SECTION 4.3

CULTURAL RESOURCES

This section provides a background discussion of the regulatory framework and the environmental setting with regard to cultural and paleontological resources. Cultural resources consist of archaeological sites from the prehistoric and historic periods, and buildings, structures, and objects from the historic period. Paleontological resources are the fossil remains of animals and plants from the past. Paleontological resources are not cultural resources because they are not the result of human activity. However, paleontological resources are combined with cultural resources for the purposes of CEQA because they are considered in the Cultural Resources section of the Environmental Checklist Form (State CEQA Guidelines, Appendix G). Therefore, impacts to paleontological resources are also analyzed in this section.

The regulatory framework identifies the federal, state, and local regulations applicable to cultural and paleontological resources. The environmental setting discusses the Area of Potential Effect, the cultural context, records search results, field inventory results, and Native American concerns. Impacts on historic resources (i.e. significant cultural resources) and paleontological resources that would result from constructing the Project are analyzed based on state and local laws and regulations.

Information in this section is summarized from multiple sources including *Inventory, Evaluation and Analysis of Impacts on Historic Resources on Private Lands Within the Area of Potential Effect of the Campo Verde Solar Project, Imperial County, California* prepared by ASM Affiliates, Inc. (Davis et. al, 2011) and the "California Historical Resources Information System Records Search" prepared by the South Coastal Information Center (SCIC 2011). These documents are provided on the attached CD of Technical Appendices as **Appendix D** of this SEIR.

4.3.1 REGULATORY FRAMEWORK

A. STATE

Cultural Resources

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) is the state law that addresses the evaluation of a project's impacts on cultural resources. A "project" is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to "Historical Resources" be identified and, if the impacts will be significant, that mitigation measures to reduce the impacts be applied.

A "Historical Resource" is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k), or 3) has been identified as significant in a historical resources survey, as defined in Public Resources Code 5024.1(g) [CCR Title 14, Section 15064.5(a)].

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

(1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

(2) It is associated with the lives of persons important to local, California, or national history.

(3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

(4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. The integrity of a resource is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, Section 4852(c)]. Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Archaeological sites are usually evaluated under Criterion 4, the potential to yield information important in prehistory. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. Imperial County, as the CEQA lead agency, makes the determination of eligibility based on the results of the test program.

AB 4239

AB 4239 established the Native American Heritage Commission (NAHC) as the primary government agency responsible for identifying and cataloging Native American cultural resources. The bill authorized the Commission to act in order to prevent damage to and insure Native American access to sacred sites and authorized the Commission to prepare an inventory of Native American sacred sites located on public lands.

Public Resources Code 5097.97

No public agency and no private party using or occupying public property or operating on public property under a public license, permit, grant, lease, or contract made on or after July 1, 1977, shall in any manner whatsoever interfere with the free expression or exercise of Native American religion as provided in the United States Constitution and the California Constitution; nor shall any such agency or party cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

Public Resources Code 5097.98 (b) and (e)

Public Resources Code 5097.98 (b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until he/she confers with the NAHC-identified Most Likely Descendents (MLDs) to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the landowner is required to reinter the remains elsewhere on the property in a location not subject to further disturbance.

California Health and Safety Code, Section 7050.5

California Health and Safety Code, Section 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the county coroner.

Paleontological Resources

CEQA Guidelines Appendix G provides a checklist of questions that a lead agency should typically address if relevant to a project's environmental impacts. Appendix G Section (V)(c) asks if the project will directly or indirectly destroy a unique paleontological resource, site, or unique geological feature. Based on the Project's location on Lake Cahuilla sediments, it could contain paleontological resources.

B. LOCAL

Cultural Resources

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, and policies for the identification and protection of significant cultural resources. The Open Space Element of the General Plan includes goals, objectives, and policies for the protection of cultural resources and scientific sites that emphasize identification, documentation, and protection of cultural resources. **Table 4.3-1** provides a consistency analysis of the applicable Imperial County General Plan policies relevant to cultural resources as they relate to the proposed Project. While this SEIR analyzes the Project's consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.3-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

GENERAL PLAN POLICIES	CONSISTENT WITH GENERAL PLAN?	ANALYSIS
Cultural Resources Conservation Policy Identify and document significant historic and prehistoric resources, and provide for the preservation of representative and worthy examples; and recognize the value of historic and prehistoric resources, and assess current and proposed land uses for impacts upon these resources. **Programs** • The County will use the environmental impact report process to conserve cultural resources. Public awareness of cultural heritage will be stressed. All information and artifactual resources recovered in this process will be stored in an appropriate institution and made available for public exhibit and scientific review. • Encourage the use of open space easements in the conservation of high value cultural resources. • Consider measures which would provide incentives to report archeological discoveries immediately to the Imperial Valley College - Baker Museum. • Coordinate with appropriate federal, state, and local agencies to provide adequate maps identifying cultural resource locations for use during development review. Newly discovered archeological resources shall be	Yes	As part of the environmental review (SEIR process) for the Campo Verde Solar Project, including the Battery Energy Storage System site, historic and prehistoric resources were identified and documented. No known historical or paleontological resources are known to existing on the Project site.

TABLE 4.3-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

GENERAL PLAN POLICIES	CONSISTENT WITH GENERAL PLAN?	ANALYSIS
added to the "Sensitivity Map for Cultural Resources". • Discourage vandalism of cultural resources and excavation by persons other than qualified archaeologists. The County shall study the feasibility of implementing policies and enacting ordinances toward the protection of cultural resources such as can be found in California Penal Code, Title 14, Point 1, Section 622-1/2.		

4.3.2 ENVIRONMENTAL SETTING

The Project site is within the western portion of the Colorado Desert, which is also part of the larger Sonoran Desert. The area is located between the Colorado River on the east, the Yuha Desert on the west, the Salton Sea to the north, and the U.S.-Mexico International Border to the south. The topography in the project area is relatively level and consists of solar facilities and irrigated agricultural fields. Irrigation water is provided by a network of canals and ditches that bring water from the Colorado River via the All-American Canal. Prior to conversion of the area to agriculture, native vegetation consisted of creosote, ocotillo, brittle bush, ephedra, and white bursage, as well as other native annuals and grasses. The New River, which carries excess irrigation water from drains installed in fields to the Salton Sea, is located about 0.25-mile north of the northeast corner of the Campo Verde Solar Project.

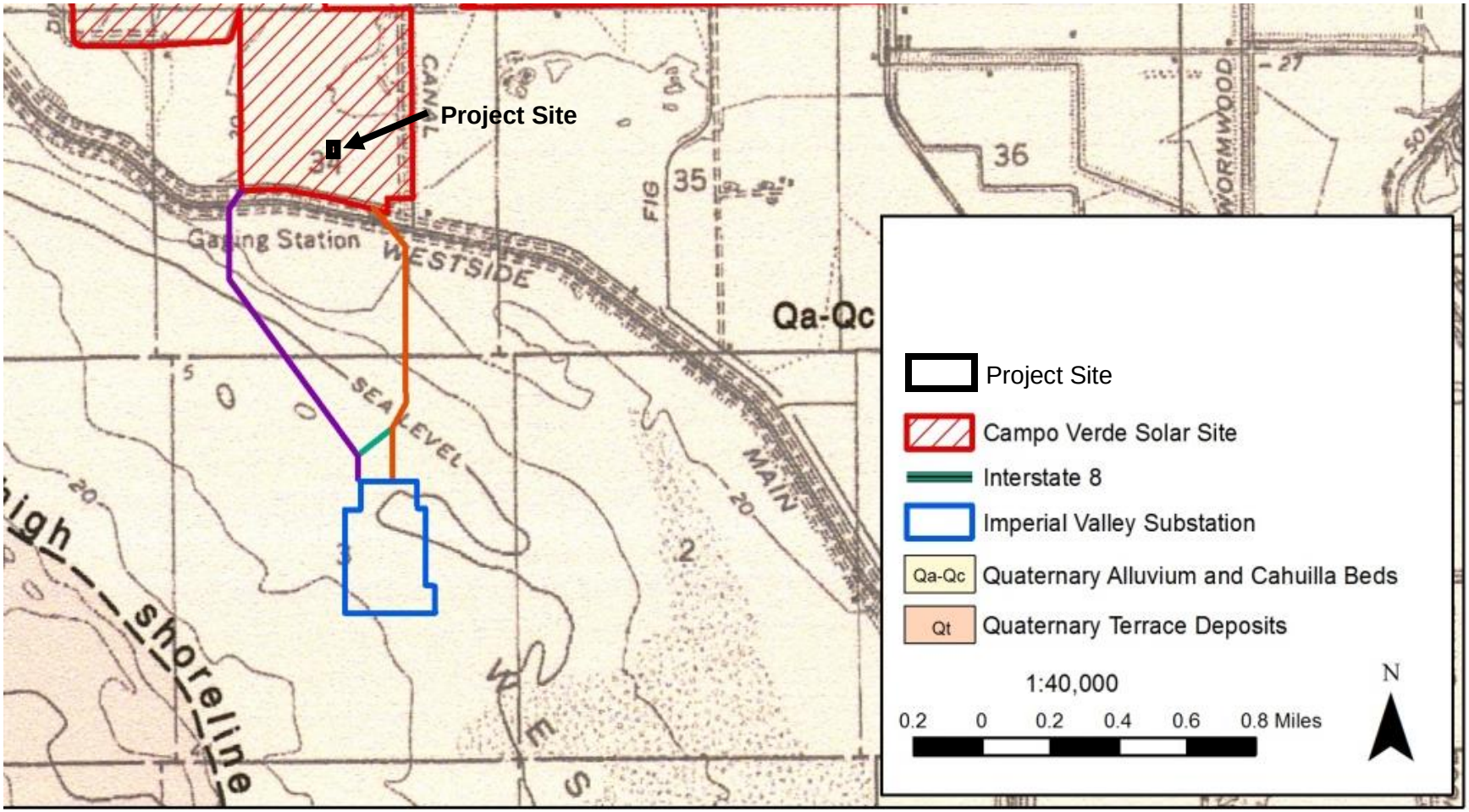
A. PALEONTOLOGY

Paleontological resources (fossils) are the remains of prehistoric plant and animal life. Fossil remains, such as bones teeth, shell, and wood, are found in geologic deposits (rock formations) within which they were originally buried. The following discussion provides an overview of the geologic formations that underlie the Project site and surrounding area (**Figure 4.3-1**) as well as their potential to yield significant fossils (Demere and Siren 2011).

Geologic Formations

Quaternary Alluvium (Qa)

The Quaternary alluvium consists of recent sediments including aeolian sand and alluvial sand and gravel. These surficial deposits are likely entirely Holocene in age (less than 10,000 years). Because of the young age of the sediments, Quaternary alluvium usually does not yield significant fossils.



Source: kpe 2011.

FIGURE 4.3-1
SUBSURFACE GEOLOGY

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Lake Cahuilla Sediments (Qc)

Lake Cahuilla sediments are sedimentary rocks that underlie much of the Project site. These sediments contain fossils of freshwater molluscs (including freshwater mussel) and fish (desert pupfish, bonytail, and razorback sucker) that lived in Lake Cahuilla, a large lake that existed intermittently during the Holocene when the Colorado River overflowed into the Salton trough. Terrestrial fossils, including various species of lizards and snakes, as well as mammals, including cottontail rabbit, kangaroo rat, wood rat, pocket mouse, and ground squirrel. Lake Cahuilla sediments have the potential to yield significant fossils because of the paleoclimatic and paleoecological information they can provide.

Brawley Formation (Qbr)

The Brawley Formation consists of sedimentary rocks (including siltstone) that crop out in rocks in the central portion of the Project area and are also found subsurface in the vicinity of the Imperial Valley Substation. The Brawley Formation is Pleistocene in age (0.4 to 1.07 million years old) and has yielded fossils of freshwater lacustrine vertebrates (fish) and invertebrates (molluscs).

Field Survey

During the field survey of the Campo Verde Solar Project site, Lake Cahuilla sediments and rock from the Brawley Formation were observed in low outcrops within and directly adjacent to the Campo Verde Solar Project site. In the vicinity of the Imperial Valley Substation, Lake Cahuilla sediments extend six to eight feet below the surface and overlie sedimentary rocks of the Brawley Formation (Demere and Siren 2011).

B. CULTURAL RESOURCES

Prehistory

Little archaeological material dating to the Early and Middle Holocene Periods (8,000 to 1,000 B.C.) is known from the Salton Trough area of the Colorado Desert. The only indications of use of this area during this long period of time consist of large dart points found on the former lake bed of Lake Cahuilla (an older and larger version of the Salton Sea) and in the nearby desert (Mitchell 2011). The sparse occupation during the Middle Holocene may be related to extremely arid climatic conditions and of the lack of water in the Salton Trough (Lake Cahuilla was likely dry during this period). While the population of the region was likely sparse during this period, small bands of mobile Desert Archaic people presumably moved among areas where water (at springs) and plant food resources were available.

Higher population and greater numbers of sites appear to correlate with the presence of Lake Cahuilla which filled the Salton Trough when water flowed into the trough from the Colorado River. When water ceased to flow from the river, the lake dried, markedly reducing the availability of resources. Occupation of the Salton Trough during the Late Prehistoric Period (A.D. 700 to Contact) correlates with three cycles of inundation and drying in Lake Cahuilla that occurred between A.D. 1,200 and 1,680 (Mitchell 2011). When the lake was present, lacustrine resources, such as fish, shellfish, and waterfowl were available. When the lake was absent, very few resources were available and human population was low. Lake Cahuilla was much larger than the current Salton Sea. Whereas the current Salton Sea shoreline is about 70 meters (230 feet) below sea level, the maximum Lake Cahuilla shoreline was near sea level (Mitchell 2011). The entire Imperial Valley between East Mesa and West Mesa was underwater when Lake Cahuilla was present.

Late Prehistoric archaeological sites in this area belong to the Patayan pattern characterized by use of the bow and arrow and ceramics. The Patayan pattern began about A.D. 700 with the introduction of the bow and arrow, indicated archaeologically by the presence of small projectile points (arrow points) and, along the Colorado River, by the appearance of ceramics. In the southern Salton Trough area, ceramics first appear about A.D. 1000 (Mitchell 2011). Along the lower Colorado River, the Patayan settlement-subsistence system consisted of horticulture, hunting, and gathering in riparian habitats. People lived in multi-seasonal residential bases along the river. When Lake Cahuilla was present in the Salton Trough, they also occupied temporary camps for fishing, hunting, and gathering on the eastern shore of Lake Cahuilla. On the west side of the Salton Trough, the Patayan pattern consisted of a seasonal round among upland and lowland habitats. When Lake Cahuilla was present, seasonal residential bases and temporary camps were occupied on the western shore of Lake Cahuilla in order to obtain resources from the lake including fish, shellfish, and waterfowl (Mitchell 2011).

Obsidian from the Obsidian Butte source on the southeast margin of the Salton Sea was used for making flaked stone tools throughout southern California during the Late Prehistoric Period. However, obsidian from Obsidian Butte could only be obtained when lake levels were low because it is at an elevation of -40 meters (130 feet below sea level).

Ethnography

The Kumeyaay

The Kumeyaay are the Yuman-speaking native people of central and southern San Diego County and the northern Baja Peninsula in Mexico. Spanish missionaries and settlers used the collective term Diegueño for these people, which referred to people living near the presidio and mission of San Diego de Alcalá. Today, these people refer to themselves as Kumeyaay or as Tipai and Ipai, which are northern and southern subgroups of the Kumeyaay (Mitchell 2011).

The territory of the Kumeyaay extended north from Todos Santos Bay near Ensenada, Mexico to Agua Hedionda Lagoon in north San Diego County, and east to the Imperial Valley. The primary source of Kumeyaay subsistence was vegetal food. Seasonal travel followed the ripening of plants from the lowlands to higher elevations of the mountain slopes. Acorns, grass and sage seeds, cactus fruits, wild plums, pinyon nuts, and agave stalks were the principal plant foods. Women sometimes transplanted wild onion and tobacco plants to convenient locations, and sowed wild tobacco seeds. Deer, rabbits, small rodents, and birds provided meat. Village locations were selected for seasonal use and were occupied by clans or bands of related people. Three or four clans might winter together, then disperse into smaller bands during the spring and summer (Mitchell, 2011).

It is estimated that the pre-contact Kumeyaay population ranged from approximately 3,000 to 9,000 (Mitchell, 2011). Beginning in 1775, the semi-nomadic life of the Kumeyaay began to change as a result of contact with European-Americans, particularly from the influence of the Spanish missions. Through successive Spanish, Mexican, and Anglo-American control, the Kumeyaay were forced to adopt a sedentary lifestyle and accept Christianity. As of 1968, Kumeyaay population was approximately 1,500 (Mitchell, 2011).

The Colorado River Peoples: The Quechan and Cocopah

The Quechan and Cocopah are the Yuman-speaking people who lived along the lower Colorado River and also made use of resources in the Imperial Valley. The first historic accounts of the traditional inhabitants of the lower Colorado River were made by Spanish and, later, American

explorers. The Lower Colorado River area was one of shifting tribal territory and tribal boundaries in ethnohistoric times due to inter-tribal warfare. When the Spanish explorers Díaz and Alarcón sailed up the lower Colorado River in 1540 the scene they observed was one of incessant warfare (Mitchell, 2011).

The Quechan and Cocopah obtained food through seasonal rounds of hunting, fishing, and gathering supplemented by small-scale agricultural practices. The Cocopah derived about 30 percent of their diet from agriculture while the Quechan derived about 40 percent of their diet from agriculture. Cultivated crops included maize, beans, squash, melon, and various semi-wild grasses. The river Yumans used more than 75 wild plant foods as food sources, the most important being mesquite and screwbean. The primary source of dietary protein came from fish caught in the Colorado River. Among the more important species were the humpbacked sucker and Colorado pike minnow. Regularly hunted game included small mammals such as rabbits, squirrels, and pack rats. Larger game included deer and bighorn sheep (Mitchell, 2011).

History

In 1769, stimulated by Russian and English encroachment on the northwest Pacific Coast, Spain began to establish a series of missions and presidios along the coastal plains of California that eventually stretched from San Diego to San Francisco. The Spanish established a presidio and mission at San Diego. Lt. Pedro Fages, who was stationed at the San Diego presidio, explored the Imperial Valley area in 1772, 1782, and 1785. The Anza expedition, led by Captain Juan Bautista de Anza, crossed the Imperial Valley in 1774. Beginning at the Spanish presidio at Tubac in what is now southern Arizona, the expedition crossed the Colorado River near Yuma, and passed through the Imperial Valley on its way to Mission San Gabriel in the Los Angeles area (Mitchell, 2011).

The first formal record of the region made by an American was that of Lieutenant-Colonel W. H. Emory, who, in 1846, traveled what was known as the Southern Route from Yuma, through the southern portion of Imperial Valley and the Salton Sink, followed the Carrizo Wash to Warner Springs. From here there were rotes leading to San Diego and Los Angeles. The following year, Emory accompanied General Stephen W. Kearny's American Army of the West expedition over the same route. In 1848, the Mormon Battalion followed the Southern Route and established the first wagon road (Mitchell, 2011). During the Gold Rush of the late 1840s and early 1850s, thousands of prospectors and other immigrants came to California by the Southern Route. Semi-weekly stage service by the Butterfield Overland Mail Company from St. Louis to San Francisco began in 1858. The segment of the route between Yuma and Los Angeles crossed the Imperial Valley. Service ended in 1861 at the beginning of the Civil War (Mitchell, 2011).

As early as 1890, settlers began to enter the Imperial Valley of California. Prior to this, many settlers and travelers passed through the valley on their way to San Diego or Los Angeles from Ft. Yuma on the Colorado River. People viewed the Imperial Valley as a barren waste-land that was subject to instant flooding and plagues of insects in addition to arid land and scorching heat throughout the year (Mitchell, 2011). A few settlers started the town of Imperial, and by 1900 many more settlers entered the valley and began to farm the land; however, no real development took place until water was brought into the area in 1901. This occurred with the construction of the Alamo Canal, which was a 4 mile-long waterway that connected the Colorado River to the head of the Alamo River. The canal was constructed in 1901 to provide irrigation to the Imperial Valley. A small portion of the canal was located in the United States but the majority of the canal was located in Mexico. The Alamo Canal is also known as the Imperial Canal (Mitchell, 2011), and by 1903 hydroelectric power was being harnessed as well. By 1904 the

City of Imperial was officially formed. In 1905 there were a series of floods that diverted the Colorado River into the valley and the Salton Sea was formed. Imperial County, originally part of San Diego County, was founded August 7, 1907. The same year the cities of El Centro, Brawley, and Holtville were also formed.

After the flooding of the Salton Sea was brought under control in early 1907, agricultural development resumed in Imperial Valley. The Imperial Irrigation District (IID) was established in July of 1911, covering an area of 817 square miles, the largest irrigation district in the world at that time. In June, 1916, the IID purchased the canal system built by the California Development Company (IID n.d.).

By the mid-1920s 500,000 acres in Imperial Valley were being irrigated. In 1934 construction began on a new irrigation canal system for the valley that would be primarily on U.S. soil, the All-American Canal, which was completed in 1940 (IID, n.d.). The population by this time had grown to more than 61,000 in Imperial Valley. In the 1950s and 1960s farmers were encouraged to level and tile their fields and install concrete ditches. In 1950 there were approximately 1,550 farmers, but presently there are approximately 500 farmers in Imperial Valley.

Patents (federal deeds) were issued for land in the Project area beginning in 1911 (Mitchell, 2011). All land in the Imperial Valley was originally public land owned by the federal government. Settlers could purchase land from the federal government, obtain it through homesteading, or through the Desert Land Act which required irrigating the land for three years. When the settler had met the requirements, the settler received a patent and assumed ownership of the land. Most of the federal patents for land in the Project area were issued between 1911 and 1920. The federal government also issued patents to the State of California for land in the project area. The state then sold much of this land to settlers.

Cultural Resources in the Project Area

Records Search

A cultural resources records search was conducted by the South Coastal Information Center (SCIC), a component of the California Historical Resources Information System (CHRIS). The SCIC archives site records, maps, and reports for cultural resources in San Diego and Imperial Counties. The SCIC is located at San Diego State University in San Diego, California. The purpose of the records search was to determine the extent of previous cultural resources investigations within a 1-mile radius of the Campo Verde Solar Project site, including the Battery Energy Storage System site, and to determine whether any archaeological sites or architectural resources have been previously identified within the area. Materials reviewed as part of the records search included archaeological site records, historic maps, and listings of resources on the NRHP, the CRHR, California Points of Historical Interest, and California Historical Landmarks.

The records search revealed that 47 cultural resources investigations have been conducted within one mile of the Campo Verde Solar Project site. Of these 47 investigations, six were within or crossing the Campo Verde Solar Project site. The records search identified a total of 139 previously recorded cultural resources within the one-mile records search radius. While eight were within the Campo Verde Solar Project site, none were located on or aligning through, the Battery Energy Storage System site.

Native American Consultation

The NAHC conducted a Sacred Lands File search of the Campo Verde Solar Project area of potential effect (APE) and found Native American cultural resources were not identified within

their inventory. However, the Native Americans were aware of recorded archaeological sites and Native American cultural resources in close proximity to the APE. In 2011, Dave Singleton of the NAHC provided a list of Native American contacts for the Campo Verde Solar Project site. This letter is included as part of **Appendix D** provided on the attached CD of Technical Appendices of this SEIR.

E-mails were sent to the following Native American contacts on the NAHC list:

- Gwendolyn Parada - Chairperson, La Posta Band of Mission Indians
- Leroy J. Elliott – Chairperson, Manzanita Band of Kumeyaay Nation
- Monique LaChappa – Chairperson, Campo Kumeyaay Nation
- Keeny Escalanti, Sr. - President, Fort Yuma Quechan Tribe
- Will Micklin – Executive Director, Ewiiaapaayp Band of Kumeyaay Indians
- Michael Garcia – Vice Chairman, Ewiiaapaayp Band of Kumeyaay Indians
- Jill McCormick – Tribal Archaeologist, Cocopah Indian Tribe
- Bridget Nash-Chrabascz – THPO, Fort Yuma Quechan Tribe
- Preston J. Arrow-Weed, Ah-Mut-Pipa Foundation
- Bernice Paipa – Vice Spokesperson, Kumeyaay Cultural Repatriation Committee

A letter was sent to:

- Carmen Lucas, Kwaaymii Band of Mission Indians

Ms. Lucas requested a visit to the Campo Verde Solar Project site. Ms. Lucas and other Native American representatives were invited to an on-site meeting on December 6, 2011. The meeting was attended by Carmen Lucas (of the Kwaaymii Band of Mission Indians) and Jill McCormick (Tribal Archaeologist for the Cocopah Indian Tribe).

As part of due diligence for this SEIR, the NAHC was contacted to determine if additional tribal consultation was required. Gayle Totton, Associate Governmental Program Analyst with the NACH indicated that a new round of consultation was not necessary for the SEIR (Totton, pers comm., 2016).

Field Survey

An archaeological field survey of a portion of the Campo Verde Solar Project site was conducted by the Environmental Planning Group (EPG) in 2007 (Mitchell 2011). The remainder of the Campo Verde Solar Project site surveyed by KP Environmental in 2011 (Mitchell 2011). An inventory of historic period buildings, structures and facilities was completed by ASM Affiliates (Davis et. al., 2011). During the field survey, systematic pedestrian transects spaced at intervals of 15 meters were utilized. The survey team closely examined the ground surface for evidence of prehistoric and historic resources. An archaeological site was defined as at least three associated artifacts or a single feature. Cultural resources not meeting the site criteria were recorded as isolated finds.

The field surveys identified 29 cultural resources more than 50 years old in the Campo Verde Solar Project site. None of these resources were located within the boundaries of the Battery Energy Storage System.

4.3.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following questions from the Environmental Checklist Form (State CEQA Guidelines, Appendix G). The Project would result in a significant impact to cultural resources if it would result in any of the following:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

d) Disturb any human remains, including those interred outside of formal cemeteries?

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(b)]. CEQA Historical Resources include resources that are eligible for the NRHP or the CRHR [CCR Title 14, Section 15064.5(a)]. Such resources can be buildings, structures, and facilities from the historic period and prehistoric and historic archaeological sites. Demolition or alteration of eligible buildings, structures, and features to the extent that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed "visual impacts") of eligible buildings and above-ground structures and facilities in the Project area could also result in significant impacts. All potentially significant impacts would occur as a result of construction. Operation and maintenance of the Battery Energy Storage System will not result in any further impacts to cultural resources.

B. METHODOLOGY

The identified cultural resources in the Campo Verde Solar Project site were evaluated to determine if they are eligible for the CRHR. If evaluated as eligible for the CRHR, the resources were found to be Historical Resources as defined by CEQA. Construction activities were analyzed to determine whether they would demolish or destroy the Historical Resource or if they would materially impair the characteristics that made the resource eligible for the CRHR. If the construction activities would demolish or destroy the Historical Resource or if they would materially impair the characteristics that make it eligible, the impact is determined to be significant. If a cultural resource is not a Historical Resource as defined by CEQA, there is no potential for impacts and impacts are not analyzed. In the following Section D the cultural resources that are not eligible for the CRHR are listed and the reasons why they are not eligible are discussed. Because these ineligible resources are not Historical Resources, they are not further considered and there is no impact analysis for these resources. After the discussion of the ineligible resources, impact analyses are provided for the Historical Resources (resources eligible for the CRHR).

C. ISSUES SCOPED OUT

Several criteria were eliminated from further evaluation as part of CEQA Appendix G Environmental Checklist Form and consideration of subsurface conditions present beneath the Project site. Criterion "a" was eliminated because the Cultural Resources Inventory Report prepared for the Campo Verde Solar Project included the Battery Energy Storage Site. In addition, a records search and field survey were conducted for the entire Campo Verde Solar Project that included the Battery Energy Storage Site. No historical resources were identified within the boundaries of the proposed Project site. In addition, the area of the proposed Battery Energy Storage System site has been disturbed and leveled as part of the Campo Verde Solar Project. Thus, no historical resources as defined in §15064.5 are present and no impact would occur. This issue will not be discussed further in the SEIR.

D. PROJECT IMPACTS AND MITIGATION MEASURES

Unrecorded Subsurface Cultural Resources

Impacts to Unrecorded Subsurface Archaeological Resources

Impact 4.3.1 Unrecorded subsurface archaeological resources could be damaged during construction of the Battery Energy Storage System. This is considered a **potentially significant impact**.

Construction

The proposed Battery Energy Storage System site has been historically disturbed by past agricultural practices and is currently vacant land within the Campo Verde Solar Project west of the Campo Verde Substation. Although the potential for intact subsurface archaeological resources on the Battery Energy Storage System site is low, given the underlying geologic formations (i.e. Lake Cahuilla sediments), and the fact that trenches would be excavated to a depth of at least 36 inches (3 feet), the possibility exists for unrecorded cultural resources potentially present beneath the ground surface to be exposed during construction. Therefore, potential to encounter subsurface archaeological resources is considered a **potentially significant impact** during construction.

Operation

During Project operation and maintenance, no additional impacts to the archaeological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. As a result, impacts to archaeological resources are considered **less than significant** during Project operation.

Decommissioning

Decommissioning activities will consist of the removal of the battery cells, structures and wiring. During the decommissioning phase of the Project, earth-moving activities similar to those occurring during Project construction. However, the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction of the Battery Energy Storage System. As such, no further disturbance of potential archaeological resources would occur. As a result, impacts to archaeological resources are considered **less than significant** during decommissioning. However, a monitor would be present during decommissioning activities in the unlikely event that archaeologic resources are discovered.

Mitigation Measure

MM 4.3.1 If subsurface deposits believed to be cultural in origin are discovered during construction, all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist shall be retained to evaluate the significance of the find. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required. Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR. If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility for the CRHR and, if eligible, data recovery as mitigation.

Timing/Implementation: *During construction and decommissioning/Field monitor, Qualified Archaeologist, if necessary.*

Enforcement/Monitoring: *Qualified archaeologist and Imperial County Department of Planning and Development Services.*

Significance After Mitigation

Implementation of mitigation measure MM 4.3.1 requires construction activities to be halted in the event that potential subsurface resources are discovered during construction. No further construction would occur until after an assessment of the resource by a qualified professional archaeologist has been made. Following implementation of mitigation measure MM 4.3.1, impacts to unrecorded subsurface archaeological resources would be **less than significant** after mitigation.

Impacts to Subsurface Human Remains

Impact 4.3.2 Subsurface human remains could be impacted during construction of the Battery Energy Storage System. This is considered a **potentially significant impact**.

Construction

The proposed Battery Energy Storage System site has been historically disturbed by past agricultural practices and is currently vacant land within the Campo Verde Solar Project west of the Campo Verde Substation. Although the potential for encountering subsurface human remains within the Battery Energy Storage System site is low, there remains a possibility that human remains could be present beneath the ground surface, and that such remains could be exposed during Project construction. Therefore, potential to encounter subsurface human remains is considered a **potentially significant impact** during construction.

Operation

During Project operation and maintenance, no additional impacts to subsurface human remains would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. As a result, impacts to subsurface human remains are considered **less than significant** during Project operation.

Decommissioning

Decommissioning activities will consist of the removal of the battery cells, structures and wiring. During the decommissioning phase of the Project, earth-moving activities similar to those occurring during Project construction. However, the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction of the Battery Energy Storage System. As such, no further disturbance of potential subsurface human remains would occur. As a result, impacts to archaeological resources are considered **less than significant** during decommissioning. However, a monitor would be present during decommissioning activities in the unlikely event that human remains are discovered.

Mitigation Measure

MM 4.3.2 In the event that evidence of human remains is discovered, construction activities within 200 feet of the discovery shall be halted or diverted and the Imperial County Coroner will be notified (Section 7050.5 of the Health and Safety Code). If the Coroner determines that the remains are Native American, the Coroner will notify the Native American Heritage Commission which will designate a Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

Timing/Implementation: *During construction and decommissioning/Field Monitor, Imperial County Coroner, if necessary.*

Enforcement/Monitoring: *Applicant, Imperial County Department of Planning and Development Services, Imperial County Coroner.*

Significance After Mitigation

Implementation of mitigation measure MM 4.3.2 requires construction activities to be halted or diverted in the event that human remains are discovered. The County Coroner and Native American Heritage Commission will be notified as appropriate. Following implementation of mitigation measure MM 4.3.2, impacts to unrecorded subsurface human remains would be **less than significant** after mitigation.

Paleontological Resources

Impacts to Fossil Remains

Impact 4.3.3 Fossil remains could be destroyed by excavation and trenching associated with construction of the Battery Energy Storage System. This is considered a **potentially significant impact.**

Construction

Paleontological (or fossil) resources are protected under CEQA if a project will disturb or destroy a unique paleontological resource or site or unique geologic feature. Previously undisturbed Lake Cahuilla sediments underlie most of the Campo Verde Solar Project, including the Battery Energy

Storage System site. The Brawley Formation immediately underlies the Lake Cahuilla sediments. These geologic formations have the potential to contain both vertebrate fossils and non-vertebrate fossils (Demere and Siren 2011 pp. 9-10). Because the Brawley Formation immediately underlies the Lake Cahuilla sediments, rocks of the Brawley Formation could be encountered in the shallow subsurface of the Project site. Project-related excavation and trenching activities (up to at least 36 inches in depth) have the potential to physically destroy non-renewable scientifically important fossil remains in these formations and sediments during construction. This is considered a **potentially significant impact**.

Operation

During Project operation and maintenance, no additional impacts to fossil remains would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. As a result, impacts to fossil remains are considered **less than significant** during Project operation.

Decommissioning

Decommissioning activities will consist of the removal of the battery cells, structures and wiring. During the decommissioning phase of the Project, earth-moving activities similar to those occurring during Project construction. However, the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction of the Battery Energy Storage System. As such, no further disturbance of potential fossil remains would occur. As a result, impacts to fossil remains are considered **less than significant** during decommissioning. However, a monitor would be present during decommissioning activities in the unlikely event that fossil remians are discovered.

Mitigation Measure

MM 4.3.3 Ground-disturbing activities in the Lake Cahuilla sediments, Quaternary alluvium, and the Brawley Formation must be monitored by a qualified paleontological monitor. Paleontological monitors will be equipped to salvage fossils as they are unearthed (to help avoid construction delays) and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens will be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Fossil specimens will be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontological resources.

Timing/Implementation: *During construction and decommissioning of Phase 1 and Phase 2/Qualified Paleontological Monitor.*

Enforcement/Monitoring: *Applicant and Imperial County Department of Planning and Development Services.*

Significance After Mitigation

Implementation of mitigation measure MM 4.3.3 requires that a qualified paleontological monitor be present when conducting construction activities in the Lake Cahuilla sediments. The monitor would be empowered to halt or divert construction away from large specimens and to curate fossil specimens. Implementation of mitigation measure MM 4.3.3 would reduce impacts to fossil remains during construction and decommissioning to **less than significant**.

4.3.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope of the cumulative setting for cultural resources includes irrigated agricultural lands and desert within a fifteen-mile radius from the Project site which includes the southwestern section of the high water mark of ancient Lake Cahuilla within the Yuha Basin. This geographic scope of analysis is appropriate because the archaeological, historical, and paleontological resources within this radius are expected to be similar to those in the project site based on proximity; similarity of environments, landforms, and hydrology. Likewise, similar geology within this vicinity would likely yield fossils of similar sensitivity and quantity. This scope encompasses the area within one mile of the 40-foot contour of ancient Lake Cahuilla. The Project vicinity possesses the potential for significant cultural resources that, in many cases, have not been well documented or recorded. Thus, there is the potential for ongoing and future development projects in the vicinity to disturb landscapes that may contain known or unknown cultural resources.

A. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Archaeological Resources and Fossil Remains

Impact 4.3.4 Implementation of the proposed Project, in combination with past, present and probable large-scale projects in the vicinity of the Campo Verde Battery Energy Storage System Project, has the potential to result in impacts to archaeological and historic resources. However, impacts are addressed on a project-by-project basis. Therefore, this is considered a **less than cumulatively considerable impact**.

Potential construction impacts of the proposed Battery Energy Storage System, in combination with other past, present and probable large-scale solar projects in the vicinity, could contribute to a cumulatively significant impact on archaeological resources and fossil remains.

Construction

Cumulative development of past, present and probable large-scale projects in the vicinity of the Battery Energy Storage System identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, would result in the loss and/or degradation of archaeological resources, human remains and fossil remains. These cumulative effects of development on cultural resources would be addressed on a project-by-project basis. Project-specific mitigation measures would also reduce potential project impacts to unrecorded archaeological resources (MM 4.3.1), and human remains (MM 4.3.2) and fossil remains (MM 4.3.3) during construction of the proposed Project.

Future projects in Imperial County with potentially significant impacts to archaeological and historical resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory

requirements, standard conditions of approval, and mitigation measures MM 4.3.1, MM 4.3.2 and MM 4.3.3, construction of the Battery Energy Storage System would have a **less than cumulatively considerable contribution** to impacts to unrecorded archaeological resources) (MM 4.3.1), human remains (MM 4.3.2) and fossil remains (MM 4.3.3.) during construction. Likewise, the proposed Project would result in **less than cumulatively considerable impacts** to unrecorded archeological resources, human remains or fossil remains during Project construction.

Operation

During Project operation, no additional cumulative impacts to unrecorded archeological resources, human remains or fossil remains would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. Therefore, the proposed Project would have a **less than cumulatively considerable contribution** to impacts to unrecorded archeological resources, human remains or fossil remains. Likewise, the proposed Project would result in **less than cumulatively considerable impacts** to unrecorded archeological resources, human remains or fossil remains during Project operations.

Decommissioning

Decommissioning activities will consist of the removal of the batteries and related equipment. Despite the amount of disturbance occurring during decommissioning activities, additional cumulative impacts to unrecorded archeological, human remains and fossil remains are anticipated to have no additional impacts to such resources because the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction. As such, no further disturbance of unrecorded archeological resources, human remains and fossil remains is expected to take place during decommissioning. Therefore, **no cumulatively significant impact** or **cumulatively considerable contribution** related to fossil remains would occur during decommissioning of the Battery Energy Storage System.

Mitigation Measures

None required.

Significance After Mitigation

Implementation of Project-specific mitigation measures MM 4.3.1, MM 4.3.2 and MM 4.3.3 would address potential impacts to unrecorded archeological resources, human remains and fossil remains through construction monitoring, curation of resources, and proper handling of human remains if discovered. Therefore, following implementation of these mitigation measures, cumulative impacts associated with cultural and paleontological resources would be **less than cumulative considerable**.