

APPENDIX G

Cultural Resources Technical Report

**CULTURAL RESOURCES TECHNICAL REPORT
IN SUPPORT OF THE
BUENA VISTA LAGOON ENHANCEMENT PROJECT
ENVIRONMENTAL IMPACT REPORT,
SAN DIEGO COUNTY, CALIFORNIA**

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Survey Area: Approximately 12 acres

USGS Quadrangles: San Luis Rey, Calif.

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MANAGEMENT SUMMARY

This report summarizes the archaeological investigations conducted in support of the Buena Vista Lagoon Enhancement Project (Enhancement Project or proposed project) in San Diego County, California. This study, conducted by AECOM, consisted of a records and literature search at the South Coastal Information Center (SCIC) and archaeological field survey of 11 locations, and preparation of a draft and final report.

The cultural resources inventory in support of the Buena Vista Lagoon Enhancement Project Environmental Impact Report was conducted on July 10 and 11, 2014. Three alternatives, one with two options, are proposed that would each include dredging of channels, grading within the lagoon to raise or lower elevations, vegetation removal, improvements to and use of staging areas, and construction of a boardwalk along the Carlsbad Boulevard (Coast Highway) bridge across the lagoon. Under the Freshwater Alternative, the existing weir would be replaced with a wider, 80-foot weir. The existing weir would be removed and replaced with an open tidal inlet under the Saltwater Alternative and the Hybrid Alternative, Options A and B. Under the Hybrid Alternative, Option A, a new channel would be constructed between the tidal inlet and the Railroad Basin. Replacement of the Carlsbad Boulevard bridge would occur under the Saltwater and Hybrid (both options) Alternatives. Improvement is proposed for five staging areas. The proposed project area of potential effects (APE) is the extent of physical disturbance for the undertaking.

Several prior cultural resources investigations conducted within the project study area have resulted in the identification of several prehistoric and historic archaeological sites. The present study focused on visiting known archaeological sites and potentially sensitive locations in proximity to areas of proposed disturbance.

Eleven locations with eight previously recorded archaeological sites were surveyed. Of the eight previously recorded archaeological sites visited during the study, none were found within the APE. One new prehistoric/historic archaeological site, a segment of an old alignment of Jefferson Street and a shell scatter (CA-SDI-21274) was recorded and the site form has been submitted to the SCIC for assignment of permanent numbers. Due to dense vegetation along the lagoon margin, currently unknown cultural deposits could exist on stable sediments in these areas that could potentially be affected by land-based equipment during mobilization and/or vegetation/sediment removal.

Due to the potential for unidentified cultural deposits, it is recommended that a monitoring program be initiated prior to the start of ground-disturbing construction. The program would include (1) development and implementation of a monitoring and discovery plan, (2) a training session for construction personnel conducted by a qualified archaeologist, and (3) archaeological and Native American cultural monitoring.

INTRODUCTION

This document describes the cultural resources work conducted in support of the Environmental Impact Report (EIR) for the proposed Buena Vista Lagoon Enhancement Project (Enhancement Project or proposed project), Carlsbad and Oceanside, San Diego County, California (Figure 1). The cultural resources work was designed to support documentation required under the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the San Diego Association of Governments (SANDAG). Fieldwork for the project was conducted in August 2014.

This report includes a description of the proposed project and area of potential effects (APE) justification, along with a detailed research context, methods and results of the study, and recommendations for further work.

PROJECT DESCRIPTION

SANDAG is preparing an EIR to evaluate potential environmental effects that would result from the development of the proposed Enhancement Project. A number of individuals and agencies own portions of the lagoon, including the California Department of Fish and Wildlife (CDFW), whose lands are designated as an ecological reserve. The lagoon is surrounded by urban development and traversed by a number of transportation corridors, all of which have contributed to a continual degradation of the lagoon over time. As a result of installation of a weir (a type of barrier) across the lagoon outlet, the lagoon has converted from a tidal-influenced saltwater system during dry conditions, and a river-influenced freshwater system during wet weather conditions, to an entirely freshwater system. Sedimentation from the watershed upstream of the lagoon has accumulated within the lagoon basins, leading to decreasing water depths and increasing nutrient levels. The proposed project would enhance the lagoon to improve both its ecological and recreational values through implementation of one of a range of alternatives (Freshwater, Saltwater, Hybrid).

Three alternatives, one with two options, are proposed that would each include dredging of channels, grading within the lagoon to raise or lower elevations, vegetation removal, improvements to and use of staging areas, and construction of a boardwalk along the Carlsbad Boulevard (Coast Highway) bridge across the lagoon. Under the Freshwater Alternative, the existing weir would be replaced with a wider, 80-foot weir. The existing weir would be removed and replaced with an open tidal inlet under the Saltwater Alternative and the Hybrid Alternative, Options A and B. Under the Hybrid Alternative, Option A, a new channel would be constructed between the tidal inlet and the Railroad Basin. Replacement of the Carlsbad Boulevard bridge would occur under the Saltwater and Hybrid (both options) Alternatives. Improvement is proposed for five staging areas. The project study area and proposed maximum limits of disturbance, including staging areas and access routes, are indicated in Figure 2. Planned improvements to Interstate 5 (I-5) have been proposed by the California Department of Transportation (Caltrans) as part of the North Coast Corridor Project and planned improvements

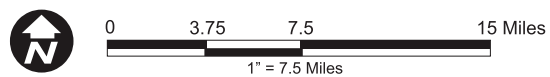
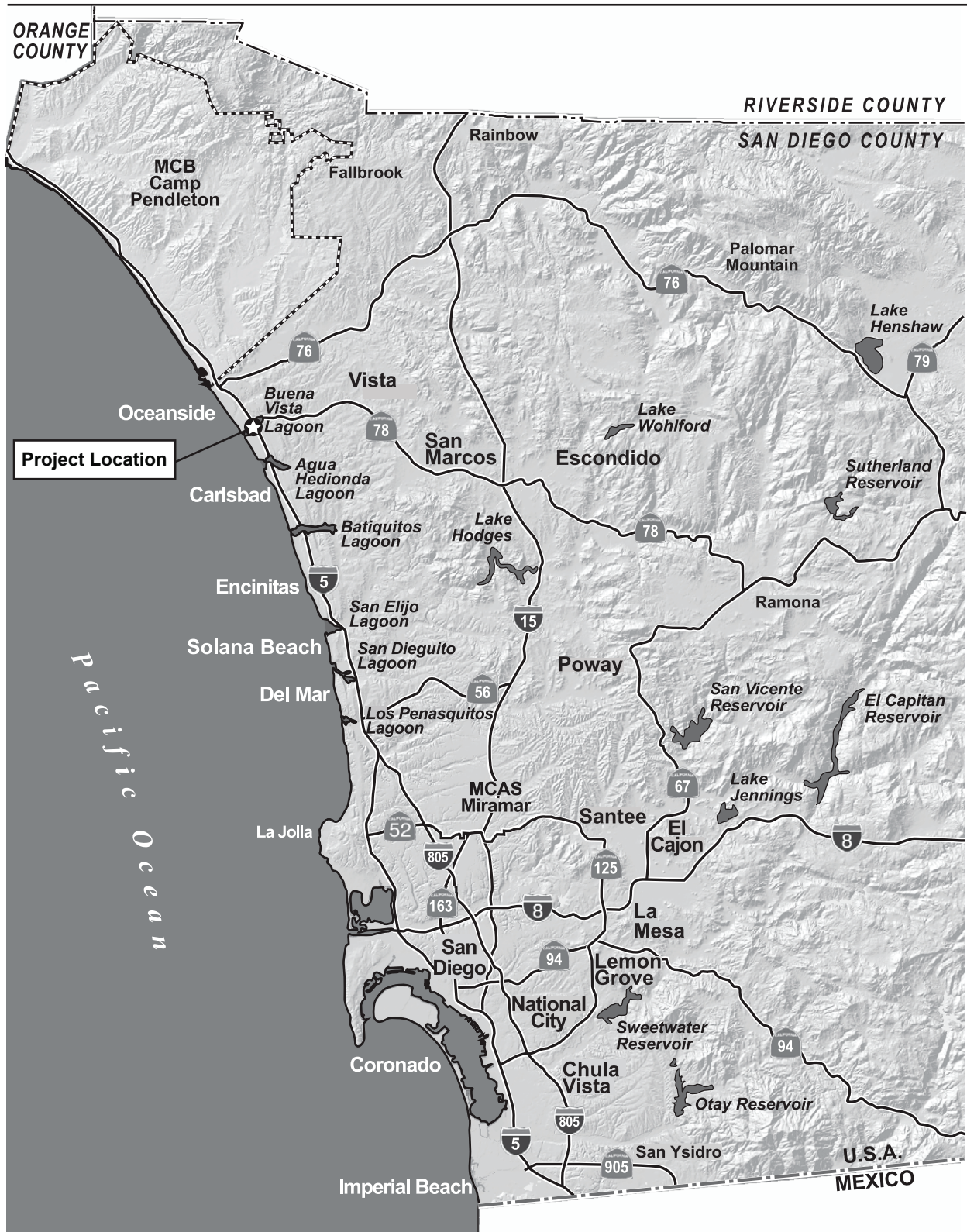


Figure 1
Regional Map



Source: SANDAG 2012; Sangis 2014; Everest 2014; AECOM 2014

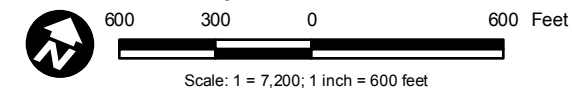


Figure 2
Project Study Area and
Maximum Limits of Disturbance

to the North County Transit District (NCTD) railroad by SANDAG in partnership with NCTD as part of the Los Angeles to San Diego Proposed Rail Corridor Improvements LOSSAN) project. Replacement of the I-5 and railroad bridges over Buena Vista Lagoon would be addressed as part of those studies.

The proposed project materials disposal/placement sites are located within former Regional Beach Sand Project II (RBSP II) receiver sites (AECOM 2011), Navy Homeporting Project (DON 1995), and San Diego (LA-5) Ocean Dredged Material disposal site (USEPA 1999), and were addressed for cultural resources under those programs. For all of the alternatives, placement of dredged materials could occur at Oceanside and Carlsbad beaches (RBSP II), nearshore Oceanside (Navy Homeporting Project), or the offshore LA-5 placement area (LA-5).

Buena Vista Lagoon is located at the boundary between the Cities of Carlsbad and Oceanside in northern San Diego County (Figure 1). The lagoon encompasses approximately 220 acres. A number of individuals and agencies own portions of the lagoon, including CDFW, whose lands are designated as an ecological reserve.

AREA OF POTENTIAL EFFECTS

The cultural resources APE encompasses all areas that may be subject to effects from the proposed project and alternatives. Impacts to cultural resources or California Register of Historical Resources (CRHR)-eligible resources may be direct or indirect. Direct impacts to cultural resources or CRHR-eligible resources occur as a result of ground-disturbing activities. Figure 2 presents the overall project study area, which includes the entire boundary of the lagoon as well as the maximum limits of disturbance from ground-disturbing activities associated with the proposed project and alternatives, as described above.

STATE LEGISLATION

Section 106 of the National Historic Preservation Act and implementing regulations (36 Code of Federal Regulations 800) require federal agencies to take into account the effects of their undertakings on historic properties. Cultural resources are assessed through the application of the criteria for inclusion in the National Register of Historic Places (NRHP).

The criteria used to evaluate resources that may be affected by this project are those provided by CEQA. A cultural resource is considered “historically significant” under CEQA if the resource meets the criteria for listing in the CRHR. These criteria define an “important” archaeological resource as one which:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or
- (2) Is associated with the lives of persons important in our past; or

- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

A resource will be listed as a historical resource in the CRHR if it meets any of the NRHP criteria, a resource that qualifies under CEQA. Unevaluated resources are considered potentially eligible for listing in the CRHR and are treated as eligible for the purposes of impact/effect analysis. CEQA also applies to archaeological resources that do not meet the criteria of a historical resource, but do meet the definition of a unique archaeological resource in Public Resources Code Section 21083.2, as follows:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

PROJECT PERSONNEL

Senior technical review was provided by Andrew York, M.A., R.P.A. Tanya Wahoff, M.A., R.P.A., served as principal investigator. Ted Cooley, M.A., served as field director and is a coauthor of the technical report. Robin Cleland, M.A., assisted with the field effort and sections of the report. Mr. York also contributed to the technical report. Resumes for key project personnel are presented in Appendix A.

NATURAL AND CULTURAL SETTING

The proposed undertaking is located within Buena Vista Lagoon, which is situated in northern San Diego County. The discussions below briefly consider aspects of the natural and cultural settings thought to have been important to the area's previous inhabitants. A general background of regional prehistory, ethnohistory, and history is also provided.

NATURAL SETTING

Climate

The proposed project area contains a variety of topographic zones and biotic communities in coastal, estuarine, and upland settings. The main geographic feature is Buena Vista Lagoon. Fed by Buena Vista Creek, the lagoon is among the smallest coastal wetlands in San Diego County. The climate is described as Mediterranean, with cool moist winters and warm dry summers. Yearly precipitation is highly variable but averages about 32 centimeters (cm) (Bailey 1966).

Geology and Topography

The project study area is located within the coastal plain of the Peninsular Ranges Geomorphic Province. It consists of marine and nonmarine terraces dissected by Buena Vista Lagoon. The coastal bluffs, which extend north and south of the lagoon, range in height to a maximum of 50 feet. The sediment present consists of recent alluvium, Eocene marine, and Pleistocene marine and marine terrace deposits (Rogers 1965).

Vegetation

Within the San Diego County lagoon areas are two primary vegetation communities, upland and riparian/other wetland, that would have been consistent with prehistoric occupation of the region. Diegan coastal sage scrub is the most dominant of the upland communities. Diegan coastal sage scrub consists mainly of California sagebrush (*Artemisia californica*) but often occurs with various codominant species. Also present in the upland communities is coyote brush scrub, which is heavily dominated by coyote brush (*Baccharis pilularis*). Nonnative grassland communities are also found within the area, and these are characterized by a dense to sparse cover of annual grasses, often with native and nonnative annual forbs (Holland 1986). Typical grasses within the region include ripgut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), soft chess (*Bromus hordeaceus*), wild oats (*Avena* spp.), and fescue (*Vulpia myuros*). Diegan coastal sage scrub/chaparral is included in the upland communities of the area and is a mix of chaparral and sage scrub species. Chamise (*Adenostoma fasciculata*) and coastal sagebrush are dominant and relatively equal in cover.

Present in the riparian/other wetland communities are coastal salt marsh, freshwater marsh, and southern willow scrub. Within the different littoral zones of the coastal salt marsh, species can be

segregated with California cordgrass (*Spartina foliosa*) nearest the open water in the low-littoral zone, Pacific pickleweed (*Salicornia pacifica*) and saltwort (*Batis maritima*) in the mid-littoral zones, and a richer mixture of species in the higher littoral zone (Holland 1986). Freshwater marsh species include California mugwort (*Artemisia douglasiana*) and a variety of sedges (*Carex* sp., *Cyperus* sp.) and rushes (*Juncus* sp.). Present in the southern willow scrub community is arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), and Goodding's black willow (*Salix gooddingii*).

Fauna

A variety of terrestrial mammals are native to the area and some are commonly represented in archaeological components; these species include mule deer (*Odocoileus hemionus*), rabbits (*Sylvilagus* spp.), jackrabbits (*Lepus californicus*), squirrels and chipmunks (Sciuridae), gophers (*Thomomys bottae*), woodrats (*Neotoma* sp.), raccoons (*Procyon lotor*), foxes (*Urocyon cinereoargenteus*), and coyotes (*Canis latrans*). Also present prehistorically, but not commonly represented in archaeological assemblages, were large carnivores such as California grizzly (*Ursus arctus californicus*) and mountain lion (*Puma concolor*). Littoral settings also supported several species of sea mammal, including California sea lion (*Zalophus californicus*), Guadalupe fur seal (*Arctocephalus townsendi*), and sea otter (*Enhydra lutris*).

Sharks and rays would have been available in the estuary, along with a variety of shellfish that were used prehistorically for food. The most important of these are Venus clam (*Chione* spp.), oyster (*Ostrea lurida*), and scallop (*Argopecten* sp.). Shellfish found along the open coast include bean clam (*Donax gouldii*), Pismo clam (*Tivela stultorum*), and mussel (*Mytilus californianus*).

CULTURAL SETTING

Regional Prehistory and History

Although the general outlines of the prehistory of coastal southern California have been in place for many decades, recent investigations have led to some important refinements. Many of these relate less to changes in assemblages and more to shifts in settlement and land use, and are thus especially relevant to models pertaining to archaeological landscapes and investigations on a more regional scale. In the following discussion, current knowledge of major prehistoric developments is reviewed as it may relate to regional land use models.

Initial Occupation: Paleoindian and Early Coastal Adaptations

Current environmental reconstructions indicate a global warming trend starting about 18,000 years ago that eventually signaled the end of the last glacial period. Inman (1983) noted that 18,000 years ago sea levels were at least 30 meters (m) below present levels. Rapid sea level rise flooded large portions of the coast, potentially inundating evidence of early human occupation (Carbone 1991).

Despite decades of research, the early prehistory of coastal southern California remains poorly understood. The archaeological record does reveal that humans had appeared by about 12,000 years ago on the Channel Islands, where they lived primarily by fishing and gathering shellfish. These early island components are of interest in that they seem to reflect fully developed maritime economies that were distinct from, but roughly contemporaneous with, the Clovis tradition represented throughout much of interior North America. Identified late Pleistocene components are lacking on the mainland coast of southern California, although several sites have yielded calibrated dates in excess of 9,000 years (Erlandson et al. 2007:58–59). Archaeological complexes represented at these early sites include the San Dieguito complex with its worked scrapers and leaf-shaped and stemmed projectile points (Warren 1968; Warren et al. 1993), and the La Jolla complex represented by flaked cobble tools, relatively abundant groundstone, and flexed burials. Although the temporal and cultural relationship between San Dieguito and La Jolla continues to be debated, it is increasingly clear that human populations were well established along the coast of southern California very early in the Holocene.

The Archaic

During the early Holocene, sea levels continued to rise. By about 8,000 years ago, however, it appears that the rise in sea level began to slow, allowing the formation of productive bay, lagoon, and estuary habitats at many locations along the San Diego County coastline (Carbone 1991; Masters and Gallegos 1997), including at what is known today as Buena Vista Lagoon. These habitats seem to have supported a significant coastal population during the early Archaic, as numerous coastal components have been found that date to this interval. Archaeological remains in these components typically represent the La Jolla complex and often contain abundant shellfish and fish remains, along with flaked cobble tools, basin metates, manos, discoidals, stone balls, and flexed burials. At the same time, it has been suggested that the contemporaneous Pauma complex of inland San Diego County may represent seasonal movements of early Archaic populations between coastal and inland resource areas (True and Pankey 1985; Warren et al. 1961). If so, a relatively broad seasonal range is implied for the early portion of the Archaic.

Although the basic toolkit represented by the La Jolla complex appears to have remained consistent throughout the Archaic, there are some indications of significant shifts in settlement, which is possibly a response to changing environmental conditions at the lagoons and estuaries. Data suggest that some of the southern California coastal lagoons were closed to tidal circulation between about 3,500 and 1,000 years ago (Masters and Gallegos 1997; Byrd et al. 2004, York et al. 2001). Open lagoon salinity levels are comparable to seawater; however, when closed, their salinity becomes highly variable, resulting in a decreased abundance of shellfish and other resources that may have a limited range of salinity tolerance (Zedler 1982). Compilations of radiocarbon assays for Batiquitos Lagoon (Gallegos 1985; Warren et al. 1961) provide evidence for disuse of this location between about 3000 and 1500 before present (B.P.). This, and evidence from some other locations in San Diego County, led Warren (1964, 1968; Warren et al. 1961) and others (Gallegos 1985; Masters and Gallegos 1997) to postulate a population movement inland and southward in response to siltation and declining productivity of coastal lagoons in the

northern portion of the county. Warren (1964) suggested that San Diego Bay and Mission Bay would have continued to provide productive wetland resource areas at this time.

The Late Prehistoric

The beginning of the Late Prehistoric is marked by the appearance of small projectile points, ceramics, and cremation burial practices. Data suggest that Late Prehistoric land use and settlement systems increasingly focused on inland settings, with settlements at a variety of interior and upland locations. Coastal settings continued to be used as well. The pattern of large residential camps with satellite short-term campsites that developed during this period (True 1966; Rosenthal et al. 2001; Byrd and Raab 2007) is seen as an indicator of economic intensification (Byrd and Reddy 1999, 2002)—a shift toward exploitation of smaller, more abundant resources—in response to stresses from increased populations and variable climatic conditions. Although more labor intensive to procure, these smaller resources were available in greater numbers and easily accessible for a range of age groups. The small satellite camps are seen as short-term campsites or activity areas focused on specific resources. An example of Late Prehistoric period intensification practices is the numerous Late Prehistoric period shell middens composed of bean clam (*Donax gouldii*) (Gallegos et al. 1998; Byrd 1996, 1998), a species that likely appeared in quantity with the expansion of sandy beaches in the Late Prehistoric period (Masters 1998).

Ethnohistory

By the time the Spanish arrived in California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay, or Northern Diegueño. A major Kumeyaay ethnohistoric village, *Palamai*, was in the vicinity of the proposed project on the coast between Buena Vista and Agua Hedionda Lagoons (Krober 1925). The Kumeyaay people spoke a Yuman language of Hokan stock. The Kumeyaay were organized into bands that followed a seasonal round of resource exploitation. Subsistence was plant-based, supplemented by game and also by shellfish on the coast. Acorns from a variety of oaks (*Quercus* spp.) were a staple, and the variety of seeds that also formed an important part of the diet included chia (*Salvia columbarie*), buckwheat (*Eriogonum fasciculatum*), and grasses (*Bromus/Stipa* spp., *Hordeum* sp., *Phalaris* sp., and *Sporobolus* sp.) (Luomala 1978; Byrd and Raab 2007). Trading networks moved coastal resources such as salt and shells inland and acorns, agave, and mesquite beans toward the coast (Luomala 1978).

History

Europeans first entered the project region in 1769, when the members of the Spanish Portola expedition crossed through the area en route from Mexico to Monterey (Brown 2001). Dual military and religious contingents established a series of missions in Alta California between San Diego and Monterey. After secularization of the mission system in 1834, large tracts of former mission lands were granted by the Mexican government to individuals. One of the many grants by Mexican Governor Pio Pico was the 13,311-acre Agua Hedionda Rancho, granted to Don Juan Maria Marron in 1842 (Moyer 1969:37). Located approximately 1 mile to the southeast of the lagoon, the rancho was primarily used for raising cattle, and later also for farming. For the

next approximately 40 years, the area around Buena Vista Lagoon remained largely undeveloped.

The communities of Oceanside and Carlsbad developed to the north and south, respectively, of Buena Vista Lagoon. Oceanside was platted in 1883 and incorporated in 1888. The community developed in proximity to a railroad depot, which was largely responsible for its early growth. The town experienced population increases during the real estate booms of the late 1880s, and again when the nearby Marine Corps Base Camp Pendleton was established in 1942 (Bibb and Flannigan 1997; O'Hara 2005). Carlsbad, originally a spa town, was platted in the 1880s but not incorporated until 1952 (Pryde 1992; Moyer 1969).

Trails and dirt wagon roads were the earliest travel routes in California. Major transportation routes developed along the coast in the late 19th century and early 20th century that provided easier access to the area. These included the Atchison, Topeka, and Santa Fe Railroad and the Coast Route (later known as Coast Highway 101). Construction of the railroad to San Diego County brought an influx of people and opened the area to development. From its inception in the early 1900s until the development of modern highways in the 1950s and 1960s, the Coast Route was the main north-south transportation route between San Diego and Los Angeles. The highway had a major role in the development of numerous coastal communities in San Diego County. As communities in San Diego County continued to develop through the 20th century, so did the need for improved transportation routes. Among the many highways constructed to meet this need was I-5 along coastal San Diego County. Construction of I-5 began in 1957 and was completed in 1966 (Arnold 2002).

INVESTIGATION METHODS

The cultural resources inventory of the proposed project area was designed to identify potentially significant cultural resources that could be affected by the proposed undertaking. Major activities directed at identifying and documenting these included archival research, a pedestrian field survey, site recording, mapping, and a draft and a final report.

RESEARCH ORIENTATION

Archaeological research in coastal southern California has led to a number of models that address issues of prehistoric cultural change (Byrd and Reddy 2002; Gallegos 1987; Warren 1964, 2012; Warren et al. 1961; Warren et al. 1993). These models explore the influences of such variables as climate, habitat change, resource distribution, and demographic trends on human land use. With respect to coastal southern California, the basic questions arising from these models revolve around prehistoric movement across—and use of—the landscape, trends in subsistence intensification, and refinement of the regional chronological framework. Historic research issues focus on transportation, development, and use of the area during World War II.

To address these questions, it is necessary to (1) identify, on a regional scale, the spatial distributions of archaeological components representing various prehistoric periods; (2) distinguish functional types among these components (i.e., habitation sites, temporary camps, or resource processing locations); (3) use zooarchaeological, archaeobotanical, and artifactual data to identify regional subsistence trends; and (4) apply archaeological data to the identification of regional procurement ranges and trade networks.

Although typically limited to surface observations, cultural resources inventories can help address these issues by contributing to the regional database relating to site locations and distributions. In addition, some attributes identified during site recording can provide useful preliminary data relating to site type and chronology. Common examples of these attributes include site size, presence of hearths or fire-affected rock, bedrock milling features, certain types of faunal remains, and temporal indicators such as ceramics or diagnostic projectile points.

INVENTORY METHODS

Cultural deposits typically occur on stable sediments along lagoon margins. Numerous prior cultural resources management investigations of the Buena Vista Lagoon area have resulted in the recordation of several sites in the project study area. The present study focused on previously recorded sites and stable surfaces that appeared within or in proximity to the Enhancement Project APE.

ARCHAEOLOGICAL INVENTORY

Prefield

Prior to the initiation of fieldwork, a records search was conducted at the South Coastal Information Center (SCIC) to obtain digital information on previous investigations and cultural resources recorded in the area. Georeferenced polygons for sites and previous investigations were overlain onto aerial images for each of the three proposed alternatives with areas of disturbance indicated. The maps were carefully examined, and recorded sites mapped near or within proposed areas of disturbance were selected to be revisited. Additionally, planned areas of disturbance (e.g., access roads) on stable surfaces were selected for cultural resources survey.

Field Survey

Field investigations consisted of a team of two archaeologists walking in parallel transects on either side of the existing access road, or in 10-m intervals through the survey area. In areas with dense vegetation, open areas were examined for cultural materials. Locations of the visited sites were recorded with a Global Positioning System and overview photographs were taken to document the conditions at the time of the field effort.

Site Recording

Sites were documented on standard Department of Parks and Recreation (DPR) forms (DPR 523) based on guidelines provided by the Office of Historic Preservation. For sites that were consistent with previous site records, an update was prepared on a DPR Continuation Form. Newly identified sites were recorded on DPR Primary and Archaeological Site forms, as were previously recorded sites where current observations were significantly different from the existing records.

RESULTS AND MANAGEMENT RECOMMENDATIONS

The cultural resources investigations conducted for the Enhancement Project consisted of a records and literature search and field survey. Survey was conducted at previously recorded sites and areas on stable surfaces with the potential for cultural resources that appeared to be within or in proximity to the Enhancement Project APE. Field investigations found no significant cultural resources within the proposed project APE. The following presents a summary of the records and literature search, followed by the results of the field survey.

RECORDS AND LITERATURE SEARCH

The archives of the SCIC housed at San Diego State University were consulted to identify previous cultural resources surveys and known cultural resources within a 1-mile radius of the project study area. The findings of the records search are provided separately in confidential Appendix B and summarized below.

Previous Investigations

The literature search identified 159 studies conducted within a 1-mile radius of the project study area. The prior investigations include studies associated with improvements to I-5 (Byrd and O'Neill 2002; Crafts 1995; Laylander and Becker 2004), the Rail to Trail project (Rosen 1999; York and Shaver 2005), Improvements to Highway 78 (Rosen 2004; Laylander 1988; Crafts 1992; Kyle 1995; Caltrans and Crafts 1991), Carlsbad Boulevard realignment (Kyle and Gallegos 1998), Regional Beach Sand II project (York and Hildebrand 2011), and development projects (Smith and Pierson 1994, 1996; Ni Ghabhlain 2006, Collett and Cheever 2001, Hanna 1984), and the Oceanside Harbor and Navigation Project (Cupples 1976).

Also consulted were the RBSP II EA/Final EIR (AECOM 2011), addressing locations proposed as part of the materials disposal/reuse component. Numerous submerged prehistoric sites have been recorded off the coast of southern California, identified mainly by the presence of stone grinding implements (Masters 1983). The RBSP II project provided information on the presence/absence of cultural resources at nearshore and onshore placement sites. Although they provided no information on cultural resources, sediment characterization or control studies (Everest and Battalle 2003; SAIC 2008; Applegate 1985) were reviewed to obtain information regarding the potential for dredging activities to encounter submerged terraces and former lagoon shore environments that might contain unknown cultural deposits. Based on prior boring information, approximately 5 feet of "organic rich mud," i.e., silts and clay, was deposited in the lagoon between 1940 and 1982 (Applegate 1985:16). The sediment studies undertaken for the proposed project, based on core samples of 8 to 20 feet in depth taken along the perimeter and in the central portions of the lagoon basins, revealed sediment deposits of silt, clay, and fine sands in those areas (Everest and Battalle 2003; SAIC 2008). Preliminary grading plans for the proposed project (SANDAG 2014a, 2014b, 2014c) were referenced for information related to sediment types, siltation rates, and existing and proposed elevations within Buena Vista Lagoon.

Archaeological Resources

Previous investigations by cultural resources firms have recorded 11 archaeological sites within 300 m of the lagoon study area (Table 1) (Figure 3a), four within 300 m of the onshore placement locations (Table 1) and none within the nearshore and materials disposal/placement areas (Figures 3b and 3c). One resource, site CA-SDI-626, is within 300 m of both the lagoon and the Oceanside placement area. Of the 11 prehistoric sites recorded within 300 m of the lagoon APE, four are shell scatters or shell middens; two are shell scatters, each with one recorded flake; one is a scatter of flaked stone and groundstone; and another three are sites that can be generally categorized as lithic and shell scatters although most also contain other cultural materials (e.g., groundstone, faunal bone, and/or fire-affected rock). No descriptive information is available for site CA-SDI-627. Based on the site number (site numbers are assigned sequentially), it is one of the early sites recorded in San Diego County. The site is one of a series originally recorded by Malcom Rogers, former curator of the San Diego Museum of Man, and revisited in 1958 by archaeologist William Wallace. Similar to other sites recorded in the area by Rogers, site CA-SDI-627 is likely a prehistoric shell or shell and lithic scatter.

Table 1. Archaeological Sites within 300 Meters of the Project Study Area

Resource Number	Primary Number (P-)	Component	Description	Date Recorded
Sites within 300 meters of the lagoon				
CA-SDI-626	-	P	Manos and lithic tools	1958
CA-SDI-627	-	Unidentified	No information	1958
CA-SDI-628	37-000628	P	Shell midden, debitage, cores, manos, lithic tools, and bone	1958, 1994, 2003
CA-SDI-629	-	P	Shell scatter, manos, and debitage	1958, 2009
CA-SDI-8346	-	P	Shell scatter	1981
CA-SDI-8455	-	P	Shell scatter and one flake	1981
CA-SDI-17272	-	P	Shell midden	2005
CA-SDI-17907	37-027452	H	Historic cemetery	2009
CA-SDI-18348	37-028351	P	Shell scatter and one flake	2007
CA-SDI-19375	37-030500	P	Lithic scatter, shell	2009
CA-SDI-20692	37-032654	P	Shell midden, flaked stone artifacts	2012
Sites within 300 meters of receiver sites				
CA-SDI-626	-	P	Manos and lithic tools	1958
CA-SDI-13211	-	P	Shell scatter	1993
CA-SDI-14059	37-014227	P	Shell scatter, fire-affected rock, possible mano fragment	1994
CA-SDI-17414	37-026518	P/H	Bottles, cans, salt glaze ceramics, blue English print ceramics, manos, lithic and shell tools, shell scatter	1972

H = Historic
P = Prehistoric
M = Multicomponent

Figure 3a
Records Search Results for Buena Vista Lagoon
Confidential
Map on File with SANDAG

Figure 3b
Records Search Results for Oceanside Placement Sites
Confidential
Map on File with SANDAG

Figure 3c
Records Search Results for North Carlsbad Placement Site
Confidential
Map on File with SANDAG

The historic site is the former Buena Vista cemetery, which was in use between about 1880 and 1906. The wooden markers at the cemetery were destroyed by fire in 1952. Prior to commercial development of the area in the 1970s, some of the interments were relocated to the El Camino Memorial Park. Additional remains were found during the construction activities (Catarino 2005), and some of these may have been reburied “in the slope overlooking Buena Vista Lagoon” and “under the on-ramp leading to ... I-5” (Warth 2000 in Laylander 2006), while others were relocated to a memorial park in Oceanside (Catarino 2005 in Laylander 2006). Of the two multicomponent sites, one was previously recorded and contains historic bottles, cans, and ceramic, and a scatter of lithics and both modified and unmodified shell. The other multicomponent site (CA-SDI-21274), was identified and recorded during survey at the lagoon margin conducted in support of the current Enhancement Project EIR. This site consists of a section of a historic Jefferson Street and a shell scatter. Most of these archaeological resources are unevaluated and, until they are evaluated, are considered potentially eligible for the NRHP. Examination of the digital data provided by the SCIC and field visits by AECOM archaeologists revealed that none of these resources are within the APE for the proposed project and alternatives. The majority of the sites within the project study area are prehistoric. The sites consist of shell middens, or shell and artifact scatters located around the margins of the lagoon, and provide evidence of the extensive prehistoric use of lagoon and estuarine resources.

Two of the sites within 300 m of the proposed project area and receiver areas date to the historic period. Those include a historic cemetery (CA-SDI-17907) and a trash scatter (CA-SDI-17414). Additionally, the newly identified site (CA-SDI-21274) consists of an historic asphalt road and a shell scatter.

Historic Maps

Historic maps consulted for this project included the 1872 San Diego County 1:100,000 map and the 1948 edition of the San Luis Rey U.S. Geological Survey (USGS) 7.5' topographic map. The 1872 San Diego County map identifies no resources within the current project study area. U.S. Highway 101, the Santa Fe Railroad, and the Coast Highway are indicated on the San Luis Rey 1948 7.5' topographic map.

Historic Structures

Four historic resources have been identified within the cultural resources study area, including two bridges, a railroad, and a weir. The first resource, a bridge over Buena Vista Lagoon (Bridge No. 57C00135) for Carlsbad Boulevard (Coast Highway) was constructed in 1914 and modified in 1933. This bridge was previously evaluated in the Caltrans Local Agency Bridge Inventory (Caltrans 2014) and listed as Category 5, not eligible for the NRHP. The bridge is also considered not eligible for the CRHR. The concrete I-5 bridge (Bridge No. 57 0277) was also previously evaluated in the Caltrans Historic Highway Bridge Inventory (Caltrans 2013) as Category 5, not eligible for the NRHP. As discussed above (Project Description), planned improvements to I-5 have been proposed by Caltrans as part of the North Coast Corridor Project and planned improvements to the NCTD railroad by SANDAG in partnership with NCTD as part

of the LOSSAN project. Replacement of the I-5 and railroad bridges over Buena Vista Lagoon would be addressed as part of those studies.

The 80-foot-wide weir near the mouth of the lagoon was originally constructed in 1940. It was damaged by storms in 1968 and 1969, and was replaced by the existing 50-foot weir in 1971 (Tenaglia 1999). The records and literature search indicates that no historic buildings are within 300 m of the cultural resources study area. No historical resources for the purposes of CEQA have been identified within the APE.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted for a search of their Sacred Lands files and for a contact list of interested tribes and persons. The search identified no Native American cultural resources within the Buena Vista Lagoon Enhancement Project APE. The contact program, which is ongoing, consists of an information letter, map, and response form sent to each of the tribes and persons on the contact list to inform them of the project and solicit information on known resources within the project area and any concerns regarding the project. Examples are provided in Appendix C. A follow-up telephone call(s) was made to any of the contacts that did not respond to the initial letter.

Summary of Contacts

A summary of the contact program is provided in Table 2. A specific concern was identified by Mr. Linton, Director of Cultural Resources for the Iipai Nation of Santa Ysabel, who requested Native American monitoring for the project. Mr. Linton advised that because the land is between the *Kumeyaay* and Luiseño tribal areas, representatives from both tribes should be monitoring the project.

Table 2. Native American Contact List for the Buena Vista Lagoon Enhancement Project (BVLEP)

Tribe	Person Contacted	Date	Medium	Comment
Ewiiapaayp Tribal Office	Robert Pinto Sr. (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Has no comments on the project
	Will Micklin (Executive Director)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Left a voice message.
	5/21/2015	Telephone Call	Left a voice message.	
Campo Band of Mission Indians	Ralph Goff (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Has no comments on the project

Tribe	Person Contacted	Date	Medium	Comment
Iipai Nation of Santa Ysabel	Clint Linton (Director of Cultural Resources)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Left a voice message.
		5/21/2015	Telephone Call	Left a voice message.
		5/21/2015	Telephone Call	Mr. Linton requested Native American monitoring for the project, and because the land is in between the Kumeyaay and Luiseño tribes, representatives from both tribes should be monitoring the project.
	Virgil Perez (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Requested that a copy of the information letter be emailed to him
5/18/2015		Email	Information letter, map, and response form	
Inter-Tribal Cultural Resource Protection Council	Frank Brown (Coordinator)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Has no comments on the project
Jamul Indian Village	Raymond Hunter (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Left a voice message.
		5/15/2015	Telephone Call	They haven't discussed the project yet. The meetings are the third Thursday of each month; they will email AECOM if they have any comments.
		5/21/2015	Telephone Call	Left a voice message.
Kumeyaay Cultural Historic Committee	Ron Christman	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	No answer and no option to leave a message
		5/19/2015	Telephone Call	No answer and no option to leave a message
		5/21/2015	Telephone Call	No answer and no option to leave a message
Kumeyaay Cultural Repatriation Committee	Steve Banegas (Spokesperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Has no comments on the project

Tribe	Person Contacted	Date	Medium	Comment	
Kumeyaay Cultural Repatriation Committee	Bernice Paipa (Vice Spokesperson)	1/10/2015	Letter	Information letter, map, and response form	
		5/18/2015	Email	Phone number unknown; emailed letter to bernicepaipa@gmail.com.	
Kumeyaay Diegueno Land Conservancy	Kim Bactad (Executive Director)	1/10/2015	Letter	Information letter, map, and response form	
		5/14/2015	Telephone Call	Left a voice message.	
		5/18/2015	Email	Information letter, map, and response form	
La Posta Band of Mission Indians	Gwendolyn Parada (Chairperson)	1/10/2015	Letter	Information letter, map, and response form	
		5/14/2015	Telephone Call	Left a voice message.	
		5/15/2015	Telephone Call	Left a voice message.	
		5/21/2015	Telephone Call	Not taking calls today; left a voice message	
Manzanita Band of Kumeyaay Nation	Leroy J. Elliott (Chairperson)	1/10/2015	Letter	Information letter, map, and response form	
		5/14/2015	Telephone Call	Mr. Elliott has passed away.	
	Angela Elliot Santos (Chairperson)	5/19/2015	Telephone Call	Angela Elliot Santos is the new Chairperson; she requested that a copy of the information letter be sent to her via email.	
		5/19/2015	Email	Information letter, map, and response form	
	Nick Elliott (Cultural Resources Coordinator)	1/10/2015	Letter	Information letter, map, and response form	
		5/14/2015	Telephone Call	Left a voice message.	
		5/15/2015	Telephone Call	Left a voice message.	
		5/21/2015	Telephone Call	Left a voice message.	
	Manzanita Band of Mission Indians	Keith Adkins (EPA Director)	1/10/2015	Letter	Information letter, map, and response form
			5/14/2015	Telephone Call	Left a voice message.
5/21/2015			Telephone Call	He isn't working in the office; left a voice message at the new telephone number provided.	

Tribe	Person Contacted	Date	Medium	Comment
Sycuan Band of the Kumeyaay Nation	Danny Tucker (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Left a voice message.
	Cody Martinez (New Chairperson)	5/21/2015	Telephone call	Cody Martinez is the new chairperson. Mr. Martinez is not taking calls today; left a voice message.
Sycuan Band of the Kumeyaay Nation	Sydney Morris (Environmental Coordinator)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Requested that a copy of the information letter be emailed to him.
		5/18/2015	Email	Information letter, map, and response form
Viejas Band of Kumeyaay Indians	Anthony R. Pico (Chairperson)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	No answer and no option to leave a message
		5/15/2015	Telephone Call	Mr. Pico no longer works there. The new Chairman will call AECOM with any comments left by Mr. Pico.
	Bridget McCown (New Chairperson)	5/19/2015	Telephone Call	Bridget McCown is the new Chairperson; she requested that a copy of the information letter be set to her via email
		5/19/2015	Email	Information letter, map, and response form
	Julie Hagen (Cultural Resources)	1/10/2015	Letter	Information letter, map, and response form
		5/14/2015	Telephone Call	Left a voice message.
		5/21/2015	Telephone Call	Left a voice message.

FIELD INVESTIGATIONS

The cultural resources field investigations in support of the proposed project were conducted by a team of two AECOM archaeologists on July 10 and 11, 2014. As described previously, the investigations were conducted at previously recorded sites that appeared to be within or adjacent to the proposed project APE and planned areas of disturbance on stable surfaces. These surveys were conducted, however, with two principal types of constraints, both involving access to areas to be surveyed. One constraint involved private land access that included inhibiting factors such as fences, guard animals, and/or a disinclination on the part of the owners to allow access. The second constraint involved the natural occurrence of dense vegetation coinciding with the areas

in which survey would often be desirable, i.e., the planned areas of disturbance on stable surfaces within the margins of the proposed project APE.

Based on analysis of the results of the records search performed for the project, the surveys were focused on examining locations where cultural resources sites had been previously recorded, within, or in proximity to, the footprint of proposed project activities that could potentially impact those resources. Ultimately, all of the area adjacent to the lagoon margin that could be accessed was surveyed. Eleven different locations were examined which included a total of eight previously recorded cultural resource sites (Table 3). Two of the surveyed locations are located in the I-5 Basin portion of the lagoon; seven are in the Coast Highway Basin, and one each in the Railroad and Weir Basins. The survey areas are indicated in Figure 4.

Table 3. Previously Recorded Sites Visited during Survey

Survey Area*	Site	Description
2	CA-SDI-629	Prehistoric habitation area
2	CA-SDI-17672	Shell scatter with no artifacts
2	CA-SDI-19375	Sparse shell scatter with single lithic artifact
2	CA-SDI-20692	Shell scatter with no artifacts
3	CA-SDI-628	Prehistoric habitation area
4	CA-SDI-8455	Shell scatter with single lithic artifact
9	CA-SDI-627	Prehistoric campsite
11	CA-SDI-626	Prehistoric shell midden destroyed by housing development construction

* No archaeological sites were found at survey areas 1, 5, 6, 7, 8, or 10.

Additionally, one previously unknown site (CA-SDI-21274) was identified and recorded. This site is a segment of an old alignment of Jefferson Street and a prehistoric shell scatter with no artifacts. The following discussion describes the conditions at the time of fieldwork and the findings. Sites are discussed in order by their survey area, as indicated in Table 3 and Figure 4.

Survey Results, I-5 Basin

Survey Area 1

This location is the staging area at the north end of the I-5 Basin (Plate 1). The pedestrian survey included the staging area and a strip along the west edge of the soil drying area. Research identified that all of the areas proposed for staging and soil drying are on recent fill soils. No cultural resources were previously recorded in this area and none were found during the survey.



Source: SanGIS 2009; Landscorp 2010; MoffattNichol 2009

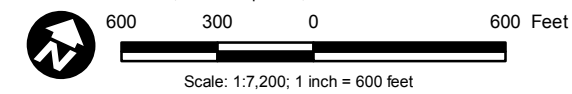


Figure 4
Archaeological Survey Areas



Plate 1. Proposed staging area in the north end of the I-5 Basin. View to the northwest.

Survey Area 2

This location is along the proposed access road (Jefferson Street) at the southern perimeter of the I-5 Basin. Sites previously recorded within or in proximity to this survey area are CA-SDI-629, CA-SDI-17671, CA-SDI-19375, and CA-SDI-20692. No newly identified resources were found within survey area 1.

CA-SDI-629

CA-SDI-629 is a prehistoric site located on the bluff along the southern edge of the lagoon. As originally recorded, the northern margin of the site was bounded by Jefferson Street. Originally recorded and tested by Malcolm Rogers (n.d.a) as SDM-W-138, with shell and a small amount of lithic debitage noted (Noah 2009a). The site was subsequently visited by Wallace (1958a, 1960) who recorded this resource as a prehistoric “campsite” with “heavy shell content” (1958) and noted two manos (1960:290–291). Wallace (1958) also described the site as “99% destroyed.” At that time, the site was assigned the permanent designation of CA-SDI-629. In 2009, A. Noah visited a portion of the site along Jefferson Street between the curb on the north side of Jefferson Street and the lagoon. She reported that “This area contains a low-density shell scatter made up principally of spp. [Venus clam] and (*Argopecten* sp.) [speckled scallop]. No artifacts were observed. The site area contains numerous small animal burrows and modern trash. The northern boundary was extended slightly to the east as a result of the current survey” (Noah 2009a).

As recorded and updated, site CA-SDI-17672, while in proximity, was not located within the Enhancement Project APE. The current survey area for the Enhancement Project essentially

coincides with the Noah survey area and it produced the same results. The approximately 7-foot to 10-foot-high, steep slope north from the edge of the road shoulder down to the edge of the lagoon was very densely vegetated, which precluded pedestrian survey.

CA-SDI-17672

Site CA-SDI-17672 was originally recorded in 2005, by D. Pallette Fink as “a large shell midden extending along a bluff overlooking the south side of Buena Vista Lagoon” (Pallette 2005). Pallette described the site as extending into the I-5 right-of-way and approximately 150 m east from the ROW, and 60 m south from the bluff edge. Limited testing conducted with the I-5 ROW indicated a depth of 60 cm (Pallette 2005). No artifacts are mentioned by Pallette.

During the current survey, along Jefferson Street, which appears to be cut into the bluff, no cultural materials or shell was observed. Below the road cut, down a steep slope to the edge of the lagoon, however, is very densely vegetated, which precluded pedestrian survey. The site was originally recorded as being present from the bluff edge south. As such, it would be sufficiently distant from the proposed Enhancement Project APE to avoid being impacted. No evidence was observed during the current survey to indicate otherwise. The field investigation found that, as recorded, site CA-SDI-17672 is not located within the proposed project APE.

CA-SDI-19375

CA-SDI-19375 is a previously recorded prehistoric site located along the southern shore of the lagoon, between the lagoon margin and Jefferson Street. It was originally described as a “low density marine shell and flaked lithic scatter dominated by spp. [Venus clam] and *Argopecten* sp. [speckled scallop] with small amount of *Ostrea* sp. [native Pacific oyster] observed” (Noah 2009b:1). Along with the shell, one flake was noted.

As recorded, a small portion of the site is located within the Enhancement Project APE. During the current survey, the area between Jefferson Street and the lagoon margin, was open and was surveyed. Visibility, however, was poor due to dense vegetation. While a few fragments of shell were observed within the same area as that defined by Noah, no artifacts were noted. The terrace that contains CA-SDI-19375 ends in a steep drop of 4 to 5 feet to the lagoon and the proposed project APE. Therefore, site CA-SDI-19375, while in proximity, is not located within the proposed project APE.

CA-SDI-20692

CA-SDI-20692 is a previously recorded prehistoric site located along the southern edge of the lagoon. The site was originally discovered during monitoring for the Buena Vista Lift Station project and consists of a deposit containing shell that “straddles” Jefferson Street (Giletti 2012). During the current survey for the Enhancement Project, the presence of a scatter of marine shell was also noted along the road shoulders along this same section of Jefferson Street, and as with the original discovery, no artifacts were observed. The short, steep, slope, north from the edge of the road shoulder down to the edge of the lagoon was very densely vegetated. The boundary of the APE, in this area, is approximately, 35 m (115 feet) north of the northern shoulder of Jefferson Street, which is the closest location where the site-associated shell materials were observed.

Survey Results, Coast Highway Basin

Survey Area 3

This survey area is along the southern margin of the Coast Highway Basin, just west of I-5. One previously recorded site (CA-SDI-628) and one newly identified site (CA-SDI-21274) are within this area.

CA-SDI-628

CA-SDI-628 is a previously recorded prehistoric site located on the bluff along the southern edge of the lagoon. The site is bisected by Jefferson Street and has likely been impacted by I-5 along its eastern edge (Laylander 2003). Originally recorded by Malcolm Rogers (n.d.b) as SDM-W-135, the site was subsequently recorded as CA-SDI-628 by Wallace (1958b, 1960) and he described it as a large prehistoric (La Jollan) campsite (1958b, 1960:288). Wallace also noted that it “is an important site and should be excavated” (1958b). In 1994, as part of the site assessment for the Muhe development project, Smith and Associates excavated a series of shovel test pits and a test excavation unit at the site (Pierson 1994). Cultural materials were found to a depth of 1 m below ground surface. Those excavations yielded marine shell, faunal bone, flaked stone and groundstone artifacts, and a small amount of charcoal.

The site area today, outside of the I-5 right-of-way, is nearly completely developed in residences. A lot extending between Jefferson Street and the southern lagoon margin was open and was surveyed. While visibility on most of the lot was good, the lagoon margin portion was densely vegetated and could only be partially surveyed. A few fragments of shell were observed within the upper terrace area of the lot, but no artifacts were noted. Site CA-SDI-628 is outside of the Enhancement Project APE.

CA-SDI-21274

Along the base of the bluff, below the location of CA-SDI-628, a small knoll was observed that rose to an elevation of approximately 1 to 2 m above the current water level of the lagoon. Numerous rodent burrow extrusions on the knoll were seen to contain marine shells including Venus clam (*Chione* spp.), scallop (*Argopecten* sp.), bay oyster (*Ostrea* sp.), and California cone shells (*Conus Californica*), but no prehistoric artifacts were observed. Also noted along this same lower portion of the bluff were the eroded remnants of a road cut and asphalt-paved surface indicating that an old roadway previously ran along the base of the bluff at this location. Subsequent to the field survey, historic aerial photographs were examined. A 1938 aerial revealed that at that time, Jefferson Street was routed along the base of the bluff. A 1947 aerial indicated that, sometime between 1938 and 1947, it was rerouted to a bluff-top location, much as it is today. DPR Primary and Archaeological Site forms (confidential Appendix D) were prepared for the site and submitted to the SCIC for assignment of permanent numbers.

Survey Area 4

This location is also along the southern margin of the Coast Highway Basin. A single previously recorded resource, CA-SDI-8455, is in proximity to this area.

CA-SDI-8455

CA-SDI-8455 is a prehistoric site located along the southern shore of the lagoon, between the lagoon margin and Jefferson Street. As recorded, site CA-SDI-8455, while in proximity, was not located within the Enhancement Project APE. It was originally described as a “low density shell scatter concentrated on the lower terraces of property, but sparsely present throughout” (Cardenas 1981). Along with the shell, a flake was also noted. Cardenas observed that the “presence of some shell in backdirt indicates probable subsurface deposition” (1981).

The location where the site was originally recorded is now completely developed in residences, and it is likely that the site has been destroyed. During the current survey, however, a lot next to the location, between Jefferson Street and the lagoon margin, was open and was surveyed. While visibility on most of the upper elevations of the lot was good, the lagoon margin portion was densely vegetated and could only be minimally surveyed. While a few fragments of shell were observed, no artifacts were noted, and, while visibility was poor in that area, no materials were observed within the APE.

Survey Area 5

This location is along the northern margin of the Coast Highway Basin and west of the I-5 interchange. No cultural resources were previously recorded within this area, although the historic Buena Vista Cemetery (CA-SDI-17901) was recorded at the top of the bluff, about 90 m to the north of the APE in this area. This survey area includes a portion of a south-facing slope (Plate 2) and the lagoon margin. Ground surface visibility was moderate on the slope, with dense vegetation along the lagoon edge. No cultural materials were observed within, or in proximity to the proposed project APE.



Plate 2. Slope west of I-5. View to the west.

Survey Area 6

This area is situated along the northern lagoon margin of the Coast Highway Basin. At the time of the Enhancement Project surveys, the area was covered in dense vegetation. No cultural resources were previously recorded within or adjacent to this area; none were found during the current field investigation.

Survey Area 7

This area is situated along the northern lagoon margin of the Coast Highway Basin, and east of the Carlsbad Boulevard bridge. At the time of the current survey, the entire extent of the proposed staging area was inundated by the lagoon and was therefore not accessible for survey. Plate 3, taken from the Carlsbad Boulevard bridge, provides an overview of this staging area. No previously recorded sites have been recorded within, or within proximity to, the area delineated for this staging area.



Plate 3. Proposed staging area in the Coast Highway Basin along the northern margin of the lagoon. View to the northeast.

Survey Area 8

This area is located within the southern lagoon margin of the Coast Highway Basin, east of Carlsbad Boulevard. At the time of the current survey, the entire extent of the proposed staging area was inundated by the lagoon and was therefore not accessible for survey (Plate 4). No previously recorded sites have been recorded within the area delineated for this staging area; none were found during the current survey.



Plate 4. Proposed staging area in the Coast Highway Basin, east of Carlsbad Boulevard. View to the northwest.

Survey Area 9

This area is on the south side of the Coast Highway Basin. One cultural resource (CA-SDI-627) was previously recorded within this area. Due to private property access issues, the area immediately adjacent to the lagoon was not visited.

CA-SDI-627

CA-SDI-627 is a prehistoric site located on the bluff along the southern edge of the lagoon. As recorded, a small portion of the site is located within the Enhancement Project APE. The site is bisected by paved Buena Vista Circle. Originally recorded by Malcolm Rogers (n.d.c) as SDM-W-142, he later described it as a “slough terrace midden” containing prehistoric hearths (1966:180). The site was subsequently recorded by William Wallace (1958c) as a prehistoric “campsite” and assigned the permanent designation of CA-SDI-627. Wallace described the site as “largely destroyed” with only “scattered remains of the site remaining.”

The site area today is completely developed in residences, which essentially precluded examining the area during the current survey. However, similar to Wallace’s notes in 1958, the site has most likely been destroyed by development. The road shoulders along Buena Vista Circle through the development at the top of the bluff overlooking the lagoon were surveyed; a few fragments of shell were observed but no artifacts were noted.

Survey Results, Railroad Basin

Survey Area 10

At the time of the current survey, the entire extent of the proposed staging area (Plate 5) located adjacent to the north shore of the Railroad Basin was open and was surveyed. Visibility ranged from poor to good with visible areas scattered around sufficiently to allow for a reasonable coverage to occur. No cultural materials were observed. No sites were previously recorded within, or within proximity to, the area delineated for this staging area.



Plate 5. Proposed staging rea along the margin of the Railroad Basin. View to the southeast.

Survey Results, Weir Basin

Survey Area 11

At the time of the current survey, the entire extent of the proposed staging area, located within the Weir Basin, was inundated by the lagoon (Plate 6) and was therefore not accessible for survey. While no sites have been previously recorded within or adjacent to the area delineated for this staging area, site CA-SDI-626 was originally recorded approximately 180 m to the southwest.



Plate 6. Proposed Staging Area in the Weir Basin along the margin of the proposed lagoon. View to the northwest.

CA-SDI-626

Prehistoric archaeological site CA-SDI-626 was previously recorded by W. Wallace (1958d, 1960) on top of a knoll along the southern shore at the mouth of the lagoon. As recorded, site CA-SDI-626, while in proximity, was not located within the proposed project APE. The site was recorded as a shell midden with two manos and a chopper (Wallace 1960). The knoll-top area, where CA-SDI-626 was originally recorded, is now completely developed in private residences and was therefore not accessible for survey. During the present survey, a sparse scatter of marine shell genera, including *Chione* spp. *Argopecten* sp. and *Ostrea* sp., was observed around the remnant base of the knoll, where the site was originally recorded. Also observed in an adjacent location was a single volcanic flake. This flake is recorded as Isolate P-37-033873. While the original source of this flake may have been from CA-SDI-626, its current context appears to be redeposited fill soils. All of the materials observed, while in areas immediately adjacent to the project boundary, were located outside of it, and all appeared in a disturbed context likely from both natural (erosion) and human-related (construction) activities. While close by, none of the materials observed were within the boundary of the Enhancement Project.

SUMMARY, EVALUATION, AND MANAGEMENT RECOMMENDATIONS

SUMMARY

The project includes dredging, grading within the lagoon, improvement to and use of staging areas, and construction of a boardwalk. The weir would be replaced under the Freshwater Alternative, and removed and replaced with an open tidal inlet under the Saltwater Alternative and the Hybrid Alternative, Option B. Under the Hybrid Alternative, Option A, a new channel would be constructed at the mouth of the lagoon. Replacement of the Carlsbad Boulevard bridge would occur under the Saltwater and Hybrid (both options) Alternatives. Materials removed during dredging would be placed at nearshore, offshore, and/or onshore placement areas, at locations previously addressed for cultural resources under the RBSP II (AECOM 2011) or the San Diego (LA-5) Ocean Dredged Material disposal site EIS (USEPA 1999). The proposed project APE is the extent of physical disturbance for the undertaking.

Numerous prior cultural resources investigations conducted within the project study area have resulted in the identification of several prehistoric and historic archaeological sites. The present study focused on revisiting archaeological sites and locations in proximity to areas of proposed disturbance.

The cultural resources pedestrian survey in support of the Enhancement Project EIR was conducted on July 10 and 11, 2014. Eleven locations with eight previously recorded archaeological sites were surveyed. None of the eight previously recorded archaeological sites visited during the study were found within or adjacent to the APE. One new prehistoric archaeological site, a shell scatter (CA-SDI-21274), was recorded and the site form submitted to the SCIC for assignment of permanent numbers.

RECOMMENDATIONS

Although no archaeological sites have been identified within the APE for the Enhancement Project, the potential exists for currently unknown cultural deposits to be encountered during land-based equipment mobilization and soil and/or vegetation removal on stable surfaces along the lagoon margin.

It is therefore recommended that a monitoring program be initiated prior to the start of ground-disturbing construction. The program would include:

- Preparation and implementation of a monitoring and discovery plan.
- A training session for project construction personnel conducted by a qualified archaeologist. The training session would include a review of required monitoring locations and communication protocols, types of cultural resources that might be

encountered, cultural resources responsibilities, protection procedures, and avoidance measures.

- Archaeological and Native American cultural monitoring during all mechanical excavations in sediments with the potential for CRHR-eligible resources.

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APPENDIX A

RESUMES OF KEY PERSONNEL

Tanya Wahoff
**Staff Archaeologist/
Lithic Technology Specialist**

Education

MA , Archaeology and Heritage, Leicester University, United Kingdom, 2008
BA, Anthropology, University of California, Santa Barbara, 1980

Professional Registrations

Register of Professional Archaeologists

Professional Affiliations

Member, Society for California Archaeology
Member, Society for American Archaeology
Member, Society for Historic Archaeology

Publications + Technical Papers

Archaeological Landscapes on San Clemente Island: A View from the North End Shelter. M.A. thesis, School of Archaeology and Ancient History, University of Leicester (2008).

Flaked and Battered Stone, in Piecing Together the Prehistory of Landing Hill: A Place Remembered, with J. Cleland, A. York, and L. Willey, Chapter 13, EDAW Cultural Publications No. 3 (2007).

Evidence for Post-Mission Period Native American Ceremonial Activity on San Clemente Island, California (with A.L. York). Proceedings of the Fifth Channel Islands Symposium, Santa Barbara (1999).

Flaked Lithic Tools From Recent Investigations on the Salton Sea Test Base. Proceedings of the Society for California Archaeology, Vol. 12. Society for California Archeology, Fresno (1999).

Recent Data on Subsistence and Environmental Change from Southern Santa Rosa Island. Proceedings of the Society for California Archaeology, Vol. 10. Society for California Archaeology, Fresno (1997).

With more than 25 years of cultural resources management experience, Tanya Wahoff possesses expertise in prehistoric archaeology, historical archaeology, and laboratory analyses. During her professional career, Ms. Wahoff has directed inventories, evaluations, data recovery efforts, monitoring programs, and laboratory analyses for projects throughout the western United States. Ms. Wahoff is knowledgeable in the procedures and guidelines associated with implementation of the NHPA, NEPA, CEQA And other regulations pertaining to cultural resources. As part of interdisciplinary teams, she has managed cultural resources investigations and authored cultural resource sections for EAs, EIRs, and EISs, and prepared management plans. Ms. Wahoff currently serves as Cultural Resources Laboratory Director for the San Diego office.

Ms. Wahoff's extensive experience in laboratory analysis includes historic artifacts, groundstone, and shell beads, with a special emphasis on flaked lithics. She has conducted lithic analysis for projects involving numerous large prehistoric quarries and lithic reduction sites, including projects situated on or adjacent to Sugarloaf Mountain, a massive obsidian quarry located near Owens Valley in eastern California. Ms. Wahoff has also participated in lithic workshops directed by Steven Shackley (Lowie Museum) and John Fagan (Oregon State University).

Representative Project Experience

Naval Facilities Engineering Command Southwest, EIS/LEIS for a Naval Air Weapons Station China Lake (NAWSCL)

Cultural resources specialist on a multidisciplinary team for preparation of an environmental impact statement (EIS)/legislative environmental impact statement (LEIS) in support of an application to evaluate the potential environmental effects associated with the continued withdrawal of approximately 1.1 million acres of public land within NAWSCL. [2011 – Ongoing]

Naval Facilities Engineering Command Southwest and Marine Corps Base Camp Pendleton, Bachelor Enlisted Quarters Package 7 Project, Marine Corps Base Camp Pendleton, San Diego County, CA

Principal investigator and monitoring supervisor during upgrades to Sewage Treatment Plant 12 on the San Mateo floodplain on Marine Corps Base Camp Pendleton. Previously unrecorded portions of prehistoric site CA-SDI-1313/14,791 discovered during monitoring were tested and evaluated for the National Register of Historic Places. [2010 – Ongoing]

Naval Facilities Engineering Command Southwest and Marine Corps Base (MCB) Camp Pendleton, Tertiary Treatment Plant Project, MCB Camp Pendleton, San Diego County, CA

Field director for evaluation of prehistoric site CA-SDI-14,170 and testing of four additional previously identified prehistoric sites and two discovery sites for a reclaimed water pipeline. Responsible for coordination with MCB Camp Pendleton Base Archaeologist, Prevost Marshall Office, traffic control, Native American monitors, project biologist, and subconsultants. Coauthor of the work plan and technical report. Laboratory director for the cataloging and conducted artifact analyses. [2006 – 2011]

California State Parks, Jolly Boy, Old Town San Diego State Historic Park, San Diego, CA

Project manager and field director for testing, data recovery, and construction monitoring for renovations to an existing building on the site of the former Aguilar Serrano adobe in Old Town San Diego. Coauthor of the technical report. [2007 – 2011]

Sempra Energy and Utilities, Coronado 69-kilovolt Utilities Relocation Area Monitoring, San Diego, CA

Project archaeologist who supervised archaeological monitoring of trenching for a 69-kilovolt cable and directed evaluation of two buried historic features discovered during monitoring. Coordinated with Sempra. Primary author of the monitoring and evaluation report. [2004]

Foster Wheeler Environmental Corporation, North Baja Gas Pipeline Project, Riverside and Imperial Counties, CA

Field supervisor for cultural resources monitoring of an approximately 80-mile-long gas pipeline between Blythe, California, and the US/Mexican border. Supervised up to 20 archaeological and Native American monitors during the 6-month monitoring effort. Supervised survey and wrote 12 addendum reports for supplemental surveys. Supervised data recovery at five discovery sites found during construction of the pipeline. Supervised lab and conducted lithic analysis. [2000 – 2003]

Naval Facilities Engineering Command Southwest and Marine Corps Base (MCB) Camp Pendleton, Archaeological Evaluation and Testing of Site CA-SDI-17,912, PPV Phase VI, MCB Camp Pendleton, San Diego County, CA

Project manager and Principal Investigator for testing and National Register of Historic Places evaluation of a prehistoric site. The project is in support of the Military Family Housing Public/Private Housing Venture. [2008 – 2010]

Naval Facilities Engineering Command Southwest and Joint POW/MIA Accounting Command (JPAC), Naval Airplane Crash Site Project, San Diego County, CA

Field director for geophysical investigations of 3.5 acres in Ramona, the location of a 1961 crash of a Grumman F4/F9 Cougar naval aircraft. Recordation of prehistoric bedrock milling site CA-SDI-19,731. [2009 – 2010]

Theodore Cooley, RPA Archaeologist

Education

MA, Anthropology, California State University, Los Angeles, 1982
BA, Anthropology, California State College, Long Beach, 1970

Professional Registration

Registered Professional Archaeologist (RPA)

Professional Affiliations

Member, Society for American Archaeology
Member, Society for California Archaeology
Member, Register of Professional Archaeologists

Certifications

County of San Diego, CA Certified Consultant List for Archaeological Resources
City of San Diego, CA Certified Principal Investigator for Monitoring Projects
County of Orange, CA Certified Cultural Resources Consultant Principal Investigator
County of Riverside, CA Certified Cultural Resources Consultant Principal Investigator
Approved lists in the Counties of San Luis Obispo, Santa Barbara, Ventura, and Los Angeles, California

Training

40-Hour HAZWOPER Training

Publications

Archaeological Excavation at the Village of Pámu, Ramona Valley, California. (with Laura Barre) *Proceedings of the Society for California Archaeology*, Vol. 17, pp. 43–56 (2004).

Observations on Settlement and Subsistence During the Late La Jolla Complex–Preceramic Interface as Evidenced at Site CA-SDI-11,767, Lower San Diego River Valley San Diego County, California. *Proceedings of the Society for California Archaeology*, Vol. 11, pp. 1–6 (1998).

Early Period Results from Data Recovery Conducted on a Portion of Stratified Prehistoric Site, CA-SDI-9,243, San Diego County, California. *Proceedings of the Society for California Archaeology*, Vol. 8, pp. 227–238 (1995).

Observations on Hydration Measurements of Obsidian Deriving from Buried Deposits from Site CA-SBA-2028, at Gaviota, Santa Barbara County, California. *Coyote Press Archives of California Prehistory*, No. 37, pp. 27–30 (1992).

Archaeological Investigations at CA-SBA-97: A Multicomponent Coastal Site at Gaviota, California (with Jon M. Erlandson, Roy Dugger, and Richard Carrico). *Coyote Press Archives of California Prehistory*, No. 37, pp. 49–80 (1992).

Contributing author. Archaeological Investigations on the Rancho San Clemente, Orange County, California. (Principal Author Constance Cameron). *Coyote Press Archives of California Prehistory*, No. 27 (1989).

A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBa-1951 (with Jon M. Erlandson and Richard Carrico). *Journal of California and Great Basin Anthropology* Volume 9, Number 1, pp. 120–128 (1987).

Excavations and Investigations at CA-Ora-183, the Newland House Site, Huntington Beach, California (with Marie Cottrell, Constance Cameron, Vada Drummy-Chapel, and Adella Schroth). *Pacific Coast Archaeological Society Quarterly* Volume 21, Number 1, January, pp. 1–77 (1985).

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Investigations of CA-SCal-137 Bulrush Canyon, Catalina Island, California (with Marie G. Cottrell and Joyce M. Clevenger). *Pacific Coast Archaeological Society Quarterly* Volume 16, Numbers 1 and 2, January and April, pp. 5–25 (1980).

Ted Cooley has 40 years of experience in archaeological resource management. He has directed test and data recovery investigations, monitoring programs, and archaeological site surveys of large and small tracts, and has prepared reports for various cultural resource management projects. He is well-versed in National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) regulations and processes. Mr. Cooley's experience also includes Native American consultation for monitoring of archaeological field projects, including some with human remains and reburial-related compliance issues.

Project Experience

California High-Speed Rail Authority, High Speed Train Project, CA

Field director for a Phase I Cultural Resources Survey and Inventory of three alternative high-speed train alignment corridors, extending from the city of Merced to the city of Fresno in the San Joaquin Valley. Duties included direction of the field crew and participation in the analysis of results and report preparation. [01/2011 – Ongoing]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Seal Beach Naval Weapons Station Archaeological Evaluations, Orange County, CA

Field director for archaeological test investigations for the delineation and evaluation of prehistoric site P-30-1503 within the Seal Beach Naval Weapons Station along the margin of the Anaheim Creek drainage wetlands system. This project involved testing for the depth and horizontal extent, as well as a significance evaluation of this Late Holocene site. Duties included direction of the field crew and participation in the analysis and report preparation. [10/2010 – Ongoing]

US Department of the Navy, Naval Facilities Engineering Command Southwest, San Nicolas Island Archaeological Evaluations, Ventura County, CA

Field director for archaeological test investigations for the delineation and evaluation of prehistoric site CA-SNI-41 on San Nicolas Island in the Channel Islands of the California Bight. This project involved testing for depth and horizontal extent, as well as significance evaluation of this Middle and Late Holocene site. Duties included direction of the field crew and participation in the analysis and report preparation. [05/2010 – Ongoing]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Compliance Documentation Support Services for Marine Corps Base Camp Pendleton, Environmental Security Section, San Diego County, CA

Provided support services on base in the preparation of documentation and correspondence for agency submittal for federal NEPA and Section 106 compliance requirements, principally to the State Historic Preservation Office (SHPO) and Advisory Council for Historic Preservation (ACHP), for several large construction projects. [01/2010 – Ongoing]

US Department of the Navy, Naval Facilities Engineering Command Southwest, San Nicolas Island Archaeological Evaluations, Ventura County, CA

Field archaeologist for archaeological evaluation of prehistoric sites CA-SNI-316, CA-SNI-361, and CA-SNI-550 on San Nicolas Island in the Channel Islands of the California Bight. This project involved the significance testing and evaluation of these Middle and Late Holocene sites, and the analysis and synthesis of results with existing island-wide archaeological data. Duties included field crew member and participation in the analysis and report preparation. [10/2009 – Ongoing]

Olivenhain Municipal Water District, Raw Water Pipeline Phase I Cultural Resources Survey and Inventory Project, San Diego County, CA

Project archaeologist and principal investigator for a Phase I Cultural Resources Survey and Inventory of two alternative pipeline alignment corridors, totalling approximately 9 miles in length. Author of the technical report of results from the survey and inventory program. [10/2009 – 10/2010]

County of San Diego Department of Parks and Recreation, Sage Hill Preserve Cultural Resources Inventory, San Diego County, CA

Supervisory archaeologist for Phase I pedestrian survey and cultural resource inventory of the Sage Hill Open Space Preserve in unincorporated west central San Diego County. Directed the field survey for prehistoric and historic archaeological resources within the proposed 234-acre natural park preserve located in coastal foothills. Co-authored the technical report of results from the survey program. [09/2009 – 02/2010]

RRG Weldon, Solar Project Cultural Resources Inventory Program, Kern County, CA

As supervisory archaeologist, directed the field survey and site documentation for prehistoric and historic archaeological resources within a proposed 425-acre solar facility near Lake Isabella in the southern Sierra Nevada Mountains. Co-author of the technical report of results from the survey program. The program was conducted under CEQA and local guidelines of the County of Kern for the implementation of CEQA. [06/2009 – 10/2010]

Abengoa Mojave Solar, Cultural Resources Inventory and Resource Evaluation Program, San Bernardino County, CA

As supervisory archaeologist, supervised the survey of a proposed 1,765-acre solar facility in the Mojave Desert. Also supervised the archaeological documentation and Phase II testing efforts, and co-authored the technical reports of results from the survey and testing programs. [05/2009 – 11/2010]

Solar Millennium, Ridgecrest Solar Project Cultural Resources Inventory Program, Kern County, CA

Co-field director of field survey for prehistoric and historic archaeological resources within a proposed 1,757-acre solar facility in the Mojave Desert. Participated in the preparation of the Department of Parks and Recreation (DPR) site forms

and was a contributing author to the technical report of results from the survey program. [05/2009 – Ongoing]

County of San Diego Department of Parks and Recreation, Boulder Oaks, Lakeside Linkage, Sycamore/Goodan, and Lusardi Open Space Preserves and Regional Parks Cultural Resources Inventories, San Diego County, CA

Supervisory archaeologist for Phase I pedestrian survey and cultural resource inventories of four open space preserves and regional parks in unincorporated central San Diego County. The projects involved the identification and documentation of prehistoric and historic resources, built environment features, and existing infrastructure to assist the Department of Parks and Recreation in resource management. Inventory reports included extensive archival research and historical narrative, an inventory of identified sites, and management guidelines for potentially significant cultural resources developed in consultation with Native Americans. [Prior to AECOM]

Parsons Brinkerhoff, State Route 94 Operational Improvements Inventory and Evaluation, San Diego County, CA

Supervisory archaeologist of cultural resources field survey efforts, and documentation and evaluation related to proposed operational improvements along an 18-mile-long stretch of State Route 94 in San Diego County. Development of documentation in the California Department of Transportation (Caltrans) format for archaeological and built environment resources. [Prior to AECOM]

Southern California Edison, As-Needed Archaeological Services, Statewide, CA

Supervisory archaeologist for surveys, resource identification, documentation, testing, and evaluation efforts related to infrastructure replacements and development throughout the state on both private and public lands, including of the Bureau of Land Management (BLM), US Army Corps of Engineers (USACE), and US Forest Service (USFS). Project involved completion of State of California DPR forms, assessment of resource significance according to National Register of Historic Places (NRHP) eligibility and CEQA significance criteria, and management recommendations. [Prior to AECOM]

Blackwater USA, West Cultural Resources Phase I and Phase II Studies, Potrero, CA

As supervisory archaeologist, supervised the survey of an approximately 850-acre area in eastern San Diego County

and the test excavation of identified prehistoric sites. Supervised the archaeological documentation, extended Phase I testing, and Phase II testing efforts under the County of San Diego Guidelines implemented in September 2006. [Prior to AECOM]

Private Development Client, Circle P Ranch Housing Development Project, San Diego County, CA

Principal investigator for a Phase I cultural resources inventory and survey and extended Phase I site testing program involving a prehistoric and historic site, CA-SDI-17,910/H, located within the approximately 15-acre project property near Valley Center, California. Project duties consisted of supervision of fieldwork personnel, interaction with Native American monitors, and supervision and participation in the analysis and technical report preparation. The program was conducted under CEQA and local guidelines of the County of San Diego for the implementation of CEQA. [Prior to AECOM]

Private Development Client, Blossom Valley Housing Development Project, San Diego County, CA

Principal investigator for a Phase I cultural resources inventory and survey and extended Phase I site testing program involving prehistoric site CA-SDI-17,968 within the approximately 50-acre project property in Blossom Valley, California. Project duties consisted of supervision of fieldwork personnel, interaction with Native American monitors, and supervision and participation in the analysis and technical report preparation. The program was conducted under CEQA and local guidelines of the County of San Diego for the implementation of CEQA. [Prior to AECOM]

County of San Diego Department of Public Works (DPW), Jacumba Community Park Restroom Facility National Register and CEQA Testing Program, San Diego County, CA

Principal investigator for a National Register and CEQA significance testing program conducted at prehistoric archaeological site CA-SDI-17,979 to be impacted by the construction of a restroom facility. Directed all project archaeological activities, including analysis and report preparation. The project required interaction with DPW personnel and with Native American monitors. [Prior to AECOM]

City of Goleta, General Plan EIR Cultural and Paleontological Resources Section, Santa Barbara County, CA

Task manager for and participant in the preparation of the cultural resources section of the environmental impact

report (EIR) for the Goleta General Plan. The project required the gathering and synthesis of background information, existing conditions, paleontological data, and regulatory requirements, and interaction with local individuals, interest groups, and personnel of the city of Goleta. [Prior to AECOM]

Big Sandy Rancheria of Mono Indians, Big Sandy Rancheria Casino, Fresno County, CA

Supervisory archeologist for a field survey and cultural resources site testing program for a proposed gaming facility near Friant, California. Project responsibilities included assisting in the supervision of field survey and site testing, and participation in report preparation. [Prior to AECOM]

Otay Water District, 30-inch Recycled Water Pipeline, Reservoir, and Pump Station, San Diego, CA

Principal investigator for a Historic Properties Inventory and Survey for a 6.1-mile-long 30-inch-diameter recycled water pipeline route, and for a reservoir site pump station. A National Register and CEQA significance testing program was conducted at prehistoric archaeological site CA-SDI-17,668 to be impacted by construction. Directed all project archaeological activities, including analysis and report preparation. The project required interaction with the Otay Water District, private contractor personnel, and Native American monitors. [Prior to AECOM]

Private Development Client, Emerald Oaks Housing Development Project, Ramona, CA

Project supervising archaeologist and co-principal investigator for a cultural resources survey and extended Phase I site boundary testing and Phase II evaluation program involving five prehistoric sites within the 311-acre project property. Project duties consisted of supervision of fieldwork personnel and supervision and participation in the analysis and technical report preparation. The program was conducted under CEQA and local guidelines of the County of San Diego for the implementation of CEQA. [Prior to AECOM]

Starwood Development Company, Crosby Estate Golf Course Development, San Diego County, CA

Project supervising archaeologist for a cultural resources evaluation and site-indexing program involving the C.W. Harris Site Complex and other adjacent historic and prehistoric sites within the project property and adjacent open space areas. Project duties consisted of direction of fieldwork, monitoring of construction activities, and supervision and participation in the analysis and technical report preparation. The program was conducted for US Army

Corps of Engineers (USACE) 404 Permit compliance. [Prior to AECOM]

San Diego County Water Authority (SDCWA), As-Needed Surveys for Geotechnical and Water Facility Construction Projects, San Diego, CA

Project manager and principal investigator for six archaeological survey and/or monitoring projects conducted over a 3-year period. The programs, all situated in western San Diego County, California, consisted of evaluations through background research and field surveys of proposed drilling/boring sites, pump stations, and other facility locations, and, when required, monitoring of drilling/boring and facility construction operations situated in areas determined as sensitive. The project included background research, field surveys, preparation of technical reports, interaction with Water Authority engineers for project redesign, and interaction with construction personnel for successful monitoring. [Prior to AECOM]

Mark S. and Colleen J. McArthur, and Donald C. "Skip" White, Oak Country Estates, Ramona, CA

Project supervising archaeologist and co-principal investigator for a cultural resources survey and extended Phase I site boundary testing and Phase II evaluation program involving 30 mostly late-prehistoric sites within the 648-acre project property. Project duties consisted of supervision of fieldwork personnel, and supervision and participation in the analysis and technical report preparation. The program was conducted under CEQA and local guidelines of the County of San Diego for the implementation of CEQA. [Prior to AECOM]

Tetra Tech EM, San Luis Rey Land Outfall Pipeline Alternatives Constraints Study, Oceanside, CA

Principal investigator and overall field supervisor for this archaeological resource inventory and constraints study program, conducted in compliance with CEQA. The purpose of this project was to assess the relative cultural resources impacts within four alternative route corridors for a proposed additional outfall pipeline from an existing inland water treatment plant to the ocean through the city of Oceanside in San Diego County. The project consisted of background research, spot check field survey of the alternative alignment corridors, and completion of the project data analysis and technical report preparation. [Prior to AECOM]

Davis-Eagle Property, Archaeological Survey and Constraints Study, Ramona, CA

Project supervising archaeologist and co-project manager of an archaeological survey of 1,231 acres for a development constraints analysis. The project required the discovery and recordation of all cultural resources on the property to provide data for an analysis of the constraints that cultural resources might represent relative to future development of the property. Served as over-all supervisor of archaeological field and site recordation activities, co-managed the project, and conducted the cultural resources constraints analysis and report preparation. [Prior to AECOM]

City of San Diego Water Department, San Pasqual Reclaimed Water Project Cultural Resources Inventory Study, San Diego, CA

Principal investigator for a cultural resources study of 8.15 miles of reclaimed water pipeline route and 12 acres of water tank facility construction. Project responsibilities included background research, field survey direction, and technical report preparation. The project was conducted under CEQA and local guidelines of the city of San Diego for the implementation of CEQA. [Prior to AECOM]

California State Department of Parks and Recreation, Point Magu State Park Water Pipeline Route Archaeological Survey, Ventura County, CA

Principal investigator for cultural resources survey of an 8-mile-long water pipeline route along Big Sycamore Canyon. Project responsibilities included background research, field survey direction, GPS site location, and technical report preparation. The program was conducted under CEQA. [Prior to AECOM]

California State Department of Parks and Recreation, Malibu Creek State Park Archaeological Survey, Los Angeles County, CA

Principal investigator for cultural resources survey of the 94-acre Tapia Park sub-unit within Malibu Creek State Park. Project responsibilities included background research, field survey direction, GPS site location, and technical report preparation. The program was conducted under CEQA. [Prior to AECOM]

USDA Forest Service, Cleveland National Forest Archaeological Overview, Cleveland National Forest, CA

As researcher/document co-author, participated in the preparation of the Archaeological Overview for the Cleveland National Forest, California. The project consisted of a review and assessment of existing archaeological resources data on file at the Cleveland National Forest. Project

responsibilities included participation in background research, data analysis, and technical report preparation. The project was conducted in compliance with Section 110 of the National Historic Preservation Act. [Prior to AECOM]

County of San Diego DPW, Ramona Soils Source Project, Ramona, CA

Principal investigator for Phase I survey of a 30-acre property and Phase II testing/evaluation program of prehistoric site CA-SDI-16,386 and historic site CA-SDI-16,399. Supervised all project archaeological activities, including data analysis and report preparation. The project required interaction with the Native America Heritage Commission and with County of San Diego Department of Public Works personnel. [Prior to AECOM]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Naval Submarine Base Point Loma Data Recovery Project, San Diego, CA

Co-author of the technical document, Archaeological Data Recovery Report for a Portion CA-SDI-48 at Buildings 139 and 158, Naval Submarine Base, San Diego. The project consisted of a data recovery program conducted at National Register prehistoric archaeological site CA-SDI-48, located on the Point Loma Naval Submarine Base. Project responsibilities included participation in background research, data analysis, and report preparation. [Prior to AECOM]

California Public Utilities Commission (CPUC), Metromedia Fiber Optic Line Project, CA

Project archaeologist for cultural resources studies conducted in compliance with CEQA of more than 300 miles of proposed routes for the emplacement of fiber optic cable lines along existing streets and railroad rights-of-way within San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Marin, Los Angeles, Orange, and San Diego Counties. Project involvement included background research, field surveys, site recordation, and technical report preparation. [Prior to AECOM]

Calvary Lutheran Church, Data Recovery Project, Solana Beach, CA

Co-principal investigator for a data recovery program conducted at prehistoric archaeological site CA-SDI-10,238 (SDM-W-36), important under CEQA. Program responsibilities consisted of completion of background research, overall supervision of field personnel, data analysis, and technical report preparation. The program also

required interaction with Calvary Lutheran Church personnel, Native American consultants, the city of Solana Beach, and the State Historic Preservation Office. [Prior to AECOM]

San Diego County Water Authority, Mexico/United States Colorado River Conveyance Facility, San Diego and Imperial Counties, CA

Principal investigator for archaeological surveys and monitoring of geotechnical drilling/boring sites. The program consisted of evaluations, background research, and field survey of 26 proposed drilling/boring site locations and the subsequent monitoring of five of the drilling/boring operations situated in areas determined as sensitive. The locations were distributed along two proposed pipeline routes between San Vicente Lake and the Yuha Basin. Project involvement included background research, field surveys, preparation of technical reports, and interaction with the San Diego County Water Authority, BLM, and USDA Forest Service. [Prior to AECOM]

Private Development Client, Dry Creek Native American Gaming Facility, Sonoma County, CA

Project archaeologist for cultural resources field survey for a proposed gaming facility in Dry Creek Valley. Project responsibilities included field surveys and report preparation. [Prior to AECOM]

Bennett Consolidated, Otay Travel Center Project, Otay Mesa, CA

Principal investigator for a significance testing program of two prehistoric sites, CA-SDI-10,067 and CA-SDI-12,878. Directed all project archaeological activities, including data analysis and report preparation. The project required interaction with subcontractors and County of San Diego planning personnel. [Prior to AECOM]

City of American Canyon, Wastewater Facility & Sewer Line Extension Routes, Napa County, CA

Project archaeologist for cultural resources field surveys of proposed emplacement of sewer pipelines along future and existing city streets within the city of American Canyon. Project responsibilities included field surveys, site recordation, and report preparation. [Prior to AECOM]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Fallbrook Naval Ordnance Center Historic Properties Inventory, Seal Beach, CA

Project manager, principal investigator, and overall field supervisor for an archaeological resource inventory program that consisted of background research, field surveys of 5,800 acres, and completion of the project data analysis and technical report preparation. The program was conducted in compliance with Section 110 of the National Historic Preservation Act. [Prior to AECOM]

Talega Associates, Focused Data Recovery Project, San Juan Capistrano, CA

Co-principal investigator for a focused data recovery program conducted at prehistoric archaeological site CA-ORA-907, Locus A, important under CEQA, located in Orange County, California. Program responsibilities consisted of completion of background research, direct supervision of field personnel, data analysis, and technical report preparation. The program also required interaction with Native American consultants and County of Orange personnel. [Prior to AECOM]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Naval Air Station Miramar EIS Cultural Resources Studies for the Base Realignment and Closure Project, San Diego, CA

For more than 2 years, served as task manager and overall field supervisor for cultural resources studies with principal investigator responsibilities on this major cultural resource program. The program consisted of background research for, and field surveys of, more than 3,500 acres for numerous proposed facility locations. Project duties consisted of overall direction of fieldwork and supervision and participation in the project data analysis, technical report preparation, and field construction monitoring for US Army Corps of Engineers 404 Permit compliance. [Prior to AECOM]

US Department of the Navy, Naval Facilities Engineering Command Southwest, Marine Corps Camp Pendleton Helicopter Outlying Landing Field Project, San Diego, CA

Directed cultural resources studies as project manager and principal investigator for this 3-year Environmental Assessment program consisting of a Phase I inventory and Phase II evaluation for the construction of a helicopter outlying landing field. Four alternative locations were inventoried and three prehistoric sites, located within the preferred alternative, were tested for National Register eligibility. Project duties included overall direction and supervision of the project fieldwork, data analysis, technical report preparation, and interaction with various base and agency personnel. [Prior to AECOM]

San Diego County Water Authority, Emergency Water Storage Project, San Diego, CA

Principal investigator for archaeological surveys and site evaluations. This large-scale project lasted for more than 2 years and included field surveys of more than 3,500 acres for alternative reservoir sites and appurtenant facilities, and approximately 40 miles of alternative pipeline routes. It included interaction with local Native American groups. [Prior to AECOM]

US Navy, Point Loma Submarine Base Data Recovery, San Diego, CA

Project manager and co-principal investigator for a data recovery program conducted at National Register prehistoric archaeological site CA-SDI-10,945, located on the Point Loma Naval Submarine Base. Program required interaction and coordination with base personnel, and interaction with the State Historic Preservation Office and the Advisory Council on Historic Preservation. [Prior to AECOM]

Metropolitan Transit District Board, Mission Valley West Light Transit Limited Data Recovery, San Diego, CA

Task manager and principal investigator for a Limited Data Recovery Program conducted at National Register prehistoric archaeological site CA-SDI-11,767, located on the Star Dust Golf Course. Program required interaction and coordination with Native American monitors and US Army Corps of Engineers personnel for 404 Permit requirements. [Prior to AECOM]

PCL Civil Contractors, East Mission Gorge Interceptor Pump Station and Force Main Cultural Resources Data Recovery, San Diego, CA

Principal investigator and co-project manager for a data recovery program conducted at National Register eligible prehistoric archaeological site CA-SDI-9,243 to be impacted by construction of a reclaimed water force main pipeline. Directed all project archaeological activities, including analysis and report preparation. The project required interaction with city of San Diego water utilities personnel and Native American monitors. [Prior to AECOM]

City of Chula Vista and County of San Diego, Otay Ranch Planned Development Archaeological Reconnaissance Survey, Chula Vista, CA

Principal investigator and co-project manager of an archaeological survey of 6,000 acres of proposed

development on three parcel areas of the 23,088-acre Otay Ranch. The project required evaluation of all cultural resources on the ranch property. Directed archaeological activities, co-managed the project, supervised analysis and report preparation, and interacted with County of San Diego and City of Chula Vista personnel. [Prior to AECOM]

City of San Diego Water Utilities Department, Crown Point and Rose Creek Portion of the Mission Bay Sewage Interceptor System Phase V Archaeological Testing Program-Department No. 90-0540, San Diego, CA

Principal investigator and project manager for a testing program of two large prehistoric sites, CA-SDI-11,571 and CA-SDI-5,017, during Phase V of the project involving the placement of pipelines along city streets in the Crown Point and Rose Creek areas, adjacent to Mission Bay. Directed all project archaeological activities, including analysis and report preparation. Required interaction with construction subcontractors and city of San Diego water utilities personnel. [Prior to AECOM]

All American Celeron Pipeline Company, Pipeline Studies, Santa Barbara County, CA

Project manager for more than 3 years on this major cultural resource program that consisted of surveys of alternative pipeline routes, testing of sites to be impacted, final data recovery on 17 prehistoric sites, monitoring of construction activities, and planning and coordination with local Native American groups and Native American monitors. [Prior to AECOM]

US Army Corps of Engineers, US Air Force Housing Archaeological Study, Los Angeles County, CA

Project supervising archaeologist of a testing program of three sites on the Palos Verdes Peninsula for the United States Air Force. Directed field work and participated in analysis and report preparation. [Prior to AECOM]

Texaco Trading and Transportation Company, Marine Terminal Construction, Santa Barbara County, CA

Co-principal investigator and project supervising archaeologist for more than 1 year for the project, a cultural resources evaluation and data recovery program involving one historic and four prehistoric sites in Gaviota, Santa Barbara County. Project duties consisted of direction of fieldwork and construction monitoring activities, planning and coordination with local Native American groups and Native American monitors, and supervision and participation in analysis and report preparation. [Prior to AECOM]

Chevron USA, Point Arguello Pipeline Studies, Santa Barbara County, CA

Project archaeologist with responsibilities as field director and co-principal investigator for more than 3 years on this major cultural resource program that consisted of surveys of alternative pipeline routes, testing of sites to be impacted for National Register assessment, final data recovery on 34 National Register quality sites, monitoring of construction activities, and planning and coordination with local Native American groups and Native American monitors. [Prior to AECOM]

San Diego Gas & Electric, Southwest Powerlink Transmission Line Corridor, Imperial County, CA

Field director for a major 2-year archaeological Data Recovery Program that included monitoring portions of 35 sites along a 27-mile-long transmission line corridor located in the Picacho Basin and East Mesa areas. Responsibilities included coordination and supervision of three crew chiefs and their field crews, a field laboratory director and laboratory crew, BLM agency personnel, and local Native American groups and Native American monitors. [Prior to AECOM]

US Department of the Navy, Pacific Missile Test Facilities, San Nicolas Island Cultural Resources Survey, Point Mugu, Ventura County, CA

Field archaeologist for the cultural resources survey. This project involved a field survey of the entire island and the recordation of more than 350 previously recorded and/or newly discovered sites on the island. Participated in the preparation of the DPR site forms. [Prior to AECOM]

Mission Viejo Land Development Company, Archaeological Studies, Mission Viejo, CA

Project archaeologist/field director of archaeological surveys of 2,700-acre, 3,000-acre, and 7,000-acre development properties, and of a testing and data recovery program of prehistoric archaeological site CA-ORA-947 to be impacted by planned development. Directed the field work and conducted the analysis and report preparation. [Prior to AECOM]

Cayman Development Company, Archaeological Data Recovery Program, Los Angeles County, CA

Project archaeologist/field director of both the test and salvage excavations of prehistoric archaeological sites

CA-LAN-844 and CA-LAN-845, located on Palos Verdes Peninsula. Directed the field work and conducted the analysis and report preparation. [Prior to AECOM]

Signal Landmark Properties, Land Development Archaeological Studies, Huntington Beach, CA

Project archaeologist/field director of test, and co-field director of data recovery excavations of archaeological site CA-ORA-183. Directed field work, conducted analysis and report preparation of the testing phase, and co-directed and participated in analysis and report preparation of the data recovery phase. [Prior to AECOM]

Professional Papers and Presentations

Cooley, T. 2008. Dating at the Spindrift Site Relative to Other La Jolla Sites and the Adjacent San Diego Coastal Area. Paper presented at the Society for California Archaeology Meetings, Burbank, California, March.

Cooley, T. 2006. Continuing Discoveries of the San Dieguito and Other Cultural Patterns In and Around the C.W. Harris Site (SDI-149). Paper presented at the Society for California Archaeology Meetings, Ventura, California, March.

Cooley, T., and L. Barrie. 2003. Archaeological Excavation at the Village of Pámu, Ramona Valley, California. Paper presented by the junior author at the Society for California Archaeology Meetings, Sacramento, California, March.

Cooley, T. 1998. Review of the Biface Reduction Technique Exhibited at a Southern California Quarry Site. Paper presented at the Society for California Archaeology Meetings, San Diego, California, March.

Cooley, T. 1997. Observations on Settlement and Subsistence During the La Jolla Complex-PreCeramic Interface as Evidenced at Site CA-SDI-11,767, Lower San Diego River Valley, San Diego County, California. Paper presented at the Society for California Archaeology Meetings, Rohnert Park, California, March.

Cooley, T. 1994. Results of a Data Recovery Program Conducted on a Portion of Stratified Prehistoric Site CA-SDI-9,243, San Diego County, California. Paper presented at the Society for California Archaeology Meetings, Ventura, California, March.

Cooley, T. 1991. Investigations at CA-SBa-2028. Paper presented at the Society for California Archaeology Meetings, Sacramento, California, March.

Cooley, T. 1991. Description and Analysis of Biface Artifacts Recently Excavated from the C. W. Harris Site Complex, San Diego County, California. Paper presented at the Society for California Archaeology Meetings, Sacramento, California, March.

Cooley, T. 1990. Preliminary Analysis and Description of Biface Artifacts Recently Excavated from the C. W. Harris Site Complex, San Diego County, California. Paper Presented at the Society for California Archaeology Southern California Data Sharing Meeting, Riverside, California, October.

Cooley, T. 1984. Diagnostic Artifacts and Temporal Considerations at Rancho San Clemente: A Preliminary Appraisal. Paper Presented at the Society for California Archaeology Southern California Data Sharing Meeting, Fullerton, California, October.

Cooley, T. 1984. Thermal Applications and Lithic Tool Manufacture and Use at LAn-844. Paper presented at the Society for California Archaeology Meetings, Asilomar, California, March.

Cooley, T. 1983. The Biface Reduction Technique Exhibited at a Southern California Quarry Site. Paper presented at the Southwestern Anthropological Society Meetings, San Diego, California, March.

Cooley, T. 1983. Project Results of the Picacho Basin Studies. Paper presented at the Society for California Archaeology Meetings, San Diego, California, March.

APPENDIX B

RECORDS SEARCH
(Bound Separately)

APPENDIX C
CONTACT LETTERS

EDAW Inc
1420 Kettner Boulevard, Suite 500, San Diego, California 92101
T 619.233.1454 F 619.233.0952 www.edaw.com

Facsimile

Please deliver to		From	
Name	Katy Sanchez	Name	Tanya Wahoff
Firm	Native American Heritage Commission	Direct line	619-233-1454 x 6816
Fax number	916-657-5390	Date transmitted	9/2/2014
Phone number		Total pages	2
Subject	Buena Vista Lagoon Enhancement Project		
Project number	60288954.04-03		

Project Description: The overall purpose of the proposed project is to enhance the biological and hydrological functions of the Buena Vista Lagoon to address increased sedimentation and invasive vegetation encroachment, as well as resulting declining coastal biodiversity, degrading water quality, water circulation restriction, and increased vector concerns.

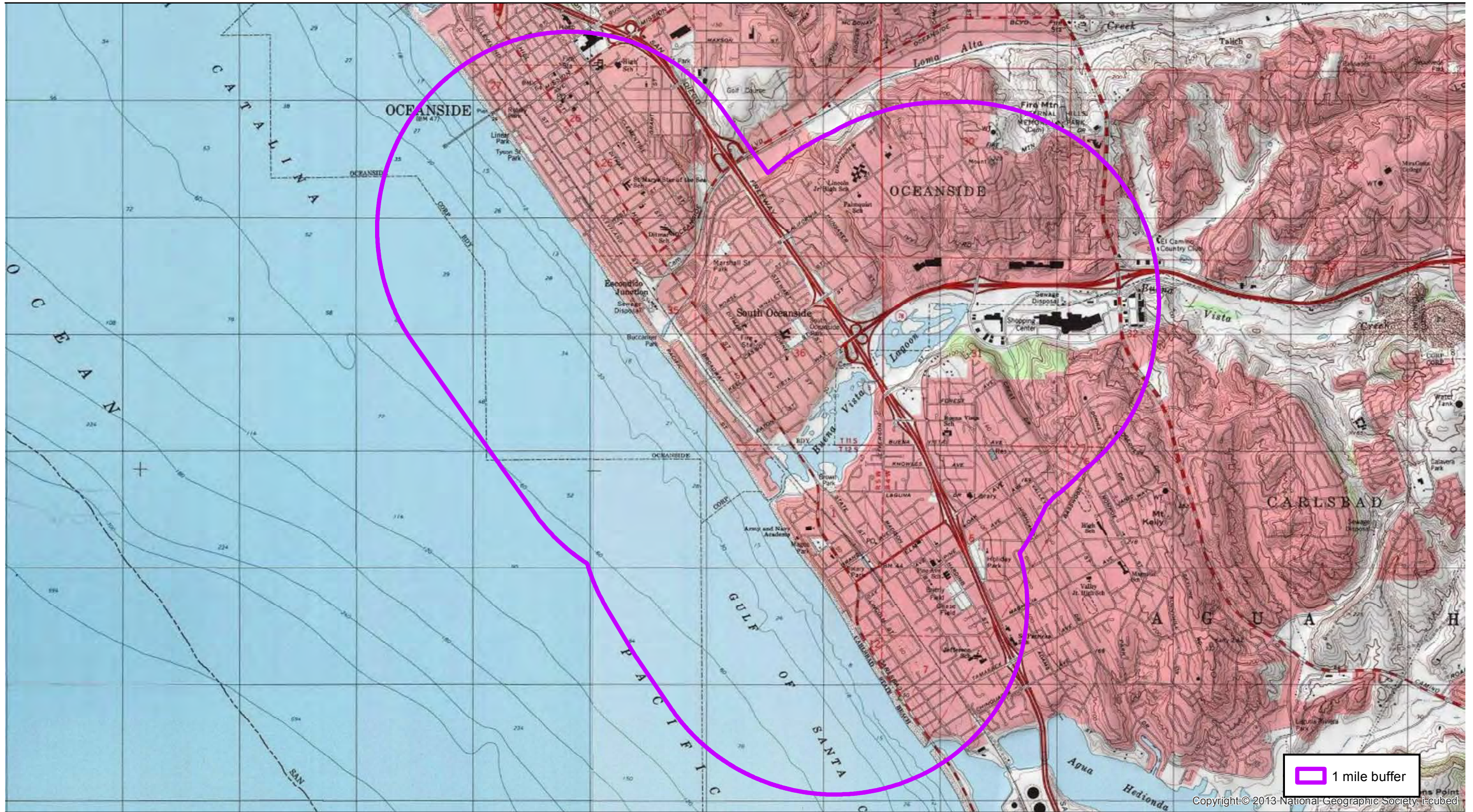
We are contacting you to request a sacred lands file check for the Buena Vista Lagoon Enhancement Project. The project area encompasses the Buena Vista Lagoon and parts of Oceanside beach and Carlsbad beach in coastal San Diego County. Attached is a map showing the project area, and a 1-mile radius around the section located on the following quadrangle:

San Luis Rey T11S R5W Sections: 1, 6, 31, 35, 36

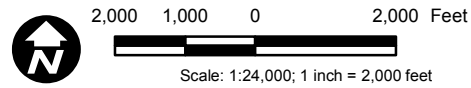
Please include a list of contacts for appropriate Native American Groups or interested persons to contact regarding the project. If you have any questions, please do not hesitate to call me at (619) 233-1454.

Sincerely,

Tanya Wahoff
Archaeologist/Associate



Source: USGS topo San Luis Rey, CA 1975, Oceanside, CA 1975



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1 mile buffer

1 Mile Buffer

Buena Vista Lagoon Enhancement Project

Path: P:\2013\60288954_BVLEP_EIR\06GIS\6.3_Layout\Cultural\1_mile_buffer.mxd, 8/12/2014, SorensenJ

STATE OF CALIFORNIAEdmund G. Brown, Jr. Governor**NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



September 2, 2014

Tanya Wahoff
EDAW, Inc.
1420 Kettner Blvd., Suite 500
San Diego, CA 92101

Sent by Fax: (619) 233-0952
Number of Pages: 3

Re: Buena Vista Lagoon Enhancement Project, Project Number, 60288954-03, San Diego County.

Dear Ms. Wahoff,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

A handwritten signature in cursive script that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

Native American Contact List

San Diego County

August 29, 2014

Ewiiapaayp Tribal Office Robert Pinto Sr., Chairperson 4054 Willows Road Alpine, CA 91901 wmicklin@leaningrock.net (619) 445-6315 (619) 445-9126 Fax	Diegueno/Kumeyaay	Kumeyaay Cultural Historic Committee Ron Christman 56 Viejas Grade Road Alpine, CA 92001 (619) 445-0385	Diegueno/Kumeyaay
La Posta Band of Mission Indians Gwendolyn Parada, Chairperson 8 Crestwood Road Boulevard, CA 91905 gparada@lapostacasino. (619) 478-2113 (619) 478-2125	Diegueno/Kumeyaay	Campo Band of Mission Indians Ralph Goff, Chairperson 36190 Church Road, Suite 1 Campo, CA 91906 chairgoff@aol.com (619) 478-9046 (619) 478-5818 Fax	Diegueno/Kumeyaay
Manzanita Band of Kumeyaay Nation Leroy J. Elliott, Chairperson P.O. Box 1302 Boulevard, CA 91905 ljbirdsinger@aol.com (619) 766-4930 (619) 766-4957 Fax	Diegueno/Kumeyaay	Jamul Indian Village Raymond Hunter, Chairperson P.O. Box 612 Jamul, CA 91935 jamulrez@sctdv.net (619) 669-4785	Diegueno/Kumeyaay
Sycuan Band of the Kumeyaay Nation Daniel Tucker, Chairperson 5459 Sycuan Road El Cajon, CA 92019 ssilva@sycuan-nsn.gov (619) 445-2613 (619) 445-1927 Fax	Diegueno/Kumeyaay	Kumeyaay Cultural Repatriation Committee Steve Banegas, Spokesperson 1095 Barona Road Lakeside, CA 92040 sbenegas50@gmail.com (619) 742-5587 (619) 443-0681 Fax	Diegueno/Kumeyaay
Viejas Band of Kumeyaay Indians Anthony R. Pico, Chairperson P.O. Box 908 Alpine, CA 91903 jhagen@viejas-nsn.gov (619) 445-3810 (619) 445-5337 Fax	Diegueno/Kumeyaay	Viejas Band of Kumeyaay Indians ATTN: Julie Hagen, Cultural Resources P.O. Box 908 Alpine, CA 91903 jhagen@viejas-nsn.gov (619) 445-3810 (619) 445-5337	Diegueno/Kumeyaay

This list is current only as of the date of this document.

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Buena Vista Lagoon Enhancement Project, # 60288954.04-03, San Diego County.

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San Diego County

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619.610.7600 tel
619.610.7601 fax

<date>

<name>

<title>

<tribe>

<address>

<city>, CA <zip>

Dear <name>:

The San Diego Association of Governments (SANDAG) is currently preparing an Environmental Impact Report (EIR) to evaluate potential environmental impacts associated with the Buena Vista Lagoon enhancement effort. The Buena Vista Lagoon Enhancement Project would address the continued degradation of the Buena Vista Lagoon through enhancement of its biological and hydrologic functions.

Background

Historically (e.g., pre-1940s), the Buena Vista Lagoon was in a dynamic equilibrium between tidal-influenced saltwater system during dry conditions and a river-influenced freshwater system during wet weather. More recently, the lagoon converted to a freshwater system as a result of installation of a weir (a type of barrier) across the lagoon outlet. The existing weir built in 1972 and spanning approximately 50 feet, maintains a minimum water level within the lagoon of 5.6 feet above mean sea levels. The lagoon is comprised of four basins located from west to east and referred to as the Weir Basin, the Railroad Basin, the Coast Highway Basin and the Interstate-5 Basin. The lagoon has been progressively degrading in terms of benefits and value to biological communities, habitats, and human uses. Without enhancement, the lagoon is anticipated to continue to degrade and could become a vegetated freshwater marsh or riparian woodland-meadow within the next 30 to 50 years. This continued degradation could reduce coastal habitat biodiversity or eliminate wetland functions and values, and result in increased concerns about vectors, water quality impairments, and impacts to aesthetic resources.

Project Alternatives

SANDAG has identified three alternatives to be carried forward for evaluation in the EIR, plus a no project alternative. These alternatives were developed based upon a comprehensive Feasibility Analysis created for the State Coastal Conservancy and past public input. SANDAG is seeking input on the alternatives in the Notice of Preparation process, which could result in modifications to the identified alternatives or the number of alternatives analyzed in the EIR. Based on previous analysis and input from the public, alternatives anticipated to be analyzed in the EIR include:

Alternative 1 - Freshwater Lagoon Enhancement Alternative

This alternative would result in a predominantly freshwater regime within the lagoon. While some areas of existing vegetation would be left intact to maintain adequate breeding and refuge areas for sensitive wildlife, portions of each basin would be dredged to maintain a water depth that would minimize the encroachment of vegetation into the middle of the lagoon and provide a buffer for future sedimentation. Additionally, enhancement through clearing and/or excavation would improve water flow between basins, provide additional bird nesting habitat, and enhanced flood flow conveyance via modification of the existing weir at the outlet and other infrastructure within the lagoon.

Alternative 2 - Saltwater Enhancement Alternative

This alternative would result in a predominantly saltwater regime through existing freshwater vegetation removal (primarily cattails), and dredging to remove excess sediment from channels and basins. The

<name>, <title>

<tribe>

<date>

Page 2

existing weir would be *removed* and a stabilized ocean inlet would be constructed to provide continuous tidal exchange between the lagoon and ocean. Tidal influence could extend east of 1-5, particularly during drier conditions, under this alternative.

Alternative 3 - Hybrid Saltwater-Freshwater Enhancement Alternative

This alternative would result in a hybrid saltwater-freshwater regime within the lagoon. The alternative would focus on removal of some of the existing freshwater vegetation to enhance flow conditions, enhancement of saltwater habitat and eelgrass habitat west of 1-5, and shallow freshwater habitat east of IS through sediment dredging. The existing weir would be removed and a stabilize ocean inlet/outlet created to provide continuous tidal exchange between the western portion of the lagoon and the ocean. A new weir would be constructed under 1-5 to maintain a freshwater basin east of the freeway.

Alternative 4 - No Project Alternative

The No Project Alternative would not involve any enhancement efforts in the lagoon.

Project Location

The project site is located in the cities of Carlsbad and Oceanside, in northern San Diego County, CA. The lagoon is bordered by the Pacific Ocean on the west, Vista Way/State Route 78 on the north and Jefferson Street on the east and south (see Figure 1).

Cultural Resources

A records and literature search conducted at the South Coastal Information Center and an archaeological survey for the project have identified 16 prehistoric and historic archaeological sites; 12 within 300 m of the lagoon study area and four within 300 m of the onshore placement locations. Thirteen of these sites are prehistoric, one is historic, and two sites have both a historic and a prehistoric component. None of the archaeological sites are within the APE for the BVLEP.

The purpose of this letter is to notify you of this project and to solicit your input. We would like to know if you have any questions, comments, or concerns. A project map, a reply form, and a self-addressed stamped envelope have been included for your convenience. Providing comments now does not limit your ability to comment at a later time. Please write or call by February 27, 2015, so that we may include your views in our report.

Sincerely,

Tanya Wahoff
Senior Archaeologist

Enclosure: Map
Response form
Stamped reply envelope

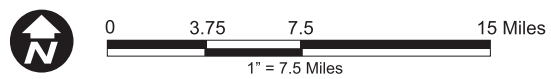
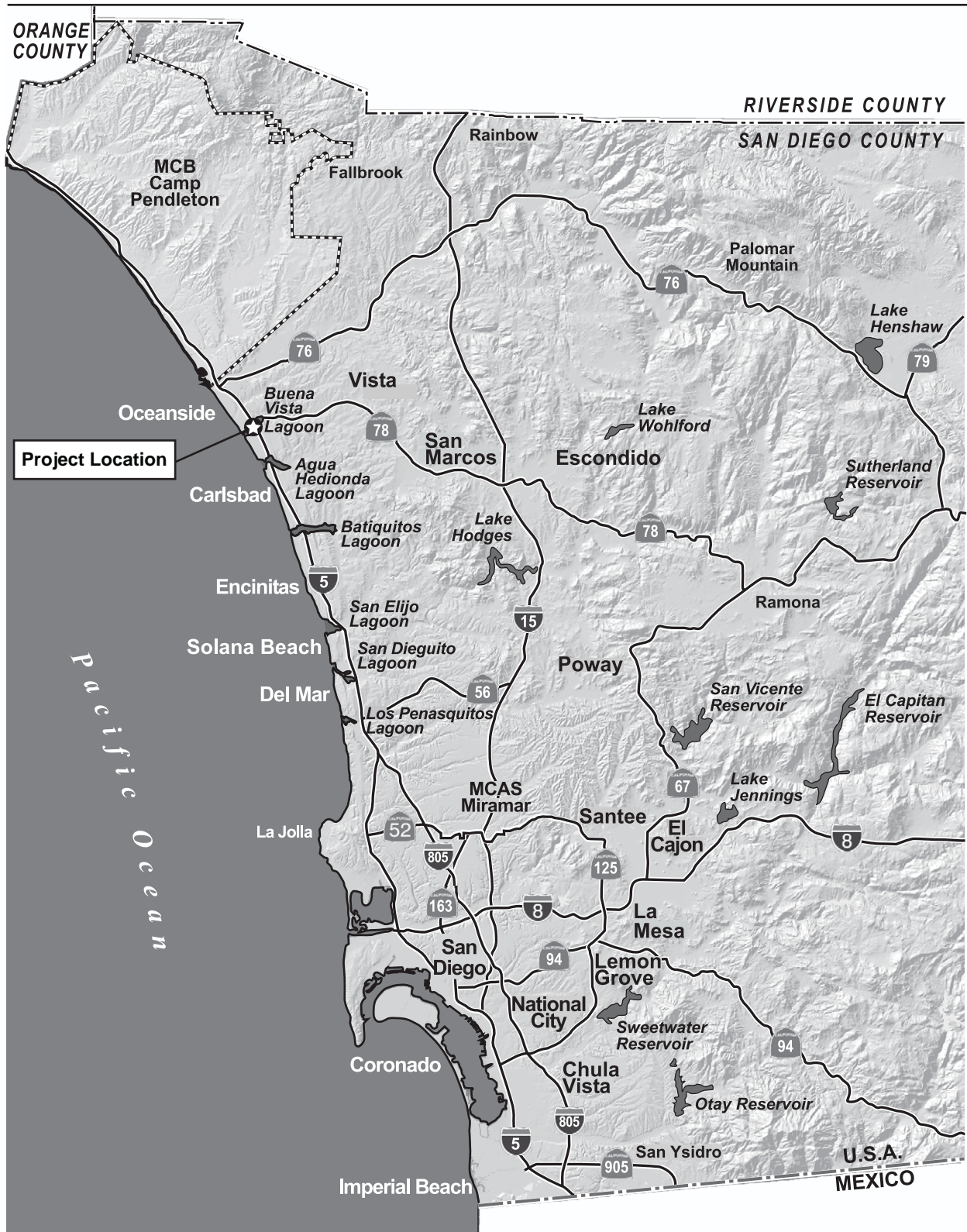
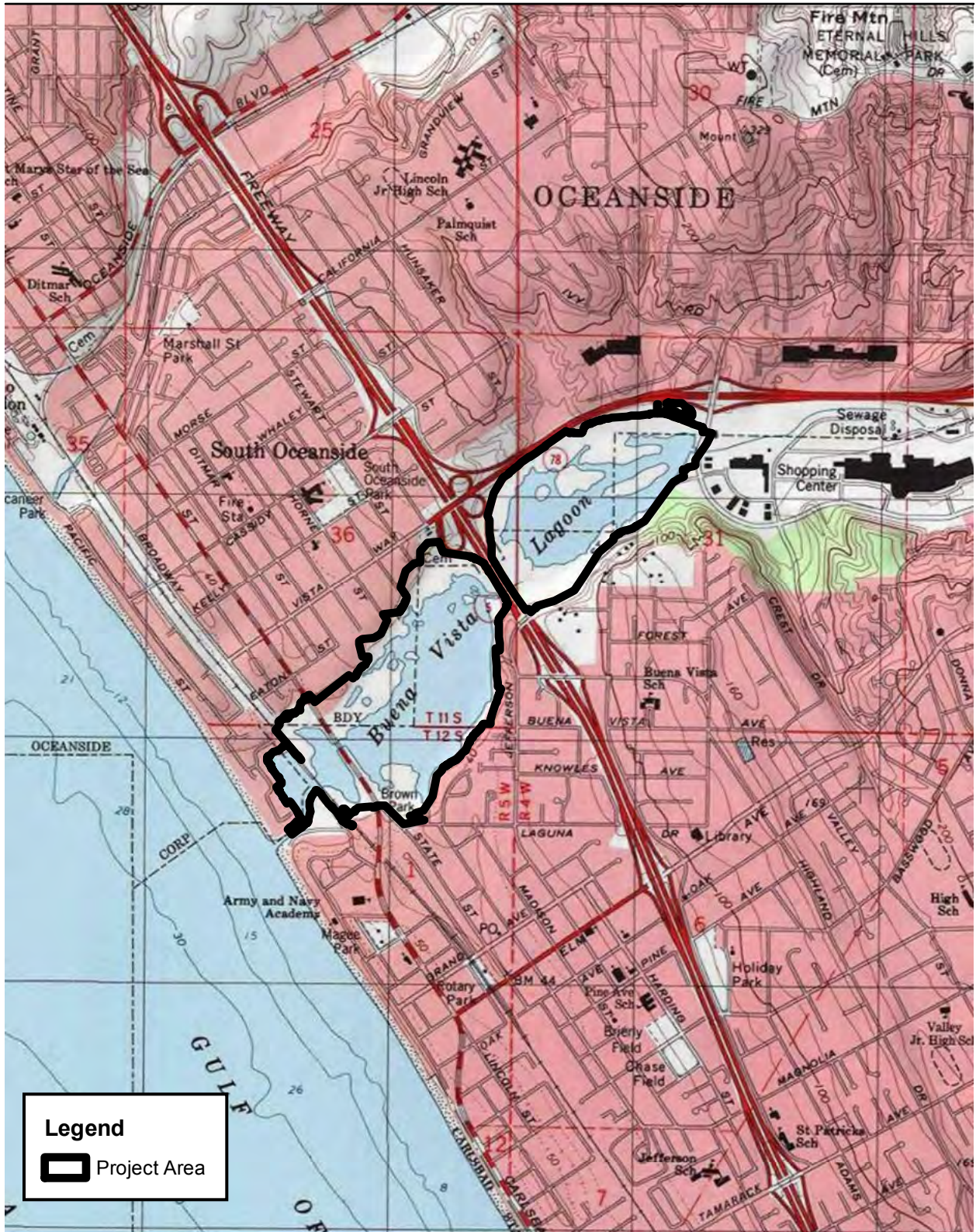


Figure 1
Regional Map



Source: ESRI; AECOM 2013

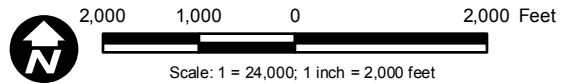


Figure 2
Vicinity Map

Buena Vista Lagoon Restoration Project

Path: P:\2013\60288954_BVLEP_EIR\06\GIS\6.3_Layout\Reports\Avian_Letter\2_Vicinity.mxd, 4/2/2013, steinb

CONTACT PROGRAM RESPONSE FORM
Buena Vista Lagoon Enhancement Project (60288954)

<name>
<title>
<tribe>
<address>
<city>, CA <zip>

Please check all that apply:

- Please call me to discuss the project further; my day-time phone number is (____)_____ or my evening phone number is (____)_____
- I have further comments as provided below
- I do not have any comments

Comments:

Signature:

<name>, <title>

Date

APPENDIX D

DPR FORMS

(Confidential On-file with SANDAG)

