination of vacant or disturbed land and confined livestock (DOC 2016c).

	Total Acreage	Inventoried	2014 – 2016 Acreage Conversion			
Land Use Category	2014	2016	Lost (-)	Gained (+)	Total Acreage Changed	Net Acreage Changed
Prime Farmland	190,589	190,205	714	330	1,044	-384
Farmland of Statewide Importance	297,558	297,272	1,143	857	2,000	-286
Unique Farmland	1,971	2,070	18	117	135	99
Farmland of Local Importance	40,403	38,924	2,682	1,203	3,885	-1,479
Important Farmland Subtotal	530,521	528,471	4,4557	2,507	7,076	-2,050
Grazing Land	0	0	0	0	0	0
Agricultural Land Subtotal	530,521	528,471	4,557	2,507	7,064	-2,050
Urban and Built-Up Land	35,590	37,413	173	1,996	2,169	1,823
Other Land	461,665	461,892	260	487	747	227
Water Area	749	749	0	0	0	0
Total Area Inventoried	1,028,525	1,028,525	4,990	4,990	9,980	0

TABLE 4.9-2IMPERIAL COUNTY CHANGE IN AGRICULTURAL LAND USE SUMMARY (2014 – 2016)

Source: DOC 2016b.

# B. SEVILLE 4 SOLAR PROJECT

# **Existing Conditions**

Farming began on the Allegretti Property in the early 1950s and peaked in approximately the 1970s with approximately 1,700 acres planted with various crops. Between 1954 and 1973 about 180 to 320 acres were farmed. Agriculture peaked in the mid to late 1970s with 1,700 acres farmed in 1978. From 1983 to 2009, up to approximately 1,024 acres were farmed, although no farming reportedly occurred in 1990. Only 80 acres were farmed in 2010 and 2011. Reduction of farmed acreage was due, in part, to poor soil and groundwater quality and increased cost of electricity to pump the water. Little to no farming occurred on the Property in 2012 and 2013 (Todd 2013, p. 1). As measured on Google Earth, approximately 60 acres in the northwest portion of the proposed Project site (under either the HSAT or Fixed-Frame configuration) was previously farmed. Agricultural use of the Project site appears to be no more recent than 2008.

# Important Farmland Categories

**Figure 4.9-1** depicts the Important Farmlands Classifications on the Project site. (Note: The Gen-Tie Line would extend through Lots 1, 2 and 3 within the Seville 3 Solar project; the extension of the existing access road; and the proposed Seville 4 Substation and IID Switching Station on Lot D were not included as part of the acreages below). **Table 4.9-3** provides the approximate acreages associated with each of the Important Farmland Classifications on the proposed Project site.

# TABLE 4.9-3 IMPORTANT FARMLANDS ON THE PROJECT SITE

Classification	Approximate Project	Acreage on Site	Acreage Temporarily Converted with Project Implementation		
	Fixed-Frame	HSAT	Fixed-Frame	HSAT	
Prime Farmland	0	0	0	0	
Farmland of Local Importance	50	65	50	65	
Farmland of Statewide Importance	0	0	0	0	
Unique Farmland	0	0	0	0	
Subtotal Important Farmlands	0	0	0	0	
Other Land	96	109	96	109	
Total	146	174	146	174	

Source: DOC 2016b. \*Note: Does not include approximately acres devoted to the 34.5-kV transmission line and Seville 4 Substation on Lot D.

#### Agricultural Soils Classifications

#### United States Department of Agriculture Soil Survey

The USDA conducted a Soil Survey for the Imperial Valley Area and published maps and guidelines to define the condition and location of various kinds of soils in the region (USDA 1981). Soils were characterized according to their appearance, depth, consistency, slope, and erosion factors. The Soil Survey grouped soil types identified in the study into eight soil Capability Classes. The classes were determined according to any limiting characteristics that would prevent the soils from being used for agricultural purposes. These classes are identified in **Table 4.9-4**. Soils are graded from I through VIII, with I denoting the most suitable class for cultivation, and VIII denoting the least suitable for cultivation.

<b>TABLE 4.9-4</b>				
SOIL CAPABILITY CLASSES - CLASS DESCRIPTION				

Class	Description
I	Soils have few limitations that restrict their use.
п	Soils have moderate limitations that reduce the choice of plants or that require moderate
	conservation practices.
	Soils have severe limitations that reduce the choice of plants, require special conservation
	practices, or both.
N/	Soils have very severe limitations that reduce the choice of plants, require very careful
IV	management, or both.
V	Soils are not likely to erode but have other limitations, impractical to remove, that limit their
v	use largely to pasture or range, woodland, or wildlife habitat.
M	Soils have severe limitations that make them generally unsuited to cultivation and limit their
VI	use mainly to pasture, range, forestland, or wildlife food and cover.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict
VII	their use mainly to grazing, forestland, or wildlife.
	Soils and miscellaneous areas have limitations that preclude their use for commercial plant
VIII	production and limit their use to recreation, wildlife, or water supply or for aesthetic
	purposes.

Source: USDA 1981.

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#### Source: DOC 2017.

Note: Not to scale. 174-acre HSAT Configuration HSAT Boundary shown.

**FMMP** IMPORTANT FARMLANDS MAP

# Storie Index

The Storie Index provides another mechanism for rating soils. Under the Storie Index, a numerical system is used to convey the relative degree of suitability, or value of a soil for general intensive agriculture use. The index considers a soil's color and texture, the depth of nutrients, presence of stones, and slope. All of these characteristics directly relate to the adequacy of a soil type for use in crop cultivation.

The Storie Index does not consider other factors, such as the availability of water for irrigation, climate, and the distance from markets. Values of the index range from 1 to 100 and are divided into six grades. An index of 100 and a grade of 1 is considered the most suitable farmland. Soils that have a Storie rank of 10 or below are considered to have a very low agricultural potential. Soils are considered to be prime for high quality agricultural production if their Storie Index Rating is 80 or greater. In the Imperial Valley region, the Storie Index ratings of soils range from 5 to 97 (USDA 1981). **Table 4.9-5** identifies the Storie Index classifications.

Grade	Index Rating	Description
1	80 to 100	Few or no limitations that restrict use for crops. Excellent or well suited to general intensive farming.
2	60 to 80	Good or also well suited to general farming.
3	40 to 60	Fairly well suited to general farming.
4	20 to 40	Poorly suited to general farming.
5	10 to 20	Very poorly suited to general farming.
6	Less than 10	Not suitable for farming.

 TABLE 4.9-5

 STORIE INDEX RATINGS - GRADE INDEX RATING DESCRIPTION

Source: USDA 1981.

#### On-Site Soils

Two soil types are present within the boundaries of the Project site based on the USDA survey maps. **Table 4.9-6** provides details on these soils, along with their Capability Class and Storie Index rating. Refer to Figure 4.6-5 in Section 4.6, Geology and Soils for a graphical depiction of these soil types on the Project site for each configuration.

Map Symbol - Soil	Fixed-Frame <sup>1</sup> Acres/% of Total Acres*	HSAT <sup>2*</sup> Acres/% of Total Acres	Capability Class	Storie Index
121 Meloland Fine Sand	116.6/79.7%	130.8/75%	IIIs-3	47
143 Vint Fine Sandy Loam	29.7/20.3%	43.6/25%	lls-1	100
Totals	146.3/100%	174.4/100%		

 TABLE 4.9-6

 SOIL SUITABILITY - MAP SYMBOL MAPPING UNIT CAPABILITY

Source: Data from <sup>1</sup>EMA 2017a and <sup>2</sup>EMA 2017b; compilation by EGI.

\*Note: Does not include approximately 7 acres devoted Gen-Tie, common access roads and IID Switch/Project Substation.

# C. GEN-TIE, SEVILLE 4 SUBSTATION AND IID SWITCHING STATION

The Gen-Tie Line, Seville 4 Substation, IID Switching Station on (Lot and D), as well as extension of the existing access road, will not result in any new impacts or conversions any agricultural land as these areas were previously analyzed as part of the Seville Solar Farm Complex EIR. Thus, the analysis of impacts is focused on the Project site.

# 4.9.3 IMPACTS AND MITIGATION MEASURES

### A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the thresholds identified in the CEQA Guidelines, as listed in Appendix G. The Project would result in a significant impact to agricultural resources if it would result in any of the following:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 511 04(g)).
- d) Result in the loss of forest land or conversion of forest land to non-forest use.
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

#### B. ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

Three CEQA significance criteria were scoped out as part of the Initial Study. Criterion "b" was eliminated from further analysis because no conflicts with the existing A-2 Zoning would occur in association with Project implementation. In addition, there are no Williamson Act lands within or adjacent to the Project area. Therefore, conversion of land under Williamson Act Contract is not an issue and will not be discussed.

Criterion "c" was scoped out because based on the Imperial County General Plan Conservation and Open Space Element, mixed chaparral, pinyon-juniper habitats, and the montane hardwood-conifer forest are located in restricted areas of the County. Mixed chaparral and pinyon-juniper habitats are located in the extreme southwestern corner of the County and montane hardwood-conifer forest is in the extreme northwestern corner of Imperial County. Thus, there are no existing forest lands, timberlands, or timberland zoned Timberland Production either on or near the Project area that would conflict with existing zoning. This issue will not be discussed in the impact analysis.

Lastly, criterion "d" was scoped out because there are no existing forest lands either on the or in the vicinity of the Project area. The proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact is identified for this issue area.

#### C. METHODOLOGY

Baseline conditions described in subsection 4.9.2 have been evaluated with regard to their potential to be affected by project construction, operation and reclamation. These activities were identified based on information provided by the Applicant and other supporting information provided to Imperial County. Impacts to agricultural resources have been identified based on the predicted interactions between construction, operation and reclamation activities and the affected environment. The following discussion of impacts and mitigation measures for the proposed Project is based on the current status of the Project site (i.e. no longer active agricultural land).

The California Agricultural Land Evaluation and Site Assessment (LESA) Model was used to assess impacts on agriculture and farmland. The LESA Model is an approach for rating the relative quality of land resources that assigns points to six specific, measurable factors. The two Land Evaluation factors (Land Use Capability Classification and Storie Index) are based on measures of soil resource quality. The four site assessment factors address a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. The "LESA Assessment Seville 4 Solar Project Fixed-Frame Array (T16S, 4123, S35, SBB&M)" (EMA 2017a) and "LESA Assessment Seville 4 Solar Project Horizontal Single-Axis Tracking Array" (T16S, 4123, S35, SBB&M) (EMA 2017b) were prepared by Environmental Management Associates. (The LESA Assessments are included in **Appendix I** of the Technical Appendices of this EIR on the attached CD).

#### D. PROJECT IMPACTS AND MITIGATION MEASURES

#### Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance

Impact 4.9.1 The proposed Project would temporarily convert Farmland of Local Importance and Other Land to non-agricultural uses. This land has not been farmed in several years and would be reclaimed to its existing condition following decommissioning of the Project. Therefore, conversion of Farmland of Local importance is considered a less than significant impact.

#### Construction

Construction of the proposed Project would result in the direct, temporary conversion of approximately 146 acres for the Fixed-Frame Configuration and 174 acres for the HSAT Configuration. Approximately 50 acres of Farmland of Local Importance would be temporarily converted in association with the Fixed-Frame Configuration and 65 acres of Farmland of Local Importance would be temporarily converted for the HSAT Configuration. The conversion and associated impacts are considered temporary because the Project, under either configuration, would be removed and the Project site would be reclaimed to approximate the existing desert and idle farmland at the end of the useful life of the Project (i.e. 30 or 40 years [if a 10-year extension is requested and approved] in the future).

Appendix G of the CEQA Guidelines identifies the California Agricultural LESA Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. The temporary conversion of important farmlands for the construction and operation phases of the Project has been evaluated for significance under CEQA based on the LESA Model (**Appendix** I of this EIR). **Table 4.9-7** presents a summary of the LESA analysis for the proposed Project for the Fixed-Frame Configuration.

A final LESA score between 0 to 39 is not considered significant under CEQA. As shown in **Table 4.9-7**, the Land Evaluation subscore is 18.28, while the Site Assessment subscore is 17.25. The final LESA score is 35.53. With both subscores (Land Evaluation and Site Assessment) below 20, implementation of the proposed Project would result in a **less than significant impact** under CEQA with regard to conversion of Farmland of Local Importance.

	Factor Rating (0 – 100 Points)	Factor Weighting (Total = 100)	Weighted Factor Rating <sup>1</sup>
Land Evaluation (LE)			
Land Capability Classification (LCC Rating)	10.00	0.25	2.50
Storie Index Rating	63.12	0.25	15.78
Land Evaluation Subscore		0.50	18.28
Site Assessment (SA)			
Project Size Rating	40	0.15	6.00
Water Resource Availability Rating	65	0.15	9.75
Surrounding Agricultural Land Rating	0	0.15	0.00
Surrounding Protected Resource Lands Rating	30	0.05	1.50
Site Assessment Subscore		0.50	17.25
	Т	OTAL LESA SCORE	35.53

 TABLE 4.9-7

 FINAL LESA SCORE SHEET SUMMARY – FIXED-FRAME CONFIGURATION

Source: EMA 2017a.

Notes: <sup>1</sup>Weighted Factor Rating calculated by multiplying Factoring Rating Points X Factory Weighting.

**Table 4.9-8** presents a summary of the LESA analysis for the proposed Project for the HSAT Configuration. A final LESA score between 0 to 39 is not considered significant under CEQA. As shown in **Table 4.9-8**, the Land Evaluation subscore is 18.75, while the Site Assessment subscore is 20.25. The final LESA score is 39.00. With both subscores (Land Evaluation and Site Assessment) below 21, implementation of the proposed Project would result in a **less than significant impact** under CEQA with regard to conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.

 TABLE 4.9-8

 FINAL LESA SCORE SHEET SUMMARY – HSAT CONFIGURATION

	Factor Rating (0 – 100 Points)	Factor Weighting (Total = 100)	Weighted Factor Rating <sup>1</sup>
Land Evaluation (LE)			
Land Capability Classification (LCC Rating)	10.00	0.25	2.50
Storie Index Rating	65	0.25	16.25
Land Evaluation Subscore		0.50	18.75
Site Assessment (SA)			
Project Size Rating	60	0.15	9.00
Water Resource Availability Rating	65	0.15	9.75
Surrounding Agricultural Land Rating	0	0.15	0.00
Surrounding Protected Resource Lands Rating	30	0.05	1.50
Site Assessment Subscore		0.50	20.25
		TOTAL LESA SCORE	39.00

Source: EMA 2017b.

#### Operation

As would occur during construction, operation of the proposed Project would result in the direct, temporary conversion of approximately 50 acres of Farmland of Local Importance in association with the Fixed-Frame Configuration and 65 acres of Farmland of Local Importance with the HSAT configuration.

# 4.9 AGRICULTURAL RESOURCES

The conversion and associated impacts are considered temporary because the Project would be removed and the Project site would be reclaimed to existing desert and idle farmland at the end of the useful life of the Project (i.e. 30 to 40 years [if a 10-year extension is requested and approved] in the future). However, because the total LESA Score for both the Fixed-Frame Configuration (35.53) and HSAT Configuration (39.00) are 39.00 or less, implementation of the proposed Project would result in a **less than significant impact** under CEQA with regard to conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance.

#### Reclamation

At the end of the Project's useful life, the Project site would be reclaimed to approximate the existing desert and idle farmland. As a result, the temporary conversion of Farmland of Local Importance would be considered **less than significant** following completion of reclamation.

#### Mitigation Measures

None required.

#### **Significance After Mitigation**

Not applicable.

#### Indirect Environmental Effects of Conversion of Farmland

**Impact 4.9.2** The proposed Project would not result in the indirect conversion of other farmland to a non-agricultural use. Therefore, this impact is considered **less than significant**.

#### Construction

Construction of the proposed Project would temporarily convert the Project site to a non-agricultural use. The Project site is currently desert and idle farmland (approximately 50 acres for the Fixed-Frame Configuration and 65 acres for the HSAT) with no current agricultural operations. Lands to the south and west are currently open desert and lands to the north are developed with the Seville 2 Solar project. Lands immediately to the east are proposed to be developed with the Seville 3 Solar project. Therefore, indirect environmental effects of the temporary conversion of farmland on the Project site would not impact any adjacent farmlands as there are none. Indirect environmental effects of the temporary conversion of farmland are considered **less than significant** during Project construction.

#### Operation

The Project site is surrounded by open desert (see **Figure 4.9-1**) on the south and east and is bordered by the proposed Seville 3 Solar project on the west and Seville 2 Solar Project on the north. The proposed Project would place a solar generation facility in an area that is a mixture of existing desert and idle farmland. The Project does not include the extension of utilities or infrastructure that would pressure nearby lands to urbanize with residential, commercial, or other urban levels of development. None of the areas surrounding the Project site are being farmed. Thus, the indirect environmental effects of the temporary conversion of farmland on adjacent lands are considered **less than significant**.

#### Reclamation

Activities similar to those occurring during construction would take place during reclamation as the Seville 4 Solar Project is dismantled, underground utilities are removed, etc. Reclamation activities could result in an increase in pests and nuisance conditions (e.g. weeds and dust) on adjacent lands during reclamation activities. However, upon completion of site reclamation and final site contour, indirect environmental effects of the temporary conversion of farmland would be considered **less than significant**.

#### **Mitigation Measures**

None required.

#### **Significance After Mitigation**

Not applicable

# 4.9.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

## A. CUMULATIVE SETTING

The geographic scope for cumulative impacts to agricultural resources is the Imperial Valley of Imperial County. The Imperial Valley consists of approximately one-half-million acres of more-or-less contiguous farm fields located in the Imperial Valley and surrounded by desert and mountain habitat. The Imperial Valley comprises approximately 17 percent of the County's 2,942,080 acres (Imperial County 1996b, p. 5). Based on the most current available information from the Department of Conservation approximately 528,741 acres of the County are designated as farmland under the FMMP (DOC 2016b). County-wide approximately 21,938 acres of solar projects (including the proposed Project) are currently operational, under construction, approved but not built or pending entitlement. **Table 4.9-9** summarizes these solar projects and the acreage of agricultural land temporarily converted or pending conversion in association with each project.

Project Name	Acres
Chocolate Mountain	320
Imperial Valley Solar II*	150
IV Solar Company	123
Energy Source Solar 1	960
Midway Solar Farm I*	480
Midway Solar Farm II*	320
Midway Solar Farm III	320
Midway Solar Farm IV	150
Calipat Solar Farm I (includes Lindsey and Wilkinson)*	609
Alhambra Solar/Solar Gen 2*	482
Arkansas Solar/Solar Gen 2*	481
Sonora Solar/Solar Gen 2*	488
Imperial Solar West	1,130
Campo Verde Solar	1,443
Imperial Solar South	947
Calexico I-A*	720
Calexico I-B*	610
Calexico II-A*	940
Calexico II-B*	530
Mount Signal Solar*	1,431
Centinela Solar*	1,645
Wistaria Ranch Solar*	2,661
Iris Cluster (Includes Lyons, Rockwood, Ferrell and Iris)*	1,400
Heber Solar Energy Facility	80
Acorn Greenworks Solar	696
Laurel Solar	175
Big Rock Solar	316
Vega SES	483
SEPV Dixieland West	29
SEPV Dixieland East	21
Seville Solar Farm	1,238
Valencia I	16
Valencia II	10
Valencia III	40
Nider*	320
Total Acres Without Proposed Project	21,764
Seville 4 Solar	174
Total Acres With Proposed Project	21,938

 TABLE 4.9-9

 SUMMARY OF SOLAR PROJECTS AND TEMPORARY CONVERSION OF

 AGRICULTURAL ACREAGE IN IMPERIAL COUNTY

Source: ICPDSD 2017a. \* Denotes cumulative projects identified in Table 3.0-1.

#### B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

#### **Cumulative Agricultural Resources Impacts**

**Impact 4.9.3** Implementation of the proposed Project would incrementally add to the temporary conversion of agricultural land in Imperial County. The acreage of farmland on the Project site is limited and has not been farmed in several years. Upon decommissioning of the Project, the site will be reclaimed to open desert and idle farmland. Therefore, temporary impacts to agricultural resources are considered less than cumulatively considerable.

#### Construction, Operation and Reclamation

Cumulative impacts on agricultural resources consider the proposed Project's temporary impacts during construction, operation and decommissioning as well as those likely to occur in association with other large scale proposed, approved and reasonably foreseeable renewable energy projects. To determine cumulative impacts on agricultural resources, the temporal nature of the impacts on individual resources is assessed. Solar developments are considered temporary rather than permanent (such as is the case with residential or industrial development) based on a specified useful life (i.e. 20 to 40 years) and the requirement that the lands on which solar generation facilities are located be reclaimed to agriculture. The inventory of agricultural resources within the cumulative setting is also considered when assessing the impacts of each individual project.

The proposed Project would temporarily convert 50 acres of Farmland of Local Importance (Fixed-Frame Configuration) and 65 acres of Farmland of Local Importance (HSAT Configuration) to a non-agricultural use during construction; remain as a solar generation facility over the operational life of the Project; and be reclaimed to approximate existing idle farmland and desert at the end of the Project's useful life. Thus, the proposed Project would incrementally add to the temporary conversion of agricultural land in Imperial County during the construction and operation periods of the Project.

According to "Table A-9 - Imperial County 2014 - 2016 Land Use Conversion" prepared by the DOC, approximately half of the County (528,471 acres out of a total of 1,028,525 acres) is classified as Important Farmland (refer to **Table 4.9-2**, above) (DOC 2016b). **Table 4.9-10** summarizes the percentage of each type of farmland in the County that would be temporarily converted by the proposed Project.

Agriculture Classification*	(A) Total Acreage in Imperial County	(B) Approximate Acreage Temporarily Converted on the Project Site		(B÷A x 100) Project Percent of County Acreages	
		Fixed- Frame	HSAT	Fixed- Frame	HSAT
Prime Farmland	190,205	0	0	0	0
Farmland of Local Importance	38,924	50	65	.12	.17
Farmland of Statewide Importance	297,272	0	0	0	0
Unique Farmland	2,070	0	0	0	0
Total	528,471	50	65	.009	.012

 TABLE 4.9-10

 PERCENTAGE TEMPORARY CONVERSION OF FARMLAND BY THE PROPOSED PROJECT

Source: Data from DOC 2016b; calculations by EGI.

\*Note: Does not include the Category "Other". Approximately 96 acres of Other Land would be converted for the Fixed-Frame Configuration and 109 acres of Other Land would be converted for the HSAT Configuration. The gen-tie, access roads and IID Switch/Project Substation were not included in these calculations.

As shown in **Table 4.9-10**, the Important Farmland (Prime Farmland, Farmland of Local Importance and Farmland of Statewide Importance) within the Fixed-Frame configuration comprises approximately 0.009 percent (50 acres ÷ 528,471 acres x 100) of the total Important Farmland in the County. Similarly, the HSAT configuration comprises approximately 0.12 percent (65 acres ÷ 528,471 acres x 100) of the total Important Farmland in the County. Thus, the proposed Project would temporarily convert a very small fraction of one percent of the total Important Farmlands in the County and have a minimal effect on agricultural land on a cumulative scale. Furthermore, the conversion would be temporary and last for the duration the Project's useful life (i.e. approximately 30 to 40 years [if a 10-year extension is requested and approved] in the future).

"Table A-9 - Imperial County 2014-2016 Land Use Conversion", also identified a net loss of 4,557 acres of Important Farmland in Imperial County from 2014-2016 (refer to **Table 4.9-2**, above) (DOC 2016b). The primary cause of conversion was attributed to construction of solar facilities (approximately 1,820 acres) and to a lesser degree, residential development (DOC 2016c).

Table 3.0-1, Large Scale Proposed, Approved and Reasonably Foreseeable Renewable Energy Projects (refer to Chapter 3.0), identifies solar developments similar to the proposed Project for consideration in the cumulative analysis. Most of these projects are located on private lands, which are predominately agricultural, and would have agricultural impacts comparable to the proposed Project. The impacts of these individual projects include the temporary conversion of Important Farmland, and, in some cases, conflicts with Williamson Act Contracts.

As illustrated in **Table 4.9-10** and discussed in Impact 4.9.1, above, construction of the proposed Project would temporarily convert 50 acres of Farmland of Local Importance (for the Fixed-Frame Configuration) and 65 acres of Farmland of Local Importance (for the HSAT Configuration) to a non-agricultural use over the useful life of the Project. Because the LESA model scores for both configurations were 39 or less, impacts to farmland for the purposes of CEQA are considered less than significant. Therefore, the incremental impact of the temporary conversion of 50 or 65 acres of farmland is considered **less than significant**.

When the proposed Project is combined with the cumulative projects (identified in Table 3.0-1 and noted as part of the County-wide solar projects listed in **Table 4.9-9**), the total agricultural land conversion is estimated to be 21,938 acres (inclusive of all Important Farmland acreage). During construction and operation, the proposed Project would contribute either 0.22 percent ( $[50 \div 21,938] \times 100$ , Fixed-Frame Configuration) or 0.29 percent ( $[65 \div 21,938] \times 100$ , HSAT Configuration) of the total temporary agricultural land conversion associated with cumulative solar projects on a County-wide basis. This land has not been farmed in several years and would be reclaimed to its existing condition following decommissioning of the Project. Therefore, the Project's contribution to temporary conversion of agricultural land impacts would be **less than cumulatively considerable**.

The cumulative projects combined would contribute to the mostly temporary conversion of approximately 4.1 percent (21,938 acres  $\div$  528,471 acres x 100) of the farmland in Imperial County. Likewise, each individual cumulative project would be required to provide mitigation for any impacts to agricultural resources.

In order to address the increased demand for solar facilities, Imperial County has developed the following measures to apply to all new proposed solar projects, as described in the Staff Memorandum dated September 2, 2011:

1) Preservation of Comparable Agricultural Lands. Each solar project is required to procure agricultural conservation easements or pay an "Agricultural In-Lieu Mitigation Fee" that would result in the conservation of farmland of comparable quality and classification as would be

temporarily removed from agricultural use by the solar facility. A solar project may satisfy the inlieu fee requirement by executing a Public Benefit Agreement with the County.

2) Reclamation Plan. Each solar project is required to prepare a site reclamation plan that demonstrates that the project site will be returned to its current agricultural condition when the solar facility is decommissioned. The typical length of operation of the solar facilities is anticipated to range from 30 to 50 years. The project applicant must also provide financial assurances in the amount equal to the cost estimate for the reclamation in order to ensure that funds will be available to implement the reclamation plan.

Compliance with the requirements for each solar project to preserve comparable agricultural lands and to provide a detailed reclamation plan, including bonding or financial assurances, would reduce each project's contribution to cumulative agricultural impacts, including the temporary conversion of important farmland, to **less than cumulatively considerable** by ensuring that comparable farmland is preserved and/or that the land is returned to an agricultural condition when each project ceases to operate, approximately 20 to 40 years in the future.

#### **Mitigation Measures**

No mitigation is required for the proposed Project because the on-site farmland has not been farmed in several years and would be reclaimed to its existing condition following decommissioning of the Project. Thus, the Project's contribution to temporary conversion of agricultural land impacts would be **less than cumulatively considerable**.

Mitigation measures are typically imposed, on a project-by-project basis to address impacts of temporary conversion of farmland. They include three options by which the Applicant may mitigate impacts resulting from the temporary conversion of agricultural land for Non-Prime and Prime Farmland and an additional fourth option (exclusion of Prime Farmland acreage) for Prime Farmland. The first option would require an Applicant to: conserve Important Farmland of like quantity and quality (on a 1 to 1 basis for Non-Prime and 2 to 1 basis for Prime) through a conservation easement (Option 1); or, pay an in-lieu fee based on a formula (Option 2); or voluntarily enter a Public Benefit Agreement (Option 3), as compensation for the temporary loss of the agricultural resources. A fourth option for Prime Farmland (Option 4) would require the Permittee to avoid Prime Farmland.

#### **Significance After Mitigation**

Not applicable.

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