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CULTURAL RESOURCES TECHNICAL REPORT FOR THE HYDROSTOR A-CAES PROJECT, KERN COUNTY, CALIFORNIA

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MANAGEMENT SUMMARY

At the request of Golder Associates, Inc., PaleoWest, LLC (PaleoWest) conducted a cultural resources assessment for the proposed Hydrostor A-CAES Project (Project) located near Willow Springs in Kern County, California. The study scope was developed according to the CEC's cultural resources guidelines and it complies with the *Rules of Practice and Procedure and Power Plant Site Certification Regulations* (CEC 2007) and this report has been prepared to conform to the Archaeological Resource Management Report format (OHP 1990). The Project will be a nominal 500-Megawatt (MW) advanced compressed air energy storage (A-CAES) facility deploying Hydrostor Inc. (Hydrostor) proprietary A-CAES technology. The Project will consist of an approximately 10.9-mile, 200-foot wide 230 kV single-circuit tie-line (gen-tie lines) interconnecting to the Southern California Edison (SCE) Whirlwind Substation, or an approximately 3.5-mile 230 kV single-circuit tie-line interconnecting to the future Los Angeles Department of Water and Power (LADWP) Rosamond Substation. The Project is located on private land.

This report summarizes the methods and results of the cultural resource assessment of the approximately 400 Project area, which includes the proposed gen-tie alignment plus a 50-foot buffer on each side. This investigation includes background research and an intensive pedestrian survey of the Project area. Existing cultural resources records search data were compiled from the Southern San Joaquin Valley Information Center of the California Historical Resources Information System using a study area of 0.5 miles around the Project area. The survey area for architectural history utilized the same study area as the records search per CEC guidance.

Results of the record search indicate that 20 cultural resources have been previously recorded in the Project area. These resources comprise 3 prehistoric period archaeological sites, 4 multicomponent sites, 7 historic period archaeological sites, 2 historic built environment resources, 3 prehistoric isolated objects, and 1 historic isolated object. Five of these previously recorded resources have been recommended eligible for listing on the California Register of Historic Resources (CRHR) and/or the National Register of Historic Place (NRHP). The remaining 15 cultural resources have been determined ineligible for listing on the CRHR, have not been evaluated, or their status of eligibility is not known. A Sacred Lands File search was also conducted by the Native American Heritage Commission on August 24, 2021, with negative results.

PaleoWest archaeologists conducted an intensive pedestrian survey and site inventory of the Project area between August 23 and September 28, 2021. The survey resulted in the documentation of 53 cultural resources, including 14 previously recorded archaeological sites, 1 previously recorded built-environmental resource with archaeological components, 2 previously recorded isolated objects, 26 newly recorded archaeological sites, and 10 newly recorded isolated objects. The architectural survey resulted in the documentation of 36 built-environment resources.

PaleoWest analyzed the CRHR eligibility of all archaeological resources within the Project area under Criteria 1, 2, 3, and 4. Only one resource within the Project area is recommended eligible for listing on the CRHR (P-15-019042, a previously recorded lithic scatter with over 200 flakes and debitage of chert, rhyolite, obsidian, and chalcedony and one obsidian biface tip). Three resources remain unevaluated pending subsurface testing. The remaining 49 cultural resources

were recommended not eligible for listing on the CRHR. PaleoWest recommends that the Project avoid at least some of the identified cultural resources to the extent feasible. Where avoidance is not feasible, recommended eligible or unevaluated resources may require additional cultural resources management that could include the preparation and implementation of a testing or data recovery program. To mitigate impacts to potential historic resources that are encountered during Project construction, PaleoWest also recommends cultural resource mitigation measures be implemented for the discovery of inadvertent archaeological resources and human remains.

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1 INTRODUCTION

At the request of Golder Associates, Inc., PaleoWest, LLC (PaleoWest) conducted a cultural resources assessment for the proposed Hydrostor A-CAES Project (Project) located near Willow Springs in Kern County, California. The study scope was developed according to the CEC's cultural resources guidelines and it complies with the *Rules of Practice and Procedure and Power Plant Site Certification Regulations* (CEC 2007) and this report has been prepared to conform to the Archaeological Resource Management Report format (OHP 1990).

1.1 PROJECT LOCATION AND DESCRIPTION

The Project will be a nominal 500-Megawatt (MW) advanced compressed air energy storage (A-CAES) facility deploying Hydrostor Inc. (Hydrostor) proprietary A-CAES technology. Located on private land, the Project will consist of an approximately 10.9-mile, 200-foot wide 230 kV single-circuit tie-line (gen-tie lines) interconnecting to the Southern California Edison (SCE) Whirlwind Substation, or an approximately 3.5-mile 230 kV single-circuit tie-line interconnecting to the future Los Angeles Department of Water and Power (LADWP) Rosamond Substation. The Project area encompasses 400 acres.

The Project is located west of the unincorporated community of Willow Springs in the southeastern portion of Kern County (County), between 170th Street West to the west, 90th Street West to the east, Hamilton Boulevard to the north, and Rosamond Boulevard to the south (Figure 1-1). Regionally, the site is depicted on the U.S. Geological Survey (USGS) Tylerhorse Canyon, Fairmont Butte, Willow Springs, and Little Buttes 7.5-minute topographic quadrangle maps. The Project is within Sections 13, 14, 23, and 24 in Township 9 North, Range 15 West, Sections 1-4, 8, 9-12, and 16-18 in Township 9 North, Range 14 West, and Sections 7, 8, 17-19, and 24 in Township 9 North, Range 13 West, San Bernardino baseline and meridian (Figure 1-2 and Figure 1-3).

The purpose of the Project is to provide an energy storage facility consisting of five, 100-MW (nominal) power blocks. Each power block will contain a motor-driven air compressor drivetrain, heat exchangers, and an air turbine generator and their ancillary equipment. Each power block will share a common set of thermal storage tanks (hot and cold) as well as the air storage cavern. The site will be designed to store 500 MW for up to 14 hours and deliver up to 4,000 Megawatt hours (MWh) over an 8-hour period when discharging.

Hydrostor's proprietary technology is a low-cost, bulk-scale energy storage solution. It provides long-duration, emission-free storage that can be flexibly sited where the electricity grid requires it, providing multi-hundred megawatts of generation capacity and a suite of ancillary services in a fifty (50) year life. This is enabled by combining industry-proven technologies with two key innovations: the use of hydrostatically compensated air storage caverns and a proprietary thermal management system.

PaleoWest conducted a pedestrian archaeological survey of the Project area, which consists of the project linear facility routes and extending 50 feet on either side of the preferred alignment and proposed alternatives. The Project area encompasses approximately 400 acres spanning 33 linear miles. The Project study area consists of a half mile buffer around the Project area.

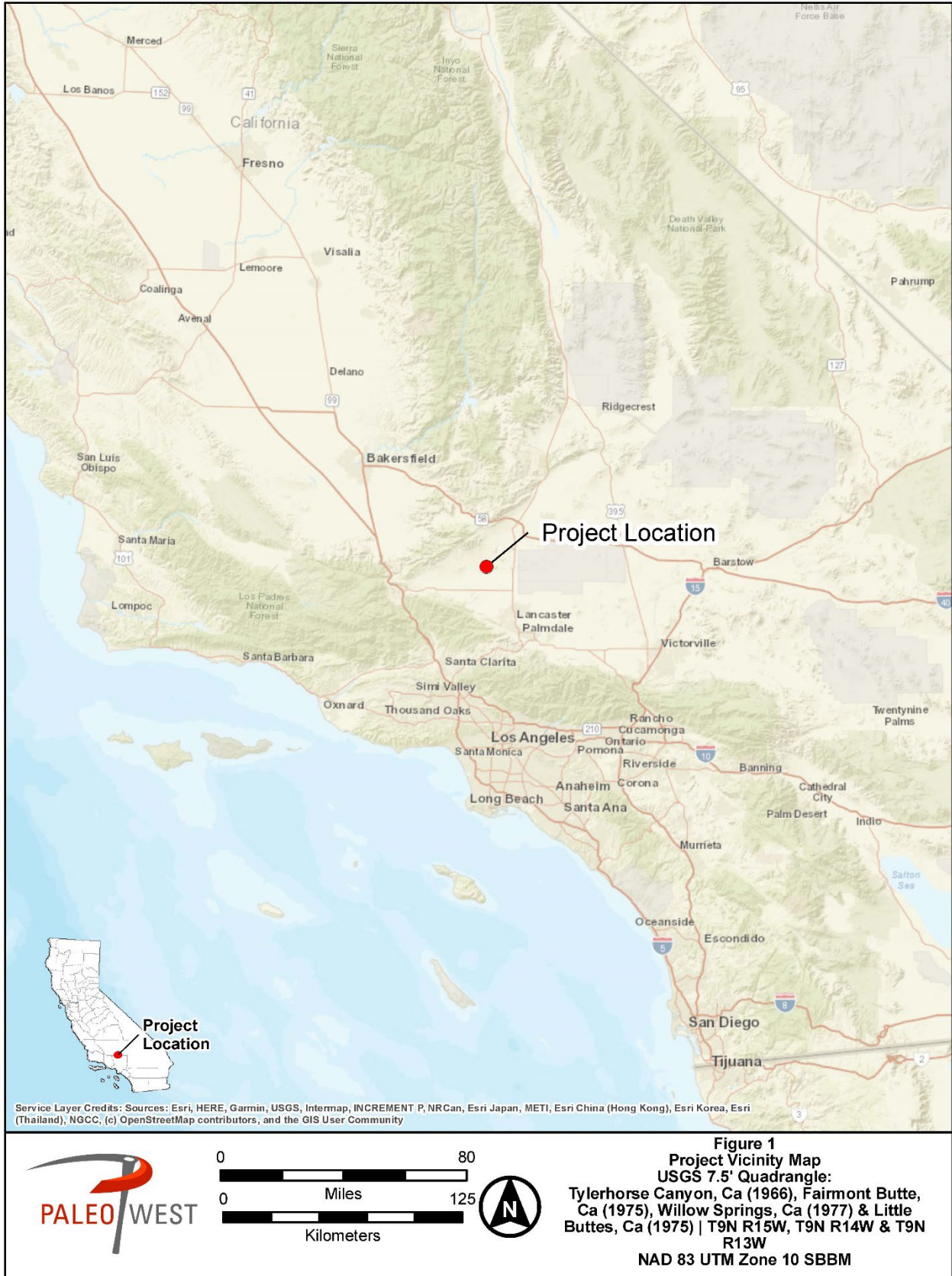
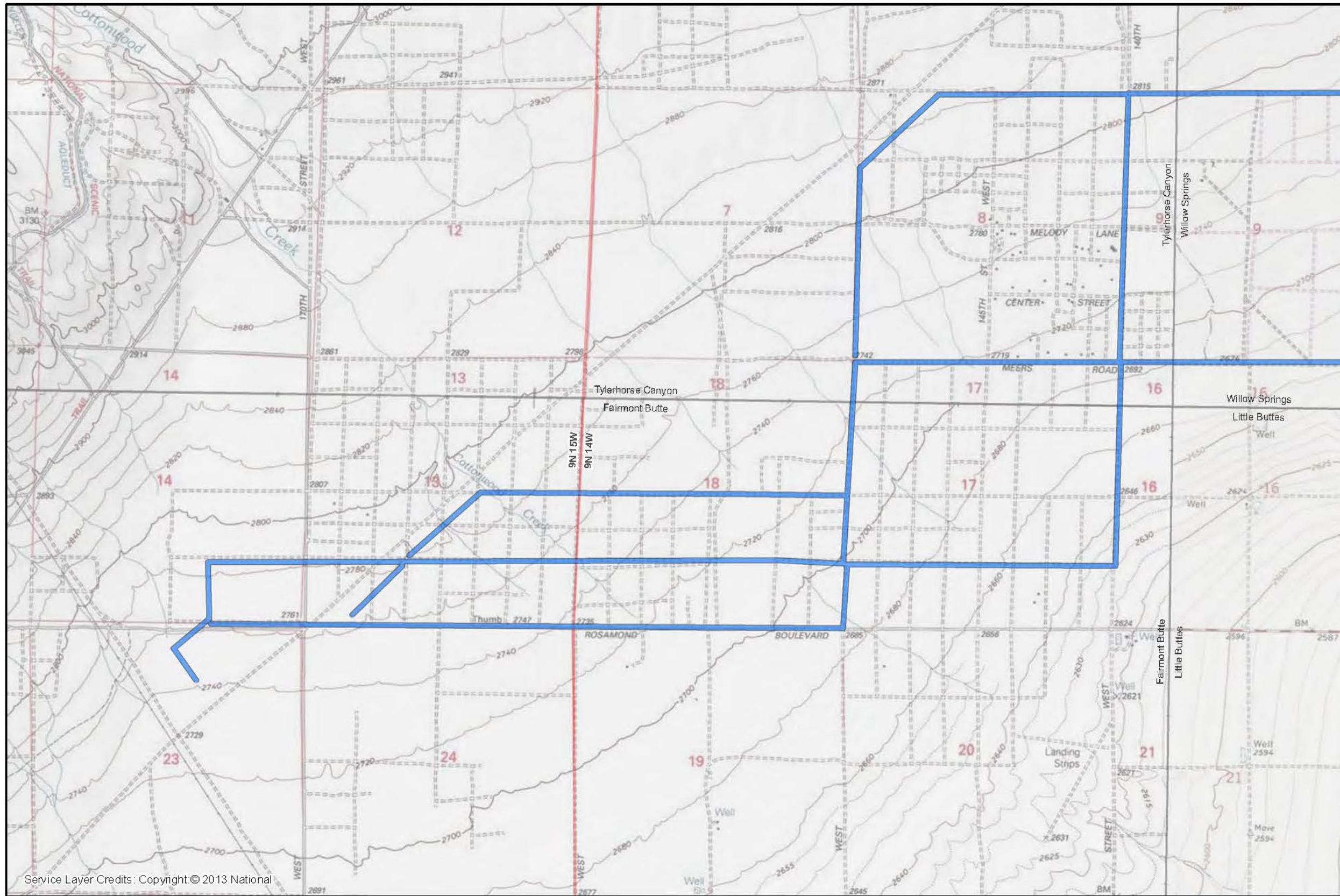


Figure 1-1. Project vicinity map.

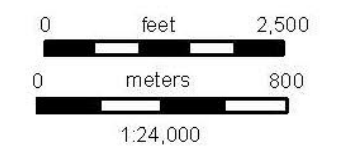


USGS 7.5' Quadrangle:
 Tylerhorse Canyon, Ca (1966), Fairmont Butte, Ca (1975), Willow Springs, Ca (1977) & Little Buttes, Ca (1975)
T9N R15W, Secs 13-14 & 23-24; T9N R14W, Secs 8-9 & 16-18
San Bernardino Baseline and Meridian
UTM Zone 11, NAD 83

SHEET 1

- Project Area
- USGS Quadrangle Boundary
- Township Boundary

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 Public Disclosure of Archaeological Site Locations is Prohibited (54 USC 307103)

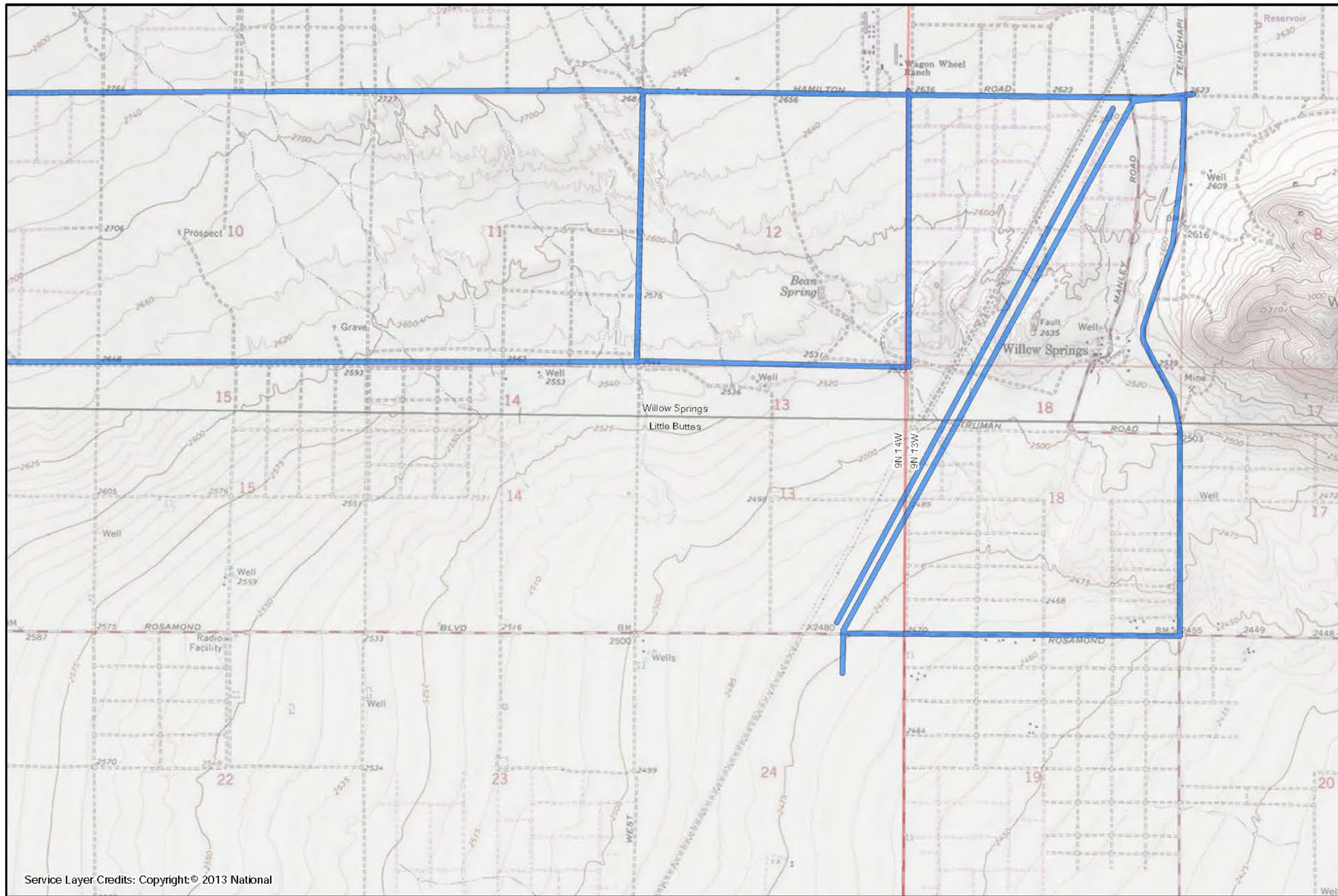


Project Location



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Figure 1-2. Project location map.

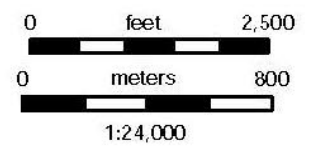


USGS 7.5' Quadrangle:
 Willow Springs, Ca (1977)
 & Little Buttes, Ca (1975)
 T9N R14W, Secs 1-4 & 9-12;
 T9N R13W, Secs 7-8, 17-19 & 24
 San Bernardino Baseline and Meridian
 UTM Zone 11, NAD 83

SHEET 2

- Project Area
- USGS Quadrangle Boundary
- Township Boundary

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 Public Disclosure of Archaeological
 Site Locations is Prohibited
 (54 USC 307103)



Project Location



Service Layer Credits: Copyright © 2013 National

Figure 1-3. Project location map (continued).

1.2 REPORT ORGANIZATION

This report documents the results of a cultural resource investigation conducted for the proposed undertaking. Section 1 has introduced the Project location and description. Section 2 states the regulatory context that should be considered for the undertaking. Section 3 synthesizes the natural and cultural setting of the Project area and the surrounding region. The results of the cultural resource literature and records search conducted at the Southern San Joaquin Valley Information Center (SSJVIC) are presented in Section 4. Section 5 presents the research design and research questions. Details of the field investigation, including methods, evaluation criteria, survey results, and survey evaluations, are included in Section 6. Section 7 provides a summary and management recommendations. Appendix A contains maps depicting the locations of previously recorded cultural resources and prior cultural resource studies. Appendix B includes the results of the Sacred Lands File search by the Native American Heritage Commission and coordination efforts carried out for this study. Appendix C includes maps showing the locations of all identified cultural resources within the Project area. Appendix D contains copies of the DPR 523-series records. Appendix E contains copies of technical reports whose survey coverage is wholly or partly within 0.25 mile of the Project area.

2 REGULATORY CONTEXT

2.1 STATE LAWS AND REGULATIONS

2.1.1 California Environmental Quality Act

The proposed Project is subject to compliance with CEQA, as amended. Compliance with CEQA statutes and guidelines requires both public and private projects with financing or approval from a public agency to assess the project's impact on cultural resources (Public Resources Code Section 21082, 21083.2 and 21084 and California Code of Regulations 10564.5). The first step in the process is to identify cultural resources that may be impacted by the project and then determine whether the resources are "historically significant" resources.

CEQA defines historically significant resources as "resources listed or eligible for listing on the California Register of Historical Resources (CRHR)" (Public Resources Code Section 5024.1). A cultural resource may be considered historically significant if the resource is 45 years old or older, possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and meets any of the following criteria for listing on the CRHR:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history (Public Resources Code Section 5024.1).

Cultural resources are buildings, sites, humanly modified landscapes, traditional cultural properties, structures, or objects that may have historical, architectural, cultural, or scientific importance. CEQA states that if a project will have a significant impact on important cultural resources, deemed “historically significant,” then project alternatives and mitigation measures must be considered.

2.1.2 Assembly Bill 52

Signed into law in September 2014, California Assembly Bill 52 (AB 52) created a new class of resources – tribal cultural resources – for consideration under CEQA. Tribal cultural resources may include sites, features, places, cultural landscapes, sacred places, or objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing on the CRHR, included in a local register of historical resources, or a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant and eligible for listing on the CRHR. AB 52 requires that the lead CEQA agency consult with California Native American tribes that have requested consultation for projects that may affect tribal cultural resources. The lead CEQA agency shall begin consultation with participating Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report. Under AB 52, a project that has potential to cause a substantial adverse change to a tribal cultural resource constitutes a significant effect on the environment unless mitigation reduces such effects to a less than significant level.

3 PROJECT CONTEXT

This section of the report summarizes information regarding the physical and cultural setting of the Project area, including the prehistoric, ethnographic, and historic contexts of the region. Several factors, including topography, available water sources, and biological resources, affect the nature and distribution of prehistoric, ethnographic, and historic-period human activities in an area. This background provides a context for understanding the nature of the cultural resources that may be identified within the region.

3.1 ENVIRONMENTAL CONTEXT

The Project area lies within the Antelope Valley in the western Mojave Desert. The Mojave Desert is bounded on the west by the Sierra Nevada Mountains, on the south by the Transverse and Peninsular ranges, on the southeast and east by the Yuma and Colorado deserts, and on the north by the Great Basin. The western Mojave Desert comprises a number of valleys, including the Antelope Valley, Fremont Valley, Victor Valley, Lucerne Valley, along with the Mojave River and the Barstow area.

Geologically, the Mojave Desert region is a wedge-shaped fault block, which has been termed the “Mojave Block” (Dibblee 1967:4). It is bounded by the San Andreas and Garlock fault zones on the southwest and north, respectively. Rocks within the western Mojave Desert region can be grouped into three main divisions that include crystalline rocks of pre-Tertiary age; sedimentary and volcanic rock of Tertiary age; and sediments and local basalt flows of Quaternary age. Units of the pre-Tertiary crystalline rocks and Quaternary sediments and basalt are widespread with Tertiary volcanic and sedimentary rocks more limited in their areal distribution (Dibblee 1967).

The Mojave is a warm-temperature desert situated between the subtropical Sonoran Desert to the south and the cold-temperature Great Basin to the north. The arid Mojave Desert is characterized by sparse rainfall, generally ranging from 5 to 25 centimeters (cm) (2–10 inches [in.]) per year. Some areas receive as little as 2.5 cm (1 in.) of annual precipitation, while others receive more than 25 cm (10 in.) (Warren 1984:342). The Littlerock area receives approximately 8 in. of precipitation annually. The present day climate and concomitant vegetation within the Mojave Desert was substantially different during the so-called Wisconsin Glacial Stage (60,000 to 10,500 Before Present [B.P.]), where the climate was influenced by the massive continental ice sheets that resulted in cooler summer and warmer winter temperatures than at present (Bupp et al. 1998, as cited in Basgall and Overly 2004).

The Joshua tree is often used as the common vegetative marker of the Mojave Desert (Sutton 1996:223), although the creosote bush is considered to be the dominant plant of both the Mojave and Colorado deserts (Grayson 1993; Warren 1984:342). Lower elevations of the Mojave Desert are dominated by creosote bush with higher elevations giving way to yuccas and agaves and piñon-juniper habitats. Other vegetation may include catclaw acacia, white brittlebush, white bursage, barrel and hedgehog cactus, littleleaf krameria, ocotillo, desert sand verbena, branched pencil and teddybear cholla, coastal bladderpod, desert agave, Douglas and rubber rabbit brush, Mojave yucca, beavertail, prickly pear, jojoba, desert senna, and Anderson's wolfberry. Various forbs and grasses also vary but can be found throughout desert scrub habitats (Mayer and Laudenslayer 1988:88).

Large game animals are rare in the Mojave Desert, as evidenced by deer (*Odocoileus hemionus*) and black bear (*Ursus americanus*), which make infrequent treks from the nearby Sierra Nevada slopes. More common to the desert floor are various reptiles and rodents, such as Couch's spadefoot toad (*Scaphiopus couchii*), desert tortoise (*Xerobates [Gopherus] agassizii*), chuckwalla (*Sauromalus obesus*), leopard lizard (*Crotaphytus wislizenii*), horned lizard (*Prynosoma platyrhinos*), Mojave rattlesnake (*Crotalus scutulatus*), whitetail antelope squirrel (*Ammospermophilus leucurus*), and kangaroo rats (*Dipodomys spp.*). Other species found in the Mojave include blacktail jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), kit fox (*Vulpes macrotis*) coyote (*Canis latrans*), and bobcat (*Lynx rufus*) (Laudenslayer and Boggs 1988:114; Martyn and Moore 1996). More than 300 species of birds are known to inhabit the northern Mojave Desert.

3.2 PREHISTORIC CONTEXT

Prehistoric archaeological sites in California are places where Native Americans lived or carried out activities during the prehistoric period before 1769 A.D. These sites contain artifacts and subsistence remains, and they may contain human burials. Artifacts are objects made by people and include tools (such as projectile points, scrapers, and grinding implements), waste products from making flaked stone tools (debitage), and nonutilitarian artifacts (beads, ornaments, ceremonial items, and rock art). Subsistence remains include the inedible portions of foods, such as animal bone and shell, and edible parts that were lost and not consumed, such as charred seeds.

Over the past century, archaeologists have generally divided the prehistory of the Western Mojave Desert into five distinct periods or sequences distinguished by specific material (i.e., technological) or cultural traits. Early cultural chronologies were proposed by Amsden (1937), Campbell and Campbell (1937), and Rogers (1939), that were later adapted by Warren and

Crabtree in 1972 (later published in 1986 and further detailed by Warren in 1984), in what many consider to be the most influential cultural sequence proposed for the region. Alternative sequences have since emerged (e.g., Bettinger and Taylor 1974) proposing new nomenclature (e.g., Newberry Period vs. Rose Spring Period vs. Saratoga Springs), slightly adjusted cultural chronologies, or attempting to link the Great Basin chronological framework to the Mojave Desert.

Recently, Sutton et al. (2007:233) proposed a cultural-ecological chronological framework based on climatic periods (e.g., Early Holocene) “to specify spans of calendric time and cultural complexes (e.g., Lake Mojave Complex) to denote specific archaeological manifestations that existed during (and across) those periods.” The new sequence draws heavily from Warren and Crabtree (1986) and Warren (1984), as well as from the vast body of recent archaeological research conducted in the region.

3.2.1 Pleistocene (ca. 10,000 to 8,000 cal B.P.)

The earliest cultural complex recognized in the Mojave Desert is Clovis, aptly named for the fluted projectiles often associated with Pleistocene megafaunal remains. Arguments for pre-Clovis Paleoindian human occupation in the Mojave Desert rely on relatively sparse evidence and unpublished data, although in light of the growing body of evidence suggesting a pre-Clovis occupation of the Americas, the argument cannot simply be ruled out. Paleoindian culture is poorly understood in the region due to a relative dearth of evidence stemming from a handful of isolated fluted point discoveries and one presumed occupation site on the shore of China Lake. Archaeologists tend to interpret the available data as evidence of a highly mobile, sparsely populated hunting society that occupied temporary camps near permanent Pleistocene water sources.

3.2.2 Early Holocene (ca. 8,000 to 6,000 cal B.P.)

Two archaeological patterns are recognized during the Early Holocene: the Lake Mojave Complex (sometimes referred to as the Western Pluvial Lakes Tradition) and the Pinto Complex. The Lake Mojave Complex is characterized by stemmed projectile points of the Great Basin Series, abundant bifaces, steep-edged unifaces and crescents. Archaeologists have also identified, in less frequency, cobble-core tools and ground stone implements. The Pinto Complex, on the other hand, is distinguished primarily by the presence of Pinto-style projectile points. Although evidence suggests some temporal overlap, the inception of the Pinto Complex is assigned to the latter part of the Early Holocene and is generally considered a Middle Holocene cultural complex.

During this period, the Lake Mojave cultural complex utilized more extensive foraging ranges, as indicated by an increased frequency of extralocal materials. Spheres of influence also expanded, as potential long-distance trade networks were established between desert and coastal peoples. Groups were still highly-mobile, but they practiced a more forager-like settlement- subsistence strategy. Residential sites indicate more extensive periods of occupation and recurrent use. In addition, residential and temporary sites also indicated a diverse social economy, characterized by discrete workshops and special-use camps (e.g., hunting camps). Diet also appears to have diversified, with a shift away from dependence upon lacustral environments such as lakeside marshes, to the exploitation of multiple environments containing rich resource patches.

3.2.3 Middle Holocene (ca. 7,000 to 3,000 cal B.P.)

The Pinto Complex is the primary cultural complex in the Mojave Desert during the Middle Holocene. Once thought to have neatly succeeded the Lake Mojave Complex, a growing corpus of radiocarbon dates associated with Pinto Complex artifacts suggest that its inception could date as far back into latter part of the Early Holocene. Extensive use of toolstone other than obsidian and high levels of tool blade reworking were characteristic of this complex and the earlier Lake Mojave Complex. A reduction in toolstone source material variability, however, suggests a contraction of foraging ranges that had expanded during the Early Holocene. Conversely, long distance trade with coastal peoples continued uninterrupted, as indicated by the presence of *Olivella* shell beads.

The most distinguishing characteristic of the Pinto Complex is the prevalence of ground stone tools, which are abundant in nearly all identified Pinto Complex sites. The emphasis on milling tools indicates greater diversification of the subsistence economy during the Middle Holocene. Groups increased reliance on plant processing while continuing to supplement their diet with protein from small and large game animals.

Recent archaeological research in the Mojave Desert suggests there was a greater degree of regional cultural diversity during the Middle Holocene than once previously thought. Sutton et al. (2007) have proposed a new Middle Holocene cultural complex associated with sites exclusively located at Twentynine Palms in the southeastern Mojave Desert. Artifacts recovered from Deadman Lake Complex sites, such as Olivella Dama from the Sea of Cortez, and contracting-stem and lozenge-shaped projectiles similar to those recovered from Ventana Cave in Arizona, may suggest closer cultural contact with Southwest Archaic cultures than Pinto cultures to the north and west. However, it is also possible that the proposed complex simply reflects a technologically distinct segment of the Pinto, rather than a distinct culture.

3.2.4 Late Holocene (ca. 2,000 cal B.P. to Contact)

The Late Holocene in the greater Southern California region is characterized by increases in population, higher degrees of sedentism, expanding spheres of influence, and greater degrees of cultural complexity. In the Mojave Desert, the Late Holocene is divided into several cultural complexes; namely the Gypsum Complex (2000 cal B.C. to cal A.D. 200), the Rose Spring Complex (cal A.D. 200 to 1100), and the Late Prehistoric Complexes (cal A.D. 1100 to contact).

The Gypsum Complex is defined by the presence of side-notched (Elko series), concave-based (Humboldt series), and well-shouldered contracting stem (Gypsum series) projectile points. Other indicative artifacts include quartz crystals, paint, rock art, and twig figures, which are generally associated with ritual activities. Warren (1984) considers the appearance of these artifact types at Gypsum Complex sites as evidence of the Southwest's expanding influence in the region. Conversely, Sutton et al. (2007) opt to associate Gypsum sites, which tend to cluster in the northern Mojave Desert, with temporal sequences modeled for the adjacent Great Basin. It is most likely, however, that the Gypsum Complex was exposed to various cultural influences stemming from long-distance exchange and social interaction networks that linked groups occupying the Mojave Desert to those on the Pacific Coast, and in the American Southwest and the Great Basin.

The Rose Spring Complex can also be defined by the presence of distinct projectile points (i.e., Rose Spring and Eastgate series) and artifacts, including stone knives, drills, pipes, bone awls,

milling implements, marine shell ornaments, and large quantities of obsidian. Of greater significance, however, are the characteristic advancements in technology, settlement strategies, and evidence for expanding and diverging trade networks.

The Rose Spring Complex marks the introduction of the bow and arrow weapon system to the Mojave Desert, likely from neighboring groups to the north and east. As populations increased, groups began to consolidate into larger, more sedentary residential settlements as indicated by the presence of well-developed midden and architecture. West and north of the Mojave River, increased trade activity along existing exchange networks ushered in a period of relative material wealth, exhibited by increased frequencies of marine shell ornaments and toolstone, procured almost exclusively from the Coso obsidian source. East and south of the Mojave River, archaeological evidence suggests there was a greater influence from Southwest and Colorado River cultures (i.e., Hakataya; Patayan).

Between approximately A.D. 1100 and contact, a number of cultural complexes emerged that archaeologists believe may represent prehistoric correlates of known ethnographic groups. During the Late Prehistoric Cultural Complex, material distinctions between groups was more apparent, as displayed by the distribution of projectile point styles (e.g., Cottonwood vs. Desert Side-notched), ceramics, and lithic materials. Long-distance trade continued, benefiting those occupying “middleman” village sites along the Mojave River where abundant shell beads and ornaments, and lithic tools were recovered from archaeological contexts (Rector et al. 1983). Later on, however, trade in Coso obsidian was significantly reduced as groups shifted focus to the procurement of local silicate stone.

The Late Prehistoric Cultural Complex was also a time of increasing regional influence and territorial expansion. Warren (1984) noted “strong regional developments” in the Mojave Desert that included Anasazi interest in turquoise in the Mojave Trough, Hakatayan (Patayan) influence from the Colorado River, and the expansion of Numic Paiute and Shoshonean culture eastward. These developments led Sutton (1989) to propose that a number of interaction spheres were operating in the Mojave Desert during the Late Prehistoric. Sutton (1989) delineated interaction spheres based on the distribution of projectile point styles, ceramics, and obsidian and argued that the spheres broke along geographical lines that reflected the territorial boundaries of known ethnohistoric groups.

3.3 ETHNOGRAPHIC CONTEXT

Two groups consider the Antelope Valley to be part of their traditional use area – the Tataviam and the Kitanemuk. Ethnographic information on each of these groups is provided below.

3.3.1 Tataviam

The Tataviam are a Native American group that resided in and around the area encompassing the Project area. They belong to the family of Serrano people who migrated down into the Antelope, Santa Clarita, and San Fernando valleys some time before 1550 B.P. They settled into the Santa Clara River drainage system, east of Piru Creek, but also marginally inhabited the upper San Fernando Valley. Their territory also may have extended over the Sawmill Mountains to include at least the southwestern fringes of the Antelope Valley, which they apparently shared with the Kitanemuk, who occupied the greater portion of the Antelope Valley.

The Tataviam were hunters and gatherers who prepared their foodstuffs in much the same way as their neighbors. Their primary foods included yucca, acorns, juniper berries, sage seeds, deer, the occasional antelope, and smaller game such as rabbits and ground squirrels. There is no information regarding Tataviam social organization, though information from neighboring groups shows similarities among Tataviam, Chumash, and Gabrielino ritual practices. At first contact with the Spanish in the late 18th century, the population of this group was estimated at less than 1,000 persons. However, this ethnographic estimate of the entire population is unlikely to be accurate, since it is based only on one small village complex and cannot necessarily be indicative of the entire population of Tataviam. Given the archaeological evidence at various Tataviam sites, as well as the numbers incorporated into the Spanish Missions, pre-contact population and early contact population easily exceeded 1,000 persons (Blackburn 1962; Johnston 1962).

The Tataviam people lived in small villages and were semi-nomadic when food was scarce. Labor was divided between the sexes. Men carried out most of the heavy but short-term labor, such as hunting and fishing, conducted most trading ventures, and had as their central concerns the well-being of the village and the family. Women were involved in collecting and processing most of the plant materials and basket production. The elderly of both sexes taught children and cared for the young.

3.3.2 Kitanemuk

The Kitanemuk belonged to the northern section of the people known as the "Serrano." The name, "Serrano," however, is only a generic term meaning "mountaineers" or "those of the Sierras." Ethnographers group the Kitanemuk with the Serrano based on linguistic similarities though the Kitanemuk did not identify themselves as Serrano. They lived on the upper Tejon and Paso creeks and also held the streams on the rear side of the Tehachapi Mountains, the small creeks draining the rear slope of the Liebre and Sawmill Range, with Antelope Valley and the westernmost part of the Mojave Desert. The extent of their territorial claims in the desert region is not certain.

The Kitanemuk lived in permanent winter villages of 50 to 80 people or more. During the late spring, summer, and fall months they dispersed into smaller, highly-mobile gathering groups. They followed a seasonal round, visiting different environmental regions as the important food producing plants became ready for harvest. Some staple foods important to the Kitanemuk include acorns and piñon pine nuts (Antelope Valley Indian Museum) and yucca, elderberries, and mesquite beans were available as well (Duff 2004).

While traveling in the Antelope Valley in 1776, Spanish explorer and Franciscan priest Francisco Garcés encountered the Kitanemuk living in a communal tule house. His written account describes that dwelling as consisting of a series of individual rooms surrounding a central courtyard. Each room housed a family and its own door and hearth.

The Kitanemuk appeared to share certain cultural fundamentals with the surrounding Serrano groups. While some customs differed, more specifically the ritualistic practices honoring their dead; the Kitanemuk appear to have buried their dead, while the Serrano cremated them.

Garcés also relates that the Kitanemuk had extensive trade relations with sometimes distant groups. For example, he writes that the Kitanemuk traded with the "Canal" (Chumash of the Santa Barbara Channel region) and describes wooden vessels with inlays of *Haliotis* that bore

stylistic similarities to decorations found on the handles of Chumash knives and other objects (Kroeber 1953).

3.4 HISTORIC CONTEXT

3.4.1 Mojave Desert Region

European exploration of the Mojave Desert began in the 16th century, but sustained EuroAmerican settlement of the region did not occur until the mid-19th century. This extended period of exploration without expansion creates a long Proto-historic period in the region, during which Europeans and local Native American groups knew of one another but interacted very little. This time period is discussed above from the point of view of Native American history. Below, the Euro-American expansion into the region and subsequent historical developments are described.

The European period in the Mojave Desert began when Spanish missionaries and explorers entered the area in the 18th century. Among the first Europeans in the area was Pedro Fages, who led an expedition into the western Mojave in 1772 in pursuit of Spanish soldiers who had deserted (Pourade 1960). Later forays into the Mojave were undertaken in 1776 by Franciscan missionary Francisco Garcés. Garcés was tasked with exploring overland routes between Santa Fe, New Mexico, and Southern California. During his expedition, he stayed in what is today the town of Mojave (Coues 1900; Sutton 1991). The establishment of trade routes between Santa Fe and Los Angeles and the establishment of missions in the Mojave Desert were difficult in the 18th century because the native Mohave people hindered Spanish expansion beyond the coastal areas of California (Bean and Bourgeault 1989). The Old Spanish Trail, which passes through the Mojave Desert, was not firmly established as a travel route until the 1830s (Norris and Carrico 1978).

The Mexican War of Independence from Spain began in 1810. The Mexicans were victorious in 1821 and declared the Republic of Mexico in 1823. California was made a territory of the Republic in 1825. During Mexican rule, from 1825 to 1847, the rancheros became wealthy from trade in hides, tallow, wine, and brandy. The missions' properties were redistributed between 1834 and 1836, making the rancheros even wealthier. American traders, drawn by low prices for cowhides and other raw materials, made contacts with the Californios. Some married the daughters of the rancheros, started business enterprises, and became increasingly influential in the finance and commerce of the region (Los Angeles Cultural Heritage Masterplan 2000:15).

During the Mexican-American War, on August 13, 1846, Captain John Fremont entered the pueblo of Los Angeles and declared it an American territory. The Treaty of Cahuenga ended the conflict in California in 1847. The Treaty of Guadalupe Hidalgo officially ended the war in 1848 (Los Angeles Cultural Heritage Masterplan 2000:15).

American exploration into the Mojave Desert began in the 19th century. Jedediah Smith was the first American to enter the Mojave in 1826 and 1827. Little is known about Smith's time in the Mojave since his notes were lost in a fire (Pourade 1961). Smith followed the Old Spanish Trail, which runs south and east of the current Project area, and ultimately reached the Pacific Ocean where Spanish authorities prevented him from continuing farther and temporarily imprisoned him (Beck and Haase 1974; Norris and Carrico 1978). In 1844, John C. Fremont traveled through the Mojave from the north and eventually met up with the Old Spanish Trail

(Beck and Haase 1974; Fremont 1845). Fremont was named “The Great Pathfinder” because his explorations helped open the West for Americans to move into California in the middle and late 19th century (Barnard 1977).

By the 1850s, the Old Spanish Trail was established as a reliable overland route to California, and it became easier for people to move into the area. Once California was ceded to the United States, the land was open for settlement and development. With the discovery of gold in the Sierra Nevada Mountains, California’s population boomed. The majority of early mining in California took place in the north, near Sacramento and San Francisco. Mining led to the creation of roads throughout the state. Later, these mining roads would be used to establish railroads that operated in the region.

In the Mojave, scientific exploration was being undertaken in conjunction with investigations into proposed railroads from the east (Sherer 1994). An expedition led by Lt. Amiel Weeks Whipple in 1854 sought to survey a railroad route leading from Arkansas to Los Angeles along the 35th parallel, passing near Fremont Valley. The proposed railroad was meant to tie into lines that originated in both the north and the south (Barnard 1977). Whipple’s expedition included scientists who recorded information about the geology, climatology, and biology of the region (Sherer 1994). A later expedition undertaken by Edward Beale in 1857 tested the feasibility of using camels for transport across the desert and established an early wagon road through the area (Norris and Carrico 1978; Sherer 1994).

3.4.2 Antelope Valley

The Antelope Valley lies on the west end of the Mojave Desert, in the northern extent of Los Angeles County and extends into southern Kern County. A number of non-native expeditions transversed through the Antelope Valley starting with Friar Francisco Garces in 1776, but the first non-native settlements did not occur until the 1850s through a combination of factors. Discovery of gold in Kern County and Silver in Inyo County in the early 1850s established new wagon routes, followed by the Butterfield mail stagecoach mail route in 1858, and the Los-Angeles Havilah Stage Line in 1864. Establishment of Fort Tejon in 1854 on the west end of the valley created a safe outpost for travelers, and a telegraph line that connected San Francisco to Los Angeles was completed in 1860. Construction of the Southern Pacific Railroad through this section of the Antelope Valley was completed in 1876 as part of the connecting route between San Francisco and Los Angeles. The alignment passed through the newly established railroad towns of Rosamond and Lancaster, approximately seven miles west and south from the Project area (LACountyLibrary.com 2021; Lien 2021 July 7).

3.4.3 Willow Springs

Willow Springs is a natural water feature in the Antelope Valley that was depicted next to “Tehicipi Road” on General Land Office map in 1856. Friar Garces stopped at the spring in 1776 as did John C. Fremont in 1844. Starting in 1860, the springs were used a freight station and watering hole while transporting silver from the Cerro Gordo and Coso mines out of Inyo County. Two years later, Nelson and Adelia Ward built an adobe boarding house next to the springs where they hosted freighters, travelers, and kept horse and mule teams. Nelson Ward died in 1873 and in 1875 the silver freighting company chose a new route that bypassed Willow Springs. This loss of income prompted his widow to sell the station and move her five children elsewhere. The new owners only lasted a year running the station after they were robbed by

bandits and the Southern Pacific Railroad was completed in 1876 which rendered stage travel obsolete (GLO 1856; Lien 2021 July 7; Bostwick 2010).

The station remained abandoned for nearly 25 years until stone mason Ezra Hamilton purchased 160-acres, including the spring and the station, in 1900. Hamilton struck gold nearby four years earlier and wanted a set up his own gold mill. Enamored with his oasis in the desert landscape, Hamilton invested \$40,000 to build a resort boasting 27 stone buildings that included houses, a hotel for 30 guests, school, dance hall, post office, restaurant, store, an auditorium, water reservoirs, and a pool fed by the spring. He also built greenhouses to stock the restaurant and store with fresh produce and experimented with silkworms for silk production. The resort thrived and served as a gathering place for local residents until Hamilton's death in 1915 and the resort was sold three years later by his heirs (Bostwick 2010 Lien 2021 July 7; Morgan 1914: 999).

Willow Springs changed hands a number of times between 1918 and 1947, including serving as the headquarters of a local mining operation in the 1930s. During this time, the watering hole at Willow Springs became California Historic Landmark #130 in 1934. Stockholders in the mining company, Robert and Mary Nelson, purchased the property in 1947 and moved into one of the stone houses. Over the years they leased out the buildings, including a semi-successful restaurant, but a number of the buildings were destroyed in the 1952 Tehachapi earthquake (Tipton 1988; OHP 2021).

3.4.4 Post World War II Development

The Willow Springs International Raceway opened a little over 1.25-miles west from Willow Springs in 1953. At the time, there was little residential development around Willow Springs or the racetrack, save for a few farms that had installed irrigation equipment and a few small desert homesteaders. During the 1960s, a series of new grided streets were cut in the area around Willow Spring and the raceway, apparently in anticipation for increased residential growth. Ultimately, very few residences were built, the majority of which are centered in a small area in the Project area bound by Irone Avenue, Melody Lane, 145th Street W and 140th Street West and were constructed between 1960 and 1965 (UCSB 1952a, 1952b; HistoricAerials.com 1959, 1963; USGS 1965a, 1965b, 1965c, 1965d; Kern County Recorder 1960).

3.4.5 Wind and Solar Energy in Antelope Valley

The landscape and population size of the area around Willow Springs changed very after Ezra Hamilton built his stone building resort at the turn of the twentieth century. That changed in the early 1980s when the first wind power project in the Antelope Valley was constructed at the base of the Tehachapi Mountains, north of the Project area. The windy Tehachapi Pass in the Mojave Desert proved to be a valuable resource on the barren landscape. More wind, and eventually solar farms cropped up in Tehachapi Pass and Antelope Valley. Ground was broken on the 80-square mile Manzanita Wind Power Project located just west of the Project area in 2011 for the 126 1.5-megawatt wind turbines and came online in December 2012. Developed, owned, and operated by Avangrid Renewables, the company sells electrical output to San Diego Gas & Electric, Silicon Valley Power, and Los Angeles Department of Water and Power. At the southwest corner of the Project area is the Southern California Edison (SCE) Whirlwind Substation that was constructed in 2011 as part of a long-range SCE wind farm plan that

connects a series of substations through 500kv transmission lines to bring wind power to Los Angeles Basin. More recently, between 2013 and 2015, several large solar farms have been installed in the area south of the Project area below Rosamond Boulevard (*Palm Desert Post* 1982 Jan 13; AvangridRenewables.com 2021; Google Earth Pro 2013 May, 2015 April; Edison International 2021).

4 CULTURAL RESOURCES INVENTORY

A literature review and records search was conducted at the SSJVIC, housed at California State University, Bakersfield, on November 5, 2020 and again on August 18, 2021. This inventory effort included the Project area and a one-half-mile radius around the Project area, collectively termed the Project study area. The objective of this records search was to identify prehistoric or historical cultural resources that have been previously recorded within the study area during prior cultural resource investigations.

As part of the cultural resources inventory, PaleoWest staff also examined historical maps and aerial images to characterize the developmental history of the Project area and surrounding area. A summary of the results of the record search and background research is provided below.

4.1 PREVIOUS CULTURAL RESOURCE INVESTIGATIONS

The data review indicates that no fewer than 68 previous investigations have been conducted and documented within one-half-mile of the Project area since 1961 (Table 4-1). Forty-seven of these studies encompass portions of the Project area.

Table 4-1. Previous Cultural Studies within One-Half-Mile of the Project Area

Report No.	Date	Author(s)	Title
KE-00101	1996	Kimball, Marcia	Cultural Resource Testing and Evaluation Report for the Cory and Minn Parcels of the Loomis Land Exchange
<i>KE-00355</i>	<i>1994</i>	<i>Clift, Gregory R. and Sutton, Mark Q.</i>	<i>An Archaeological Assessment of Tentative Tract No. 5612, Rosamond, Kern County, California</i>
KE-00519	1990	Jackson, Scott	An Archaeological Assessment of 470 Acres of Land Southwest of Willow Springs, Kern County, CA
KE-00634	1985	Macko, Michael E. and Wiesbord, Jill	Sylmar Expansion Project: Cultural Resources Inventory and Significant Evaluation Addendum to Final Report
KE-00634A	1985	Macko, Michael E. and Weisbord, Jill	Sylmar Expansion Project Cultural Resources Inventory and Significance Evaluation Final Report Volume II
<i>KE-00802</i>	<i>1989</i>	<i>Parr, Robert E.</i>	<i>An Archaeological Assessment of 480 Acres of Land West of Rosamond, Kern County, California</i>
<i>KE-00803</i>	<i>1989</i>	<i>Parr, Robert E.</i>	<i>An Archaeological Assessment of 80 Acres of Land West of Rosamond, Kern County, California</i>
<i>KE-00869</i>	<i>1990</i>	<i>Parr, Robert E. and Jackson, Scott</i>	<i>An Archaeological Assessment of 840 Acres of Land Near Willow Spring, Kern County, California</i>

Report No.	Date	Author(s)	Title
KE-01010	1991	Robinson, R.W.	<i>Regional Overview of the Cultural Resources of the Willow Springs Specific Plan Update, Southern Kern County, California</i>
KE-01010A	1991	Bein, Robert	<i>Environmental Impact Report Draft, Willow Springs Specific Plan Update</i>
KE-01181	1990	Schiffman, Robert A.	<i>Archaeological Investigation of 112 Acre Parcel West of Willow Springs Section 18, Township 9N, 13W. Kern County, California</i>
KE-01182	1980	Schiffman, Robert A. and Garfinkel, Alan P.	<i>Draft - Archaeological Overview of Kern County</i>
KE-01183	1981	Schiffman, Robert A. and Garfinkel, Alan P.	Prehistory of Kern County - An Overview
KE-01196	1991	Robinson, R.W.	A Regional Overview of the Cultural Resources of the Willow Springs Specific Plan Update, Southern Kern County, California
KE-01286	1987	Schiffman, Robert A.	Archaeological Investigation for Parcel Map #8208, Kern County, California
KE-01341	1989	Schiffman, Robert A.	Archaeological Investigation for Parcel Map No. 9001, Kern County, California
KE-01355	1989	Schiffman, Robert A.	Archaeological Investigation for a 1900 Acres West of Rosamond, Kern County, California
KE-01605	1989	Sutton, Mark Q.	An Archaeological Survey of PM 8386, 20 Acres at 90th W. and Rosamond Blvd.
KE-01628	1987	Sutton, Mark Q.	On the Late Prehistory of the Western Mojave Desert
KE-01630	1978	Sutton, Mark Q., Forbes, Charles, and Robinson, Sylva	A Possible Paleo-Indian Site Complex in the Western Mojave Desert
KE-01867	1975	Hall, Matthew C., Barker, James P., Snyder, Toni B., Weaver, Richard A., and Lawton, Harry W.	Background to Prehistory of the El Paso/Red Mountain Desert Region
KE-01960	1986	Cleland, James H., Woods, Clyde M., Skinner, Elizabeth J., Kelly, Michael S., and Apple, Rebecca M.	Kern River Pipeline Cultural Resource Overview
KE-01993	1995	Hayden, William E., Macko, Michael E., and Earle, David D.	A Class III Intensive Survey of Five Land Exchange Sites for Hughes Land Company in the Rosamond and Palmdale Areas, Los Angeles and Kern Counties, California
KE-02002	1993	Meyers, Thomas B. and Trimble, Michael K.	Archaeological Curation - Needs Assessments for Fort Sill, Oklahoma, Fort Gordon, Georgia, Vandenberg Air Force Base, California, Camp Pendleton Marine Corps Base, California, and Naval Air Weapons Station, China Lake, California
KE-02059	1997	Love, Bruce	Cultural Resources Survey Report: Bakersfield-Rialto Fiberoptic Line Project, Kern, Los Angeles, and San Bernardino Counties, California

Report No.	Date	Author(s)	Title
KE-02232	1961	Cawley	Cawley Manuscript
KE-02244	1994	Everson, G. Dicken and 1965, Joan S.	Kelso Conference Papers: A Collection of Papers and Abstracts from the First Five Kelso Conferences on the Prehistory of the Mojave Desert
KE-02825	2003	Hansen, Linda	Western Mojave Desert Off Road Vehicle Designation Project
KE-02826	2003	Pool, Mike and Hansen, Linda	Decision Record CDCA Plan Amendment: Western Mojave Desert Off Road Vehicle Designation Project
KE-02827	2003	Hansen, Linda, Hays, Michael E., Priester, Scott, and Pool, Mike	Draft Environmental Impact Report and Statement for the West Mojave Plan: A Habitat Conservation Plan and California Desert Conservation Area Plan Amendment Vol 1
KE-02954	2004	Schmidt, James	2004 Deteriorated Pole Replacement Project in the Willow Springs and Rosamond Areas, Kern County
KE-03212	2006	Romani, John	Archaeological Survey Report: Rosamond Boulevard from SR 14 to 90th Street West, Rosamond, Kern Co., CA
KE-03493	2005	Hudlow, Scott M.	A Phase I Cultural Resource Survey for Property at Hamilton Road and Willow Springs - Tehachapi Road, Kern County, California
KE-03534	2006	Nilsson, Elena, Bevil, Russel, Kelly, Michael S., and Dwyer, Erin	Archaeological Inventory of the First and Second Los Angeles Aqueducts and Selected Access Roads, Kern, Inyo, and Los Angeles Counties, CA
KE-03546	2006	Ahmet, Koral, Mason, Roger, and Bholat, Sara	Cultural Resources Survey Report for Antelope Transmission Project: Segments 2 & 3 Los Angeles and Kern Counties
KE-03781	2010	Orfila, Rebecca S.	RE: Archaeological Survey of the Southern California Edison Company Power Poles #1200431E, 1200439E, 549527E, 1433929E, and 549520E on the Oak Creek 21KV Circuit Near Willow Springs/ Rosamond, Kern County, California (IO# 312201; SAP# TD435806)
KE-03787	2010	Orfila, Rebecca S.	RE: Archaeological Survey of the Southern California Edison Company Power Pole #2007586E on the Oak Creek 12 KV Circuit Near Willow Springs, Kern County, California (IO# 314301, TD 479142)
KE-03793	2008	Romani, John F. and Gold (Garfinkel), Alan P.	Archaeological Survey Report Tehachapi Willow Springs Road from Rosamond Boulevard to 10 Miles North, Willow Springs Area, Kern County, California
KE-03874	2009	Glover, Amy and Gust, Sherri	Supplemental Cultural and Paleontological Resources Assessment, Segment 3A, Section1, Tehachapi Renewable Transmission Project
KE-03889	2009	DeCarlo, Matthew and Orfila, Rebecca	A Cultural Resources Assessment of Three Proposed Deteriorated Pole Replacement Projects (WO 4703-0455) Near Rosamond, Kern County, California
KE-03892	2009	Norwood, Richard H.	Phase I Cultural Resource Investigation for a 5-Acre Property North of the Intersection of 90th Street West and Rosamond Boulevard Rosamond, Kern County, California

Report No.	Date	Author(s)	Title
KE-03941	2009	Price, Barry A., Baloian, Mary Clark, Lichtenstein, Robert, and Linder, Marc	Confidential Specialist Report: Cultural Resources Inventory for the Tehachapi Renewable Transmission Project Kern, Los Angeles, and San Bernardino Counties, California
KE-04023	2010	Schmidt, June A.	Re: Archaeological Letter Report: Oak Creek Distribution Line Scott Bracket/Deteriorated Pole Replacement Project (WO 6036-4800; 0-4823), Willow Springs Area, Kern County, California
KE-04057	2011	Hudlow, Scott M.	Phase I Cultural Resources Survey for PV3, Willow Springs, Kern County, California
KE-04058	2011	Hudlow, Scott M.	Phase I Cultural Resources Survey for PV-11, (Rosamond Solar Array) Rosamond, Kern County, California
KE-04080	2010	Wilson, Stacie and Jordan, Stacey C.	Cultural Resources Report for the Proposed RRG Antelope Valley Solar Project Kern and Los Angeles Counties, California
KE-04099	2012	Miller, Jason Andrew	Results of the AV Solar Ranch Survey (LSA Project No. SCE1105S)
KE-04135	2011	Schmidt, James J.	Archaeological Letter Report: Rosamond Area (Willow Springs 12 kV, Lloyd, Huron, Alfalfa, and Muroc 12 kV) Deteriorated Pole Replacement Project (WO 6036-4800, K-4854 & K-4857), Kern and Los Angeles County, California
KE-04224	2010	Unknown	Supplemental Archaeological Investigation and National Register of Historic Places and California Register of Historical Resources Eligibility Evaluation of Archaeological Site CA-KER-7214H Southern California Edison Tehachapi Renewable Transmission Project, Segment 9, Kern County, California
KE-04225	2010	Jackson, Thomas, Armstrong, Matthew, and Sikes, Nancy	Cultural Resources Inventory of the Southern California Edison Company Whirlwind to Rosamond and Rosamond to Windhub Telecommunication Line, Kern County, California
KE-04226	2010	Schneider, Tsim D. and Holson, John	Supplemental Archaeological Survey Report #2, Tehachapi Renewable Transmission project Segment 4, Kern and Los Angeles Counties, California
KE-04227	2010	Schneider, Tsim D. and Holson, John	Supplemental Archaeological Survey Report #2, Tehachapi Renewable Transmission Project Segment 10, Kern County, California
KE-04229	2010	Panich, Lee, Cimino, Stephanie, and Holson, John	Supplemental Archaeological Survey Report #1, Tehachapi Renewable Transmission Project Segment 10, Kern County, California
KE-04230	2011	Bischoff, Wayne	Third Supplemental Survey Report for Additional Roads on Segment 10, Tehachapi Renewable Transmission Project, Kern County, California
KE-04233	2010	Panich, Lee, Cimino, Stephanie, and Holson, John	Supplemental Archaeological Survey report #1, Tehachapi Renewable Transmission Project, Segment 4, Kern and Los Angeles Counties, California
KE-04234	2011	Bischoff, Wayne	Cultural Resources Survey Letter Report for the Variance Request for Disturbance Area Modifications for Towers M73-T3A and M73-T3B, Segment 4, Tehachapi Renewable Transmission Project, Kern County, California

Report No.	Date	Author(s)	Title
KE-04435	2010	Meyer, Jack, Young, D. Craig, and Rosenthal, Jeffrey	Volume I: A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9 - Cultural Resources Inventory of Caltrans District 6/9 Rural Conventional Highways - EA 06-0A7408 TEA Grant
KE-04435A	2010	Meyer, Jack, Young, D. Craig, and Rosenthal, Jeffrey S.	Volume II: Appendices A Geoarchaeological Overview and Assessment of Caltrans District 6 and 9 - Cultural Resources Inventory of Caltrans District 6/9 Rural Conventional Highways - EA 06-0A7408 TEA Grant
KE-04749	2015	Dice, Michael	Barren Ridge Renewable Transmission Project Historic Property Treatment Plan for Archaeological Sites TW-17, TW-18, and CA-KER-7034, Los Angeles and Kern Counties,
KE-04833	2016	Foglia, Shannon and Cooley, Theodore	Cultural Resources Survey Report for the Proposed Southern California Edison Company's Antelope-Magunden No. 1 Transmission Line Rating Remediation Project, Kern County, California
KE-04887	2009	Way, K. Ross, Jackson, Thomas L., and Jones, Kari	Results of the Evaluation of Eligibility of Archaeological Site CA-KER-2821/H (Bean Spring) for Listing in the California Register of Historical Resources and Data Recovery Program for Mitigating Unavoidable Impacts to the Site That May Result from Activities Associated with Construction of Segment 3 of the Tehachapi Renewable Transmission Project
KE-04953	2017	Whitley, David, Carey, Peter, and Azpitarte, Robert	Phase I Survey/Class III Inventory, AVEP Solar Project, Kern County, California
KE-05013	2017	Gilbert, Rebecca	Archaeological Survey Report for Southern California Edison's (SCE) North Rosamond Project near Whirlwind Substation, Kern County, California
KE-05043	2016	Whitley, David S. and Carey, Peter A.	Phase I Survey/Class III Inventory, Rosamond 5 and 6 Solar Project Areas, Kern County, California
KE-05163	2019	Hudlow, Scott M.	A Phase I Cultural Resource Survey for Property at the Northeast Corner of 170th Street West and Rosamond Boulevard, Rosamond, Kern County, California
KE-05178	2019	Gilbert, Rebecca	Cultural and Paleontological Resources Monitoring Report for the Valentine Solar Project Located in Kern County, CA
KE-05192	2009	Harper, Veronica and Glover, Amy	Archaeological Assessment, Tehachapi Renewable Transmission Project, Segments 4 and 10 Rosamond to Whirlwind and Rosamond to Windhub Proposed Telecommunications Line, Kern County, California
KE-05194	2014	Valasik, Molly and Gust, Sherri	Pacific Wind and Catalina Solar DIMP Cultural Resources Assessment, Kern County, California

KE-04435, KE-04435A, KE-04749, KE-04887, KE-04953, KE-05013, KE-05043, KE-05163, KE-05178, KE-05192, and KE-05194 indicates previous projects that include portions of the current Project area.

4.2 PREVIOUSLY RECORDED CULTURAL RESOURCES

The records search indicated that 174 cultural resources have been previously documented within one-half-mile of the Project area (Table 4-2). These resources include 30 prehistoric sites, 8 multi-component sites, 45 historic period sites, 44 prehistoric isolated artifacts, 3 multi-component isolates, 37 historic isolated artifacts, and 7 historic built-environment resources. Twenty of these previously recorded resources are located within the Project area, including 3

prehistoric period archaeological sites, 4 multicomponent sites, 7 historic period archaeological sites, 2 historic built environment resources, 3 prehistoric isolated objects, and 1 historic isolated object. A description of each of these resources is provided below; Department of Parks and Recreation (DPR) 523 forms are included in Appendix B. Figure 6-1 and Figure 6-2 depict the mapped location of these resources within the Project area.

Table 4-2. Cultural Resources Recorded within One-Half-Mile of the Project Area

Primary No.	Trinomial	Type	Age	Description
P-15-000129	CA-KER-000129/H	Site	Prehistoric, Historic	Reportedly the location of protohistoric Kitanemuk village and cemetery destroyed in the 1930s. Site of the Willow Springs Stage Station on the Los Angeles-Havilah Stage Lines from 1864-1872. California Landmark No. 130.
P-15-001969	CA-KER-001969	Site	Prehistoric	Sparse lithic scatter with fire-altered rock. 100+ flakes and biface fragment recorded.
P-15-002821	CA-KER-002821/H	Site	Prehistoric, Historic	Bean Spring Site Archaeological Complex. Large prehistoric complex lithic scatter with bedrock mills and habitation debris. Historical component dating from mid 1800s to mid 1900s with refuse and foundations. 22 loci recorded.
P-15-003560	CA-KER-003560H	Site	Historic	Vandalized Gravesite: originally containing several individuals, including the grave of Ray Conary 1890-1906. Headstone removed by vandals; small depression (Feature 1) and pile of stones still extant.
P-15-004672	CA-KER-004376H	Site	Historic	Transmission line and historical refuse scatter.
P-15-007339		Isolate	Prehistoric	Metate fragment recorded 1990. Not found during 2017 survey.
P-15-007340		Isolate	Prehistoric	Large rhyolite flake.
P-15-007341		Isolate	Prehistoric	Rhyolite flake.
P-15-007342		Isolate	Prehistoric	Two rhyolite flakes.
P-15-008520		Site	Historic	Willow Springs.
P-15-012475		Isolate	Prehistoric	Rhyolite flake recorded in 2006. Not found during 2017 survey.
P-15-012493	CA-KER-007035	Site	Prehistoric	Single fire-altered rock feature.
P-15-012494	CA-KER-007036	Site	Prehistoric	Single fire-altered rock feature.
P-15-012725	CA-KER-007183H	Site	Historic	Large refuse scatter ca. early 1900s.
P-15-012726	CA-KER-007184H	Site	Historic	Large refuse scatter ca. 1950s.
P-15-012727	CA-KER-007185H	Site	Historic	Refuse scatter post-1935.
P-15-012728	CA-KER-007186H	Site	Historic	Refuse scatter post-1935.
P-15-012780	CA-KER-007213H	Site	Historic	Refuse scatter; early to mid 1900s.
P-15-012781		Isolate	Prehistoric	Rhyolite flake and core.
P-15-012786		Isolate	Prehistoric	Rhyolite core.
P-15-012792		Isolate	Prehistoric	Small rock cairn and semi-circular rock alignment in 2 meter area.
P-15-012793	CA-KER-007214H	Site	Historic	Large refuse scatter ca. early to mid 1900s with cistern-like feature (Feature 1) and shallow pit with raised berm (Feature 2).

Primary No.	Trinomial	Type	Age	Description
P-15-012807	CA-KER-007228	Site	Prehistoric	Single bedrock milling station with 3 grinding surfaces.
P-15-013657	CA-KER-007674H	Site	Historic	Refuse scatter; early to mid 1900s.
P-15-013703		Isolate	Prehistoric	Fused shale flake.
P-15-013830	CA-KER-007744H	Site	Historic	Small refuse scatter ca. early to mid 1900s. No materials found in subsurface context during testing.
P-15-013831	CA-KER-007745H	Site	Historic	Small can scatter ca. early to mid 1900s. Only one artifact found in subsurface context during testing.
P-15-013832	CA-KER-007746H	Site	Historic	Refuse scatter ca. early to mid 1900s. Cultural materials found to 10 cm depth during testing.
P-15-013833	CA-KER-007747H	Site	Prehistoric, Historic	Two segments of the General Petroleum Road ca. 1915 with 4 concentrations and scatters of ca. early to mid 1900s roadside refuse. One chert biface also recorded along edge of road.
P-15-013837		Isolate	Prehistoric	Chert biface.
P-15-013844		Site	Prehistoric	One fire-altered rock feature.
P-15-013845		Site	Prehistoric	Two fire-altered rock features and possible core. Eastern portion destroyed by construction. Core not found during recent survey.
P-15-013846		Site	Prehistoric	Sparse flake scatter with <i>Tivela stultorum</i> shell fragments. Site completely destroyed during construction.
P-15-013847		Site	Prehistoric	Sparse lithic scatter. Artifacts collected during mitigation. Only one flake observed during recent survey; site downgraded to Isolate status.
P-15-013848		Site	Prehistoric	Sparse lithic scatter. Could not be re-identified during more recent survey. Site no longer exists at recorded location.
P-15-014592	CA-KER-008175H	Site	Historic	Refuse scatter ca. early to mid 1900s.
P-15-014596	CA-KER-008179H	Site	Historic	Segment of historic fence line (900 ft) and extremely sparse scatter of early to mid 1900s refuse.
P-15-014602	CA-KER-008184H	Site	Historic	Large, dispersed scatter of ca. early to mid 1900s refuse.
P-15-014691	CA-KER-008258H	Site	Historic	Sparse refuse scatter ca. early to mid 1900s intermixed with more modern refuse.
P-15-014893	CA-KER-008318H	Site	Historic	Ca. early to mid 1900s structure foundation and landscaping.
P-15-014895	CA-KER-008320H	Site	Historic	Large, scatter of ca. early to mid 1900s refuse with 12 loci.
P-15-014896		Building	Historic	Ca. 1940s bunkhouse and farm complex with pond and landscaping.
P-15-014902	CA-KER-008324H	Site	Historic	Burned remains of 1920-1930s house.
P-15-014903	CA-KER-008325H	Site	Historic	Large agricultural stand pipe; post WW II.
P-15-014904	CA-KER-008326H	Site	Historic	Small refuse scatter ca. 1920s with 2 rock fire rings.
P-15-014906	CA-KER-008328H	Structure	Historic	!0 mile long segment of tamarisk windrow; post WW II.

Primary No.	Trinomial	Type	Age	Description
P-15-014907	CA-KER-008329H	Structure	Historic	Large square concrete box-like structure; possible electrical stand. Post WW II.
P-15-015234		Isolate	Prehistoric	Three rhyolite flakes found along graded road shoulder.
P-15-015588		Isolate	Historic	Two milk Glass Fragments.
P-15-015698	CA-KER-008666H	Site	Historic	Refuse scatter; post 1963 to modern.
P-15-015744		Isolate	Historic	Pull tab Busch Beer can.
P-15-015745		Isolate	Historic	Soldered top can with "Punch Here."
P-15-015746	CA-KER-008682H	Site	Historic	Sparse refuse scatter ca. 1960s-1970s.
P-15-015747		Isolate	Historic	Single can; post WW II.
P-15-016245		Isolate	Prehistoric	One rhyolite flake and one obsidian flake found 1.2-1.5 m below ground surface.
P-15-016246		Isolate	Prehistoric	Chalcedony core.
P-15-016258	CA-KER-008991H	Site	Historic	Early to mid 1900s refuse scatter and 3 rock features.
P-15-016603	CA-KER-009179H	Site	Historic	Early to mid 1900s refuse scatter.
P-15-016609	CA-KER-009185H	Site	Historic	Dense refuse scatter and animal pens; ca. early to mid 1900s. Site may represent a labor or herder's camp.
P-15-016662		Isolate	Prehistoric	Single piece of obsidian shatter.
P-15-016672		Isolate	Historic	Can scatter (17 items) and glass Mentholatum jar; ca. early to mid 1900s (incorrectly recorded as Isolate).
P-15-016680		Isolate	Historic	Sun-colored amethyst glass (4 shards from the same bottle) and oil can.
P-15-016681		Isolate	Prehistoric	Single bedrock mortar (incorrectly recorded as Isolate).
P-15-016683		Isolate	Historic	Ca. 1950s automobile.
P-15-016692		Isolate	Historic	Ceramic electrical insulator fragment (1949).
P-15-017243		Structure	Historic	SCE Big Creek Hydroelectric System Company Vincent 220kV Transmission Line; constructed 1925-1927.
P-15-017582		Structure	Historic	SCE Antelope-Magunden #1 220kV Transmission Line; installed 1949.
P-15-018282	CA-KER-009975H	Site	Historic	Sparse refuse scatter ca. 1915-1930.
P-15-018283	CA-KER-009976H	Site	Historic	Refuse scatter with 3 concentrations ca. mid 1900s; intermixed with modern debris.
P-15-018284	CA-KER-009977H	Site	Historic	Refuse scatter with 3 concentrations; post WW II.
P-15-018285	CA-KER-009978H	Site	Historic	Large refuse dump ca. early to mid 1900s intermixed with more modern debris.
P-15-018286	CA-KER-009979H	Site	Historic	Refuse scatter ca. early to mid 1900s with one concentration (Feature 1) and one rock fire ring (Feature 20).
P-15-018288	CA-KER-009981H	Site	Historic	Unpaved segment of Hamilton Road with roadside refuse and rock fire ring. Road constructed between 1943-1965, but some portions may date as early as 1915.

Primary No.	Trinomial	Type	Age	Description
P-15-018289	CA-KER-009982H	Site	Historic	Unpaved road segment dating to or prior to 1915 with one refuse dump and roadside debris dating ca. early to mid 1900s.
P-15-018290	CA-KER-009983H	Site	Historic	Sparse refuse scatter ca. early to mid 1900s.
P-15-018291	CA-KER-009984H	Site	Historic	Sparse refuse scatter ca. early to mid 1900s.
P-15-018305		Isolate	Historic	Two vent-hole evaporated milk cans dating 1917-1929.
P-15-018313		Isolate	Historic	One vent-hole can, one sanitary can ca. 1900-1985.
P-15-018314		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018315		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018316		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018317		Isolate	Historic	One vent-hole can: 1900-1985.
P-15-018318		Isolate	Historic	One vent-hole can: 1900-1985.
P-15-018319		Isolate	Historic	One sanitary can: 1904-1993.
P-15-018320		Isolate	Historic	One vent-hole can: 1900-1985.
P-15-018321		Isolate	Historic	One vent-hole can: 1900-1985.
P-15-018322		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018323		Isolate	Historic	One vent-hole can, one aqua glass bottle base ca. 1900-1920.
P-15-018327		Isolate	Historic	One upright tobacco can with hinged lid:1908-1988.
P-15-018346		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018360		Isolate	Historic	Royal Crown Cola aqua glass bottle:1957.
P-15-018361		Isolate	Historic	One vent-hole evaporated milk can: 1915-1930.
P-15-018362		Isolate	Historic	Two sun-colored amethyst glass fragments ca. 1880-1930.
P-15-018363		Isolate	Historic	One upright tobacco can with hinged lid:1908-1988.
P-15-018364		Isolate	Historic	One hole-in-cap can, one vent-hole can:1900-1930.
P-15-018365		Isolate	Historic	One vent-hole evaporated milk can: 1931-1948.
P-15-018366		Isolate	Historic	One vent-hole can: 1900-1985.
P-15-018568		Isolate	Historic	One steel pail.
P-15-018676	CA-KER-010199/H	Site	Prehistoric, Historic	Historic refuse scatter ca. 1920s-1960s and prehistoric lithic scatter with flaked and ground stone artifacts, faunal remains, and one Olivella shell.
P-15-018677	CA-KER-010200	Site	Prehistoric	Dense lithic scatter with flaked and ground stone artifacts, faunal remains, and Olivella shells.
P-15-018678	CA-KER-010201/H	Site	Prehistoric, Historic	Refuse scatter ca. 1920s-1950s, and two lithic flakes.
P-15-018679	CA-KER-010202/H	Site	Prehistoric, Historic	Refuse scatter ca. 1950s, and one lithic flake.
P-15-018681	CA-KER-010204H	Structure	Historic	LADWP Owens Gorge 230kV transmission line ca. 1960-1952.
P-15-018723		Isolate	Historic	Key and strip opened coffee can.
P-15-018724		Isolate	Historic	Medicine bottle, hole-in-top can, and cooking oil can ca. 1930s.
P-15-018725		Isolate	Prehistoric, Historic	One lithic flake, one hole-in-cap can.
P-15-018726		Isolate	Prehistoric	One lithic flake.

Primary No.	Trinomial	Type	Age	Description
P-15-018727		Isolate	Prehistoric, Historic	Two lithic flakes, one hole-in-cap can.
P-15-018728		Isolate	Prehistoric	One core, one lithic flake.
P-15-018729		Isolate	Historic	One glass bottle finish, one hole-in-cap can, two bi-metal beer cans.
P-15-018730		Isolate	Prehistoric, Historic	One chert flake, two pieces of straw-colored glass.
P-15-018731		Isolate	Historic	Two pieces sun-colored amethyst glass ca. 1880-1930.
P-15-018732		Isolate	Historic	One piece sun-colored amethyst glass ca. 1880-1930.
P-15-018733		Isolate	Prehistoric	One chalcedony flake fragment.
P-15-019042	CA-KER-010408	Site	Prehistoric	Sparse lithic scatter:100+ flakes, one biface fragment.
P-15-019153		Isolate	Historic	Gallo Glass Company green glass wine bottle base: 1966+.
P-15-019154	CA-KER-010447H	Site	Historic	Refuse scatter ca. early to mid 1900s intermixed with modern debris.
P-15-019537	CA-KER-010701/H	Site	Prehistoric, Historic	Lithic scatter with flaked and ground stone tools and lithic debitage; Refuse scatter ca. early 1900s.
P-15-019538	CA-KER-010702	Site	Prehistoric	Sparse lithic scatter: < 20 flakes.
P-15-019539	CA-KER-010703	Site	Prehistoric	Sparse lithic scatter: 65 flakes, one flake tool.
P-15-019540	CA-KER-010704/H	Site	Prehistoric, Historic	Historic refuse scatter ca. early to mid 1900s; sparse lithic scatter (10 flakes). Two loci.
P-15-019541	CA-KER-010705H	Site	Historic	Refuse (can) scatter ca. early to mid 1900s; three concentrations.
P-15-019542	CA-KER-010706H	Site	Historic	Refuse scatter ca. early to mid 1900s.
P-15-019543	CA-KER-010707	Site	Prehistoric	Sparse lithic scatter: 65 flakes, two flaked stone tools.
P-15-019547	CA-KER-010711	Site	Prehistoric	Sparse lithic scatter: 10 flakes, 3 ground stone tools.
P-15-019548	CA-KER-010712H	Site	Historic	Refuse scatter ca. mid 1900s.
P-15-019549	CA-KER-010713	Site	Prehistoric	Sparse lithic scatter (8 flakes) and midden soil (Feature 1).
P-15-019550	CA-KER-010714	Site	Prehistoric	Sparse lithic scatter: 20 flakes.
P-15-019551	CA-KER-010715	Site	Prehistoric	Moderately dense lithic scatter: 100 flakes.
P-15-019552	CA-KER-010716	Site	Prehistoric	Sparse lithic scatter: 55 flakes.
P-15-019553	CA-KER-010717	Site	Prehistoric	Sparse lithic scatter: 5 flakes.
P-15-019554	CA-KER-010718H	Site	Historic	Refuse (can) scatter ca. early to mid 1900s.
P-15-019555	CA-KER-010719H	Site	Historic	Refuse scatter ca. mid 1900s.
P-15-019556	CA-KER-010720	Site	Prehistoric	Sparse lithic scatter: 10 flakes.
P-15-019557	CA-KER-010721	Site	Prehistoric	Sparse lithic scatter: 5 flakes.
P-15-019558	CA-KER-010722H	Site	Historic	Refuse scatter ca. mid 1900s; one concrete foundation (Feature 1).
P-15-019559	CA-KER-010723	Site	Prehistoric	Sparse lithic scatter: 10 flakes, one ground stone artifact (mano).
P-15-019560	CA-KER-010724	Site	Prehistoric	Sparse lithic scatter: 5 flakes.
P-15-019561	CA-KER-010725	Site	Prehistoric	Sparse lithic scatter: 5 flakes.
P-15-019562	CA-KER-010726	Site	Prehistoric	Sparse lithic scatter: 20 flakes.

Primary No.	Trinomial	Type	Age	Description
P-15-019563	CA-KER-010727	Site	Prehistoric	Moderately dense lithic scatter with biface and flake tool: quantity of flakes not specified.
P-15-019564	CA-KER-010728	Site	Prehistoric	Sparse lithic scatter with one metate fragment: quantity of flakes not specified.
P-15-019565	CA-KER-010729	Site	Prehistoric	Moderately dense lithic scatter and biface: quantity of flakes not specified.
P-15-019566	CA-KER-010730	Site	Prehistoric	Sparse lithic scatter: quantity of flakes not specified.
P-15-019567		Isolate	Prehistoric	One obsidian flake.
P-15-019569		Isolate	Prehistoric	One rhyolite flake.
P-15-019570		Isolate	Prehistoric	One rhyolite core
P-15-019571		Isolate	Prehistoric	Two chert flakes
P-15-019572		Isolate	Prehistoric	Projectile point fragment; distal tip.
P-15-019574		Isolate	Prehistoric	One rhyolite flake.
P-15-019575		Isolate	Prehistoric	One chert flake.
P-15-019576		Isolate	Prehistoric	One chert flake.
P-15-019577		Isolate	Prehistoric	One rhyolite flake.
P-15-019578		Isolate	Prehistoric	One rhyolite flake.
P-15-019579		Isolate	Prehistoric	One rhyolite flake, one chert flake.
P-15-019580		Isolate	Prehistoric	Two rhyolite flakes.
P-15-019581		Isolate	Prehistoric	One chert core.
P-15-019582		Isolate	Prehistoric	Two rhyolite flakes.
P-15-019583		Isolate	Prehistoric	One rhyolite flake, one chert flake.
P-15-019584		Isolate	Historic	Sun-colored amethyst glass medicinal bottle: ca. 1880-1930.
P-15-019585		Isolate	Prehistoric	One rhyolite flake.
P-15-019586		Isolate	Prehistoric	One rhyolite flake.
P-15-019587		Isolate	Prehistoric	One rhyolite flake, one chert flake.
P-15-019588		Isolate	Prehistoric	One rhyolite flake, one chert flake.
P-15-019589		Isolate	Prehistoric	One rhyolite flake.
P-15-019590		Isolate	Prehistoric	Two rhyolite flakes.
P-15-019591		Isolate	Prehistoric	One rhyolite flake.
P-15-019592		Isolate	Prehistoric	One rhyolite flake.
P-15-019593		Isolate	Prehistoric	One rhyolite flake.
P-15-019725		Site	Historic	Refuse (can) scatter:1960s+
P-15-019848		Isolate	Prehistoric	Chert projectile point: Cottonwood Triangular.
P-15-019849		Isolate	Prehistoric	One chert flake tool.
P-15-020415		Site	Historic	Sparse refuse scatter ca. 1940s-1950s intermixed with modern debris.
P-15-020596		Structure	Historic	Access Road to SCE Big Creek Hydroelectric System Vincent 220kV Transmission Line constructed in 1927.

Bold indicates resources in the Project area.

4.3 ADDITIONAL SOURCES

Historical maps consulted include Elizabeth Lake, CA (1915 and 1917) 30-minute, Willow Springs, CA (1943 and 1965) 15-minute, Los Angeles, CA (1949, 1955, and 1959) 1-degree,

Little Buttes, CA (1965) 7.5-minute, Fairmont Butte, CA (1965) 7.5 minute, and Tylerhorse Canyon, CA (1965) 7.5-minute USGS quadrangles. Historical aerial images from NETROnline dated 1948, 1959, 1963, 1974, and 1994 were also reviewed. Results of the archival research indicate that by the early 1940s, portions of Hamilton Road and Rosamond Boulevard were present, which a few dirt roads connecting sparse structures to these relatively more major routes. The area remained relatively undeveloped until the 1960s, when a series of grid-oriented dirt roads were established throughout the Project area and the general vicinity. These road grids were presumably built for planned communities that were never established. Most of the roads visited during the survey exhibit some degree of use by local residents. The most significant development in the area has been wind and solar energy development, with the Project vicinity remaining relatively undeveloped and retaining its rural character.

4.4 NATIVE AMERICAN COORDINATION

A Sacred Lands File search request was sent to the Native American Heritage Commission (NAHC) for the Hydrostor A-CAES Project site. The objective of the Sacred Lands File search was to determine if the Native American Heritage Commission had any knowledge of Native American cultural resources (e.g., traditional use or gathering area and place of religious or sacred activity) within the immediate vicinity of the Project area. A response from the NAHC was received on August 24, 2021. The response indicated that no sacred lands listed in the Sacred Lands File are present in the Project Area (Appendix B). All tribal contacts were sent a letter via email on August 27, 2021 to gather information regarding cultural resource issues related to the proposed Project. A first round of follow up calls was placed on September 21, 2021 and a second round of follow up calls was placed on October 1 to tribes and tribal contacts who had yet to respond. An example of the SLF search request letter, the list of contacts, a sample scoping letter, a contact/response matrix, and copies of correspondence are included in Appendix B.

5 RESEARCH DESIGN

The archaeology of this area is complex, as it encompasses an extensive time period, numerous Native American cultures, and substantial environmental variation. The following presents research domains that encompass this vast temporal span, from the earliest prehistoric eras to more recent historic periods.

5.1 RESEARCH QUESTIONS

Archaeological investigation generally contributes to our understanding of the past by describing, recording, and reconstructing past lifeways; testing hypotheses regarding activities in the past; and reinforcing, altering, or challenging the current assumptions about the past (Little and Seibert 2000:29). To do this, research questions are identified to structure evaluations. The research questions are separated into prehistoric and historic period subcategories.

5.1.1 Chronology

Chronological information can be used to understand the trajectory and rate of cultural change and to establish relationships among sites at both a local and regional level. Chronological information can be derived from historic-period sites through the analysis of a set of maker's mark and artifact styles, while prehistoric period site will require chronometric dates and formal diagnostic artifacts. Important questions or issues that can be addressed on the basis of accurate chronological controls include, but are not limited to:

- When was the site used or occupied? Was use or occupation of the site continuous or discontinuous?
- Was the site contemporaneous with other sites in the area, or did it represent a distinct time period?
- Were different parts of the site occupied or used at different times?
- How were changes through time represented at the site in terms of prehistoric occupation, resource procurement, and population density?
- How do the historic-era artifact scatters reflect the dates upon which they were deposited? Did these deposits occur on a regular basis within short time frames?
- What methods could be used for dating the site?

Temporally sensitive prehistoric artifact types, such as shell beads and projectile points identifiable to specific time periods, can help place the site within the recognized prehistoric cultural horizons developed thus far for southern California. Materials that can be dated directly can provide specific chronological information for the site. Stratified cultural deposits can provide provenience for artifacts and material samples where alluvial activity may have altered the landscape and buried cultural deposits.

5.1.2 Flaked Stone Tool Technology

Flaked stone tools and the by-products of their production can be used to address important research questions regarding reduction trajectories employed in tool manufacture, as well as the types of activities carried out at an archaeological site. In addition, a valid sample of flaked stone material can help answer questions concerning how reduction sequences vary by type of material reduced, whether or not assemblages change over time, if assemblages represent local procurement or imported or partially finished materials, and if flaked stone assemblages can be characteristic of a specific cultural group. These data can help address questions related to the division and organization of labor, as well as questions that explore the relationships between people and their environment. Important questions or issues that can be addressed through flaked stone analysis include:

- What were the typical reduction trajectories employed in flaked stone tool manufacture at the site?
- Do these vary by the type of material used?
- How did flaked stone assemblages and material preferences change over time?
- Were flaked stone assemblages characterized by local raw material procurement and reduction, or were the assemblages more complex and inclusive of imported materials?

- What tool types comprised the flaked stone assemblage and what sorts of activities were represented by the flaked stone tool types?
- Did the flaked stone tool assemblage suggest use of the site over a continuous period of time (indicated by a greater density and diversity of flaked stone tools, evidence of numerous stages of reduction and tool manufacture, and evidence of re-tooling) or did it reflect temporary or intermittent occupation (suggested by a few stages of reduction, repair, or retooling and few tool types)?
- What changes in technology occurred during and between periods of occupation?
- What was the distribution of flaked stone materials on the site relative to other types of artifacts and features, and how might those distributions have reflected task-specific behaviors?
- Are the tools different from those found in other sites in the region, and if so, what accounts for those differences?

Flaked stone tools must be recoverable in datable contexts or intact stratified cultural deposits or recovered association with other temporally diagnostic artifacts or features. Variability in the distribution of flaked stone tool forms may provide clues as to site function, specific tasks that took place at the site, and temporal affiliation. A large and complex assemblage of tool forms and debitage made from various raw materials, either excavated from individual features or, to a lesser degree, site-wide, can be used to examine changes in flaked stone tool manufacturing trajectories, technological development, and regional interaction through time.

5.1.3 Ground Stone Tool Technology

Ground stone artifacts can be used to address several research issues, including manufacturing method, change through time or the division of labor and social organization. The presence or absence of certain ground stone tool types can be chronologically sensitive and could be used to answer questions relating to subsistence practices. Important questions or issues that can be addressed through analysis of ground stone technologies include:

- What manufacturing methods were employed in ground stone tool manufacture?
- Did these methods vary according to the type of raw material being used?
- Were the ground stone assemblages characterized by handstone/milling slab or mortar/pestle technology? What do the assemblages reveal about food processing at the site?
- Were the ground stone assemblages characterized by local lithic procurement and manufacture or were the assemblages more complex, incorporating use of imported materials?
- How was ground stone distributed across the site relative to other artifact types and features, and how might that have reflected task-specific behaviors?

Ground stone must be recovered in datable contexts or intact stratified cultural deposits or recovered in association with other temporally diagnostic artifacts or features. Variability in the distribution of ground stone tool forms may provide clues as to site function, specific tasks that took place at the site, and temporal affiliation. A large and complex assemblage of ground stone

artifacts made from various raw materials, either excavated from individual features or to a lesser degree, site-wide, can be used to examine changes in manufacturing trajectories, technological development, and regional interaction through time.

5.1.4 Heated-rock Features

Heated-rock features are very common in southern California and although ubiquitous, they may bear floral, faunal, or macrobotanical remains, and would be highly significant because open-air sites rarely allow for good preservation of feature interiors. The examination of any heated rock feature at sites in the Project area can be undertaken by following methods outlined by Milburn et al. (2009), which included analysis at the artifact level, archaeological feature level, through experimental studies, and as part of ethnographic investigations pertaining to subsistence. Important questions or issues that can be addressed on the basis of analysis of heated-rock features include:

- What is the reason for and significance of the topographic placement of the sites with heated-rock features?
- What is the intra-site spatial relationship among these features at each site?
- What is the age and chronology for the creation of features and do the features represent contemporaneous use or use over a relatively long period of time?
- What are the faunal, floral, and lithic constituents of each feature and what do these indicate in terms of species and environments from which food and other resources were derived?
- How are the features constructed and how does the construction fit with feature types known from the region?
- What is the function of the features?

Organic samples obtained from the features can be used for chronometric dating to establish the chronological relations of features in and between each site. Identifiable floral and faunal remains recovered from the feature should contribute to our understanding of what was being processed in the features and whether different types of features were used to process different materials. Data regarding site setting, chronology, faunal and floral materials, and construction methods should allow an understanding of how the features were used and what role they may have played in settlement and subsistence practices.

5.1.5 Prehistoric Settlement and Subsistence

One of the primary goals of archaeological research is to understand the settlement and subsistence practices of prehistoric and historic peoples. Using all available data derived from intact features, research questions relating to settlement and subsistence practices may be explored and a better understanding of the cultural factors influencing the use of the local of each site may be achieved. Important questions or issues that can be addressed include:

- What were the cultural and natural factors influencing the decision to use or occupy the site? How was the evidence for this decision-making similar or dissimilar to that observed at other sites in the region, particularly regarding changing mobility patterns over time?

- How did the spatial distribution of artifacts, features, and other cultural materials at the site reflect the spatial organization of the occupants and their activities over time?
- What raw materials or subsistence items were procured at or imported to the site based on evidence from faunal and floral remains, artifacts raw materials, etc.? What was the seasonal availability of resources used at the site?
- What was the nature of the settlement or subsistence activities at the site at various points in time as reflected by temporally or spatially segregated assemblages of artifacts, features, and other cultural remains?
- Was the site occupied or used into the historic period? How or to what extent did artifact assemblages or subsistence practices shift as a result of the expanding settler colonial presence?

5.1.6 Historic Settlement and Subsistence

Research regarding the settlements of the western Antelope Valley are important for understanding whether sites in the area should be considered significant. Use of the valley was, at first, associated with homesteading and transportation. Due to the remoteness and limited accessibility of resources, permanent settlements were few and far between. Important questions or issues that can be addressed include:

- What were the cultural factors influencing the decision to deposit the artifact loci at this site?
- How did the spatial distribution of artifacts, features, and other cultural materials at the site reflect the location of the site relative to other historic farmsteads in the area?
- What types of materials were selectively deposited at this site and do they reflect farming or some other type of off-site activity?
- What was the nature of the activities at the site at various points in time?
- How or to what extent did artifact assemblages or subsistence practices shift as a result of the expanding farming presence in the Antelope Valley?

5.1.7 Trade and Exchange

The Antelope Valley represents a potential stopping point for trading parties, given the view of the whole of the valley can be seen from certain ridges within the valley, and that travelers and animals would also need to use the Springs located in the vicinity. Prehistoric occupants of the valley may have been positioned along prehistoric regional trade and exchange routes linking the coast and the desert interior. Important questions or issues that can be addressed include:

- What prehistoric trade routes were associated with the area?
- How did the selection of raw materials for manufacture or the types of lithic materials used in finished tools reflect mobility patterns or preferences in socio-economic interactions with neighboring groups over time?
- The presence of shell artifact would indicate interaction and trade with coastal groups – is there any indication that these materials were obtained through trade?

- What evidence from other sites in the region suggests prehistoric coast/interior interaction? How can that evidence be employed to refine our understanding of human activities at Mojave Desert sites?
- Are there tool types or styles found at the site that are characteristic of other areas or non-local assemblages?

Evidence for trade and socio-economic interaction can be gained through an examination of artifacts derived from identifiable local and non-local sources. Distinctive tool types can also be used to infer the group and temporal period that produced them. Such materials must be recovered from intact, datable deposits in order to be related to a particular time.

6 FIELD INVESTIGATION

6.1 SURVEY METHODS

The primary goal of the pedestrian survey was to identify and document cultural resources and analyze their cultural constituents. It was anticipated that the results obtained from the survey would not only allow for the potential project efforts to be better assessed but would also provide data with which to confirm or elaborate our current understanding of the prehistory and history of the region. From a management perspective, the ability of specific resources to address research questions is one of the criteria used to evaluate CRHR eligibility, in addition to the integrity of the resources.

PaleoWest archaeologists conducted an intensive pedestrian surface survey and site inventory of the approximately 400-acre Project area between August 23 and September 28, 2021.

The pedestrian survey was directed and supervised by Dr. Kyle Knabb (Project Manager) and Dr. James Potter (Principal Investigator), and Gena Granger (Field Director), all of whom meet the Secretary of Interior's Professional Qualifications Standards for Archaeology. Prior to the commencement of the surveys, permission to survey the Project area was obtained from Golder.

The survey methods followed CEC standards consisting of parallel pedestrian transects spaced at 10- to 15-meter (33- to 50-foot) intervals when allowed by terrain and vegetation. Crew members also opportunistically examined any subsurface exposures, including rodent burrows and cut banks. Survey crews navigated the transects using georeferenced PDF maps on tablets using the ESRI Fieldmaps application and handheld global position system (GPS) units. Field iPads included all Project maps and relevant site forms. All resources were documented with an iSX-Blue data collector GPS unit with sub-meter accuracy that was compatible with iPad-based ESRI Fieldmaps for ArcGIS web application via Bluetooth.

The Project area was documented with digital photographs that included general views of the topography and vegetation density, and other images. A photograph log was maintained to include photograph number, date, orientation, photograph description, and comments. The surveyors carefully inspected all areas likely to contain or exhibit sensitive cultural resources to ensure discovery and documentation of and visible, potentially significant cultural resources located within the project area. In particular, the survey crews carefully inspected rocky outcroppings, creek banks, clearings, and other habitable flat spots.

The Project area lies on the broad Antelope Valley floor. The area is characterized by a near level to gently sloping topography that is transected by numerous southwest-to-northeast running ephemeral desert washes. Vegetation in the area consisted primarily of open desert scrub that consists of largely scattered creosote bushes and desert landscapes. Due to the openness of the terrain, transect spacing and observation strategies allowed for the detection of small sites and isolates (fewer than five artifacts or single features).

All cultural materials and features of an eligible age were recorded during the surveys in accordance with OHP guidelines (OHP 1995). Materials and features that could not be accurately dated in the field were also recorded. Historic period indicators include standing buildings, objects, structures such as sheds, or concentrations of materials at least 45 years in age, such as domestic refuse (e.g., glass bottles, ceramics, toys, buttons, and leather shoes), refuse from other pursuits such as agriculture (e.g., metal tanks, farm machinery parts, and horse shoes) or structural materials (e.g., nails, glass window panes, corrugated metal, wood posts or planks, metal pipes and fittings, and railroad spurs). Prehistoric site indicators include areas of darker soil with concentrations of ash, charcoal, animal bone (burned or unburned), shell, flaked stone, ground-stone, pottery, or even human bone.

When artifacts were found during the surveys, site boundaries were defined by surveying out in widening concentric circles until artifacts were no longer encountered. Artifacts or features that were within 30 meters of each other, or that were clearly related, were combined into the same isolate or site. All sites were digitally recorded in the field directly into a FileMaker database on iPad.

6.1.1 Site and Isolated Occurrences Definitions

The OHP's *Instructions for Recording Historical Resources* (OHP 1995) defines a site as the location of a prehistoric or historic-era occupation or activity. A district is defined as possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. The term "structure" is used to distinguish from buildings or those functional constructions usually made for purposes other than creating human shelter.

For the purpose of this study, a "site" was defined as a location that has material evidence of past life, activities, and culture. The California standard is to record any cultural resources over 45 years of age, despite the NRHP threshold of 50 years of age. In general, an archaeological site should exhibit at least one of the following:

- One or more features;
- Five or more artifacts in clear association within a 25 square meter (5 × 5 meter) area;
- Fewer than five artifacts that have data potential or are "diagnostic" (i.e. fluted points).

Examples of archaeological sites found during this survey include prehistoric lithic scatters and historic-period refuse scatters, roads, and agricultural remnants. Resources separated by more than 30 meters or located on different landforms were recorded as distinct sites or as isolates, unless other indicators suggested a close association. Isolates were defined as fewer than five

artifacts that are greater than 45 years old. Examples of isolates found during this survey include lithic artifacts, metal cans, and glass bottle fragments.

Previously recorded cultural resources were also revisited during this survey. Their condition was assessed and an update was made to the record if determined necessary. All newly recorded sites were fully recorded and are described in this report. Maps showing the locations of all identified cultural resources within the Project area are included in Appendix C. Site forms for these sites have also been submitted in conjunction with this report (See Appendix D).

6.1.2 Documentation Methods

All sites and isolates were recorded using a hosted FileMaker Go database developed specifically by PaleoWest to replicate California's DPR 523-series record forms. At a minimum, a completed site record consisted of a primary record form, a location map (a GPS location plotted on a USGS 7.5-minute quadrangle map), a scaled site sketch map, color site overview photographs, and photographs of diagnostic artifacts and features where appropriate. Field crews entered site information (e.g., in-field artifact analyses, features data, and narrative description) into the FileMaker Go database on an iPad. Site sketch maps were created using the ArcGIS Collector application, using GPS with sub-meter accuracy. Site maps depict the site datum and boundary, artifact and feature locations, disturbances, and surrounding topography and drainages. Digital photographs were taken using iPads and automatically linked to the forms in the FileMaker Go database. These included general views of the topography and vegetation density, and other relevant images. A photograph log was maintained to include, at a minimum, photo number, date, orientation, photo description, and comments. Isolate records include an isolate description and photograph, and a GPS location.

6.1.3 Evaluating Site Significance

PaleoWest evaluated each identified cultural resource within the Project area for significance and eligibility for listing on the CRHR. To qualify for listing, a property must represent a significant theme in American history, archaeology, architecture, engineering, or culture, and it must be a good representative of that theme. Moreover, the property must retain integrity, that is, an ability to convey its association with important events, individuals, or themes by means of its physical characteristics.

The CRHR recognizes properties of local, state, or national importance with evaluative criteria and procedures similar to the NRHP standards. These include:

- Classifying the property as a district, site, building, structure, or object;
- Determining the theme, period, and context within which the property is significant;
- Determining which NRHP significance criteria are applicable;
- Determining whether the property meets any exclusionary considerations; and
- Determining whether the property retains integrity.

The professional evaluations offered here have been developed in collaboration with the client but are subject to final concurrence by the federal, state, and local regulatory agencies. The CEQA lead agency makes determinations regarding significance and eligibility for the CRHR.

Accordingly, the present task is to render a professional assessment rather than an administrative determination.

Section 15064.5(a)(3) of the CEQA Guidelines (as amended) states that a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (Public Resources Code Section 5024.1, Title 14 California Code of Regulations Section 4852). A site meets the criteria of eligibility for the CRHR if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Cultural resources meeting one or more of these criteria are defined as “historical resources” under CEQA. Resources included in a local register of historical resources (pursuant to Section 5020.1[k] of the Public Resources Code), or identified as significant in a historical resources survey (meeting the criteria in Section 5024.1[g] of the Public Resources Code), also are considered “historical resources” for the purposes of CEQA. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in a historical resources survey, does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1. 3.

Contexts for Evaluation

For both the NRHP and CRHR, the archaeological and historical contexts presented in Chapter 3 establish the framework within which decisions about significance are based. The evaluation process essentially weighs the relative importance of events, people, and places against the larger backdrop of prehistory and history; the contexts provide the comparative standards and/or examples as well as the theme(s) necessary for this assessment. According to the NPS, a theme is a pattern or trend that has influenced the history of an area for a certain period. A theme is typically couched in geographic (i.e., local, state, or national) and temporal terms to focus and facilitate the evaluation process.

Significance is based on how well the subject resource represents one or more of these themes, provides important scientific information about the theme, or helps to understand the important events or people associated with the resource and its inherent qualities. A resource must demonstrate more than just association with a theme; it must be a good representative of the theme, capable of illustrating or explaining the various thematic elements of a particular time and place in history.

Integrity

To be eligible for the CRHR, a resource must possess both significance and integrity. Thus, cultural resources that are not significant per NRHP and CRHR criteria are by definition not eligible to either register and do not require an integrity assessment. It is not necessary for a

property to retain all of its historic physical features or characteristics in order to be eligible for listing. The property must, however, retain enough integrity to enable it to convey its historic identity; in other words, to be recognizable to a historical contemporary. The CRHR recognizes seven aspects or qualities that, in various combinations, define integrity:

1. Location—the place where the historic property was constructed or the place where the historic event occurred.
2. Design—the combination of elements that create the form, plan, space, structure, and style of a property.
3. Setting—the physical environment of a historic property.
4. Materials—the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. Workmanship—the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6. Feeling—a property’s expression of the aesthetic or historic sense of a particular period of time.
7. Association—the direct link between an important historic event or person and a historic property.

These elements of integrity are most appropriately applied to built-environment resources (i.e., standing buildings, structures, and objects). Although location (as described above) is relevant for all types of resources, the other aspects of integrity are not readily applicable to most archaeological sites. Instead, physical properties—like vertical and horizontal structure—provide a more relevant measure of integrity for archaeological sites. To illustrate, a site is considered to possess integrity if its original stratigraphy remains generally unaltered such that the chronology of activity can be determined and if indications of disturbance do not obscure the full range of activity that occurred at the site as expressed in its features and artifacts. If both conditions are met, the site will have likely retained its ability to yield scientifically important information. To retain historic integrity, a property will always possess several, and usually most, of these aspects.

Linkage

Under CRHR Criterion 4, the data potentials of a particular archaeological site are identified through the linkage of specific artifact classes present at the site with research themes such as those outlined in Section 4 above. For example, charcoal or other organic remains suitable for radiocarbon dating, source-identified obsidian, shell beads, projectile points, or other stylistic artifacts would permit the study of cultural chronology. Faunal and floral remains provide information on food procurement, diet, seasonality, and the biotic environment, while obsidian, shell beads, or other nonlocal materials would enable studies of trade and commerce. The presence of these kinds of remains in an undisturbed context would indicate a significant cultural deposit. If such remains are lacking, or if their contextual integrity has been seriously impaired by post-depositional disturbances, then the site likely would not be considered eligible under Criterion 4.

A key factor in assessing archaeological data potentials is the capacity for chronological control of the cultural assemblage. Temporally diagnostic artifact forms, historical documents, datable carbon, source-identified obsidian specimens, and preserved stratigraphy are among the major sources of chronological data. Sufficient samples of obsidian debitage, even in the absence of diagnostic tool types, can also yield chronologically controlled data on raw material procurement, lithic reduction sequences, and tool manufacturing techniques through obsidian sourcing and hydration studies.

If site chronology and function can be defined, a site can usually provide data on land use and settlement patterns. These data are usually embodied in the locational, functional, and contextual information about the site. Similarly, almost all prehistoric sites have some potential to provide data on lithic technology, given chronological control of a sufficient sample of tools and/or debitage. However, if this information cannot be placed in a larger cultural context, the data are not considered of great importance; thus, sites having only limited settlement or technological data are not generally deemed significant or important under Criterion 4. Likewise, sparse scatters of flaked or ground stone without temporal diagnostics have limited data potential due to the low density and low variability of the cultural assemblage and the lack of datable material.

Archaeological sites in the Project area generally were judged to meet the CRHR eligibility criteria under Criterion 4 if they exhibited one or more of the following characteristics:

- Temporally discrete features, strata, or components;
- Variability in flaked and ground stone assemblages and faunal remains;
- Sufficient quantities of artifacts and debris to provide statistically valid samples;
- Internal spatial variability that might reflect functional differentiation in site use;
- Vertical or horizontal structure that might reflect discrete single component occupations or readily separable multicomponent occupations; and/or
- Documentation of important historical associations.

Sites with these characteristics were judged to contain the kinds of data useful for understanding the local chronological sequence, defining discrete cultural components, and learning how these relate to more well-known cultural sequences. At the next hierarchical level, such sites can provide information on dimensions of flaked and ground stone technology, prehistoric diet and subsistence, trade and exchange, and other regionally important research questions.

Whereas prehistoric archaeological sites are typically evaluated only under Criterion 4 for their potential to yield data important to understanding the prehistory of the area or region. Historical archaeological sites and architectural resources may be evaluated under any of the four criteria because their features, plus available historical documentation, may be used to inform our understanding of their association with events, people, workmanship, or other important historical information.

6.2 ARCHAEOLOGICAL SURVEY RESULTS AND CRHR ELIGIBILITY RECOMMENDATIONS

As previously discussed, PaleoWest archaeologists revisited the mapped locations of known archaeological resources within the Project area to assess their current condition and update the DPR 523 forms as necessary. New sites were mapped following the methods outlined above and documented on the relevant DPR 523 forms. Approximately 7.5 acres of the Project area were unsurveyed due to access issues, which included fences, signage, and interactions with local property owners obstructing or denying access to the area (Figure 6-1 and Figure 6-2).

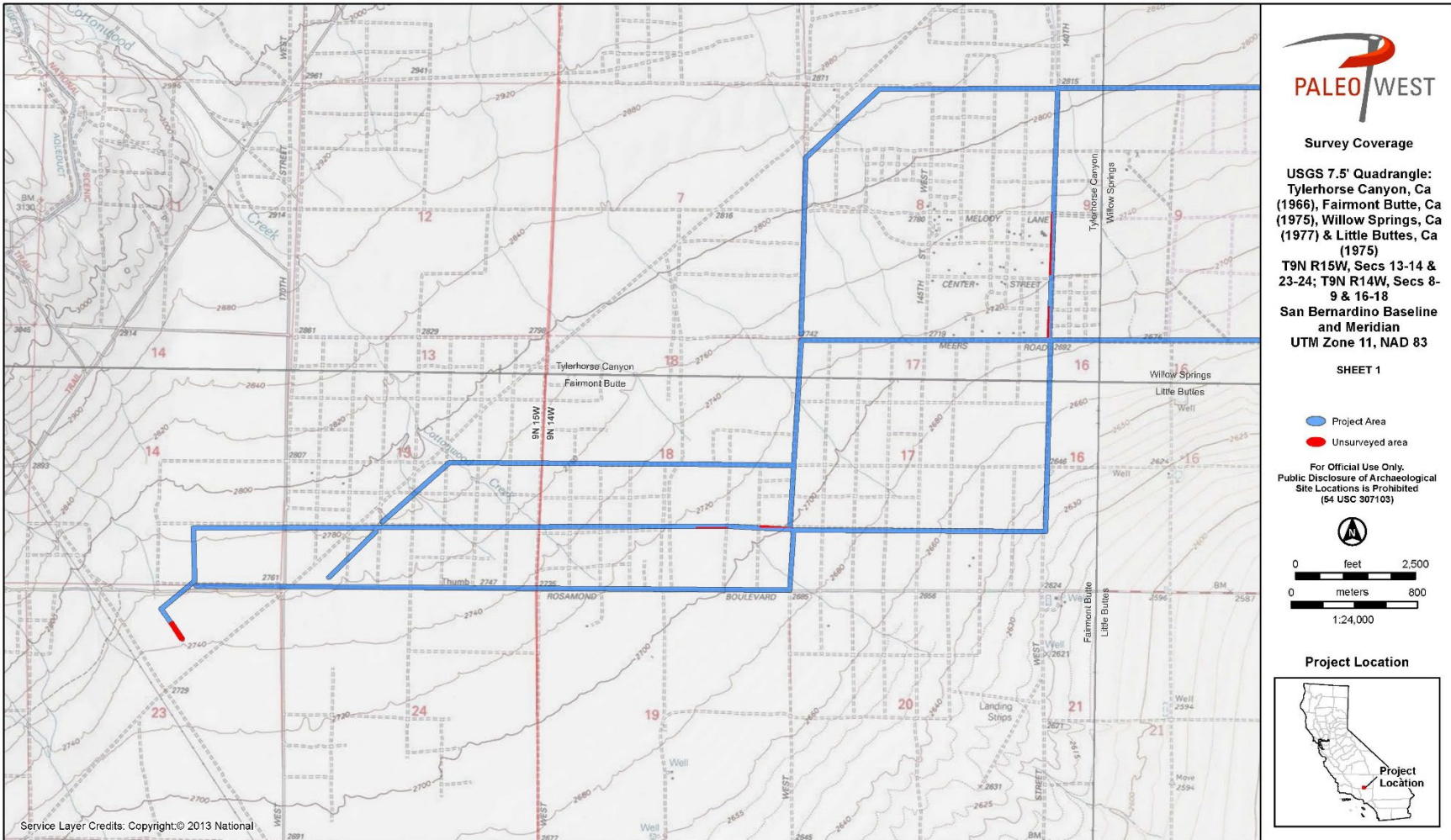


Figure 6-1. Survey coverage map.



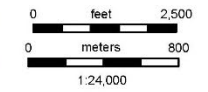
Survey Coverage

**USGS 7.5' Quadrangle:
Willow Springs, Ca (1977)
& Little Buttes, Ca (1975)
T9N R14W, Secs 1-4 & 9-
12; T9N R13W, Secs 7-8,
17-19 & 24
San Bernardino Baseline
and Meridian
UTM Zone 11, NAD 83**

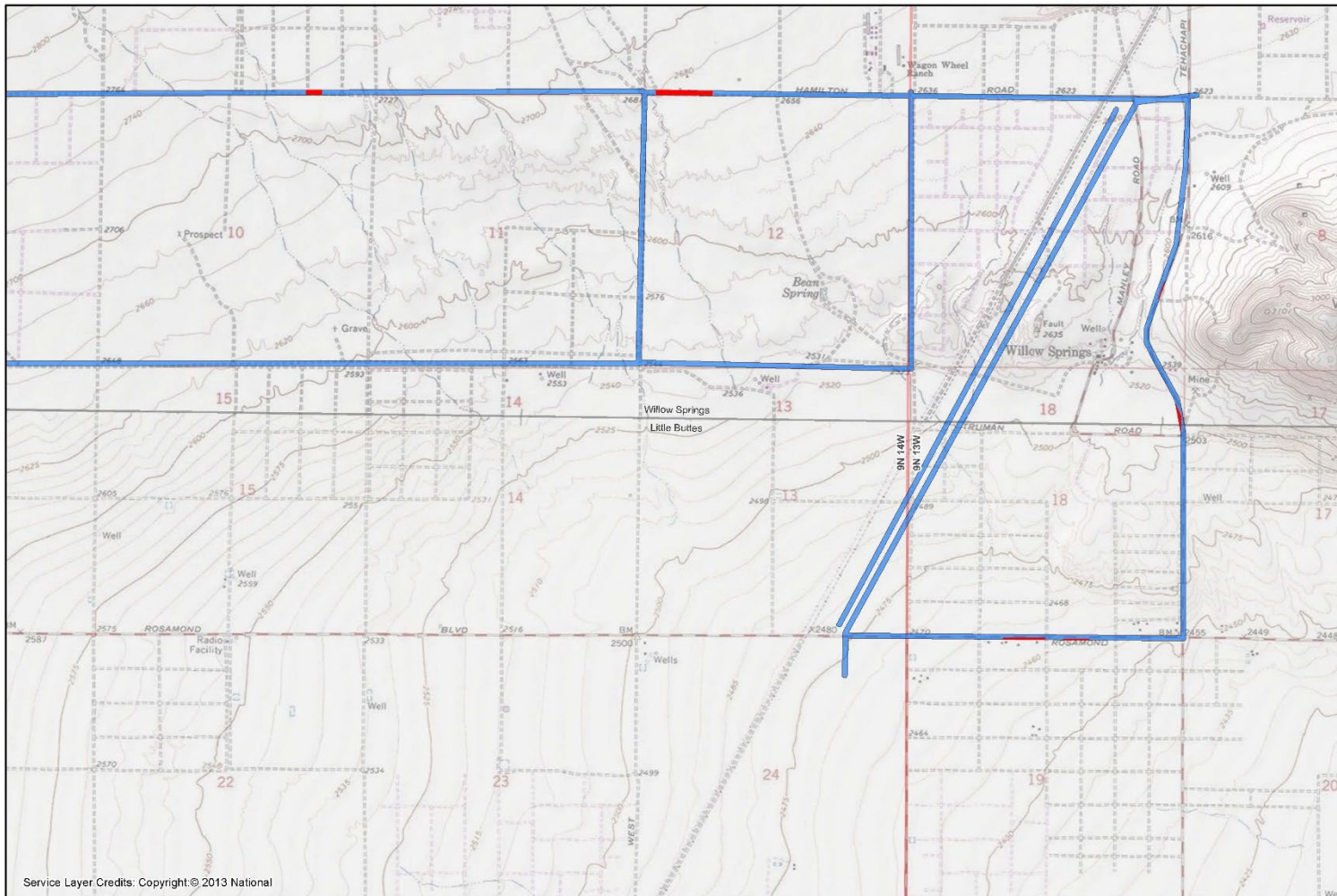
SHEET 2

- Project Area
- Unsurveyed area

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Public Disclosure of Archaeological
Site Locations is Prohibited
(54 USC 307103)**



Project Location



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Figure 6-2. Survey coverage map (continued).

6.2.1 Previously Recorded Archaeological Sites

The mapped locations of 14 previously recorded archaeological sites and 1 built environmental resource with archaeological components were revisited during the archaeological survey. Descriptions and evaluations of these resources are provided below. Table 6-1 lists these previously recorded archaeological sites within the Project area. The revisits found that one of these resources, P-15-015698/CA-KER-008666H), is outside of the Project area. Maps and overview photos of each site can be found in Appendix D.

Table 6-1. Previously Recorded Archaeological Sites Revisited in the Project Area

Primary No.	Trinomial No.	Age	Description	Previous CRHR Eligibility Determination	CRHR Eligibility Recommendation
P-15-000129	KER-000129	Multicomponent	Reportedly the location of protohistoric Kitanemuk village and cemetery destroyed in the 1930s. Site of the Willow Springs Stage Station on the Los Angeles-Havilah Stage Lines from 1864-1872. California Landmark No. 130.	Not evaluated	Unevaluated pending subsurface testing
P-15-001969	KER-001969	Prehistoric	Sparse lithic scatter with fire-altered rock. 100+ flakes and biface fragment recorded.	Not Evaluated	Site combined with 15-014902
P-15-002821	KER-002821	Multicomponent	Bean Spring Site Archaeological Complex. Large prehistoric complex lithic scatter with bedrock mills and habitation debris. Historical component dating from mid 1800s to mid 1900s with refuse and foundations. 22 loci recorded.	Recommended eligible under Criterion 4	Unevaluated pending subsurface testing
P-15-012725	KER-007183	Historic	Large refuse scatter ca. early 1900s.	Not Evaluated	Not eligible
P-15-012793	KER-007214	Historic	Large refuse scatter ca. early to mid 1900s with cistern-like feature (Feature 1) and shallow pit with raised berm (Feature 2).	Unknown	Not eligible
P-15-014902	KER-008324	Historic	Burned remains of 1920-1930s house.	Unknown	Not eligible
P-15-015698	CA-KER-008666H	Historic	Refuse scatter; post 1963 to modern.	Unknown	Not in Project area

Primary No.	Trinomial No.	Age	Description	Previous CRHR Eligibility Determination	CRHR Eligibility Recommendation
P-15-018288	KER-009981H	Historic	Unpaved segment of Hamilton Road with roadside refuse and rock fire ring. Road constructed between 1943-1965, but some portions may date as early as 1915	Recommended not eligible	Not eligible
P-15-018676	KER-010199	Prehistoric, Historic	Historic refuse scatter ca. 1920s-1960s and prehistoric lithic scatter with flaked and ground stone artifacts, faunal remains, and one Olivella shell.	Recommended eligible under Criterion 4	Not eligible within Project area
P-15-018677	KER-010200	Prehistoric	Dense lithic scatter with flaked and ground stone artifacts, faunal remains, and Olivella shells.	Recommended eligible under Criterion D (NRHP)	Not eligible within Project area
P-15-019042	KER-010408	Prehistoric	Sparse lithic scatter: 100+ flakes, one biface fragment.	Recommended eligible under Criterion D/4	Eligible under Criterion 4
P-15-019540	KER-010704	Prehistoric, Historic	Historic refuse scatter ca. early to mid 1900s; sparse lithic scatter (10 flakes). Two loci.	Unknown	Unevaluated pending subsurface testing
P-15-019542	KER-010706	Historic	Refuse scatter ca. early to mid 1900s.	Unknown	Not eligible
P-15-019548	KER-010712	Historic	Refuse scatter ca. mid 1900s.	Unknown	Not eligible
P-15-020596		Historic	Access Road to SCE Big Creek Hydroelectric System Vincent 220kV Transmission Line constructed in 1927.	Recommended eligible as contributor to Big Creek Hydroelectric District	Not eligible within Project area

P-15-000129

P-15-000129 is a previously recorded multicomponent site consisting of the town of Willow Springs. The site was originally described as a prehistoric, historic, and protohistoric site with several ruined and in-use historic structures (Green and Knight 1992). A small part of the Willow Springs Stage Station is present, as are two historical markers (one for the stage-coach station and one mentioning Friar Francisco Garces, Colonel John C. Fremont, and Kit Carson). Additional historic ruined structures and refuse scatters are present. The prehistoric component consists of artifact scatters, midden deposits, and a potential rock art feature (pictographs).

During PaleoWest's revisit to P-15-000129 the portion of the site boundary that lies within the Project area was revisited. None of the previously recorded constituents were identified in the

Project area, which is largely paved over by Tehachapi Willow Springs Road. Review of the existing site records did not reveal any previously recorded features within the current project area. The unpaved surfaces within the project area did not contain any evidence of prehistoric or historic resources. Analysis of the built environment structures can be found section 6.3 below.

CRHR Eligibility

Site P-15-000129 is a California Historic Landmark but has not been previously evaluated for CRHR-eligibility. This section deals with the archaeological component of the site within the Project area only. While PaleoWest attempted to evaluate the site based on the results of the field survey and review of previous records, the portion of the site within the Project area is mostly paved. Unpaved areas examined during the survey did not reveal cultural resources; however, given the possibility of buried resources within the Project area an evaluation of the site is not possible. Therefore, the site is unevaluated pending subsurface testing.

P-15-001969

P-15-001969 is a previously recorded prehistoric lithic scatter. The site was originally recorded by Johnson and Miller (1985) and was described as a sparse lithic scatter with over 100 pieces of chert, rhyolite, obsidian, and chalcedony debitage and one obsidian biface tip. The site measures 226 meters by 80 meters.

PaleoWest revisited the site in September 2021 and identified additional flakes outside the site's original boundaries. The site has been disturbed as a result of the construction of a transmission line access road since the 2014 update. As a result of expanding the sites boundaries, the site should be combined with and subsumed under the updated site boundary for P-15-019042.

CRHR Eligibility

Site P-15-001969 has not been previously evaluated for significance. Because this site's boundaries have been subsumed under P-15-019042, CRHR evaluation can be found under the new site designation.

P-15-002821

Site P-15-002821 was previously recorded as a multicomponent site consisting of a large prehistoric complex and historic-era features. The site originally consisted of a sparse lithic and groundstone scatter that was combined with multiple sites and eventually resulting in a massive site complex that totals approximately 371 acres with multiple prehistoric and historic loci (ASM Affiliates, Inc. 2017). Prehistoric features at the site include lithic scatters, bedrock milling features, hearths, habitation debris, and groundstone. Historic features include house foundations and historic refuse. The most recent investigations at the site resulted in the recordation of 22 loci (ASM Affiliates 2017), however, the site limits were incompletely defined and only the portion of the site within the Project area at the time were investigated. Investigations by Way and Norwood (2009) identified 14 sites within a site measuring approximately 1,000 m by 2,700 meters. As a result of these investigations, the site was recommended eligible for listing in the CRHR. PaleoWest's review of the previous reporting on site P-15-002821 suggest that the site's boundaries were erroneously reduced following the

2017 investigations, which investigated the site within the boundaries of the previous Project area. It is therefore recommended that the site boundaries from the 2009 investigation be reinstated.

PaleoWest's revisit to Site P-15-002821 did not identify any cultural resources as previously described in the site records. However, the revisit was limited to the current Project area. Review of the previously mapped loci indicates that none are within the current Project area. During the survey, an additional historic feature was recorded consisting of a diffuse historic can scatter of approximately 30 sanitary cans. Most of the cans are crushed, shot, or partially buried due to erosion activities. A small wash is present along the eastern boundary of the site and may have redeposited cultural constituents further south of site and outside of the Project area. This portion of the site is just east of an access road and subject to additional disturbance from activities along the road.

The newly recorded historic component of Site P-15-002821 is located adjacent to a historic dirt road. Review of BLM GLO records indicates that the site is near a homestead issued to Charles Bean in 1892 on the southeast quarter of Section 11 of Range 14 west of Township 9 north. Charles Bean also homesteaded the north half of section 12, where Bean Spring is located. However, review of historic topographic maps and aerial photos did not reveal any homestead-related development in the vicinity of the refuse scatter. The proximity of the site to 100th Street West, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

The prehistoric component of site P-15-002821 was previously recommended eligible for listing in the CRHR. The historic component does not appear to have been evaluated. As such, PaleoWest only evaluated the portion of the site within the proposed Project area. The portion of the site within the project area contains an unpaved dirt road that extends through the center of the Project area. Undeveloped areas examined during the survey did not reveal cultural resources, however, given the overall sensitivity of the area and the possibility of buried resources within the Project area an evaluation of the site is not currently possible. PaleoWest recommends the prehistoric component of the site is unevaluated pending subsurface testing.

The historic component of site P-15-002821 contains no evidence to indicate that the remains are linked to homesteading- or transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, Charles Bean does not appear to have been an important person in California's past aside from the spring bearing his name that exists on his homestead. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, P-15-002821 is not significant under Criterion 4.

P-15-012725

P-15-012725 is a previously recorded historic refuse scatter. The site was originally recorded by Brown and Hamm (2002) and was described as a historic artifact scatter with over 150 sanitary cans, ceramics, seven amethyst, four green, and twelve brown bottle glass fragments, two hole in cap meat tins, and other domestic refuse dating to the late 19th and early 20th centuries. The site measures 150 feet by 225 feet.

PaleoWest revisited the site in September 2021 and found that the site's location had been misplotted, so the site was remapped. The site appeared to be in similar condition as previously reported, though not all of the diagnostic artifact originally identified could be relocated. No evidence of the association with the originally Los Angeles Aqueduct was identified in the field, nor was such evidence found on historical aerials or topographic maps. However, the site is located adjacent to two historic roads that first appear on historic topographic maps from 1915 and 1943.

CRHR Eligibility

Site P-15-012725 contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, P-15-012725 is not significant under Criterion 4.

PaleoWest recommends P-15-012725 be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-012793

P-15-012793 is a previously recorded historic refuse scatter. The site was originally recorded by Ramirez et al. (2007) and was described as a large historic trash scatter with over 150 sanitary cans, several concentrations of colorless glass, fence posts, a square, cistern like feature, and other domestic refuse dating to the late 19th and early 20th centuries. The site measures 1,143 feet by 726 feet.

PaleoWest revisited the portion of the site within the Project area in September 2021 and found that the resource appears to have been destroyed by the construction of the SCE Whirlwind Substation, which encompasses part of the site boundaries. Only 3 cans were relocated within the Project area. The cans include one bimetal pull tab, one hole in top can with knife opening, and one church key opened beverage can. The site is just north of the substation and east of the transmission line. PaleoWest archaeologists also observed that the ground outside of the Project area had been cleared, suggesting that other portions of the site had also been destroyed.

CRHR Eligibility

Site P-15-012793 does not appear to have been previously evaluated for significance. As the portion of the site within the Project area appears to have been destroyed, it is recommended not eligible for listing on the CRHR because the site retains none of its integrity. Given the extent of the disturbance observed across the rest of the site boundaries, PaleoWest assumes the entire site is not eligible for the same reasons.

P-15-014902

P-15-014902 is a previously recorded historic site that was originally recorded by Hudlow (2010) and was described as the remnants of a 1920-1930s house constructed of fieldstone. The site measured 90 feet by 75 feet. The site had burned down and charcoal from the fire was observed throughout the site.

PaleoWest's revisit to Site P-15-014902 found that the current conditions of the site are largely unchanged since 2010, although the site appears to have been misplotted. The site was relocated approximately 500 feet to the east. The site is located adjacent to Rosamond Boulevard. A review of historical maps and BLM GLO (2021) records found that the area had been homesteaded by James H. Hill in 1926.

CRHR Eligibility

Site P-15-014902 does not appear to have been previously evaluated for significance. The site contains no evidence to indicate that the remains are linked to homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, James H. Hill does not appear to have been an important person in California's past. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, P-15-014902 is not significant under Criterion 4.

PaleoWest recommends P-15-014902 ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-018288

P-15-018288 is a previously recorded historic roadway, historic hearth feature, and three cans. The site was originally recorded by that was originally recorded by Newcomb et al. (2015) and was described as a 2.3-mile segment of a historic roadway, a hearth feature, and three cans. The resource was updated in 2015 and the hearth was excavated to better understand its origin. The results were negative for any artifacts or charcoal and the hearth was determined to be modern. None of the site components could be associated with a homestead, structure, or individuals, so the site was recommended not eligible for the CRHR under all criteria.

PaleoWest's revisit to Site P-15-018288 found that the current conditions of the site are largely unchanged since 2015. The hearth feature was not relocated, likely because it was destroyed

during previous testing at the site. Refuse at the site appears to be the result of episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

Site P-15-018288 was previously recommended not eligible for listing on the CRHR, although no formal agency determination appears to have been made. The site contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, P-15-018288 is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-003H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-018676

P-15-018676 is a previously historic refuse scatter and small prehistoric lithic scatter. The site was originally recorded by Webb and Marty (2014a). According to the record, collection of the site's prehistoric constituents occurred in 2015 (including 27 flakes, 50 fragments of bone from small mammals, one groundstone artifact, and an Olivella shell, all of which were collected as part of a data recovery program for mitigation of the site due to the construction of a transmission line tower and related access road. During a record update in 2017, four additional flakes were observed.

PaleoWest revisited the site in September 2021 and relocated the historic component of the site. The prehistoric component (four flakes) was not relocated. The site's boundaries were extended to include historic refuse extending south and southeast from the site. The refuse appears to be related to secondary deposition of historic refuse that is eroding from. As a result of the updates to site P-15-018676 the site boundaries now overlap with historic isolate P-15-018724. Thus, it is recommended that the resources be merged into a large site under the site designation P-15-018676. The new site boundaries measure 1,016 feet by 675 feet. The site is located along an unnamed historic road was established by 1915 based on review of historic topographic maps. The proximity to a historic road suggests that the historic component of the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

Site P-15-018676 was previously recommended eligible for the NRHP and CRHR under criterion D/4, though a formal determination does not appear to have been made. As such, PaleoWest evaluated the portion of the site in the Project area for listing in the CRHR as part of the current study. The prehistoric component of P-15-018676 lacks temporally or culturally diagnostic

materials. Because it cannot not be associated with a particular era or persons important to the past, it is recommended not eligible under Criterion 1 or 2. The lithic scatter also lacks any defining or distinguishing features and does not appear to be eligible under Criterion 3. As there are only a small number of artifacts due to previous data collection at the site, there is little opportunity to obtain information important to the past and previous data recovery investigations have likely exhausted the sites data potential. Due to this, the site is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. Therefore, it is recommended that the portion of the site in the Project area is not eligible for listing on the CRHR under Criterion 4.

The historic component of P-15-018676 contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is recommended not eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, the historic component of P-15-018676 is not significant under Criterion 4.

PaleoWest recommends site P-15-018676 be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-018677

Site P-15-018677 is a previously recorded sparse lithic scatter that was originally recorded by Webb and Marty (2014b). The site was originally described as a lithic scatter with over 300 flake artifacts and four tools: one expedient drill, one scraper, one biface tip, and one core fragment. The prehistoric component of the site appears to have been recommended eligible for the NRHP. As a result, data recovery was conducted at the site in 2015 to mitigate the effects of the construction of Tower #29-4 and Tower Spur Road. Data recovery included the excavation of 65 1x1 meter units and the recovery of 3,004 lithic flakes, 8,900 fragments of bone, over 30 flake tools, numerous Olivella shells, a small number of groundstone artifacts, and C-14 samples. Portions of the site outside of the area of direct impacts were placed in a temporary Environmentally Sensitive Area (ESA).

PaleoWest revisited the site in September 2021 and did not relocate any of the original site components within the current Project area. It appears that the construction of the transmission tower, intensive surface collection, and data recovery program performed in 2016 has destroyed large portions of the site, which is no longer extant within the Project area.

CRHR Eligibility

Site P-15-018677 was previously recommended eligible for listing in the NRHP under a previous undertaking, though a formal determination does not appear to have been made. As such, PaleoWest evaluated the portion of the site within the project area for listing in the CRHR as part of the current study. Site P-15-018677 lacks temporally or culturally diagnostic materials.

Because it cannot not be associated with a particular era or persons important to the past, it is recommended not eligible under Criterion 1 or 2. The lithic scatter also lacks any defining or distinguishing features and does not appear to be eligible under Criterion 3. As there are only a small number of artifacts due to previous data collection at the site, there is little opportunity to obtain information important to the past and previous data recovery investigations have likely exhausted the sites data potential. Due to this, the site is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. Therefore, it is recommended that the portion of the site in the Project area is not eligible for listing on the CRHR under Criterion 4.

PaleoWest recommends site P-15-018677 be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-019042

P-15-019042 is a previously recorded prehistoric lithic scatter. The site was originally recorded by Webb and Marty (2014c) and was described as a sparse lithic scatter with over 100 pieces of chert, rhyolite, obsidian, and chalcedony debitage and one obsidian biface tip. The site measures 83 meters by 48 meters.

PaleoWest's revisit to Site P-15-019042 found that the site was misplotted and the site boundary was updated. An obsidian point that was previously recorded could not be relocated, but the flakes within the site boundary do appear to be late-stage reduction as originally described. With the corrected site location, the site appears to overlap with site P-15-01969, also a previously recorded lithic scatter described above. PaleoWest recommends that this site be combined with site P-15-01969 to create one large sparse lithic scatter resource under site number P-15-019042. Disturbances noted during the site visit include the construction of a transmission tower to the west of the site. The new site's boundaries are 203 meters by 208 meters.

CRHR Eligibility

Site P-15-019042 was previously recommended eligible for listing in the NRHP and CRHR under criterion D/4, though a formal determination of eligibility does not appear to have been made. As such, PaleoWest evaluated the site for listing in the CRHR as part of the current investigation. Site P-15-019042 lacks temporally or culturally diagnostic materials. Because it cannot not be associated with a particular era or persons important to the past, it is recommended not eligible under Criterion 1 or 2. The lithic scatter also lacks any defining or distinguishing features and does not appear to be eligible under Criterion 3. However, the presence of a formal tool and the high proportion of late stage debitage suggest that the site has the potential to yield important information on prehistoric tool manufacture and land use in the region. Therefore, Site P-15-019042 is recommended as eligible for listing on the CRHR under Criterion 4.

P-15-019540

P-15-019540 is a previously recorded multicomponent site south of Hamilton Road. The site was originally recorded by Azpitarte et al. (2017a) and consists of a historic refuse scatter and

prehistoric lithic scatter. The prehistoric component consists of a very sparse lithic scatter of approximately ten flakes. The historic component consists of a sparse scatter of cans and domestic refuse.

PaleoWest's revisit to Site P-15-019540 found that the current conditions of the site have deteriorated since 2017. The prehistoric component was not relocated and the historic component was remapped to include more area south and southwest of the previous boundary where additional historic refuse was identified. The new site boundaries measure 590 feet by 440 feet. The proximity of the site to Hamilton Road, which appears on historic topographic maps from 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

Site P-15-019540 does not appear to have been previously evaluated for significance. As such, PaleoWest evaluated the site for listing in the CRHR as part of the current investigation. The prehistoric component of P-15-019540 lacks temporally or culturally diagnostic materials. Because it cannot be associated with a particular era or persons important to the past, it is recommended not eligible under Criterion 1 or 2. The lithic scatter also lacks any defining or distinguishing features and does not appear to be eligible under Criterion 3. As the originally recorded artifacts were not relocated, there is little opportunity to obtain information important to the past. Due to this, the site is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. However, the possibility of buried archaeological remains exists, and therefore, a recommendation under Criterion 4 is pending subsurface testing to determine whether additional remains are present.

The historic component of P-15-019540 contains no evidence to indicate that the remains are linked to homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, Leonard A. Turner does not appear to have been an important person in California's past. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, the historic component of P-15-019540 is not significant under Criterion 4.

P-15-019542

Site P-15-019542 is a previously recorded historic refuse scatter. The site was originally recorded by Azpitarte, et al. (2017b) as a sparse, mid-20th century scatter consisting of meat tins, glass bottles, beverage cans, and other domestic refuse. The site measures 240 feet by 89 feet and is located east of 110th Street West. The site was reported as being in poor condition.

PaleoWest's revisit to Site P-15-019542 found that the current conditions of the site are largely unchanged since 2017. In addition to the man scatter and glass bottles, three additional bottle bases were recorded that confirm the mid-20th century date of the domestic refuse deposit.

The proximity of the site to an unnamed dirt road, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

Site P-15-019542 contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, P-15-019542 is not significant under Criterion 4.

PaleoWest recommends P-15-019542 be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

P-15-019548

Site P-15-019548 is a previously recorded historic refuse scatter. The site was originally recorded by Azpitarte, et al. (2017c) as a sparse, mid-20th century scatter consisting of beverage and food cans and bottles and other domestic refuse. Cans at the site include 10 bimetal beverage cans, 10 church key opened beer cans, coffee cans, a Thatcher Manufacturing bottle, an Owens-Illinois mason jar, and a few porcelain-ware fragments. The site measures 337 feet by 107 feet and is located east of 110th Street West. The site was reported as being in poor condition.

PaleoWest's revisit to Site P-15-019542 found that the site's boundaries should be extended further south and east to include an additional 50 cans and other domestic refuse. The additional constituents are similar in quality and type to the previously recorded artifact types. The proximity of the site to an unnamed dirt road, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century.

CRHR Eligibility

Site P-15-019548 contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact

scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, P-15-019548 is not significant under Criterion 4.

PaleoWest recommends P-15-019548 be considered ineligible for listing on the CRHR under all Criteria (1-4).

P-15-020596

Site P-15-020596 is a previously recorded historic access road that consists of a series of unpaved segments that provide access to the SCE Big Creek Hydroelectric System Vincent 220 kV Transmission line, a contributing element to the Big Creek Hydroelectric System Historic District. The access road, which was first recorded by Urbana Preservation and Planning (2019) spans multiple quads and extends for approximately 224 miles. The road was initially constructed in 1925-1928 and consisted of an unpaved 15-foot-wide dirt road.

PaleoWest’s revisit to Site P-33-020596 found that the current conditions of the site has changed since it’s last recordation. The site was not relocated within the Project area and appears to have been paved over for the construction of 170th Street West

CRHR Eligibility

Given that the site is no longer extant within the Project boundary it is recommended that the portion of site P-33-020596 within the current boundaries is not eligible for listing on the CRHR.

6.2.2 Newly Recorded Archaeological Sites

Twenty-six newly identified archaeological sites were documented during the Class III survey. Descriptions and evaluations of these resources are provided below. Table 6-2 lists the newly recorded archaeological sites within the Project area.

Table 6-2. Newly Recorded Archaeological Sites in the Project Area

Temporary No	Age	Description	CRHR Eligibility Recommendation
21-0546-GG-001H	Multicomponent	Prehistoric lithic scatter and historic refuse scatter	Not eligible
21-0546-GG-002H	Historic	Refuse scatter	Not eligible
21-0546-GG-003H	Historic	Refuse scatter	Not eligible
21-0546-GG-004H	Historic	Refuse scatter	Not eligible
21-0546-GG-005H	Historic	Refuse scatter	Not eligible
21-0546-GG-006H	Historic	Refuse scatter	Not eligible
21-0546-GG-008H	Historic	Refuse scatter	Not eligible
21-0546-GG-009H	Historic	Refuse scatter	Not eligible
21-0546-GG-010H	Historic	Refuse scatter	Not eligible
21-0546-GG-011H	Historic	Refuse scatter	Not eligible
21-0546-GG-012H	Historic	Refuse scatter	Not eligible

Temporary No	Age	Description	CRHR Eligibility Recommendation
21-0546-GG-013H	Historic	Refuse scatter	Not eligible
21-0546-GG-014H	Historic	Refuse scatter	Not eligible
21-0546-GG-015H	Historic	Refuse scatter	Not eligible
21-0546-GG-016H	Historic	Refuse scatter	Not eligible
21-0546-GG-017H	Historic	Refuse scatter	Not eligible
21-0546-GG-018H	Historic	Refuse scatter	Not eligible
21-0546-GG-019H	Historic	Refuse scatter	Not eligible
21-0546-GG-020H	Historic	Refuse scatter	Not eligible
21-0546-GG-021H	Historic	Refuse scatter	Not eligible
21-0546-GG-022H	Historic	Refuse scatter	Not eligible
21-0546-GG-023H	Historic	Refuse scatter	Not eligible
21-0546-GG-024H	Historic	Refuse scatter	Not eligible
21-0546-GG-025H	Historic	Refuse scatter	Not eligible
21-0546-GG-026H	Historic	Refuse scatter	Not eligible
21-0546-GG-027H	Historic	Refuse scatter, well	Not eligible

21-0546-GG-001H

Site 21-0546-GG-001H is a multicomponent site consisting of a prehistoric lithic scatter and a historic-period refuse scatter. The site measures 48.8 meters by 36.6 meters and is located approximately 600 meters west of the intersection of Hamilton Road and 110th Street West. The site is in fair condition. Vegetation consists of creosote, sage brush, and Joshua trees. Soils are light tan silty alluvial sands. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits. The historic component consists of one amber glass bottle and four sanitary cans. The glass bottle is triangular in shape with a screw top opening (cap missing). The base is embossed with "A.C. Barnes, 3, Made in U.S.A." The cans included three hole in top, and one sanitary can, all of which were knife opened. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. Review of Bureau of Land Management (BLM) General Land Office (GLO) records indicates that the site is near a homestead issued to Leonard A. Turner in 1914 on the southeast quarter of Section 2 of Range 14 west of Township 9 north.

The prehistoric component consists of a lithic scatter with 47 debitage pieces, including 21 secondary flakes, 24 tertiary flakes, and 2 pieces of shatter. Raw materials include rhyolite, chert, quartzite, metamorphic, obsidian, and quartz. The composition of the flaked stone assemblage suggests the site is a temporary lithic reduction locale. Prehistoric activities appear to have focused on the testing or assaying of a single or small number of cobbles for tool stone quality, or possibly early-stage core reduction.

CRHR Eligibility

The prehistoric component of 21-0546-GG-001H lacks temporally or culturally diagnostic materials. Because it cannot be associated with a particular era or persons important to the past, it is recommended not eligible under Criterion 1 or 2. The lithic scatter also lacks any defining or distinguishing features and does not appear to be eligible under Criterion 3. As there are only a small number of artifacts, there is little opportunity to obtain information important to the past. There is a low probability for subsurface deposits given that the site does not appear to contain subsurface deposits. Due to this, the site is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. Therefore, it is recommended not eligible for listing on the CRHR under Criterion 4.

The historic component of 21-0546-GG-001H contains no evidence to indicate that the remains are linked to homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, Leonard A. Turner does not appear to have been an important person in California's past. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-001H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-001H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-002H

Site 21-0546-GG-002H is a historic refuse scatter site in a north-south oriented seasonal wash. The site measures 96 feet by 33 feet and consists of scrap metal, glass, and cans located approximately 500 feet west of the intersection of Hamilton Road and 110th Street West. The site is in good condition. Vegetation consists of creosote, sage brush, cholla, and Joshua trees. Soils are silty alluvial sands with calcium concentrations and channel fill. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. Review of BLM GLO records indicate that the site is near a homestead issued to Leonard A. Turner in 1914 on the southeast quarter of Section 2 of Range 14 west of Township 9 north. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-002H contains no evidence to indicate that the remains are linked to homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, Leonard A. Turner does not appear to have been an important person in California's past. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact

scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-002H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-002H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-003H

Site 21-0546-GG-003H is a historic refuse scatter on an open alluvial plain. The site measures 113 feet by 20 feet and consists of a small, diffuse scatter of bottle glass and cans located 40 feet west of Manly Road. The site is in good condition. Vegetation consists of salt brush, creosote, and short grasses. Soils are light tan alluvial silts and sands. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Manly Road suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-003H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-003H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-003H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-004H

Site 21-0546-GG-004H is a historic refuse scatter on an open alluvial plain. The site measures 330 feet by 112 feet and consists of a small, diffuse scatter of food and beverage cans located south of and adjacent to Hamilton Road. The site is in good condition. Vegetation consists of salt brush, creosote, and short grasses. Soils are light tan alluvial silts and sands. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Hamilton Road, which appears on historic topographic maps from 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-004H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-004H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-004H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-005H

Site 21-0546-GG-005H is a historic refuse scatter on an open alluvial plain. The site measures 42 feet by 28 feet and consists of a small, diffuse scatter of bottle glass and cans located approximately 60 feet south of Hamilton Road. The site is in good condition. Vegetation consists of salt brush, creosote, and short grasses. Soils are light tan alluvial silts and sands. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Hamilton Road, which appears on historic topographic maps from 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-005H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-005H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-005H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-006H

Site 21-0546-GG-006H is a historic refuse scatter within a seasonal wash. The site measures 165 feet by 80 feet and consists of a diffuse scatter of approximately 150 cans, bottle glass, scrap metal, vehicle parts, and construction debris located just west of 100th Street West. The site is in fair condition. Vegetation consists of creosote, salt brush, and low grasses. Soils are light tan alluvial loam. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to 100th Street West, which, based on review of historic topographic maps, appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-006H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-006H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-006H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-008H

Site 21-0546-GG-008H is a historic refuse scatter on an open alluvial plain. The site measures 1,150 feet by 360 feet and consists of a diffuse scatter of cans and glass located west and east of 100th Street West. Five discrete concentrations of artifacts were mapped within the site. The diffuse scatter of cans and glass outside of the large concentrations were likely redeposited from their original context due to erosion and other disturbances. An access road cuts through the middle of the site, which is in fair condition. Vegetation consists of creosote, salt brush, and low grasses, and sparse Joshua trees. Soils are a light-tan alluvial loam.

The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. Review of BLM GLO records indicates that the site is near a homestead issued to Charles Bean in 1892 on the southeast quarter of Section 11 of Range 14 west of Township 9 north. Charles Bean also homesteaded the north half of section 12, where Bean Spring is located. However, review of historic topographic maps and aerial photos did not reveal any homestead-related development in the vicinity of the refuse scatter. The proximity of the site to 100th Street West, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The

site appears to be largely surficial, with no evidence found to suggest the presence of substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-008H contains no evidence to indicate that the remains are linked to homesteading- or transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, Charles Bean does not appear to have been an important person in California's past aside from the spring bearing his name that exists on his homestead. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-008H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-008H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-009H

Site 21-0546-GG-009H is a historic refuse scatter on an open alluvial plain and a seasonal wash. The site measures 125 feet by 20 feet and consists of a dense scatter of cans, scrap metal, and glass south of Irone Avenue. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Irone Avenue, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-009H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-009H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-009H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-010H

21-0546-GG-010H is a historic refuse scatter on an open alluvial plain. The site measures 50 feet by 36 feet and consists of a diffuse can scatter comprised of approximately 20 cans located south of Irone Avenue. Can types found at the site include bimetal pull tab cans, church key opened beverage cans, church key and rotary opened sanitary cans, and church key and knife opened hole in top cans. One oil can with punch spout opening was observed as well. The site is in fair condition and modern refuse is present as well. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Irone Avenue, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0010H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-010H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-010H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-011H

Site 21-0546-GG-011H is a historic refuse scatter on an open alluvial plain. The site measures 300 feet by 190 feet and consists of a large scatter of cans, glass, scrap metal, and ceramics that spread north and south across Irone Avenue. The dense scatter consists of 300+ sanitary and beverage cans, green, amber, colorless, and milk glass from food and beverage bottles, and ceramics and fiesta ware. Examples of the can types found within the scatter include sanitary rotary opened cans, church key beverage cans, bimetal pull tab cans, meat tins, rectangular tobacco tins, and hole in top church key opened cans. Many of the maker's marks from the glass bottles indicate episodes of dumping from the early- to mid-20th century and then again in the late 1970s and 1980s. The site is in fair condition. An access road running E/W bisects the resource. Vegetation surrounding the resource is comprised of salt bush, creosote,

and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. Additionally, there is modern refuse, tires, scrap metal and wire, paint cans, aerosol cans, milled wood, plastics, and rubber seals associated with some sort of machinery dumped within the site boundary indicating that the area may still be used to dump refuse. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Irone Avenue, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0011H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-011H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-011H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-012H

Site 21-0546-GG-012H is a historic refuse scatter on an open alluvial plain. The site measures 35 feet by 20 feet and consists of 7 crushed church key opened beverage cans and one small fragment of an aqua bottle base located south of Irone Avenue. The site is in poor condition due to disturbance from recent grubbing and light grading in the area to create access to the south of the site. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Irone Avenue, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0012H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the

CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-012H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-012H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-013H

Site 21-0546-GG-013H is a historic refuse scatter on an open alluvial plain. The site measures 70 feet by 57 feet and consists of a dense scatter of 200+ cans and glass bottle bases and fragments, construction debris, and household refuse south of Fisher Avenue. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Fisher Avenue, which, based on review of historic topographic maps appears to have been established as early as 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. Additionally, review of BLM GLO records indicates that the area was homesteaded in 1926 to James H. Hill. However, review of aerial photographs and historic topographic maps did not reveal any evidence of a permanent homestead in the vicinity of the refuse scatter. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0013H contains no evidence to indicate that the remains are linked to transportation- or homestead-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions and has very limited. As a result, 21-0546-GG-013H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-013H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-014H

Site 21-0546-GG-014H is a historic refuse scatter on an open alluvial plain. The site measures 86 feet by 280 feet and consists of a scatter of sanitary cans and bottle glass south of Fisher

Avenue. Some scrap metal and wire are also present. The refuse scatter contains approximately over 150 sanitary cans. Can types observed include hole it top church key or knife opened cans, rotary and church key opened sanitary cans, bimetal pull tab cans, oil and fuel cans, meat tins and sardine tins, and one friction lid can. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Fisher Avenue, which, based on review of historic topographic maps appears to have been established as early as 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. Additionally, review of BLM GLO records indicates that the area was homesteaded in 1926 to James H. Hill. However, review of aerial photographs and historic topographic maps did not reveal any evidence of a permanent homestead in the vicinity of the refuse scatter. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0014H contains no evidence to indicate that the remains are linked to transportation- or homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-014H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-014H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-015H

Site 21-0546-GG-015H is a historic refuse scatter on an open alluvial plain. The site measures 130 feet by 100 feet and consists of a sparse scatter of sanitary cans east of 170th Street and historic Road P-15-020596. Can types present include cans including bi-metal pull tab cans, church key open beverage cans, and two square gas cans. The site is in good condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to P-15-020596 suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0015H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-015H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-015H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-016H

Site 21-0546-GG-016H is a historic refuse scatter on an open alluvial plain. The site measures 130 feet by 210 feet and consists of a diffuse scatter of sanitary cans and bottle glass north of an unnamed access road adjacent to the SCE Whirlwind Substation. Refuse at the site consists of approximately 30 beverage cans and glass shatter. Can types include bimetal pull tab, church key opened, and two cone top beverage cans. The glass shatter throughout the site includes colorless, green, and aqua glass (likely Coca Cola and 7up bottles due to the trace evidence of labels). Some modern refuse is present (Coors bottles). No diagnostic artifacts were recorded and many of the cans are crushed and the glass sherds are too small to identify makers marks. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to an unnamed access road, which, based on review of historic topographic maps appears to have been established as early as 1943, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0016H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce

information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-016H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-016H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-017H

Site 21-0546-GG-017H is a historic refuse scatter on an open alluvial plain. The site measures 140 feet by 95 feet and consists of one concentration of sanitary cans and a diffuse scatter of cans and glass within the site boundaries west of 170th Street. The site consists of approximately 15 cans that are mostly crushed and broken glass. Examples of the can types include one tobacco tin, church key opened beverage can, bimetal pull tab, and sanitary church key opened cans. Diffuse cans were likely redeposited out of the main concentration as a result of wind and water erosion. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to 170th Street and unnamed dirt roads that preceded it, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0017H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-017H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-017H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-018H

Site 21-0546-GG-018H is a historic refuse scatter on an open alluvial plain. The site measures 135 feet by 120 feet and consists of a diffuse scatter of cans and glass located south of General Petroleum Road. Refuse consists of over 10 sanitary cans and a glass scatter that is loosely dispersed over the boundary of the site. Examples of can types present are church key opened sanitary cans, a hole in top rotary opened can, and tobacco tins. Many of the cans are crushed. The glass shards consist of colorless, amber, and green glass. No diagnostic glass artifacts were observed. The site is in fair condition. Vegetation surrounding the resource is

comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. A N/S running wash lies west of the resource. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to General Petroleum Road, which, based on review of historic topographic maps appears to have been established as early as 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0018H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-018H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-018H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-019H

Site 21-0546-GG-019H is a historic refuse scatter on an open alluvial plain. The site measures 130 feet by 80 feet and consists of a sparse scatter of cans, bottle glass, and metal located to the south of Stetson Avenue. Can types present include, bimetal and early pull tab, church key opened sanitary, hole in top church key opened, and sanitary rotary opened cans. Bottle glass includes beverage containers bearing Owens Illinois maker's marks and Midland Glass Makers, among others. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. A north-south running wash lies west of the resource. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Stetson Avenue, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0019H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the

CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-019H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-019H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-020H

Site 21-0546-GG-020H is a historic refuse scatter on an open alluvial plain. The site measures 28 feet by 66 feet and consists of a dense concentration of sanitary cans, glass shards, steel pipe, and bailing wire just south of Hamilton Road. Site is also situated south of access road to a nearby home, and a wash lies along west edge of site. Additionally, it appears that some dozing activities just west of the site have taken place. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Hamilton Road, which appears on historic topographic maps from 1915, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-020H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-020H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-020H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-021H

Site 21-0546-GG-021H is a historic refuse scatter on an open alluvial plain. The site measures 410 feet by 605 feet and consists of a diffuse scatter of cans, glass, and ceramic that has been disturbed by dozing and possible grubbing activities north of an unnamed dirt road near Irone Avenue and 110th St. West. The refuse includes over 50 cans, glass shards, earthenware, and a

partial brown Clorox bleach bottle. Most of the cans are hole in top knife opened cans. Meat cans, church key opened beverage cans, utility cans, and remnants of tobacco can lids are also present. Glass sherds are comprised of colorless, aqua, and milk glass. This site has been heavily disturbed by a dozer as tracks are present throughout and many of the cans and glass are shattered or crushed. No diagnostic artifacts were observed. The site boundaries encompass prehistoric isolate P-15-019579 (two prehistoric flakes), however this previously recorded resource was not relocated and appears to no longer be extant, perhaps due to damage from the disturbances noted above. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to an unnamed dirt road, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0021H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-021H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-021H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-022H

Site 21-0546-GG-022H is a historic refuse scatter on an open alluvial plain. The site measures 75 feet by 35 feet and consists of a diffuse scatter of cans, glass, scrap metal, and ceramic east of 110th Street. The refuse scatter consists of 15 sanitary cans, most of which are church key opened beverage cans, hole in top church key opened cans, and rotary opened sanitary cans. The scatter also includes bailing wire, a ceramic butter dish lid, and broken colorless glass jars. Some sparse broken green glass is also present. The site has a dozer track running right through the middle of it and the machine has likely crushed some of the cultural constituents and the site's condition is poor. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to an unnamed dirt road, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of

opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0022H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-022H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-022H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-023H

Site 21-0546-GG-023H is a historic refuse scatter on an open alluvial plain. The site measures 220 feet by 185 feet and consists of a dense scatter of cans, glass, and ceramic east of 110th Street. The refuse is comprised of approximately 300+ sanitary cans that are a mix of modern rotary opened corrugated cans, church key opened beverage cans, bimetal pull tab, meat tins, rectangular tobacco tins, fuel cans, and coffee cans. Glass scatter within the site includes colorless, aqua, green, amber, milk, and modern window-pane glass. Earthen ware and porcelain sherds were also observed. Tires, scrap metal, shoes, plastic, and milled lumber are also present within the site. There are many glass bottle bases with makers marks present including Owens Illinois, Latchford, Anchor Hocking, and Brockway Machine Glass Company. The historic refuse within the site likely dates to the early- to mid-20th century based on can types and the example of maker's marks observed. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to an unnamed dirt road, which, based on review of historic topographic maps appears to have been established between 1943 and 1965, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest the presence of substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0023H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the

CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-023H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-023H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-024H

Site 21-0546-GG-024H is a historic refuse scatter on an open alluvial plain. The site measures 245 feet by 425 feet and consists of a dense scatter of cans and glass located just south of Truman Road. The refuse scatter consists of over 25 sanitary cans and colorless glass jar sherds. Examples of the can types observed are mostly church key beverage cans, condensed milk cans, bimetal pull tab cans, and sanitary cans with church key or rotary openings. No diagnostic artifacts were observed. Within the site boundary modern refuse such as corrugated rotary opened cans and glass beverage bottles and jars were observed. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Truman Road, which, based on review of historic topographic maps appears to have been established as early as 1943, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest the presence of substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0024H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association and has very limited data potential, it cannot produce information that would answer directed research questions. As a result, 21-0546-GG-024H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-024H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-025H

Site 21-0546-GG-025H is a historic refuse scatter on an open alluvial plain. The site measures 210 feet by 430 feet and consists of a dense scatter of cans and glass located south of

Rosamond Blvd. Refuse at the site consists of approximately 20 cans, which are primarily church key opened beverage cans and bimetal pull tab cans. Glass is colorless, amber and green and is very loosely dispersed across the site but fans out along the southern edge of the boundary. No diagnostic artifacts were recorded. The site is in poor condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse Joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to Rosamond Blvd, which, based on review of historic topographic maps appears to have been established as early as 1945, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-0025H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-025H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-025H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-026H

Site 21-0546-GG-026H is a historic refuse scatter on an open alluvial plain. The site measures 1110 feet by 130 feet and consists of six concentrations of cans and glass with diffuse cans and glass spread across the site boundary to the east of 90th Street West. The site is in fair condition. Vegetation surrounding the resource is comprised of salt bush, creosote, and sparse joshua trees. Soils consist of light tan silty sandy alluvial loam and metamorphic sub angular small pebbles and cobbles. The assemblage dates to the early- to mid-20th century and consists primarily of domestic refuse. The proximity of the site to 90th Street West, which, based on review of historic topographic maps appears to have been established as early as 1945, suggests that the site is the result of several episodes of opportunistic roadside dumping by travelers throughout the first half of the 20th century. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-026H contains no evidence to indicate that the remains are linked to transportation-related activities that made a significant contribution to the broad patterns of our history. Furthermore, the refuse scatter cannot be associated or linked with an important

person in California's history. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-026H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-026H be considered ineligible for inclusion on the CRHR under all Criteria (1-4).

21-0546-GG-027H

21-0546-GG-027H is a historic site consisting of an irrigation standpipe and sparse historic refuse. The site measures 70 feet by 363 feet and lies just south of Irone Avenue and east of 115th St. W. Based on review of historic topographic maps the site appears to be much larger and includes at least one house foundation elsewhere on the parcel. However, the site beyond the current Project area was not accessible. The irrigation pipe is comprised of a circular steel rebar-enforced concrete well or irrigation overflow pipe. Very diffuse sanitary cans also lie within the Project APE. The cans are likely secondary deposit from a dense refuse scatter and structure foundations that lie further south within the parcel but outside of the Project APE. A seasonal wash running N/S is also present adjacent to the resource. The assemblage, while not particularly diagnostic, dates to the early- to mid-20th century and consists primarily of domestic refuse. Review of BLM GLO records indicate that the site is near a homestead issued to John C. Hammonds in 1919 on the northeast quarter of Section 14 of Range 14 west of Township 9 north. The site appears to be largely surficial, with no evidence found to suggest there are substantial buried deposits.

CRHR Eligibility

Site 21-0546-GG-027H contains no evidence to indicate that the remains are linked to homesteading-related activities that made a significant contribution to the broad patterns of our history. Furthermore, John C. Hammonds does not appear to have been an important person in California's past. As such, the site is not recommended eligible for listing on the CRHR under Criterion 1 or 2. The artifacts do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; therefore, the site is not significant under Criterion 3. Finally, because the artifact scatter exhibits no clear temporal or historically significant association, it cannot produce information that would answer directed research questions and has very limited data potential. As a result, 21-0546-GG-027H is not significant under Criterion 4.

PaleoWest recommends 21-0546-GG-027H be considered ineligible for inclusion to on the CRHR under all Criteria (1-4).

6.2.3 Isolated Occurrences

A total of 12 isolated occurrences were recorded or relocated during the archaeological survey of the Project area (Table 6-3). These include 2 previously recorded isolated occurrences that

were re-identified within the survey area and 10 newly identified isolated finds. Isolated occurrences are generally considered not eligible for inclusion in the CRHR unless they possess unique or substantial qualities to warrant their listing. All isolated occurrences are recommended not eligible for inclusion in the CRHR under any criterion. Two previously recorded prehistoric isolated occurrences were not relocated during the survey.

Table 6-3. Isolated Occurrences Recorded in the Project Area

Isolate No. (Primary or Temporary Number)	Age	Description
P-15-018724	Historic	Isolated glass bottle and sanitary cans
P-15-019570	Prehistoric	Rhyolite core
21-0546-GG-ISO-01	Historic	One sanitary can
21-0546-GG-ISO-02	Historic	One church key-opened sanitary can
21-0546-GG-ISO-03	Historic	Three sanitary cans
21-0546-GG-ISO-04	Historic	Metal gas can with wire handle and screw top
21-0546-GG-ISO-05	Historic	Two sanitary cans
21-0546-GG-ISO-06	Historic	Three sanitary cans (one modern and two historic)
21-0546-GG-ISO-07	Historic	One brown rectangular liquor bottle
21-0546-GG-ISO-08	Historic	Three sanitary cans
21-0546-GG-ISO-09	Historic	Three sanitary cans
21-0546-GG-ISO-010	Historic	Three sanitary cans

6.3 ARCHITECTURAL HISTORY SURVEY RESULTS

A total of 36 built-environment resources is located within, or intersect portions of, the study area for architectural history. At the request of Golder, PaleoWest has compiled an inventory of built environment resources in the study area, which is presented below (Table 6-4). Evaluation and documentation of these resources will be completed at a future date pending potential changes to the project design.

Table 6-4. Historic Built-Environment Resources in the Project Area

Primary/ Temporary No.	Address	Parcel Number	Resource Type/Style	Name	Photo Dates
1			Transmission Line		8/26/2021
2	14205 Irone Ave, Rosemond	358-132-12	House with multiple buildings, including potentially a barn, appears to be surrounded by a fence		8/24/2021
3		358-132-10	Large complex with several buildings, located just east of 14205 Irone Avenue		8/24/2021

Primary/ Temporary No.	Address	Parcel Number	Resource Type/Style	Name	Photo Dates
4	14070 Lodestar Ave, Rosemond	358-132-07	House with 1-3 structures		8/25/2021
5	4301 140th Street Rosemond	358-131-26	Pole barn, smaller barns, sheds, corrals		8/24/2021
6	14037 Brighstar Avenue, Rosemond	358-131-12	House with barn and another outbuilding		8/24/2021
7	10837 Hamilton Road, Rosemond	358-051-30	Multiple bars, trailers		8/27/2021
8	10145 Hamilton Road, Rosemond	358-052-08	Possibly a house with 2 outbuildings		8/27/2021
9	10085 Hamilton Road, Rosemond	358-052-07	House with multiple additions 2-3 additional structures of various ages, possible orchard remnants		8/27/2021
10	10057 Hamilton Road, Rosemond	358-052-06	Huge property, dozen buildings and/or structures, possible orchard remnants, junkyard, animal pens/cages		8/27/2021
P-15-018681		315-230-10; 315-012-07	Transmission line corridor for LADWP		8/27/2021
12	9714 Rosamond Blvd, Rosamond	374-042-03	Single family residence		8/30/2021
13	9668 Rosamond Blvd, Rosamond	374-042-04	Single family residence with multiple outbuildings		8/30/2021
14	9650 W Rosamond Blvd, Rosamond	374-042-39	Single family residence with a garage, surrounded by trees		8/30/2021
15	9580 Rosamond Blvd, Rosamond	374-042-07	Single family residence with multiple trailers, outbuildings and surrounded by a chain link fence		8/30/2021
16	2973 95th Street, Rosamond	374-042-08	Single family residence with 2 outbuildings at the SW corner of 95th Street and Rosamond Blvd		8/30/2021
17	9009 Rosamond Blvd., Rosamond	252-352-33	Single family residence located east of commercial building at the corner of 90th St W and Rosamond Blvd, include 7 outbuildings		8/30/2021
18	9009 Rosamond Blvd., Rosamond	252-352-33	Commercial building on the NW corner of Rosamond Blvd and 90th St W, former gas station		8/30/2021

Primary/ Temporary No.	Address	Parcel Number	Resource Type/Style	Name	Photo Dates
19	3045 90th Street West, Rosamond	252-352-32	Commercial building, tree row on north side of property.	High Desert Cellars	8/30/2021
20	3972 90th Street, Rosamond	252-341-07	Multiple buildings, possible corral or paddock		8/30/2021
21		252-341-05	Single family residence, several outbuildings with a pool, surrounded by trees.		8/30/2021
22	4040 Manly road, Rosamond	315-012-01	70-acre parcel, contains many of the buildings in the town. Appears to be a single family residence with an addition and a barn, surrounded by trees on 2 sides and a grape vineyard on the other.		8/30/2021
23		252-341-06	55-acre parcel that contains many of the buildings in the town.		8/30/2021
24		252-341-06	55-acre parcel that contains many of the buildings in the town. Appears to be single family residence with shop or shop building.		8/30/2021
25		252-341-06	55-acre parcel that contains many of the buildings in the town. Unknown building, located behind trees and a fence.		8/30/2021
26	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Appears to be 4 buildings behind trees and a fence. Includes a stone house, with possibly 3 smaller stone houses or bunkhouses.		8/30/2021
27	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Stone building "Willow springs company reserve systems Inc."		8/30/2021
28	4040 Manly Road, Rosamond	315-012-01	70-acre parcel containing many of the buildings in the town. Long rectangular building located on north side of Many Road at west end. Appears to be a gas station/garage with pumps, has loading dock and is constructed of adobe.		8/30/2021
29	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. 2-story stone building east of 16B with swinging doors.		8/30/2021
30	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Two stone structures encircled by a stone wall.		8/30/2021

Primary/ Temporary No.	Address	Parcel Number	Resource Type/Style	Name	Photo Dates
31	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Appears to be a pole barn and second structure, encircle by grape or vineyards with potential orchard remnants.		8/30/2021
32	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Appears to be a single-family residence, encircle by grape or vineyards with potential orchard remnants.		8/30/2021
33	4040 Manly Road, Rosamond	315-012-01	70-acre parcel that contains many of the buildings in the town. Appears to be a pole barn on east side of Manly Road.		8/30/2021
34	4167 Venus Way, Rosamond	315-134-01	Possible residence with outbuildings and a corral		8/30/2021
35	4340 Venus Way, Rosamond	315-082-03	Single family residence with outbuildings		8/30/2021
36	4652 Tehachapi- Willow Springs Road, Rosamond	315-081-07	Pole barn and warehouse		8/30/2021

7 SUMMARY AND RECOMMENDATIONS

7.1 SUMMARY

The cultural resource assessment included background research and a pedestrian survey of the Project area. As a result of these efforts, 53 cultural resources were identified in the Project area, including 14 previously recorded archaeological sites, 1 previously recorded built-environmental resource with archaeological components, 2 previously recorded isolated objects, 26 newly recorded archaeological sites, and 10 newly recorded isolated objects. The architectural survey resulted in the documentation of 36 built-environment resources.

Table 7-1 summarizes the archaeological sites identified within the Project area that are recommended eligible for the CRHR or are potentially eligible for the CRHR pending further investigation. PaleoWest analyzed the CRHR-eligibility of all resources under Criteria 1, 2, 3, and 4. Only one resource within the Project area was found to be eligible for listing in the CRHR. A total of three resources were unevaluated pending subsurface testing (Table 7-1). The remaining 49 archaeological resources have been recommended not eligible for listing in the CRHR.

PaleoWest recommends avoiding archaeological resources to the extent feasible. If avoidance is not feasible, then a data recovery program should be prepared and implemented for the affected resources. PaleoWest recommends cultural resources compliance measures be

implemented for the discovery of inadvertent archaeological resources and human remains during Project construction.

7.2 ENVIRONMENTAL EFFECTS

Appendix G, Environmental Checklist Form of the CEQA guidelines, addresses significance criteria with respect to cultural resources (PRC Sections 21000 et seq.). Appendix G (V)(a, b, d) indicates that an impact would be significant if the project will have the following effects:

- Cause a substantial adverse change in the significance of a historical resource
- Cause a substantial adverse change in the significance of an archaeological resource
- Disturb any human remains, including those interred outside formal cemeteries

Project investigations included archival research, review of all cultural resource investigation reports within the Project area, contacts Native American groups, and an intensive archaeological survey. Archaeological resources were identified and the area is considered sensitive due to the availability of water (Bean spring, Willow spring) and raw material sources (Little Butte, Fairmont Butte). Also, because the Project area has remained relatively undeveloped, the sensitivity of the underlying soils is considered moderate to high. No built structures recorded were evaluated for eligibility in the CRHR as a part of this study.

Impacts to historic resources are possible during construction and/or during operation. Construction impacts would be short term, while operation impacts would be long term. Construction impacts could affect the integrity of any cultural resources considered historically significant. Four potential historic resources are located within Project area that have the potential to be directly impacted by the Project (Table 7-1). Avoidance and preservation of historic resources is always preferred. Through careful design efforts, the Project could avoid at least some of the potential historic resources. Resources that are avoided should not require any additional cultural resources management work. However, it may be beneficial to establish temporary barriers around historic resources to be avoided and periodically inspected by qualified cultural resources personnel. Protocols for such inspection should be included in a Cultural Resource Monitoring and Mitigation Plan (CRMMP) (see Section 7.3.1 below). If historic resources cannot be avoided, then additional cultural resources work will be required to mitigate the potential for adverse effects of the undertaking on these resources. Towards this end, the project owner should retain a qualified Cultural Resources Specialist to prepare and implement an Archaeological Treatment Plan (ATP) for the potentially affected historic resources that cannot be avoided. The Principal Investigator for the preparing the ATP will meet the minimum Principal Investigator qualifications under the Secretary of the Interior's Standards for Archaeology.

Table 7-1. Summary of CRHR-Eligible Sites and Management Recommendations

Primary/ Temporary No.	Trinomial No.	Type	Age	Description	Previous CRHR Eligibility Determination	PaleoWest Eligibility Recommendations	Management Recommendation
15-000129	KER-000129	Site and Built Environment	Prehistoric, historic	Reportedly the location of protohistoric Kitanemuk village and cemetery destroyed in the 1930s. Site of the Willow Springs Stage Station on the Los Angeles-Havilah Stage Lines from 1864-1872. California Landmark No. 130.	Not evaluated	Historic component within project area recommended not eligible; Prehistoric component unevaluated pending subsurface testing; Built environment component not evaluated	Archaeological component: avoid, mitigate if avoidance is not possible Built environment component: management recommendation pending formal evaluation
15-002821	KER-002821	Site	Prehistoric, historic	Bean Spring Site Archaeological Complex. Large prehistoric complex lithic scatter with bedrock mills and habitation debris. Historical component dating from mid 1800s to mid 1900s with refuse and foundations. 22 loci recorded.	Recommended eligible under Criterion 4	Historic component within project area recommended not eligible; Prehistoric component unevaluated pending subsurface testing	Avoid; mitigate if avoidance is not possible
15-019042	KER-010408	Site	Prehistoric	Sparse lithic scatter:100+ flakes, one biface fragment.	Recommended eligible under Criterion D/4	Eligible under Criterion 4	Avoid; mitigate if avoidance is not possible
15-019540	KER-010704	Site	Prehistoric, Historic	Historic refuse scatter ca. early to mid 1900s; sparse lithic scatter (10 flakes). Two loci.	Unknown	Unevaluated pending subsurface testing	Avoid; mitigate if avoidance is not possible

7.3 MITIGATION MEASURES

7.3.1 Undiscovered Archaeological Sites

Archaeological sites were found during the survey of the Project area and it is considered likely that subsurface construction could encounter buried archaeological remains. As a result, the proponent will implement measures, based on state and agency regulations and guidelines, to mitigate any potential adverse impacts that could occur if there were an inadvertent discovery of buried cultural resources. These measures include the following:

- Designation of a Cultural Resources Specialist (CRS) to investigate any cultural resource finds made during construction
- Implementation of a construction worker training program
- Procedures for halting construction in the event that there is an inadvertent discovery of archaeological deposits or human remains
- Procedures for evaluating an inadvertent archaeological discovery
- Procedures to mitigate adverse impacts on any inadvertent archaeological discovery determined significant

Designated Cultural Resources Specialist

The Project proponent will retain a designated CRS who will be available during the earth-disturbing portion of the construction periods to inspect and evaluate any finds of buried archaeological resources that might occur during the construction phase. The CRS will meet the minimum qualifications for Principal Investigator on federal projects under the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The CRS will be qualified, in addition to site detection, to evaluate the significance of the deposits, consult with regulatory agencies, and plan site evaluation and mitigation activities.

If there is a discovery of archaeological remains during construction, the CRS, in conjunction with the construction superintendent and environmental compliance manager, will make certain that construction activity stops in the immediate vicinity of the find until the find can be evaluated. The CRS will inspect the find and evaluate its potential significance in consultation with CEC staff and the CEC compliance project manager (CPM). The CRS will make a recommendation as to the significance of the find and any measures that will mitigate adverse impacts of construction on a significant find. Once this process has been completed, construction within the area of the find can be resumed.

Construction Worker Training

The CRS will prepare a construction worker sensitivity training program to ensure implementation of procedures to be followed if cultural resources are discovered during construction. This training will be provided to each construction worker as part of their environmental, health, and safety training. The training will include photographs of various types of historic and prehistoric artifacts, and it will describe the specific steps to be taken in the event of an unanticipated discovery of cultural material, including human remains. It will explain

the importance of, and legal basis for, the protection of significant archaeological resources. The training also will be presented in the form of a written brochure.

Emergency Discovery

If construction staff or others identify archaeological resources during construction, they will immediately notify the CRS and the site superintendent, who will halt construction in the immediate vicinity of the find, if necessary. The archaeological monitor or CRS will use flagging tape, rope, or other means as necessary to delineate the area of the find within which construction will halt. This area will include the excavation trench from which the archaeological finds came and any piles of dirt or rock spoil from that area. Construction will not occur within the delineated find area until the CRS, in consultation with the CEC staff and CEC CPM, can inspect and evaluate the find.

Site Recording and Evaluation

The CRS will follow accepted professional standards in recording any find, and will submit the standard Form DPR 523 and location information to the CHRIS at the Southern San Joaquin Valley Information Center. If the CRS determines that the find is not significant and the CEC CPM concurs, construction will proceed without further delay. If the CRS determines that further information is needed to determine whether the find is significant, the designated CRS will, in consultation with the CEC, prepare a plan and a timetable for evaluating the find.

Mitigation Planning

If the CRS and CPM determine that the find is significant, the CRS will prepare and conduct a mitigation plan in accordance with state guidelines. This plan will emphasize the avoidance, if possible, of significant archaeological resources. If avoidance is not possible, recovery of a sample of the deposit from which archaeologists can define scientific data to address archaeological research questions will be considered an effective mitigation measure for damage to or destruction of the deposit.

The mitigation program, if necessary, will be carried out as soon as possible to avoid construction delays. Construction will resume at the site as soon as the field data collection phase of any data recovery efforts is completed. The CRS will verify the completion of field data collection by letter to Project proponent and the CPM so that they can authorize construction to resume.

Curation

The CRS will arrange for curation of archaeological materials collected during an archaeological data recovery mitigation program. Curation will be performed at a qualified curation facility meeting the standards of the California Office of Historic Preservation. The CRS will submit field notes, stratigraphic drawings, and other materials developed as part of the data recovery/mitigation program to the curation facility along with the archaeological collection, in accordance with the mitigation plan.

Report of Findings

If a data recovery program is planned and implemented during construction as a mitigation measure, the CRS will prepare a detailed scientific report summarizing results of the

excavations to recover data from an archaeological site. This report will describe the site soils and stratigraphy, describe and analyze artifacts and other materials recovered, and draw scientific conclusions regarding the results of the excavations. This report will be submitted to the curation facility with the collection.

7.3.2 Inadvertent Discovery of Human Remains

If human remains are found during construction, project officials are required by the California Health and Safety Code (Section 7050.5) to contact the Orange County Coroner. If the coroner determines that the find is Native American, he or she must contact the NAHC. The NAHC, as required by PRC Section 5097.98, determines and notifies the Most Likely Descendant with a request to inspect the burial and make recommendations for treatment or disposal.

8 REFERENCES

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- 1937 The Lake Mohave Artifacts. In E. W. C. Campbell, W. H. Campbell, E. Antevs, C. A. Amsden, J. A. Barbieri, and F. A. Bode, *The Archaeology of Pleistocene Lake Mohave: A symposium*. Los Angeles: *Southwest Museum Papers* 11:51-98.

ASM Affiliates, Inc.

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Appendix A.
Records Search Results Maps
[CONFIDENTIAL]

**Appendix B.
Sacred Lands File Search Results
and Correspondence with
Native American groups**

**Appendix C.
Map Showing Location of Survey Area
and Identified Cultural Resources
within Project Area
[Confidential]**

**Appendix D.
DPR Forms
[Confidential]**

**Appendix E.
Previous Studies Conducted within 0.25
Miles of Project Area**



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