CULTURAL RESOURCE ASSESSMENT OF THE BROOKFIELD MINOR RANCH PROJECT IN THE CITY OF MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

USGS Romoland 7.5' Quadrangle; Township 5S, Range 3W, Sections 13 and 24

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MANAGEMENT SUMMARY

Applied EarthWorks, Inc. (*Æ*) was retained by Albert A. WEBB Associates (WEBB) to conduct a cultural resource investigation for the proposed Brookfield Menifee Valley Project (Project) Area of Potential Effects (APE) in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

This report summarizes the methods and results of the cultural resource investigation of the approximate 598 acre APE within the City of Menifee, Riverside County, California. This assessment included a records search and literature review, communication with Native American tribal representatives, and an archaeological survey of the APE. The purpose of the investigation was to determine whether the proposed Project would affect historic properties.

A cultural resources literature and records search was completed at the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS), housed at the University of California, Riverside. The results indicate that the entire APE had been previously surveyed. One cultural resource, a prehistoric bedrock milling site (CA-RIV-3429/ P-33-003429), has been previously documented within the APE. *Æ* also requested a search of the *Sacred Lands File* from the Native American Heritage Commission (NAHC), which was completed with negative results. The NAHC provided a contact list and requested outreach to Native American individuals and organizations to elicit information regarding Native American cultural resources that may be located within the Project. Of the tribes contacted, both the Agua Caliente Band of Cahuilla Indians and the Soboba Band of Luiseño Indians noted there were Native American cultural resources in the area. In Soboba's view, these resources comprise a larger village complex and possible traditional cultural landscape.

An intensive cultural resource pedestrian survey of the APE was performed by *Æ* archaeologists Dennis McDougall and Patrick Moloney between June 1 and 10, 2016. Patrick Moloney conducted a survey of additional acreage on May 24, 2018. The field survey of the APE resulted in the re-identification of the previously recorded bedrock milling site (CA-RIV-3429); additional bedrock milling features that had not been previously documented were identified during the revisit. The field survey also recorded a newly identified sparse scatter of flaked stone artifacts (CA-RIV-12345/P-33-024902). To better define the vertical limits of these two archaeological resources, an Extended Phase I testing program was conducted by the *Æ* archaeologists on June 20 and 21, 2016. No subsurface cultural materials were recovered from either CA-RIV-3429 or CA-RIV-12345 during the test excavations.

Significance evaluations of CA-RIV-3429 and CA-RIV-12345 suggest that the sites do not meet the criteria for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). As such, no further cultural resource management of the APE is recommended. Field notes documenting the current investigation are on file at *Æ*'s Hemet office. A copy of this report will be placed on file at the EIC.

1
INTRODUCTION

On behalf of Albert A. Webb Associates (WEBB), Applied EarthWorks, Inc. (*Æ*) conducted a cultural resource investigation of the proposed Brookfield Menifee Valley Project (Project) located within the City of Menifee, Riverside County, California. The Project is within a U.S. Army Corps of Engineers (USACE) jurisdictional wetland boundary; therefore, in anticipation of future Project review by the USACE, this cultural resource investigation was designed to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA).

Because the Project also requires discretionary approval from the City of Menifee (City), it is subject to the requirements of the California Environmental Quality Act (CEQA). The City is the lead agency for the purposes of CEQA. *Æ* was retained by WEBB to conduct a Phase I cultural resource investigation of the Project Area of Potential Effects (APE) to identify significant cultural resources that could be affected by the Project. Tiffany Clark, Ph.D., RPA, served as *Æ*'s Principal Investigator for the cultural resource study with Dennis McDougall acting as the Field Supervisor.

1.1 PROJECT DESCRIPTION AND LOCATION

The Project is located within the approved Menifee Valley Ranch Specific Plan, which encompasses 1,548 acres (ac) in the northeastern portion of the City of Menifee, Riverside County, California (Figure 1-1). The Project is a proposed amendment to remove the Project from the Menifee Ranch Specific Plan and propose a new specific plan for this area to provide for future development of residential housing, commercial, and public facility land uses.

The Project encompasses approximately 594 gross ac containing Assessor Parcel Numbers (APN) 331-260-005, 331-260-006, 331-260-007, 331-260-008, 331-260-009, 331-260-012,331-270-005, 331-280-005, 331-290-004, 331-300-002, 331-300-004, 331-300-005, 331-300-007, 331-300-009, 333-170-006, 333-170-011, 333-170-012, and 333-170-013, in addition to an approximately 4.4 ac off-site improvement area. The Project is bound by State Route 74 to the north, Case Road to the south, Menifee Road to the west, and Briggs Road to the east and is depicted on the United States Geological Survey (USGS) Romoland, California 7.5' topographic quadrangle map in Sections 13 and 24, Township 5 South, Range 3 West, of the San Bernardino Baseline and Meridian (Figure 1-2). Elevation ranges from 453 to 495 meters (m) (1,487 to 1,623 feet [ft]) above mean sea level (amsl). Two small unlined drainages run across the Project in a northeast to southwest direction.

1.2 REGULATORY CONTEXT

The Project is considered a federal undertaking as defined in 36 CFR 800.16(y) and is subject to the full authority of federal historic preservation laws and regulations. Several state laws also guide actions that concern cultural resources. These include the California Environmental Quality Act (CEQA; Public Resources Code 21000 et seq.), Public Health and Safety Code (HSC), and Public Resources Code (PRC).

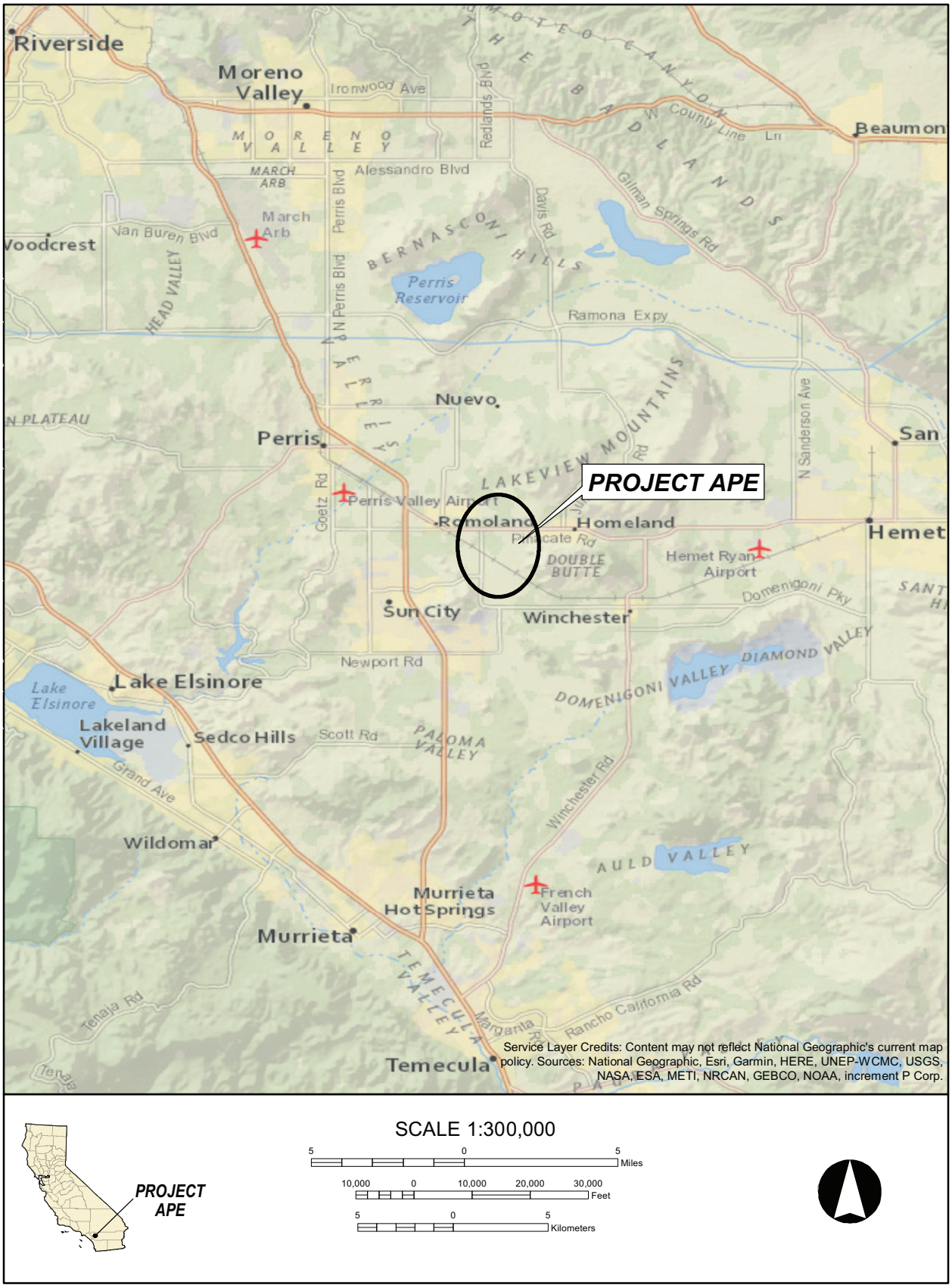

Figure 1-1 Project vicinity map.

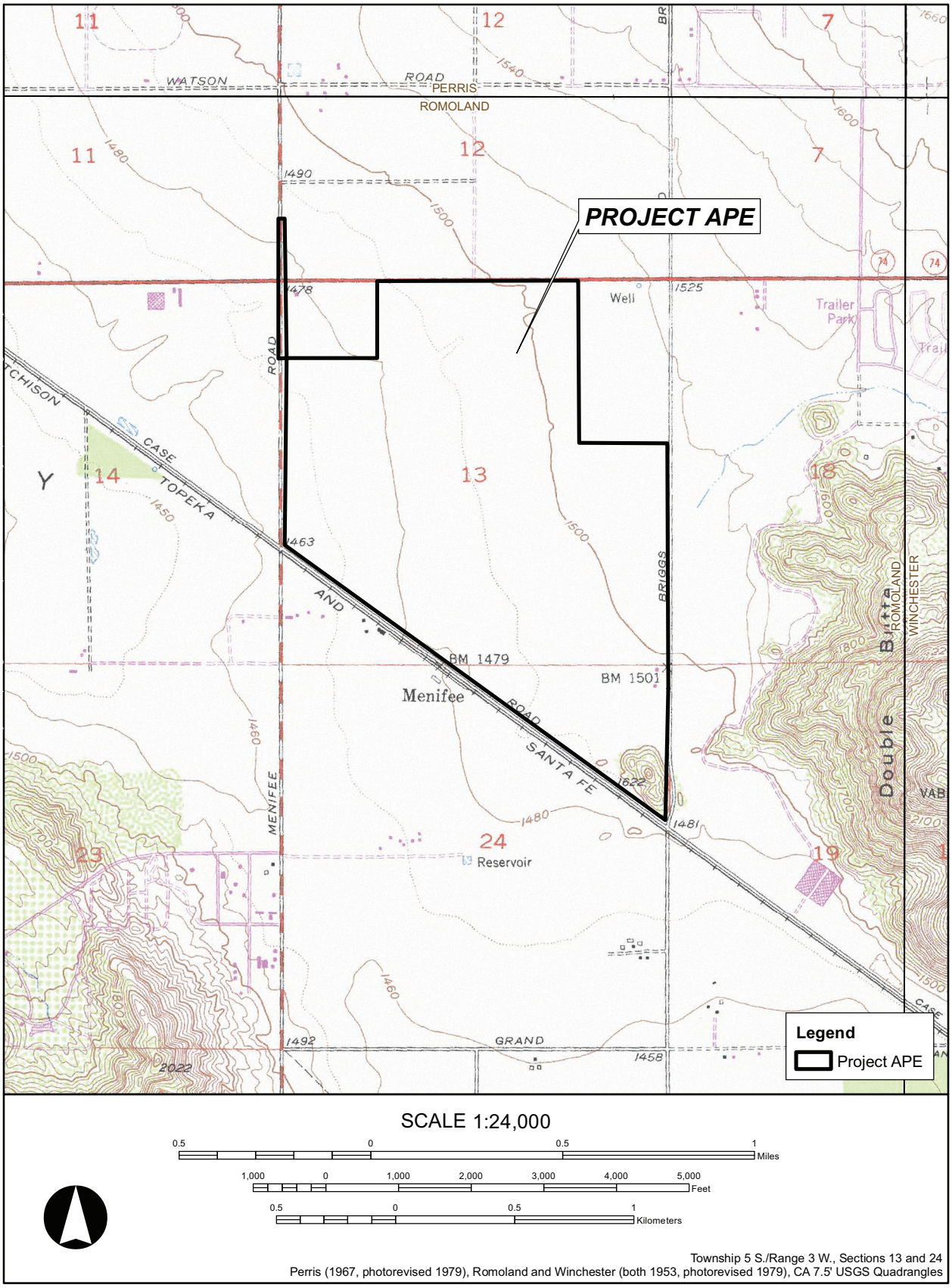

Figure 1-2 Project location map.

These laws and regulations specify how cultural resources are to be managed in the context of projects that are federal undertakings or are subject to CEQA. Briefly, they require archival and field surveys of the project's APE. Cultural resources discovered in the APE must be inventoried and assessed in prescribed ways, and cultural properties important to Native Americans identified and treated in a sensitive manner, consistent with both federal and state laws. Prehistoric and historic resources deemed "significant" (i.e., "historic properties" eligible for inclusion in the National Register of Historic Places [NRHP] per 36 CFR 60.4 or "historical resources" eligible for listing in the California Register of Historical Resources [CRHR] per Section 15064.5 of the CEQA Guidelines) must be considered further in project planning and development.

1.2.1 Federal Laws and Regulations

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. Undertakings include any federally funded, licensed, or permitted project.

In the context of a federally permitted undertaking, such as this Project, the significance of cultural resources is measured against the NRHP criteria for evaluation (36 CFR 60.4):

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history;
>
> B. that are associated with the lives of persons significant in our past;
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important to prehistory or history.

A property must meet one or more of these specific criteria to qualify as a good representative of a significant historical theme or pattern. It must be associated with important historical events or persons (Criteria A and B); convey important technical, aesthetic, or environmental values (Criterion C); or have potential to provide important new scientific or scholarly information (Criterion D). Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years of age.

1.2.2 State Laws and Regulations

The Project requires discretionary approval from the City and is therefore subject to the requirements of CEQA. The CEQA Statute and Guidelines direct lead agencies to determine whether a project will have a significant impact on historical resources. Generally, a cultural resource shall be considered "historically significant" if it meets the requirements for listing on the CRHR under any one of the following criteria (Title 14, California Code of Regulations [CCR], §

15064.5):

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.

A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (14 CCR § 15064.5[b]).

1.3 AREA OF POTENTIAL EFFECTS (APE)

The APE is defined as the geographic area within which the Project has the potential to directly or indirectly cause alterations to historic properties, per 36 CFR § 800.16(d). The APE for this Project includes approximately 598 ac.

1.4 REPORT ORGANIZATION

This report documents the results of a cultural resources investigation of the proposed Project. Chapter 1 has introduced the scope of the work and regulatory context. Chapter 2 synthesizes the natural and cultural setting of the Project and surrounding region. Chapter 3 presents a research design. The methods and results of the background research, which includes a cultural resources literature and records search, are discussed in Chapter 4. Chapter 5 details the *Sacred Lands File* (SLF) search with the Native American Heritage Commission (NAHC) and Native American communications. The Phase I fieldwork methods and findings are outlined in Chapter 6. Significance assessments are provided in Chapter 7 with management recommendations included in Chapter 8. Chapter 9 includes the bibliographic references, followed by the appendices.

2
SETTING

2.1 INTRODUCTION

This chapter describes the prehistoric, ethnographic, and historical cultural setting of the Project to provide a context for understanding the nature and significance of cultural properties identified within the region. Prehistorically, ethnographically, and historically, the nature and distribution of human activities in the region have been affected by such factors as topography and the availability of water and natural resources. Therefore, prior to a discussion of the cultural setting, the environmental setting of the area is summarized below.

2.2 ENVIRONMENTAL SETTING

The Project is situated in western Riverside County within Menifee Valley. This area is underlain by the Southern California Batholith, which is part of the Peninsular Range, and is a massive geological intrusion of granite rock that was formed in the late Cretaceous and uplifted in the early Tertiary. This landform extends from the San Gabriel Mountain range to southern Baja Mexico. The general physiography of the Peninsular Ranges Province in southern California is characterized by three major northwest-trending mountainous regions composed of stable crustal blocks separated by active fault zones, including (from east to west) the San Jacinto Mountains, the Perris Block, and the Santa Ana Mountains (Morton and Miller 2006). The separating faults include the San Jacinto and Elsinore fault zones. The topography of the Perris Block, which directly underlies the Project, consists of bedrock highlands and isolated hills that are separated by alluvium-filled valleys. Elevations range from 443 to 633 m (1,453 to 2,077 ft) amsl.

A geological assessment of the Project indicates that most of the Project is immediately underlain by middle to late Pleistocene (1.8 million years ago to 11,700 years before present) alluvial fan deposits (Clifford and DeBusk 2016). The Quaternary older alluvial fan deposits (Qof) disconformably overlie the granodiorite to tonalite bedrock (Kdvg) at an unknown but likely relatively shallow depth. The surficial sediments are composed of tan to reddish-brown sandstone and siltstone that was deposited in alluvial fan and local channel environments during the Pleistocene. The deposits are moderately consolidated and poorly indurated, with angular to subangular clasts, local pebble conglomerate lenses, moderate soil formation, and abundant dissection (Morton et al. 2003; Morton and Miller 2006). Holocene alluvial fan deposits (Qya), derived from nearby highland areas, are restricted to a small western portion of the Project where they overlie the older Quaternary alluvium. These deposits consist of unconsolidated, moderately dissected, sand, silt, and clay-bearing alluvium (Morton et al. 2003). Finally, Cretaceous granitic bedrock (Kdvg) is exposed in a weathered outcrop along the southeastern Project boundary. The composition of the intrusive igneous rock grades from medium-grained biotite-hornblende granodiorite into tonalite, with moderately abundant mafic inclusions (Morton and Miller 2006). The granitic rock belongs to the Domenigoni Valley pluton of the Peninsular Ranges Batholith.

The primary drainage within the region is the San Jacinto River, which heads in the San Jacinto Mountains and flows northwesterly through the San Jacinto Valley and then to the west and southwest until it empties into Lake Elsinore, a sink in the Elsinore fault zone. Levees built between 1919 and 1939 altered the course of the river, shifting it as much as a mile south of its

historical course. Prior to historical hydrological modifications, the San Jacinto River flowed perennially only in the eastern portion of the valley. Four miles southeast of the town of San Jacinto, the river entered an area historically referred to as the Cienega (Whitney 1982). During the wet season, the river flowed farther and collected in the northern part of the valley (about 8 kilometers [km] northwest of the town of San Jacinto) in an elongate depression forming a shallow, ephemeral lake now known as Mystic Lake (Morton 1977; Whitney 1982). Overflow from the lake drained to the southwest, eventually reaching Lake Elsinore. Because the lake existed before 1895, which predates groundwater withdrawal in the valley, Morton inferred that the depression is of tectonic origin. Subsequent growth of this depression, expressed as increasingly larger lakes, may be a result of both tectonic subsidence and groundwater withdrawal. The current channel of the San Jacinto River is approximately 5 miles (mi) northwest of the Project. Two small unlined drainages are present within the Project area itself.

In prehistoric times, the vegetation in the immediate Project vicinity in Riverside County likely included representative species of three major plant communities: valley grassland, Riversidian sage scrub (the interior variant of the coastal sage scrub community), and chamise chaparral (Munz and Keck 1959). Restricted riparian communities would have also occurred near springs or in places where groundwater was close to the ground surface, as well as along the San Jacinto River. Depending on elevation and climate, various species from these communities were available from early spring until winter, and the leaves, stems, seeds, fruits, and tubers from many of these plant species formed an important subsistence base for the Native American inhabitants of the Project (Bean 1972; Hyde and Elliot 1994). Fauna likely to have been present in the valley grassland community included herbivorous and granivorous species tolerant of sparse vegetation cover, and burrowing species that require relatively deep, friable soils. Larger mammals found in the valley grassland community may have included carnivores and omnivores preying upon the abundant rodents (Bean and Vane 2001; Bettinger 1974; Metropolitan 1991; Munz 1974; Wagner 1998).

Environmental variables influencing archaeological site types and locations have fluctuated over the last 12,000 years, the period of confirmed human occupation in California. Paleoenvironmental, paleobotanical, and geomorphological investigations associated with the Eastside Reservoir Project (ESRP) (Spaulding 2001; Anderson 2001; and Onken and Horne 2001, respectively) suggest that the climate, vegetation, and landscape of the inland southern California region changed dramatically at the end of the Pleistocene, from wet and cool conditions to a drier and warmer regime. In very general terms, the desert interior would have actually been more productive and more attractive to prehistoric groups than the inland areas during the Early Holocene (circa [ca.] 10,000–8000 before present [B.P.]); however, by the Middle Holocene (ca. 8000-4000 B.P.), increased aridity in the desert would have created resource deficiencies, and the inland areas would have become a more suitable habitation location. Effective moisture continued to increase in the inland areas throughout most of the Late Holocene (ca. 4000 B.P. to the present). However, approximately 1060 B.P., a period of persistent drought called the Medieval Warm began. Higher temperatures and decreased precipitation occurred throughout the western United States and continued until about 575 B.P. Both the desert interior and inland areas of southern California would have been adversely affected by these conditions, although the desert would have been more susceptible to these droughts, making the inland areas more attractive to prehistoric peoples. At the end of the Medieval Warm, cooler temperatures and greater precipitation ushered in the Little Ice Age, during which time ecosystem productivity greatly increased along with the availability and predictability of water. The differences between the inland areas and the desert regions would have become less pronounced, making both areas suitable for human habitation.

2.3 PREHISTORIC SETTING

This section describes the prehistoric cultural setting of the Project to provide a context for understanding the types, nature, and significance of the prehistoric cultural resources identified within the study area. The data presented, herein, regarding the sequence of prehistoric use, adaptation, and occupation of the interior valleys and mountain localities that include the Project, are summarized from a synthesis of more than 10 years of archaeological research conducted as part of the ESRP (now known as Diamond Valley Lake), located approximately 5–9 mi southeast of the Project (Goldberg et al. 2001). To further understand the types and nature of the prehistoric cultural deposits identified within the Project within the frame of a wider geographical context, a review of the coastal (Wallace 1955, 1978; Warren 1968) and desert (Warren and Crabtree 1986; Warren 1980) regional chronologies to which most researchers have subscribed is also provided.

The prehistory of inland southern California has been less thoroughly understood than that of the adjacent desert and coastal regions. Prior to the ESRP studies, no comprehensive synthesis had been developed specifically for the interior valley and mountain localities of cismontane southern California that include the Project. The lack of an adequate culture history for this portion of California can be attributed to at least three major factors: (1) the nature and scope of investigations in the region, where research has been concentrated for the most part at single sites or on specific problems; (2) the complex historical sequence of investigations and discoveries, combined with a tendency on the part of many authors to explain similarities in assemblages to cultural diffusion; and (3) the confusion of typological and chronological terminology, which has led to ill-defined units that alternately describe time periods, tool morphology, social groupings, or technological adaptations (see Goldberg and Arnold 1988).

Two regional chronologies are widely cited in the archaeological literature for the prehistory of the coastal regions of southern California (Wallace 1955, 1978; Warren 1968). These chronologies are generalized temporal schemes based on the presence or absence of certain artifact types; both chronologies span the known prehistoric occupation of coastal southern California. The units used by Wallace are "horizons" or "periods," which are extensive in space but restricted in time. The units employed by Warren are "traditions," which may be spatially restricted but display temporal continuity. A more recent chronological synthesis for coastal southern California has been provided by Koerper and Drover (1983). This synthesis employs Wallace's (1955) horizon terminology, but uses radiometric data to order stylistic changes observed in the artifact assemblages, which are interpreted as temporal indications of cultural change over time.

In the absence of absolute chronological indicators for most inland sites, researchers have generally employed typological cross dating of artifact types from either coastal or desert sequences, often as the sole means for assigning age to archaeological sites within the interior valleys, including the Project area. However, two large reservoir projects, first the Perris Reservoir Project (O'Connell et al. 1974), and then most recently, the Eastside Reservoir Project (Goldberg et al. 2001), generated large data sets that have built upon one another to provide a basis for resolving some of these regional discrepancies. Thus, the following discussion of the prehistoric cultural setting for the Project region is drawn from the cultural sequence developed for the ESRP study area. This chronology was based first on artifact cross dating and geomorphological interpretations, and then refined with radiocarbon and obsidian hydration dates (Onken and Horne 2001; Robinson 1998, 2001). The resultant chronology draws heavily on a cultural sequence defined by Warren (1984) that is based largely on archaeological work conducted in the Colorado and Mojave deserts. However, because Warren's chronology used temporal period names that

suggest links to the Mojave, these were replaced in the ESRP chronology by value neutral terms.

For purposes of this report, the discussion will begin at 9500 B.P., because no evidence of the earlier Paleoindian Period (ca. 12,000–9500 B.P.) has been found within the vicinity of the Project. It should be noted however, that an isolated burial, CA-RIV-5786, was found during excavation of a portion of Salt Creek Channel near ESRP; a single radiocarbon date from this burial yielded an uncalibrated date of 7380 ± 300 B.P. (McDougall 1995).

2.3.1 Early Archaic Period (ca. 9500 to 7000 B.P.)

The Early Archaic period saw a continuation of the weather patterns described above for the latest Pleistocene/Early Holocene period, with the desert interior apparently much more favorable for human occupation than the cismontane valleys of southern California. It has been postulated that small, highly mobile groups still traveled over a wide home range utilizing highly portable tool kits to procure and process critical resources, with brief and anticipated intervals of seasonal sedentism. However, because of the arid conditions within the interior valley areas, prehistoric use of the general study area would still have been negligible; populations would still have favored the coastal or interior desert regions. Nonetheless, those populations exploiting the interior valleys would still have been tethered to the few reliable, drought-resistant water sources such as Lake Elsinore, Mystic Lake, and possibly the Cajalco Basin (Goldberg et al. 2001).

Archaeological sites documented within the vicinity of the Project dating to the Early Archaic or containing meager evidence suggestive of sporadic use during this time period are rare, supporting the hypothesis of negligible prehistoric use of the inland valley areas of western Riverside County during this period. Within the ESRP study area, only two site components are firmly dated to the Early Archaic. One component includes a single human burial at CA-RIV-5786 dating to 7380 ± 300 B.P. and capped by several large, highly shaped metates (McDougall 1995). The second is the lower cultural component at CA-RIV-5086, a small temporary camp dated with obsidian hydration data and stratigraphic information to the Early Archaic; this component contained a relatively sparse scatter of flaked and ground stone artifacts and faunal remains, but no cultural features, suggesting that CA-RIV-5086 was initially utilized as a resource extraction locale, possibly situated adjacent to a wetlands environment during the Early Archaic period.

Although much of the data gathered during the ESRP studies seem to corroborate the notion of sporadic use of the study region by small, highly mobile bands utilizing highly portable tool kits during the Early Archaic, the data from CA-RIV-5786, and one other site (CA-RIV-6069) investigated recently, seem to contradict this theory. Identified during the Metropolitan Water District's Inland Feeder Pipeline Project, CA-RIV-6069 is situated on an alluvial fan emanating north from the Lakeview Mountains in western Riverside County, just above the floor of the San Jacinto Valley and south of Mystic Lake; numerous springs are present along the mountain front overlooking the embayment (Horne and McDougall 2008). The cultural deposits at CA-RIV-6069 were encountered at depths ranging from 1.5 m (5 ft) to 3.9 m (13 ft) below the modern ground surface; the vertical distribution of cultural materials and features documented indicates that two distinct cultural strata representing two periods of cultural occupation are present. A more intensive cultural occupation was encountered between approximately 2.7 m (9 ft) to 3.9 m (13 ft) below the modern ground surface; eight radiocarbon assays from cultural features identified in this lower component range from 7940 to 8370 B.P. A less intensive period of site use is represented by materials and features encountered between 1.5 (5 ft) to 2.4 m (8 ft) below the ground surface; charcoal recovered from an intact fire hearth within the upper component was assayed to 2230 B.P., or to the Late Archaic Period. These data suggest that the lower component at CA-RIV-6069

is the oldest prehistoric cultural deposit ever investigated in the greater San Jacinto Valley, and among the oldest deposits ever investigated in inland southern California.

Emergency data-recovery excavations in a portion of CA-RIV-6069 yielded an extensive assemblage of flaked and ground stone tools, marine and terrestrial faunal remains, and bone and shell tools and ornaments. Additionally, 15 discrete cultural features were identified, including intact fire hearths, ground stone artifact caches, and concentrations of artifacts, fire-altered rock, and unmodified manuported cobbles representing remnants of former activity areas; 12 of these cultural features were encountered within the lower cultural component. It should also be noted that the lower component identified at CA-RIV-6069 yielded 37 intentionally molded and fired ceramic objects, possibly the oldest ceramic industry identified to date in the Western Hemisphere (Horne and McDougall 2008). As well, the presence of numerous cultural features at CA-RIV-6069, and the extreme degree of fragmentation, fire alteration, and reuse/recycling of large, highly shaped ground stone implements suggests fairly intensive residential use (either repeated or long term) of CA-RIV-6069 during the Early Archaic. The presence of several artifact caches suggests that site reuse was anticipated. Thus, CA-RIV-6069 may have been a destination point with a predictable resource base that was located on a scheduled, seasonal collecting round. Resource predictability, and the planning depth and organizational characteristics necessary to take full advantage of it, fosters expectations of site reoccupation and longer-term residential occupations.

One other site containing an Early Archaic component worthy of note is CA-RIV-2798/H, or the Lake Elsinore Site. CA-RIV-2798/H is situated at the mouth of the outlet channel of Lake Elsinore, one of the only natural lakes in southern California. Data-recovery excavations at the site, conducted in 1993 by Statistical Research, Inc., revealed stratified cultural deposits attaining depths of nearly 3 m (10 ft) and containing a fairly large assemblage of flaked stone tools (bifaces, unifaces, projectile points, small flake tools, and crescents); a variety of ground stone implements were also collected (Grenda 1997). Documented features include several fire hearths and hearth clean-out refuse deposits, rock clusters, and ground stone caches. Of the eight radiometric assays available for the site, one assay of 8400 ± 60 B.P. from marine shell, coupled with the crescents, suggests that the initial occupation of the Lake Elsinore site may have occurred during the later portion of the Early Holocene (Grenda 1997:279). Two additional radiometric assays (4800 ± 60 B.P. and 4530 ± 80 B.P.) and six dart points, as well as several cultural features indicate that the site occupation intensified during the Middle Holocene; during subsequent periods of the Late Holocene, site occupation apparently became more sporadic and less intensive (Grenda 1997:279–284).

In summary, few sites dating to the Early Archaic have been documented within the regional study area, supporting the theory of negligible use of the inland areas of southern California at this time because of arid conditions. Many of these sites contain only scant evidence of Early Archaic use in the form of obsidian hydration rind measurements, suggesting ephemeral site use by small, highly mobile groups. However, some sites dating to this time period (e.g., CA-RIV-2798/H and the lower cultural component at CA-RIV-6069) do contain evidence of fairly sedentary residential occupations, and evidence that site reuse was anticipated, suggesting a predictable availability of water and other critical resources. These sites have been found invariably near large, drought-resistant, inland water sources, and may have been destination points on a scheduled, seasonal round.

2.3.2 Middle Archaic Period (ca. 7000 to 4000 B.P.)

The Middle Archaic saw a reversal of the weather patterns which had prevailed throughout much of cismontane southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching maximum aridity of the postglacial period (Antevs 1955; Hall 1985; Haynes 1967; Mehringer and Warren 1976; Spaulding 1991, 1995). Spaulding (2001) proposes that a westerly air flow pattern returned to southern California, while the monsoonal weather patterns in the deserts retreated. As a result, the inland areas may have seen increased effective moisture, while the interior deserts, no longer receiving moist monsoonal flow and now in the rainshadow of the Transverse and Peninsular ranges, became quite arid. This suggests that cismontane southern California, including the Project region, may have been a relatively more hospitable environment than the interior deserts during the middle Holocene.

Due to both the amelioration of the local environmental conditions and the deterioration of the conditions in the interior deserts, it was postulated that the inland areas of cismontane southern California would see an increase in prehistoric use and occupation after about 6000 B.P. as compared to the earlier periods (Goldberg et al. 2001). This hypothesis appears to have been validated by the ESRP studies, where at least 19 archaeological localities were dated to the Middle Archaic. These Middle Archaic components include several intensively used residential bases and/or temporary camps containing abundant cultural debris including temporally diagnostic artifacts (Pinto and Silver Lake projectile points, crescents), at least nine complex lithic scatters which appear to have functioned as resource extraction and processing sites, and one human burial covered with large rocks and ground stone artifacts. In addition, evidence of ephemeral Middle Archaic use is present at several sites in the form of isolated radiocarbon-dated features and/or sparse scatters of obsidian debitage dated by obsidian hydration methods. The more intensively used residential locations occur along alluvial fan margins, while less intensively used areas tend to be situated on arroyo bottoms or upland benches (Goldberg et al. 2001).

In coastal southern California, the early traditions gave way to what Warren refers to as the "Encinitas Tradition" by about 7000 to 8000 B.P.; Wallace's "Period II: Food Collecting" also would be subsumed under this tradition. Inland San Diego County sites dating to this period have been assigned to the "La Jolla/Pauma Complex" by True (1958). This interval has been described frequently as the "Milling Stone Horizon" because of the preponderance of milling tools in the archaeological assemblages of sites dated to this era (Basgall and True 1985; Kowta 1969; Wallace 1955).

In the coastal and inland regions of southern California, this period of cultural development is marked by the technological advancements of seed grinding for flour and possibly the first use of marine resources, such as shellfish and marine mammals. The artifact inventory of this period is similar to that of the previous period and includes crude hammerstones, scraper planes, choppers, large drills, crescents, and large flake tools. This assemblage also includes large leaf-shaped projectile points and knives; manos and milling stones used for hard-seed grinding; and likely nonutilitarian artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones (Kowta 1969; True 1958; Warren et al. 1961).

Although sites assigned to this stage of cultural development are similar in many respects, their content, structure, and age can vary. This variability is largely due to geographical differences between the coast and interior; the primary difference between the archaeological assemblages of coastal and inland sites appears to be related to subsistence. Coastal occupants gathered fish and

plant resources, while hunting was generally less important (projectile points are rare). The inland occupants primarily collected hard seeds and hunted small mammals; therefore, projectile points are more common in inland assemblages. King (1967:66–67) suggests that the coastal sites probably represent more permanent occupations than are found in the interior, since coastal inhabitants were sustained by more reliable and abundant food resources. A more mobile subsistence round was likely necessary for inland inhabitants. It is possible, too, that inland and coastal sites of this period represent seasonal movement by the same groups of people.

These inconsistencies in content, structure, and age of sites assignable to the "Milling Stone Horizon" have been reviewed by Goldberg and Arnold (1988:12–13, 46–50). In their discussion, the presence of a single technology (the milling stone and mano) to define a temporally meaningful analytic unit of cultural development is seen to be problematic and does not explain the variability in site assemblages and dates of this period. They argue that to assign all sites that contain milling stones and manos to the period from 8000 to 2000 B.P. implies a "cultural unity" among the peoples who deposited these artifacts. However, decades of research have documented significant variability in subsistence emphasis, mortuary practices, and nonutilitarian artifacts (e.g., cogged stones, discoidals, beads), notwithstanding great similarities in one element of the tool kit—the milling stone and the mano.

In the desert regions of southern California, the "Pinto Period" succeeded the "Lake Mojave Period," beginning at approximately 7000 B.P. and lasting to 4000 or 3500 B.P. Relatively recent paleoecological and paleohydrological evidence suggests maximum aridity in the desert regions between ca. 7000 and 5000 B.P., with amelioration beginning at approximately 5500 B.P. and continuing through 4000 B.P. (Spaulding 1991, 1995). As an adaptive response to these changing climatic conditions, the Pinto Period is characterized by necessary shifts in prehistoric subsistence practices and adaptations, with greater emphasis placed on the exploitation of plants and small animals than the preceding Lake Mojave Period, as well as a continued focus on artiodactyls (Warren 1980, 1984).

The distinctive characteristics of the "Pinto Basin Complex" as defined by Campbell and Campbell (1935) are projectile points of the Pinto series, described by Amsden (1935) as weakly shouldered, indented-base projectile points that are coarse in manufacture as well as form. Other diagnostic artifact types of this period include: large and small leaf-shaped bifaces; domed and heavy-keeled scrapers; numerous core/cobble tools; large blocky metates evincing minimal wear and small, thin, extensively used milling slabs; and shaped and unshaped manos. Throughout most of the California desert region, sites containing elements of the Pinto Basin Complex (e.g., those in the Pinto Basin, Tiefort Basin, Salt Springs, and Death Valley) are small and usually limited to surface deposits suggestive of temporary and perhaps seasonal occupation by small groups of people (Warren 1984:413).

Interestingly, one site discovered during the ESRP studies evinces purely Lake Mojave and Pinto period materials. This site, CA-RIV-5045, also known as the Diamond Valley Pinto Site, is very unique in that Pinto and Lake Mojave materials are found within well-stratified, radiometrically defined cultural deposits. In addition to the numerous dart projectile points recovered indicative of the Pinto period (i.e., Pinto-series and Silver Lake-series), these deposits contain abundant and diverse faunal assemblages, an extensive array of flaked stone tools and ground stone implements, as well as intact cultural features ascribable to specific periods of occupation. Radiometric data, feature types, and artifact/ecofact assemblage characteristics indicate that CA-RIV-5045 was occupied most intensively between 6200–5600 B.P., and functioned as a winter-time residential

base during this period (McDougall 2001).

As was noted earlier, it was posited that cismontane southern California would see an increase in human activity after about 6000 B.P. in response to changing environmental conditions. At this time, local environmental conditions ameliorated and conditions in the interior deserts reached the maximum aridity of the postglacial period. The number of sites dating to the Middle Archaic documented at the ESRP certainly increased during this period, and it is plausible that the apparent increase in human use and occupation of the ESRP study area during the Middle Archaic is related to both the amelioration of the local environment and the deterioration of the desert interior (Goldberg et al. 2001).

The distribution of sites and variety of site types (i.e., residential bases, temporary camps, and a variety of ephemeral resource extraction and processing sites) dating to the Middle Archaic at the ESRP suggest that overall use of the study area likely conformed to a rest-rotation collecting strategy involving relatively brief intervals of sedentism during the midwinter ebb of yearly productivity, followed by warm-season residential movements through a series of resource procurement camps in a seasonal round (Goldberg and Horne 2001). A key feature of rest-rotation collecting is a reliance on stored foods during the interval of winter sedentism. Logistic mobility, or the collection and transport of critical resources to the home residential base, also played an important role in resource procurement, especially during the interval of seasonal sedentism and consumption of stored foods. Another key feature of this strategy is the regular rotation of settlements on a yearly or multi-yearly basis to new areas to avoid the declining rates of return associated with continuous exploitation of the same areas.

It is of interest that although the indices used to measure residential mobility for the Early and Middle Archaic components documented at the ESRP study area indicate that these early components evince a more mobile land-use strategy than later periods, and that the Middle Archaic strategy registers more mobile than the Early Archaic strategy, most data convincingly show that neither of these early periods can be characterized as fully mobile. The fragmentation of bottom grinding stones (i.e., metates, milling slabs), ranging between 80 and 100 percent for nearly all ESRP components throughout prehistory, clearly indicates that occupations were fairly sedentary or that sites were consistently reused, with ground stone being cached and reused until it was no longer functional (Klink 2001a). In addition, the occurrence of artifact and toolstone caches at several Middle Archaic sites suggests that site reuse was anticipated (Horne 2001).

While most chronometric data from the ESRP Middle Archaic components are too gross to confirm whether intensified use of the ESRP study area began after the posited ca. 6000 B.P. termination of the postglacial thermal maximum, some reliable radiocarbon assays support that proposition. Dates from three separate residential components, CA-RIV-4628/H Locus A, CA-RIV-4629/H Locus B, and CA-RIV-5045 Locus B, all postdate 6000 B.P. when tree-ring calibrations are taken into account. No reliable radiocarbon samples date Middle Archaic occupation to the postglacial thermal maximum in the ESRP study area (Goldberg 2001:570).

2.3.3 Late Archaic Period (ca. 4000 to 1500 B.P.)

The Late Archaic Period was one of cultural intensification in southern California. The beginning of the Late Archaic coincides with the Little Pluvial, a period of increased moisture in the region. Effective moisture continued to increase in the desert interior by approximately 3600 B.P., and lasted throughout most of the Lake Archaic. This ameliorated climate allowed for more extensive occupation of the region. By approximately 2100 B.P., however, drying and warming increased, perhaps causing resource intensification.

At the ESRP study area, 23 archaeological localities show evidence that their primary use was during the Late Archaic, while eight others yielded evidence of some activity during the period. Late Archaic site types documented within the ESRP study area include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. In general, sites showing evidence of the most intensive use tend to be on range-front benches adjacent to permanent water sources such as perennial springs or larger streams, while less intensively used locales occur either on upland benches or on the margins of active alluvial fans (Goldberg 2001).

Evidence from the ESRP also suggests increased sedentism during this period, with a change to a semi-sedentary land-use and collection strategy. The profusion of features, and especially refuse deposits in Late Archaic components, suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the Middle Archaic, with increasing moisture improving the conditions of southern California after ca. 3100 B.P. (Horne 2001). Drying and warming after ca. 2100 B.P. likely exacted a toll on expanding populations, influencing changes in resource procurement strategies, promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift towards greater sedentism (Goldberg 2001).

Technologically, the artifact assemblage of this period was similar to that of the preceding Middle Archaic; new tools were added either as innovations or as "borrowed" cultural items. Diagnostic projectile points of this period are still fairly large (dart point size), but also include more refined notched (Elko), concave base (Humboldt), and small stemmed (Gypsum) forms (Warren 1984). Late in the period, Rose Spring arrow points appeared in the archaeological record in the deserts, reflecting the spread of the bow and arrow technology from the Great Basin and the Colorado River region. However, this projectile point type was not found at the ESRP study area, and there is no evidence suggesting that the bow and arrow had come into use at this time in the inland regions of southern California.

Concerning the cultural sequences for Late Archaic coastal sites, for the period after about 5000 B.P., Warren (1968) and Wallace (1978) diverge in their chronological sequences for the coastal regions of southern California. Warren's "Encinitas Tradition" includes all areas outside the Chumash territory of the Santa Barbara coastal zone and continues until approximately 1250 B.P. Wallace, on the other hand, identifies a transition beginning approximately 5000 B.P., marking the onset of "Period III: Diversified Subsistence." In his original 1955 sequence, Wallace said this period, generally referred to as the "Intermediate Horizon," was largely based on changes in the archaeological assemblages of sites from the Santa Barbara coastal region. This horizon is characterized by a greater variety of artifacts, suggesting a greater variety of utilized food resources. Although this interval of human occupation in coastal southern California is poorly defined and dated because of the paucity of representative sites, many researchers in southern

California have retained Wallace's original "Intermediate Horizon" as a classification for sites dating between 5000 and 1500 B.P.

The subsistence base during this period broadened. The technological advancement of the mortar and pestle may indicate the use of acorns, an important storable subsistence resource. Hunting also presumably gained importance. An abundance of broad, leaf-shaped blades and heavy, often stemmed or notched projectile points have been found in association with large numbers of terrestrial and aquatic mammal bones. Other characteristic features of this period include the appearance of bone and antler implements and the occasional use of asphaltum and steatite. Most chronological sequences for southern California recognize the introduction of the bow and arrow by 1500 B.P., marked by the appearance of small arrow points and arrow shaft straighteners.

Some archaeologists have suggested that the changes in the coastal artifact assemblages dating to this period were the result of an influx or incursion of "Shoshonean" people from interior desert areas to the coastal regions (Rogers 1929; Wallace 1978). However, there is virtually no agreement among researchers as to the timing of the initial Shoshonean incursion into the study region; estimates generally range from 1,000 to more than 6,000 years ago, and few researchers acknowledge or question the assumption that Shoshoneans arrived to the study region and replaced some other cultural group (Goldberg and Arnold 1988:50–56). Other archaeologists suggest that cultural transition from the earlier "Milling Stone Horizon" to the succeeding "Intermediate Horizon" coastal and inland assemblages reflects progressive economic changes (e.g., trade) rather than population replacement (King 1982; Koerper 1981; Moratto 1984:164).

In general, cultural patterns remained similar in character to those of the preceding horizon. However, the material culture at many coastal sites became more elaborate, reflecting an increase in sociopolitical complexity and increased efficiency in subsistence strategies (e.g., the introduction of the bow and arrow for hunting). The settlement-subsistence patterns and cultural development during this period are not well understood because of a lack of data; however, the limited data do suggest that the duration and intensity of occupation at the base camps increased, especially toward the latter part of this period.

In the eastern desert regions of southern California, the "Gypsum Period" (ca. 4000 to 1500 B.P.) is generally coeval with Wallace's "Intermediate Horizon." A trend toward increasing effective moisture, which began in the late middle Holocene, culminated in a pronounced pluvial episode between approximately 3700 and 3500 B.P. At that time, a number of basins in the Mojave and Owens river drainages supported perennial lakes (Enzel et al. 1992). No comparable events are evident earlier in the paleohydrological record, developed largely since Warren's (1984) work, that date to 5000 to 4500 B.P., the dates that encompass Warren's so-called "Little Pluvial." After the end of pluvial conditions (ca. 3500 B.P.), conditions typified by greater effective moisture appear to have persisted until approximately 3,000 years ago. An episode of aridity exceeding that of the present may have occurred about 2500 B.P., but there is evidence for increased effective moisture again between approximately 2000 and 1400 years B.P. (Spaulding 1991, 1995).

In addition to diagnostic projectile points, Gypsum Period sites include leaf-shaped points, rectangular-based knives, flake scrapers, T-shaped drills and, occasionally, large scraper planes, choppers, and hammerstones (Warren 1984:416). Manos and milling stones are also common. A technological innovation introduced during this period was the mortar and pestle, used for processing acorns and hard seeds, such as those derived from the hollyleaf cherry and mesquite pod. This correlates with a warming and drying trend that began around 2100 B.P., which appears

to have resulted in resource intensification. In addition, the frequencies of grinding tools show increasing importance of plant foods throughout the Late Archaic, with a substantially greater emphasis after 2000 B.P. (Goldberg 2001). Other artifacts include arrow shaft smoothers, incised slate and sandstone tablets and pendants, bone awls, *Olivella* shell beads, and *Haliotis* beads and ornaments. A wide range of perishable items dating to this period was recovered from Newberry Cave, including atlatl hooks, dart shafts and foreshafts, sandals and S-twist cordage, tortoise-shell bowls, and split-twig animal figurines. The presence of both *Haliotis* and *Olivella* shell beads and ornaments and split-twig animal figurines indicates that the California desert occupants were in contact with populations from the southern California coast, as well as the southern Great Basin (e.g., Utah and Nevada).

Technologically, the artifact assemblage of this period is similar to that of the preceding Pinto Period; new tools also were added either as innovations or as "borrowed" cultural items. Included are the mortar and pestle, used for processing hard seeds (e.g., mesquite pods), and the bow and arrow, as evidenced by the presence of Rose Spring projectile points late in this period. Ritual activities became important, as evidenced by split-twig figurines (likely originating from northern Arizona) and petroglyphs depicting hunting scenes. Finally, increased contact with neighboring groups likely provided the desert occupants important storable foodstuffs during less productive seasons or years, in exchange for valuable lithic materials such as obsidian, chalcedonies, and cherts. The increased carrying capacity and intensification of resources suggests higher populations in the desert with a greater ability to adapt to arid conditions (Warren 1984:420).

2.3.4 Saratoga Springs Period (ca. 1500 to 750 B.P.)

Because paleoenvironmental conditions were little changed from the preceding period, cultural trends in the early portion of the Saratoga Springs Period were, in large part, a continuation of the developments begun during the end of the Late Archaic Period. However, the Medieval Warm, a period of even more persistent drought, began by 1060 B.P., and conditions became significantly warmer and drier. These climatic changes were experienced throughout the western United States (Jones et al. 1999; Kennett and Kennett 2000), although the inland areas of cismontane southern California may have been less affected than the desert interior. The Medieval Warm continued through the first 200 years of the Late Prehistoric Period until approximately 550 B.P. (Spaulding 2001).

Firm evidence of Saratoga Springs Period occupation was documented at seven site components within the ESRP study area, while three other sites exhibit evidence of ephemeral use at this time. Six other localities within the ESRP study area yielded either obsidian with hydration bands suggesting Saratoga Springs age or Saratoga Springs projectile points (a large triangular form associated with use of the bow and arrow which began to appear in the ESRP study area at this time) but without evidence of sustained site use during this period. The focal shift of prehistoric activity from alluvial fan margins to mountain-front benches adjacent to permanent water sources, which was initiated during the Late Archaic, is also evidenced in the Saratoga Springs site locations (Goldberg 2001).

Within the ESRP study area, the Saratoga Springs Period is seemingly marked by a reduction in the number of refuse deposits and, to a slightly lesser extent, hearths. Interestingly, when accounting for sample size, the frequency of artifact and toolstone caches was more than doubled during the Saratoga Springs Period from the preceding Late Archaic, while the frequency of human remains reached the highest point of any time in the archaeological record. Midden-altered sediments also appear for the first time during this period (Horne 2001).

However, it is of interest that most Saratoga Springs components identified within the ESRP study area actually date to the Medieval Warm Interval; only one component did not. When components dating to the Medieval Warm segment of the Saratoga Springs Period are segregated and combined with Medieval Warm components from the Late Prehistoric Period, it reveals that the frequency of refuse deposits and artifact and toolstone caches during the Medieval Warm is slightly higher than during the Late Archaic and much higher than during the latter portion of the Late Prehistoric Period. The frequency of human remains (all of which are unburned) during the Medieval Warm is also much higher than during the Late Archaic and Protohistoric Period; no human remains were found in components of the Late Prehistoric Period after the Medieval Warm Interval (Horne 2001).

During the ESRP studies, it was anticipated that intensive use of the inland areas of cismontane southern California during the Medieval Warm may have been curtailed altogether owing to inhospitable climate and concomitant decline in water and food sources. However, while land-use and procurement strategies experienced profound changes at this time, the response to deteriorating conditions was not abandonment of the inland areas, but rather intensification. Apparently, climatic conditions of warming and drying that may have begun ca. 2100 B.P., toward the end of the Late Archaic, had already triggered an intensification process that established productive strategies for dealing with resource stress. With the onset of the Medieval Warm, those strategies were further refined and intensified (Goldberg 2001).

Not only did the data indicate that the ESRP study area was used on at least a semi-permanent basis during the Medieval Warm Interval, but that residential bases show evidence (e.g., refuse deposits, midden development) that activities intensified at those settlements. People were also intentionally caching toolstone and ground stone tools, suggesting that they anticipated returning to the same locations. Characteristics of the ESRP ground stone assemblages from the Medieval Warm demonstrate that plant foods were more important than in any other period; plant processing intensified and acorns apparently became an important staple (Klink 2001a). The faunal assemblages also show that resource stress was accommodated with similar strategies by intensifying the use of lagomorphs and by further expanding diet breadth, adding animals (i.e. medium-sized carnivores) to the diet that were rarely consumed during other periods (McKim 2001). The most abundant evidence of trade also occurs in the Medieval Warm components identified at the ESRP, suggesting that this was another mechanism for dealing with resource stress (Goldberg 2001).

However, two factors identified during the ESRP studies indicate that these adaption strategies may not have been completely successful in dealing with the resource stress brought about by the Medieval Warm. First, the indices which differentiate degrees between planned and actual mobility indicate that occupations were considerably shorter than had been anticipated during the Saratoga Springs Period. Substantially long-term occupation at any given location may have been difficult given the presumably low levels of environmental productivity at this time. This suggests that not only were conditions harsh, they may also have been unpredictable. This may account for a larger number of residential locations than had been anticipated, a pattern in response to arid conditions that has also been identified on the central California coast (Lebow 2000). Second, while the burial population discovered throughout the ESRP study area was surprisingly small, the relative proportion of those from the Medieval Warm Interval is higher than any other time period (Horne 2001).

Throughout much of the California desert regions to the east, the Saratoga Springs Period saw essentially a continuation of the Gypsum Period subsistence adaptation. Unlike the preceding period, however, the Saratoga Springs Period is marked by strong regional cultural developments, especially in the southern California desert regions, which were heavily influenced by the Hakataya (Patayan) culture of the lower Colorado River area (Warren 1984:421–422). Specifically, turquoise mining and long distance trade networks appear to have attracted both the Anasazi and Hakataya peoples into the California deserts from the east and southeast, respectively, as evidenced by the introduction of Buff and Brown Ware pottery and Cottonwood and Desert Side-notched projectile points. The initial date for the first Hakataya influence on the southern Mojave Desert remains unknown; however, it does appear that by about 1000 to 1100 B.P. the Mojave Sink was heavily influenced, if not occupied by, lower Colorado River peoples.

Lake Cahuilla is believed to have refilled the Coachella Valley around 1450 B.P., and was the focus of cultural activities such as exploitation of fish, water fowl, and other lacustrine resources during this period. Desert people, speaking Shoshonean languages, may have moved into southern California at this time; the so-called "Shoshonean Intrusion." Brown and Buff Ware pottery first appeared on the lower Colorado River at about 1200 B.P., and started to diffuse across the California deserts by about 1100 B.P. (Moratto 1984:425). Associated with the diffusion of this pottery were Desert Side-notched and Cottonwood Triangular arrow projectile points dating to about 800 to 850 B.P., suggesting a continued spread of Hakataya influences.

However, about 1060 B.P., environmental conditions became notably warmer and drier. This period of intense drought, the Medieval Warm, extended throughout the Southwest, and led to the withdrawal of Native American populations from marginal desert areas to more reliable, drought-resistant water sources such as the Colorado River and Lake Cahuilla, the episodic presence of which was not climatically controlled but dependent upon natural discharges from the Colorado River, and which experienced two, if not three, high stands during the Medieval Warm Interval (Waters 1983).

Along the southern California coastal regions, reliance on the bow and arrow for hunting, along with the use of bedrock mortars and milling slicks, mark the beginning of the tradition denoted as the "Late Prehistoric Horizon" by Wallace (1955) and the "Shoshonean Tradition" by Warren (1968), dating from about 1500 B.P. to the time of Spanish settlement (approximately A.D. 1769). Late prehistoric coastal sites are numerous. Diagnostic artifacts include small triangular projectile points, mortars and pestles, steatite ornaments and containers, perforated stones, circular shell fishhooks, and numerous and varied bone tools, as well as bone and shell ornamentation. Elaborate mortuary customs, as well as generous use of asphaltum and the development of extensive trade networks, are also characteristic of this period.

In the Santa Barbara coastal region, the Late Prehistoric Horizon appears to represent increases in population size, economic complexity, social complexity, and the appearance of social ranking. King (1990) posits that the mortuary practices of the Intermediate and Late Horizons throughout Chumash territories evince social ranking and that beads were used to confer status. Similarly, craft specialization on the northern Channel Islands has been linked to expanding economic capacities and emerging social ranking during the Late Period (Arnold 1987). Although the motivating forces for such trends have yet to be identified with certainty, some researchers have suggested that economies controlled by social elites spurred increasing economic productivity and resultant population growth (Clewlow et al. 1978; King 1990). More recently, archaeologists have linked past changes in subsistence, population, exchange, health, and violence to periods of

drought and resource stress that occurred during the Medieval Warm Interval (Arnold 1992a, 1992b; Arnold et al. 1997; Jones et al. 1999; Larson 1987; Moratto et al. 1978).

2.3.5 Late Prehistoric Period (ca. 750 to 400 B.P.)

The Medieval Warm extended into the Late Prehistoric Period, ending about 550 B.P. The cultural trends and patterns of land use that characterized the Medieval Warm Interval, including that portion which extends into the earlier part of the Late Prehistoric Period, were discussed above. At the end of the Medieval Warm, however, and lasting throughout the ensuing Protohistoric Period (410–150 B.P.), a period of cooler temperatures and greater precipitation ushered in the Little Ice Age during which time ecosystem productivity greatly increased along with the availability and predictability of water (Spaulding 2001).

Also during this period, Lake Cahuilla began to recede (Waters 1983), and the large Patayan populations occupying its shores began moving eastward to the Colorado River basin or westward into areas such as Anza Borrego, Coyote Canyon, the Upper Coachella Valley, the Little San Bernardino Mountains, and the San Jacinto Plain (Wilke 1976:172–183). The desiccation of Lake Cahuilla that occurred approximately 370 B.P. (A.D. 1580) resulted in a population shift away from the lakebed into the Peninsular Ranges and inland valleys to the west, and the Colorado River regions to the east.

With the return of more mesic conditions after approximately 550 B.P., resulting in less resource stress, the ESRP studies show that people returned to a less intensive, semi-sedentary land-use strategy similar to that identified for the Late Archaic Period. Within the ESRP study area, evidence of intensive occupation dating to the Late Prehistoric Period occurs at five residential sites comprising 16 separate components; all of these coincide with sites that were occupied during earlier periods, and all are situated on elevated bedrock benches near active springs and overlook the valley floor (Goldberg 2001).

By segregating those components dating to the Medieval Warm Interval from other Late Prehistoric components, the differences between land-use strategies for these periods can be demonstrated. The ESRP studies show that after the Medieval Warm Interval there was a quite unexpected reduction in the number and frequency of refuse deposits, as well as fire-altered rock weight and midden development. The number and frequency of artifact and toolstone caches were also reduced, while hearth features were slightly more common. Rock art also first appeared in association with Late Prehistoric components which post-date the Medieval Warm Interval. The decrease in the number of artifact and toolstone caches and the first appearance of rock art during this period suggests that residential sites may have been occupied year-round (Horne 2001).

Mortars and pestles and other grinding tools also declined in importance after the Medieval Warm in the ESRP site components, suggesting that the intensive procurement and processing of acorns and other plant foods was no longer as critical as previously; this pattern is further supported by a decline in the effort expended in shaping grinding tools (Klink 2001a). A reduction in emphasis on plant foods, and especially acorns, which require intensive preparation, likely accounts for the reduction in refuse deposits, fire-altered rock weights, and midden development at the end of the Late Prehistoric. It is possible that the portable milling toolkit was supplemented substantially by bedrock milling features which are ubiquitous throughout the study area; however, since bedrock features cannot be dated, they cannot be assigned to any particular time period(s). Percentages of projectile points also increased somewhat after the Medieval Warm (Cottonwood Triangular points began to appear in inland assemblages at this time, and Obsidian Butte obsidian became much

more common), suggesting increased focus on large mammals, but the lower ratio of late-stage bifaces indicates that hunting methods returned to random-encounter strategies, rather than the logistical forays of the preceding period (Klink 2001b). Of particular note, faunal assemblages produced an anomalously high lagomorph index after the Medieval Warm, suggesting a very wet climatic regime with dense undergrowth well suited to cottontails (McKim 2001). Finally, the percentage of nonutilitarian artifacts declined considerably, suggesting that trade was no longer critical for assuring food supplies (Klink 2001c).

2.3.6 Protohistoric Period (ca. 400 to 150 B.P.)

The ameliorated, productive conditions of the Little Ice Age continued throughout the Protohistoric Period. Generally speaking, sedentism intensified during the Protohistoric Period, with small, but apparently fully sedentary villages forming. Increased hunting efficiency (through use of the bow and arrow) and widespread exploitation of acorns and other hard nuts and berries (indicated by the abundance of mortars and pestles) provided reliable and storable food resources. This, in turn, promoted greater sedentism. Related to this increase in resource utilization and sedentism are sites with deeper middens, suggesting central-based wandering or permanent habitation. These would have been the villages, or *rancherias*, noted by the early nonnative explorers (True 1966, 1970).

Within the ESRP study region, the most striking change in material cultural in this period was the local manufacture of ceramic vessels and ceramic smoking pipes. Although pottery was known in the Colorado Desert as long ago as 800 B.P., ceramic technology in the Project region appears to date to around 350 B.P. Also during this interval, abundant amounts of obsidian were imported into the region from the Obsidian Butte source which was exposed by the dessication of Lake Cahuilla. In addition, Cottonwood Triangular points were supplemented by Desert Side-notched points during this period. Late in this period, some European trade goods (i.e., glass trade beads) were added to the previous cultural assemblages (Meighan 1954).

Based on work in the San Luis Rey River Basin in northern San Diego County, Meighan (1954), True (1970), and True et al. (1974, 1991) have defined two Late Prehistoric/Protohistoric Period complexes that are worthy of mention. The "San Luis Rey I Complex" existed from approximately 600 to 250 B.P., and is typified by grinding implements, small (Cottonwood) triangular projectile points with concave bases, stone pendants, *Olivella* shell beads, quartz crystals, and bone tools. The "San Luis Rey II Complex," lasting from about 250 to 150 B.P., is very similar, but with the addition of ceramic vessels (including cremation urns), red and black pictographs, glass beads, metal knives, and steatite arrow straighteners. True et al. (1974) believe that the San Luis Rey complexes developed out of the earlier La Jolla/Pauma cultural substratum, and are the prehistoric antecedents to the historically known Luiseño Indians.

The Hakataya influence in coastal and inland southern California regions appears to have diminished during the late Protohistoric Period when the extensive trade networks along the Mojave River and in Antelope Valley appear to have broken down, and large village sites were abandoned (Warren 1984:427). Warren (1984:428) suggests that the apparent disruption in trade networks may have been caused by the movement of the Colorado River basin Chemehuevi populations southward across the trade routes during late Protohistoric Period.

Within the ESRP study area, all five village clusters located on elevated bedrock surfaces near active springs and overlooking the valley floor that were occupied during the Late Prehistoric saw continued occupation in the Protohistoric Period. Most archaeological data from the ESRP

Protohistoric site components indicate that a fully sedentary land-use strategy was adopted during this period. Given the spatial coincidence of the Protohistoric villages with residential sites of the Late Prehistoric Period, this sedentism appears to have been a further intensification of patterns established in the earlier period. At that time, resource stress did not appear to have been an issue; resource niche widths were expanded, and intensive resource processing that had been required during the Medieval Warm Interval appeared not to have been necessary. However, even though the climatic conditions of the Little Ice Age afforded a very productive environment during both the Late Prehistoric and Protohistoric periods, land-use strategies intensified during the later period. The use of plant food increased, as did the intensity of the processing effort. The Protohistoric Period exhibited the highest ranks for fire-altered rock and midden development, as well as rock ring foundations for brush dwellings, storage facilities, and ceremonial areas with rock art and rock enclosures; overall, there was a fluorescence of feature types and numbers at this time (Horne 2001). The faunal data for this period indicate a decrease in faunal diversity, and signify a reduction in diet breadth as well as greater intensification (McKim 2001).

The intensification in land use during the Protohistoric Period seen in the ESRP assemblages mirrors changes that occurred at the end of the Late Archaic when it is hypothesized that the collecting strategy evolved from rest-rotation to semi-sedentary. Climatic degradation causing resource stress beginning about 2100 B.P. is thought to have triggered that shift. If the environment during the Protohistoric Period was just as productive as during the earlier portion of the Little Ice Age (Late Prehistoric Period), what then accounts for land-use intensification at this time? Apparently resources were stressed again, but not by deteriorating productivity of the environment. Rather, population growth probably led to competition for food, and possibly water and fuel resources. While preceding periods of stress could have been relieved by expansion of territory and diet breadth, increasing populations would have precluded the opportunity for territory expansion. Therefore, it is hypothesized that the shift to a fully sedentary strategy was brought about by population stress, which itself was initiated during the Late Prehistoric Period when the environment was productive and populations were very successful at exploiting that productivity (Goldberg 2001).

Other archaeological patterns exhibited by the ESRP Protohistoric components were likely a result of sedentism and protection of territories. As it is today, logistical mobility would have become essential for provisioning fully sedentary communities. With lower temperatures during the Little Ice Age but no source of fuel wood in or near the ESRP study area, procurement of fuel may have become an increasingly important element of logistical provisioning. Although there was a fluorescence of feature types and numbers at the ESRP sites dating to the Protohistoric Period, the number of artifact and toolstone caches reached an all-time low; toolstone and artifact caches would no longer have been required because there were year-round occupants at residential bases. Due to increased territoriality, resource intensification would have been required because territorial and resource niche-width expansion was no longer viable. Likewise, along with increasing territorial circumscription would have come the inevitable fact that residential bases were occupied longer than the inhabitants had originally anticipated; moving the residential base may no longer have been an option. As well, trade and ceremonial gatherings with other groups would have helped maintain social relationships and ensure food resources. Finally, sedentism and the need to protect critical resources from competitors may have eventually led to conflict. Protohistoric patterns of raw material procurement indicate that desert materials (obsidian and chert) gained prominence, while other relatively closer sources of exotic raw materials from the west (basalt, andesite, rhyolite, metavolcanic rock, and Piedra de Lumbre "chert") were little used, suggesting that territorial boundaries, at least to the west, had become established. While there

was no direct evidence of physical conflict at any of the ESRP sites, the locations of villages on elevated bedrock surfaces overlooking the valley may have been designed to afford views of intruders; an increase in projectile points may reflect a need for defensive weapons (Goldberg et al. 2001).

2.4 ETHNOGRAPHIC SETTING

Based on information passed down from Tribal elders, published academic works in the areas of anthropology, history, and ethnohistory, and through recorded ethnographic and linguistic accounts (cf., Freers and Smith 1994; Kroeber 1925; Strong 1929; Vane 2000), the Project lies within the ancestral cultural territory of the Luiseño. However, the Project may also have been occupied by the Cahuilla due to population shifts in the historic era (Bean 1978). Both of these tribes speak a language of the Takic branch of the Shoshonean family, part of the larger Uto-Aztecan language stock. The following discussions of Luiseño and Cahuilla traditional culture are derived primarily from Bean (1978) and Bean and Shipek (1978).

2.4.1 Luiseño

Territory. The term Luiseño originated as a description of the native peoples associated with Mission San Luis Rey near Oceanside. Luiseño territory in ethnographic times encompassed a stretch of the California coast and included most of the drainage of the San Luis Rey and Santa Margarita rivers. Inland, Luiseño territory extended south from Santiago Peak, including the Elsinore and Temecula valleys, and extended farther south to Mount Palomar and the Lake Henshaw area, then west to the coast at Agua Hedionda Creek. The coastal territory of the Luiseño extended north to near San Mateo Creek in Orange County (Bean 1978). Their territory included every ecological zone from the coastline to the mountains. Elders of the Pechanga Band of Luiseño Indians add that the Temecula/Pechanga people had usage/gathering rights to an area extending from Rawson Canyon on the east, over to Lake Mathews on the northwest, down to Temescal Canyon to Temecula, eastward to Aguanga, and then along the crest of the Cahuilla Range back to Rawson Canyon.

Social and Political Organization. The traces of any Luiseño moiety system that may have existed are indistinct, but suggest a division into easterners (inland groups) and westerners (coastal groups) (Bean and Shipek 1978:550). The social structure of the Luiseños was severely disrupted by the mission system as early as the 1770s. Their population density is thought to have been greater than that of the Cahuilla, probably because they occupied a more favorable environment. Each village was occupied by a "clan tribelet—a group of people patrilineally related who owned an area in common and who were politically and economically autonomous from neighboring groups" (Bean and Shipek 1978:555). The clan tribelets, by the time anthropologists studied them, were composed of one major lineage that had a ceremonial head, a ceremonial house or enclosure, and a ceremonial bundle, and the remnants of other lineages. Settlements, occupied by one or more familial groups, were sometimes politically autonomous, but sometimes several villages were allied under one chief. The hereditary chiefs had religious, economic, and military power, and were role models for their people. They were assisted in their duties by one or more assistants. The chiefs and their families were the elites of the society, along with the very wealthy. The acquisition of wealth was important, but the acquisition of extreme wealth was prevented by the custom of burning or burying the possessions of the deceased.

Subsistence and Material Culture. The Luiseño were, for the most part, hunters, collectors, and harvesters. Their subsistence patterns can be attributed mostly to their environments. Clans were apt to own land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Villages were usually located in coves or canyons that offered some shelter from the sun and wind, featured a reliable water supply, and that was defensible. Settlement areas were surrounded by named places associated with food products, raw materials, or sacred beings. Hunting and gathering places were owned by individuals, families, the chief, or by the collective community (Bean and Shipek 1978:551). Certain clusters or groves of tobacco, eagle nests, cactus, oaks, or other sources of food and medicine were guarded and owned by individuals. Collecting outside of one's area could only be done with permission of the owner, and failure to do so could result in physical combat or sorcery against one another. Most food resources were gathered within close proximity to the village, but during certain seasons the family group would move to the coast for marine resources or into the mountains for acorns and deer.

Game animals included deer, cottontail rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, doves, ducks, and other birds. Tree squirrels, most reptiles, and predators were avoided as food resources, except possibly during lean times. As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants also were used. Insects were also available as food resources. Roots and shoots of various types were gathered from marshes and wetlands. Seeds from various grasses and scrub plants also played an important role in the aboriginal diet and were available for harvest from summer through fall. Certain mushrooms and tree fungi supplemented the diet and were considered delicacies. Teas were made from a variety of floral resources and were used for medicinal cures as well as for beverages. Tobacco and datura were sacred plants used for rituals and medicine. Fire was used as a crop-management technique and for communal rabbit drives (Bean and Shipek 1978:552).

To gather these food resources and to prepare them for eating, the Luiseño had an extensive inventory of equipment. The throwing stick and bow and arrow were the most important hunting tools for killing game, but snares, traps, slings, decoys, disguises, and hunting blinds also were part of the hunting technology. Many villages had access to creeks and rivers, and nets, traps, spears, hooks and lines, and poisons were used to catch fish. Gathering required few tools: poles for shaking pine nuts and acorns from the trees, cactus pickers, chia hooks, seed beaters, digging sticks and weights for digging sticks, and pry bars (Bean and Shipek 1978:552–553).

Food was usually stored in large storage baskets. Pottery ollas and baskets treated with asphaltum also were used to store and carry water and seeds. Wood, clay, and steatite were used to make jars, bowls, and trays. Skin and woven grass were used to make bags. Food processing required hammers and anvils for cracking nuts; mortars and pestles for grinding acorns and other hard nuts and berries; manos and metates for grinding seeds and berries; winnowing baskets; strainers; leaching baskets and bowls; cutting implements made of stone, bone, and wood. Basket mortars, made by using asphaltum to attach an open-bottomed basket to a mortar, were important for food processing. Food was served in wooden and gourd dishes and cups and in basket bowls that were sometimes tarred. Wood, shell, and horn were used for spoons (Bean and Shipek 1978:553).

Most Luiseño houses were conical and partially subterranean; however, during the nineteenth century some Luiseño had rectangular houses. The dwellings were made of locally available material, such as reeds, brush, or bark. Occupants entered using a door at the side of the shelter, which was sometimes accessed through a short tunnel. Smoke from a central fireplace rose through a hole in the center of the roof. Domestic chores, such as cooking, eating, and social

interaction, often occurred under a brush-covered ramada that stood near the house. Earth-covered sweat houses for purification and curing rituals, ceremonial houses with fenced areas, and granaries for food storage were found in most villages (Bean and Shipek 1978:553; Bean and Vane 2001:VI.D-5).

Religion, Ceremony, and World View. The various life cycles of the Luiseño, including birth, puberty, marriage, and death were celebrated in ritual. At birth, the child was confirmed to the group and the patrilineage (Bean and Shipek 1978:556). Girls and boys were initiated in puberty rituals, which taught them about supernatural beings, the rules of behavior, and explained how their actions would be governed through adulthood. The boys' ceremony included the drinking of *toloache*, which induced visions, followed by dancing, and the teaching of songs and rituals. The girls' ceremony included instruction for maintaining a household and preparation for marriage, rock paintings, and a "roasting ceremony" that included placing the young girl in a bed of warm sand to prepare her for child bearing. Girls were married shortly after their puberty ceremony. Marriages were arranged by the parents to ensure that the two were not closely related, and to form alliances between groups. Marriage ceremonies included a bride-price, after which the couple resided with the husband's lineage. Death rituals were surrounded by purification, from washing one's clothes to smoking and incense. The mourning ritual was attended by close relatives as well as related clans. An image-burning ceremony was held to commemorate the death of an individual and was considered the last of the rites, ending formal mourning after a period of time. During the ceremony, an image of the person was burned to signify their passing, followed by a feast and presentation of gifts to guests. To commemorate the death of a chief, an eagle was killed (Bean and Shipek 1978:556).

Among the Luiseño, rituals played a role in governing hunting, harvest, warfare, and all other major activities of village life. Many rituals were connected with the *Chinigchinich* cult among the Luiseño. A great deal is known about this religion because Father Boscana of Mission San Juan Capistrano recorded what he knew of it in 1828 (Boscana 1978). The *Chinigchinich* religion may have originated as recently as the late eighteenth century. It spread southward to the Luiseño, and then to some of the Hokan-speaking peoples of present-day San Diego County. It did not reach the Cahuilla. This religion originated among the Gabrieliño to the north in the appearance of a second deity at the village of *Puvu*, the birthplace of *Wiyot*, one of the first creations who established the order of the world in Luiseño cosmology. This second deity gave the Gabrieliño instructions for proper living. *Chinigchinic*h was an avenging god, whose animal helpers, such as eagles, hawks, ravens, and rattlesnakes, kept watch to see that people obeyed *Chinigchinich's* rules, and avenged transgressions. Shamans and boys undergoing puberty rites drank infusions of *toloache* made from the datura plant in order to gain supernatural power. Sand paintings were a significant component of the *Chinigchinich* religion, and although utilized by several southern California groups, they are best documented among the Luiseño. They were made at boys' and girls' initiations, and at the death of cult members. The sand paintings were constructed to include various elements used in the ritual to which it pertained, and once the ritual was completed, the sand painting was destroyed (Bean and Shipek 1978:556).

2.4.2 Cahuilla

Territory. Ethnographically, Cahuilla territory spanned from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, a portion of the Colorado Desert west of Orocopia Mountain to the east, the San Jacinto Plain as far as Riverside, and the eastern slopes of Palomar Mountain to the west (Bean 1978:575). Bean

(1978:583) has estimated the total population of the three Cahuilla divisions—the Mountain, Pass, and Desert Divisions—at between 6,000 and 10,000 people at Spanish contact in the late eighteenth century. The Cahuilla occupied a topographically complex region that includes mountain ranges with elevations of 11,000 ft, to low desert at 273 ft below sea level, interspersed by passes, canyons, foothills, and valleys. Seasonal extremes in temperature, precipitation, and wind characterize the region.

Social and Political Organization. The term Cahuilla is of uncertain origin; the language belongs to the Cupan subgroup of the Takic family of Uto-Aztecan stock. The Cahuilla were grouped into clans or sibs that were organized on the basis of patrilineal descent (Bean 1978:580). Individuals related to a common male ancestor by descent through the male line belonged to the same clan, whether they were males or females. All Cahuilla clans, whether of the Mountain Cahuilla, Pass Cahuilla, or Desert Cahuilla divisions of this native language-culture group, belonged to one of two moiety divisions—Wildcat or Coyote. This moiety system regulated marriage, such that clans that belonged to the Coyote moiety division had to seek a spouse belonging to a clan belonging to the Wildcat moiety division.

For the Cahuilla, individual clans were led by a chief or *net*, who acted as both a political and ceremonial leader. The *net* had charge of the sacred house (dance house) and sacred bundle, *maswut*. This sacred bundle consisted of matting, originally of seagrass, which was wrapped around ritual paraphernalia and items sacred to the clan. This bundle was a sacred expression of the identity of the clan. It was kept in a special enclosure at the back of the sacred house, which also served as a dance house, and originally as a residence of the net. Among many clans, the *net* was assisted by a *Paha*, a ritual assistant or "master of ceremonies," also found among other Takic groups. This pattern of political and ritual "offices" is generally similar to that of the Serrano, Cupeño, and Luiseño. The individual lineages, however, lacked their own sacred bundle, sacred house, and *net*. Sometimes the individual lineages might live together to gather at a particular location, but sometimes they lived at separate named localities. Even if they lived separately, however, they were dependent on the *net*, or clan ritual and religious leader. As Strong (1929) pointed out, the *Pūalem*, the shamans or wizards of the Cahuilla, played an important role in Cahuilla culture but were not officers or political or ritual leaders of the individual clans. Their enterprise was individual rather than group-corporate (Bean 1972, 1978).

Subsistence and Material Culture. The Cahuilla were hunters, collectors, and harvesters. A diverse habitat provided an immense variety of floral resources, which the Cahuilla used for food, medicine, and manufacture of tools and shelter (Bean 1978:578). Acorns, screw beans, mesquite, piñon, cactus fruits, seeds, wild berries, tubers, roots, and greens were valuable food resources. Corn, beans, squash and melons from the Colorado River tribes were raised in garden plots by the Cahuilla. Hunting and butchering of meat was carried out by the men, while women did the cooking and the acorn and seed processing. Acorns and hard berries were pounded in stone mortars, while hard seeds were ground on stone metates. Softer foods, like honey mesquite, were pounded in wooden mortars. Various basket and pottery forms were used to process and cook plant foods. Stone-lined pit ovens were used to cook yucca, agave, and tule-potatoes. Large granaries were constructed for storing acorns, and pottery ollas were used to store seeds. At ancient Lake Cahuilla in the Coachella Valley, periods of high lake stands brought Cahuilla from the mountain areas down to the valley floor to exploit the freshwater aquatic resources such as fish, shellfish, waterfowl, and shoreline vegetation (Wilke 1976:8, from Blake 1856:98).

Cahuilla pottery was manufactured by the coil method and paddle-and-anvil technique, and was often painted or incised. Their pottery forms included cooking pots, ollas, bowls, dishes, and tobacco pipes. Basketry was produced by a stitched coil method, and forms included flat plates or trays for winnowing seeds, both shallow and deep baskets, conical baskets, and round flat bottom baskets, which were often decorated with cosmological motifs (Bean 1978:579). Arrow-shaft straighteners were made of soapstone and incised with designs that reflected ownership. Bows were made of willow or mesquite, and were strung with mescal fiber or sinew. Ceremonial items included charmstones, bull-roars, clappers, rattles, feathered headdresses, wands, and eagle feather skirts and capes. Clothing included sandals made of mescal fiber, rabbit skin or other hide blankets, and skirts made of tule, or the soft inner bark of mesquite or cottonwood.

Tribal cosmology and history were recorded in Cahuilla songs, and "songs accompanied games, secular dances, shamanic activities, and hunting and food-gathering activities" (Bean 1978:580). Musical expression was primarily vocal, although instruments often accompanied the song and included one or more of the following: elder flutes, split-stick clappers, whistles, pan-pipes, bone flageolets, or rattles made of deer hooves, turtle shell, gourds, seashells, or dried cocoons. Games were also an important part of Cahuilla society, and wagers were often placed on the outcome of the game, such as a guessing game played by men, called peón (Bean 1978:580).

Cahuilla shelters were more often made of brush, although some were wattled and plastered with adobe mud. In prehistoric times, these shelters are believed to have been dome-shaped; during post-contact times they tended to be rectangular. The entryway into the shelter was usually covered with hides or woven mats, and one or more holes were left open at the roof peak for smoke to escape. Most of the Cahuilla's domestic activities were performed outside within the shade of large, expansive ramadas. Within each village, the chief's house was the largest and was usually next to the ceremonial house. Each village also had a men's sweat house and several granaries (Bean 1978:578; Bean and Vane 2001:VI.D-1).

Some Cahuillas specialized as traders, with goods being transferred as far west as Catalina Island, and east to the Gila River (Bean 1978:582). Trade items included shell beads, steatite ornaments, asphaltum, food products, hides, furs, obsidian, turquoise, and salt. Within the Cahuilla territory, local craftsmen exchanged their wares among the group for services and goods.

Religion, Ceremony, and World View. The Cahuilla understand the universe in terms of power, and power, believed to be sentient and to have will, was assumed to be the principal causative agent for all phenomena, whether good or bad (Bean 1978:582). The presence of power was used to explain all unusual talents, events, or differences in the universe. Shamans, always male, were both revered and feared (Bean 1978:581). They could eat fire, cure illness, cause rain, increase food resources, keep away evil spirits, and some could even change shape into animals, or could kill a person instantly with supernatural power. A shaman's status was often reaffirmed through public demonstration of his abilities. As power figures, they acted together with the net as community leaders. Another person of power was a diviner or dreamer, either male or female, who could foretell future events, find lost objects, and locate game and new food resources. A medicine doctor, often a woman, was not connected with supernatural power, but possessed great knowledge in the use of medicinal herbs and medical conditions.

The Cahuilla's creator-god, *Múkat*, established the order of the world and how the dead should be cremated (Bean 1978:583). The elderly, through the story of *Múka*t, attained privilege, power, and honor through wisdom and age. Elders, it was taught, are the repositories of knowledge and

lore, which was especially important among the Cahuilla, who lived in a diverse and often harsh environment. The elderly were respected as teachers of the values and skills needed for a successful adult life. Older women taught young girls the techniques of basketry, and values of womanhood, and performed tasks that were time-consuming such as grinding seeds and making blankets. Older men made hunting implements and taught boys the traditional societal values as well as hunting techniques.

Cahuilla were taught to share possessions, food, and capital within an enforced system of reciprocity (Bean 1978:583). Failure to reciprocate could be punishable by public ridicule. Lineages and clans shared harvesting and hunting areas in a reciprocal manner when there was a surplus of game or food. Following the teachings of *Múkat*, Cahuilla children were taught to do things slowly, orderly, and deliberately, and to be aware of any possible ramifications for their actions. Therefore, actions were usually explicit and direct as possible to avoid misunderstandings.

Cahuilla rituals included the mourning ceremony, the eagle ceremony, birth, naming, adolescence, marriage, status changes, and performances to improve subsistence resources (Bean 1978:582). At the center of many of these rituals was the performance of songs that recorded the cosmology and history of Cahuilla tradition. Some song cycles could be very long and complex requiring several days to perform. These ceremonial songs were sung and taught to younger assistants by a ceremonial song leader. Dancers often accompanied the singers to enact mythical events. Marriages were arranged by the parents, and spouses were chosen that were unrelated by at least five generations, or sometimes crossed cultural boundaries between the Cahuilla and neighboring groups. Husbands were expected to be skilled in economic pursuit, while women were expected to work hard to produce food and bear children. Food and gifts were presented to the wife's family at the time of marriage, and afterwards she took residence within the husband's kin group. The birth of a child signified an economic and social alliance between the two families, and the reciprocal exchange of gifts and food. At death, a person's soul went to the land of the dead, to the east of the Cahuilla territory, where all others before went. Spirits could still pass messages to the living, "advising, sanctioning, and aiding those still on earth" (Bean 1978:582).

2.4.3 Missionization and Native American Lifeways

European settlement of California began with the founding of Mission San Diego de Alcala in 1769, although European explorer Juan Rodriguez Cabrillo had contact with southern California coastal tribes in 1542. The establishment of Mission San Gabriel in 1771 had an indirect impact on the native inhabitants of the Project. The founding of Mission San Luis Rey in 1798 had a profound effect on the Native American populations located in Project, especially the Luiseño, who derive their name from this mission.

The first European contact with the Cahuilla was by the Juan Bautista de Anza expedition, which passed through the Coachella Valley in 1774. Subsequently, in 1781, hostility by the Quechan Indians along the Colorado River closed this land route across California from Santa Fe. Europeans primarily used sea routes to populate and supply California, due to the superior technology of ships and harsh conditions in the interior deserts, which made land travel a daunting prospect. The Cahuilla, therefore, had little direct contact with Europeans except for those baptized at missions in San Gabriel, San Luis Rey, and San Diego, and thus integrated into the mission system.

In 1819, several Mission-associated *asistencias* were established. At Rancho San Jacinto Viejo, one of the most remote ranchos associated with Mission San Luis Rey, livestock ranching was the

principal pursuit. Although not officially part of the rancho, the broad grasslands of the San Jacinto Plains were often used to graze the rancho cattle.

Mission San Luis Rey, like other California missions, began baptizing people who lived in the immediate vicinity of the mission; however, as time went on, the Mission Fathers went farther and farther away in search of converts. Mission life was highly regimented and contrasted sharply with the southern California traditional Native American lifeway. As a result, colonization had a dramatic and negative effect on Native American society, including fugitivism.

For the most part, young, active, working adults of southern California Native American communities were forcibly baptized during the 1810s. This left traditional Native American communities economically devastated, because significant portions of the labor force were removed. Fewer active young people remained to hunt and collect food; to take care of the sick, young, and elderly; to defend territorial rights against other native groups or poachers; and to authenticate the culture's stories and traditions (Bean and Vane 2001).

During this period, the local Native American populations became increasingly sedentary, and learned to use the Spanish language. Cahuillas adopted some European economic practices such as cattle ranching, agriculture, trade, and wage labor, as well as cultural traits such as clothing styles. Some Cahuillas worked seasonally for the local Euro-American inhabitants and lived for the remainder of the year in their villages.

2.5 HISTORICAL SETTING

The historical background of the Project region is best presented by adhering to the familiar divisions of local history that have become standardized in the area literature. Beginning with the Spanish Period in 1769, the progression moves rapidly through the poorly documented Mexican Rancho Period into the American Period. Relevant historical information for the Project region is based on Brackett (1939), Gunther (1984), Rawls and Bean (1998), Robinson (1957), and Rolle (1978).

2.5.1 The Spanish Period, 1769–1822

The Historical Period in California formally began in 1769 with the Spanish occupation of Alta California and the founding of the *San Diego de Alcala* mission in San Diego when written records began to be compiled. The years 1769 to 1822 represent the Spanish Period in California.

Exploration of the California coastline by ship during the sixteenth and seventeenth centuries was the basis for the Spanish claim to most of Alta and Baja California at that time. While a number of explorers and their men came ashore periodically, they did not venture a great distance inland. In the eighteenth century, Spain recognized that to strengthen its claim to the region, it would have to establish settlements along the northern coastline of Alta California to preclude encroachment by the Russian and British fur-traders entering the region from the north. Therefore, in the latter half of the eighteenth century, Spain and the Franciscan Order founded a series of presidios, or military camps, and missions along the California coast, beginning with the founding of Mission San Diego de Alcala in 1769. They proceeded to establish a military presidio at Monte Rey (present-day Monterey) in northern California in 1770, their fourth mission at San Gabriel in 1771, and a fifth mission at San Luis Obispo by 1772. However, providing supplies, animals, and colonists to the Spanish missions and presidios by way of ship was difficult, time-consuming, expensive, and dangerous. Thus, an overland route was necessary to initiate a strong colonizing

effort in Alta California. In 1774, Captain Juan Bautista de Anza crossed the San Jacinto plains with a small party of soldiers and servants. Anza's expeditionary force crossed the Cahuilla Valley, skirted the Santa Rosa Mountains, made their way up through Coyote Canyon, descended into the San Jacinto Valley via Bautista Creek, and trekked northwest across the San Jacinto Valley into Moreno Valley, crossing the Santa Ana River near Jurupa.

The Riverside County and San Bernardino County areas lacked a mission proper, but remained connected to the California presidio and mission system through Franciscan outposts known as ranchos and *asistencias*. The Riverside area was considered to be a part of the San Diego District, a military designation associated with the San Diego presidio; most of the territory fell under the authority of the Mission San Luis Rey. Founded in 1798, Mission San Luis Rey was the eighteenth of California's 21 missions. During much of the Spanish Period, European settlement in Riverside County was slow and sporadic. By the end of the Spanish Period, few Europeans had settled permanently within the San Jacinto and Moreno Valleys. At Rancho San Jacinto Viejo, one of the most remote ranchos associated with Mission San Luis Rey, livestock ranching was the principal pursuit. Although not officially part of the Rancho, the broad grasslands of the San Jacinto Valley were used to graze the Rancho's cattle. La Casa de la Loma, the headquarters for Mission San Luis Rey's San Jacinto cattle ranch, was established in 1820 on a small hill in the San Jacinto Valley near the present-day intersection of Warren Road and Ramona Expressway.

2.5.2 Mexican Rancho Period, 1822–1848

In 1821, after 10 years of intermittent rebellion and warfare, Mexico and the territory of California won independence from Spain. On December 15 of that same year, the Mexican *Cortes* (the legislative body of the Mexican government) ended the older regime's strict isolationist policies that were designed to protect the traditional Spanish monopoly on trade, and decreed that California ports (namely San Diego and Monterey) be open to foreign merchants (Dallas 1955:14). Following the Secularization Act of 1833, which called for the immediate privatization of Franciscan lands, the Mexican government secularized all of the California missions. During the two-year period of 1834–1836, this radical process quickly and effectively reduced the missions to parish churches. Although the original secularization schemes called for redistribution of mission lands to those Native Americans who were responsible for the physical construction of the mission empire, the vast mission land and livestock holdings were redistributed by the Mexican government into several hundred land grants to private, non-Native American ranchers (Langum 1987:15–18). These private Mexican citizens subsequently released their neophyte Native American "workers" to fend for themselves. During the resultant Rancho Period (1834–1848), ranchos were predominantly devoted to the cattle industry and large tracts of land were devoted to grazing.

Until the Gold Rush of 1849, livestock and horticulture dominated the economics of California. Through the years, settlement continued to develop across the inland valleys of what would eventually become western Riverside County. With the influx of new settlers, some of the larger ranchos were subsequently subdivided into smaller parcels.

2.5.3 American Period, 1848–Present

With the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, California entered into the American Period and, in 1850, became the 31st state in the Union. During the late 1840s, there began the decline of old California's cattle ranching industry, which for over half a century represented the currency and staple of the rancho system. Between 1848 and 1850 came a large influx of Americans seeking their fortunes; the catalyst for this influx was

James Marshall's 1848 discovery of gold at Sutter's Mill. By the 1850s to 1860s, cattle ranching in the general region had greatly declined, and ranchos changed ownership regularly. In 1852, San Diego organized into a county; in 1853, San Bernardino followed suit. Riverside County would be formed in 1893, carved out of portions of San Bernardino and San Diego counties, with the City of Riverside as the county seat. The San Jacinto Valley, of which Perris Valley is a part, was originally part of San Diego County.

The completion of the transcontinental railroad in 1869 opened California to agricultural settlement and brought the previous era of large-scale ranching to a close. The arrival of the Southern Pacific Railway into nearby Colton resulted in a dramatic influx of new settlers into what is now western Riverside County. The Riverside Colony was founded in 1870, and agricultural lands in the region quickly began to be settled by homesteaders. The Riverside Land and Irrigating Company soon established a series of canal systems, tapping water from the Santa Ana River. With this much-needed water supply, the settlers could focus on irrigation and agriculture. Perhaps one of the most influential early settlers in western Riverside County during this period was Eliza Tibbets who planted the first two navel orange trees, acquired from Brazil, in the Riverside Colony. Mrs. Tibbets' oranges flourished and provided the bud grafts for the Washington Navel Orange, setting the foundation for western Riverside County's highly successful citrus industry.

During the 1880s and 1890s, and similar to the phenomena occurring in the area surrounding the Riverside Colony, irrigation canals were built and the regional citrus industry took root in the greater San Jacinto Valley and surrounding areas. The arrival of reliable water sources coincided with the arrival of a second transcontinental railroad.

In 1882, construction of a competing rail line into southern California, known as the California Southern Railway, was underway, financed by the Atchison, Topeka, and Santa Fe Railway Company. California Southern Railway's chief engineer, Frederick Thomas Perris, oversaw the building of the rail line from National City near the Mexican border in San Diego County, north to Oceanside and across Temecula Canyon, then on to San Bernardino. Fred Perris drove the first passenger train into San Bernardino on September 13, 1883 (Gunther 1984:385). Once the railway had made its way through the Perris Valley in 1882, homesteaders began to stake their claim to land in the vicinity. The town of Pinacate had been established along the rail line on May 12, 1885, about 2 mi south of Perris, but settlers in the northern part of the valley desired a more centrally located town site. Settlers convinced the California Southern Railway officials on a suitable location, donated land for a railroad siding and town, built a depot, dug a well, and named it Perris in honor of Fred Perris. The townsite plat was filed February 16, 1886, and Perris was officially named a station along the Santa Fe line (Gunther 1984:385). The buildings and businesses at Pinacate were moved to Perris, and a hotel and saloon were among the first buildings constructed. The town was incorporated as a city on May 26, 1911 (City of Perris 2015).

A second Santa Fe subsidiary, the Atlantic and Pacific Railroad extended a line west from Albuquerque, then connected San Bernardino and Los Angeles; this connection was opened as of May 1887. The eastern United States was now readily accessible via Los Angeles. The establishment of a second competing railway line from the Midwest to Los Angeles in 1886 triggered the so-called "Southern California land boom" of the late 1880s, which finally brought substantial settlement to the region. In fact, during the land boom of the 1880s, the Santa Fe and Southern Pacific Railroads fed the land grab with their rate wars; on March 10, 1886, it cost only $23 to travel from New York to southern California (Dumke 1970:25). The population of the city of Los Angeles alone grew by more than 700 percent in seven years, reaching 80,000 in 1887.

The development of the California Southern line through Perris and Temecula in 1882, connection with the rest of the Santa Fe system in 1885–1886, and the founding of Perris in 1886, led to a surge of settlement in the region. A branch line was built from Perris through Ethanac, Menifee, Winchester, and Hemet to San Jacinto, whose station was opened in May of 1888. During the construction of the line, a depot was built at Winchester, in Pleasant Valley, and opened in May 1888. The area now had that much sought after rail access attractive to prospective farmers and ranchers. However, the California Southern "main line" to San Diego, running southwest from Perris was washed out by the Santa Margarita River in 1884 and in 1891. This second interruption of service in 1891 was not repaired, so through-service from Perris to San Diego ended that year, and Temecula became the new terminus of the California Southern line. All produce and goods were now funneled into San Bernardino and Riverside. This was a disappointment to interests in the Perris region.

During the mid and late 1880s, a relatively substantial influx of settlers into the San Jacinto and Perris valleys occurred, during the era of the southern California land and emigration boom. Early settlers in the region obtained land either from the public domain of the United States through homesteading or other forms of public land acquisition, or from the land agents of the railroad.

At the time of the arrival of the railroad in the 1880s, settlers focused on grain production. The dry farming of winter wheat and other grains like barley had, for a number of years, been carried out in areas on the coastal side of the Transverse Ranges that received from 12 to 16 inches (in.) or more of rainfall per year. The productivity of this dry farming of grain varied with the observed multi-year cycles of heavier or lighter winter season precipitation. It required relatively large land holdings and use of harvesting equipment. It was not without risk, however, being caught between the threats of drought on the one hand and the reality of declining international wheat prices on the other. Yet during cycles of wet winters, it could be very productive. Up through 1892–1893, as rainfall remained adequate, grain production continued to be the agricultural mainstay in the region. This is reflected in county tax assessor's records and in the occupational information contained in the 1893–1894 Riverside County directory (A.A. Bynon and Sons 1893 [reprint]).

In the early 1890s, against the backdrop of the traditional existence of extensive dry-farming "ranch" holdings in southern California based on stock grazing and grain and hay cultivation, citrus and other orchard production were promoted as heralding a new era of small-scale "family farming" in southern California. The price conditions of specialty markets for these crops were touted as favorable enough to tide the small producer over the shoals of irrigation capitalization and orchard maturation. Yet the prospective "family farmer" had to bring considerable capital to such an enterprise.

Bee wrangling and honey production were also important in coastal and interior southern California in the late nineteenth century, as it was in the Project region. This industry, established with bees brought south from San Francisco in the early 1850s, became important even before the great expansion of orchard production in southern California in the 1880s. As naturalist John Muir noted from his observations in the San Gabriel foothills in 1877, beekeeping was particularly attractive because it required no capital and no land. It was the first rung on the ladder of success in building an agricultural enterprise, providing initial capital. It would later become an important activity for fruit growers, since it provided income during the years when immature trees were still not producing, and it also ensured the pollination of many types of fruit trees. The production of honey was an important economic activity in the region in the early 1890s. Honey and wool were listed as principal products of the general region in 1893 (A.A. Bynon and Sons 1893).

Population rose dramatically as railroads, citriculture, ranching, and readily available land enticed more Americans and Europeans to settle in southern California. By the late 1880s and early 1890s, conflicts and discontent between the cities of Riverside and San Bernardino led to the establishment of a new county. Portions of the Temecula and San Jacinto valleys, then in San Diego County, joined with the residents of Riverside to form a new county seat in May 1893, leading to the formation of Riverside County (Greenwood et al. 1993:34).

During the late 1890s, years of low rainfall brought crisis to agriculture in southern California. Both the orchard crop areas dependent on gravity-flow irrigation and the dry-land farm zones were severely affected. Eight of the 10 years between 1896 and 1905 were seriously deficient in winter rainfall. By 1905, rainfall levels had returned to normal. After this date, new pumping technology and the availability of petroleum distillate internal combustion engines allowed individual farmsteads in southern California to pump water from farm wells in increasingly large volumes. For fruit growing districts in the region, this advancement led to major additional agricultural development during the 1910s and 1920s (Waring 1919). In dry-land farming areas, such new technology was less essential. However, the installation of larger diameter wells clearly reflected efforts to put the new pumping technology to use.

During the years from about 1908 through American entry into World War I in 1917, there was renewed interest in farm settlement and farming in California and elsewhere in the western U.S. This was reflected in a sharp surge in Homestead filings on remaining public lands in rural California at that time. There was an increase in the turnover of property during that time, including the purchase of farms by individuals making a move from the city to the country. Two factors that helped contribute to this kind of move were the increased use of the automobile, which decreased the isolation of rural living, and the brighter financial prospects for farming during the World War I years. The outbreak of war in Europe in 1914 drove international commodity prices sharply upward, providing a bonanza for grain farmers, for example.

The decade of the 1920s offered regional urban growth in southern California that was helpful to many farmers in the region. However, it also brought sustained national declines in the prices of many agricultural commodities due to major increases in agricultural production in the U.S. and elsewhere. Coupled with this were seven years of lower than average rainfall during the 1920s in southern California. The years 1922–1924 were particularly dry, which set off a temporary collapse of hydroelectric power generation. Fruit or alfalfa producers, depending on pumped groundwater, were less affected by these drought conditions than dry-land farm grain producers. In the late 1920s, even before the onset of the Great Depression, farm properties in the region were at least temporarily coming into the hands of banks and other financial institutions, clearly reflected in tax assessor's records from that era. During the worst years of the Depression in the early 1930s, this trend of loss of farm property to creditors was accelerated.

The crisis in agriculture during the Depression was particularly difficult for southern California farmers who had to pay to pump water to irrigate their crops. Those who obtained their water from irrigation districts often lost their land to water lien sales. However, winter rainfall conditions, beginning in 1934–1935, were quite favorable through 1943–1944, and very helpful to those who were involved in the dry-farming of grain. Thus, after 1934, the dry-farmers who had survived the early Depression years were given an opportunity to stabilize their situation.

Turnover in land ownership during the 1930s and the eventual recovery of agricultural prices by the eve of World War II was followed by the disruptions of the exodus of younger people into

military service or leaving to work in urban areas. However, the favorable average rainfall conditions of the years from 1934 through 1944 was followed by a prolonged period of lower than average years of winter rainfall lasting until 1965. The portion of this drought cycle from 1944 through 1951 was particularly severe, with rainfall in Los Angeles, for example, totaling only little more than half of normal in the years 1947–1951. Water from the Colorado River Aqueduct was piped to the region beginning in the early 1940s, and the Eastern Municipal Water District was responsible for delivering that water to the Perris Valley by the early 1950s. Alfalfa, potatoes, watermelons, and sugar beets soon after became the mainstay of farming in the Perris Valley region.

2.5.4 Menifee Valley

As noted previously, the Project is situated within the Menifee Valley. The following brief history of the Menifee Valley is adapted from Smith et al. (2007).

Settlement in the Menifee Valley area began with mining and homesteading in the 1880s. Early in the 1880s, a young prospector from Kentucky by the name of Menifee Wilson discovered and claimed a gold-bearing quartz mine about 8 miles south of Perris which he named the Menifee Quartz Lode (Gunther 1984). The discovery of the gold-bearing ore led to an influx of miners to the area that became known as Menifee or Menifee Valley. Additional claims by other prospectors led to the area being formally designated as the Menifee (Auld) Mining District, which encompasses most of the granite formations on the south side of Menifee Valley and produced commercial quantities of gold from a number of mines (Smith et al. 2007:2.0-36).

The discovery of gold led to increased interest and population movements into the Menifee and Perris valleys. Several farms were established to take advantage of the farming and ranching potential of the area, and a post office and school were constructed because of the increased population resulting from the agricultural development of the valley. It is of interest to note that an actual town site of "Menifee" never existed; the post office and school became the community landmarks. The Menifee Post Office, established on May 18, 1887, with Darius W. Godfrey as the first postmaster, was situated in a small store adjacent to the schoolhouse, all of which were situated near the present-day intersection of Newport and Bradley roads. The post office was discontinued in November of 1896, subsequently re-opened in April of 1900, but was permanently discontinued in July of 1900, and the mail was routed to Perris thereafter (Smith et al. 2007:2.0-36).

The Menifee School District was formed in 1890. William W. Snoddy, an owner of 160 ac of land in the valley, donated an acre and a half of land for a school site on March 31, 1890. The school served the local farming community, and was incorporated into the county school system in April of 1893 (Smith et al. 2007:2.0-36). In an article in the Riverside Daily Press dated March 3, 1893, Menifee was described as:

> …exclusively a grain growing section. There is no village. Up to about three weeks ago there was a store, but that burned and has not been rebuilt. The post office is now being kept in a little shanty. There is a fine schoolhouse near where the store stood. There are few houses except at the old mines. The ranch houses, which are widely scattered, are nearly all fine looking buildings and denote general prosperity in this section [Smith et al. 2007:2.0-37]

Throughout the late 1800s and for most of the 1900s until the more recent boom in housing development and construction of major transportation routes through the area resulted in the loss of farmlands, farming and ranching remained the primary economic focus within the Menifee Valley region (Smith et al. 2007:2.0-38). More recent development of the Menifee area began with Sun City in the early 1960s as a concept of an early retirement community. The Menifee area later grew in the late 1980s and into the early 1990s as a master-planned community. On June 3, 2008, the residents of the communities encompassing the Menifee area voted to incorporate together to form Riverside County's 26th city. The new City of Menifee was officially established on October 1, 2008 (*www.city of menifee.us/85/history*).

3
RESEARCH DESIGN

A research design is presented in this chapter which will serve as a basis for the evaluation of cultural resources identified within the APE. The research is design is intentionally broad in scope and considers an array of research topics germane to the prehistory of interior southern California and western Riverside County.

3.1 PREHISTORIC RESEARCH THEMES

Research in the region has resulted in investigation of the ways that past human populations in the area have adapted to their environment, ascertaining when and how the environment and cultural behavior changed and explaining why particular adaptations occurred. Among the many interrelated elements of human adaptation are chronology, technology, subsistence, land use, and settlement strategies. These aspects of adaptation can be studied archaeologically and, thus, have been the focus of regional studies (Goldberg et al. 2001). These existing research designs will be used to establish the context within which site significance will be evaluated, and assess the potential effects or impacts the Project may have on the cultural resources identified. Major prehistoric themes particularly relevant to an assessment of cultural resources within the Project area include:

- **Chronology** – Does the site contain temporally significant artifacts (e.g., projectile points, ceramics, and beads) or artifacts with chronometric potential (organic material suitable for radiocarbon analysis or obsidian that can provide hydration readings)? When was the site occupied? How do artifacts conform to patterns observed for the temporal components defined in the region?

- **Technology of Tool Manufacture and Use** – Is there evidence to suggest tools were manufactured on site? Do lithic artifacts and technologies reflect expedient manufacture and use or a more curated pattern of technology? What does this tell us about land use and mobility?

- **Settlement Organization and Land Use** – What does the artifact assemblage suggest about the range of activities conducted at the site? Are there artifact types with morphological and stylistic attributes that have specific regional or geographic affinities? Does the assemblage allow for investigations into trade and exchange?

- **Subsistence Behavior** – Are plant or animal remains available at the site to inform on subsistence behavior? Are there indications that certain resource types were preferentially exploited? What does this tell us about the seasonality of site use?

3.2 A CULTUAL LANDSCAPE-BASED APPROACH TO BEDROCK MILLING SITES

Recent developments in landscape theory provide a means for archaeologists working in western Riverside County to define, discuss, and interpret cultural landscapes. Landscape refers broadly to culturally constructed space and the creation of meaningful places. Landscape includes natural-

resource distributions and the relationship of human groups to those resources, but it also comprises how natural resources and landmarks are incorporated into the cultural landscape as meaningful places to the people who lived there. For hunter-gatherer groups this may include burial grounds, rock art sites, a built or modified environment that extends beyond a habitation site, rivers, mountains, or resource-collection areas that are culturally significant, or even habitation or activity sites that bear important cultural meaning.

Cultural landscape approaches have been useful for understanding cultural resources within the context of broader surroundings (Bender 1993; Cosgrove 1984; Fowles 2010; Gamble and Wilken-Robertson 2008; Hirsch and O'Hanlon 1995; Potter 2004; Rossignol and Wandsnider 1992; Tilley 1994; Ucko and Layton 1999). The approach explicitly acknowledges the importance of both the natural environment—its features and its resources—and constructed places of meaning (the built environment). Within this theoretical construct, places are perceived, experienced, contextualized, and given meaning by people and their actions and these actions are both constrained and enabled by the natural and cultural resources composing the landscape. The cultural landscape is therefore created by human activity and structured by the distribution of resources on the land and the cultural perceptions of human relationships to those resources (Anschuetz et al. 2001; Potter 2004).

While sacred places, revered landforms, and residential sites are the most visible components of cultural landscapes, an equally important element is the activity area or "taskscape," which comprises places created and modified through repetitious activities that occur on the landscape (Ingold 1993; Perry and Delaney-Rivera 2011:106) and connected physically to other places through a patchwork of trails and relationally by the social and economic meanings associated with the specific task. Each task derives its meaning from its position within an ensemble of tasks, generally by groups working together (Ingold 1993; Robinson 2010). As such, individual tasks or activities represented at or near sites cannot be considered in isolation from the ensemble, an idea that resonates with local Native American views of the landscape (Applied Earthworks, Inc. 2013).

The taskscape, then is a socially constructed space of human activity, understood as having spatial boundaries and delimitations for the purposes of analysis. One of the most prominent ensembles of tasks that have been documented in western Riverside County relates to subsistence-based procurement and processing activities. Subsistence-based procurement and processing tasks carried out by prehistoric inhabitants over several millennia left an indelible mark on cultural and modern landscapes, and remains an important unit of analysis for archaeological research. Site and non-site locations communicate direct and indirect evidence relating to subsistence-based tasks, which can be extracted from natural resource patches where wild foods were collected, hunting blinds and butchering locations, temporary camps, work camps, or seasonal camps like those associated with the acorn harvest. In areas like western Riverside County where bedrock outcrops are situated near valuable resource patches and permanent water sources, evidence of routine socioeconomic tasks related to subsistence are no more apparent than at bedrock milling sites ranging from isolated bedrock milling features exhibiting a single slick to dense clusters of milling features representing processing stations containing a variety of slicks, basin metates, and sometimes mortars.

In the past, these bedrock milling sites were evaluated in isolation from one another, labeled ubiquitous, redundant, and were well-documented in the archaeological literature. Sites were thus determined not historically significant for the National Register of Historic Places (NRHP) or the CRHR and were destroyed during project construction without further consideration. The problem

is not specific to bedrock milling sites, and was addressed in the *National Register Bulletin: Guidelines for Evaluating and Registering Archaeological Properties*.

> Overlooking the significance of small sites may skew our understanding of past lifeways as these sites not only receive less research attention, but are also destroyed without being recorded thoroughly because they are 'written off' as ineligible for listing in the National Register. Such losses point up the need to continuously reexamine historic contexts and allow new discoveries to challenge our ideas about the past [Little et al. 2000:21].

In the Double Butte area, the prevalence of bedrock milling outcrops suggests that these sites may constitute part of a meaningful taskscape within the larger cultural landscape. Delineation of a cultural landscape is beyond the scope of the current study and would require a cooperative effort between the Native Americans and cultural resource managers to determine the level of research needed to properly identify, record, and evaluate such a landscape for the CRHR. As such, the present study acknowledges the existence and significance of the concept of cultural landscapes and associated taskscapes based on scientific, academic, and tribal knowledge and Native American concerns and recommends that the cultural landscape concept be taken into account in current and future Project planning and decision-making processes.

4
CULTURAL RESOURCE LITERATURE AND RECORDS SEARCH

Prior to the cultural resource fieldwork, Æ conducted a literature and record search of the Project and surrounding area. A records search was undertaken at the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS), housed at the University of California, Riverside. Historic maps research was also conducted to provide information on historical land-use practices in the area. The methods and results of the background studies are detailed below.

4.1 METHODS

4.1.1 EIC Records Search

On May 18, 2016, Æ staff conducted an archaeological literature and records search at the EIC. The objective of this records search was to determine whether any prehistoric or historical cultural resources had been recorded previously within a Study Area encompassing a 1-mile radius of the APE. Sources consulted during the records search at the EIC include:

- National Register of Historic Places (NRHP);
- Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility (ADOE);
- Office of Historic Preservation Directory of Properties in the Historic Property Data File (HPD);
- California Historic Landmarks; and
- California Points of Historical Interest

4.1.2 Historical Map Research

Historical maps consulted during the cultural resource literature and records search include the General Land Office survey plat map for Township 6 South/Range 3 West (1860), Elsinore 30' USGS topographic quadrangle (1901), Murrieta 15' USGS topographic quadrangle (1942), and the Romoland 7.5' USGS topographic quadrangle (1953).

4.2 RESULTS

4.2.1 EIC Records Search

Results of the records search indicate that no less than 56 cultural resource investigations have been conducted within the Study Area between 1975 and 2015 (Table 4-1). One of these studies, which was completed by Smith and Buysse in 2000 (RI-04518) involved 100 percent of the overall APE.

A total of 59 cultural resources have been documented within the Study Area (Table 4-2). The vast majority of these are prehistoric sites that range from isolated bedrock outcrops with a single milling feature to site complexes with middens containing a variety of artifact types, numerous bedrock milling features, and pictographs; these sites tend to concentrate along the lower slopes of Double Buttes east and north of the Project. A number of historic-period archaeological resources have also been recorded in the Project vicinity including homestead sites, water-related

features, and refuse deposits. Finally, two built-environment resources, a single-family residence and the San Jacinto Valley Railway, have been identified within the records search area. No NRHP- or CRHR-eligible cultural resources, California Historic Landmarks, or California Points of Historic Interest have been recorded or listed within the Study Area or the APE.

One previously recorded cultural resource (CA-RIV-3429/P-33-003429) has been identified within the boundary of the APE. As detailed in the original site record, the site is located on the north slope of a large rock outcrop northwest of the intersection of Case and Briggs roads; the outcrop is directly west of a much larger boulder-covered hill (Smith and Buysse 2000). CA-RIV-3429 was described as measuring 14 x 4 m in area and containing a total of three grinding slicks which were located on two bedrock outcrops. Each of the slicks exhibited an overall oval shape that ranged in length from 24 to 35 centimeters (cm) and showed signs of heavy weathering and exfoliation. No prehistoric artifacts were observed on the ground surface in the vicinity of the bedrock milling features. A series of five shovel test pits (STPs) and a test unit were excavated around the two bedrock outcrops to assess the potential for subsurface archaeological deposits. The STPs and test unit were excavated to a depth of 30 cm at which point very compact subsoil was encountered. No prehistoric artifacts were recovered as a result of the test excavations. Based on the findings of the subsurface testing, Smith and Buysse (2000:6.3-2) concluded that the site is not considered significant according to CRHR criteria or the County of Riverside guidelines.

Table 4-1
Previous Cultural Studies in the Study Area

Author(s)	Date	EIC Report #	Report Title	Results
Wells, H.	1975	RI-00186	Archaeological Impact Report: Eastern Municipal Water District, Riverside County, California: PL 984 Water Systems Addition	One resource identified
Desautels, Roger J.	1979	RI-00698	Archaeological/Paleontological Survey Report on the Proposed Lake Perris Power Plant and Bypass Project Located in the Perris Reservoir of the County of Riverside, W.O. 4-4485	No resources identified
Bowles, L.L.	1980	RI-00794	An Archaeological Assessment of Parcel 16334	No resources identified
Swenson, James D.	1980	RI-00934	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel 13769, Homeland Area of Riverside County, California	No resources identified
Brewer, Christina	1980	RI-00959	An Archaeological Survey of Tentative Tract 12976	Seven resources identified
Giansanti, Renee	1978	RI-00996	Environmental Impact Evaluation: Archaeological Assessment of Tentative Parcel 11901, Skinner Reservoir Area of Riverside County, California	No resources identified
Wlodarski, Robert J. and John M. Foster	1980	RI-01237	Archaeological Survey Report for the Proposed Improvement of Haun Road Between Garboni Road and Holland Road, Riverside County, California.	Two resources identified
Bowles, Larry L., and Jean Salpas	1978	RI-01568	An Archaeological Assessment of Parcel 13408	No resources identified

Table 4-1 (continued)

Author(s)	Date	EIC Report #	Report Title	Results
McCarthy, Daniel	1983	RI-01660	Archaeological Assessment of the Proposed Homeland-Green Acres Pollution Project No. C-06-2886, Eastern Municipal Water District, Riverside County, California	No resources identified
Rector, Carol. H.	1984	RI-01825	Cultural Resources Inventory for the 1984, and Par of the 1985, California Metropolitan Project Area Public Lands Sales Program (Riverside County Portion Only)	Three resources identified
Kielusiak, Carol M.	1988	RI-02327	A Cultural Resources Assessment of Vesting Tract 23398, Riverside County, California	No resources identified
Brewer, Christina	1988	RI-02328	An Archaeological Assessment of APN No. 333.080.020, Case No. PUP 633, County of Riverside, California	No resources identified
Drover, Christopher	1989	RI-02342	Cultural Resources Review: An Addendum to the Menifee Ranch Specific Plan, Near Hemet, California	No resources identified
Jenkins, Richard C.	1986	RI-02347	An Archaeological Assessment of the Bedford Canyon Vegetation Management Project, Riverside County, California	No resources identified
Drover, Christopher	1989	RI-02475	A Cultural Resource Inventory of the Menifee North Project, Near Hemet, California	Four resources identified
Drover, Christopher	1990	RI-02476	A Cultural Resource Inventory an Addendum to the Menifee North Project, Near Hemet, California	No resources identified
Drover, Christopher.	1989	RI-02618	A Cultural Resource Inventory Tentative Tract 24936 Near Romoland, California	No resources identified
Lancy, Barbara, Douglas McIntosh, and Judy McKeenhan	1990	RI-02995	A Cultural Resource Assessment of a 160 Acre Parcel Near Winchester, California	One resource identified
White, Robert	1990	RI-03045	An Archaeological Assessment of a 5.30 Acre Parcel as Shown on PM 9584 (Parcel #2) Adjacent to El Paraiso Drive, Romoland, Riverside County, California	No resources identified
Keller, Jean	1992	RI-03574	An Archaeological Assessment of Tentative Parcel May 27095, 11.17 Acres of Land Near Temecula, Riverside County, California	No resources identified
Landis, Daniel	1993	RI-03739	A Cultural Resources Survey for the Gas Pipeline No. 6900 Project, Riverside County, California	Four resources identified
Love, Bruce and Bai "Tom" Tang	1997	RI-04052	Cultural Resources Report California State University, San Bernardino Coachella Valley Campus, City of Palm Desert, Riverside County, California	No resources identified
Love, Bruce and Bai "Tom" Tang	1997	RI-04059	Identification and Evaluation of Historic Properties Cathedral City Senior Housing Project No. 122-EE020-WAH-NP Cathedral City, Riverside County, California	No resources identified

Table 4-1 (continued)

Author(s)	Date	EIC Report #	Report Title	Results
Dice, Michael and Leslie Nay Irish	2001	RI-04425	A Phase I Archaeological Resource Survey of Tract #28801: A 146.33-Acre Residential Project Located Near Briggs and Matthews Roads, County of Riverside County, California	Three resources identified
Smith, Brian R., and Johanna L. Buysse*	2000	RI-04518	An Archaeological/Historical Study for the Menifee Ranch Project, Perris Valley, County of Riverside – Specific Plan Number 301, Amendment #1	Six resources investigated
Robinson, Mark C., and Dina Coleman	2003	RI-05089	Historic Property Survey Report	No resource identified
Drover, Christopher	2003	RI-05627	A Cultural Resources Inventory: An Archaeological Assessment of Romoland 64 Project, Romoland, Riverside County, CA	Two resources identified
Tang, Bai, Michael Hogan, Mariam Dahdul, and Daniel Ballester	2003	RI-06018	Historical/Archaeological Resources Survey Report, Menifee Valley North Drainage Facilities Project, In and Near the Communities of Romoland and Homeland, Riverside County, CA	No resources identified
CRM Tech	2006	RI-06637	Historical/Archaeological Resources Survey Report: The Pradera Heights Project, Assessor's Parcel No. 461-150-006, Near the Community of Winchester, Riverside County, California	No resources identified
Austerman, Virginia	2006	RI-06745	Cultural Resources Assessment: Citrus Estates, City of Perris, Riverside County, California	One resource identified
Marken, Mitch W., Marcy H. Rockman, Kyle H. Garcia, and J.D. Stewart	2006	RI-06795	Phase I Cultural and Paleontological Assessment of the Motte Menifee North Project, County of Riverside, California	No resources identified
Lerch, Michael K., and Marlesa A. Gray	2006	RI-06888	Cultural Resources Assessment of the Valley-Ivyglen Transmission Line Project, Riverside County, California	36 resources identified
Jordan, Stacy C., and Joshua D. Patterson	2006	RI-06913	Archaeological Survey Report for the Southern California Edison Company Re-Locate U/G Facilities, Service Center Relocation, OH Feed to Office Trailer & Rule 15 Line Exit Riverside County, California.	No resources identified
Crull, Scott	2007	RI-07508	Final Report for the Mitigation Monitoring of the Jensenal/Alvarado ranch Winery Stabilization Project, County of Riverside, California	No resources identified
Cooley, Theodore G.	2008	RI-07528	Archaeological Survey Report for Southern California Edison Company Livermore 12 kV DSP Project, Riverside County, California (WO#6577-5345, AI#6-5350)	Two resources identified
Hogan, M., and T. Tang	2008	RI-07622	Phase I Archaeological Assessment: Green Heritage, LLC, Menifee Valley Area, Riverside County, California	No resources identified

Table 4-1 (continued)

Author(s)	Date	EIC Report #	Report Title	Results
Tetra Tech, Inc.	2008	RI-07629	An Archaeological and Paleontological Resources Survey of Approximately 12 Acres (APN 327-320-009) for the Briggs Road Project in the Unincorporated Community of Romoland, Riverside County, California 92585	No resources identified
Rosenberg, Seth A.	2005	RI-07636	A Cultural Resources Survey for the Malone Development Project, Riverside County, California	No resources identified
Pierson, Larry J.	2006	RI-07876	Results of the Mitigation Monitoring and Reporting Program for the Heritage Lake Phase II Project, Perris Valley, County of Riverside. Specific Plan Number 301, Amendment #1.	One resource identified
Bodmer, Clarence, Daniel Ballester, and Laura H. Shaker	2008	RI-07927	Phase I Archaeological Assessment: Tentative Parcel Map No. 34998, Heritage Square Project, Menifee Valley Area, Riverside County, California	No resources identified
Clowery-Moreno, Sara, and Brian Smith	2008	RI-07966	A Phase I Archaeological Assessment for the Retaining Walls Project, Riverside County, California APNs 331-210-019, -020, and -021; CUP 03560	No resources identified
Bonner, Wayne H., and Sarah A. Williams	2008	RI-08072	Letter Report: Cultural Resource Records Search and Site Visit Results for Royal Street Communications, California LLC Candidate LA3130A (Menifee Ranch SS), 30125 Highway 74, Homeland, Riverside County, California	No resources identified
Schmidt, James, and June A. Schmidt	2009	RI-08182	Archaeological Survey Report, Southern California Edison, Intelsat POP-22401 Juniper Flats Road, Nuevo, Riverside County. Intelsat TAP to Splice #1 on Valley-Bunker Fiber Optic Cable (10062). IO #304865	13 resources identified
Eckhardt, William T., and Stacie Wilson	2009	RI-08374	Final Cultural Resources Inventory of the Proposed SCE Devers to Valley Substation Project, Riverside County, California.	34 resources identified
Dolittle, Christopher J., and Susan Hogan-Conrad	2007	RI-08472	Archaeological Survey Report for Southern California Edison's San Jaquinto Service Center Extension Project, Riverside County, California	No resources identified
Dolittle, Christopher J., and Susan Hogan-Conrad	2007	RI-08473	Archaeological Survey Report for Southern California Edison's Valley-Sun 115kV Transmission Reconductor Project, Riverside County, California	No resources identified
Schmidt, James J.	2010	RI-08519	Letter Report: Mira Loma-Cleargen-Delgen 66kV Transmission Line Deteriorated Pole Replacement Project (WO 4305-4114; 80028383), Corona, Riverside County, California	No resources identified
Keller, Jean A.	2010	RI-08646	A Phase I Cultural Resources Assessment of Specific Plan Amendment 2010-090	No resources identified
Bonner, Wayne H., and Sarah A. Williams	2010	RI-08648	Cultural Resource Record Search and Site Visit Results for T-Mobile USA Candidate IE2491-A	No resources identified

Table 4-1 (continued)

Author(s)	Date	EIC Report #	Report Title	Results
Switalski, Hubert, and Sonia Hutmacher	2011	RI-08781	Archaeological Survey Report for the Southern California Edison Company's Replacement of Six Deteriorated Pole Structures Along the Bogey, Castlerock, Crossing, Jet Ski, and Peddler 12KV Distribution Circuits (6087-4800, 0-4873), Blythe and Parker, Riverside and San Bernardino Counties, California	No resources identified
Tang, Bai "Tom", Michael Hogan, Jay K. Sander, Daniel Ballester, and Laura H. Shaker	2012	RI-08888	Vista and Ellis Zones Water System Improvement Project	No resources identified
Wilson, Stacie and Jill Gibson	2013	RI-08955	Confidential, Final, Cultural Resources Survey Report For The Proposed Southern California Edison Valley South Subtransmission Project (VSSP), Riverside County, California	31 resources identified
Justuc, Scott C., Matthew M. DeCarlo, and William T. Eckhardt	2010	RI-08980	Final: Cultural Resources Inventory Of The Proposed DPV2 Construction Yards Riverside County California	12 resources identified
White, Robert S., and Laura S. White	2013	RI-08998	A Phase I Cultural Resources Assessment of 67.69 Acres as Shown on Tentative Tract Map No. 36567 Located Immediately North of the Elsinore Sanitary Landfill, City of Lake Elsinore, Riverside County	No resources identified
Tang, Bai "Tom"	2014	RI-09002	Re: Update to Historical/ Archaeological Resources Survey Report Menifee Valley North Drainage Facilities Project, Cities of Menifee and Perris; Unincorporated Homeland and Romoland Areas, Riverside County, California, CRM TECH Contract No. 1104/2771	Three resources identified
Tang, Bai "Tom", and Michael Hogan	2015	RI-09276	Phase I Cultural Resources Assessment: The Village at Menifee, City of Menifee, Riverside County, California	No resources identified

* Study within the APE

Table 4-2
Previously Documented Cultural Resources in the Study Area

Primary	Trinomial	Description
33-000536	CA-RIV-536	Prehistoric site containing two bedrock milling features with two grinding slicks
33-001175	CA-RIV-1175/H	Multicomponent site containing four prehistoric bedrock milling slicks, an associated lithic scatter, and a small historical artifact concentration
33-002607	CA-RIV-2607	Prehistoric bedrock milling site containing one milling slick on a granite boulder
33-002608	CA-RIV-2608	Prehistoric bedrock milling site containing 41 milling slicks and 4 mortars
33-002786	CA-RIV-2786	Prehistoric bedrock milling site containing five grinding slicks, two cairns, and one possible rock alignment

Table 4-2 (continued)

Primary	Trinomial	Description
33-002787	CA-RIV-2787	Prehistoric bedrock milling site containing five grinding slicks concentrated in three loci
33-002788	CA-RIV-2788	Prehistoric bedrock milling site containing one grinding slick
33-003429*	CA-RIV-3429	Prehistoric bedrock milling site containing three grinding slicks
33-003714	CA-RIV-3714	Prehistoric bedrock milling site containing one grinding slick
33-004711	CA-RIV-4711	Prehistoric bedrock milling site containing 14 grinding slicks, two pictographs, and a sparse lithic scatter
33-004712	CA-RIV-4712H	Historical archaeological site containing nine water-related features including springs, reservoirs, irrigation ditches, roads, a path, a partial foundation, cistern, and two modern water features
33-009722		Historical homestead site containing the remains of a house structure, four additional foundations, and an artifact scatter
33-009723	CA-RIV-6482H	Historical refuse scatter
33-009724		Historical site consisting of a concrete cattle trough and six ancillary concrete foundations
33-009725	CA-RIV-7883H	Historical artifact scatter with seven trash-filled pits
33-009726		Historical site containing stockyard/cattle staging area containing a large concrete pad, a loading/unloading structure, and a large pit
33-010994	CA-RIV-6643H	Historical refuse scatter
33-011466	CA-RIV-6844/H	Multicomponent site containing prehistoric milling features and a historical refuse scatter
33-011468	CA-RIV-6846/H	Multicomponent site containing 10 prehistoric bedrock milling slicks and a historical refuse scatter
33-011469	CA-RIV-6847	Prehistoric site containing four bedrock grinding slicks on two boulders
33-011470	CA-RIV-6848/H	Multicomponent site containing 12 prehistoric bedrock milling slicks and one grinding basin with an associated artifact scatter; historical remains consist of a refuse scatter
33-011471	CA-RIV-6849/H	Multicomponent site containing 53 prehistoric bedrock milling features composed of 87 slicks, 27 rubs, 6 basin, 2 ovals, 2 mortars, and 1 collar with an associated midden; historical remains consist of a refuse scatter
33-012535	CA-RIV-7129	Prehistoric site consisting of six prehistoric bedrock milling features with associated lithic debitage
33-012536	CA-RIV-7130	Large prehistoric site containing flaked and ground stone artifacts.
33-012729		Prehistoric isolate consisting of two mano fragments and a unifacial flake tool
33-012733		Prehistoric isolate consisting of a nearly complete granitic mano
33-013226	CA-RIV-7367	Prehistoric bedrock milling station consisting of a single milling slick
33-013227	CA-RIV-7368	Prehistoric bedrock milling station consisting of a single milling slick
33-013760	CA-RIV-7529	Prehistoric bedrock milling station consisting of a six slicks on a large granite boulder
33-013761	CA-RIV-7530	Prehistoric bedrock milling station consisting of a two milling slicks on two boulders
33-013762	CA-RIV-7531	Prehistoric bedrock milling station consisting of a three milling slicks on two boulders
33-013763	CA-RIV-7532	Prehistoric bedrock milling station consisting of one mortar
33-013764	CA-RIV-7533	Prehistoric bedrock milling station consisting of a four milling slicks on three boulders
33-013765	CA-RIV-7534	Prehistoric bedrock milling station consisting of a two milling slicks on two boulders
33-013766	CA-RIV-7535	Prehistoric bedrock milling station consisting of eight boulders each with one grinding slick
33-013768	CA-RIV-7537	Prehistoric bedrock milling station consisting of a seven milling slicks on two boulders
33-013769	CA-RIV-7538	Prehistoric bedrock milling station consisting of a two milling slicks on two boulders

Table 4-2 (continued)

Primary	Trinomial	Description
33-013770	CA-RIV-7539	Prehistoric bedrock milling station consisting of a three milling slicks on three boulders
33-013771	CA-RIV-7540	Prehistoric bedrock milling station consisting of a two milling slicks on two boulders
33-015381		Historical single-family residence
33-015743	CA-RIV-8196H	Historical San Jacinto Valley Railway
33-020447	CA-RIV-10348	Historical site consisting of a segment of a paved road
33-020504	CA-RIV-10405	Historical site consisting of two segments of a paved road
33-020506	CA-RIV-10407	Historical site consisting of a segment of a paved road
33-020644	CA-RIV-10551	Historical site consisting of two segments of a paved road
33-020645	CA-RIV-10552	Historical site consisting of two segments of a paved road
33-021003	CA-RIV-10879	Prehistoric site consisting of granitic bedrock milling outcrops
33-021004	CA-RIV-10880	Prehistoric site consisting of two granitic bedrock milling outcrop each with a single grinding slick
33-021005	CA-RIV-10881	Prehistoric site consisting of a granitic bedrock milling outcrop with a single grinding slick
33-024087		Isolated prehistoric obsidian flake
33-024197	CA-RIV-11897	Prehistoric site consisting of a bedrock milling outcrop with a two grinding slicks
33-024198	CA-RIV-11898	Prehistoric site consisting of a granitic bedrock milling outcrop with a single grinding slick
33-024199	CA-RIV-11899	Multicomponent site containing of a granitic bedrock milling outcrop with a single grinding slick and a historical 0.22 shell casing
33-024200	CA-RIV-11900	Multicomponent site containing of a granitic bedrock milling outcrop with a single grinding slick and a historical 0.22 shell casing
33-024201	CA-RIV-11901	Multicomponent site containing of a granitic bedrock milling outcrop with a single grinding slick and a historical shotgun shell headstamp
33-024202	CA-RIV-11902	Multicomponent site containing of a granitic bedrock milling outcrop with a single grinding slick and a historical shotgun shell headstamp
33-024203		Isolated prehistoric basin metate fragment
33-024267	CA-RIV-11920	Prehistoric site consisting of two granitic bedrock milling outcrop each with a single grinding slick
33-024268	CA-RIV-11921	Prehistoric site consisting of a granitic bedrock milling outcrop with a single grinding slick

* Identified resource in APE

4.2.2 Historical Maps Research

A review of historical maps indicates that the only feature of historical interest depicted within the APE is an east-west running road situated along the Section 13 and 24 boundary line on the Murrieta 15' topographic quadrangle map. Although the Elsinore 30' USGS topographic quadrangle depicts the San Jacinto & Pleasant Valley Company Canal within the Project vicinity, it appears that the canal does not extend into the APE.

5
NATIVE AMERICAN COORDINATION

Æ contacted the NAHC on May 12, 2016, and requested a review of the SLF to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity, etc.) are present within or adjacent to the Project. The NAHC responded on May 17, 2016, stating that the records search failed to indicate the presence of Native American cultural resources within the immediate Project; the NAHC suggested that 35 Native American individuals and/or organizations be contacted to elicit information regarding cultural resource issues related to the proposed Project (Appendix A). Upon review of the Native American contact list, Æ narrowed the list to 18 individuals and/or organizations, removing redundancies and groups that do not have a tribal affiliation/association with the immediate Project. Letters requesting information on Native American cultural resources were sent to these 18 Native American tribes and individuals on June 18, 2016. Individuals contacted as part of this effort included:

- Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians;
- Jim McPherson, Tribal Historic Preservation Officer for the Rincon Band of Mission Indians;
- Carrie Garcia, Cultural Resources Manager for the Soboba Band of Luiseño Indians;
- Amanda Vance, Chairperson of the Augustine Band of Cahuilla Indians;
- John Perada, Environmental Director for the Los Coyotes Band of Cahuilla and Cupeño Indians;
- John Gomez, Environmental Coordinator for the Ramona Band of Cahuilla Mission Indians;
- Denisa Torres, Cultural Resource Manager for the Morongo Band of Mission Indians;
- Karen Kupcha of the Augustine Band of Cahuilla Indians;
- Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians;
- Cultural Department of the San Luis Rey Band of Mission Indians;
- Terry Hughes, Tribal Administrator of the Santa Rosa Band of Mission Indians;
- Thomas Rodriguez, Chairperson for the La Jolla Band of Luiseño Indians;
- Patricia Garcia-Plotkin, Tribal Historic Preservation Officer for the Agua Caliente Band of Cahuilla Indians;

- Charles Devers, Cultural Committee for the Pauma Band of Luiseño Indians;
- Luther Salgado, Chairperson of the Cahuilla Band of Indians;
- Anna Hoover, Cultural Analyst for the Pechanga Band of Luiseño Indians;
- Jospeh Ontiveros, Cultural Resources Department, Soboba Band of Luiseño Indians; and
- Michael Mirelez, Cultural Resource Coordinator for the Torres-Martinez Desert Cahuilla Indians.

Two responses were received as a result of this initial coordination. The Agua Caliente Band of Cahuilla Indians (ACBCI) emailed a letter dated June 24, 2016 stating that the Project is not location within the boundaries of the ACBCI Reservation but it is within the Tribe's Traditional Use Area (TUA). A records check of the ACBCI registry identified previous surveys in the area that were positive for the presence of cultural resources. The Tribe requested: a copy of the records search with associated survey reports and site records; copies of any cultural resource documentation generated in connection with the project; and the presence of an approved Native American Cultural Resource Monitor during any ground-disturbing activities. Terry Hughes, Tribal Administrator for the Santa Rosa Band of Cahuilla Indians, responded in an email on June 23, 2016 noting that the area is not in their jurisdiction and requested we contact the Soboba Band of Mission Indians.

Æ conducted follow-up emails and telephone calls with the remaining Native American groups and individuals on July 11, 2016. Five additional responses were received as a result of this follow-up communication. Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians (Cabazon), stated that the Project was outside of the Tribe's current reservation boundaries but within an area that may be considered a TUA. Although the Cabazon had no specific archival information on the Project indicating that it may be a sacred/religious site or other site of Native American traditional cultural value, Ms. Stapp suggested that there be an archaeologist on site during all ground-disturbing activities to monitor for the discovery of unknown cultural resources. Joseph Ontiveros, Cultural Resource Director for the Soboba Band of Luiseño Indians (Soboba), stated that he is aware of cultural resources within and adjacent to the Project. In Soboba's view, these resources comprise a larger village complex and possible traditional cultural landscape. Vincent Whipple, Manager for the Cultural Resources Department, Rincon Band of Mission Indians, noted that the Project is not within Rincon's historic boundaries; the Rincon had no additional information regarding the Project and deferred to the Pechanga Band of Luiseño Indians or the Soboba Band of Luiseño Indians who are located closer to the Project. Shasta Gaughen, Tribal Historic Preservation Office for the Pala Band of Mission Indians, stated that the Project is beyond the boundaries of the territory that the tribe considers its TUA. Therefore, the Pala Band had no objection to the project activities as currently planned and they deferred to the wishes of the Tribes in closer proximity to the Project. Finally, John Perada, Environmental Director for the Los Coyotes Band of Cahuilla and Cupeño Indians, had no specific comments regarding the Project. A summary of responses is included in Appendix A.

6
CULTURAL RESOURCE FIELDWORK

6.1 PHASE 1 SURVEY

6.1.1 Methods

A Phase I cultural resources survey of the APE was conducted from June 1 to 10, 2016. Dennis McDougall acted as Field Supervisor with Patrick Moloney serving as a Field Technician. On May 24, 2018, Patrick Moloney surveyed approximately 2.5 ac in the southern portion of the APE that was recently added to the Project. The vast majority of the Project consists of flat agricultural fields that have been allowed to go fallow; the area had been recently mowed prior to the cultural resources survey (Figure 6-1). However, a small granitic knoll and a much larger, steep granitic inselberg to the immediate east of the knoll are located within the extreme southern portion of the Project (Figure 6-2). Additionally, two shallow, sandy washes flow across the northern portion of the Project from northeast to southwest.

The intensive pedestrian survey of that portion of the APE encompassing the fallow agricultural fields was conducted by the survey crew walking parallel transects spaced at 12 to 15 m (39 to 50 ft) intervals. However, due to the steepness of the terrain on the large granitic inselberg shown in Figure 6-1, the survey of this hill was conducted in parallel contour intervals, with the two surveyors separated by approximately 5 m (16 ft) in elevation. Finally, the linear portion of the APE in the northwest corner was not formally surveyed as it is within Menifee Road and completely covered with pavement. Throughout the APE, all areas likely to contain or exhibit archaeologically or historically sensitive cultural resources were inspected carefully to ensure that visible, potentially significant cultural resources were discovered and documented. Additionally, surveyors investigated any unusual landforms, contours, soil changes, features (e.g., bedrock outcrops, drainages), and other potential cultural site markers. Ground visibility throughout the APE ranged from good to excellent (60–100%). A Daily Work Record was completed each day that documented survey personnel, hours worked, ground surface visibility, and identified cultural resources.

During the field inventory, systematic efforts were be made to characterize and define the areal extent of each archaeological resource. For purposes of this Project, one or more archaeological features or three or more artifacts greater than 45 years of age within a 30 m (100 ft) radius were deemed to constitute a site. Features or clusters of artifacts more than 30 m away from the nearest known archaeological resource were generally considered a separate site area. Less than three prehistoric or historical artifacts within a 30 m radius, but outside of a known site, were considered an isolated find.

When encountered, any newly identified archaeological resources were recorded on State of California Department of Parks and Recreation Primary Record Forms (DPR 523 [1995]). Systematic efforts were made to characterize and define the boundaries of each archaeological site, as well as any discrete activity loci and/or cultural features. Site locations were plotted on the Romoland CA 1:24,000 scale USGS 7.5' quadrangle using a Trimble GeoXH hand-held GPS unit using real-time satellite based augmentation system (SBAS) corrections achieving sub-meter accuracy. The GPS unit was also used to determine and document the precise locations and UTM coordinates of any activity loci, cultural features, and temporally or functionally diagnostic

Figure 6-1 Overview of Project from top of knoll in southeast corner of Project, looking north.

Figure 6-2 View of knoll in southeast corner of Project, looking southeast.

artifacts identified within site areas. Site maps of each archaeological resource were drawn to scale, indicating the location of any activity loci, features, and temporally or functionally diagnostic artifacts. Digital site overview photographs were also taken; in addition, digital overview photographs were also taken of any activity loci, cultural features, and temporally or functionally diagnostic artifacts. No artifacts were collected during survey.

Æ personnel attempted to re-identify any cultural resources recorded previously within the APE. If the cultural resource was recorded 10 or more years ago, or if the current site record was deemed inadequate or incomplete, the site record for the resource was updated appropriately using the methods described above.

6.1.2 Results

The intensive Phase I pedestrian survey of the APE resulted in the re-identification of the bedrock milling site (CA-RIV-3429). Additional bedrock milling features were identified at the site during the revisit that had not been previously documented. The field survey also recorded a newly identified sparse scatter of flaked stone artifacts (CA-RIV-12345/P-33-024902) in the APE. Detailed descriptions of these two resources are provided below with locations shown on Figure 6-3; DPR site records are provided in Appendix B. No historic-period cultural resources, including remnants of the road or canal depicted on the historical map (see Section 4.2.2), were identified during the Phase I survey.

CA-RIV-3429 (P-33-003429). CA-RIV-3429 is located in the southernmost portion of the APE on the north slope of a rocky granitic knoll immediately north of Case Road (Figure 6-4); the knoll is directly west of a much larger hill containing abundant exposures and outcrops of granitic bedrock that forms the extreme southern end of the APE.

CA-RIV-3429 was originally recorded in 2000 as a bedrock milling site measuring 14 x 4 m (46 x 13 ft [E-W x N-S]); the site was described as containing a total of three grinding slicks on two bedrock outcrop features (Feature A and B) located along the northern edge of a small knoll (Smith and Buysse 2000:6.3-1). During the current survey of the APE, Features A and B were re-identified at their recorded location; these features were renamed Outcrops [OC] 3 and 2, respectively. Further examination of OC 3 resulted in the discovery of a third previously undocumented grinding slick on the outcrop. In addition, four previously unrecorded bedrock milling features (OC 1 and OCs 4–6) containing five additional grinding slicks were also found along the eastern, southeastern, southern, and southwestern edges of the knoll (Figure 6-5). As a result, CA-RIV-3429 now measures approximately 45 x 30 m (148 x 98 ft [E-W x N-S]) in area and contain six outcrops and/or exposures of granitic bedrock with a total of nine milling slicks.

OC 1 is located along the northeastern edge of the rocky knoll and measures 2.8 x 1.1 x 0.4 m (L x W x H); the outcrop contains one moderately ground, minimally exfoliated milling slick on a slightly inclined surface. OC 2 measures 3.8 x 2.4 x 0.55 m and is located along the northern edge of the knoll; this outcrop contains one highly ground, minimally exfoliated milling slick in a slight basin near the eastern edge of the outcrop. OC 3 is located along the northeastern edge of the knoll, measures 4.0 x 2.5 x 0.3 m and contains three moderately to highly ground, minimally exfoliated milling slicks along the upper crest of the boulder. OC 4 is a large bedrock exposure located at the southwest corner of the rocky knoll, and contains two moderately ground, minimally exfoliated milling slicks near the upper northeast edge of the exposure.

Figure 6-3 Cultural resources within the APE (CONFIDENTIAL - Not for Public Distribution)

Figure 6-4 Knoll on which CA-RIV-3429 is located, facing northeast.

OC 5 is also a large bedrock exposure located near the top southern portion of the knoll; the outcrop contains one moderately ground, minimally exfoliated milling slick within a granodiorite inclusion within the granitic bedrock.

Located along the southeastern edge of the knoll, OC 6 measures 1.7 x 1.1 x 0.95 m and contains one moderately ground, minimally exfoliated milling slick on the relatively flat upper surface of the boulder. No artifacts or other cultural materials were identified on the ground surface with the site area.

Evidence of natural weathering and exfoliation was observed on the bedrock outcrops and milling features that compose CA-RIV-3429. Although the site area does not appear to have been subject to a high degree of disturbance, developments in the immediate area have impacted the general setting of CA-RIV-3429. The areas north of the site contain agricultural fields with a railroad, roadway, and large residential development located to the south.

CA-RIV-12345 (P-33-024902). CA-RIV-12345 is located within a plowed field in the southwestern portion of the APE approximately 130 m north of Case Road (see Figure 6-3). Measuring 27 x 21 m (89 x 69 ft; [N-S x E-W]), CA-RIV-12345 consists of a very sparse scatter of flaked stone materials (see Figure 6-5); eight artifacts (one biface fragment [Artifact 1] and seven pieces of lithic debitage) were identified within the site area (Figure 6-6).

Figure 6-5 Map of CA-RIV-3429 showing locations of XPI SHPs (CONFIDENTIAL - Not for Public Distribution)

Figure 6-6 Overview of CA-RIV-12345, facing east.

Artifact 1 consists of the proximal end of an early-stage biface of crystalline quartz measuring 1.6 x 2.0 x 0.6 cm. Debitage observed includes two interior flakes of crystalline quartz, two pieces of crystalline quartz shatter, two flakes of very high-quality vein quartz (1 primary flake and 1 interior flake), and one small interior flake of dark gray-black fine-grained quartzite. All lithic materials present are locally available within Bedford Canyon Formation several miles to the southeast within the area of Diamond and Domenigoni valleys; however, other as yet unknown sources of these materials may be present closer to the site area, particularly within the Double Butte hills approximately one mile to the east.

CA-RIV-12345 displays a high level of disturbance. The site in located within an active agricultural field. As such, it is likely that plowing/disking activities have likely moved artifacts from their original provenience, and may have damaged the artifacts to some extent.

6.2 EXTENDED PHASE I TESTING

6.2.1 Methods

An Extended Phase I (XPI) testing program was conducted the two prehistoric sites identified within the APE to determine if intact subsurface cultural deposits were present within the site areas. The XPI efforts entailed the manual excavation of shovel probes (SHPs) measuring 30 cm in diameter. SHPs were excavated in 20 cm levels until bedrock was encountered, or until a minimum of four 20-cm levels sterile of cultural materials (80 cm below ground surface [bgs]) were excavated. All sediments were screened through 1/8-in. hardware mesh.

6.2.2 Results

CA-RIV-3429 (P-33-003429). During the previous evaluation of CA-RIV-3429, Smith and Buysse (2000) excavated a total of five shovel test pits (STP 1–5) and a test excavation unit (TEU 1) in the vicinity of OC 2 and 3 (Figure 6-7). The STPs and test unit were excavated to a depth of 30 cm at which point very compact subsoil was encountered. No prehistoric artifacts were recovered as a result of these test excavations.

For the XPI study, an additional five shovel probes (SHP 101–105) were excavated along the western, southern, and eastern boundary of the site where the newly identified bedrock milling features were located (see Figure 6-5). The SHPs were placed within areas that appeared relatively undisturbed adjacent to the outcrops with milling features. Each SHP was excavated until bedrock was encountered; bedrock depths ranged from 29 cm (11.4 in.) to 100 cm (39.4 in.) bgs. The sediments overlying bedrock consisted of a loose, fine sandy-silt alluvium (Munsell Brown [10YR 5/3; dry]) containing 3–5 percent extremely small, angular granitic gravels. No cultural materials were recovered within SHPs 101–105.

CA-RIV-12345 (P-33-024902). A total of five SHPs (SHPs 1–5) were excavated within the known extent of the lithic scatter that composed CA-RIV-12345. One SHP was positioned in the center of the site with four additional SHPs placed at 8 to 10 m (26–33 ft) intervals in all cardinal directions radiating out from the central SHP (see Figure 6-5). The SHPs 1–5 were excavated to a depth of 80 cm (31.5 in.) bgs (four 20 cm levels). The sediments encountered consist of extremely hard and compacted, fine sandy-silt alluvium (Munsell Brown [10YR 5/3; dry]) containing 3–5 percent extremely small, angular gravels of granite, quartz, and schist. No cultural materials were recovered within SHPs 1–5.

Figure 6-7 Map of CA-RIV-12345 showing locations of XPI SHPs (CONFIDENTIAL - Not for Public Distribution)

7
SIGNIFICANCE EVALUATION

Æ evaluated each identified archaeological resource within the APE for significance and eligibility for listing on the NRHP and the CRHR. Similar to the NRHP, the CRHR recognizes properties of local, state, or national importance with evaluative criteria (see Section 1.2). To qualify for listing in the NRHP, 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 basic steps in the evaluation process include:

- Classifying the resource as an object, building, structure, site, area, place, record, or manuscript;
- Determining the theme, period, and context within which the resource is significant;
- Determining which NRHP/CRHR significance criteria are applicable; and
- Determining whether the resource retains integrity.

A point worth emphasizing is that NRHP/CRHR eligibility is being assessed, but not determined, in this document. The professional evaluations offered here are subject to final concurrence by the federal, state, and local regulatory agencies. The lead federal and CEQA agency make determinations regarding significance and eligibility for listing in the NRHP/CRHR. Accordingly, the present task is to render a professional assessment rather than an administrative determination.

7.1 CONTEXTS FOR EVALUATION

The archaeological and historical contexts and research domains presented in Chapters 2 and 3, respectively, establish the framework within which decisions about significance are based (NPS 2002:9). 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 (2002:9), 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.

7.2 INTEGRITY

All properties change over time. Therefore, it is not necessary for a property to retain all of its historic physical features or characteristics in order to be eligible for listing on the NRHP/CRHR. 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. 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 [NPS 2002:44-45].

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 conventionally 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 generally 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. In order to properly assess integrity, however, significance (why, where, and when a property is important) must first be fully established. Only after significance is established can the issue of integrity be addressed. To be eligible for listing on the NRHP/CRHR, a resource must possess both significance and integrity.

7.3 LINKAGE

Under NRHP Criterion D and 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 Chapter 3. For example, charcoal or other organic remains suitable for radiocarbon dating, source-identified obsidian, projectile points, or other stylistic artifacts would permit the study of cultural chronology. Flaked stone tools and debitage may provide information on lithic technology, while faunal and floral remains provide information on

food procurement, diet, seasonality, and the biotic environment. 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 D/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 is not considered of great importance; thus, sites having only limited settlement or technological data are not generally deemed significant or important under Criterion D/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.

Thus, archaeological sites in the APE generally were judged to meet the NRHP/CRHR eligibility criteria under Criterion D/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.

7.4 EVALUATION OF RESOUCE SIGNIFICANCE

7.4.1 CA-RIV-3429 (P-33-003429)

CA-RIV-3429 was previously evaluated by Smith and Buysse (2000), who noted that the site represents one of several resource processing sites in the area. Based on the information derived from the testing program, Smith and Buysse (2000:6.3-3) argued that CA-RIV-3429 exhibits no artifacts, no segregated special use areas beyond the bedrock milling function, and no unique

elements. They concluded that the research potential of the site is limited and CA-RIV-3429 should not be considered significant according to CRHR criteria. The passage of time, changing perceptions of significance, or incomplete prior evaluations, may require the reevaluation of previously evaluated resources. The additional features that were identified at CA-RIV-3429 by Æ warrant a reevaluation of CA-RIV-3429 to determine if the resource now meets the criteria for listing on the NRHP or CRHR.

The site represents a prehistoric special-use area related to subsistence-based processing activities, most likely the processing of native seeds, plant fibers, and small mammals. The flat surfaces of the grinding slicks would have been most conducive to seed grinding rather than acorn processing, for which mortar cups are often utilized (Basgall and True 1985). The relatively high degree of polish associated with some of the grinding slicks indicates that the features may be the result of repeated processing episodes. No artifacts were found in association with the milling features during the revisit and XPI study, which is consistent with the earlier findings by Smith and Buysse (2000).

As an individual resource, the site does not meet any of the four criteria for listing on the NRHP or CRHR. CA-RIV-3429 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. It is not associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. It also does not embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of artifacts and chronologically indicative material indicates that the site is not likely to yield any additional information that can address research issues related to chronology, technology, and settlement organization and land use. Furthermore, the shallowness of the grinding features makes it unlikely that specialized protein and starch residue analyses will produce positive results with which to obtain data on subsistence behavior (see Schneider and Bruce 2009; John Eddy, personnel communication, 2016). Thus, CA-RIV-3429 lacks potential to provide important new information about local or regional prehistory. For these reasons, the site is not considered significant under NRHP/CRHR Criterion D/4.

As previously discussed in Section 3.2, complexes of bedrock milling sites may constitute meaningful taskscapes within a larger cultural landscape. In the Double Butte area, the prevalence of bedrock milling outcrops suggests that these sites may constitute a possible taskscape. Delineating the boundary of this possible taskscape and associated cultural landscape would require a cooperative effort between the Native Americans and cultural resource managers to determine the level of research needed to properly identify, record, and evaluate such a landscape for the NRHP/CRHR. Although this work is beyond the scope of the current Project, some preliminary observations may be offered regarding the role that CA-RIV-3429 may have played in the possible cultural landscape that characterized the area prehistorically.

Bedrock milling features were likely one of an unknown number of tasks that made up the subsistence-based procurement and processing task ensemble. Additional tasks may have included the actual gathering of small seeds, grasses, and possibly small game for processing on the bedrock features and ground stone metates using hand stones, lithic reduction activities to produce tools used in food gathering and processing, and the packaging of processed and unprocessed materials for transport back to residential sites.

Site distribution data suggest that subsistence-based procurement and processing tasks involving bedrock milling features may have been centered on the Double Butte area. An examination of known bedrock milling sites within a one-mile radius of the APE indicates that the highest densities of outcrop features are found along the northwestern slopes of Double Butte. CA-RIV-3429 is located almost a mile to the southwest on an isolated granitic knoll that extends out into the adjacent valley; a far lower density of bedrock milling sites is found in this area. These findings suggest that while subsistence-based procurement and processing activities involving bedrock milling features were undertaken in the Project vicinity, the intensity of such activities appears to far less compared to the site complex at Double Butte.

The extant data suggest that if a cultural landscape was present in the Double Butte area that focused on prehistoric subsistence-based procurement and processing tasks, then CA-RIV-3429 is not likely to be considered a contributing element to this landscape for two primary reasons. First, the location of the site on an isolated knoll suggests that the processing activities that occurred at this site were not an integral part of the larger subsistence regime that was centered on Double Butte. As such, the site is not a key contributor to the significance of the possible cultural landscape. Second, agricultural and residential development of the immediate area surrounding the site has impacted the integrity of setting, feeling, and association of the resource. Therefore, CA-RIV-3429 does not retain a sufficient degree of integrity to enable it to convey its significance as it relates to subsistence-based procurement and processing activities within a larger cultural landscape.

7.4.2 CA-RIV-12345 (P-33-024902)

CA-RIV-12345 appears to have functioned as a temporary lithic reduction site. The flaked stone artifacts that compose the site suggest knapping activities focused on early-stage biface reduction. Lithic raw materials (i.e., crystalline quartz, vein quartz, and fine-grained quartzite) were locally available in the region within the Bedford Canyon Formation. The absence of substantial archaeological deposits at CA-RIV-12345 indicates limited use of the site for an isolated or small number of production episodes.

This site is not associated with events that have made a significant contribution to the broad patterns of our history and therefore is not recommended as eligible to the NRHP/CRHR under Criterion A/1. It is not associated with the lives of persons significant in our past and therefore is not recommended as eligible for listing on the CRHR under Criterion D/2. It also does not embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. CA-RIV-12345 consists of a small flaked stone assemblage containing one biface fragment and seven pieces of lithic debitage. The artifacts are not temporally diagnostic, and no organic material suitable for radiocarbon dating or other chronologically indicative material was found. The lack of chronological control, low quantity of artifacts, and lack of assemblage diversity mean that temporal or cultural components cannot be defined at the site. Thus, the site lacks potential to provide important new information about local or regional prehistory. For these reasons, the site is not considered significant under NRHP/CRHR Criterion D/4.

8
MANAGEMENT RECOMMENDATIONS

The cultural resource assessment for the proposed Brookfield Minor Ranch Project identified two prehistoric archaeological resources (CA-RIV-3429 and CA-RIV-12345) within the APE. A significance evaluation of these resources indicates that neither met the criteria for listing as an individual resource on the NRHP or the CRHR. Furthermore, the findings of the current study indicate that CA-RIV-3429 is not likely to be considered a contributing element to a subsistence-based procurement and processing cultural landscape that may have been present prehistorically at Double Buttes. As no significant cultural resources will be affected or impacted by the proposed Project, no further treatment or management of CA-RIV-3429 and CA-RIV-12345 is recommended at this time.

In the event that potentially significant archaeological materials are encountered during construction, all work must be halted in the vicinity of the discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource and complete Section 106 consultation in accordance with Part 800.13, post review discoveries. Any such discoveries, and subsequent evaluation and treatment, should be documented in a cultural resource report, which should be submitted to the EIC for archival purposes. Additionally, Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of human remains in a location other than a dedicated cemetery.

Finally, if the APE is expanded to include areas not covered by this survey or other recent cultural resource investigations, additional studies may be required.

9
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APPENDIX A

NATIVE AMERICAN COMMUNICATION

LIST OF NATIVE AMERICAN CONTACTS AND RECORD OF RESPONSES

Name	Date & Time of Calls	Responses
Patricia Garcia Tribal Historic Preservation Officer Agua Caliente Band of Cahuilla Indians	June 23, 2016 June 24, 2016	Scoping letter sent via email. Received letter via email stating that the Project is not located within the Agua Caliente Band of Cahuilla Indians (ACBCI) Reservation. However it is within the Tribe's Traditional use Area (TUA). A record check of the ACBCI registry identified previous surveys in the area that were positive for the presence of cultural resources. The ACBCI THPO requested the following:1) A copy of the record search with associated survey reports and site records from the information center; 2) copies of any cultural resource documentation generated in connection with the project; and 3) the presence of an approved Native American Cultural Resource Monitor during any ground disturbing activities.
Judy Stapp Director of Cultural Affairs Cabazon Band of Mission Indians	June 23, 2016 July 11, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. Received letter from Ms. Stapp via email. Ms. Stapp stated that the Project is located outside of Tribe's current reservation boundaries, but within an area that may be considered a traditional use area. The Tribe has no specific archival information indicating that the Project area may be a sacred/religious site or other site of Native American traditional cultural value. However, the Tribe recommends there be an archaeologist on-site during all ground disturbing activities to monitor for unanticipated discoveries.
Luther Salgado Chairperson Cahuilla Band of Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
John Perada Environmental Director Los Coyotes Band of Cahuilla and Cupeno Indians	June 23, 2016 July 11, 2016	Scoping letter sent via US Postal Service. Telephoned Mr. Perada during the follow-up effort. He stated that the tribe had no comment regarding the Project.

Name	Date & Time of Calls	Responses
John Gomez Environmental Coordinator Ramona Band of Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
Denisa Torres Cultural Resource Manager Morongo Band of Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
Shasta Gaughen Historic Preservation Office Pala Band of Mission Indians	June 23, 2016 July 11, 2016 July 12, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. Received letter via email stating that the Project is not within the boundaries of the recognized Pala Indian Reservation. The Project is also beyond the boundaries of the territory the tribe considers its Traditional Use Area. Therefore, the Tribe has no objection to the continuation of Project activities as currently planned and defers to the wishes of Tribes in close proximity to the Project area.
Cultural Department San Luis Rey Band of Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
Anna Hoover Cultural Analyst Pechanga Band of Luiseño Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
Karen Kupcha Augustine Band of Cahuilla Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via US Postal Service. Telephoned tribal office during follow-up effort. No one answered the phone and no voicemail was available.
Amanda Vance Chairperson Augustine Band of Cahuilla Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via US Postal Service. Telephoned tribal office during follow-up effort. No one answered the phone and no voicemail was available.
Jim McPherson Tribal Historic Preservation Officer Rincon Band of Mission Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.

Name	Date & Time of Calls	Responses
Carrie Garcia Cultural Resource Manager Soboba Band of Luiseno Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.
Terry Hughes Tribal Administrator Santa Rosa Band of Mission Indians	June 23, 2016 July 23, 2016	Scoping letter sent via email. Responded via email stating that the area is not within their jurisdiction but recommended contacting the Soboba Band of Luiseño Indians.
Thomas Rodriguez Chairperson La Jolla Band of Luiseno Indians	June 23, 2016 July 11, 2016	Scoping letter sent via US Postal Service. Telephoned tribal office and was directed to James Trujillo. Left voice mail for Mr. Trujillo. No response received.
Charles Devers Cultural Committee Pauma Band of Luiseno Indians	June 23, 2016 July 11, 2016	Scoping letter sent via US Postal Service. Telephoned and left message for Mr. Devers. No response received.
Joseph Ontiveros Cultural Resource Department Soboba Band of Luiseño Indians	June 23, 2016 July 11, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received. Received email from Mr. Ontiveros who stated that the Soboba were extremely concerned about the Project. Their internal database indicates that sites are located within the Project boundary and the adjacent areas. He noted that in Soboba's view, these resources comprise a large village complex and possible traditional cultural landscape.
Michael Mirelez Cultural Resource Coordinator Torres-Martinez Desert Cahuilla Indians	June 23, 2016 July 11, 2016	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
915 Capitol Mall, RM 364
Sacramento, CA 95814
(916) 653-4082
(916) 657-5390 – Fax
nahc@pacbell.net

Information Below is Required for a Sacred Lands File Search

Date: May 12, 2016

Project: Webb Associates – Brookfield Minor Ranch Development

County: Riverside

USGS Quadrangle Name: Romoland

Township 5S Range 3W Section(s) 13 and 24

Company/Firm/Agency: Applied EarthWorks, Inc.

Contact Person: Tiffany Clark

Street Address: 133 N. San Gabriel Blvd, Suite 201

City: Pasadena Zip: 91107

Phone: (626) 578-0119

Fax: (626)204-5590

Email: tclark@appliedearthworks.com

Project Description: The project proposes the development of a 590-acre area located north of Case Road and west of Briggs Road in the City of Menifee, Riverside County.

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

May 17, 2016

Tiffany Clark
Applied EarthWorks, Inc.

Sent by E-mail: tclark@appliedearthworks.com
Number of Pages: 6

RE: Proposed Webb Associates – Brookfield Minor Ranch Development, City of Menifee, Romoland USGS Quadrangle, Riverside County, California

Dear Ms. Clark:

Attached is a contact list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

Our records indicate that the lead agency for this project has not requested a Native American Consultation List for the purposes of formal consultation. The list for consultation is different than the contacts list provided for cultural resource assessments. Please note that the intent of the referenced codes below is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> **Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.

- Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.
   - All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

The results of these searches and surveys should be included in the "Tribal Cultural Resources" subsection of the Cultural Resources section of the environmental document submitted for review.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Contact List
Riverside County
May 17, 2016

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203
(760) 342-2593

(760) 347-7880 Fax

Los Coyotes Band of Mission Indians
Shane Chapparosa, Chairman
P.O. Box 189 Cahuilla
Warner Springs , CA 92086
Chapparosa@msn.com
(760) 782-0711

(760) 782-0712 Fax

Pala Band of Mission Indians
Shasta Gaughen, PhD, THPO
PMB 50, 35008 Pala Temecula Rd. Luiseno
Pala , CA 92059 Cupeno
sgaughen@palatribe.com
(760) 891-3515

(760) 742-3189 Fax

Pauma Band of Luiseno Indians - Pauma & Yuima
Temet Aguilar, Chairperson
P.O. Box 369, Ext. 303 Luiseno
Pauma Valley , CA 92061
(760) 742-1289

(760) 742-3422 Fax

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477 Luiseno
Temecula , CA 92593
pmacarro@pechanga-nsn.gov
(951) 770-8100

(951) 506-9491 Fax

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105

(951) 763-4325 Fax

Rincon Band of Mission Indians
Jim McPherson, Tribal Historic Pres. Officer
1 West Tribal Road Luiseno
Valley Center , CA 92082
vwhipple@rincontribe.org
(760) 749-1051

(760) 749-5144

Soboba Band of Luiseno Indians
Carrie Garcia, Cultural Resources Manager
P.O. Box 487 Luiseno
San Jacinto , CA 92581 Cahuilla
carrieg@soboba-nsn.gov
(951) 654-2765

(951) 654-4198 Fax

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
P.O. Box 1160 Cahuilla
Thermal , CA 92274
tmchair@torresmartinez.org
(760) 397-0300

(760) 397-8146 Fax

Santa Rosa Band of Mission Indians
Steven Estrada, Chairman
P.O. Box 391820 Cahuilla
Anza , CA 92539
(951) 659-2700

(951) 659-2228 Fax

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Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.3.1 Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Webb Associates - Brookfield Minor Ranch Development Project, City of Menifee, Romoland USGS Quadrangle, Riverside County, California.

Native American Contact List
Riverside County
May 17, 2016

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 398-4722
(760) 369-7161Fax

Los Coyotes Band of Cahuilla and Cupeno Indians
Janice Elzendnga, Tribal Administrator
P.O. Box 189 Cahuilla
Warner Springs , CA 92086
(760) 782-0711

(760) 782-2701 Fax

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
dtorres@morongo-nsn.gov
(951) 849-8807
(951) 572-6004 Fax
(951) 572-6004 Fax

Los Coyotes Band of Cahuilla and Cupeno Indians
John, Perada, Environmental Director
P.O. Box 189 Cahuilla
Warner Springs , CA 92086
(760) 782-0712

(760) 782-2730 Fax

Pauma Band of Luiseno Indians - Pauma & Yuima
Bennae Calac
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
bennaecalac@aol.com
(760) 617-2872

(760) 742-3422 Fax

Ramona Band of Cahuilla Indians
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(951) 763-4105

(951) 763-4325 Fax

Rincon Band of Mission Indians
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Valley Center , CA 92082
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(760) 749-5144

Ramona Band of Mission Indians
John Gomez, Environmental Coordinator
P.O. Box 391670 Cahuilla
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(951) 763-4105

(951) 763-4325 Fax

Cabazon Band of Mission Indians
Judy Stapp, Director of Cultural Affairs
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203
jstapp@cabazonindians-nsn.gov
(760) 342-2593

(760) 347-7880 Fax

San Luis Rey Band of Mission Indians
Tribal Council
1889 Sunset Drive Luiseno
Vista , CA 92081
cjmojado@slrmissionindians.org
(760) 724-8505

(760) 724-2172 Fax

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Native American Contact List
Riverside County
May 17, 2016

San Luis Rey Band of Mission Indians
Cultural Department
1889 Sunset Drive — Luiseno
Vista , CA 92081 — Cupeno
cjmojado@slrmissionindians.org
(760) 724-8505

(760) 724-2172 Fax

Santa Rosa Band of Mission Indians
Terry Hughes, Tribal Administrator
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Anza , CA 92539
thughes@santarosacahuilla-nsn.gov
(951) 659-2700

(951) 659-2228 Fax

Kupa Cultural Center (Pala Band)
Shasta Gaughen, Assistant Director
PMB 50, 35008 Pala Temecula Rd. — Luiseno
Pala , CA 92059
sgaughen@palatribe.com
(760) 891-3515

(760) 742-4543 Fax

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive — Cahuilla
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(760) 699-6800

(760) 699-6919 Fax

Morongo Band of Mission Indians
Robert Martin, Chairperson
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Banning , CA 92220 — Serrano
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(951) 755-5200
(951) 922-8146 Fax

Pechanga Band of Mission Indians
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striplett@pechanga-nsn.gov
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(951) 695-1778 Fax

La Jolla Band of Luiseno Indians
Thomas Rodriguez, Chairperson
22000 Highway 76 — Luiseno
Pauma Valley , CA 92061
(760) 742-3771

(760) 742-3779 Fax

Agua Caliente Band of Cahuilla Indians THPO
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Palm Springs , CA 92264
ACBCI-THPO@aguacaliente.net
(760) 699-6907
(760) 567-3761 Cell
(760) 699-6924 Fax

Augustine Band of Cahuilla Mission Indians
Karen Kupcha
P.O. Box 849 — Cahuilla
Coachella , CA 92236
(760) 398-4722

Pauma Band of Luiseno Indians - Pauma & Yuima
Charles Devers, Cultural Committee
P.O. Box 369, Ext. 317 — Luiseno
Pauma Valley , CA 92061
(760) 742-1289

(760) 742-3422 Fax

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Native American Contact List
Riverside County
May 17, 2016

Cahuilla Band of Indians
Luther Salgado, Chairperson
P.O. Box 391760 Cahuilla
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Chairman@cahuilla.net
(951) 763-5549
(951) 763-2808

Pechanga Cultural Resources Department
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ahoover@pechanga-nsn.gov
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(951) 694-0446 Fax

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581 Cahuilla
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137
(951) 654-4198 Fax

Pala Band of Mission Indians
Robert H. Smith, Chairperson
12196 Pala Mission Road Luiseno
Pala , CA 92059 Cupeno
rsmith@palatribe.com
(760) 891-3500

(760) 742-3189 Fax

Torres-Martinez Desert Cahuilla Indians
Michael Mirelez, Cultural Resource Coordinator
P.O. Box 1160 Cahuilla
Thermal , CA 92274
mmirelez@tmdci.org
(760) 399-0022, Ext. 1213

(760) 397-8146 Fax

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Webb Associates - Brookfield Minor Ranch Development Project, City of Menifee, Romoland USGS Quadrangle, Riverside County, California.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020

June 23, 2016

Carrie Garcia
Cultural Resource Manager
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

Re: Cultural Resource Investigation for the Brookfield Minor Ranch Project, City of Menifee, Riverside County, California

Dear Ms. Garcia:

Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study of the Brookfield Minor Ranch Project (Project) in the City of Menifee, Riverside County, California. The property owner proposes the development of approximately 590 acres of land located north of Case Road and west of Briggs Road in the City of Menifee. As indicated on the attached map, the Project is located on the Romoland, CA 7.5' USGS map within Sections 13 and 24, Township 5 South, Range 3 West, San Bernardino Baseline and Meridian (SBBM). The proposed Project requires compliance with the California Environmental Quality Act (CEQA). The City of Menifee is acting as the lead CEQA agency.

A cultural resource literature and records search conducted at the Eastern Information Center (EIC) housed at the University of California, Riverside, indicates that at least 56 cultural resource studies have been conducted within a one-mile radius of the Project area; one of these studies involved the Project area specifically. The records search also indicated that 58 cultural resources have been identified within a one-mile radius of the Project area. One of these resources, a prehistoric bedrock milling site consisting of three grinding slicks on two bedrock outcrops (CA-RIV-3429/P-33-003429), was identified within the current Project boundary. Site records indicate that no prehistoric artifacts were observed on the ground surface at the time the site was originally recorded. To assess the potential for subsurface archaeological deposits, the original recorders excavated five shovel test pits and a test unit around the two bedrock outcrops; no prehistoric artifacts were recovered as a result of the test excavations.

Between June 1 and 10, 2016, Æ performed an intensive-level archaeological survey of the Project area. Close attention was paid to soils, vegetation, and natural and human-modified landforms; naturally occurring boulders were inspected for any indication of prehistoric or historic human modification. During the survey, the previously documented site was revisited. An examination of the granite outcrops and exposures forming the knoll on which CA-RIV-3429 is located revealed additional bedrock milling features that had not been previously reported. As a result of this work, the boundary of the site was expanded to include six outcrops and/or exposures of granitic bedrock that contain a total of nine milling slick features. An extended Phase I study was conducted by Æ at CA-RIV-3429 on June 20, 2016. The study involved the excavation of five shovel test pits in the area around the newly identified features. Each test pit was excavated until bedrock was encountered; no artifacts were recovered from any of the test pits.

The Phase I pedestrian survey also resulted in the initial identification and documentation of a very sparse scatter of flaked stone artifacts that is temporarily identified as Æ-3484-1. The scatter measures 27 x 21 m (89 x 69 ft; [N-S x E-W]) in size consists of eight artifacts, including one biface fragment and seven pieces of lithic debitage. An extended Phase I study was conducted by Æ at Æ-3484-1 on June 21, 2016. The study involved the excavation of five shovel test pits within the known extent of the site area. Each test pit was

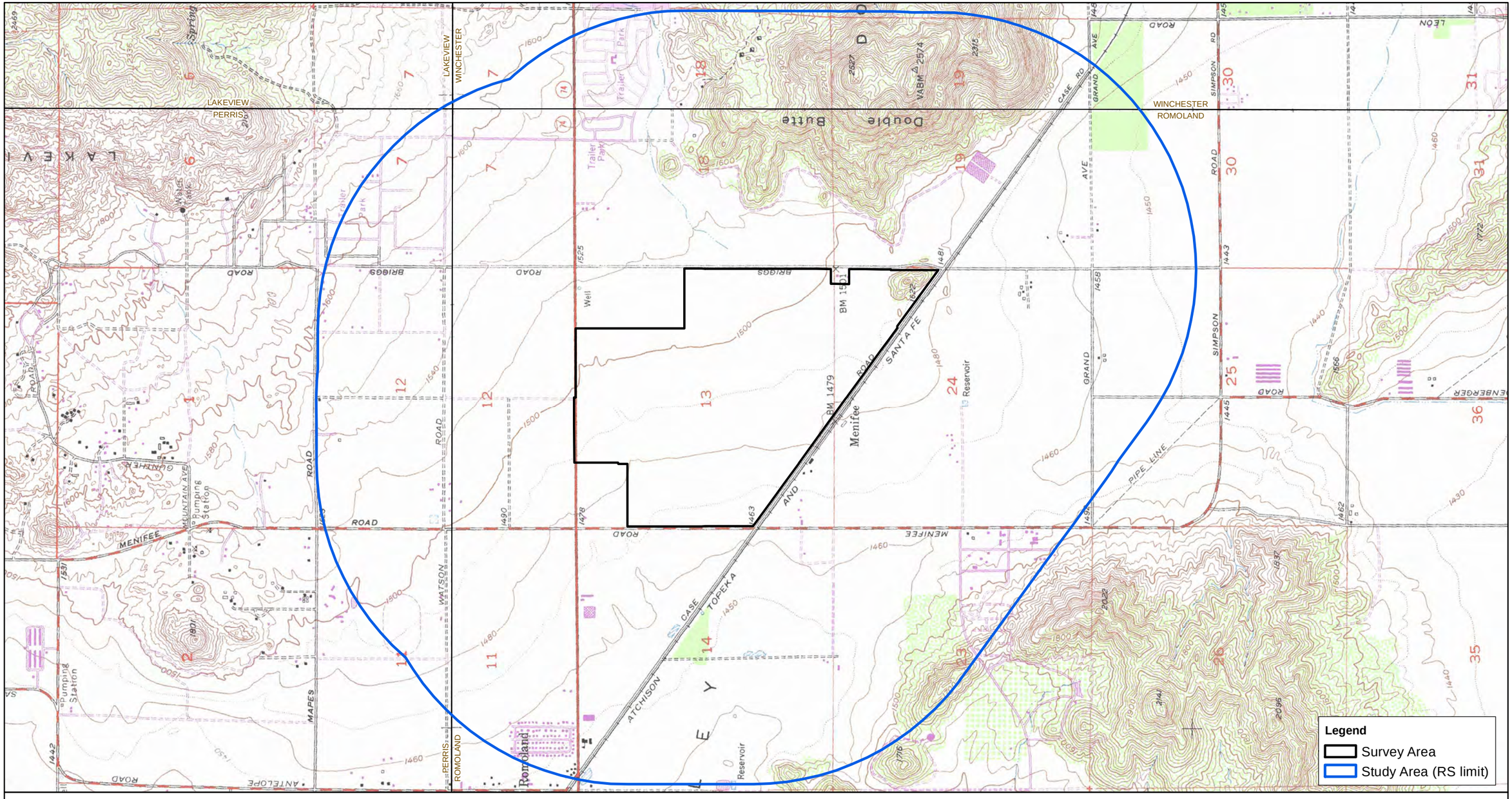
excavated to a depth of 80 centimeters below the ground surface; no artifacts were recovered from any of the test pits.

As part of the cultural resource assessment of the Project area, Æ requested a search of the Native American Heritage Commission's (NAHC's) *Sacred Lands File*. The NAHC responded on May 17, 2016 stating that the *Sacred Lands File* search was completed with negative results. However, should your records show that sensitive Native American cultural resources exist within or near the Project area, please call me at (626) 578-0119 or e-mail me at tclark@appliedearthworks.com. If I do not hear from you within the next two weeks, I will contact you with a follow-up telephone call.

Your comments are very important to us, and to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Tiffany Clark
Senior Archaeologist
Applied EarthWorks, Inc.



SCALE 1:24,000

1 0.5 0 1 Miles

1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 Feet

1 0.5 0 1 Kilometers

574.4 Acres
Township 5S/Range 3W, Section 13 and 24
Lakeview, Perris, Romoland, and Winchester, CA 7.5' USGS sQuadrangle

Records search map for the *Webb - Brookfield Miners Ranch Project - AE3484.*

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-057-2016-013

June 24, 2016

[VIA EMAIL TO:tclark@appliedearthworks.com]
Applied Earthworks
Ms. Tiffany Clark
3550 E. Florida Ave. Suite H
Hemet, CA 92544

Re: Brookfield Minor Ranch

Dear Ms. Tiffany Clark,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Brookfield Minor Ranch project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area (TUA). A records check of the ACBCI registry identified previous surveys in the area that were positive for the presence of cultural resources. For this reason, the ACBCI THPO requests the folllowing:

*A copy of the records search with associated survey reports and site records from the information center.

*Copies of any cultural resource documentation (report and site records) generated in connection with this project.

*The presence of an approved Native American Cultural Resource Monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Office.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6907. You may also email me at acbci-thpo@aguacaliente.net.

Cordially,

Patricia Garcia-Plotkin

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

Pattie Garcia
Director
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

July 11, 2016

Tiffany Clark
Senior Archaeologist
Applied EarthWorks, Inc.
3550 E. Florida Avenue, Suite H
Hemet, CA 92544-4937

Re.: Cultural Resource Investigation for the Brookfield Minor Ranch Project,
City of Menifee, Riverside County, California

Dear Ms. George,

Thank you for contacting the Cabazon Band of Mission Indians concerning cultural resource information relative to the above referenced project.

The project is located outside of the Tribe's current reservation boundaries but within an area that may be considered a traditional use area. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value within the project area. The Cabazon Band suggests, however, there be an archaeologist on site during all ground disturbing activities to monitor for the discovery of unknown cultural resources.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Best regards,

Judy Stapp

Judy Stapp
Director of Cultural Affairs

PALA TRIBAL HISTORIC PRESERVATION OFFICE

PMB 50, 35008 Pala Temecula Road
Pala, CA 92059
760-891-3510 Office | 760-742-3189 Fax

PALA THPO

July 12, 2016

Tiffany Clark
Applied Earth Works
3550 E. Florida Ave, Suite H
Hemet, CA 92544

Re: Brookfield Minor Ranch Project

Dear Mrs. Clark,

The Pala Band of Mission Indians Tribal Historic Preservation Office has received your notification of the project referenced above. This letter constitutes our response on behalf of Robert Smith, Tribal Chairman.

We have consulted our maps and determined that the project as described is not within the boundaries of the recognized Pala Indian Reservation. The project is also beyond the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Therefore, we have no objection to the continuation of project activities as currently planned and we defer to the wishes of Tribes in closer proximity to the project area.

We appreciate involvement with your initiative and look forward to working with you on future efforts. If you have questions or need additional information, please do not hesitate to contact me by telephone at 760-891-3515 or by e-mail at sgaughen@palatribe.com.

Sincerely,

Shasta C. Gaughen, PhD
Tribal Historic Preservation Officer
Pala Band of Mission Indians

ATTENTION: THE PALA TRIBAL HISTORIC PRESERVATION OFFICE IS RESPONSIBLE FOR ALL REQUESTS FOR CONSULTATION. PLEASE ADDRESS CORRESPONDENCE TO **SHASTA C. GAUGHEN** AT THE ABOVE ADDRESS. IT IS NOT NECESSARY TO ALSO SEND NOTICES TO PALA TRIBAL CHAIRMAN ROBERT SMITH.

RINCON BAND OF LUISEÑO INDIANS

Cultural Resources Department

1 W. Tribal Road · Valley Center, California 92082 ·
(760) 297-2635 Fax:(760) 749-2639

June 24, 2016

Tiffany Clark
Applied Earthworks, Inc.
3550 E. Florida Avenue, Suite H
Hemet, CA 92544

Re: Brookfield Minor Ranch Project

Dear Ms. Clark:

This letter is written on behalf of Rincon Band of Luiseño Indians. We have received your notification regarding the Brookfield Minor Ranch Project and we thank you for the consultation notification. The location you have identified is within the Territory of the Luiseño people.

Embedded in the Luiseño Territory are Rincon's history, culture and identity. The project is within the Luiseño Aboriginal Territory of the Luiseño people however, it is not within Rincon's Historic Boundaries. We do not have any additional information regarding this project but, we defer this project to the Pechanga Band of Luiseño Indians or Soboba Band of Luiseño Indians who are located closer to your project area.

Thank you for the opportunity to protect and preserve our cultural assets.

Sincerely,

Vincent Whipple
Manager
Rincon Cultural Resources Department

From: Terrance Hughes
To: Tiffany Clark
Subject: RE: Native American Information Request for the Brookfield Minor Ranch Project
Date: Thursday, June 23, 2016 1:06:43 PM

Sorry Tiffany, For this last e-mail. While this area is not in our jurisdiction, we would hope you would contact Soboba. Thank you.

Terrance L. Hughes –Tribal Administrator
Santa Rosa Band of Cahuilla Indians
P.O. Box 391820
Anza, CA. 92539
Office: (951) 659-2700
Cell: (951) 551-5666

From: Tiffany Clark [mailto:tclark@appliedearthworks.com]
Sent: Thursday, June 23, 2016 1:03 PM
To: Terrance Hughes
Subject: Native American Information Request for the Brookfield Minor Ranch Project

Please find attached a letter requesting information on Native American cultural resources that may be present in the Brookfield Minor Ranch Project located in the City of Menifee, Riverside County. Please contact me if you have any questions regarding this request.

Sincerely,

Tiffany Clark

Tiffany Clark **| Applied EarthWorks, Inc.**
Senior Archaeologist/Project Manager

133 N. San Gabriel Blvd., Ste. 201
Pasadena, CA 91107-3414
626.578.0119 ext. 102 office
http://www.appliedearthworks.com

From:	Joseph Ontiveros
To:	Tiffany Clark
Cc:	Jessica Valdez
Subject:	Re: Native American Information Request for the Brookfield Minor Ranch Project
Date:	Monday, July 11, 2016 1:24:15 PM
Attachments:	image002.jpg

Tiffany,

It was good talking with you today. As i mentioned we are extremely concerned with the project. After a comparison with our internal database, the site within the project boundary and the adjacent resources came up. In Soboba's view theses resources comprise a larger village complex and possible traditional cultural landscape. I understand that there has been no application submitted to the city as of yet, but once notification is received we will be requesting consultation. Very often it is possible to have some concerns resolved before consultation with the agency takes place, so with that in regard I would like to request a possible discussion with the project applicant. I can be reached at the contact information listed below.

Thanks,

Joe

Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseno Indians
PO BOX 487
San Jacinto, CA 92581
O:(951)-654-5544 ext.4137
C:(951)-663-5279
jontiveros@soboba-nsn.gov

_____

From: Tiffany Clark <tclark@appliedearthworks.com>
Sent: Monday, July 11, 2016 9:07 AM
To: Joseph Ontiveros
Subject: Native American Information Request for the Brookfield Minor Ranch Project

Good morning,

Just a quick follow-up on the Brookfield Minor Ranch Project. To summarize, the project, in coordination with City of Menifee, proposes to the development of approximately 590 acres of land north of Case Road and west of Briggs Road in the City of Menifee. A literature and records search was conducted and 56 cultural resource studies have been conducted previously within a one-mile radius of the Project area. One of these studies involved the entire Project area. The records search also indicated that 58 cultural resources have been identified within a one-mile radius of the Project area. One of these resources, a prehistoric bedrock milling site (CA-RIV-3429), is located within the Project area. The Sacred Lands File search conducted by the NAHC was completed with negative results. During the pedestrian survey, CA-RIV-3429 was revisited and a second site (AE-3484-1), which consisting of a very sparse flaked stone scatter, was identified. An expanded Phase 1 study, involving the excavation of shovel test pits, was conducted at both sites; no artifacts were recovered from any of the test pits.

Should you have any comments or concerns regarding this Project, please call or email me.

Thank you,

Tiffany

Tiffany Clark | Applied EarthWorks, Inc.
Senior Archaeologist/Project Manager
626.578.0119 ext. 102

From: Tiffany Clark [mailto:tclark@appliedearthworks.com<mailto:tclark@appliedearthworks.com>]
Sent: Thursday, June 23, 2016 1:10 PM
To: 'jontiveros@soboba-nsn.gov<mailto:jontiveros@soboba-nsn.gov>'
Subject: Native American Information Request for the Brookfield Minor Ranch Project

Please find attached a letter requesting information on Native American cultural resources that may be present in the Brookfield Minor Ranch Project located in the City of Menifee, Riverside County. Please contact me if you have any questions regarding this request.

Sincerely,

Tiffany Clark

Tiffany Clark | Applied EarthWorks, Inc.
Senior Archaeologist/Project Manager

[AEonly_e-mail_sm.png]133 N. San Gabriel Blvd., Ste. 201
Pasadena, CA 91107-3414
626.578.0119 ext. 102 office
http://www.appliedearthworks.com<http://www.appliedearthworks.com/>

APPENDIX B

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