

Cultural Resource Survey and Testing for the Skyline Retirement Center, San Diego County, California

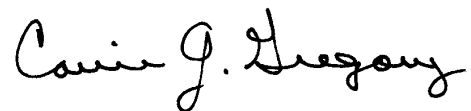
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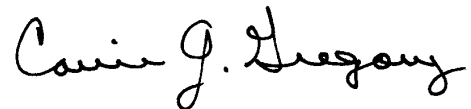
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November 2017

NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

Authors: Carrie J. Gregory and Scott H. Kremkau

Firm: Statistical Research, Inc.

Client/Project Proponent: REC Consultants, Inc.

Report Date: November 2017

Report Title: *Cultural Resource Study and Testing for the Skyline Retirement Center, San Diego County, California*

Type of Study: Records search, literature review, cultural resource survey, buried-sites testing

New Sites: None

Updated Sites: CA-SDI-5064 (P-37-005064) and CA-SDI-5066 (P-37-005066)

USGS Quad: Jamul Mountain, California, 7.5-minute

Project Number: PDS2016-GPA-16-005, PDS2016-SPA-16-002, PDS2016-REZ-16-003, PDS2016-MUP-16-003, PDS2016-ER-16-19-001

Acreage: 8.91 acres

Key Words: milling slicks, ceramic scatter, midden, debitage, and mano

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LIST OF ACRONYMS

CCR	<i>California Code of Regulations</i>
CEQA	California Environmental Quality Act
CFR	<i>Code of Federal Regulations</i>
CRHR	California Register of Historical Resources
GIS	geographic information system
GPS	Global Positioning System
LEED	Leadership in Energy & Environmental Design
MLD	Most Likely Descendent
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
PD	Provenience Designation
PRC	<i>California Public Resources Code</i>
RPA	Register of Professional Archaeologists
RPO	Resource Protection Ordinance
SCIC	South Coastal Information Center
SDSU	San Diego State University
SHPO	State Historic Preservation Office
SRI	Statistical Research, Inc.
TCP	traditional cultural property
TCR	tribal cultural resource
TR	Trench
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

Statistical Research, Inc. (SRI), conducted a cultural resource study for the proposed Skyline Retirement Center, a new senior retirement center associated with the Skyline Wesleyan Church. The project area includes two parcels of land, Assessor Parcel Nos. 506-140-06 and 506-140-07, located near the corner of Via Mercado and State Route 94/Campo Road, Rancho San Diego, San Diego County, California. The project area is approximately 8.91 acres of mostly undeveloped land located within an unsectioned portion of the Jamacha Land Grant, Township 16 South, Range 1 West, on the 2010 Jamul Mountain, California, 7.5-minute U.S. Geological Survey (USGS) quadrangle.

The proposed development is considered a “project” subject to the California Environmental Quality Act (CEQA) (*California Public Resources Code* [PRC] 21000–21177, as amended), which mandates the lead agency to consider the effects of the project on historical, archaeological and tribal cultural resources (TCRs). The County of San Diego (County) is the CEQA lead agency. SRI prepared this report in compliance with *County of San Diego Guidelines for Determining Significance* (County of San Diego 2007a), *Report Format and Content Guidelines* (County of San Diego 2007b), Resource Protection Ordinance (RPO), and the County CEQA Guidelines.

The cultural resource study began with a records search, literature review, and a Sacred Lands File search of the approximately 8.91-acre project area. On August 31, SRI conducted the records search at the South Coastal Information Center (SCIC) of the California Historical Resources Information System at San Diego State University (SDSU). Initially, the records search was conducted with a 1/2-mile radius around the project area. A second records search that expanded the search radius to 1 mile around the project area was conducted September 21, 2015 to ensure compliance with County regulations. During these records searches, SRI identified 25 previously recorded cultural resources. Of these, 2 were located within the bounds of the project area. The records search indicated that the entire project area had been previously surveyed for cultural resources.

SRI surveyed the entire 8.91-acre project area on September 3, 2015. SRI did not identify any cultural resources or human remains within the project area. Low brush was present in parts of the project area, but generally, ground visibility was good. No trace of either of the two previously recorded sites located within the project area, CA-SDI-5064 and CA-SDI-5066, were found. The area around CA-SDI-5064 has been highly disturbed, and a large pile of fill was located at the recorded site location. The area around CA-SDI-5066 was also heavily disturbed. Much of this portion of the site has been graded, and the site deposit may no longer be present. Large piles of fill soils have been placed near the fenced area, so parts of the site may be present below the fill piles.

On October 24, 2017, the entire 8.91-acre Skyline Retirement Center project area was resurveyed because it had been 2 years since the completion of SRI’s 2015 cultural resource survey. The purpose of the resurvey was to confirm the project area and site conditions at CA-SDI-5064 and CA-SDI-5066. Although CA-SDI-5064 still could not be relocated, the results of the 2017 resurvey of CA-SDI-5066 were positive, with two isolated artifacts being identified within the site boundary. These artifacts consist of a single brick fragment of unknown age and a nearly complete *Chione* shell fragment that is possibly prehistoric.

Following the completion of the resurvey, a total of four trenches were judgmentally placed approximately 65 feet apart in the southeastern portion of the project area. Two of the trenches were placed within the boundary of CA-SDI-5066, whereas the remaining two were placed immediately adjacent to the northeastern boundary of CA-SDI-5066. A sample of 3.5 cubic feet of sediment was randomly collected from each level and then dry-screened through 1/8-inch mesh to identify artifacts and ecofacts. No additional artifacts or subsurface cultural deposits were identified as a result of testing.

All field notes and photographs from SRI’s survey are on file at SRI’s office in Redlands, California. Site records for both sites are provided as a confidential appendix to this report and have been submitted to SCIC. Artifacts collected during the project will be curated at the San Diego Archaeological Center.

1.0 INTRODUCTION

1.1 Project Description

REC Consultants, Inc., contracted with Statistical Research, Inc. (SRI), to conduct a cultural resources survey for the proposed development of two parcels of land, Assessor Parcel Nos. 506-140-06 and 506-140-07, located near the corner of Via Mercado and State Route 94/ Campo Road, Rancho San Diego, San Diego County, California (Figures 1 and 2). The project area includes approximately 8.91 acres of mostly undeveloped land located within an unsectioned portion of the Jamacha Land Grant, Township 16 South, Range 1 West, on the 2010 Jamul Mountain, California, 7.5-minute USGS quadrangle.

The proposed development is for the Skyline Retirement Center, associated with the Skyline Wesleyan Church located just east of the project area. The proposed Skyline Retirement Center project is a full-service senior-living facility with multiple levels of care. The project consists of a multi-story main building with three separate wings that connect to central common areas and five detached duplex buildings. Building sizes are provided in Figure 3. The proposed project would meet the requirements of Leadership in Energy & Environmental Design (LEED) Silver. The facility grounds include a pool, a landscaped courtyard and social grounds, a playground, and walking trails. Access to the Skyline Retirement Center will be provided from the existing private driveway that connects to Skyline Wesleyan Church's parking lots. Thirty parking spaces will be provided off the main driveway for employees, visitors, and residents. Additional parking will be provided in a basement parking garage underneath Wing 3. Three stormwater detention basins will be located onsite. No offsite streets or widening of existing streets is proposed. No offsite drainage or stormwater facilities are proposed, with the exception of one of the basins (BMP Basin 3) that is located just offsite between the two entry driveway openings. The proposed development is considered a "project" subject to the California Environmental Quality Act (CEQA) (PRC 21000–21177, as amended), which mandates the lead agency to consider the effects of the project on historical, archaeological and TCRs. The County of San Diego is the CEQA lead agency.

1.2 Existing Conditions

1.2.1 Environmental Setting

The project area is currently vacant but is being used to store construction materials, including piles of soil and leftover concrete. The project area has been partially disturbed by construction activities of the adjacent property.

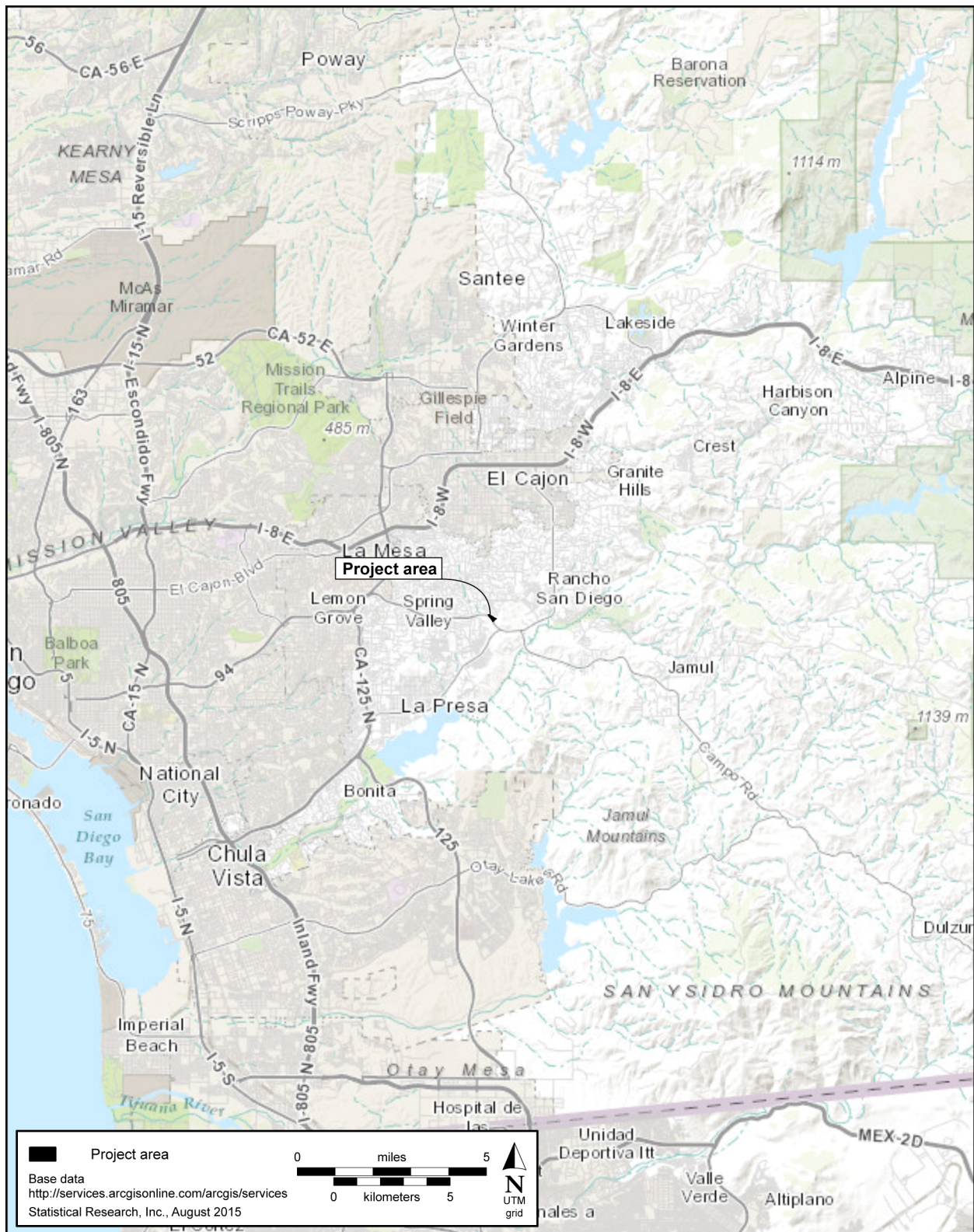


Figure 1. Project area vicinity map.

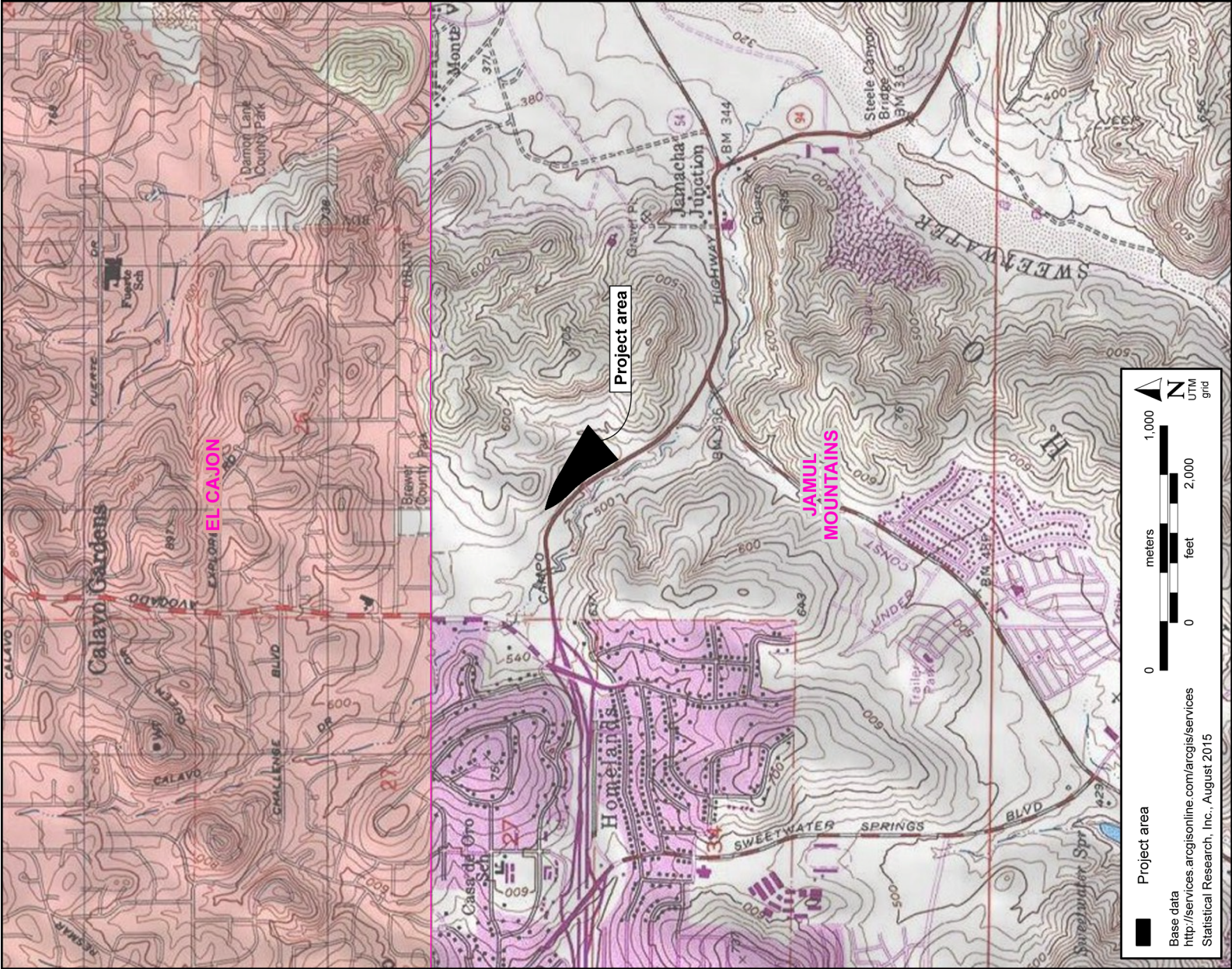


Figure 2. Project area location map.

Natural Setting

Climate

San Diego County has a semiarid Mediterranean climate moderated by the ocean, typical of coastal southern California. This climatic zone results from subtropical high-pressure systems typically forming over the Pacific Ocean, which forces dry air to fall toward the earth from high altitudes. At the same time, the cool coastal ocean waters create a zone of fog in low elevations, which extends farther inland during summer months because of rising warm air. This action forms the locally well-known phenomenon of the “marine layer.”

Most precipitation in the region falls during winter storms. Precipitation in the county is as much as 58 cm (23 inches) per year in some of the inland hilly areas and about half that amount along the coastline (28 cm [11 inches]). However, precipitation in southern California fluctuates considerably because of the frequency of winter storms. The frequency and intensity of these is, in turn, partially controlled by longer-term weather events of the Southern Oscillation, namely El Niño and La Niña weather events. Unpredictable precipitation, combined with a generally arid climate, likely influenced ancient peoples to settle along permanent and predictable sources of fresh water. Temperatures are generally mild throughout the year. The lowest winter temperatures average 6°C (43°F) in January, and the highest summer maximum temperatures average 25°C (78°F) in August.

Flora and Fauna

The project area is located on relatively flat, low hills and alluvial terraces north of Rural Creek, a tributary of the Sweetwater River, which drains into San Diego Bay. Soils in the project area include decomposed granite and alluvial material, although much of the project area has been disturbed through grading. The area is at an elevation of between 116 to 152 m (380 and 500 feet) above mean sea level.

Vegetation in the inland portions of San Diego County consists of southern willow scrub, valley needlegrass, sycamore/alder riparian woodland, Engelmann’s oak woodland, southern coast live-oak riparian forest, coastal live-oak woodland, southern cottonwood/willow riparian forest, coastal and valley freshwater marsh, along with several kinds of chaparral that overlap with those found on the coast. Chaparrals are composed of chamise, scrub-oak, and southern-mixed and hoaryleaf. In addition, as with the coast, the uplands have also been invaded by nonnative grasslands.

The fauna of the area include a variety of birds—songbirds, fowl, and raptors—and small and medium-sized mammals, such as cottontail rabbits, desert woodrats, coyotes, mule deer, bobcats, bats and California ground squirrels. However, during the early historical period and especially during the prehistoric period, the large mammalian fauna may have been more diverse and included at least pronghorns and black bears, among other extirpated species. Other large carnivores, including mountain lions and wolves, may also have previously inhabited the area.

Cultural Setting

The cultural setting of the project area is discussed below, in order to provide the prehistoric, ethnographic, and historical-period context of the project sites and their cultural resources. The sections for the Late Holocene Prehistoric Context and the Ethnographic Context is heavily drawn from Gallegos et al. (2012:8–9).

Prehistoric Context

A number of chronological frameworks have been developed for the prehistory of coastal southern California (e.g., see Meighan 1954; Reddy 2007; Rogers 1929, 1945; True 1958, 1966, 1980; Wallace 1955; Warren 1964; see also Moratto 1984). The first general synthesis of southern California prehistory (Wallace 1955:215; see also Wallace 1978) proposed four “broad temporal divisions”: Horizon I (Early Man), Horizon II (Milling Stone), Horizon III (Intermediate), and Horizon IV (Late Prehistoric). This general

chronology was not revised until very recently (Sutton 2010a), although the “Millingstone Horizon” was redefined as the Encinitas tradition by Warren (1968) (see also Sutton and Gardner 2010). Along coastal San Diego County, a general chronology using Early, Middle, and Late Archaic and Late Prehistoric periods is often used (e.g., Reddy 2007; York 2005). Others focus on broad environmental periods, such as the Early, Middle, and Late Holocene (e.g., Byrd 2011; Byrd and Raab 2007; Gallegos 2002), or even finer temporal subdivisions of those general periods (e.g., Byrd et al. 2004; Byrd and Berryman 2006).

Terminal Pleistocene

It has commonly been believed that the first people in North America were Paleoindians that entered mainland North America on foot, using terrestrial resources, and spreading out across the continent. These Paleoindians would have had a terrestrial adaptation, and considerable evidence of such Paleoindians have been found, although their record in California is meager (see Erlandson et al. 2007). In California, only one Paleoindian complex has so far identified, Clovis, and it is thought to date to between 12,000 and 10,000 B.P. (Basgall 2007; Davis 1978; Riddell and Olsen 1969). The Clovis complex is marked by the characteristic fluted projectile point of the same name. Fluted points have an uneven distribution in California, and none has been discovered along the coastal areas of southern California. It seems that Paleoindian groups probably had small populations and were highly mobile, living in small temporary camps located near permanent water sources. The full nature of Paleoindian subsistence systems also remains unknown.

There is also now a growing body of evidence to suggest that at least some people entered the New World by moving south along the coast (Erlandson et al. 2007; Moratto 1984). A number of very early sites are known along the coasts and islands of central and southern California, apparently reflecting a Paleocoastal population and an adaptation and technology separate from the terrestrial Paleoindians, possibly indicating a separate migration.

The Early Holocene

As with the Terminal Pleistocene, much of the Early Holocene is still poorly understood archaeologically. Along the coast, the Paleocoastal (ca. 12,000–10,000 B.P.; see Moratto 1984:104–109) people had a maritime focus (e.g., the use of shellfish, fish, and marine mammals), presumably using boats (although the earliest evidence of boat-building technology in the area is dated to only ca. 8000 B.P. [Cassidy et al. 2004:109; Raab and Cassidy 2009; see also Erlandson and Moss 1996:295]). Sites dating to Paleocoastal times (see Erlandson 2007b) along coastal central and southern California include Daisy Cave (Erlandson et al. 1996), Arlington Springs (Johnson et al. 2002), Cross Creek (Jones et al. 2002; 2008), Arlington Point (Erlandson et al. 1999), and Eel Point (Raab and Cassidy 2009).

Inland sites in San Diego County that date to this time have been referred to as the San Dieguito complex. This complex was first defined at the Harris site (CA-SDI-149) (hereinafter, the CA- will be omitted from site trinomials), a multicomponent site located on the San Dieguito River. The site was tested by Malcolm Rogers in 1938 and 1939 and again by the University of California, Los Angeles, in 1959 (Warren 1966, 1967a; Warren and True 1961). The San Dieguito complex component was marked by the presence of stemmed (e.g., Lake Mojave or Silver Lake) projectile points, crescents, many scrapers, a small number of milling tools, and the general use of volcanics for flaked stone tools. The San Dieguito complex component dated to between 9080 ± 350 and 8540 ± 400 RCYBP.

Most researchers believe that the San Dieguito complex originated ca. 10,000 B.P. in the deserts to the east (e.g., Lake Mojave in the Mojave Desert) and moved to the coast as conditions deteriorated at the end of the Pleistocene (Kowta 1969:68; Warren et al. 1961:28; Warren and Pavesic 1963:420; see also Osborne 1958:48).

Other San Dieguito complex components are known along the southern California coast at the Irvine site (ORA-64) (Drover et al. 1983; Macko 1998) in Orange County and at the Agua Hedionda site (SDI-210)

(Moriarty 1967) in northern San Diego County. San Dieguito complex components are also known from several inland sites, including Lake Elsinore (RIV-2798) (Grenda 1997) and Lake Perris at RIV-6069 (Horne and McDougall 2008) and RIV-5086/H (McDougall 2001).

The Middle Holocene

There is evidence for a gradual transition, beginning about 8,000 years ago, from Early Holocene patterns to a broader array of subsistence practices (Bryd 2011:9). This period, which lasted between 4,000 and 5,000 years, was originally termed the Millingstone horizon by Wallace (1955) and was subsequently renamed the Encinitas tradition (Sutton and Gardner 2010; Warren 1968), combining the various regional expressions of the Millingstone horizon into a single tradition. Warren (1968:6) defined the ecological adaptation of the Encinitas tradition as reflecting a well-developed plant-collecting economy, with projectile points and faunal remains (i.e., hunting) being rare.

Generally speaking, the Middle Holocene along coastal San Diego County is characterized by a major reliance on shellfish, fishing in rocky near shore areas and kelp beds, heavy exploitation of lagoons, seed gathering, and some terrestrial hunting (Sutton and Gardner 2010). Animal bones tend to be rare at Middle Holocene sites, reinforcing the original idea that hunting was not very important during this period. However, it is possible that hunting may have been more important than is currently thought. Gallegos and Kyle (1998:iii) suggested that this paucity of bone might be due to poor preservation (or perhaps to the “schlepp effect”; see Daly 1969:149), and Sutton (1993) suggested the possibility the bone may have been processed and thus not recovered in the 1/4-inch screen so often used during archaeological excavation. Middle Holocene sites are typically located on terraces around lagoons or bays (e.g., Byrd and Raab 2007; Gallegos 1992; Masters and Gallegos 1997; Moratto 1984; Warren et al. 2008:78). Warren (1964) (see also Warren 1967b:234–236) suggested that La Jolla pattern groups used a Central-Based Wandering pattern (e.g., see Beardsley et al. 1956:138).

In inland San Diego County, assemblages from the Middle Holocene are quite different from those from the preceding San Dieguito complex (True 1980:37), although they are generally similar to the assemblages observed on the coast, with the exception of shellfish remains, which are present only rarely at inland sites (True 1980:37; see also Warren et al. 2008:71). Middle Holocene components are known from a variety of areas in San Diego County (e.g., San Luis Rey River, Valley Center, Escondido, San Marcos, Green Valley, and Santa Margarita River), and exhibit “generally similar aggregates of artifacts. . . in generally similar environmental contexts” (True and Beemer 1982:233). Indeed, an examination of the geographic distribution of Middle Holocene sites shows a tendency for sites to be located in montane settings.

Sites from the Middle Holocene in the northern interior of San Diego County (see Sutton and Gardner 2010:Table 2) are characterized by a high frequency of shaped manos, a predominance of basin metates over slab metates, and cobble tools, as well as occasional scrapers, discoids, and stone balls (True 1958, 1980; True and Beemer 1982; True and Pankey 1985; Warren et al. 1961; see also McCown 1955). Flaked stone artifacts (e.g., knives or points) are relatively uncommon, and bedrock mortars, pottery, and small triangular projectile points are “conspicuous by their absence” (True and Beemer 1982:233; see also True 1958, 1980; True and Pankey 1985; Warren et al. 1961). As noted above, archaeological assemblages of inland and coastal sites are similar, indicating “some as yet undefined but close relationship. . . between the two” (True 1980:370) (see also Warren et al. 1961; Warren et al. 2008:71).

The Late Holocene

During the Late Holocene (ca. 1300 to historical-period contact), a material-culture pattern similar to that of historical-period Native Americans first becomes apparent in the archaeological record. The economic pattern during this period appears to be one of more-intensive and -efficient exploitation of local resources. The prosperity of these highly refined economic patterns is well evidenced by the numerous Kumeyaay/Diegueño and Luiseño habitation sites scattered throughout San Diego County. This increase in Late Holocene site density probably reflects both better preservation of the more-recent archaeological

record and a gradual population increase within the region. Artifacts and cultural attributes reflecting this Late Holocene pattern include small projectile points, pottery, the establishment of permanent or semipermanent seasonal habitation sites, a proliferation of acorn-processing sites in the uplands, the presence of obsidian from Obsidian Butte, the Imperial Valley source, and interment by cremation.

Luiŕeño occupation in north San Diego County during the Late Holocene has been viewed as an occupation that resulted from the migration of a population from the desert to the coast (Rogers 1966), a resettlement called “the Shoshonean Wedge” (Kroeber 1925). Late period cultural patterns were shared with groups along the northern and eastern periphery of San Diego County, incorporating many elements of their neighbors’ cultures into their own cultures. This transference and melding of cultural traits between neighboring groups makes positive association of archaeological deposits with particular ethnographically known cultures difficult. This is particularly true of the groups within San Diego County. Although significant differences exist between Luiŕeño and Kumeyaay/Diegueño cultures (including linguistic stock), the long interaction of these groups during the Late period resulted in the exchange of many social patterns. Archaeologists must rely heavily on ethnographic accounts of group boundaries as recorded during the historical period, although it is not known how long these boundaries had been in place or the validity of these boundaries as presently reported.

Ethnographic Context

The project area is located in southwestern San Diego County, which was occupied by the Native American Kumeyaay tribe at the time of European contact. Kroeber (1925) placed their nearest neighbors, the Luiŕeño, more than 48 km (30 miles) to the northwest of the project area, between Agua Hedionda and Batiquitos Lagoons. According to Luomala (1978), the territory of the Ipai (northern Kumeyaay) extended along the coast from the San Luis Rey River in the north to San Diego Bay in the south, with San Felipe Creek marking the east boundary. The territory of the Tipai (southern Kumeyaay) extended south from San Diego Bay to include parts of Mexico and the southern mountains. Florence Shippek (1993) identified the northern and southern Kumeyaay/Diegueño tribal boundary as follows:

In 1769, Kumeyaay national territory starting at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiŕeño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and then north across the divide between Valley Center and Woods Valley up to the 1880-foot peak, then curving around east along the divide above Woods Valley.

Further readings pertinent to the Luiŕeño and Kumeyaay (Diegueño) Native Americans include: Almstedt (1974); Barrows (1900); Bean (1972); Bean and Saubel (1972); Bean and Shippek (1978); Burrus (1967); Cuero (1968); Drucker (1939); Dubois (1908); Gifford (1918); Harrington (1978); Hedges and Beresford (1986); Heizer and Almquist (1971); Heizer and Whipple (1957); Hooper (1920); Keneally (1965); Kroeber (1925); Langdon (1970); Merrill (1973); Pourade (1960); Priestley (1937); Rudkin (1956); Shippek (1977, 1978, 1980, 1986a, 1986b, 1987, 1988, 1989a, 1989b, 1991, 1993); Sparkman (1908); Spicer (1962); Spier (1923); Strong (1929); Tibesar (1955); Underhill (1941); White (1963); Wolcott (1929); and Woodward (1934).

Historical-Period Context

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American occupation and land use. A brief history of San Diego County is presented as general background to the region.

Spanish Period Occupation (1769–1821)

Spain first laid claim to the California coast in the sixteenth century, during its rise as a world power in the midst of an age of exploration. Taking advantage of a navigable bay, the first area settled by the Spanish in Alta California was San Diego, beginning in 1769 (Pourade 1960). The Spanish period (1769–1821) represents a time of European exploration and settlement. Although California was, in theory, a colony of Spain since its discovery by Juan Cabrillo in 1542, it was more than 200 years later that Spain established colonies in the area. Military and naval forces along with a religious contingent founded missions along the California coast, from San Diego to San Francisco (Pourade 1960; Rolle 1998).

Strategy for colonization included a dual settlement of the area by both the military and the church. In San Diego, both a mission and a military presidio were located on Presidio Hill overlooking the San Diego River. The mission was later relocated to lands in Mission Valley along the San Diego River, which promised better agricultural potential. In July 1769, upon establishment of the first Spanish Mission in San Diego, the Spanish expedition continued north, encountering the San Luis Rey Valley. The fertile valley would remain only a stop on El Camino Real (the King's Highway) until June 1798, when Mission San Luis Rey de Francia was founded (Pourade 1960).

Mexican Period Occupation (1821–1848)

Mexico won its independence from Spain in 1821, with Emperor Iturbide forced out in 1823, allowing Mexico to become a republic. Mexico took control of Alta California and a small community of Hispanic settlers developed in what is today known as Old Town, at the foot of Presidio Hill, starting in the 1820s. Many Spanish practices survived into the early part of the Mexican period. Secularization of the missions in 1834 brought notable changes to the land ownership and use in the region. The lands surrounding the missions were made available to the public through land grants conceded by the Mexican government. Uprisings occurred between the citizens of the southern and northern California regions. In 1845, California's civil unrest quieted down and Pio Pico was named governor of California. In an effort to dispense the land to Mexicans, or the people of Alta California, Pico authorized numerous land grants. Large tracts of land were granted to families and individuals, with cattle ranching as the major economic focus (Pourade 1963).

Early American Period (1848–1900)

War was declared on Mexico by the United States in 1846, with General Kearney and Commodore Stockton marching on Los Angeles. After two years of battles, the Republic of Mexico signed the Treaty of Guadalupe Hidalgo in 1848, bringing about an official end to the Mexican-American War. The territory of Alta California was ceded to the United States by Mexico. California attained statehood in 1850, with San Diego becoming the first county. Although some previous land claims were validated, much of the land that was once part of the ranchos became available for settlement. Population movement into California was an outgrowth of several events, including the discovery of gold, the conclusion of the Civil War, and the passage of the Homestead Act, as well as the construction of connecting railways (Pourade 1963).

In 1865, the second great westward migration from the east began, with droves of people arriving in San Diego County in the 1870s (Pourade 1964:253). In 1870, gold was discovered near Julian and Cuyamaca, and several mining districts were formed. Although the 1870s brought San Diego its first bank, downtown school, mining district, and water company, the economy plummeted. In 1876, nine Indian reservations in San Diego County became official, with the signature of President Grant (Pourade 1964:253). In the 1880s, there was a concerted effort on the part of land developers to entice people to move westward. Many who felt San Diego would be the next great city offered real estate promotions that brought a flurry of new settlers to the region (Pourade 1964).

Water continued to be a limiting factor in the growth of the region. The San Diego Flume Company was incorporated in 1886, and work began on the construction of a dam on Boulder Creek in Cuyamaca Valley. The dam was completed the same year, with water arriving to San Diego by a 35-mile-long wooden flume

dedicated in 1889 (Pourade 1964:175). The long-awaited coastal railroad connecting San Diego with towns to the north was completed in 1885, prompting a large influx of people to San Diego. As a consequence, the 1880s saw the San Diego population expand from 8,000 to 35,000 people (Pryde 1992). This boom ended in the 1890s, when the anticipated railroad connecting San Diego County to the east never arrived and erratic rainfall caused many farmers to give up portions of their land. But by then, the pioneer settlers had done the bulk of the work to make San Diego a hospitable area, and new settlers continued to drift in (Pourade 1964).

American Period (1900–Present)

Many people who settled in the San Diego County area found the weather pleasant enough but noted the lack of rainfall, which caused crops to fail and herds to die. Many early settlers made efforts to improve the supply of water in the area by drilling wells and damming water surpluses. Several people who had arrived for the Julian and Cuyamaca gold rush brought with them enough capital to make a reasonable start at farming the land. The San Diego area experienced a steady influx of settlers up until the 1920s (Pourade 1965).

This migration took a sharp decline in the 1930s with the onset of a national economic depression. The decline seems to have particularly affected farmers in San Diego as many moved to urban areas, abandoning rural farmlands. Efforts to provide additional water to thirsty communities continued with the construction of Lake Hodges Dam in 1918, El Capitan Dam on the San Diego River in 1935, and San Vicente Dam in 1941, designed to hold runoff and imported water (Pourade 1977).

The San Diego area did not fully recover from the Great Depression until World War II. During this period, many of the family farms within the county were abandoned or consolidated. By then, many farms belonged to large and often absentee land owners. Small farming communities, once ubiquitous across the nation, had all but disappeared. However, the Cold War military-industrial complex was to become well established in the San Diego region and helped to stimulate ongoing economic growth during the late twentieth century. The mild climate and job opportunities continued to draw large numbers of new residents to the region.

Project-Area History

Although the origin of the name is unknown, Kroeber (1925:895) noted that Jamacha is a Diegueño word for a wild, squashlike plant that is common throughout San Diego County. Based on mission records, Spanish missionaries baptized eight residents of a Kumeyaay village also called Jamacha in 1775. Later that year, residents from Jamacha and 19 other villages sacked the San Diego Mission de Alcalá, killing three Spaniards (Kyle and Gallegos 1995:1–6). Records of baptisms of Native Americans from Jamacha persist until 1809, but it is unclear what happened to the remaining residents of the village after this date.

Secularization of mission lands occurred across California in 1834. In 1840, Mexican Governor Juan Bautista Alvarado granted 8,881 acres of land near the village of Jamacha to Apolinaria Lorenzana, which became known as Rancho Jamacha. Lorenzana was a devout Catholic woman who came to San Diego in 1800. She assisted the mission fathers and was known as *La Beata*, or the devout one. Lorenzana had lived on the rancho for several years prior to receiving the grant and had few horses and cattle, compared to neighboring ranchos. In 1843, Mexican Governor Manuel Micheltorena granted Doña Lorenzana the Rancho of La Cañada de los Coches. Apolinaria Lorenzana received the patent to the rancho on April 11, 1871; however, by a means that she never understood, she lost the Jamacha Rancho to A. R. Eddy prior to that, in 1852 (Brackett 1939:39–41; Moyer 1976:18).

In the subsequent years, Rancho Jamacha was divided into numerous smaller parcels, most of which were owned by absentee landlords and livestock owners. By 1968, the ranch was leased temporarily for grazing, while plans were made for suburban development projects. Several other historical sites are located in the Jamacha area but outside of the project area. These include Isham's Springs, the site of a mineral-water

bottling plant dating from the 1880s; Apolinaria Lorenzana's adobe site; Dictionary Hill; La Presa; and Hillsdale (Brackett 1939:40–41; Kyle and Gallegos 1995:1–7; Moyer 1976:19–21).

It should be noted that the travel corridor (present-day State Route 94) adjacent to the project area to the south has been in use since at least 1865–1885, when it was one of the stage lines through San Diego County (Map Showing Roads and Trails in Use from 1769–1885 by B. B. Moore). By 1872, it was considered a county road (1872 Official Map of the Western Portion of San Diego County, California by M. C. Wheeler County Surveyors). USGS maps show no known improvements on the property from 1903 to 1995.

1.2.2 Records Search and Literature Review

A records search was conducted at the SCIC, SDSU (Appendix A). The goal of the records search was to review any previous archaeological projects that may have been conducted within or around the project area and to identify any previously recorded archaeological resources that are located within or adjacent to the project area.

On August 31, SRI conducted the records search at the SCIC. Initially, the records search was conducted with a 1/2-mile radius around the project area. A second records search that expanded the search radius to 1 mile around the project area was conducted on September 21, 2015, to ensure compliance with County regulations. The records search examined all reports from archaeological work executed within this 1-mile radius of the 8.91-acre project area. The records search was conducted by examining geographic information system (GIS) databases containing information on previously conducted cultural resource investigations, as well as previously recorded archaeological sites and historical-period resources located within the records search area. A GIS layer containing the boundaries of the sites was uploaded into the GIS, and all investigations and resources within the project area and the 1-mile records-search buffer area were highlighted. Shapefiles for these investigations and resources were subsequently downloaded, as were digital copies of all investigation reports and resource records.

Previous Cultural Resource Studies

The records-search results identified that, in total, 61 previous investigations had been conducted within a 1-mile radius of the project area (Table 1; Confidential Appendix Figure B.2). Of those, 10 studies included land within the project area. The entire project area has been previously surveyed through 9 surveys (Confidential Appendix Figure B.3) (Bowden-Renna 2010a; Carrico 1977; Eckhardt and Carrico 1977; Kyle and Gallegos 1995; McManus 1977; Westec Services 1988a, 1988b; Heuett 1979; U.S. Department of Transportation 1980).

Previously Recorded Cultural Resources

In total, 25 previously recorded cultural resources have been identified within the records-search area. Of these, 2 prehistoric archaeological sites, CA-SDI-5064/P-37-005064 and CA-SDI-5066/P-37-005066, are located within the project area (see below). The 25 resources date to both the prehistoric and historical period and include 5 prehistoric artifact scatters; 9 sites with bedrock milling features; 2 sites with bedrock milling features and artifact scatters; 1 site with bedrock milling features, an artifact scatter, and a historical-period structure; 2 prehistoric campsites; 1 site with a prehistoric campsite and a historical-period structure; 1 historical-period building; and 4 historical-period structures (Table 2; Confidential Appendix B).

CA-SDI-5064 (P-37-005064)

CA-SDI-5064 is a small site consisting of two milling slicks on one bedrock outcrop. The site was originally recorded by Carrico in 1977. No artifacts are associated with the features, and no subsurface testing has been conducted at the site. It is unclear if the site was impacted by the construction of that development.

CA-SDI-5066 (P-37-005066)

CA-SDI-5066 is a large lithic and ceramic scatter and a deflated subsurface deposit. The site was originally recorded by Carrico in 1977, during work for the Skyline Wesleyan Church location southeast of the project area. Test excavations at the site were subsequently conducted by Rosen (1982) and Gallegos and Associates (Kyle and Gallegos 1995). The results of the testing project identified a shallow subsurface deposit at the site. As a result of the testing, Kyle and Gallegos (1995) evaluated the site and found CA-SDI-5066 “not significant/important under County of San Diego and CEQA guidelines” and recommended no additional work. Furthermore, Kyle and Gallegos (1995) indicated that CA-SDI-5066 was previously recommended not significant, with State Historic Preservation Office (SHPO) concurrence, and was not eligible for listing in the National Register of Historic Places (NRHP). A portion of the site within the project area was revisited by Bowden-Renna (2010b) during monitoring for the installation of a fence. A few pieces of debitage and a mano were observed, but it appears that much of this part of the site has been disturbed through grading. None of the reports is clear as to the final disposition of collected artifacts.

Table 1. Previously Conducted Cultural Resource Investigations within 1 Mile of the Project Area

Report No.	Investigation Type	Report Title	Citation
SD-00179	inventory/survey	An Archaeological Survey: Proposed Willow Glen Drive Sewer Main	Barbolla-Rolan, D. Axford, and M. Axford 1984
SD-00656	inventory/survey	Archaeological - Historical Survey Report for Avocado Village Lot No. 4	Carrico 1977
SD-00754	inventory/survey	Archaeological Investigation at SDi-4781 and SDM-W-1309 Avocado Village Lot No. 4 San Diego County, California	Eckhardt and Carrico 1977
SD-00895	inventory/survey	An Archaeological Survey of the Honey Springs Off-Site Water Line Appendix VI to the Archaeology of Honey Springs, San Diego County (1980) (EAD Log #81-19-24)	Chace 1983
SD-00952	inventory/survey; archaeological testing	Cultural Resource Survey and Testing for the Skyline Wesleyan Church Project, San Diego, California	Gallegos, Kyle, and Carrico 1988
SD-00979	inventory/survey	An Archaeological Survey of Rancho San Diego	Gross and Ezell 1972
SD-00988	inventory/survey	A Report of Cultural Impact Survey Phase I Project: P.M. 13.5-15.5 11-SD-94 Avocado Blvd. to 0.5 Mi. South of Jamacha Junction	Gross 1975
SD-00991	inventory/survey	A Report of Cultural Impact Survey Phase II Project: P.M. 1.9-16.3 11-SD-54 Rte. 805 to Rte. 8	Gross 1974
SD-01193	archaeological testing	The Rancho San Diego Project I (Monte Vista Village) Archaeological Testing and Historic Research	Heuett 1981
SD-01286	inventory/survey	Archaeological Survey Report 11-SD-94 P.M. 13.3 to P.M. 75.1 11203-184211 Phase I.	McManus 1977
SD-01383	inventory/survey	Archaeological Survey for the Proposed Monte Vista Borrow Pit, Casa De Oro, California Project No. 670033	Fink 1974
SD-01594	inventory/survey	Cultural Resource Survey Report on McBride Parcel in San Diego County	Whitney-Desautels, Hemphill, and Peter 1985
SD-01812	inventory/survey	An Archaeological Survey of Selected Portions of 11-SD-94 P.M. 13.3/15.1	Meacham 1977a
SD-01832	inventory/survey	Third Addendum Archaeological Survey Report for a Proposed Material Site and Biological Mitigation Parcel Sweetwater River Bridge Replacement	Crotteau 1984
SD-02074	inventory/survey	Extended Initial Study for the Monte Vista Borrow Pit (P 87-073, P 87-005, Log #87-19-51)	County of San Diego Department of Planning and Land Use 1988
SD-02175	environmental impact report	Draft Environmental Impact Report For Rancho SAS Diego Specific Plan SPA87-001 R87-006 Log #87-19-6	Mooney-Lettieri and Associates 1987

Report No.	Investigation Type	Report Title	Citation
SD-02356	inventory/survey	Results of a Cultural Resource Survey of the 42 Inch Transmission Main and Regulatory Site Improvement Project for the Otay Water District	Smith 1992
SD-02439	environmental impact report	Appendices for Supplemental Draft Environmental Impact Report for Rancho San Diego Tentative Map	Jacks and Lacy 1990
SD-02976	inventory/survey	Archaeological Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M.12.7 Charge Unit No./EA No. 11221-182050/11221-182020.	Clevenger 1994
SD-03100	inventory/survey; archaeological testing	Cultural Resource Extended Test and Survey Report for the Skyline Wesleyan Church Project, San Diego County, California	Kyle and Gallegos 1995
SD-03334	archaeological testing	Archaeological Testing at CA-SDI-4763, Locus 2 for the Jamacha Boulevard Improvements Project, El Cajon, San Diego County, California	Robbins-Wade and Whitehouse 1995
SD-03757	inventory/survey	State Route 94 and State Route 54 Widening Project County of San Diego	Crawford and Clevenger 1995
SD-03783	inventory/survey	Cultural Resource Survey for the Sitto 9.77-Acre Development Property, La Mesa, San Diego County, California	Cooley 2000
SD-04329	inventory/survey; archaeological testing	Cultural Resource Survey & Testing for the Skyline Wesleyan Church Project, San Diego, California	Westec Seces 1988a
SD-04382	inventory/survey	Cultural Resource Survey of the Skyline Wesleyan Church Project, San Diego, California	Westec Services 1988b
SD-04588	inventory/survey	Negative Archaeological Survey Report: Widening & Realignment of a 550-Foot Section of State Route 76, East of Oceanside, California	Caltrans and Rosen 1991
SD-04727	historic resource evaluation	Historic Resource Evaluation: Report Piper Ranch Reservoirs	Herbert 1994
SD-04894	environmental impact report	Draft EIR for Crestwood	RECON 1976
SD-04904	inventory/survey	Extended Phase I Investigation at CA-SDI-4782	Rosen 1984
SD-05108	inventory/survey	State Highways 54 and 94 Survey Reports	U.S. Department of Transportation 1980
SD-05345	environmental impact report	Environmental Impact Report Rancho San Diego Specific Plan San Diego County, California Appendices Volume II	PRC Toups 1979

Report No.	Investigation Type	Report Title	Citation
SD-05474	inventory/survey	3rd Supplemental/Historical Property Survey Report for Biological Mitigation Sites, Utility Relocation Sweetwater Road Realignment and the Evaluation of the Sweetwater Day, Sweetwater Quarries, and National City and Otay Railroad	Caltrans and Rosen 1998
SD-05779	inventory/survey	Historic Properties Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M. 12.7	Clevenger and Crawford 1994
SD-06080	biological survey	Draft Biological Survey Report for the Jamacha Boulevard Road Widening Project	Egoroff 1996
SD-06189	inventory/survey	An Archaeological Survey Report for Two Excess Parcels on 11-SD-54 Calavo Drive Area P.M. 7.0-11.3	Meacham 1977b
SD-06423	environmental impact report	Final Environmental Impact Report Phase II of the Sweetwater. Reservoir Urban Runoff Diversion System	A. D. Hinshaw Associates 1991
SD-06425	historic resources inventory	Historic Resources Inventory Sweetwater Valley	Carrico 1990
SD-06626	inventory/survey	Archaeological Survey of Mount Helix 77 Acre Development	Carrico 1974
SD-07135	inventory/survey	Cultural Resource Survey for the Otay Water District 640-1 Reservoir Project	Kyle 2004
SD-07273	inventory/survey	Archaeological Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M. 12.7	Clevenger 1993
SD-07393	inventory/survey	Preliminary Archaeological Survey Report of the Eastern Alignment Alternatives for State Route 125-South	Crafts 2000
SD-07396	inventory/survey	An Archaeological Survey of the Nawaz Lot Split Project	Smith 1993
SD-07492	inventory/survey	Cultural Resource Assessment AT&T Wireless Services Facility No. 10057A-05 San Diego Count, CA	Duke 2002a
SD-07811	inventory/survey	AT&T Wireless	Duke 2002b
SD-08618	environmental impact report	Draft Environmental Impact Report for Crestwood	RECON 1979
SD-08620	inventory/survey	Preliminary Archaeological Investigations of W-1146 Spring Valley, California	Heuett 1979
SD-08622	inventory/survey	Proposed 36" Main from La Presa Pump Station To Regulatory Reservoir: An Archaeological Survey	Barbola-Roland 1984

Report No.	Investigation Type	Report Title	Citation
SD-09827	archaeological data recovery	Preliminary Report for the Archaeological Data Recovery Program at CA-SDI-4765 Rancho San Diego - Jamacha Village West, San Diego County, California	Schaefer, Cook, and Palette 1992
SD-09985	inventory/survey	Site Boundary Definition for SDI-4782 (W-1146) "Jamacha Village"	Berryman 1986
SD-10938	environmental impact report	Supplement and Draft Environmental Impact Report for the Sweetwater Reservoir Urban Runoff Diversion System	Hector and Graham 1987
SD-11213	inventory/survey	Cultural Resource Survey for the CIP: P2009 Jamacha Road 36-Inch Potable Water Pipeline and CIP P2038: 12-Inch Potable Water Pipeline Replacement, San Diego, California	Kyle 2007
SD-11304	historic resource evaluation	Sweet River Bridge	Various n.d.
SD-11558	historic resource evaluation	Historic Site Designation Report - R. King Kauffman Home, Mt. Helix Calavo Gardens Unit #2, 10807 Dutton Drive, La Mesa, CA 91941, APN: 497-207-09-00	Tinsley 2007
SD-11626	environmental impact report	Draft Environmental Assessment for the Proposed Acquisition of Rancho San Diego, Sweetwater II, and Lot 707 Properties from the Resolution Trust Corporation for the Proposed San Diego National Wildlife Refuge Otay-Sweetwater Refuge Unit	U.S. Department of the Interior 1995
SD-11841	inventory/survey	Rancho San Diego Sheriff Substation Negative Cultural Resources Survey Report	Iversen 2008
SD-11914	inventory/survey	Cultural Resource Records Search and Site Visit Results for AT&T Mobility, LLC Facility Candidate SS-624-02 (Dixieline/Blockbuster), 3607 "B" Avocado Boulevard, La Mesa, San Diego County, California	Bonner, Aislin-Kay, and Williams 2008
SD-12131	inventory/survey	Negative Cultural Resources Survey Report for the Calavo Drive Drainage Improvement Project	Zepeda-Herman 2009
SD-12816	inventory/survey	Cultural Resources Survey for 25 Wood to Steel Pole Replacements along TL6911, TL624, TL627, TL643 and Staging Yards Areas for Jamacha Getaways, Rancho San Diego Area, San Diego County, California	Bowden-Renna 2010a
SD-13198	inventory/survey	Archaeological Survey Report for the County of San Diego Sheriff's Station Access Road, San Diego County, California	Rosen 2011
SD-13767	archaeological monitoring	Letter Report: ETS 20688 Cultural Resources Monitoring for a Staging Area at the Skyline Wesleyan Church for the Jamacha Getaways Wood-to-Steel Project, Rancho San Diego Area, San Diego County, California 10-200415072	Bowden-Renna 2010b
SD-14730	archaeological monitoring	Lake Morena's Oak Shores Mutual Water Company Water System Improvements Project Phase 2 - Archaeological Monitoring	Davison and Robbins-Wade 2013

Table 2. Previously Recorded Cultural Resources within 1 Mile of the Project Area

Primary No.	Trinomial	Period	Site Type	Site Dimensions (m)	Report Citation(s)
		historical	3240 Sweetwater Road		
P-37-002713	CA-SDI-2713	prehistoric	bedrock milling features	35.4 × 53.1	Cooley 2000; Smith 1993
P-37-004763	CA-SDI-4763	prehistoric	campsite	66.1 × 94.0	Gallegos, Kyle, and Carrico 1988; Smith 1992; Clevenger 1994; Kyle and Gallegos 1995; Robbins-Wade, M. Whitehouse, and J. Whitehouse 1995; Westec Services 1988a, 1988b; U.S. Department of Transportation 1980; Clevenger 1993
P-37-004764	CA-SDI-4764	prehistoric	bedrock milling features	99.2 × 136.7	
P-37-004766	CA-SDI-4766	prehistoric	bedrock milling features; artifact scatter	55.1 × 60.1	Smith 1992; U.S. Department of Transportation 1980
P-37-004768	CA-SDI-4768	prehistoric	artifact scatter	35.2 × 76.9	
P-37-004775	CA-SDI-4775	prehistoric	artifact scatter	55.7 × 70.8	Gallegos, Kyle, and Carrico 1988; Clevenger 1994; Westec Services 1988a, 1988b; U.S. Department of Transportation 1980; Clevenger 1993
P-37-004780	CA-SDI-4780	prehistoric	artifact scatter	43.4 × 58.3	Clevenger 1994; Clevenger 1993
P-37-004781	CA-SDI-4781	prehistoric	artifact scatter	58.2 × 63.5	Carrico 1977; Eckhardt and Carrico 1977; Duke 2002b
P-37-004782	CA-SDI-4782	prehistoric; historical	bedrock milling features; artifact scatter; historical structure	209.0 × 441.4	Mooney-Lettieri and Associates 1987; Clevenger 1994; U.S. Department of Transportation 1980; PRC Touns 1979; Clevenger 1993; Barbolla-Rolan, D. Axford, and M. Axford 1984; Rosen 1984
P-37-004783	CA-SDI-4783	prehistoric	artifact scatter	39.5 × 47.5	Gallegos, Kyle, and Carrico 1988; McManus 1977; Westec Services 1988a, 1988b; U.S. Department of Transportation 1980; PRC Touns 1979
P-37-005064	CA-SDI-5064	prehistoric	bedrock milling features	34.8 × 41.3	PRC Touns Corporation 1979
P-37-005065	CA-SDI-5065	prehistoric	bedrock milling features	38.6 × 41.0	
P-37-005066	CA-SDI-5066	prehistoric	campsite	121.0 × 306.7	Gallegos, Kyle, and Carrico 1988; Mooney-Lettieri and Associates 1987; Kyle and Gallegos 1995; Westec Services 1988a, 1988b; U.S. Department of Transportation 1980; PRC Touns 1979; Bowden-Renna 2010a; Bowden-Renna 2010b
P-37-006981	CA-SDI-6981H	historical	State Route 94	12860 × 61693.0	
P-37-008319	CA-SDI-8319H	historical	historical structures	38.2 × 47.1	Heuett 1981

Primary No.	Trinomial	Period	Site Type	Site Dimensions (m)	Report Citation(s)
P-37-008320	CA-SDI-8320	prehistoric	bedrock milling features	31.2 × 44.7	Heuett 1981
P-37-008326	CA-SDI-8326H	prehistoric; historical	campsite; historical structure	111.9 × 214.0	Mooney-Lettieri and Associates, Inc. 1987; Clevenger 1994; U.S. Department of Transportation 1980; PRC Toups Corporation 1979; Clevenger 1993; Barbolla-Rolan, D. Axford, and M. Axford 1984; Heuett 1981
P-37-010962	CA-SDI-10962	prehistoric	bedrock milling features	20.0 × 20.0	
P-37-017453		historical	Bridge 57-0110		
P-37-018344	CA-SDI-15559	prehistoric	bedrock milling features	25.1 × 36.4	Cooley 2000
P-37-018345	CA-SDI-15560	prehistoric	bedrock milling features	27.9 × 31.0	Cooley 2000
P-37-018346	CA-SDI-15561	prehistoric	bedrock milling features; artifact scatter	40.6 × 54.0	
P-37-029402		historical	R. King Kauffman Residence		
P-37-033559	CA-SDI-21089	prehistoric	bedrock milling features	19.7 × 48.9	

1.3 Applicable Regulations

In this section, we outline the state and county regulatory requirements pertinent to the project. This technical report follows the provisions of CEQA regarding cultural resources and also follows local policies of the County.

1.3.1 California Environmental Quality Act

The CEQA Guidelines (14 *California Code of Regulations* [CCR] 15064.5) sets forth the process for categorizing and addressing impacts on archaeological resources. In regard to archaeological sites, the CEQA Guidelines states that “when a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource” or “a unique archaeological resource” (14 CCR 15064.5[c]). A historical resource for the purposes of the CEQA is generally a resource that is listed or is eligible for listing in the California Register of Historical Resources (CRHR). Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing in the CRHR including the following (PRC 5024.1):

- (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.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

The CRHR is the authoritative guide to the state’s significant archaeological and historical resources. It serves to identify, evaluate, register, and protect California’s historical resources. For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the CRHR (PRC 21084.1).

1.3.2 San Diego County Resource Protection Ordinance

The majority of development in the County is subject to the San Diego County RPO. This ordinance requires that cultural resources be evaluated as part of the County’s discretionary environmental review process and, if any resources are determined significant under the RPO, they must be preserved. The RPO prohibits development, trenching, grading, clearing, and grubbing, or any other activity or use that may result in damage to significant prehistoric or historic sites—which also includes unique cultural resources or any location of past or current sacred religious or ceremonial observances—except for scientific investigations with an approved research design prepared by an archaeologist certified by the Register of Professional Archaeologists (RPA).

The County defines a significant prehistoric or historic sites under its RPO as follows:

1. any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
 - (a) formally determined eligible or listed in the NRHP; or
 - (b) to which the Historic Resource (H designator) Special Area Regulations have been applied; or
2. one-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data or materials; and
3. any location of past or current sacred religious or ceremonial observances which is either:

- (a) protected under Public Law 95-341, the American Religious Freedom Act, or Public Resources Code Section 5097.9, such as burials, pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
- (b) other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

1.3.3 Conservation and Open Space Elements (Chapter 5, Sections 7 and 8) of the San Diego County General Plan

Sections 7 and 8 of the Conservation and Open Space Elements of the San Diego County General Plan provides policies for the protection of cultural resources. Section 7 details policies for the protection and preservation of archaeological resources including:

COS-7.1. Establishes the importance of archaeological resource protection from loss or destruction by development and requires evaluation of resources from the perspective of the affected community in addition to those definitions presented in the California Public Resources Code.

COS-7.2. Requires the avoidance of cultural resources by development and mitigation of the effects of development, if avoidance is not possible.

COS-7.3. Requires the appropriate treatment and preservation of archaeological collections based on established federal curation standards in tandem with consultation with affected communities.

COS-7.4. Requires consultation with affected communities and local Native American tribes to determine appropriate treatment of cultural resources including archaeological sites, sacred places, traditional cultural properties, historical buildings and objects, artifacts, human remains, and other items.

COS-7.5. Requires the dignified and respectful treatment of human remains and coordination with the Most Likely Descendant (MLD) of a tribe for the handling and repatriation of disturbed remains as well as met requirements established by Federal, State, and County Regulations.

COS-7.6. Coordination with public agencies, tribes, and institutions to build and maintain a central database of cultural resources. The South Coastal Information Center at San Diego State University maintains a partnership with the County and provides this information to qualified personnel so that resources may be avoided early in the process of developmental project design.

Section 8 details policies for the protection and conservation of the historical built environment including:

COS-8.1. Encourages the preservation or adaptive reuse of historic sites, structures, and landscapes as a means of protection during the developmental planning process.

COS-8.2. Encourages the development of educational and interpretive programs focusing on the history of San Diego County.

1.3.4 San Diego County Local Register of Historical Resources

The purpose of the San Diego County Local Register of Historical Resource is to develop and maintain an authoritative guide to be used by state agencies, private groups, and citizens to identify the County's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (Ordinance 9493, *San Diego County Administrative Code* 396.7). Sites, places, or objects that are eligible for listing in the NRHP or CRHR are automatically included in the San Diego County Local Register of Historical Resources. The criteria for eligibility for the Local Register are comparable to the criteria for eligibility for the CRHR and NRHP, but significance is evaluated at the local level. Criteria for inclusion on the Local Register includes:

1. resources associated with events that have made a significant contribution to the broad patterns of California or San Diego County's history and cultural heritage;
2. resources associated with the lives of persons important to our past, including the history of San Diego and our communities;
3. resources that embody the distinctive characteristics of a type, period, region (San Diego County), or method of construction, or represent the work of an important creative individual, or possesses high artistic values; and
4. resources that have yielded or are likely to yield, information important in prehistory or history.

According to County Guidelines, any site that yields information or has the potential to yield information is considered a significant site (County of San Diego 2007a:16). Unless a resource is determined to be "not significant" based on the above criteria, it will be considered a significant resource. If it is agreed to forego significance testing on cultural sites, the sites will be treated as significant resources and must be preserved through project design. In addition, a treatment plan must be prepared that will include preservation of cultural resources (County of San Diego 2007a:19).

1.3.5 Traditional Cultural Properties/Tribal Cultural Resources

Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Potentially relevant to prehistoric archaeological sites is the category termed traditional cultural properties (TCPs) in discussions of cultural resource management performed under federal auspices. According to Parker and King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

The County Guidelines (2007) identifies that cultural resources can also include TCPs, such as gathering areas, landmarks, and ethnographic locations in addition to archaeological districts. These guidelines incorporate both State and Federal definitions of TCPs. Generally, a TCP may consist of a single site, or group of associated archaeological sites (district; traditional cultural landscape), or an area of cultural/ethnographic importance.

The Traditional Tribal Cultural Places Bill of 2004 requires local governments to consult with Native American representatives during the project planning process. The intent of this legislation is to encourage consultation and assist in the preservation of “Native American places of prehistoric, archaeological, cultural, spiritual, and ceremonial importance” (County of San Diego 2007a). It further allows for tribal cultural places to be included in open space planning. State Assembly Bill 52, in effect as of July 1, 2015, introduces the TCR as a class of cultural resource and additional considerations relating to Native American consultation into CEQA. As a general concept, a TCR is similar to the federally-defined TCP, however incorporates consideration of local and state significance and required mitigation under CEQA. A TCR may be considered significant if included in a local or state register of historical resources; or determined by the lead agency to be significant pursuant to criteria set forth in PRC 5024.1; or is a geographically defined cultural landscape that meets one or more of these criteria; or is a historical resource described in PRC 21084.1, a unique archaeological resources described in PRC 21083.2, or is a non-unique archaeological resource if it conforms with the above criteria.

In 1990 the National Park Service and Advisory Council for Historic Preservation introduced the term “TCP” in *Guidelines for Evaluating and Documenting Traditional Cultural Properties* (formerly National Register Bulletin 38; Parker and King 1998). A TCP may be considered eligible based on “its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1998:1). Strictly speaking, TCPs are both tangible and intangible; they are anchored in space by cultural values related to community-based physically defined “property referents” (Parker and King 1998:3). On the other hand, TCPs are largely ideological, a characteristic that may present substantial problems in the process of delineating specific boundaries. Such a property’s extent is based on community conceptions of how the surrounding physical landscape interacts with existing cultural values. By its nature, a TCP need only be important to community members, and not the general outside population as a whole. In this way, a TCP boundary, as described by Parker and King (1998), may be defined based on viewscape, encompassing topographic features, extent of archaeological district or use area, or a community’s sense of its own geographic limits. Regardless of why a TCP is of importance to a group of people, outsider acceptance or rejection of this understanding is made inherently irrelevant by the relativistic nature of this concept.

2.0 GUIDELINES FOR DETERMINING IMPACT SIGNIFICANCE

Any of the following will be considered a potentially significant environmental impact to cultural resources.

1. The project causes a substantial adverse change in the significance of a historical resource as defined in 14 CCR 15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.
2. The project causes a substantial adverse change in the significance of an archaeological resource pursuant to 14 CCR 15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. The project disturbs any human remains, including those interred outside of formal cemeteries.
4. The project proposes activities or uses damaging to significant cultural resources as defined by the County RPO and fails to preserve those resources.
5. The project, as designed, causes a substantial adverse change in the significance of a TCR. This shall include the destruction or disturbance of a TCR.

Guidelines 1 and 2 are derived directly from CEQA. PRC 21083.2 and 14 CCR 15064.5 of the CEQA guidelines recommend evaluating historical and archaeological resources to determine whether or not a proposed action would have a significant effect on unique historical or archaeological resources. Guideline 3 is included because human remains must be treated with dignity and respect and CEQA requires consultation with the “Most Likely Descendant” as identified by the California Native American Heritage Commission (NAHC) for any project in which human remains have been identified. Guideline 4 was selected because cultural resources are protected under the RPO. Any project that would have an adverse impact (direct, indirect, and/or cumulative) on significant prehistoric resource as defined by these guidelines would be considered to have a significant impact on the environment. Guideline 5 was selected because CEQA recommends evaluating TCRs to determine whether or not a proposed action would have a significant effect.

3.0 RESEARCH DESIGN

As lead agency, the County of San Diego requires that the sites in the current study be evaluated to assess their eligibility for inclusion in the CRHR. As part of this process, SRI developed a research design to be used as a framework with which to evaluate the sites. A research design is an explicit statement of the theoretical and methodological approaches to be used in an archaeological study (Office of Historic Preservation 1990:9). The research design presented in this section was developed as a tool to establish field and analytical methods appropriate for evaluating the sites within the project area for their eligibility for listing in the CRHR. The following sections address both the prehistoric and protohistoric and the historical-period components of the site with respect to various research themes important to both of these eras.

3.1 Prehistoric and Protohistoric Research Themes

Research themes and issues for coastal southern California have been developed and debated by scholars over the last 50 years. The most recent discussions of research issues for western San Diego County include those of Finney (2003), York (2006, 2009), Underwood (2006), Zepeda-Herman and Underwood (2006), Reddy (2007), Byrd and Raab (2007), Sutton (2011, 2015), Sutton and Gardner (2010), Byrd (2011), and Davis and Laylander (2012). In addition to specific research questions, the issue of site integrity is important and is addressed below. A number of research themes applicable to the project area are considered below.

3.1.1 Site Placement and Dating

Adequate temporal control in archaeological deposits is crucial if researchers are to generate meaningful inferences from data or to address specific research questions with any degree of analytical confidence. Crucial to the current study is the timing of the prehistoric occupation of the sites within the project area (as outlined by Sutton [2011, 2015] and Sutton and Gardner [2010]). As outlined in Section 1.2.1, San Diego County has been home to human occupation for at least 10,000 years. The survey-level and excavation data from SDI-5066 conducted by Rosen (1982) and Gallegos and Associates (Kyle and Gallegos 1995) did not identify diagnostic artifacts or materials suitable for radiocarbon dating. The lack of ceramics led both researchers to conclude that the site was likely an early or middle Holocene encampment. However, without firm dates from the site, this temporal assignment is tenuous.

Research Questions Relating to Site Placement and Dating

1. What was the full temporal extent of the occupation of each of the project sites? Do they represent the full occupational history of the region or just a subset of that history?
2. What was the intensity of use of each site over time?
3. How do data from the sites from the project area compare to data from other regional-settlement-pattern studies?

Data Requirements

Data necessary to determine the age of the sites within the project area include an understanding of the full range of material culture present, including projectile points and pottery; mortar-to-milling-slick ratios; obsidian-source use; and general depth of deposit. Chronometric data (radiocarbon and obsidian hydration), if available, will be used to help place the site in time.

3.1.2 Regional Settlement Patterns

A number of different settlement-pattern models have been proposed for the San Diego County area, with much of the focus on the latter half of the Late Holocene (Byrd 2011:45–46).

Relatively few settlement-pattern studies have been conducted for the Late Pleistocene and Early and Middle Holocene in San Diego County, in part because of the relative paucity of sites dating to these early periods. The low diversity of site types and lack of specialized subsistence and resource-procurement sites is likely due to relatively low population levels during the Early and Middle Holocene (Byrd and Reddy 1999:51). Following this model, the low population allowed for more-generalized subsistence practices and less need for more-specialized sites within the daily foraging range of major residential bases. York (2006) reported a Middle Holocene occupation along the Santa Margarita River in Camp Pendleton in the northern part of San Diego County that followed a similar pattern (La Jolla III; see Sutton and Gardner 2010) with a settlement pattern of stable residential sites with temporary camps at resource-procurement localities (York 2006:49–50), perhaps akin to a collector-like system (*sensu* Binford 1980).

There appears to have been a major change in settlement during the Late Holocene, with an increase in the occupation of the major drainages (True and Waugh 1982). This change in settlement pattern corresponds to the entry of Taki groups into Los Angeles, Orange and northern San Diego counties (Sutton 2009). At Camp Pendleton, in northern San Diego County, Byrd and Reddy (2002:53) reported that after ca. 800 B.P., site density increased, major residential sites were located closer to each other, and the number and diversity of specialized sites increased. This suggested to Byrd and Reddy (2002:53) that people became more sedentary, that group territories became smaller, and that exploitation of littoral resources increased.

Based on data from the Palomar Mountain area, True and Waugh (1981:113, 1982:36) (see also True 1993:16; True et al. 1991:47) suggested that, by the mid Late Holocene, the system of dispersed settlements from the initial part of the Late Holocene had developed into a bipolar system of larger and more-sedentary winter and summer villages near permanent water. In this latter system, lowland winter villages would be located near the river valley, whereas upland summer villages would be located high on the mountain.

During the latter part of Late Holocene, the “one village per drainage” pattern shifted to a more complex, consolidated village pattern. This shift was probably stimulated by contact with Euroamerican missionaries and settlers and by factors such as drought (Rowntree 1985) and resource competition. The role of smaller, subsidiary sites in this system is unclear (True et al. 1991:47). Some level of rock art appears to be associated with each major settlement (True 1954:68). Along the lower reaches of the San Luis Rey River, True (1993:17) reported that permanent villages were located near springs. Nearby, Wallace (1960) discovered several sites with Late Holocene components with associated San Luis Rey style rock art (Wallace 1960:285, 287).

This Late Holocene village-based settlement pattern is similar to that of ethnohistorically documented Luiseño Kumeyaay (Diegueño) settlements. Oxendine (1983:56–57, 159–160) reported a Luiseño settlement pattern that consisted of permanent villages with sedentary populations, located in a valley near water and in an ecotone, with smaller temporary camps used for special purposes. She suggested that the bipolar settlement pattern proposed by True et al. (1974) was restricted to those areas with marked changes in elevation (Oxendine 1983:33).

Research Questions Related to Regional Settlement Patterns

1. Do any of the project sites date to the late Pleistocene? Is there evidence for relatively long-term habitation, or were the sites used only as short-term camps? Is there any evidence for specialized activities?

2. Do any of the project sites date to the early or middle Holocene? Do project sites dating to the early and middle Holocene follow the settlement models noted by Byrd and Reddy (1999, 2002) and York (2006)? Are these habitation sites, or are specialized-activity sites also present? Where are these sites located?
3. Do any of the project sites date to the late Holocene? How well do the project sites conform to the settlement models posed for prehistoric societies of the late Holocene? Is there evidence for increasing site diversity and smaller foraging areas? Do smaller sites conform to the two site types identified by True et al. (1974)?

Data Requirements

Once the phase(s) assignment of the SDI-15143 occupation has been determined, the location and function of the site can be compared to the existing model of inland settlement to determine where it supports or refutes the current view.

3.1.3 Subsistence

The most pronounced environmental change for coastal southern California was the rise in sea level that occurred during the early to middle Holocene, with associated flooding of coastal valleys and the creation of lagoons. Evidence of environmental change in lagoons is based on analysis of core samples combined with radiocarbon dates and radiocarbon-dated shellfish samples taken from precontact sites near lagoons. Environmental studies using shellfish to explain site patterning and environmental change include Miller (1966), Warren et al. (1961), Warren and Pavesic (1963), Bull and Kaldenberg (1976), Gallegos (1985), and Masters (1988).

About 3,500 years ago, the sea level stabilized, causing an increase in siltation processes that eventually caused degradation of the lagoons during the late Holocene. In contrast to San Diego Bay, the environmental change for lagoons in San Diego County was more complex. San Diego Bay formed in the early Holocene and stayed open to the ocean throughout the Holocene (Gallegos and Kyle 1988). Similar to the north San Diego County lagoons, the Tijuana Lagoon cycled from an open lagoon to a closed mudflat estuary by 3,500 years ago. Thus, some precontact sites may reflect a changing environment and the loss of lagoonal shellfish and fish, whereas other sites dependent on San Diego Bay for resources may not reflect these changes.

Large quantities of shellfish generally have not been recovered from precontact sites in the area. This relative lack of shellfish may be the result of poor preservation, or it may reflect the location of habitation sites away from lagoon and ocean resources. Changes in use of shellfish and fish through time, therefore, may be difficult to determine for habitation sites in the area.

Another issue is the intensification of acorns. Mortars (including bedrock mortars) and pestles were not part of inland Encinitas (La Jolla) technology (Sutton and Gardner 2010:7), and manos and metates remained the principal technology even after 5000 B.P. Thus, it appears that acorns were not exploited inland until very late (e.g., see Hale 2006), and they never gained the importance in the interior that they seem to have had along the coast. True et al. (1991:47) suggested that the upland element of the bipolar late Holocene settlement system had a subsistence focus on acorns, whereas the lowland/coastal system included a greater variety of resources that included acorns and the seasonal use of marine resources, such as bean clams (*Donax gouldii*). This idea was supported by an increase in the percentage of mortars in late Holocene bedrock milling features (True 1993:9). It is also possible that the adoption of pottery enabled a new cooking method to “detoxify” acorns (see Mack 2003:31), as the Luiseño cooked leached acorn meal in pottery vessels (Sparkman 1908:194). This is all suggestive of decreasing mobility and increasing resource intensification (e.g., see Horne 2001:2).

Research Questions regarding Dietary Change

1. What is the evidence of subsistence practices, both in material culture (e.g., milling equipment and projectile points) and ecofactual remains (faunal and paleoethnobotanical materials), at the sites?
2. If a site was occupied over a relatively long period of time, is there evidence for changing dietary practices?
3. How do the subsistence practices at the project sites compare with competing coastal-decline and coastal-intensification models? Is there evidence for increasing dependence of lower-ranked resources during late Holocene times?
4. Were acorns processed at the project sites? If so, were they the central focus of resource-procurement strategies, or were they one of many different resources exploited by the people using the site?

Data Requirements

Issues regarding subsistence would be addressed using faunal and botanical data, including pollen, phytoliths, lipids, and protein residue. The field and laboratory methods are designed to obtain and analyze such data, if present. Any information regarding seasonality will also be obtained, if possible. Features, such as hearths and granaries, may be present and could provide data on subsistence. Finally, the presence of subsistence technology (e.g., procurement, processing, or storage) could be useful to address these questions.

3.1.4 Reconstructing Regional Trade

The major trade materials found in the archaeological record are obsidian from inland sites and shell beads from the coast. Until ca. 1500 B.P., nearly all of the obsidian used by people in southern California originated from geologic sources to the north, primarily the Coso Volcanic Field (Sutton 2010:18). At a time ca. 1500 B.P., the trade in Coso obsidian decreased dramatically in the southern San Joaquin Valley (Sutton and DesLauriers 2002), in the Mojave Desert (Sutton 1996:240; Sutton et al. 2007:244), along the Santa Barbara coast (e.g., Ericson and Meighan 1984:149), and in southern California in general. After that time, people in southern California adjusted to this problem by using glass from the Obsidian Butte source located in Imperial County (Koerper et al. 2002:69; see also Koerper et al. 1986). In San Diego County, Obsidian Butte glass seems to appear more frequently in the interior than along the coast (Hughes and True 1985:333; Laylander and Christenson 1988). By the Late Holocene, obsidian (from Obsidian Butte) is generally rare (Hughes and True 1985:Table 2, 333; True et al. 1991:51).

Shell beads are not common until the start of the Late Holocene (Meighan 1954:220, Table 2), and most probably were obtained from the Pacific coast. However, some are known from the Gulf of California (Gibson and Koerper 2000; King 1990).

Research Questions Related to Regional Trade

1. What trade goods are present at the project sites? Is there evidence for long-distance exchange, such as the presence of Coso obsidian or *Olivella* shells from the Gulf of California?
2. Did access to trade goods change through time?

Data Requirements

Data required to test these various ideas include information on obsidian and shell beads. The sourcing and hydration data from any obsidian found at the site could be used to elucidate trade patterns of obsidian through time, testing the current model of the late use of the Obsidian Butte source.

4.0 ANALYSIS OF PROJECT EFFECTS

4.1 Methods

4.1.1 Survey Methods

A pedestrian survey of the project area was conducted on September 3, 2015, by Project Director Scott H. Kremkau, Ph.D., RPA; Dean Duryea, M.A., RPA; and Joy Vyhmeister, M.A. The survey was conducted with a team of three archaeologists, who walked in straight-line transects across the entire project area spaced at 15-m intervals. The progress of the survey was monitored using Trimble GeoXT/XH Global Positioning System (GPS) units and high-resolution aerial photographs. A map of previously recorded sites was used as a background on the GPS units. This allowed survey crewmembers to determine when they were within the boundaries of previously recorded sites. Field notes and photographs are on file at SRI's office in Redlands, California.

4.1.2 Buried-Sites Testing Methods

Approximately 2 years after the completion of the 2015 pedestrian survey of the Skyline Retirement Center project area, SRI conducted a buried-sites testing investigation in order to determine if intact portions of CA-SDI-5066 are still present under the fill soils at the project area. The buried-sites testing investigation at CA-SDI-5066 was conducted in two phases, resurvey and trenching, from October 24, 2017, to October 26, 2017, by SRI Project Director James Clark, M.A., RPA; SRI Assistant Project Director Allison Hill, M.A. RPA; and SRI Field Technicians Alvin Rosa, B.A., and Zachary Pendley, B.A. Bob Chamberlain, of the Jamul Indian Village of California, provided Native American monitoring services during the investigation, and Mike Cook, of Skyline Wesleyan Church, functioned as the backhoe operator.

Resurvey Methods

The initial phase of the buried-sites testing investigation entailed resurveying the entire 8.91-acre Skyline Retirement Center project area, because it had been 2 years since the completion of SRI's 2015 cultural resources survey. The purpose of the resurvey was to confirm the project area and site conditions at CA-SDI-5064 and CA-SDI-5066 remained consistent with observations from the 2015 survey.

Similar to the 2015 investigation, the entire project area was surveyed by SRI staff walking parallel transects spaced at 15-m intervals. Progress of the survey and any cultural resources identified by SRI staff was recorded using Trimble GeoXT/XH GPS units. Field notes and photographs are on file at SRI's office in Redlands, California.

Trenching Methods

Following the completion of the resurvey of the project area, an E32 Bobcat backhoe equipped with a 3-foot-wide toothed bucket excavated a series of four trenches in the southeastern portion of the project area both within and immediately adjacent to the site boundary of CA-SDI-5066 to determine if intact portions of the site were still present under the surface of the project area. The trenches were placed approximately 65 feet apart, and each measured 20 by 3 feet. Because previous testing at CA-SDI-5066 demonstrated the presence of a subsurface deposit between 0 and 50 cm below surface (Gallegos 1995; Rosen 1982), all trenches were mechanically excavated to a depth of 5 feet below the surface in 1-foot levels.

A 3.5-cubic-foot sediment sample was collected per level from each of the four trenches and dry-screened through 1/8-inch screen mesh in order to identify the presence of any artifacts or ecofacts. Profiles of the soil stratigraphy were recorded for each trench. When ecofacts, artifacts, or features were identified during trenching activities, as per the work plan developed for this project, a 1-by-1-m excavation unit was excavated next to the positive trench in order to further investigate the nature of the subsurface deposit (Kremkau 2016). The excavation units were excavated in 10-cm levels and screened through 1/8-inch mesh. Any intact portions of the CA-SDI-5066 found in the course of the project were evaluated pursuant to CEQA and the County of San Diego RPO.

Backfilling of mechanically excavated trenches was monitored by SRI Field Technician Zachary Pendley and Jamul Indian Village of California Native American Monitor Bob Chamberlain on October 26, 2017. Field notes and photographs are on file at SRI's office in Redlands, California.

4.1.3 Native American Coordination

Part of the records search and literature review involved contacting the NAHC for a list of traditional-use areas or sacred sites within the project area and for a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. The NAHC Sacred Lands File search did not indicate the presence of Native American TCPs within the project area (Confidential Appendix C). Additionally, the NAHC provided a list of 29 contacts that could provide additional information on cultural resources within the project area. SRI subsequently began discussions with the contacts provided by the NAHC. The contacts were sent a letter describing the proposed project and SRI's involvement. We requested any information the contacts may be able to provide on the potential for TCPs within the project area.

In a letter to SRI dated October 13, 2015, the Viejas Band of Kumeyaay Indians, requested Ms. Julie Hagen be contacted to schedule a site visit to the project area (see Confidential Appendix C). SRI communicated this request to REC Consultants and Ms. Julie Castillo of Skyline Wesleyan Church. Ms. Castillo, contacted the Viejas Band of Kumeyaay Indians on October 17, 2017, and informed the tribal point of contact the Skyline Retirement Center project area would be made accessible to them for a site visit on October 24, 2017, to coincide with the start of the buried-sites testing investigation at CA-SDI-5066. Unfortunately, the Viejas Band of Kumeyaay Indians were unable to visit the project area on this date, and their representative informed Ms. Castillo that they would contact her in the immediate future to reschedule their site visit. At the time of this report, the Viejas Band of Kumeyaay Indians have yet to reschedule their site visit to the Skyline Retirement Center project area.

The County is also conducting outreach with local tribes and groups. Consultation is ongoing and will continue throughout the processing of this project. Copies of all Native American correspondence for this project is provided in Confidential Appendix C.

4.2 Results

4.2.1 Survey Results

The initial pedestrian survey of the 8.91-acre Skyline Retirement Center project area occurred on September 3, 2015, and no cultural resources were identified (see Figure 2). Low brush was present in parts of the project area, but generally, ground visibility was good and ranged from 75 to 99 percent. No trace of either of the two previously recorded sites located within the project area, CA-SDI-5064 and CA-SDI-5066, were found (see updated California Department of Parks and Recreation site-record forms in Confidential Appendix D). The area around CA-SDI-5064 has been highly disturbed, and a large pile of fill was located

at the recorded site location (Confidential Appendix Figure E.1). A large, recently disturbed boulder was identified at the site location, but the boulder did not contain any milling features.

The area around CA-SDI-5066 was also heavily disturbed. Much of the portion of the site within the project area has been used as a staging area for equipment associated with the construction of the Skyline Wesleyan Church between 1995 and 2000 and the San Diego Electric 25 Wood-to-Metal Pole Replacement Project in 2010 (Bowden-Renna 2010a, 2010b) (see Confidential Appendix Figure B.4). Much of this portion of the site has been graded, and the site deposit may no longer be present (Confidential Appendix Figure E.2). Large piles of fill soils have been placed near the fenced area (Confidential Appendix Figure E.3), so parts of the site may be present below the fill piles.

4.2.2 Buried Sites Testing Results

Resurvey Results

The resurvey of the entire 8.91-acre Skyline Retirement Center project area was conducted on October 24, 2017. The project area was predominantly covered in dense brush which ranged from thigh-height to chest-height, with some large swaths of the eastern project area covered in thick patches of cholla cactus. Ground visibility was low, approximately 15 percent, across most of the project area, except at the few dirt roads which wound through the eastern side of the project area and exhibited ground visibility closer to 99 percent. The disturbed condition of the project area and the two previously recorded sites observed during the 2015 survey (CA-SDI-5064 and CA-SDI-5066) was consistent with observations made by SRI staff during this survey.

Although CA-SDI-5064 still could not be relocated, the results of the 2017 resurvey of CA-SDI-5066 were positive, with two isolated artifacts being identified within the site boundary (Confidential Appendix Figure B.4). The first artifact (Artifact 1; Provenience Designation [PD] 69; Catalog No. 03006F474) is a single brick fragment (Figure 4) with paralleled grooved lines. The second artifact (Artifact 2; PD 76; Catalog No. 03006F473) is a nearly complete *Chione* shell fragment that is possibly prehistoric (Figure 5).

Prior to being collected for additional analysis at SRI's Redlands, California, office, the location of the two isolates within the boundary of CA-SDI-5066 were recorded with a Trimble GeoXT/XH GPS unit.

Trenching Results

Following the completion of the resurvey, a total of four trenches were judgmentally placed approximately 65 feet apart in the southeastern portion of the project area. Two of the trenches (Trench [TR] 1 [PD 51] and TR 2 [PD 70]) were placed within the boundary of site CA-SDI-5066, whereas the remaining two were placed immediately adjacent to the northeastern boundary of CA-SDI-5066 (TR 3 [PD 57] and TR 4 [PD 63]) (see Confidential Appendix Figure B.4).

Each trench measured 20 by 3 feet and all were excavated to a depth of 5 feet below the surface in 1-foot levels by an E32 Bobcat backhoe equipped with a 3-foot, toothed bucket. A sample of 3.5 cubic feet of sediment was randomly collected from each level, assigned a unique provenience designation number, and dry-screened through 1/8-inch mesh in order to record artifacts and ecofacts in the sample. All trenching activities were monitored by a qualified archaeologist who, in addition to recording findings on trench summary forms, carefully examined the trenches and the windrows of backdirt for the presence of features, fire-affected rock, and isolated cultural materials. Digital photographs of select trenches were taken, and frame descriptions and orientations were noted in the project photograph log. At the conclusion of trenching, soil profiles of all trenches were recorded and the boundaries of each trench were recorded with a Trimble GeoXT/XH GPS unit.



**Figure 4. Brick fragment, PD 69,
Catalog No. 03006F474.**



**Figure 5. *Chione* shell fragment, PD 76,
Catalog No. 03006F473.**

Backhoe trenching at TRs 1–4 and the associated random-sample dry-screening program failed to identify any subsurface deposits, features, or isolated cultural material associated with CA-SDI-5066. Two stratigraphic levels were identified above an intact A horizon within the two mechanically excavated trenches placed within the boundary of CA-SDI-5066 (Figures 6 and 7). Trench profiles for TRs 1 and 2 identified Stratum I as light brownish gray (10YR 6/2) sandy silt fill soils mixed with gravel and Stratum II as a distinct uniform gravel bed layer. As mentioned earlier, both strata are likely associated with this portion of the project area’s past use as a staging area for equipment associated with the construction of the Skyline Wesleyan Church between 1995 and 2000 and the San Diego Gas and Electric 25 Wood-to-Metal Pole Replacement Project in 2010 (Bowden-Renna 2010a and 2010b). The A horizon at both trenches was characterized as being dark yellowish brown (10YR 4/6) clayish sandy silt that persisted to the 5-foot terminal depth of the trench, with signs of disturbance (mechanical, krotovina, root, etc.) being noticeably absent.

The soil profiles of the two trenches mechanically excavated outside the boundary of CA-SDI-5066, TRs 3 and 4, were noted for their uniform soil profile consisting of an intact A horizon present from the surface to the terminal depth of the trench at 5 feet (Figures 8 and 9). Similar to TRs 1 and 2, the A horizon at TRs 3 and 4 was dark yellowish brown (10YR 4/6) clayish sandy silt. The only difference in the soil profiles of TRs 3 and 4 was a single piece of construction debris located in the first level (i.e., 1 foot below the surface) of TR 3.

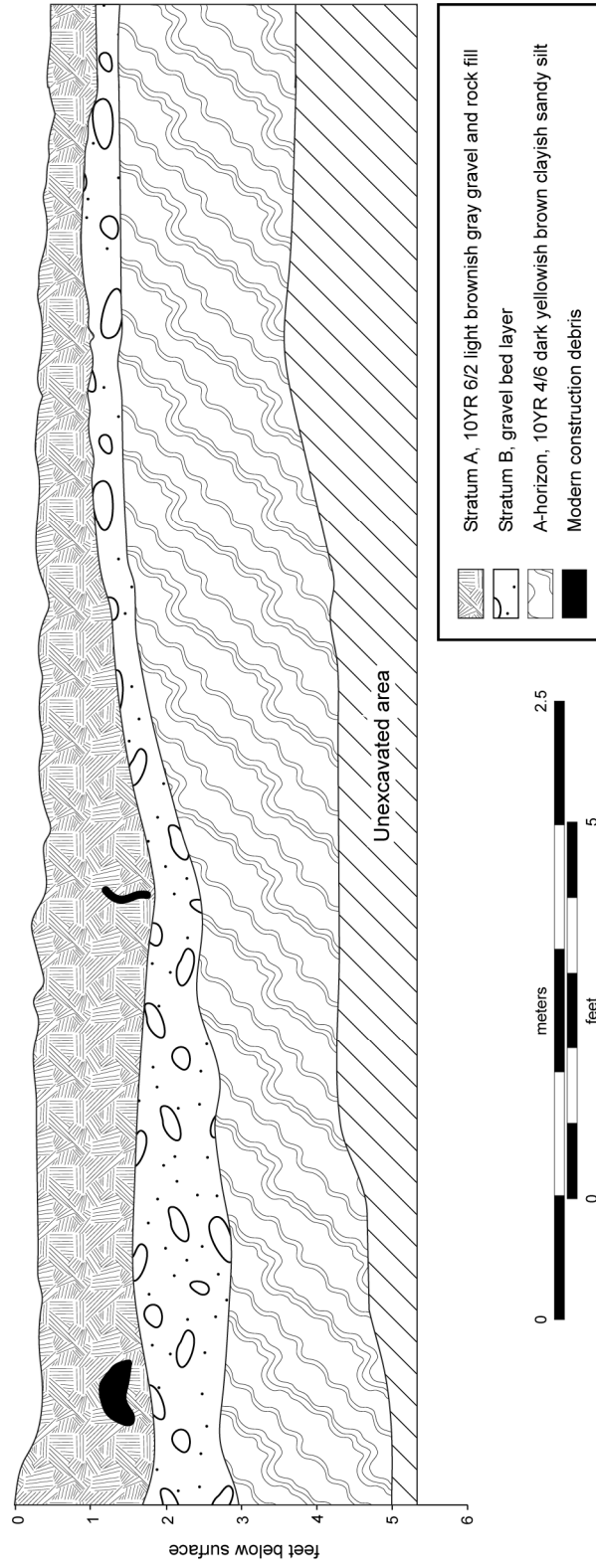


Figure 6. Profile of Trench 1 within CA-SDI-5066.

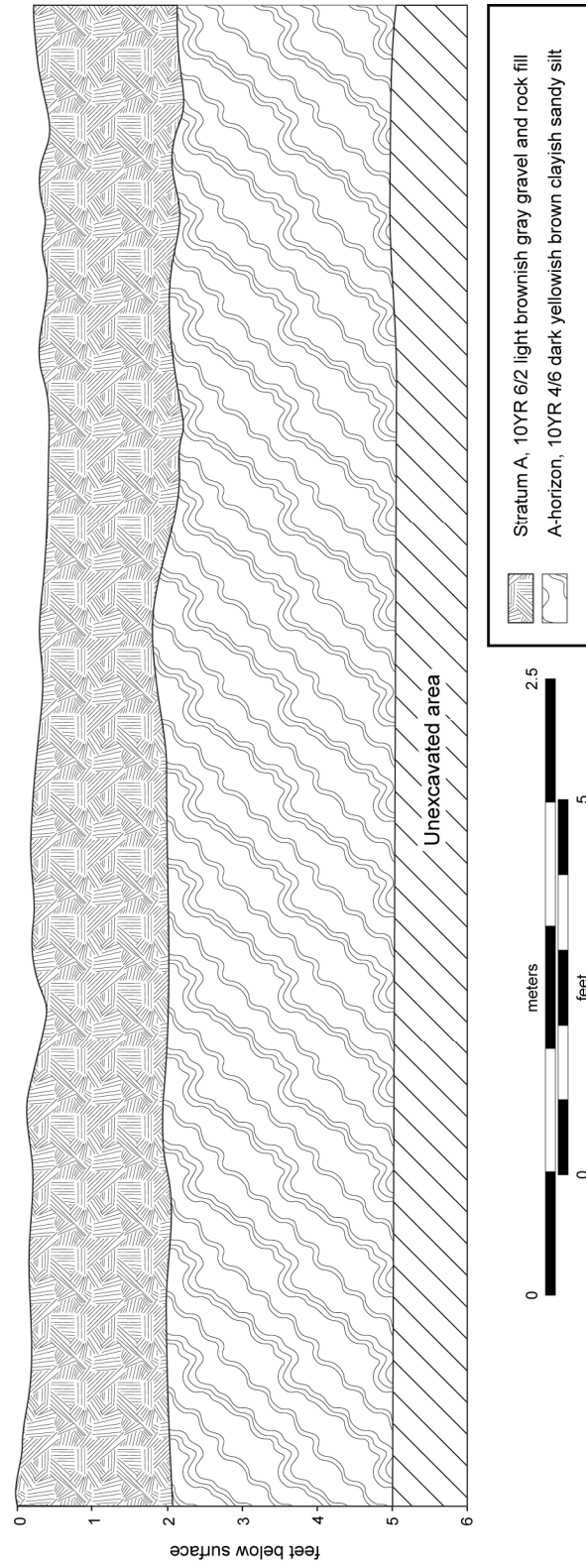


Figure 7. Profile of Trench 2 within CA-SDI-5066.

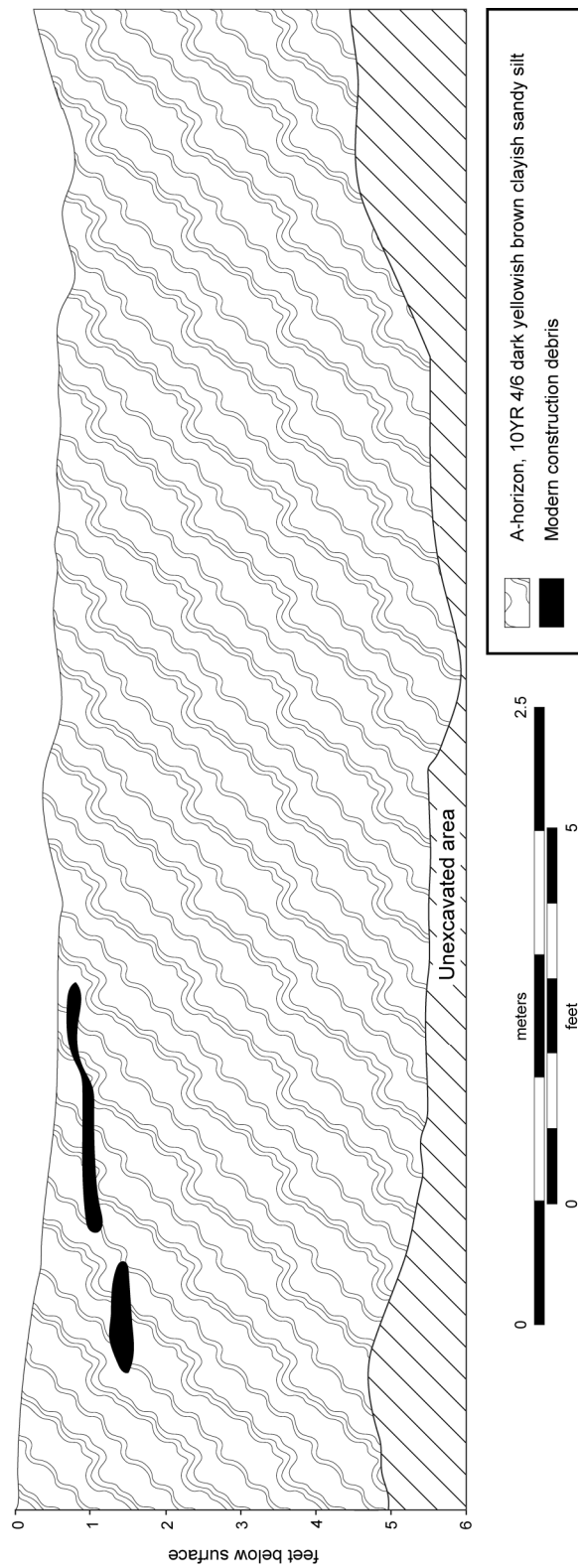


Figure 8. Profile of Trench 3 near CA-SDI-5066.

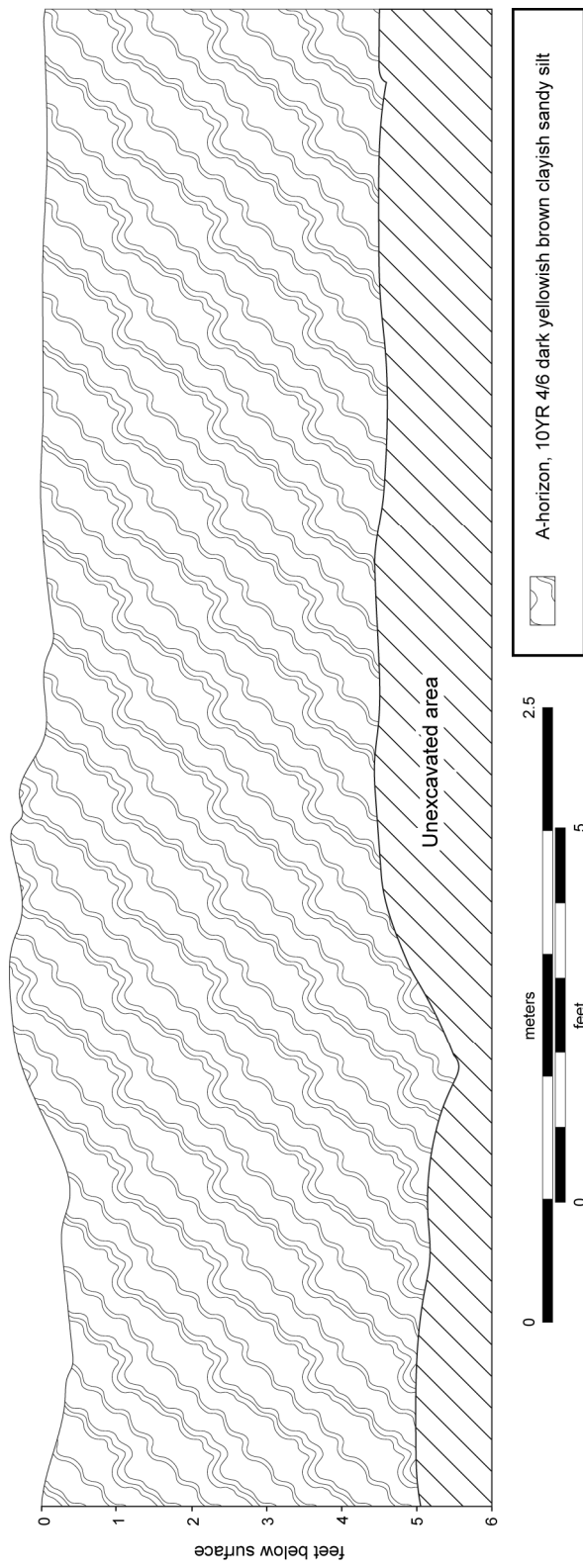


Figure 9. Profile of Trench 4 near CA-SDI-5066.

5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

5.1 Historical Resources

No historical resources were identified during the proposed project.

5.2 Archaeological Resources

The County of San Diego is the lead review agency for the project. Therefore, the sites have been evaluated for eligibility for listing in the CRHR under CEQA Guidelines as well evaluated for importance under the County Guidelines. Although sites may be recommended eligible or not eligible for listing in the CRHR under the County Guidelines, all sites are considered “important.” Under the County Guidelines, the “importance” of sites recommended not eligible for listing in the CRHR can be exhausted through testing, the curation of artifacts, and construction monitoring.

5.2.1 CA-SDI-5064

CA-SDI-5064 is a small site consisting of two milling slicks on one bedrock outcrop. The site was originally recorded by Carrico in 1977. No artifacts were associated with the features, and no subsurface testing has been conducted at the site. Based on the results from the 2015 and 2017 survey of the area by SRI, the area around CA-SDI-5064 has been highly disturbed, and a large pile of fill was located at the recorded site location. A large, recently disturbed boulder was identified at the site location, but the boulder did not contain any milling features. Because none of the site components could be relocated, it is possible that the site was damaged or destroyed by the observed disturbances.

Based on field observations and information from previous work at the site, it is recommended that CA-SDI-5064 is not a significant resource pursuant to the guidelines of the Local Register, the CRHR, and CEQA, nor is the site significant under the County RPO. The site is not considered eligible for listing in the CRHR, as it does not have any substantial research potential because the site is no longer extant. As the site was not relocated, it is not considered important under County Guidelines.

5.2.2 CA-SDI-5066

CA-SDI-5066 was previously identified as a large lithic and ceramic scatter and a deflated subsurface deposit. Test excavations at the site were subsequently conducted by Rosen (1982) and Gallegos and Associates (Kyle and Gallegos 1995). The results of the testing projects identified a shallow subsurface deposit at the site. As a result of the testing, Kyle and Gallegos (1995) evaluated the site and found CA-SDI-5066 “not significant/important under County of San Diego and CEQA guidelines” and recommended no additional work. Furthermore, Kyle and Gallegos (1995) indicated that CA-SDI-5066 was previously recommended not significant, with SHPO concurrence, and was not eligible for listing in the NRHP.

A portion of the site within the project area was revisited by Bowden-Renna (2010b) during monitoring for the installation of a fence. A few pieces of debitage and a mano were observed, but it appears that much of this part of the site has been disturbed through grading. During the current project, only two artifacts (one shell and one brick fragment of unknown age) were discovered on the ground surface; trenching within the site boundary was negative for subsurface deposits.

Based on this information, SRI agrees with the evaluation provided by Kyle and Gallegos (1995). It is recommended that CA-SDI-5066 is not a significant resource pursuant to the guidelines of the Local

Register, the CRHR, and CEQA, nor is the site significant under the County RPO. The site is not considered eligible for listing in the CRHR, as it does not have any substantial research potential. Under the County Guidelines for determining significance (County of San Diego 2007a), CA-SDI-5066 is considered an important resource. The current evaluation and documentation efforts coupled with construction monitoring during initial ground disturbance for the entire project area will mitigate impacts to this resource to less than significant. Artifacts collected during the project will be curated at the San Diego Archaeological Center.

5.3 Tribal Cultural Resources

No information has been obtained through Native American consultation or communication with the Native American monitors during fieldwork that any sites within the proposed project are culturally or spiritually significant. No TCPs that currently serve religious or other community practices are known to be present within the project area. During the current archaeological evaluation, no artifacts or remains were identified or recovered that could be reasonably associated with such practices. The prehistoric artifacts at CA-SDI-5066 consisted of previously recorded common flaked stone and ground stone items and one partial *Chione* shell found during the current study; no artifacts were recorded at CA-SDI-5064. The prehistoric features consisted of bedrock milling features at CA-SDI-5064, but these milling features could not be relocated; no features were observed at CA-SDI-5066.

6.0 MANAGEMENT CONSIDERATIONS—MITIGATION MEASURES AND DESIGN CONSIDERATIONS

6.1 Mitigated Impacts

SRI did not identify any substantial cultural resources within the project area during the survey and buried-sites testing program. The area around CA-SDI-5064 has been disturbed during the construction of an adjacent residential development, and it appears that the site has been destroyed. Therefore, under County Guidelines for determining significance (County of San Diego 2007a), CA-SDI-5064 is less than significant. CA-SDI-5064 is not historically significant under CEQA and is not eligible for listing in the Local Register or the CRHR. Furthermore, CA-SDI-5064 is not significant under the County RPO. Monitoring of all grading will reduce the impacts to this resource to less than significant.

Much of the area around CA-SDI-5066 has been graded, and it is likely the site has been heavily impacted. Piles of fill soils are present in places, which may be covering the site. Because of the potential for buried site deposits in the vicinity of CA-SDI-5066, SRI implemented a buried-sites testing program to determine if intact portions of CA-SDI-5066 are still present under the fill soils. No subsurface site deposits were observed during trenching. Based on earlier testing at this site (see Kyle and Gallegos 1995) and information gathered from the buried-sites testing program implemented by SRI, CA-SDI-5066 is not historically significant under CEQA and is not eligible for listing in the Local Register or the CRHR. Furthermore, CA-SDI-5066 is not significant under the County RPO. Under the County Guidelines for determining significance (County of San Diego 2007a), CA-SDI-5066 is an important resource. However, the research potential for this site appears to have been exhausted, based on the lack of subsurface deposits (as evidenced by the negative findings from the trenching) and overall site surface disturbances. Monitoring of all grading will reduce the impacts to this resource to less than significant.

6.2 Unanticipated Discoveries/Human Remains

Because of the sensitivity of the area, an archaeological monitoring program will be made a condition of approval. The monitoring program will include the following requirements:

- Pre-Construction
 - Pre-construction meeting to be attended by the Project Archaeologist and Kumeyaay Native American monitor to explain the monitoring requirements.
- Construction
 - Monitoring. Both the Project Archaeologist and Kumeyaay Native American monitor are to be onsite during earth disturbing activities. The frequency and location of monitoring of native soils will be determined by the Project Archaeologist in consultation with the Kumeyaay Native American monitor. Both the Project Archaeologist and Kumeyaay Native American monitor will evaluate fill soils to ensure that they are negative for cultural resources.
 - If cultural resources are identified:
 - Both the Project Archaeologist and Kumeyaay Native American monitor have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery.
 - The Project Archaeologist shall contact the County Archaeologist.
 - The Project Archaeologist in consultation with the County Archaeologist and Kumeyaay Native American shall determine the significance of discovered resources.
 - Construction activities will be allowed to resume after the County Archaeologist has concurred with the significance evaluation.

- Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and nonsignificant deposits not be collected by the Project Archaeologist, the Kumeyaay Native American monitor may collect the cultural material for transfer to a Tribal curation facility or repatriation program.
 - If cultural resources are determined to be significant, a Research Design and Data Recovery Program shall be prepared by the Project Archaeologist in consultation with the Kumeyaay Native American monitor and approved by the County Archaeologist. The program shall include reasonable efforts to preserve (avoid) unique cultural resources of Sacred Sites; the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap if avoidance is infeasible; and data recovery for nonunique cultural resources. The preferred option is preservation (avoidance).
- Human Remains.
 - The Property Owner or their representative shall contact the County Coroner and the Planning & Development Services Staff Archaeologist.
 - Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin.
 - If the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by NAHC, shall be contacted by the Property Owner or their representative in order to determine proper treatment and disposition of the remains.
 - The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by PRC 5097.98 has been conducted.
 - PRC 5097.98, CEQA (14 CCR 15064.5), and *Health and Safety Code* 7050.5 shall be followed in the event that human remains are discovered.
- Rough Grading
 - Upon completion of Rough Grading, a monitoring report shall be prepared identifying whether resources were encountered. A copy of the monitoring report shall be provided to the SCIC and any culturally-affiliated tribe who requests a copy.
- Final Grading
 - A final report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the SCIC and any culturally-affiliated tribe who requests a copy.
 - Disposition of Cultural Material.
 - The final report shall include evidence that all prehistoric materials have been curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 *Code of Federal Regulations* (CFR) 79, or alternatively have been repatriated to a culturally affiliated tribe.
 - The final report shall include evidence that all historic materials have been curated at a San Diego curation facility that meets federal standards per 36 CFR 79.

7.0 REFERENCES

Almstedt, Ruth F.

- 1974 *Bibliography of the Diegueño Indians*. Ballena Press, Ramona, California.

Barbolla-Roland, Diane

- 1984 *Proposed 36" Main from La Pressa Pump Station to Regulatory Reservoir: An Archaeological Survey*. Report on file, South Coastal Information Center.

Barrows, David Prescott

- 1900 *Ethnobotany of the Cahuilla Indians of Southern California*. University of Chicago Press, Chicago.

Basgall, Mark E.

- 2007 *Another Look at the Ancient Californians: Resurvey of the Emma Lou Davis Stake Areas and Reassessment of Collections, Naval Air Weapons Station China Lake, Kern County, California*. On file, Naval Air Weapons Station, China Lake, California.

Bean, Lowell J.

- 1972 *Mukat's People*. University of California Press, Berkeley and Los Angeles, California.

Bean, Lowell J., and Katherine Siva Saubel

- 1972 *Temalpakh: Cahuilla Indian Knowledge and Usage of Plants*. Malki Museum Press, Banning, California.

Bean, Lowell J., and Florence C. Shipek

- 1978 Luiseño. In *California*, edited by R. F. Heizer, pp. 550–563. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Beardsley, Richard K., Preston Holder, Alex D. Krieger, Betty J. Meggers, John B. Rinaldo, and Paul Kutsche

- 1956 Functional and Evolutionary Implications of Community Patterning. In *Seminars in Archaeology*, edited by Robert Wauchope, pp. 130–157. Memoirs No. 11. Society for American Archaeology, Salt Lake City.

Binford, Lewis R.

- 1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45(1):4–20.

Bonner, Wayne H., Marnie Aislin-Kay, and Sarah Williams

- 2008 *Cultural Resource Records Search And Site Visit Results For AT&T Mobility, LLC Facility Candidate Ss-624-02 (Dixieline/Blockbuster), 3607 "B" Avocado Boulevard, La Mesa, San Diego County, California*. Michael Brandman Associates. Report on file, South Coastal Information Center.

Bowden-Renna, Cheryl

- 2010 *Cultural Resources Survey For 25 Wood To Steel Pole Replacements Along Tl6911, Tl624, Tl627, Tl643 And Staging Yards Areas For Jamacha Getaways, Rancho San Diego Area, San Diego County, California*. AECOM. Report on file, South Coastal Information Center.
- 2010 *Letter Report: Ets 20688 Cultural Resources Monitoring For A Staging Area At The Skyline Wesleyan Church For The Jamacha Getaways Wood-To-Steel Project, Rancho San Diego*

- Area, San Diego County, California 10-200415072*. AECOM. Report on file, South Coastal Information Center.
- Brackett, Robert W.
 1939 *A History of the Ranchos of San Diego County, California*, Union Title Insurance and Trust Company.
- Bull, Charles, and Russell Kaldenberg
 1976 *Archaeological Investigations at the World Medical Foundation*. On file, South Coastal Information Center, San Diego State University, San Diego, California.
- Burrus, Ernest J. (editor)
 1967 *Diario del Capitan Comandante Fernando de Rivera y Moncada con un Apéndice Documental. Edición Prologo (Español y Ingles) y notas por E. J. Burrus. Colección Chimalistac de Libros y Documentos Acerca de la Nueva España, Vol. 24–25. Ediciones Jose Porrua Turanzas, Madrid.*
- Byrd, Brian F. (editor)
 2011 *Archaeological Regional Research Design for MCB Camp Pendleton, San Diego County, California*. Prepared for Naval Facilities Engineering Command Southwest, San Diego. On file, South Coastal Information Center, San Diego State University, San Diego.
- Byrd, Brian F., and Stan Berryman
 2006 *Approaching Prehistory in the Future on MCB Camp Pendleton, Southern California. In Proceedings of the Society for California Archaeology*, vol. 19, edited by Sharon A. Waechter, Don Laylander, and Gregory G. White, pp. 229–232. Society for California Archaeology, Chico, California.
- Byrd, Brian F., Kevin Pope, and Seetha N. Reddy
 2004 *Results of NSF-Funded Archaeological and Paleoenvironmental Investigations at San Elijo Lagoon, San Diego County, California*. ASM Affiliates, Carlsbad, California. On file, South Coastal Information Center, San Diego State University, San Diego.
- Byrd, Brian F., and L. Mark Raab
 2007 *Prehistory of the Southern Bight: Models for a New Millennium. In California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215–227. AltaMira Press, Lanham, Maryland.
- Byrd, Brian F., and Seetha N. Reddy
 1999 *Collecting and Residing near the Shore: The Role of Small and Large Sites in Settlement Reconstruction. Pacific Coast Archaeological Society Quarterly* 35(1):33–56. Costa Mesa, California.
- 2002 *Late Holocene Adaptations along the Northern San Diego Coast. In Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 41–62. Perspectives in California Archaeology, vol. 6. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Carrico, Richard L.
 1974 *Archaeological Survey of Mount Helix 77 Acre Development*. Natural Sciences Group. Report on file, South Coastal Information Center.

- 1977 *Archaeological - Historical Survey Report for Avocado Village Lot No. 4*. Westec Services. Report on file, South Coastal Information Center.
- 1990 *Historic Resources Inventory Sweetwater Valley*. Report on file, South Coastal Information Center.
- Cassidy, Jim, L. Mark Raab, and Nina A. Kononenko
- 2004 *Boats, Bones, and Biface Bias: The Early Holocene Mariners of Eel Point, San Clemente Island, California*. *American Antiquity* 69(1):109–130.
- Clevenger, Joyce M.
- 1993 *Archaeological Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M. 12.7*. Ogden Environmental and Energy Services. Report on file, South Coastal Information Center.
- 1994 *Archaeological Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M. 12.7 Charge Unit No./Ea No. 11221-182050/11221-182020*. Ogden Environmental and Energy Services. Report on file, South Coastal Information Center.
- Clevenger, Joyce M., and Kathleen A. Crawford
- 1994 *Historic Properties Survey Report for Proposed Improvements to Portions of State Route 94, P.M. 14.1 to P.M. 16.7 and State Route 54, P.M. T-11.0 to P.M. 12.7*. Ogden Environmental and Energy Services. Report on file, South Coastal Information Center.
- County of San Diego
- 2007a *Guidelines for Determining Significance, Cultural Resources: Archaeological and Historic Resources*. Land Use and Environment Group, Department of Planning and Land Use, Department of Public Works, San Diego County, California.
- 2007b *Report Format and Content Guidelines: Archaeological and Historic Resources*. Land Use and Environment Group, Department of Planning and Land Use, Department of Public Works, San Diego County, California.
- Crafts, Karen
- 2000 *Preliminary Archaeological Survey Report of the Eastern Alignment Alternatives for State Route 125-South*. Caltrans. Report on file, South Coastal Information Center.
- Crawford, Kathleen, and Joyce Clevenger
- 1995 *State Route 94 and State Route 54 Widening Project County of San Diego*. Ogden Environmental and Energy Services. Report on file, South Coastal Information Center.
- Cuero, Delfina
- 1968 *The Autobiography of Delfina Cuero, as told to Florence Shipek*. Dawson's Book Shop, Los Angeles, California.
- Daly, Patricia
- 1969 Approaches to Faunal Analysis in Archaeology. *American Antiquity* 34(2):146–153.
- Davis, Emma Lou
- 1978 *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Science Series No. 29. Natural History Museum of Los Angeles County, Los Angeles.

Davis, Shannon, and Don Laylander

- 2012 *Integrated Cultural Resources Management Plan for Naval Weapons Station Seal Beach Detachment Fallbrook, San Diego County, California*. On file, South Coastal Information Center, San Diego State University, San Diego.

Drover, Christopher E., Henry C. Koerper, and Paul E. Langenwaller, II

- 1983 Early Holocene Human Adaptation on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport Bay, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 19(3&4):1–84. Costa Mesa, California.

Drucker, Philip

- 1939 *Southern California*. University of California Anthropological Records Vol. 1, No. 1. Culture Element Distributions 5. University of California Press, Berkeley.

Dubois, Constance

- 1908 *The Religion of the Luiseño Indians of Southern California*. University of California Publications in American Archaeology and Ethnology Vol. 8, No. 3. University of California Press, Berkeley.

Duke, Curt

- 2002a *AT&T Wireless*. LSA Associates. Report on file, South Coastal Information Center.
- 2002b *Cultural Resource Assessment AT&T Wireless Services Facility No. 10057A-05 San Diego County, California*. LSA Associates. Report on file, South Coastal Information Center.

Ericson, Jonathon E., and Clement W. Meighan

- 1984 Boundaries, Alliances and Exchange in California. In *Exploring the Limits: Frontiers and Boundaries in Prehistory*, edited by Suzanne P. De Atley and Frank J. Findlow, pp. 143–152. BAR International Series 223. British Archaeological Reports, Oxford.

Erlandson, Jon M., and Madonna L. Moss

- 1996 The Pleistocene-Holocene Transition along the Pacific Coast of North America. In *Humans at the End of the Ice Age: The Archaeology of the Pleistocene-Holocene Transition*, edited by Lawrence Guy Straus, Berit Valentin Eriksen, Jon M. Erlandson, and David R. Yesner, pp. 277–301. Plenum Press, New York.

Eckhardt, William T., and Richard Carrico

- 1977 *Archaeological Investigation at SDi-4781 and SDM-W-1309 Avocado Village Lot No. 4 San Diego County, California*. Westec Services. Report on file, South Coastal Information Center.

Egoroff, Amy

- 1996 *Draft Biological Survey Report for the Jamacha Blvd Road Widening Project*. Woodward-Clyde Consultants. Report on file, South Coastal Information Center.

Erlandson, Jon M., Douglas J. Kennett, B. Lynn Ingram, Daniel A. Guthrie, Don P. Morris, Mark A. Tveskov, G. James West, and Philip L. Walker

- 1996 An Archaeological and Paleontological Chronology for Daisy Cave (CA-SMI-261), San Miguel Island, California. *Radiocarbon* 38(2):355–373.

Erlandson, Jon M., and Madonna L. Moss

- 1996 The Pleistocene-Holocene Transition along the Pacific Coast of North America. In *Humans at the End of the Ice Age: The Archaeology of the Pleistocene-Holocene Transition*, edited by

- Lawrence Guy Straus, Berit Valentin Eriksen, Jon M. Erlandson, and David R. Yesner, pp. 277–301. Plenum Press, New York.
- Erlandson, Jon M., Torben C. Rick, Terry L. Jones, and Judith F. Porcasi
 2007 One If by Land, Two If by Sea: Who Were the First Californians? In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 53–62. AltaMira Press, Lanham, Maryland.
- Fink, Gary R.
 1974 *Archaeological Survey for the Proposed Monte Vista Borrow Pit, Casa De Oro, California Project No. 670033*. County of San Diego Public Works Agency. Report on file, South Coastal Information Center.
- Finney, Pete J. K.
 2003 *Draft Regional Research Design for the Naval Weapons Station Seal Beach Detachment Fallbrook, San Diego County, California*. Manuscript on file, Naval Weapons Station Seal Beach, Seal Beach, California.
- Gallegos, Dennis R.
 1985 Batiquitos Lagoon Revisited. *Casual Papers of the Cultural Resource Management Center* 2(1)1:1–15.
 1992 Patterns and Implications of Coastal Settlement in San Diego County: 9000 to 1300 Years Ago. In *Essays on the Prehistory of Maritime California*, edited by Terry L. Jones, pp. 205–216. Publication No. 10. Center for Archaeological Research at Davis, Davis, California.
 2002 Southern California in Transition: Late Holocene Occupation of Southern San Diego County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 27–39. Perspectives in California Archaeology, vol. 6. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Gallegos, Dennis R., J. Jeffrey Flenniken, Carrie J. Gregory, and Scott Kremkau
 2012 *Cultural Resources Survey and Test Report for the TM 5549 Project, Otay Mesa, California: TM 5549, ER Log No. 93-19-006FF*. Technical Report 10-26. Statistical Research, San Diego. Prepared for the Department of Planning and Land Use, County of San Diego, San Diego.
- Gallegos, Dennis R., and Carolyn Kyle
 1998 *Five Thousand Years of Maritime Subsistence at CA-SDI-48, on Ballast Point, San Diego California*. Coyote Press Archives of California Prehistory No. 40. Salinas, California.
- Gallegos, Dennis, Carolyn Kyle, and Richard Carrico
 1988 *Cultural Resource Survey and Testing for the Skyline Wesleyan Church Project, San Diego, California*. Westec Services. Report on file, South Coastal Information Center.
- Gibson, Robert O., and Henry C. Koerper
 2000 AMS Radiocarbon Dating of Shell Beads and Ornaments from CA-ORA-378. *Journal of California and Great Basin Anthropology* 22(2):342–352.
- Gifford, Edward W.
 1918 *Clans and Moieties in Southern California*. University of California Publications in American Archaeology and Ethnology Vol. 14, No. 2. University of California Press, Berkeley.

Gross, Tim

- 1974 *A Report of Cultural Impact Survey Phase II Project: P.M. 1.9-16.3 11-SD-54 Rte. 805 to Rte. 8.* San Diego State University, San Diego. Report on file, South Coastal Information Center.
- 1975 *A Report of Cultural Impact Survey Phase I Project: P.M. 13.5-15.5 11-SD-94 Avocado Blvd. to 0.5 Mi. South of Jamacha Junction.* San Diego State University, San Diego. Report on file, South Coastal Information Center.

Gross, Tim, and Paul Ezell

- 1972 *An Archaeological Survey of Rancho San Diego.* San Diego State University, San Diego. Report on file, South Coastal Information Center.

Hale, Micah J.

- 2006 Processing Economies, Coastal Settlement, and Intensification in Northern San Diego County. In *Proceedings of the Society for California Archaeology*, vol. 19, edited by Sharon A. Waechter, Don Laylander, and Gregory G. White, pp. 205–210. Society for California Archaeology, Chico, California.

Harrington, J. P.

- 1978 *Chinigchinich.* Malki Museum Press, Banning, California.

Hedges, Ken, and Christina Beresford

- 1986 *Santa Ysabel Ethnobotany.* Ethnic Technology Notes No. 20. San Diego Museum of Man, San Diego.

Heizer, Robert F., and A. F. Almquist

- 1971 *The Other Californians: Prejudice and Discrimination under Spain, Mexico and the United States to 1920.* University of California Press, Berkeley.

Heizer, Robert F., and M. A. Whipple

- 1957 *The California Indians.* University of California Press, Berkeley.

Heuett, Mary Lou

- 1979 *Preliminary Archaeological Investigations of W-1146 Spring Valley, California.* Archaeological Consulting & Technology. Report on file, South Coastal Information Center.

Hooper, Lucille

- 1920 *The Cahuilla Indians.* University of California Publications in American Archaeology and Ethnology Vol. 16, No. 6. University of California Press, Berkeley.

Horne, Melinda C.

- 2001 Introduction. In *Archaic and Late Prehistoric Occupation Sites*, edited by Melinda C. Horne and Susan E. Rapp, pp. 1–6. Final Report of Archaeological Investigations, Eastside Reservoir Project, vol. 2, S. K. Goldberg, general editor. Applied Earthworks, Hemet, California. On file, Eastern Information Center, University of California, Riverside.

Horne, Melinda C., and Dennis P. McDougall

- 2008 *CA-RIV-6069: Early Archaic Settlement and Subsistence in the San Jacinto Valley, Western Riverside County, California.* Applied EarthWorks, Hemet, California. On file, Eastern Information Center, University of California, Riverside.

- Hughes, Richard E., and D. L. True
 1985 Perspectives on the Distribution of Obsidians in San Diego County, California. *North American Archaeologist* 6(4):325–339.
- Iversen, Dave
 2008 *Rancho San Diego Sheriff Substation Negative Cultural Resources Survey Report*. ASM Affiliates. Report on file, South Coastal Information Center.
- Jacks, Paula, and Stephen Lacy
 1990 *Appendices for Supplemental Draft Environmental Impact Report for Rancho San Diego Tentative Map*. Brian F. Mooney and Associates. Report on file, South Coastal Information Center.
- Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles H. Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson
 2002 The Cross Creek Site (CA-SLO-1797) and Its Implications for New World Colonization. *American Antiquity* 67(2):213–230.
- Jones, Terry L., Douglas J. Kennett, James P. Kennett, and Brian F. Coddling
 2008 Seasonal Stability in Late Holocene Shellfish Harvesting on the Central California Coast. *Journal of Archaeological Science* 35(8):2286–2294.
- Keneally, Finbar O. F. M.
 1965 *The Writings of Fermin Francisco de Lasuen*. Academy of American Franciscan History, Washington, D.C.
- King, Chester D.
 1990 *The Evolution of Chumash Society*. Garland, New York.
- Koerper, Henry C., Jonathan E. Ericson, Christopher E. Drover, and Paul E. Langenwaller II
 1986 Obsidian Exchange in Prehistoric Orange County. *Pacific Coast Archaeological Society Quarterly* 22(1):33–69. Costa Mesa, California.
- Koerper, Henry C., Roger D. Mason, and Mark L. Peterson
 2002 Complexity, Demography, and Change in Late Holocene Orange County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63–81. Perspectives in California Archaeology, vol. 6. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Kowta, Makoto
 1969 *The Sayles Complex: A Late Millingstone Assemblage from Cajon Pass and the Ecological Implications of Its Scraper Planes*. Publications in Anthropology, vol. 6. University of California Press, Berkeley.
- Kroeber, Alfred L.
 1925 *Handbook of the Indians of California*. Smithsonian Institution, Bureau of American Ethnology Bulletin 78. U.S. Government Printing Office, Washington, D.C.
- Kyle, Carolyn and Dennis R. Gallegos
 1995 *Cultural Resource Extended Test and Survey Report for the Skyline Wesleyan Church Project, San Diego County, California*. Gallegos & Associates. Report on file, South Coastal Information Center.

- 2004 *Cultural Resource Survey for the Otay Water District 640-1 Reservoir Project*. Report on file, South Coastal Information Center.
- Langdon, Margaret
- 1970 *A Grammar of Diegueño, The Mesa Grande Dialect*. University of California Press, Berkeley and Los Angeles.
- Laylander, Don, and Lynne E. Christenson
- 1988 Corral Canyon and Late Prehistoric Exchange in Inland San Diego County, California. In *Proceedings of the Society for California Archaeology*, vol. 1, edited by Susan M. Hector, Lynne E. Christenson, G. Timothy Gross, and Martin D. Rosen, pp. 135–157. Society for California Archaeology, San Diego.
- Luomala, Katherine
- 1978 Tipai and Ipai. In *California*, edited by R. F. Heizer, pp. 592–609. Handbook of the North American Indians, vol. 8, William Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Mack, Joanne
- 2003 California Ceramic Traditions: The Obscurity and the Assumptions 2002. *Society for California Archaeology Newsletter* 37(1):30–33.
- Macko, Michael E.
- 1998 *Neolithic Newport: Executive Summary: Results of Implementing Mitigation Measures Specified in the Operation Plan and Research Design for the Proposed Newporter North Residential Development at ORA-64*. Macko, Huntington Beach, California. On file, South Central Coastal Information Center, California State University, Fullerton.
- Masters, Patricia
- 1988 Report on Paleo-Environmental Reconstruction of San Diego Bay, 10,000 Years B.P. to Present. In *Five Thousand Years of Marine Subsistence at Ballast Point Prehistoric Site SDI-48*, by Dennis Gallegos and Carolyn Kyle, pp. 4.1–4.22. On file, South Coastal Information Center, San Diego State University, San Diego, California.
- Masters, Patricia M., and Dennis R. Gallegos
- 1997 Environmental Change and Coastal Adaptations in San Diego County during the Middle Holocene. In *Archaeology of the California Coast during the Middle Holocene*, edited by Jon M. Erlandson and Michael A. Glassow, pp. 11–21. Perspectives in California Archaeology, vol. 4. Cotsen Institute of Archaeology, University of California, Los Angeles.
- McCown, Benjamin E.
- 1955 *Temeku: A Page from the History of the Luiseño Indians*. Paper No. 3. Archaeological Survey Association of Southern California, Los Angeles.
- McDougall, Dennis P.
- 2001 CA-RIV-5086/H. In *Archaic and Late Prehistoric Occupation Sites*, edited by Melinda C. Horne and Susan E. Rapp, pp. 831–871. Final Report of Archaeological Investigations, Eastside Reservoir Project, vol. 2, S. K. Goldberg, general editor. Applied Earthworks, Hemet, California. On file, Eastern Information Center, University of California, Riverside.

McManus, James A.

- 1977 *Archaeological Survey Report 11-SD-94 P.M. 13.3 to P.M. 75.1 11203-184211 Phase I*. California Department of Transportation, Sacramento, CA. Report on file, South Coastal Information Center.

Meacham, Charles M.

- 1977 *An Archaeological Survey of Selected Portions of 11-SD-94 P.M. 13.3/15.1*. California Department of Transportation, Sacramento, CA. Report on file, South Coastal Information Center.

Meighan, Clement W.

- 1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

Merrill, Ruth Earl

- 1973 *Plants Used in Basketry by California Indians*. Reprinted. Ballena Press, Ramona, California. Originally published 1923, University of California Publications in Archaeology and Ethnology Vol. 20. University of California Press, Berkeley.

Miller, Jacqueline

- 1966 *The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons*. Unpublished Master's thesis, University of California, San Diego.

Mooney-Lettieri and Associates, Inc.

- 1987 *Draft Environmental Impact Report for Rancho San Diego Specific Plan Spa87-001 R87-006 Log#87-19-6*. Mooney-Lettieri and Associates. Report on file, South Coastal Information Center.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, Orlando, Florida.

Moyer, Cecil C.

- 1969 *Historic Ranchos of San Diego*. Union-Tribune Publishing, San Diego.

Office of Historic Preservation

- 1990 *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*. Office of Historic Preservation, California Department of Parks and Recreation, Sacramento.

Osborne, Douglas

- 1958 Western American Prehistory—An Hypothesis. *American Antiquity* 24(1):47–52.

Oxendine, Joan

- 1983 The Luiseño Village during the Late Prehistoric Era. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Parker, Patricia L., and Thomas F. King

- 1998 *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. Rev. ed. U.S. Department of the Interior, National Park Service, Washington, D.C. Also available online at <http://www.nps.gov/nr/publications/bulletins/nrb38>.

Pourade, Richard F.

- 1960 *The History of San Diego: The Explorers*. Union-Tribune Publishing, San Diego.

- 1963 *The History of San Diego: The Silver Dons*. Union-Tribune Publishing Company, San Diego.

- 1964 *The History of San Diego: The Glory Years*. Union-Tribune Publishing Company, San Diego.
- 1965 *The History of San Diego: Gold in the Sun*. Union-Tribune Publishing Company, San Diego.
- 1977 *History of San Diego: City of the Dream*. Cooley Books, La Jolla, California.
- PRC Toups Corporation
- 1979 *Environmental Impact Report Rancho San Diego Specific Plan San Diego County, California Appendices Volume II*. PRC Toups Corporation. Report on file, South Coastal Information Center.
- Priestly, Herbert I. (editor)
- 1937 *A Historical, Political and Natural Description of California in 1775 by Pedro Fages, Soldier of Spain*. University of California Press, Berkeley.
- Pryde, Philip R.
- 1992 *San Diego: An Introduction to the Region*. Kendall/Hunt Publishing, Dubuque, Iowa.
- Raab, L. Mark, and Jim Cassidy
- 2009 The Ancient Mariners of Eel Point. In *California Maritime Archaeology, A San Clemente Island Perspective*, edited by L. Mark Raab, Jim Cassidy, Andrew Yatsko, and William J. Howard, pp. 67–92. Altamira Press, Lanham, Maryland.
- Reddy, Seetha N.
- 2007 *A Programmatic Approach to Determine Eligibility of Prehistoric Sites in the San Diego Subregion, Southern Coast Archaeological Region, California, for National Register of Historic Places*. Department of Defense Legacy Resource Management Program Project 05–251. Technical Report 07-08. Statistical Research, Woodland, California.
- Riddell, Francis A., and William H. Olsen
- 1969 An Early Man Site in the San Joaquin Valley. *American Antiquity* 34(2):121–130.
- Robbins-Wade, Mary, and John L. Whitehouse
- 1995 *Archaeological Testing At Ca-Sdi-4763, Locus 2 For The Jamacha Boulevard Improvements Project, El Cajon, San Diego County, California*. Affinis. Report on file, South Coastal Information Center.
- Rogers, Malcolm J.
- 1929 The Stone Art of the San Dieguito Plateau. *American Anthropologist* 31(3):454–467.
- 1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167–198.
- 1966 *Ancient Hunters of the Far West*. Union-Tribune Publishing, San Diego.
- Rolle, Andrew
- 1998 *California: a History*. 5th ed. Harlan-Davidson, Wheeling, Illinois.
- Rosen, Martin D.
- 1982 *Final Report of Archaeological Phase II Excavations at SDI-4763 and SDI-5066, 11-SD-54, P.M. T11.2/T11.7, II-SD-94, P.M. T13.3/T14.8, 11203-184211*. Report on file, South Coastal Information Center.
- 2011 *Archaeological Survey Report for the County of San Diego Sheriff's Station Access Road, San Diego County, California*. ICF International. Report on file, South Coastal Information Center.

Rowntree, Lester B.

- 1985 Drought during California's Mission Period, 1769–1834. *Journal of California and Great Basin Anthropology* 7(1):7–19.

Rudkin, Charles (translator and editor)

- 1956 *Observations on California 1772–1790 by Father Luis Sales O.P.* Dawson's Book Shop, Los Angeles, California.

Shipek, Florence C.

- 1977 A Strategy for Change: The Luiseño of Southern California. Unpublished Ph.D. dissertation, Department of Anthropology, University of Hawaii, Honolulu.
- 1978 History of Southern California Mission Indians. In *California*, edited by Robert F. Heizer, pp. 610–618. Handbook of North American Indians, vol. 8, William Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- 1980 Prepared Direct Testimony: Part One: Value of Aboriginal Water Rights of the San Luis Rey River Reservations, 1851. Part Two: History of Agriculture and Irrigation for the La Jolla, Pala, Pauma, Rincon and San Pasqual Indians of Southern California. Submitted to the U. S. Court of Claims for San Luis Rey River Reservation Water Case, Docket 80A-1, San Diego.
- 1986a The Antiquity of the Kumeyaay: Myth and Geologic Reality. In *Papers from the 1983, 1984 and 1985 Hokan-Penutian Language Conferences*, edited by J. E. Redden. Occasional Papers on Linguistics No. 13. Southern Illinois University, Carbondale.
- 1986b The Impact of Europeans upon on Kumeyaay Culture. In *The Impact of European Exploration and Settlement of Local Native Americans*, edited by Raymond Starr, pp. 13–25. Cabrillo Historical Association, San Diego.
- 1987 Saints or Oppressors, Franciscan Missionaries of California: Teachers of Agriculture or Exploiters. In *Missions of California*, edited by R. Costo and J. H. Costo. American Indian Historical Society, San Francisco, California.
- 1988 *Pushed into the Rocks: Southern California Indian Land Tenure 1769–1986*. University of Nebraska Press, Lincoln.
- 1989a Mission Indians and Indians of California Claims Cases. *American Indian Quarterly* 13(4):409–420.
- 1989b An Example of Intensive Plant Husbandry: The Kumeyaay of Southern California. In *Foraging and Farming: The Evolution of Plant Exploitation*, edited by D. R. Harris and G. C. Hillman, pp. 159–170. Unwin-Hyman, London.
- 1991 *Delfina Cuero: Her Autobiography: An Account of the Rest of Her Life and Her Ethnobotanic Contributions*. Ballena Press, Menlo Park, California.
- 1993 Kumeyaay Plant Husbandry: Fire, Water and Erosion Control Techniques. In *Before the Wilderness: Environmental Management by Native Californians*, edited by Thomas C. Blackburn and Kat Anderson, pp. 379–388. Ballena Press, Menlo Park, California.

Smith, Brian F.

- 1992 *Results of a Cultural Resource Survey of the 42 Inch Transmission Main and Regulatory Site Improvement Project for the Otay Water District*. Brian F. Smith and Associates. Report on file, South Coastal Information Center.

Sparkman, Philip Stedman

- 1908 *The Culture of the Luiseño Indians*. University of California Publications in American Archaeology and Ethnology Vol. 8, No. 4. University of California Press, Berkeley.

Spicer, Edward H.

- 1962 *Cycles of Conquest: The Impact of Spain and Mexico and the United States on the Indians of the Southwest, 1533–1960*. University of Arizona Press, Tucson.

Spier, Leslie

- 1923 *Southern Diegueño Customs*. University of California Publications in American Archaeology and Ethnology Vol. 20, No. 16. University of California Press, Berkeley.

Strong, William, D.

- 1929 *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology Vol. 26. University of California Press, Berkeley.

Sutton, Mark Q.

- 1993 On the Subsistence Ecology of the “Late Inland Millingstone Horizon” in Southern California. *Journal of California and Great Basin Anthropology* 15(1):134–140.
- 1996 The Current Status of the Archaeology of the Mojave Desert. *Journal of California and Great Basin Anthropology* 18(2):221–257.
- 2009 People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly* 41(2–3):31–93. Costa Mesa, California.
- 2010a The Del Rey Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(2):1–54. Costa Mesa, California.
- 2010b A Reevaluation of Early Northern Uto-Aztecan Prehistory in Alta California. *California Archaeology* 2(1):3–30.
- 2011 The Palomar Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(4):1–74. Costa Mesa, California.
- 2015 Revisions to the Palomar Tradition Model in Southern California Prehistory. *Pacific Coast Archaeological Society Quarterly* 51(2):1–18. Costa Mesa, California.

Sutton, Mark Q., Mark E. Basgall, Jill K. Gardner, and Mark W. Allen

- 2007 Advances in Understanding Mojave Desert Prehistory. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 229–245. AltaMira Press, Lanham, Maryland.

Sutton, Mark Q., and Matthew R. DesLauriers

- 2002 Emerging Patterns in Obsidian Usage in the Southern San Joaquin Valley, California. *Pacific Coast Archaeological Society Quarterly* 38(2&3):1–18.

Sutton, Mark Q., and Jill K. Gardner

- 2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1–64. Costa Mesa, California.

Tibesar, Antonine

- 1955 *Writings of Junipero Serra*. 4 vols. Academy of American Franciscan History, Washington, D.C.

True, Delbert L.

- 1954 Pictographs of the San Luis Rey Basin, California. *American Antiquity* 20(1):68–72.
- 1958 An Early Complex in San Diego County, California. *American Antiquity* 23(3):255–263.
- 1966 Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.
- 1980 The Pauma Complex in Northern San Diego County: 1978. *Journal of New World Archaeology* 3(4):1–39.
- 1993 Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California. *Pacific Coast Archaeological Society Quarterly* 29(2):1–26. Costa Mesa, California.

True, D. L., and Eleanor Beemer

- 1982 Two Milling Stone Inventories from Northern San Diego County, California. *Journal of California and Great Basin Anthropology* 4(2):233–261.

True, D. L., Clement W. Meighan, and Harvey Crew

- 1974 *Archaeological Investigations at Molpa, San Diego County, California*. Publications in Anthropology, vol. 11. University of California Press, Berkeley.

True, D. L., and R. Pankey

- 1985 Radiocarbon Dates for the Pauma Complex Component at the Pankey Site, Northern San Diego County, California. *Journal of California and Great Basin Anthropology* 7(2):240–244.

True, D. L., Rosemary Pankey, and Claude N. Warren

- 1991 *Tom-Kav: A Late Village Site in Northern San Diego County, California, and Its Place in the San Luis Rey Complex*. University of California Publications in Anthropology, vol. 30. University of California Press, Berkeley.

True, D. L., and Georgie Waugh

- 1981 Archaeological Investigations in Northern San Diego County, California: Frey Creek. *Journal of California and Great Basin Anthropology* 3(1):84–115.
- 1982 Proposed Settlement Shifts during San Luis Rey Times, Northern San Diego County. *Journal of California and Great Basin Anthropology* 4(2):34–54.

Underhill, Ruth

- 1941 *Indians of Southern California*. Sherman Pamphlets No. 2. U.S. Office of Indian Affairs, Washington, D.C.

Underwood, Jackson

- 2006 *Cultural Landscape Report for the Case Spring Area, Marine Corps Base Camp Pendleton*. Manuscript on file, Cultural Resource Division, Camp Pendleton Marine Corps Base, Oceanside, California.

U.S. Department of the Interior

- 1995 *Draft Environmental Assessment for the Proposed Acquisition of Rancho San Diego, Sweetwater II, and Lot 707 Properties from the Resolution Trust Corporation for the Proposed San Diego National Wildlife Refuge Otay-Sweetwater Refuge Unit*. U.S. Department of the Interior, Fish and Wildlife Service. Report on file, South Coastal Information Center.

U.S. Department of Transportation

- 1980 *State Highways 54 and 94 Survey Reports*. U.S. Department of Transportation. Report on file, South Coastal Information Center.

Wallace, William J.

- 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214–230.
- 1960 Archaeological Resources of the Buena Vista Watershed, San Diego County, California. *Archaeological Survey Annual Report* 1959–1960:277–301. Department of Anthropology, University of California, Los Angeles.
- 1978 Post-Pleistocene Archeology, 9000 to 2000 B.C. In *California*, edited by Robert F. Heizer, pp. 25–36. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Warren, Claude N.

- 1964 Cultural Change and Continuity on the San Diego Coast. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.
- 1966 *The San Dieguito Type Site: Malcolm J. Rogers' 1938 Excavation on the San Dieguito River*. Papers No. 5. San Diego Museum of Man, San Diego.
- 1967a The San Dieguito Complex—A Review and Hypothesis. *American Antiquity* 32(4):168–185.
- 1967b The Southern California Milling Stone Horizon: Some Comments. *American Antiquity* 32(2):233–236.
- 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by Cynthia Irwin-Williams, pp. 1–14. Contributions in Anthropology, no. 1. Eastern New Mexico University, Portales.
- 2008 Highway Archaeology, Batiquitos Lagoon and the Coastal Decline Model: An Historical Sketch. Paper presented at the Annual Meeting of the Society for California Archaeology, Burbank, California.
- 2012 Environmental Stress and Subsistence Intensification: Late La Jolla on the San Diego Coast (3000 B.C. to A.D. 500). *California Archaeology* 4(1):39–54.

Warren, Claude N., and Max G. Pavesic

- 1963 Shell Midden Analysis of Site SDi-603 and Ecological Implications for Cultural Development of Batiquitos Lagoon, San Diego County, California. In "Archaeological Investigations at Batiquitos Lagoon, San Diego County, California," by Robert H. Crabtree, Claude N. Warren, and D. L. True, Appendix I. *Archaeological Survey Annual Report* 1962–1963:407–438. Department of Anthropology, University of California, Los Angeles.

Warren, Claude N., Gretchen Siegler, and Frank Dittner

- 2008 Paleoindian and Early Archaic Periods. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: An Historic Properties Background Study*, pp. 13–107. ASM Affiliates, Carlsbad, California. On file, South Coastal Information Center, San Diego State University, San Diego.

Warren, Claude N., and D. L. True

- 1961 The San Dieguito Complex and Its Place in California Prehistory. *Archaeological Survey Annual Report* 1960–1961:246–338. Department of Anthropology, University of California, Los Angeles.

Warren, Claude N., D. L. True, and Ardith A. Eudey

- 1961 Early Gathering Complexes of Western San Diego County: Results and Interpretations of an Archaeological Survey. *Archaeological Survey Annual Report* 1960–1961:1–106. Department of Anthropology, University of California, Los Angeles.

Westec Services, Inc.

- 1988a *Cultural Resource Survey of the Skyline Wesleyan Church Project, San Diego California*. Westec Services. Report on file, South Coastal Information Center.
- 1988b *Cultural Resource Survey and Testing for the Skyline Wesleyan Church Project, San Diego, California*. Westec Services. Report on file, South Coastal Information Center.

Wolcott, Marjorie T.

- 1929 *Pioneer Notes from the Diaries of Judge Benjamin Hayes*. Private printing. Los Angeles, California.

Woodward, Arthur

- 1934 Notes on the Indians of San Diego County from the Manuscripts of Judge Benjamin Hayes. *The Masterkey* 8(5):140–150.

York, Andrew L.

- 2005 *An Archaeological Research Context for the Lower Santa Margarita River, Marine Corps Base Camp Pendleton, California*. EDAW, San Diego. On file, South Coastal Information Center, San Diego State University, San Diego.
- 2006 *An Archaeological Research Context for the Lower Santa Margarita River, Marine Corps Base Camp Pendleton, California*. EDAW, San Diego.
- 2009 *An Archaeological Research Context for the San Mateo Creek Drainage, Marine Corps Base Camp Pendleton, California*. EDAW, San Diego. On file, South Coastal Information Center, San Diego State University, San Diego.

Zepeda-Herman, Carmen, and Jackson Underwood

2006 *Regional Research Design for the Naval Weapons Station Seal Beach Detachment Fallbrook, San Diego County, California*. Manuscript on file, South Coastal Information Center, San Diego State University, San Diego.

8.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Preparers:

Carrie J. Gregory, M.A. RPA, Project Manager
Scott H. Kremkau, Ph.D., RPA, Principal Investigator
Patrick B. Stanton, M.A., RPA, Senior Project Director

Persons and Organizations Contacted:

SCIC

Contacted to complete a records search and literature review.

California NAHC

Contacted for information and/or input regarding Native American concerns either directly or indirectly associated with the project area, a search of their Sacred Lands Files, and names of individuals in the area who should be contacted prior to completion of this study.

The following persons—included in the response received from the California NAHC—were contacted for information and/or input regarding Native American concerns either directly or indirectly associated with the project area:

Clifford LaChappa, Chairperson, Barona Group of the Capitan Grande
Robert Pinto, Sr., Chairperson, Ewiiapaayp Tribal Office
Gwendolyn Parada, Chairperson, La Posta Band of Mission Indians
Angela Elliot Santos, Chairperson, Manzanita Band of Kumeyaay Nation
Allen E. Lawson, Chairperson, San Pasqual Band of Mission Indians
Cody J. Martinez, Chairperson, Sycuan Band of the Kumeyaay Nation
Anthony R. Pico, Chairperson, Viejas Band of Kumeyaay Indians
Ron Christman, Kumeyaay Cultural Historic Committee
Ralph Goff, Chairperson, Campo Band of Mission Indians
Raymond Hunter, Chairperson, Jamul Indian Village
Mark Romero, Chairperson, Mesa Grande Band of Mission Indians
Carmen Lucas, Kwaaymii Laguna Band of Mission Indians
Rebecca Osuna, Chairman, Inaja Band of Mission Indians
Steve Banegas, Spokesperson, Kumeyaay Cultural Repatriation Committee
Javaughn Miller, La Posta Band of Mission Indians
Sheilla Alvarez, Barona Group of the Capitan Grande
Julie Hagen, Cultural Resources, Viejas Band of Kumeyaay Indians
Kristie Orosco, Environmental Coordinator, San Pasqual Band of Indians
Will Micklin, Executive Director, Ewiiapaayp Tribal Office
Clint Linton, Director of Cultural Resources, Iipay Nation of Santa Ysabel
Rodney Kephart, Environmental Coordinator, Iipay Nation of Santa Ysabel
Lisa Haws, Cultural Resource Manager, Sycuan Band of the Kumeyaay Nation
Kim Bactad, Executive Director, Kumeyaay Diegueno Land Conservancy
Frank Brown, Coordinator, Inter-Tribal Cultural Resource Protection Council
Bernice Paipa, Vice Spokesperson, Kumeyaay Cultural Repatriation Committee
Virgil Perez, Chairperson, Iipay Nation of Santa Ysabel

Records-Search Summary Forms



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CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Statistical Research Inc

Company Representative: Steve Norris

Date Processed: 8/31/2015

Project Identification: 15RC01 Skyline

Search Radius: 1/2 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements

RSID:	1095
RUSH:	no
Hours:	1
Spatial Features:	49
Address-Mapped Shapes:	no
Digital Database Records:	0
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	60



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CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Statistical Research, Inc.

Company Representative: James J. Clark

Date Processed: 9/21/2015

Project Identification: 15RC01

Search Radius: 1 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

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Summary of SHRC Approved CHRIS IC Records Search Elements

RSID:	
RUSH:	no
Hours:	1
Spatial Features:	39
Address-Mapped Shapes:	yes
Digital Database Records:	3
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	92