



9. Shallow drainage ditch.



10. Concrete-lined irrigation ditch. Only one such feature exists on the property, and it extends east and west along the north side of a manmade reservoir (see photo 11).



11. Eastern edge of the manmade agricultural reservoir.



12. Drainage ditch along the western boundary of study area.





13. Shallow drainage ditch.



14. Photo taken from San Felipe Wash, east of study area.  
Note vertical separation between floor of wash and site, which is at the tamarisk and beyond.



15. Photo taken off site in San Felipe Wash, along western survey area boundary. WUS and State Waters.



16. Top of drainage ditch.





17. Eastern boundary of study area near Tarantula Wash.



18. Northern boundary of study area near Tarantula Wash.



19. Drainage ditch constructed as part of Highway 78. This is typical of the 5 ditches that cross the transmission corridor. Runoff from four of these feature dissipates as sheet flow and does not enter any WUS or State Waters. The fifth flows into the Tarantula Wash.



20. Tarantula Wash, where it crosses the transmission corridor: WUS and State Waters.

# Seville Solar Project

## Biological Technical Report

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## 1.0 INTRODUCTION

This report describes existing biological conditions for the proposed Seville Solar project (proposed project) and describes the preliminary impacts to biological resources and associated mitigation measures. A specific site plan has not yet been prepared for the proposed project, and it is conservatively assumed at this time that the entire proposed solar site (i.e., where the solar panels would be placed) would be disturbed (ultimately, there may be minor exceptions, possibly including areas of sensitive environmental resources). It is also assumed that there would be disturbance outside the proposed solar site associated with a new primary access road and a new 92 kV transmission line.

This report provides the public, Imperial County, and other government agencies with preliminary information to assess the proposed project's potential impacts to biological resources under the California Environmental Quality Act (CEQA). The actual impacts from the proposed project and any required associated mitigation may need to be re-analyzed following preparation of a specific site plan.

### 1.1 PROJECT LOCATION AND DESCRIPTION

The proposed project is an approximately 135-megawatt solar generation facility that is located roughly 8 miles west of Highway 86, immediately south of Highway 78 (Figure 1). The proposed project would disturb approximately 1,238 acres of mostly fallow private agricultural lands in portions of Sections 15, 22, 23, 25, 26, and 27, Township 12 South, Range 9 East, San Bernardino Baseline and Meridian (Figure 2).

The existing access road to the agricultural lands is located on public lands managed by the U.S. Bureau of Land Management (BLM) in Section 14 (Figure 2). The existing access road and the adjacent existing Imperial Irrigation District (IID) distribution line from Highway 78 to the proposed solar site (Figure 2) would be left alone, although the existing road would be used by emergency responders and project personnel in emergencies as secondary access if the new primary access road to the facility is blocked. The existing access road would also continue to be used by the current owner of the lands outside of the proposed project area.

As part of the proposed project, there would be disturbance outside the proposed solar site associated with a new primary access road and a new 92 kV transmission line (Figure 2). The new primary access road to the proposed solar site is expected to be 24 feet wide with approximately 12-foot wide shoulders and would be built entirely on private land.

An electrical interconnection with the IID electrical transmission system would be necessary and would require the construction of a new, 92 kV transmission line to be built outside the proposed solar site and partly co-located on the path of the existing IID distribution line from the Anza Substation. The newly built 92 kV transmission line would be constructed within an approximately 20-foot wide right-of-way (ROW; Figure 2). This construction would occur within IID ROW previously granted by the BLM; construction within the ROW would be subject to the terms and conditions of the ROW Grant.

Where the electrical interconnection would be on the path of the existing IID distribution line, it would be overbuilt on the alignment of the existing distribution line poles (Figure 2). This means: 1) the existing IID poles would be bent over; 2) new, taller poles would be installed in the same ROW alignment; 3) new conductors (wires) would be built on the top of the taller poles; and 4) the existing IID distribution line would be hung on the new poles below the new conductors. There would be no additional ground disturbance other than use of the ROW by vehicles for this overbuild construction. Construction of the proposed project is expected to start when all permits required are obtained.

## **1.2 EXISTING AND SURROUNDING LAND USES**

The approximately 1,238-acres of proposed solar project disturbance is contained within an approximately 1,729-acre survey area (Figure 2). The survey area consists of the proposed solar site, other surrounding lands, and 50 feet along either side of the existing IID distribution line. Nearly all of the survey area supported groundwater-irrigated agricultural land in the past. Although not surveyed directly, a 100-foot buffer beyond the survey area, except the transmission line, was mapped for vegetation communities/land cover types. The portions of the study area that have not been farmed include approximately 50 acres west of the existing access road along Highway 78 and the transmission corridor. The areas that were farmed have not been actively farmed over the last several years.

The surrounding lands are generally undeveloped desert; however, Highway 78 and the existing IID distribution line occur just north of the proposed solar site. The proposed solar site is surrounded by private properties and land administered by the BLM. The lands surrounding the proposed solar site, and particularly along the existing IID distribution line ROW adjacent to Highway 78 and along the western boundary of the survey area, have been subjected to off-road vehicle use.

## **1.3 TOPOGRAPHY AND SOILS**

Elevations in the survey area range from 45 feet below mean sea level to 20 feet above mean sea level. The majority of the soils in the survey area consist of Vint fine sandy loam. Other soils in the survey area include Indio-Vint complex, Rositas sand (0-2 percent slopes), Rositas fine sand (0-2 percent slopes), Meloland fine sand, Indio loam, Glenbar complex, Rositas sand (2-5 percent slopes), Carsitas gravelly sand (0-5 percent slopes), and Glenbar clay loam (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).

## **2.0 METHODS**

### **2.1 RECORDS SEARCH**

HELIX Environmental Planning, Inc. (HELIX) conducted a search for special status biological resources reported within and near the survey area (Figure 2) using a set of databases consisting of: California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2010a), California Native Plant Society (CNPS 2012; incorporated in



CNDDDB), CDFW BIOS database, U.S. Fish and Wildlife Service (USFWS) critical habitat, BLM sensitive species, and the National Wetland Inventory (USFWS 2012).

## **2.2 BIOLOGICAL SURVEYS**

General biological surveys were conducted in the survey area by HELIX biologist Larry Sward on July 11, 2012, and by Mr. Sward and HELIX biologist Robert Hogenauer on January 29, 2013. Vegetation communities/land cover types and special status species observed were mapped. Conditions in the survey area and the potential for other special status species to occur were assessed.

Vegetation communities/land cover types were classified in accordance with the Manual of California Vegetation (Sawyer, et al. 2009) and CDFW's List of California Vegetation Alliances (CDFW 2009). Vegetation communities/land cover types were mapped on an aerial photograph base map with a scale of 1 inch equals 400 feet. Plants were identified according to The Jepson Manual: Higher Plants of California (Baldwin et al. 2012). The overall condition of the survey area was documented with photographs (available upon request).

HELIX biologists Larry Sward and Ben Rosenbaum conducted a jurisdictional delineation for the proposed project on February 13, 2013 (HELIX 2013a). U.S. Army Corps of Engineers (USACE) wetland boundaries were determined using the three criteria (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008).

The CDFW jurisdictional boundaries were determined based on the presence of riparian vegetation or regular surface flow. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation."

HELIX biologists Larry Sward and Robert Hogenauer conducted a focused survey for special status plant species in the survey area, with particular emphasis on Peirson's pincushion, on March 19, 2013.

A focused burrowing owl survey was conducted by HELIX biologists Robert Hogenauer, Jesse Miller, and Larry Sward in accordance with the CDFW guidelines outlined in Appendix D of the Staff Report for Burrowing Owl Mitigation (CDFW 2012). The habitat assessment, burrow survey, and focused owl survey were conducted from January through June 2013 (HELIX 2013b).

Lists of all plant and animal species observed or detected during the surveys were made and are compiled in Appendices A and B, respectively. The location of one special status animal species was documented on the aerial photograph base map.

## 3.0 RESULTS

### 3.1 VEGETATION COMMUNITIES/LAND COVER TYPES

The survey area supports 24 vegetation communities/land cover types (Figures 3a through 3h). While some of the major components of certain vegetation communities are present, and those areas have been classified accordingly, all of the communities in the survey area are very simple in composition with low biological diversity and, in most cases, have relatively low biomass. The native soil crust has been lost, and the surface topography of much of the survey area has been graded flat or is furrowed due to agricultural operations.

#### 3.1.1 Creosote Bush Scrub

Creosote bush (*Larrea tridentata*) is dominant in the shrub canopy of this community that is the most abundant and extensive in the desert southwest. White bursage (*Ambrosia dumosa*), honey sweet, (*Tidestromia oblongifolia*), and desert sand mat (*Chamaesyce polycarpa*) are also present in this habitat.

#### 3.1.2 White Bursage Scrub

White bursage is dominant in the shrub canopy. Associated species include Saharan mustard (*Brassica tournefortii*) and burro bush (*Hymenoclea salsola*).

#### 3.1.3 Creosote Bush – White Bursage Scrub

Creosote bush and white bursage are co-dominant in the shrub canopy. Associated shrub species include white dalea (*Psoralea argemone*).

#### 3.1.4 Creosote Bush – White Bursage Scrub – Sparse

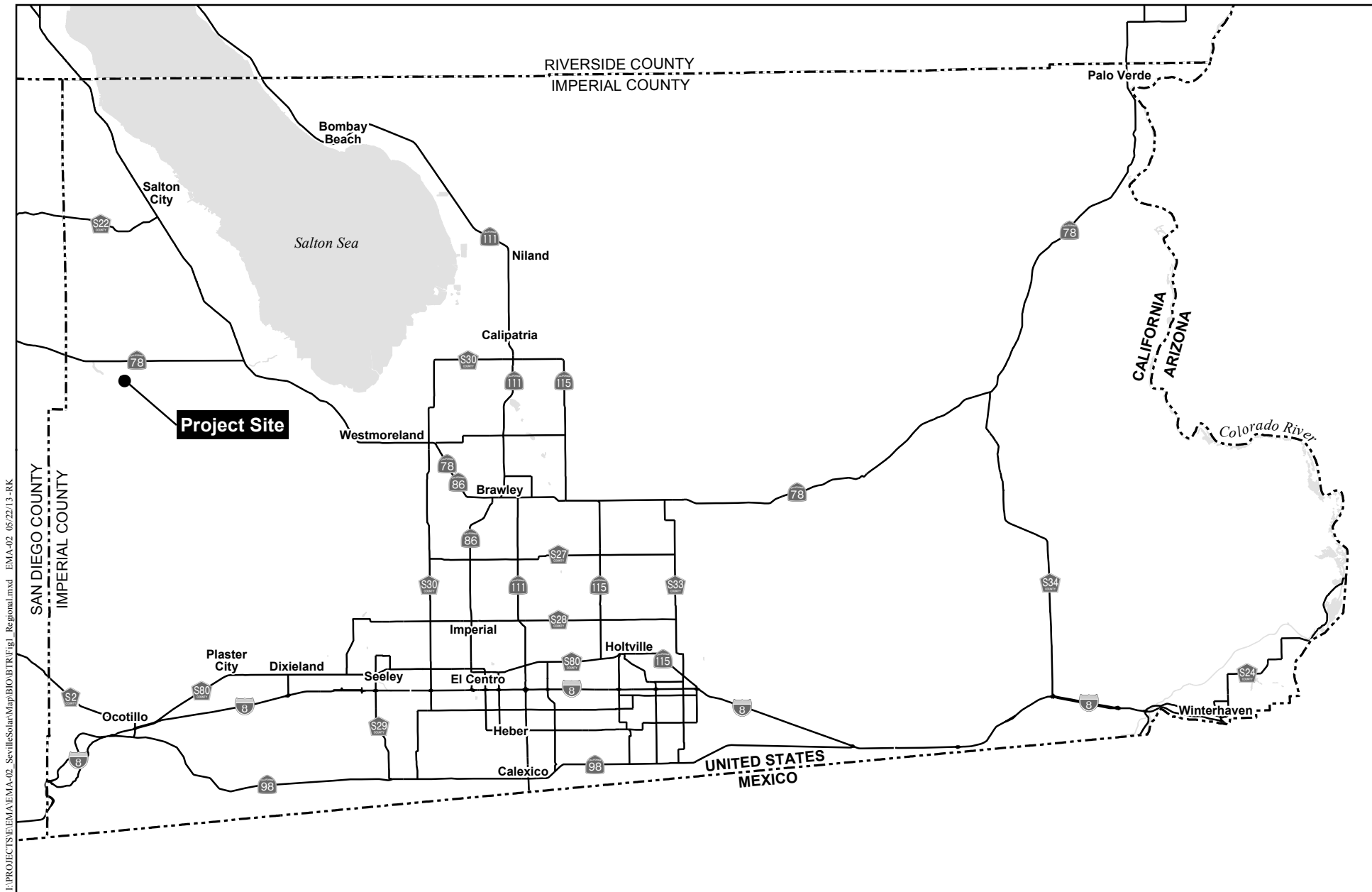
This community is similar to creosote bush–white bursage scrub except that the shrubs are fewer in number.

#### 3.1.5 Allscale Scrub

Allscale (*Atriplex polycarpa*) is the dominant species in the shrub canopy. Associated species include white bursage, creosote bush, Mediterranean grass (*Schismus barbatus*), and Saharan mustard.

#### 3.1.6 White Dalea Scrub

White dalea scrub is a near monotypic stand of white dalea that appears to be the result of previous disturbance. This species is more typically known as an associated species in creosote bush-white bursage scrub.



# Regional Location Map

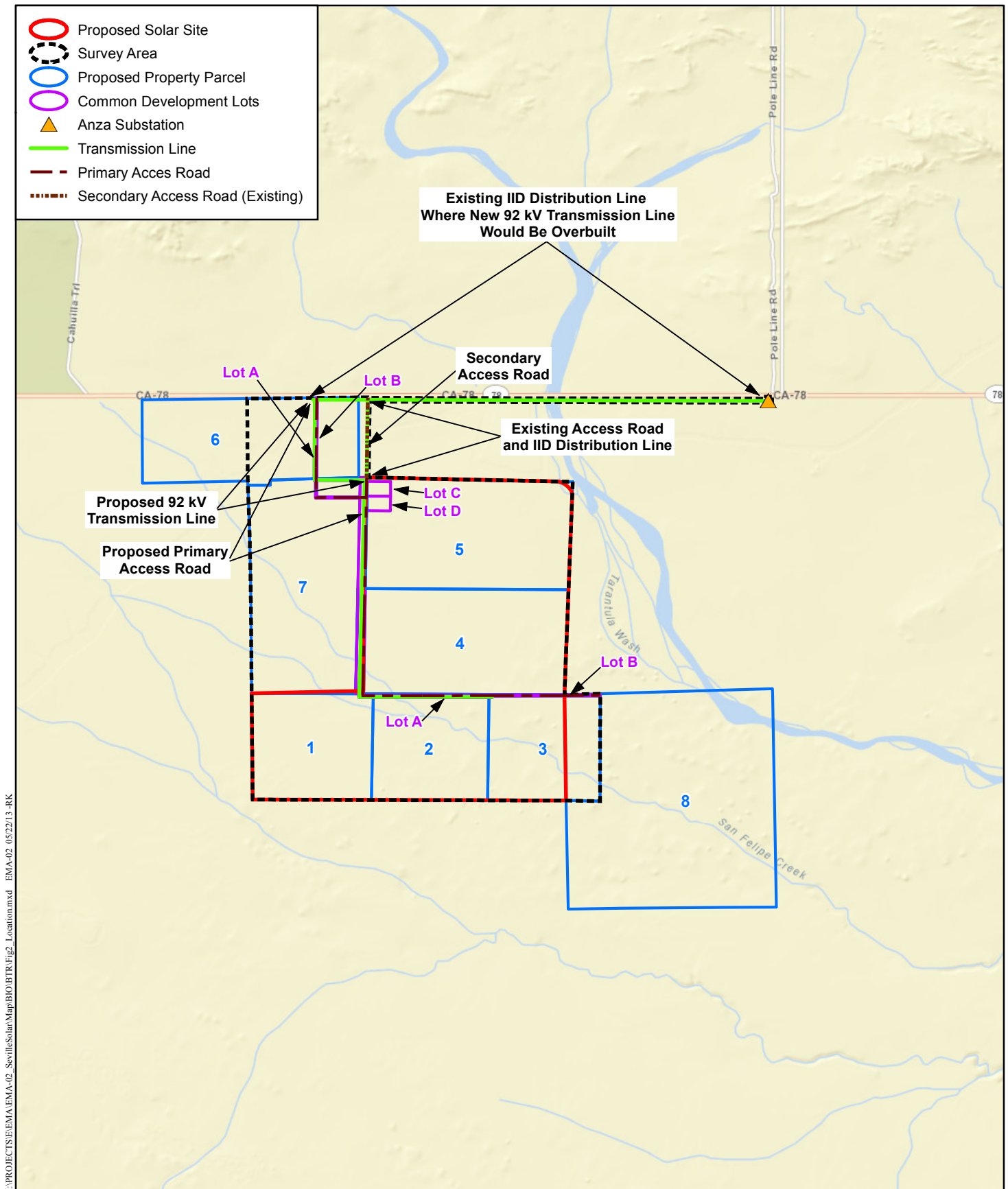
SEVILLE SOLAR PROJECT

Figure 1

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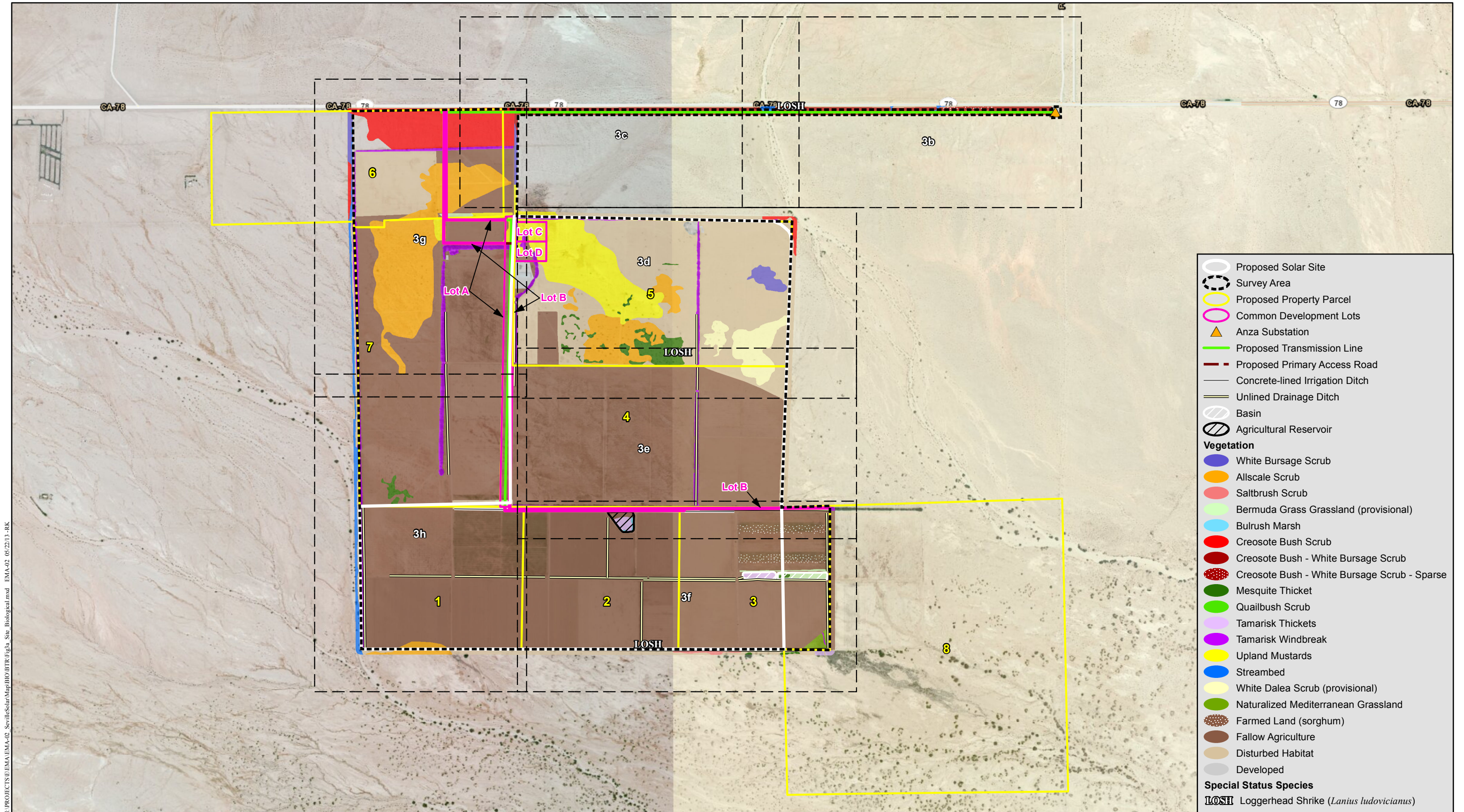
## Project Location Map

SEVILLE SOLAR PROJECT

Figure 2

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**Key Map: Biological Resources/Land Cover Types**

SEVILLE SOLAR PROJECT