

## **CHAPTER 3.0**

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# **INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED**

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The following is an introduction to the environmental impacts analysis and general assumptions used in the project specific and cumulative analyses. Individual sections of the Draft EIR include assumptions, methodology and standards of significance relevant to each applicable environmental factor identified through preparation of the Initial Study. [Note: The Initial Study is included on the attached CD of Technical Appendices as **Appendix A** of this EIR].

### **3.1 ANALYSIS ASSUMPTIONS GENERALLY USED TO EVALUATE THE IMPACTS OF THE PROJECT**

#### **3.1.1 BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR**

Section 15125(a) of the CEQA Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of the project as they exist at the time the Notice of Preparation (NOP) is published. The CEQA Guidelines also specify that the description of the physical environmental conditions is to serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant.

The environmental setting conditions of the Project area and the surrounding area are described in detail in Sections 4.1 through 4.13 of this Draft EIR. In general, these setting discussions describe the setting conditions of the Project area and the surrounding area as they existed at the time the NOP for the Project was released in September 2013 (SCH No. 2013091039) (see subsection 3.2, “Approach to the Cumulative Impact Analysis” subsection below).

#### **3.1.2 GENERAL PLAN CONSISTENCY ANALYSIS**

As required by CEQA Guidelines 15125(d), each relevant environmental factor analyzed in Sections 4.1 through 4.13 has been evaluated for consistency with goals, objectives, policies and programs contained in the Imperial County General Plan (January 18, 1993, with updates and amendments through November 2008). The General Plan consistency analysis is presented in tabular form and identifies goals, objectives, policies and programs from the ten General Plan Elements (Land Use, Housing, Circulation and Scenic Highways, Noise, Seismic and Public Safety, Agricultural, Conservation and Open Space, Geothermal and Transmission, Parks and Recreation, and Water) that are relevant to the proposed Project. The analysis considers the hierarchical structure of the General Plan beginning with overall goals, supported by objectives, and implemented through policies and programs. This hierarchical structure is reflected in the consistency table provided in each section to demonstrate the Project’s consistency with all aspects of the overarching goal which the objectives, policies and programs support. Each consistency table includes three columns. Applicable goals, objectives, policies and programs appear in the left column; the middle column identifies whether the Project is consistent (yes or no) with the item in the left column; and the right column includes a discussion of the consistency or inconsistency.

#### **3.1.3 PROJECT CONSTRUCTION EFFECTS**

The proposed Project is a solar farm complex. In order to be approved by the Imperial County Board of Supervisors, the Project must be consistent with the General Plan and Land Use Ordinance Policies and Standards. During construction, impacts such as dust, equipment noise, and increased traffic volumes are anticipated to occur. Construction phase impacts would be reduced to a level which is less than significant through the implementation of mitigation measures for the following environmental factors: air quality; geology and soils; cultural resources; noise; agricultural resources; hazards and hazardous materials; hydrology and water quality; biological resources and public services and utilities. Project

## **3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED**

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construction impacts specific to each environmental factor are evaluated in sections 4.1 through 4.13 (refer to subsections 4.1.3, 4.2.3, 4.3.3, etc., “Impacts and Mitigation Measures”).

### **3.1.4 PROJECT BUILDOUT ASSUMPTIONS**

For the environmental analysis, it is assumed that each of the five solar energy projects would be constructed independently, and construction of any one project is not expected to overlap the construction of another.

The three smaller lots are anticipated to take approximately four to five months to construct. The two larger lots are anticipated to be constructed in seven to eight months.

Project operational impacts, such as traffic, air quality, noise, hydrology and water quality, are evaluated in Sections 4.1 through 4.13 of the EIR (refer to subsections 4.1.3, 4.2.3, 4.3.3, etc., “Impacts and Mitigation Measures”). Buildout of the Project is assumed to occur in the context of other large scale renewable energy projects which are currently proposed, approved or reasonably foreseeable (refer to Table 3.0-1).

## **3.2 APPROACH TO THE CUMULATIVE IMPACT ANALYSIS**

### **3.2.1 DEFINITION OF CUMULATIVE SETTING**

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts to determine if the project’s effect is considered cumulatively considerable. As defined by CEQA Guidelines Section 15065(a)(3), “‘Cumulatively considerable’ means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

Section 15130(b)(1) goes on to identify two approaches for performing a cumulative analysis: 1) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or 2) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

For the purposes of this cumulative analysis, a list approach is used. According to Section 15130(b)(2), when using a list it is important to consider the nature of each environmental resource being examined, the location of the project and its type. In keeping with these provisions, the cumulative project list was compiled in consultation with Imperial County. The projects identified were chosen because they are approved, proposed or reasonably foreseeable and include solar energy facilities of similar size and scale.

**Table 3.0-1** lists the cumulative projects. **Figures 3.0-1a** and **3.0-1b** and **Figure 3.0-2** provide a graphical representation of each project’s location.

### 3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

**TABLE 3.0-1  
LARGE SCALE PROPOSED, APPROVED AND REASONABLY FORESEEABLE RENEWABLE ENERGY PROJECTS**

Imperial County				
#	Name of Project	Use	Project Description	Status
1	"S" Line Upgrade 230-kV Transmission Line Project	Power Line	A power line approximately 18 miles extending from approximately 10 miles southwest of the City of El Centro near Liebert Road and Wixom Road along I-8 and SR 86.	Ongoing upgrade of transmission line. Estimated completion by December, 2015 (not shown on Figure 3.0-1a or 3.0-1b).
2*	Imperial Valley Solar Project (Formerly SES Solar Two)	Electric Generating Facility	An electric generating facility capable of producing approximately 750 MWs of electricity on approximately 6,500 acres generally located west of Dunaway Road and north of I-8.	Final EIR public review period July 27, 2010 through August 23, 2010. Currently on hold pending technology change (not shown on Figure 3.0-1a or 3.0-1b).
3	North Gila to Imperial Valley #2	Power Line Project	A power line project approximately 75 miles in length extending from the SDG&E Imperial Valley substation to Yuma County, Arizona.	Construction not anticipated to begin until 2014 (not shown on Figure 3.0-1a or 3.0-1b).
4	Solar Reserve Imperial Valley	Solar Power Tower	A 100 MW solar power tower generally located approximately 35 miles east of the Imperial Valley substation.	Construction to begin after a Notice to Proceed is issued, if authorized. Construction not expected to begin until 2014(not shown on Figure 3.0-1a or 3.0-1b).
5	Mount Signal Solar Farm ++	PV Solar Facility	A PV solar facility capable of producing approximately 200 MWs of electricity on approximately 1,431 acres generally located south of SR 98 between Pulliam Road and Ferrell Road.	Under construction. Estimated completion fall of 2014.
6	Centinela Solar Energy	PV Solar Facility	A 2,067 acre PV solar facility capable of producing approximately 275 MWs of	Under construction. Completion

### 3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

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Imperial County				
#	Name of Project	Use	Project Description	Status
			electricity generally located in the vicinity of SR 98 and Drew Road.	anticipated May or June 2014.
7	Arkansas Solar Farm	PV Solar Facility	A PV solar facility capable of producing approximately 50 MWs of electricity on approximately 481 acres generally located 2.5 miles east of the town of Calipatria.	Under construction.
8	Sonora Solar Farm	PV Solar Facility	A PV solar facility capable of producing approximately 50 MWs of electricity on approximately 488 acres generally located 4.5 miles northeast of the town of Calipatria.	Under construction.
9	Alhambra Solar Farm	PV Solar Facility	A PV solar facility capable of producing approximately 50 MWs of electricity on approximately 482 acres generally located 3.5 miles south of the town of Calipatria.	Under construction.
10	Calexico I-A++	PV Solar Facility	A 710 acre PV solar facility capable of producing approximately 100 MWs of electricity on approximately 666 acres generally located 6 miles west of the City of Calexico.	Under construction.
11	Calexico I-B++	PV Solar Facility	A 610 acre PV solar facility capable of producing approximately 100 MWs of electricity on approximately 666 acres generally located 6 miles west of the City of Calexico.	Under construction.
12	Calexico II-A++	PV Solar Facility	A 940 acre PV solar facility capable of producing approximately 100 MWs of electricity on approximately	Under construction.

### 3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

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LARGE SCALE PROPOSED, APPROVED AND REASONABLY FORESEEABLE RENEWABLE ENERGY PROJECTS**

Imperial County				
#	Name of Project	Use	Project Description	Status
			733 acres generally located 6 miles west of the City of Calexico.	
13	Calexico II-B++	PV Solar Facility	A 530 acre PV solar facility capable of producing approximately 100 MWs of electricity on approximately 732 acres generally located 6 miles west of the City of Calexico.	Under construction.
14	Imperial Valley Solar II	PV Solar Facility	A 30-MW alternating current (MWAC) solar PV energy generation facility (proposed project) on 150 acres of land in Imperial County, CA	Proposed.
15	Midway Solar I	PV Solar Facility	A 319 acre 50 MW facility located one-half mile west of Brandt Road, bordered by west Sinclair Road on the north, East Peterson Road on the south, and English Road on the east.	Approved but under litigation.
16	Midway Solar II	PV Solar Facility	An 803 acre 155 MW facility located one-half mile west of SR 111 bordered by East Hooper Road on the north, English Road on the west, and Wilkenson Road on the south.	Approved.
17	Iris (520 acres)	PV Solar Facility	Four projects totaling 200 MW located on approximately 1,421 acres. The projects are generally located north of SR 98, east of Brockman Road, south of Lyons Road and west of the New River.	Proposed.
	Ferrell (367 acres)			
	Lyons (138 acres)			
	Rockwood (396 acres)			
18	Wilkinson (302 acres)	PV Solar Facility	Three projects totaling 70 MW located on approximately 609 acres.	Proposed.
	Lindsey (148 acres)			
	Calipat (159 acres)			
19	Wistaria Ranch Solar Energy Center	PV Solar Facility	250 MW solar project consisting of 17 phases located on approximately 2,793 acres	Proposed. Draft EIR being prepared.

### 3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

**TABLE 3.0-1  
LARGE SCALE PROPOSED, APPROVED AND REASONABLY FORESEEABLE RENEWABLE ENERGY PROJECTS**

Imperial County				
#	Name of Project	Use	Project Description	Status
			generally bounded by Wahl Road, Brockman and Rockwood Roads, Ferrell and Corda Roads in southwestern unincorporated Imperial County.	
San Diego County				
20	Ocotillo Wells Solar Farm	PV or Concentrated PV	Development of a 50 MW solar energy system on an approximately 440-acre site within the Desert Subregional Plan Area in the Ocotillo Wells area of unincorporated San Diego County adjacent to Imperial County.	Proposed. Mitigated Negative Declaration prepared April 2013.

Source: County of Imperial, 2013.

+ Denotes projects with published environmental documents that were used in preparing the cumulative analysis.

++ These projects were analyzed in a single EIR.

Because the proposed Seville Solar Farm Complex is in a remote portion of the County with very little development of any kind, large scale solar projects within Imperial County as a whole (refer to **Figure 3.0-1a and 3.0-1b**) were included in the cumulative setting. Several projects outside the control of Imperial County (i.e. those with BLM as the Lead) were also included based on their similarity (solar projects, electrical transmission projects). One project in San Diego County was included based on proximity (approximately 4 miles) to the Project site (refer to **Figure 3.0-2**).

#### 3.2.2 CONSIDERATION OF CUMULATIVE IMPACTS

While the cumulative projects list establishes proposed, approved and reasonably foreseeable renewable energy projects to consider in combination with the proposed Seville Solar Farm Complex, the cumulative setting varies for each environmental factor. The cumulative setting is established specific to each environmental factor based on the nature and extent of the resource or issue. Some environmental factors such as hazards and hazardous materials may be highly localized. In contrast, environmental factors such as air quality and seismicity may be regional in nature. Still, some environmental factors demonstrate both aspects as is the case of geology and soils (e.g. site-specific soils and regional geologic and seismic conditions). In most cases, a geographic scope (in miles from the project site, or as determined based on a natural or jurisdictional boundary) is identified.

When considering cumulative impacts, the analysis examines whether the overall long-term impacts of all such projects would be cumulatively significant and whether the projects would cause a “cumulatively considerable” (and thus significant) incremental contribution to any such cumulatively significant impacts (CEQA Guidelines Sections 15064(h), 15065(c), 15130(a), 15130(b), and 15355(b)). To fulfill

### **3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED**

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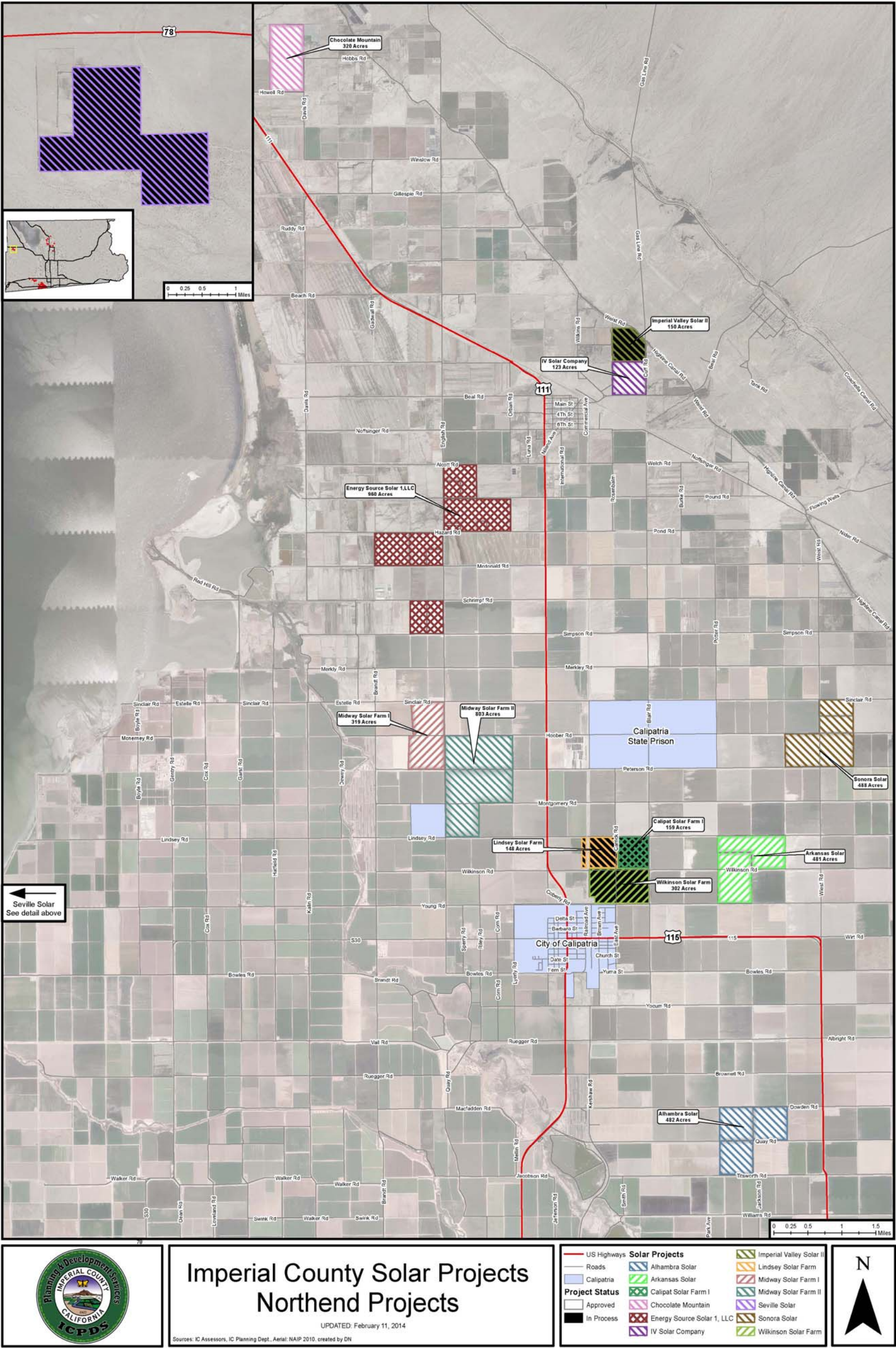
these two levels of analysis, the Project is assessed with regard to its incremental contribution to anticipated cumulative impacts within a geographic scope that extends beyond the Project area. The geographic scope is determined for each individual issue area based on the factors most appropriate to the resource area (e.g. the Salton Sea Air Basin would be the geographic scope for analyzing cumulative air quality impacts). The next level of analysis determines if the Project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e. "cumulatively considerable").

CEQA Guidelines Section 15355 defines a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment which results from the incremental impact of the projects when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355[b]).

This EIR evaluates the cumulative impacts of the Project for each environmental factor or resource area with respect to geographic scope, in combination with proposed, approved and reasonably foreseeable renewable energy projects in the area, and the Project's incremental contribution to the cumulative effects.

Chapter 5.0, Cumulative Impacts Summary, provides a summary of the cumulative impacts identified in sections 4.1 through 4.13 (refer to subsections 4.1.4, 4.2.4, 4.3.4, etc., "Cumulative Setting, Impacts and Mitigation Measures").

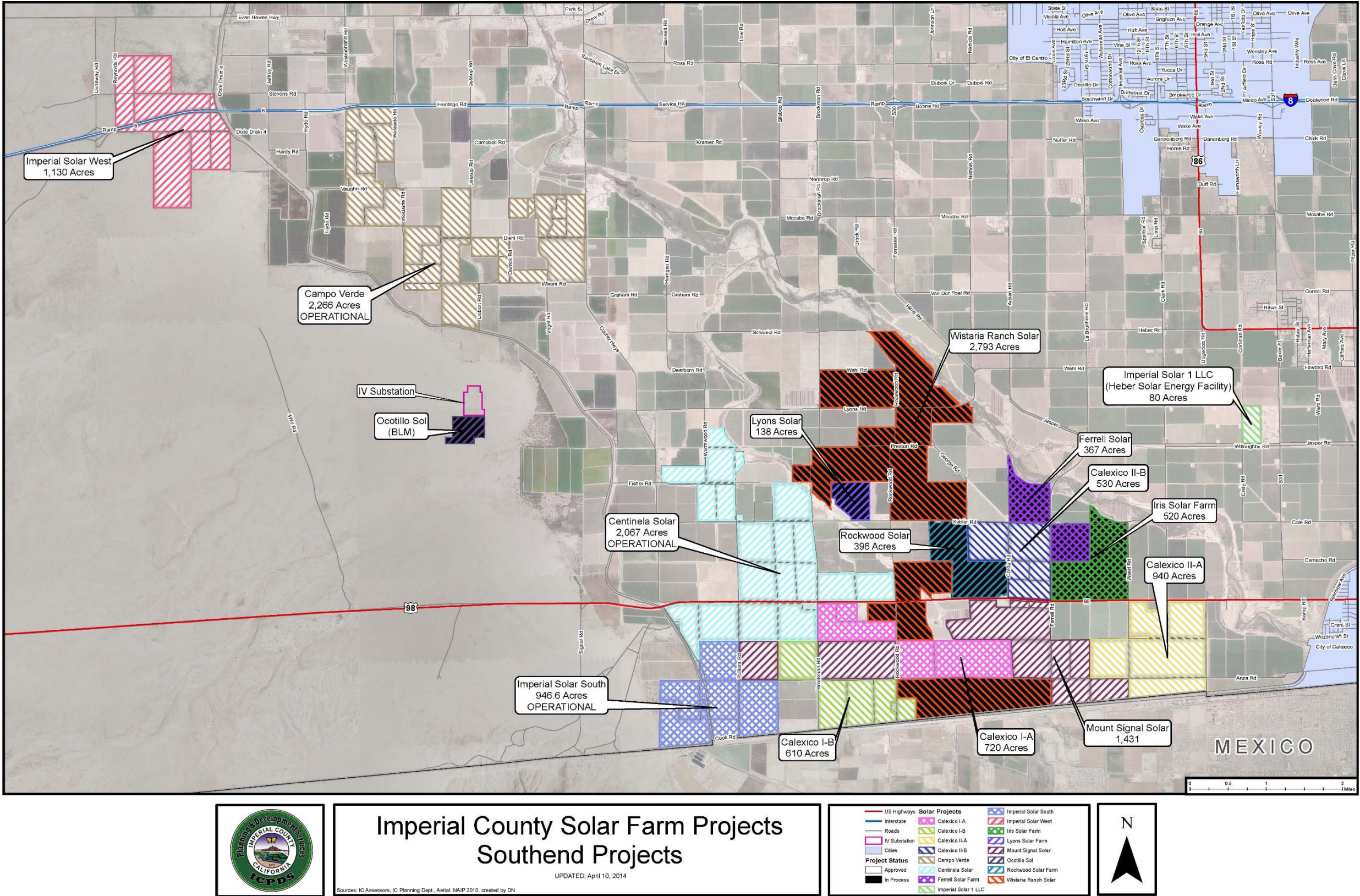
3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED



Source: ICPDSD 2014b.

FIGURE 3.0-1A  
CUMULATIVE PROJECTS MAP  
IMPERIAL COUNTY NORTHEAST

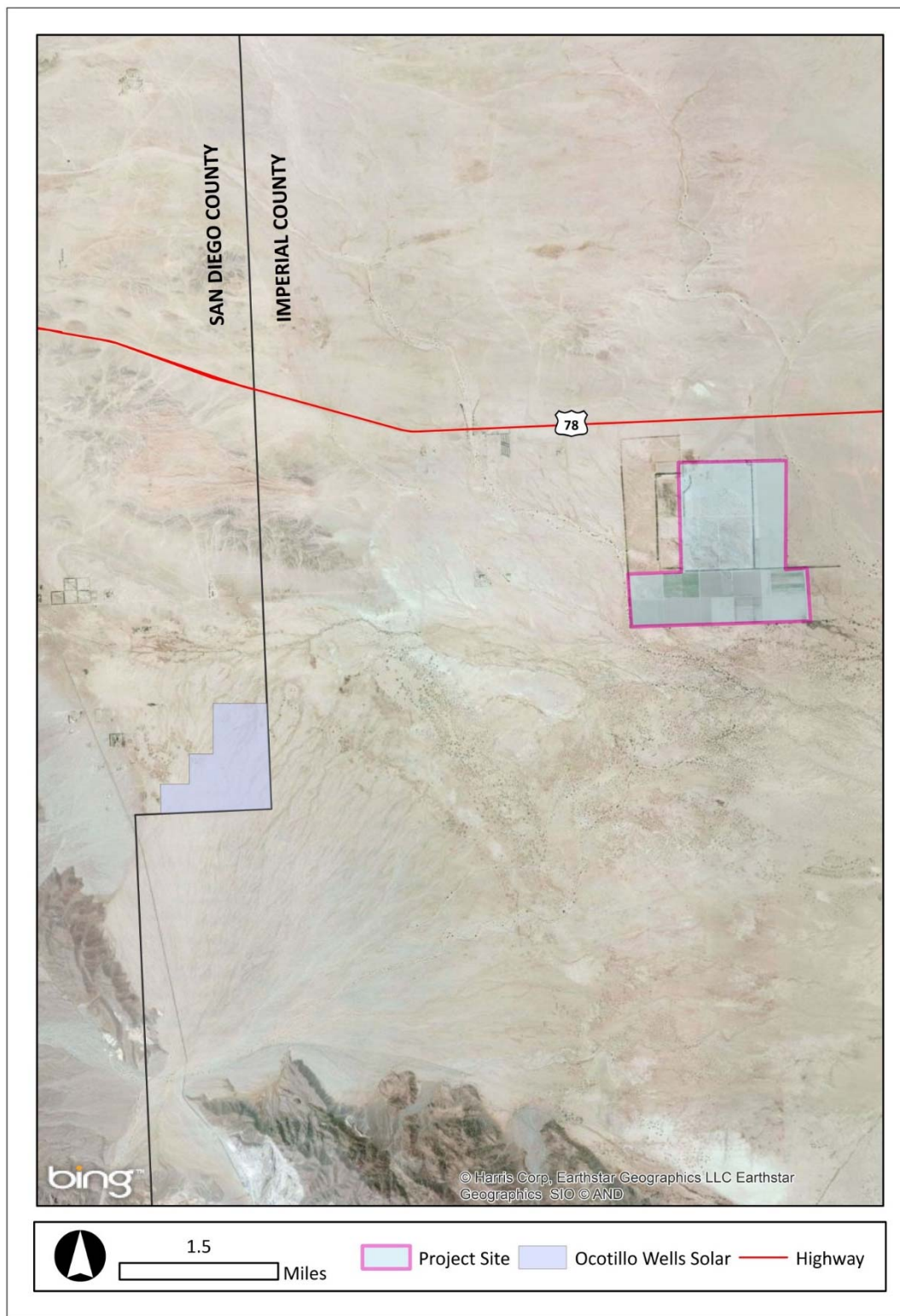
3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED



Source: ICPDSD 2014a.

FIGURE 3.0-1B  
CUMULATIVE PROJECTS MAP - IMPERIAL COUNTY SOUTHEND

### 3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED



Source: Project Applicant, RBF Consulting,  
U.S. Department of Commerce Tiger/Line Shapefiles

**FIGURE 3.0-2**  
**CUMULATIVE PROJECTS MAP – SAN DIEGO COUNTY**