

Appendix E

Cultural Resources Assessment



LOMA ALTA SLOUGH WETLAND ENHANCEMENT PROJECT, CITY OF OCEANSIDE, CALIFORNIA

Cultural Resources Assessment Report

Prepared for

City of Oceanside
300 North Coast Hwy
Oceanside, CA 92054

September 2020

Army Corps of Engineers, Regulatory Division
5900 La Place Court, Suite 100
Carlsbad, CA 92008



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5900 La Place Court, Suite 100
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Prepared by:

ESA
626 Wilshire Blvd. Suite 1100
Los Angeles, CA 90017

Principal Investigator:

Candace Ehringer, M.A., RPA

Report Authors:

Michael Vader, B.A.
Chris Lockwood, Ph.D., RPA

Project Location:

San Luis Rey (CA) USGS 7.5-minute Topographic Quad
Township 11 South, Range 5 West, Section 35

Acreage: Approx. 7.75 acres

626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
www.esassoc.com



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EXECUTIVE SUMMARY

Loma Alta Slough Wetland Enhancement Project - Cultural Resources Assessment Report

The City of Oceanside (City) has retained Environmental Science Associates (ESA) to prepare a Cultural Resources Assessment for the Loma Alta Slough Wetlands Enhancement Project (Project) in support of an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA) and a Clean Water Act Section 404 permit from U.S. Army Corps of Engineers (USACE). The Project proposes the expansion of the existing coastal wetland habitat within Loma Alta Slough to restore its functional value and accommodate public use through trails, educational signage, and linkage with public transportation. Enlargement and modification of the Slough's wetlands is expected to support coastal wildlife, improve water quality, buffer peak storm flows, and better accommodate sea-level rise. Because the Project requires a Section 404 permit from the USACE, it must comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The City is the lead agency pursuant to CEQA and the USACE is the lead federal agency responsible for carrying out the Section 106 process.

An Area of Potential Effects (APE) was established for the Project according to Section 106 of the NHPA in coordination with USACE. The APE encompasses the horizontal and vertical extents in which Project effects could occur as a result of ground disturbing activities. The approximately 7.75-acre horizontal APE includes: City- and privately-owned (Buel and Parent Family Trust) parcels along the northeastern and southeastern margins of Loma Alta Slough; the southeastern, undeveloped areas of the City's La Salina Wastewater Treatment Plant (WWTP), and the northwestern margin of Buccaneer Beach Park. The APE also includes two staging areas: one located on a paved access road northwest of the City- and privately-owned parcels and the other located within the proposed parking lot slated for the southwest end of the La Salina WWTP. Given that the only above ground element proposed is an overlook platform, the Project would not introduce obtrusive visual elements that could result in indirect visual effects to historic properties. As such, the vertical APE only encompasses the maximum depth of ground disturbance, which is approximately 7-8 feet below the ground surface.

Records searches encompassing the APE were conducted at the California Historical Resources Information System (CHRIS) South Coastal Information Center (SCIC), housed at San Diego State University, on July 30, 2015 and June 12, 2019. The records searches included a review of all recorded cultural resources and studies within a 1-mile radius of the APE. The records searches indicate that 64 cultural resources studies have been previously conducted within a 1-mile radius of the APE. Approximately 50 percent of the 1-mile records search radius has been subject to survey. The entirety of the APE has been included in previous cultural resources surveys. The

records searches indicate 56 cultural resources have been previously recorded within a 1-mile radius of the APE including: six prehistoric archaeological sites (P-37-006882, -012600, -014227, -028351, and -132111); two multicomponent archaeological sites (P-37-033869 and CA-SDI-13212); one prehistoric isolate (P-37-033331); and 47 historic architectural resources (P-37-016260, -016261, -027452, -035464, -036018, -036019, and -037136 through -037177). No cultural resources have been previously recorded within or immediately adjacent to (within 50 feet of) the APE.

The results of a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC) on August 27, 2018 indicates that cultural sites are present; however, no additional details were provided. The NAHC recommended contacting the La Jolla Band of Luiseño Indians for more information. ESA conducted outreach to the 31 Native American representatives indicated by the NAHC as affiliated with the APE. ESA sent outreach letters via certified mail on March 4, 2020 and conducted follow-up phone calls on March 11, 2020. Five tribes, including the Agua Caliente Band of Cahuilla Indians, the Rincon Band of Luiseño Indians, the San Luis Rey Band of Mission Indians, The Pala Band of Mission Indians, and the San Pasqual Band of Band of Mission Indians, responded to the outreach. Responses received by the Rincon Band, San Luis Rey Band, and Pala Band expressed concern about the Project and recommended Native American monitors be retained to monitor Project ground disturbance. The results of the outreach are summarized in the *Archival Research* section of this report.

A desktop geoarchaeological review was conducted to assess the potential for encountering subsurface prehistoric archaeological deposits during Project implementation. The geoarchaeological review indicates the Holocene-age alluvial deposits underlying the APE have a high potential for subsurface archaeological deposits. However, some areas of the APE have been heavily disturbed as part of the construction of the La Salina WWTP and development along the northern parcels. Geotechnical work indicates these areas consist of a layer of disturbed fill above the native soils. The undocumented fill soils were observed to depths between approximately 5 and 12.5 feet below the ground surface; Project-related ground disturbance may exceed the depths of previous disturbance in certain areas. Based on this assessment, the APE should be considered moderately sensitive for the presence of subsurface archaeological deposits that may be overlain by disturbed fill associated with previous development.

Cultural resources surveys of the APE were conducted on September 2, 2015 and June 5, 2020 to identify the presence of surface archaeological materials and historic-period built resources within the APE. All accessible portions of the APE with visible ground surface were surveyed in a systematic manner with transect intervals spaced no greater than 5 meters (approximately 16.5 feet) apart. Inaccessible portions of the APE and/or portions with no ground surface visibility were subject to a reconnaissance-level survey to identify the presence of historic-period built resources. Areas of the APE consisting of manicured lawns were subject to opportunistic survey wherein clearings and rodent burrows were intensively inspected for the presence of cultural resources. No cultural resources were identified as a result of the surveys.

No cultural resources were identified within the APE as a result of this assessment. As such, the Project would result in **No Historic Properties Affected** under Section 106 of the NHPA.

Although no known archaeological resources would be impacted by the Project, the geoarchaeological review indicates there is a moderate potential to encounter subsurface archaeological deposits beneath disturbed fill. Recommendations for the retention of a qualified archaeologist, cultural resources sensitivity training, construction monitoring, and protocols for the inadvertent discovery of archaeological resources and human remains are provided in the *Conclusions and Recommendations* section at the close of this report to ensure the Project would result in less than significant impacts to historical or unique archaeological resources under CEQA.

Loma Alta Slough Wetland Enhancement Project

Cultural Resources Assessment Report

Introduction

The City of Oceanside (City) has retained Environmental Science Associates (ESA) to prepare a Cultural Resources Assessment for the Loma Alta Slough Wetlands Enhancement Project (Project) in support of an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA) and a Clean Water Act Section 404 permit from U.S. Army Corps of Engineers (USACE). The Project proposes the expansion of the existing coastal wetland habitat within Loma Alta Slough to restore its functional value and accommodate public use through trails, educational signage, and linkage with public transportation. Enlargement and modification of the Slough's wetlands is expected to support coastal wildlife, improve water quality, buffer peak storm flows, and better accommodate sea-level rise. Because the Project requires a Section 404 permit from the USACE, it must comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The City is the lead agency pursuant to CEQA and the USACE is the lead federal agency responsible for carrying out the Section 106 process.

In 2015, ESA prepared a cultural resources assessment for the Loma Alta Slough Vector Habitat Remediation Project (Remediation Project) as part of the County of San Diego Vector Habitat Remediation Program (Vader and Lockwood, 2015). The Remediation Project cultural resources assessment included most of the current Project's footprint and included a cultural resources records search conducted at the California Historical Resources Information System (CHRIS) South Coastal Information Center (SCIC), a Sacred Lands File (SLF) conducted by the California Native American Heritage Commission (NAHC), Native American outreach in the form of outreach letters, a geoarchaeological review, and a cultural resources survey. No historical resources or historic properties were identified as a result of the Remediation Project's cultural resources assessment.

This report updates the results of the Remediation Project in support of the current Project and is compliant with Section 106 of the NHPA and CEQA. ESA personnel involved in the preparation of this report include: Candace Ehringer, M.A., RPA, Principal Investigator; Michael Vader B.A., report author and surveyor; Chris Lockwood, Ph.D., RPA, geoarchaeologist; and Jason Nielson, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

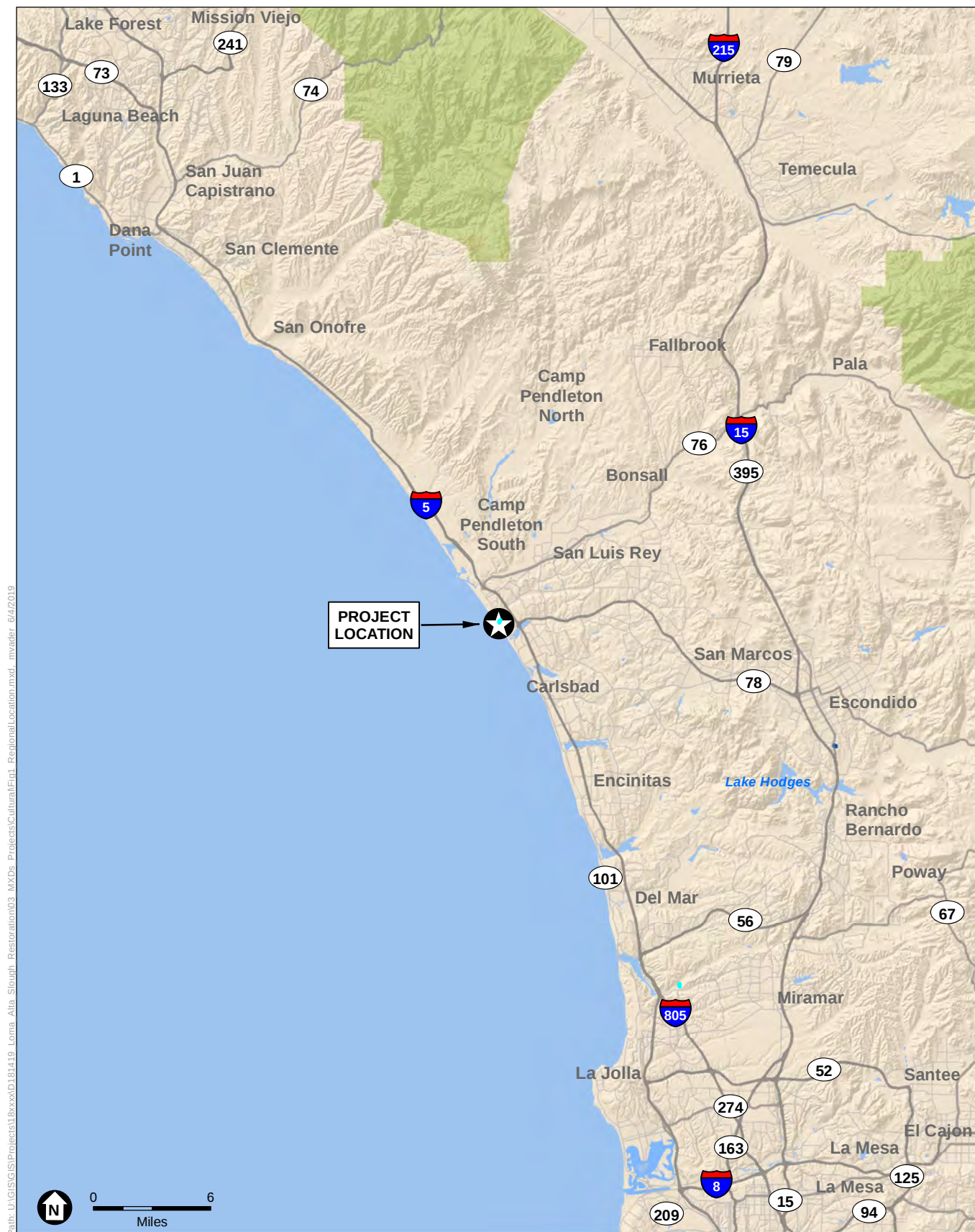
The Project area is located within the City of Oceanside, in northern San Diego County (**Figure 1**). Specifically, the Project is bounded by South Pacific Street to the west, South Coast Highway to the east, the La Salina wastewater treatment plant (WWTP) to the north, and Paradise by the Sea RV Park and Buccaneer Beach Park to the south. The Project is located within Section 35 of the San Luis Rey 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle (**Figure 2**).

Project Description

The Project would enhance the existing marsh in the Loma Alta Slough and restore marsh and transitional uplands in the adjacent properties over two phases. The Slough is a locally and regionally important natural resource that provides nesting and foraging habitat for marsh and shoreline birds. Common aquatic species likely to occur in the fresh and brackish habitats of Loma Alta Creek may include mosquitofish (*Gambusia affinis*), insect larvae, oligochaetes, clams, and snails. However, watershed urbanization, decreased sediment yield, hardening of the channel, degraded water quality, and wetland fill have degraded the health of the Slough. Additionally, the Slough itself has been filled to create developed areas, reducing the overall area available for wetland habitat.

In addition to the physical loss of wetland area, water quality issues resulting from urbanization have been ongoing since the 1960s. Currently, both Loma Alta Creek and Slough are on California's Clean Water Act 303(d) list of impaired water bodies for a variety of inhibiting constituents. Dry-weather flows from the watershed and groundwater seepage provide a continuous source of freshwater that contains nutrients, fertilizers and other contaminants that reduce water quality by causing eutrophic conditions and growth of algae and bacteria. Typically, water quality problems are exacerbated when the Slough is disconnected from the Pacific Ocean by the sand berm that forms naturally at Buccaneer Beach during dry periods.

The Project includes a new trail to be constructed from S. Coast Highway through the upland buffer in the northeast area. The trail would traverse the north of the Project area and continue west under the railroad bridge to connect to the future Coastal Rail Trail (as proposed under a different project under design). The trail would be approximately parallel to the adjacent access road north of the Project area, with a vegetated buffer to help create a separation between the trail and the road. The vegetated buffer will likely be comprised of a selection of lower growing native plants from the upland habitat community, and potentially supplemented with other species to blend with adjacent streetscapes. An overlook would be constructed within the Buel Property to provide views of the marsh.



SOURCE: ESRI

Loma Alta Slough Wetland Enhancement Project

Figure 1

Regional Location



The Project's enhancement of the Slough would be implemented in two phases (Phases 1 and 2). The City owns all of the land in the Project area except the Parent Family Trust and Buel properties in the northeast area. Acquisition of the Buel parcel is expected prior to Phase 1 implementation as the City is currently in negotiations with the property owner. In Phase 1, the Project would excavate perpendicular tidal channels from the Loma Alta Creek into the existing marsh to improve drainage. East of the railroad bridge and south of the Creek, the northeastern-most, triangular parcel would be graded to improve drainage to the Creek. North of the Creek and east of the railroad, the area would be graded to marsh elevations with a 50-foot habitat buffer separating the marsh from adjacent development. Perpendicular tidal channels would be excavated to encourage improved flushing of the new marsh. Rip-rap would be removed from some areas along the existing marsh and along the proposed marsh in the northeast of the Project area. The Phase 1 Project components are depicted in **Figure 3**.

In Phase 2, the Parent Family Trust property would be graded down to marsh elevations (up to 5 feet of excavation from existing ground elevations) with a 50-foot buffer to the north (**Figure 4**). The buffer area constructed in Phase 1 would be excavated down to marsh to increase the habitat connection between the properties, with inclusion of a new perpendicular tidal channel in this area.

Project Components

The following sections provide a detailed description of the proposed Project components associated with habitat restoration and public access.

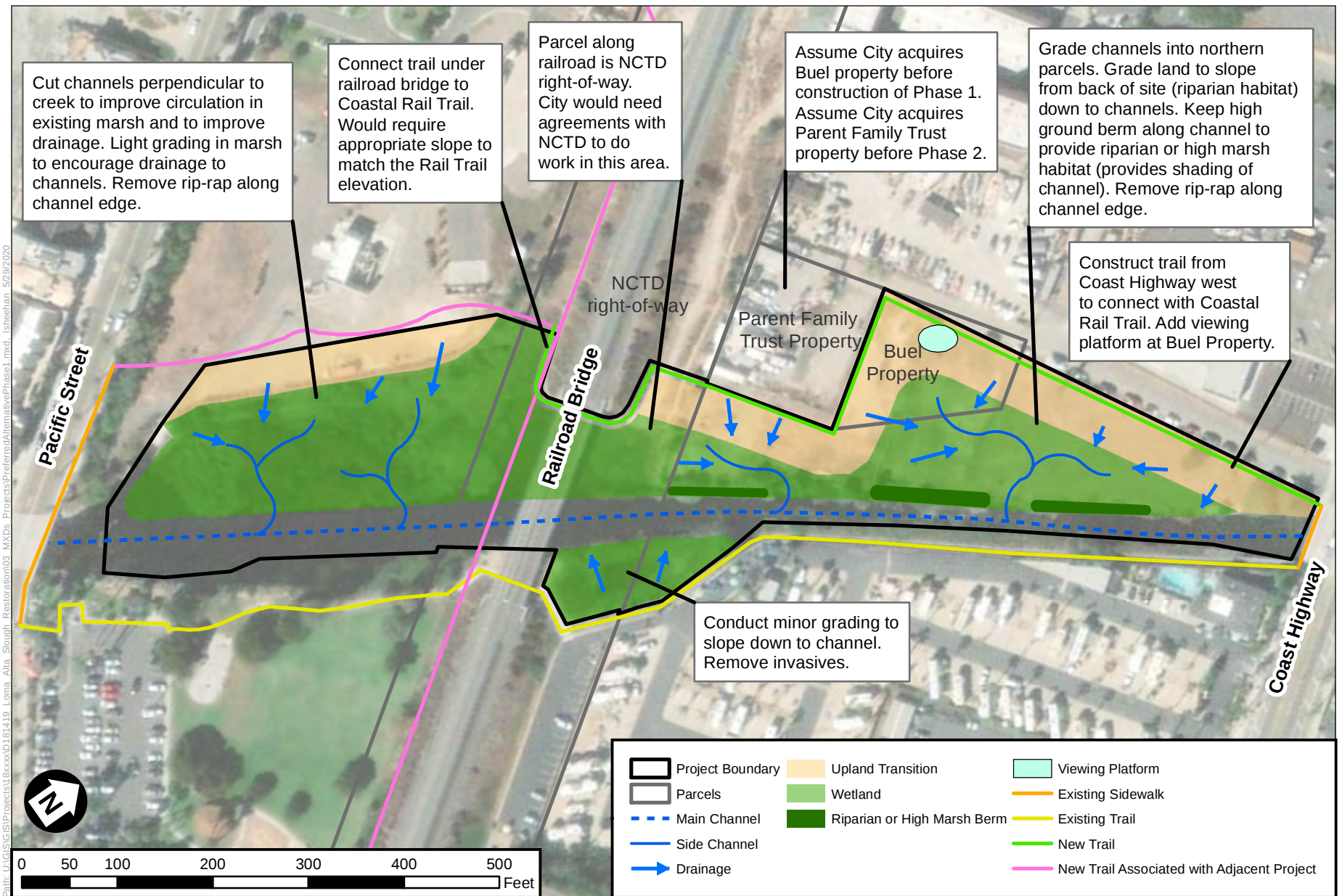
Restored Habitats

The restored wetland areas would be re-vegetated through a combination of seeding and installation of nursery grown container stock. Invasive species would be removed and some planting of marsh species would be done to ensure adequate seed source and to stabilize areas susceptible to erosion. The high marsh, transition zone, and riparian areas would be planted. Temporary irrigation would be installed for high marsh, transition zone, and riparian areas.

Marshplain Grading

In the northeast area, the Project would include excavation of fill to lower grades down to marshplain elevations. The restored marsh would be constructed as a bench, gradually sloping up from the Creek bank through intertidal and supratidal elevations, providing a range of open water depths and wetland habitat. Tidal channels would be excavated to increase drainage and circulation. The channels would be allowed to dynamically erode and deposit sediment within the restored habitat and the confines of any new or existing armoring.

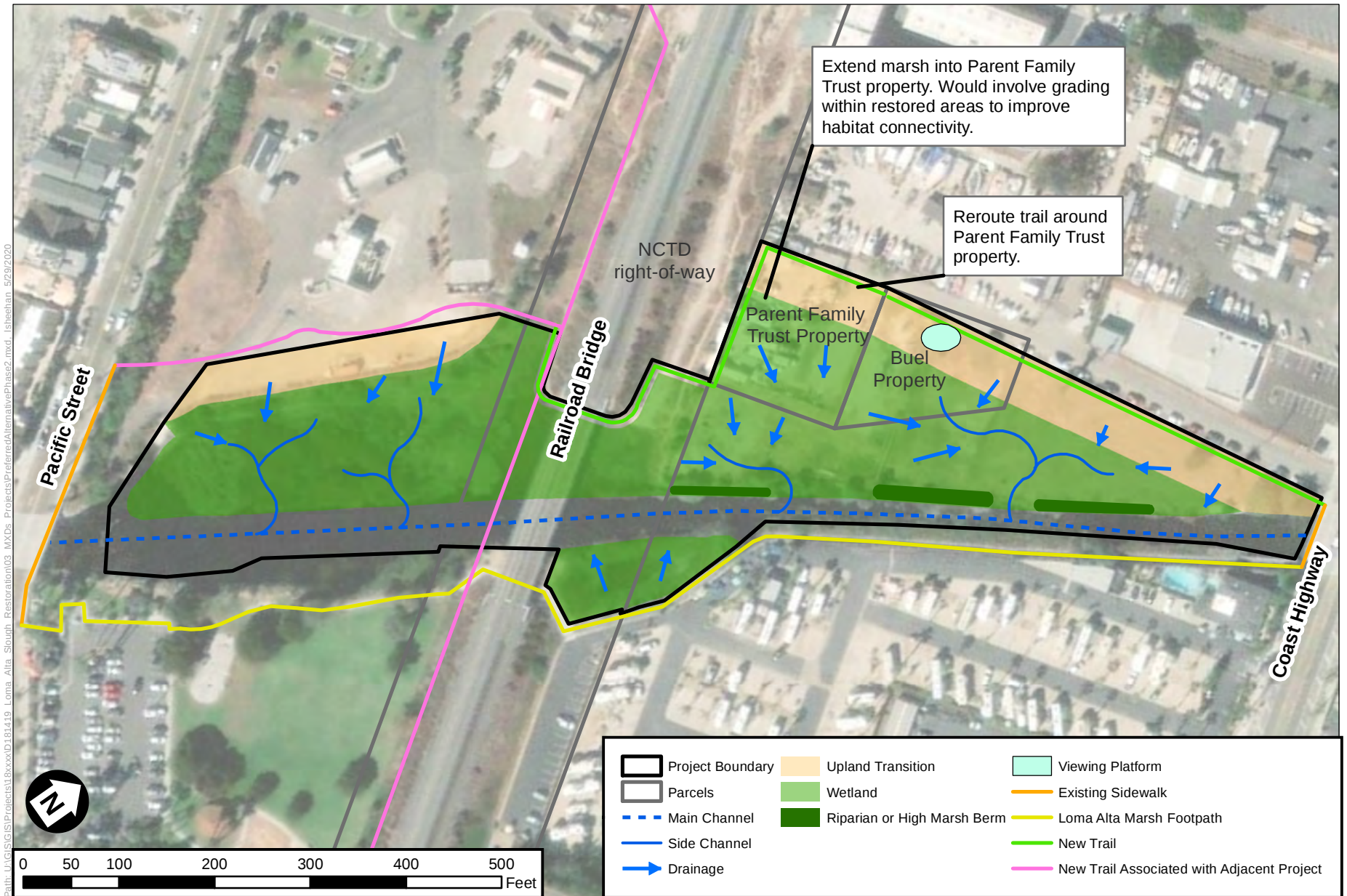
Focused grading would occur in the southeast area to improve drainage and reduce ponded water and stagnation and mosquito breeding conditions frequently observed in that area. Tidal channels would be excavated in the northwest area to increase drainage and circulation with existing marsh avoided as much as possible.



NOTE: Trail layout is approximate and final design will refine this within the buffer zone.

Loma Alta Slough Wetland Enhancement Project

Figure 3
Phase 1 Project



NOTE: Trail layout is approximate and final design will refine this within the buffer zone.

Loma Alta Slough Wetland Enhancement Project

Figure 4

Phase 2 Project

Upland Transition Buffer Grading

The northern edge of both the existing northwest marsh and the restored marsh in the northeast area would slope up through a 50-foot transitional upland habitat. A 50-foot habitat buffer is required by the City of Oceanside's Subarea Plan between all wetlands and any development. The habitat buffer would provide protection of the restored habitat from more intensive human uses, although trails are allowed within the buffer per the Subarea Plan. Additionally, wetland-upland transition zones provide many ecosystem services, including providing space for wetlands to migrate into with sea-level rise.

Grading of Riparian Berms

To mimic natural processes, riparian berms would be graded up to 1 to 1.5 feet above the marsh plain along the channel in the northeast area of the Project area.

Tidal Channel Excavation

New channels, approximately 10-feet wide, would be excavated to between 2-4 feet below the marshplain to create a sinuous and branching network of channels extending from the Creek through the wetlands. The channels would likely be intertidal when the mouth of the Slough is open (e.g., fully drain at low tide), but pond and retain water when the mouth of the Slough is closed. New channels proposed for the existing marsh areas would be strategically placed to maximize drainage and habitat benefit through regular ebb and flow of the Slough waters into the back marsh area. This feature would aid in reducing stagnation of the back marsh in the summer months that contributes to poor water quality and vector concerns from mosquito breeding.

Riprap Removal or Improvement

In many locations vegetation is likely sufficient to stabilize the channel banks and overbanks, and riprap would not be needed along the marsh edge. In areas where the channel shear stresses could result in erosion, a combination of rock slope protection (buried as feasible) and vegetated channel banks would be used to provide both channel stability and improved habitat. The Project would:

- Leave riprap in place to protect bridge piers and the access ramp from La Salina WWTP
- Leave riprap in place on the southeast channel bank to protect the existing trail and Paradise by the Sea RV park.

Public Access

Public access improvements and visitor amenities would include construction of new pedestrian trails, educational or interpretive features, and viewing areas with overlooks. These improvements would develop and enhance public access, recreation, and educational opportunities within the Project area, while balancing the need for protection of sensitive habitats.

Trails

The Project would include a new trail along the north boundary of the northeast area, which would connect under the railroad bridge to the future Coastal Rail Trail (proposed as part of a separate project). The proposed trail would connect to Coast Highway. The trail would be 6 feet wide and made of decomposed granite paving. Where the trail is parallel to the adjacent road, a vegetated

buffer would be used to provide a physical and visual separation from the streetscape. The buffer would be composed primarily of low-growing native upland vegetation to blend into the restoration area, while preserving views into the restoration area to enhance public safety. The trail network would be designed to meet Americans with Disabilities Act (ADA) guidelines.

Overlook

The Project would include a marsh overlook platform in the northeast area within the Buel Property. The overlook would be positioned along the trail to provide views and include educational information about Loma Alta Slough. The overlook would include interpretive signage and provide a stopping point for pedestrians along the trail. The overlook and trail providing access to it would be built in compliance with ADA guidelines.

Educational or Interpretive Features

Areas along the trail would be designated in the northeast area to provide visitors with opportunities to learn about wetland habitats, animals, and the larger Loma Alta Creek watershed. Educational art pieces may also be included. This feature provides continuity with the existing Loma Alta Marsh Footpath on the southern perimeter of Loma Alta Slough. ADA guidelines would also be included in the design of educational or interpretive features.

Construction

Project construction would include: mobilization and demobilization, site preparation, clearing and grubbing, earthwork, riprap removal, soil transport across and off-site, soil remediation (if necessary), revegetation, construction of trails and the overlook, and installation of signs and art. Earthwork would include excavation, grading, and fill placement to create marshplain, tidal channels, upland transition buffer, and berm habitats.

Construction would begin with site preparation, including clearing and grubbing and installation of wildlife exclusion fencing to isolate the work area from adjacent habitat as needed. Material generated during clearing and grubbing would be stockpiled for future placement in the upland buffer or berms as possible, or hauled to an offsite disposal area. Following site preparation, construction would continue with the excavation and grading of tidal channels and marshplain. Hydrologic controls such as flow diversion structures, weirs, or coffer dams are not expected to be required for construction. Once site grading is complete, revegetation of marshplain and upland habitats would occur, as well as installation of the trail surfacing, overlook structure, and other public access features.

Area of Potential Effects

An Area of Potential Effects (APE) was established for the Project according to Section 106 of the NHPA (**Figure 5**). An APE is defined as:

“the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking” (36 Code of Federal Regulations [CFR] 800.16[d]).

The APE encompasses the horizontal and vertical extents in which Project effects could occur as a result of Project ground disturbing activities. The approximately 7.75-acre horizontal APE includes: City- and privately-owned (Buel and Parent Family Trust) parcels along the northeastern and southeastern margin of Loma Alta Slough; the southeastern, undeveloped portion of the City’s La Salina WWTP; and the northwestern portion of Buccaneer Beach Park. The APE also includes two staging areas: one located on a paved access road northwest of the City- and privately-owned parcels and the other located within the proposed parking lot slated for the southwest end of the La Salina WWTP. Given that the only above ground element proposed is a 34-inch tall overlook platform, the Project would not introduce obtrusive visual elements that could result in indirect visual effects to historic properties. As such, the vertical APE only encompasses the maximum depth of ground disturbance, which is approximately 7-8 feet below the ground surface.



SOURCE: City of Oceanside; ESRI

Loma Alta Slough Wetlands Enhancement Project

Figure 4
Area of Potential Effects

Setting

Natural Setting

Loma Alta Slough is a small creek mouth estuary located at the western terminus of the Loma Alta Creek watershed, which originates from springs just west of Melrose Drive in the City of Vista located approximately 7 miles east of the APE and ends at Buccaneer Beach Park where it enters the Pacific Ocean (McLaughlin et al., 2011). Over 70 percent of the watershed is developed and is comprised of residential, industrial, commercial, and public facility land uses (City of Oceanside, n.d.). The Slough is comprised of 1.3 acres of open water area and 1.9 acres of emergent marsh. Freshwater inflows from the watershed are highly seasonal and generally associated with incoming Pacific storms that typically occur from about October through April (McLaughlin et al., 2011; Wang et al., 2013).

Prehistoric Setting

The chronology of coastal southern California is typically divided into three general time periods: the Early Holocene (11,000 to 8,000 before present [B.P.]), the Middle Holocene (8,000 to 4,000 B.P.), and the Late Holocene (4,000 B.P. to A.D. 1769). Within this general timeframe, the archaeology of southern California is generally described in terms of cultural “complexes.” A complex is a specific archaeological manifestation of a general mode of life, characterized archaeologically by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture.

Early Holocene (11,000 to 8,000 B.P.)

While it is not certain when humans first came to California, their presence in southern California by about 11,000 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 11,100 and 10,950 years B.P. (Byrd and Raab, 2007). On the mainland, radiocarbon evidence confirms occupation of the Orange County and San Diego County coast by about 9,000 B.P., primarily in lagoon and river valley locations (Gallegos, 2002). During the Early Holocene, the climate of southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Horne and McDougall, 2003).

The primary Early Holocene cultural complex in coastal southern California was the San Dieguito Complex. The people of the San Dieguito Complex (about 10,000–8,000 B.P.) inhabited the chaparral zones of southwestern California, exploiting the plant and animal resources of these ecological zones (Moratto, 1984; Warren, 1967). Leaf-shaped and large-stemmed projectile points are typical of San Dieguito Complex material culture.

Middle Holocene (8,000 to 4,000 B.P.)

During the Middle Holocene, there is evidence for the processing of acorns for food and for the increased importance of hunting (Horne and McDougall, 2003). The processing of plant foods increased (particularly acorns), a wider variety of animals were hunted, and trade with neighboring regions intensified (Horne and McDougall, 2003). Major technological changes appeared as well,

particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl.

The Middle Holocene La Jolla Complex (about 8,000–4,000 B.P.) is essentially a continuation of the San Dieguito Complex. La Jolla groups lived in chaparral zones or along the coast, often migrating between the two. Coastal settlement focused around the bays and estuaries of coastal Orange and San Diego counties. La Jolla peoples produced large, coarse stone tools, but also produced well-made projectile points and milling slabs. The La Jolla Complex represents a period of population growth and increasing social complexity, and it was also during this time period that the first evidence of the grinding of seeds for flour appears, as indicated by the abundance of millstones in the archaeological record (Horne and McDougall, 2003).

Late Holocene (4,000 B.P. to A.D. 1769)

During the Late Holocene, native populations of southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps (Byrd and Raab, 2007). Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab, 2007).

Around 1,000 B.P., an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA), occurred. While the effects of this environmental change on prehistoric populations are still being debated, it did likely lead to changes in subsistence strategies in order to deal with the substantial stress on resources (Jones and Schwitalla, 2008). In coastal southern California, beginning before the MCA but possibly accelerated by it, conditions became drier and many lagoons had been transformed into saltwater marshes. Because of this, populations abandoned coastal mesa and ridge tops to settle nearer to permanent freshwater resources (Gallegos, 2002).

Although the intensity of trade had already been increasing, it reached its zenith in the Late Holocene, with asphaltum (tar), seashells, and steatite being traded from southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl (Byrd and Raab, 2007). Small projectile points, ceramics, including Tizon brownware pottery, and obsidian from Obsidian Butte (Imperial County), are all representative artifacts of the Late Holocene.

It has been postulated that as early as 3,500 B.P., a Takic-speaking people arrived in coastal Los Angeles and Orange counties, having migrated west from inland desert regions (Kroeber, 1925; Sutton, 2009; Warren, 1967). By around 1,500 to 1,000 B.P., Takic language and cultures had spread to the south and inland to the east. These new arrivals, linguistically and culturally different from earlier coastal populations, may have brought new settlement and subsistence systems with them, along with other new cultural elements. This migration has been postulated as being a factor in several of the significant changes in material culture seen in the Late Holocene (such as the use of smaller projectile points and pottery), as well as the introduction of cremation as a burial practice.

The San Luis Rey culture (divided into San Luis Rey I [AD 1400 to 1750] and San Luis Rey II [AD 1750 to 1850]) represented the Late Period in southwestern Riverside County and northern

San Diego County (Moratto, 1984). San Luis Rey I village sites contain manos (hand stones), metates (grinding slabs), bedrock mortars, shell artifacts, and triangular arrow points. In addition to these features, San Luis Rey II sites are characterized by the presence of pottery, pictographs, and the cremation of the dead (Moratto, 1984).

San Luis Rey settlement patterns in the upper San Luis Rey River drainage are typified by seasonally occupied lowland villages located in proximity to water sources, and highland villages occupied in the late summer and fall for acorn collection (True and Waugh, 1982). However, settlement patterns within southwestern Riverside County are less well known. The available information, stemming primarily from survey data, indicates that four primary site types existed within the region during the Late Period: field camps, resource procurement locations, residential bases, and villages (Mason, 1999). Resource procurement locations and field camps, the most common site types, contain a limited assemblage of artifacts and subsistence remains, primarily lithic debitage, some tools, fire affected rock, and small amounts of animal bones and charred seeds and nuts. This indicates that these types of sites were used primarily for focused activities and short-term occupancy.

Villages and residential bases, on the other hand, show evidence for long-term occupation by large groups of people. Villages were occupied year-round, while residential bases were occupied seasonally. Artifacts and features found at both villages and residential bases, including large amounts of faunal and botanical remains, numerous high-quality tools, fire-affected rock, and anthrosols, indicate a wide range of activities (Mason, 1999). Bedrock mortars point to the processing of seeds and acorns, and ceremonial activities are evidenced by the presence of pictographs, petroglyphs, and cupules within village sites.

Ethnographic Setting

Luißeño

Native Americans living in the Project area at the time of Spanish contact are now known as the Luißeño, after the Mission San Luis Rey to which many of them were relocated. The language of the Luißeño people has been identified as belonging to the Cupan group of the Takic subfamily, which is part of the larger Uto-Aztecan language family (Bean and Shipek, 1978). Luißeño territory includes portions of northern San Diego, southern Orange, and Riverside Counties, and would have encompassed a diverse environment including lagoons and marshes, coastal areas, inland river valleys, foothills, and mountains. The neighbors of the Luißeño to the north and northwest were the Juaneño, Gabrielino, and Serrano; to the east were the Cahuilla and Cupeño; and to the south were the Kumeyaay.

The Luißeño subsisted on small game, coastal marine resources, and a wide variety of plant foods such as grass seeds and acorns. Luißeño houses were conical thatched reed, brush, or bark structures. The Luißeño inhabited permanent villages centered around patrilineal clans, with each village headed by a chief, or *not* (Kroeber, 1925; Sparkman, 1908). Seasonal camps associated with villages were also used. Each village or clan had an associated territory and hunting, collecting, and fishing areas. Villages were typically located in proximity to a food or water source, or in defensive locations, often near valley bottoms, streams, sheltered coves or canyons, or coastal

strands (Bean and Shipek, 1978). It is estimated that there may have been around 50 Luiseño villages with a population of about 200 each at the time of the first Spanish contact (Bean and Shipek, 1978).

Today, there are six federally recognized tribes in California who share Luiseño tribal affiliation, language, and culture, including the La Jolla Band of Luiseño Indians (La Jolla), Rincon Band of Luiseño Indians (Rincon), Pauma Yuima Band of Mission Indians (Pauma), Pechanga Band of Luiseño Indians (Pechanga), Pala Band of Mission Indians (Pala), and Soboba Band of Luiseño Indians (Soboba).

Kumeyaay

The greater San Diego area was inhabited by a group of people known generally as the Kumeyaay. The Kumeyaay are one of many local Native groups collectively referred to as the Diegueño, specifically representing populations occupying an area that encompassed roughly southern present-day San Diego County, southern Imperial County, and northern Baja California (Kroeber, 1925). The Kumeyaay language belonged to the Yuman language family, Hokan stock (Luomala, 1978). Subsistence strategy for the Kumeyaay involved small-game hunting and resource gathering, with a noted reliance upon marine resources near San Diego Bay and along the Pacific Coast. Inland Kumeyaay populations relied primarily upon the exploitation of small game animals including insects, fish, birds, dove, rabbits, and squirrels, as well as abundantly available vegetal resources such as many varieties of seeds, principally the acorn, cacti, and herbaceous plants. Studies indicate that the Kumeyaay divided their seasonal subsistence between the mountain and the desert ecological zones. With the seasons, the Kumeyaay moved in small bands from one productive area to another to ensure a near constant food supply (Luomala, 1978).

In 1769, the Mission San Diego de Alcalá was founded and Kumeyaay were missionized and eventually moved onto reservations (Luomala, 1978). Today, Kumeyaay tribal members within the United States are divided into twelve federally recognized bands: Barona, Campo, Ewiiapaayp, Inaja-Cosmit, Jamul, La Posta, Manzanita, Mesa Grande, San Pasqual, Santa Ysabel, Sycuan, and Viejas. An additional San Diego County band, the Kwaaymii Laguna Band of Indians, is not currently federally recognized. Several more Kumeyaay communities are present in Mexico.

Historic Setting

The first European presence in present-day San Diego County came in 1542, when Juan Rodriguez Cabrillo led an expedition along the coast. Europeans did not return until 1769, when the expedition of Gaspar de Portola traveled overland from San Diego to San Francisco. In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples (Horne and McDougall, 2003). The nearest mission to the APE was Mission San Luis Rey de Francia (San Luis Rey), founded in 1798 by Father Fermín de Francisco Lasuén de Arasqueta.

Disease and hard labor took a toll on the native populations; by 1900, the Native Californian population had declined by as much as 95 percent (Chartkoff and Chartkoff, 1984). In addition, native economies were disrupted, trade routes were interrupted, and native ways of life were significantly altered.

In 1821, Mexico, which included much of present-day California, became independent from Spain, and during the 1820s and 1830s the California missions were secularized. Mission property was supposed to have been held in trust for the Native Californians, but instead was handed over to civil administrators and then into private ownership. After secularization, many former Mission Indians were forced to leave the Missions and seek employment as laborers, ranch hands, or domestic servants (Horne and McDougall, 2003).

In 1848, gold was discovered in California, leading to a huge influx of people from other parts of North America. In 1850, California became part of the United States of America. The opening of the Butterfield Overland Stage route in 1858 and later the California Southern Railroad line in 1882 greatly increased the number of people coming to southern California.

City of Oceanside

In May 1841, the Rancho Margarita and Las Flores were granted by Governor Alvarado to brothers Pio and Andreas Pico. The 133,441-acre land grant encompasses present-day Camp Pendleton Marine Corps Base located approximately 3.75 miles north of the APE. In 1864, to pay off his debts, Pio sold his share to his brother-in-law John Forster, an Englishman, for \$14,000. In 1882, Forster died and the rancho was purchased by Richard O'Neill for \$250,000 (City of Oceanside, n.d.). In 1906, O'Neill sold half his interest in the rancho to James C. Flood, Jr. and the two formed the Santa Margarita Rancho Corporation, which held the property until 1942 when it was sold to the United States Navy (City of Oceanside, n.d.).

In 1883, the California Southern Railway, a branch of the Santa Fe Railroad, was constructed through what is present day Oceanside. The railway linked San Diego to San Bernardino and opened the San Diego County coastline for development (City of Oceanside, n.d.). That same year, Andrew Jackson Myers, a local storekeeper, applied for a Homestead Grant on the Oceanside Mesa and was allotted 160 acres making him the first occupant of what would soon become the City of Oceanside (Oceanside Chamber of Commerce 2015). Five years later on July 3, 1888, the city was incorporated with a population of 1,000 (City of Oceanside, n.d.). In the coming decade, Oceanside expanded at an exponential rate with the construction of three hotels, two drug-stores, two livery stables, two blacksmiths, a hardware store, a bakery, a harness shop, a lumber yard, a barber shop, a school, and six churches, as well as the establishment of a newspaper.

In 1915, a paved highway connecting San Diego and Los Angeles was constructed through Oceanside spurring expansion of the city throughout the 1920s. Additional markets, theaters, and hotels were built in what is present-day downtown Oceanside and residential subdivisions sprung up on West Street and Schaeffer Street located approximately 0.67 miles north of the APE. From 1914 through the 1920s a number of Hollywood productions were filmed in the vicinity of Oceanside, and the city's hotels and beaches became an attractive getaway for early movie stars (Oceanside Chamber of Commerce, 2015).

In 1942, the United States Navy purchased the land held by the Santa Margarita Rancho and constructed the nation's largest Marine Corps Base, Camp Pendleton, to train troops for service during World War II (City of Oceanside, n.d.). The construction of Camp Pendleton triggered rapid

population growth in the city as servicemen and their families moved into the region and the city's population increased from 4,652 in 1940 to 12,888 in 1950 (City of Oceanside, n.d.).

Today, Oceanside is the third-largest city in San Diego County with a population of 167,086 and is serviced by Interstate 5 and Highway 76.

History of the APE

Prior to alteration a result of historic land use, the Loma Alta Slough was once an approximately 44-acre lagoon fed by an ephemeral drainage. However, as the city of Oceanside grew, regional agricultural practices altered the local ecosystem, and more infrastructure was constructed to support the growing and expanding city population. Between 1948 and 1950 the La Salina WWTP was constructed on the north side of the Loma Alta Slough to treat sewage from downtown and areas along the coast. The facility has had multiple upgrades over the years, including the installation of two larger digester tanks, repurposing of the original tanks into sludge holding tanks, construction of several other wastewater-related structures, a new 16-inch diameter, 8,400-foot long ocean outfall pipeline, and an ultraviolet (UV) treatment facility. Presently, the City operates the pumping system and UV treatment plant to collect and treat water within the Loma Alta Slough during the summer months when the sand berm blocks the Slough from tidal flows. The UV treatment facility, constructed in 2008, treats water entering the Slough from Loma Alta Creek,

Regulatory Framework

Numerous laws and regulations require federal, state, and local agencies to consider the effects a project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies.

Federal

National Historic Preservation Act

The principal federal law addressing historic properties is the NHPA, as amended (54 United States Code of Laws [USC] 300101 et seq.), and its implementing regulations (36 CFR Part 800). Section 106 requires a federal agency with jurisdiction over a proposed federal action (referred to as an “undertaking” under the NHPA) to take into account the effects of the undertaking on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking.

The term “historic properties” refers to “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register” (36 CFR Part 800.16(l)(1)). The implementing regulations (36 CFR Part 800) describe the process for identifying and evaluating historic properties, for assessing the potential adverse effects of federal undertakings on historic properties, and seeking to develop measures to avoid, minimize, or mitigate adverse effects. The Section 106 process does not require the preservation of historic properties; instead, it is a procedural requirement mandating that federal agencies take into account effects to historic properties from an undertaking prior to approval.

The steps of the Section 106 process are accomplished through consultation with the State Historic Preservation Officer (SHPO), federally-recognized Indian tribes, local governments, and other interested parties. The goal of consultation is to identify potentially affected historic properties, assess effects to such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement (36 CFR 800.1(a)). Consultation with Indian tribes regarding issues related to Section 106 and other authorities (such as NEPA and Executive Order No. 13007) must recognize the government-to-government relationship between the Federal government and Indian tribes, as set forth in Executive Order 13175, 65 FR 87249 (Nov. 9, 2000), and Presidential Memorandum of Nov. 5, 2009.

National Register of Historic Places

The National Register of Historic Places (National Register) was established by the NHPA of 1966, as “an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation’s historic resources and to indicate what properties should be considered for protection from destruction or impairment” (36 CFR 60.2) (U.S. Department of the Interior, 2002). The National Register recognizes a broad range of cultural resources that are significant at the national, state, and local levels and can include districts, buildings, structures, objects, prehistoric archaeological sites, historic-period archaeological sites, traditional cultural properties, and cultural landscapes. As noted above, a resource that is listed in or eligible for listing in the National Register is considered “historic property” under Section 106 of the NHPA.

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Properties of potential significance must meet one or more of the following four established criteria:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history;
- B. Are associated with the lives of persons significant in our past;
- C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;
or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the criteria of significance, a property must have integrity. Integrity is defined as “the ability of a property to convey its significance” (U.S. Department of the Interior, 2002). The National Register recognizes seven qualities that, in various combinations, define integrity. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

Ordinarily religious properties, moved properties, birthplaces or graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years are not considered eligible for the National Register unless they meet one of the Criteria Considerations (A-G), in addition to meeting at least one of the four significance criteria and possessing integrity (U.S. Department of the Interior, 2002).

State

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at *Public Resources Code (PRC) Section 21000 et seq.* CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The *CEQA Guidelines* (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of Section 21083, which is as a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is 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:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5(a). Substantial adverse change is defined as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired” (*CEQA Guidelines* Section 15064.5(b)(1)). According to *CEQA Guidelines* Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

- A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Standards) (Grimmer, 2017) is considered to have mitigated its impacts to historical resources to a less-than-significant level (*CEQA Guidelines* Section 15064.5(b)(3)).

California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1[b]). Certain resources are

determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

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

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event

the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California PRC Section 5097.98, as amended, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.” Section 6254.10 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency.”

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerald “Jerry” Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a

lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Local

City of Oceanside General Plan

The City of Oceanside General Plan, Land Use Element (2002), contains the following cultural resources policies relevant to the proposed Project:

Policy A: The City shall encourage open space land use designations and open space zoning or open space easements for the preservation of cultural resources.

Policy B: The City shall encourage the acquisition, restoration and /or maintenance of significant cultural resources by private organizations.

Policy C: Cultural resources that must remain in-situ to preserve their significance shall be preserved intact and interpretive signage and protection shall be provided by project developers.

Policy D: An archaeological survey report shall be prepared by a SOPA (Society of Professional Archaeologists) certified archaeologist for a project proposed for grading or development if any of the following conditions are met:

1. The site is completely or largely in a natural state;
2. There are recorded sites on nearby properties;
3. The project site is near or overlooks a water body (creek, stream, lake, freshwater lagoon);
4. The project site includes large boulder and/or oak trees; or
5. The project site is located within a half-mile of Mission San Luis Rey.

Policy E: The presence of agriculture on a potential project site shall not preclude the requirement for an archaeological survey report if any of the above listed conditions are established.

Oceanside City Code Chapter 14A: Historical Preservation Ordinance

The City of Oceanside City Code has established the following sections for the preservation of historical resources that are relevant to this Project:

Section 14A.2. Policy and Purpose

(a) **Policy.** It is hereby declared as a matter of public policy that the recognition, preservation, enhancement, perpetuation and use of structures, landscape features, sites and areas within the City of Oceanside having historical, architectural, archeological, cultural or aesthetic significance is required in the interest of the economic prosperity, cultural enrichment, and general welfare of the people.

(b) Purpose.

- (1) Safeguard the heritage of the City of Oceanside by providing for the protection of historical sites and areas representing significant elements of its history;
- (2) Encourage public knowledge, understanding, and appreciation of the City's past;
- (3) Enhance the visual character of the City by encouraging and regulating the compatibility of architectural styles within historical areas reflecting significant architectural traditions;
- (4) Foster civic and neighborhood pride and a sense of identity based on the recognition and use of historical areas and sites;
- (5) Strengthen the economy of the City by protecting and enhancing the City's attractions to residents, tourists, and visitors;
- (6) Stabilize and improve property values and increase economic and financial benefits to the City and its inhabitants;
- (7) Identify as early as possible and resolve conflicts between the preservation of historical areas and sites and alternative land uses; and
- (8) Promote the private and public use of historical areas and sites for the education, prosperity and general welfare of the people (Ord. No. 82-41, § 1, 9-8-82).

Section 14A.6. Historical Area or Site Designation Criteria.

For the purposes of this chapter, an historical area or site may be designated as such by resolution of the City council pursuant to section 14A.7 if it meets the following criteria:

- (a) It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, or architectural history; or
- (b) It is identified with persons or events significant in local, state, or national history; or
- (c) It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or
- (d) It is representative of the notable work of a builder, designer, or architect; or
- (e) It is found by the council to have significant characteristics which should come under the protection of this chapter (Ord. No. 82-14, § 1, 9-8-82).

Section 14A.7. Historical Area or Site Designation Procedures.

Historical areas or sites shall be established by the city council in the following manner:

- (a) Any person may request the designation of an improvement or landscape feature as an historical site or the designation of an historic area by submitting a written request for such designation to the commission. The commission or city council may also initiate such proceedings on their own motion.
- (b) The commission shall conduct a study of the proposed designation and make a preliminary determination based on such documentation as it may require, as to its appropriateness for consideration. The commission shall forward a report containing its findings and determinations to the city council and the city clerk.
- (c) Upon receipt of the commission's report, the city clerk shall schedule a public hearing and give notice as set forth in subsection (5) below for a proposed historical site or subsection (6) below for a proposed historical area. The public hearing shall be held within forty-five (45) days of receipt of the commission's report.
- (d) A notice of the scheduled public hearing shall be forwarded to the building department by the city clerk and no building, alteration, demolition or removal permits for any improvement, building, structure, or landscape feature within the proposed historical area or relative to a proposed historical site shall be issued while the public hearing or any appeal thereto is pending.
- (e) In the case of a proposed historical site, notice of the date, place, time, and purpose of the hearing shall be given by first class mail to the owners and occupants of all properties affected at least twenty (20) days prior to the date of the public hearing, using the name and address of such owners as shown on the latest equalized assessment rolls, and shall be advertised once in a daily newspaper of general circulation.
- (f) At the conclusion of the public hearing on the proposed designation, the city council shall, by resolution, designate the area or site, in whole or in part, or the council may make findings regarding its rejection of the proposed designation.
- (g) Failure to send any notice by mail to any property owner where the address of such owner is not on the latest equalized assessment roll shall not invalidate any proceedings in connection with the proposed designation.
- (h) The time for designation should not exceed two (2) calendar months unless a greater period of time is required as may be determined by the council. The council shall consider, when considering an extension of time, any undue hardship which may result from such extension (Ord. No. 82-41, § 1, 9-8-82).

Archival Research

SCIC Records Search

A records search for the Remediation Project was conducted by ESA staff on July 30, 2015 and updated for the current Project on June 12, 2019 at the CHRIS-SCIC, housed at San Diego State University. The records search included a review of all recorded cultural resources within a 1-mile radius of the APE, as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest, the California Historical Landmarks, the California Register, the National Register, the Archaeological Determinations of Eligibility, and the Built Environment Resource Directory were reviewed.

Previous Cultural Resources Investigations

The records search results indicate that 64 cultural resources studies have been previously conducted within a 1-mile radius of the APE. Of these 64 previous studies, 59 included some form of field study including survey, excavation, or monitoring (**Table 1**). Approximately 50 percent of the 1-mile records search radius has been included in previous cultural resources surveys. The entirety of the APE has been included as part of six previous cultural resources surveys (SD-01269, -01677, -06629, -06636, -09361, and -14069). Although not on file at the SCIC, an additional study (Wilson, 2018) was identified and includes the entirety of the APE. This study is described in detail following the Table 1.

TABLE 1
PREVIOUS CULTURAL RESOURCES INVESTIGATIONS

Author	SCIC # (SD-)	Title	Date
Aharoni, Eitan	10948	<i>Report for the Charles Libby House</i>	1977
Andrew Pigniole	16160	<i>Cultural Resources Geotechnical Monitoring Report for the Oceanside Boulevard Sewer Lift Station Relocation Project, City of Oceanside, California</i>	2015
Andrew R. Pigniole	16159	<i>Cultural Resources Survey Report for the Oceanside Boulevard Sewer Lift Station Relocation Project, City of Oceanside, California</i>	2014
Arrington, Cindy	10551	<i>Cultural Resources Final Report of Monitoring and Findings for the Qwest network Construction Project, State of California</i>	2006
Bonner, Wayne and Sarah Williams	12557	<i>Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate Five/78 at 1501 Kelly Street, Oceanside, San Diego County, California</i>	2008
Bonner, Wayne H. and James M. Keasling	11074	<i>Cultural Resource Records Search and Site Visit Results for Cricket Telecommunications Facility Candidate SAN-112 (Best Western), 1680 Oceanside Boulevard, Oceanside, San Diego, County, California</i>	2006
Bonner, Wayne H. and Marnie Aislin-Kay WAYNE H. and MARNIE AISLIN-KAY	11602	<i>Cultural Resource Records Search Results and Site Visit for Cricket Telecommunications Facility Candidate SAN-119B (Amazon Bikes), 1227 Vista Way, Oceanside, San Diego County, California</i>	2008
Byrd, Brian F. and Collin O'Neil	09361*	<i>Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5 San Diego County, CA.</i>	2002
Caltrans	13916	<i>Interstate 5 North Coast Corridor Project Supplemental Draft Environmental Impact Report/Environmental Impact Statement</i>	2012
Caltrans	14495	<i>Interstate 5 North Coast Corridor Project Final Environmental Impact Report/Environmental Impact Statement and Section 4(F) Evaluation</i>	2013
Caltrans	14615	<i>I-5 North Corridor project Supplemental</i>	2013
Caltrans and Karen Crafts	04587	<i>Negative Archaeological Survey Report Upgrade of the Route 78 Interstate 5 Interchange in Oceanside, CA</i>	1991
Carrillo, Charles	00577	<i>Map for Highway alternative Study 11-SD-76 0.012.9 11821-159021</i>	1982
Castells, Shelby Gunderman, Shannon Davis, Sarah Stringer-Bowsher, Jennifer Krintz, and Sinéad Ní Ghabhláin	17218	<i>Cultural and Historical Resources Existing Conditions and Evaluation Report for the Pacific Surfliner Carlsbad Village Double Track Project, San Diego County, California</i>	2013
Caterino, David	09516	<i>The Cemeteries and Gravestones of San Diego County: An Archaeological Study</i>	2005
Cheever, Dayle and Dennis Gallegos	00774	<i>Cultural Resource Survey Lom Alta Apartments Project, Oceanside, California</i>	1986
Cook, E.F.	09838	<i>Lux Canyon Drainage System, EAD Log No. 81-7-48</i>	1981
Cook, John	10197	<i>Final Cultural Resources Survey of 2000 Stewart Street, San Diego County, California</i>	2006
Cooley, Theodore G. and Richard L. Carrico	09470	<i>Cultural Resources inventory Report for Four San Luis Rey Land Outfall pipeline Route Alternative, City of Oceanside, California</i>	2004
Crafts, Karen	06531	<i>Negative Archaeological Survey Report 11-SD-78 P.M. 0.0-07</i>	1991
Crull, Scott	10464	<i>Cultural Resources Records Search and Site Visit for the Cricket Communications SAN-112-D, Vine Street ROW, Stealth Lights Standard and Equipment Shelter, Located on Vine Street, Oceanside, San Diego County, California</i>	2006
Cupples, Sue Ann	00535	<i>Oceanside Harbor and Navigation Project: Archaeological Survey Report</i>	1976
Davison, Kristina	14803	<i>Cleveland Street 2 Cultural Resources Survey</i>	2014
Davison, Kristina and Mary Robbins-Wade	15254	<i>1125 Cleveland Street Cultural Resources Survey and Testing</i>	2014
Deb Dominici and Don Laylander	16127	<i>2007 Cultural Resources Treatment Plan North Coast Interstate 5 Corridor</i>	2008
Dominici, Deb	11761	<i>Historic Property Survey Report I-5 North Coast Widening Project</i>	2007

Author	SCIC # (SD-)	Title	Date
Dominici, Deborah	12762	<i>Historic Property Survey Report for the Interstate 5 North Coast Corridor Project</i>	2010
Duke, Curt	07498	<i>Cultural Resource Assessment Cingular Wireless Facility No. SD443-11 San Diego County, CA</i>	2002
Duke, Curt	07561	<i>Cultural Resource Assessment Cingular Wireless Facility No. SD 722-01 San Diego County, California</i>	2002
Falvey, Nicole and Mary Robbins-Wade	17248	<i>Breeze Luxury Apartments Project - Cultural Resources Survey</i>	2017
Gallegos, Dennis R. and Sinead Ni Ghabhlain	04175	<i>Cultural Resource Evaluation for the Oceanside-Escondido Bikeway Project, San Marcos, California</i>	1999
Guerrero, Monica and Dennis R. Gallegos	12039	<i>Cultural Resources monitoring Report for the North County Transit District (NCTD) Sprinter Rail Project Oceanside to Escondido, California.</i>	2007
Guerrero, Monica, Gallegos, Dennis, Stropes, Tracy, Bouscaren, Steve, Bugbee, Susan, and Cerreto, Richard	09546	<i>Cultural Resource Test Report for Oceanside-Escondido Rail Project Oceanside, California</i>	2001
Lauko, Kimberly and Christeen Taniguchi	10056	<i>Record Search and Site Visit Results for Sprint Telecommunications Facility Candidate SD34xC858B (Fire Mountain) adjacent to 1789 Troy Lane, Oceanside, Can Diego County, California</i>	2004
Laylander, Don	05845	<i>Historic Property Survey Report for a Widening of State Route 78</i>	1988
Laylander, Don and Linda Akyuz	11783	<i>Archaeological Survey for the Caltrans I-5 Norths Coast Corridor Project Biological Mitigation Parcels, San Diego County, California</i>	2008
Linn, Robert	13482	<i>Addendum 61087278 Five/78, 1501 Kelly Street, Oceanside, New Tower</i>	2011
Loftus, Shannon	14667	<i>Cultural Resource Records Search and Site Survey AT&T Site SD0485 Adventure 16 2002 South Coast Highway Oceanside, San Diego County, California</i>	2012
Ni Ghabhlain, Sinead	09438	<i>Historical Evaluation of Three Houses 519 and 523 South Myers Street and 112 Ash Street Oceanside, California</i>	2004
Ni Ghabhlain, Sinead	09440	<i>Historical Evaluation of 426 South Pacific Street, Oceanside, California</i>	2004
Ni Ghabhlain, Sinead	14069*	<i>Cultural and Historical Resource Study for the City of Oceanside General Plan Circulation Element Update Program Environmental Impact Report</i>	2011
Pettus, Roy E.	01269*	<i>A Cultural Survey of Portions of the Las Chollas, South Las Chollas, Los Coches Forester, and Loma Alta Stream Basins in San Diego County, California</i>	1979
Phil Fulton	16275	<i>Cultural Resource Assessment Class III Inventory Verizon Wireless Services Buccaneer Beach Facility, City of Oceanside, San Diego County, California</i>	2014
Pignuolo, Andrew, Kathleen Crawford, and Delman James	02786	<i>Archaeological Testing and Evaluation of the North County Transit District Maintenance Facility Alternatives Oceanside and Carlsbad, California</i>	1993
Robbins-Wad, Mary and Nicole Falvey	17347	<i>1125 South Cleveland Street Townhomes Archaeological Monitoring</i>	2017
Robbins-Wade, Mary	12122	<i>Hampton Inn Archaeology Update</i>	2009
Robbins-Wade, Mary	14489	<i>305 Wisconsin Avenue Archaeological and Historical Resources</i>	2013
Robbins-Wade, Mary	14492	<i>Cleveland Street 8 Cultural Resources Survey</i>	2013
Rosen, Martin	06629*	<i>Historic Property Survey Report Oceanside to San Diego Rail to Trail</i>	1999
Rosen, Martin	06636*	<i>Historic Property Survey, Loma Alta Creek Channel</i>	1997
Rosen, Martin D.	09003	<i>Positive Historic Property Survey Report</i>	2004
Smith, Brian F.	02343	<i>Results of an Archaeological Study for the Tuscany Condominiums</i>	1992
Smith, Brian F. and Sara Clowery-Moreno	12396	<i>Negative Cultural Resources Survey Report, The Vine Commercial Project, City of Oceanside, California</i>	2008
Vader, Michael, Chris Lockwood, and Vanessa Ortiz	17213	<i>Coast Highway Corridor Study Project, Oceanside, California, Phase I Cultural Resources Assessment</i>	2016

Author	SCIC # (SD-)	Title	Date
Wade, Sue	17440	<i>Fairfield Inn & Suites: Archaeological Survey</i>	2015
Wade, Sue A. and Susan M. Hector	01677*	<i>A Cultural Resource Survey of the Loma Alta Creek Improvement Plan Area</i>	1989
Wilson, Stacie	-*	<i>Cultural Resources Constraints Memorandum – Loma Alta Slough Restoration Area</i>	2018
York, Andrew and Christopher L. Shaver	09494	<i>Cultural Resources Documents for the Coastal Rail Trail Project City of Oceanside San Diego County, California</i>	2005
York, Andrew L. and Jon Hildebrand	13488	<i>Cultural Resources Investigation in Support of Consultation for the Regional Beach Sand II Project San Diego County, California</i>	2011

*Indicates study overlaps APE

Wilson 2018

In April 2018, Helix Environmental Planning (Helix) conducted a cultural resources constraints analysis for the Project which encompasses the entirety of the APE. The constraints analysis included a records search conducted at the CHRIS-SCIC, an SLF search conducted by the NAHC, and a cultural resource survey of the Project footprint. No cultural resources were identified as a result of the constraints analysis. Helix recommended that a cultural resources assessment report be prepared in support of the Section 404 permit and to be used by USACE as part of the Section 106 process.

Previously Recorded Cultural Resources

The records search indicated that 56 cultural resources have been previously recorded within a 1-mile radius of the APE including: six prehistoric archaeological sites (P-37-006882, -012600, -014227, -028351, and -132111); two multicomponent archaeological sites (P-37-033869 and CA-SDI-13212); one prehistoric isolate (P-37-033331); and 47 historic architectural resources (P-37-016260, -016261, -027452, -035464, -036018, -036019, and -037136 through -037177) (**Table 2**). No cultural resources have been previously recorded within or immediately adjacent to (within 50 feet of) the APE.

TABLE 2
PREVIOUSLY RECORDED CULTURAL RESOURCES

Primary # (P-37-)	Trinomial (CA-SDI-)	Description	Date Recorded	Eligibility Status
006882	6882	Prehistoric archaeological site: shell midden and artifact scatter	1979	Not evaluated
012600	12600	Prehistoric archaeological site: artifact scatter and bedrock milling feature	1992	Not evaluated
014227	14059	Prehistoric archaeological site: shell scatter	1994	Not evaluated
016260	-	Historic architectural resource: single family residence constructed in 1947	1997	Recommended ineligible
016261	-	Historic architectural resource: single-family residence constructed in 1926	1997	Recommended ineligible
027452	17907	Historic architectural resource: cemetery that dates to between the 1880s and the early 1900s	2006	Not evaluated
028351	18348	Prehistoric archaeological site: shell scatter	2007	
033331	-	Prehistoric isolate: bifacial mano fragment	2013	Not eligible
033869	-	Multicomponent archaeological site: prehistoric shell scatter and historic-period refuse scatter	2014	Not evaluated
035464	-	Historic architectural resource: commercial building constructed in 1947	2014	Recommended ineligible
036018	-	Historic architectural resource: multiple family property constructed in 1936	2016, 2018	Not evaluated
036019	-	Historic architectural resource: single family residence constructed in 1947	2016	Recommended ineligible
037136	-	Historic architectural resource: multiple family property constructed in 1936	2012	Recommended ineligible
037137	-	Historic architectural resource: single family residence constructed in 1954	2012	Recommended ineligible
037138	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037139	-	Historic architectural resource: single family residence constructed in 1947	2012	Recommended ineligible
037140	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037141	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037142	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037143	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037144	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037145	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037146	-	Historic architectural resource: single family residence constructed in 1948	2012	Recommended ineligible
037147	-	Historic architectural resource: multiple family property constructed in 1952	2012	Recommended ineligible
037148	-	Historic architectural resource: single family residence constructed in 1948	2012	Recommended ineligible
037149	-	Historic architectural resource: multiple family property constructed in 1960	2012	Recommended ineligible
037150	-	Historic architectural resource: single family residence constructed in 1958	2012	Recommended ineligible
037151	-	Historic architectural resource: single family residence constructed in 1960	2012	Recommended ineligible
037152	-	Historic architectural resource: multiple family property constructed in 1960	2012	Recommended ineligible

Primary # (P-37-)	Trinomial (CA-SDI-)	Description	Date Recorded	Eligibility Status
037153	-	Historic architectural resource: single family residence constructed in 1960	2012	Recommended ineligible
037154	-	Historic architectural resource: single family residence constructed in 1959	2012	Recommended ineligible
037155	-	Historic architectural resource: single family residence constructed in 1961	2012	Recommended ineligible
037156	-	Historic architectural resource: single family residence constructed in 1938	2012	Recommended ineligible
037157	-	Historic architectural resource: single family residence constructed in 1955	2012	Recommended ineligible
037158	-	Historic architectural resource: commercial building constructed in 1967	2012	Recommended ineligible
037159	-	Historic architectural resource: multiple family property constructed in 1968	2012	Recommended ineligible
037160	-	Historic architectural resource: multiple family property constructed in 1940	2012	Recommended ineligible
037161	-	Historic architectural resource: multiple family property constructed in 1955	2012	Recommended ineligible
037162	-	Historic architectural resource: multiple family property constructed in 1966	2012	Recommended ineligible
037163	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037164	-	Historic architectural resource: multiple family property constructed in 1950	2012	Recommended ineligible
037165	-	Historic architectural resource: single family residence constructed in 1934	2012	Recommended eligible
037166	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037167	-	Historic architectural resource: single family residence constructed in 1952	2012	Recommended ineligible
037168	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037169	-	Historic architectural resource: single family residence constructed in 1944	2012	Recommended ineligible
037170	-	Historic architectural resource: single family residence constructed in 1959	2012	Recommended ineligible
037171	-	Historic architectural resource: single family residence constructed in 1950	2012	Recommended ineligible
037172	-	Historic architectural resource: multiple family property constructed in 1960	2012	Recommended ineligible
037173	-	Historic architectural resource: multiple family property constructed in 1960	2012	Recommended ineligible
037174	-	Historic architectural resource: single family residence constructed in 1951	2012	Recommended ineligible
037175	-	Historic architectural resource: single family residence constructed in 1940	2012	Recommended ineligible
037176	-	Historic architectural resource: single family residence constructed in 1952	2012	Recommended ineligible
037177	-	Historic architectural resource: single family residence constructed in 1952	2012	Recommended ineligible
132111	132111	Prehistoric archaeological site: shell scatter	1993	Not evaluated
-	13212	Multicomponent archaeological site: prehistoric shell scatter and a historic-period refuse scatter	1993	Recommended ineligible

Native American Outreach

Native American outreach was conducted for the Project by ESA in support of USACE's Section 106 consultation process. The outreach conducted by ESA is separate from the AB 52 consultation process being undertaken by the City in support of the IS/MND.

An SLF search for the Project was requested from the NAHC on June 4, 2019. The results letter provided by the NAHC on June 18, 2019 indicates that Native American cultural resources are located in the APE's vicinity, but did not provide additional details. The NAHC recommended contacting the La Jolla Band of Luiseño Indians for more information. The NAHC also provided a list of Native American contacts. ESA conducted outreach with the 31 Native American representatives identified on the list provided by the NAHC.

ESA sent outreach letters via certified mail on March 4, 2020. The letters described the Project and included a map depicting the location of the APE. Recipients were requested to reply with any information concerning Native American cultural resources that might be affected by the proposed Project. Follow-up phone calls were conducted on March 11, 2020 and follow-up emails were sent on April 6, 2020. **Table 3** provides a summary of ESA's outreach efforts. Documentation pertaining to Native American outreach is attached as **Appendix B**.

TABLE 3 SUMMARY OF NATIVE AMERICAN OUTREACH

Contact	Tribe/Organization	Date Letter Mailed	Date of Follow-up Phone Call	Date of Follow-up Email	Response
Patricia Garcia-Plotkin, Director	Agua Caliente Band of Cahuilla Indians	3/4/2020	3/11/2020	-	Arysa Gonzalez Romero, Historic Preservation Technician, responded via email stating the APE is located outside of Agua Caliente's Traditional Use Area and the tribe defers to groups in closer proximity
Jeff Grubbe, Chairperson	Agua Caliente Band of Cahuilla Indians	3/4/2020	3/11/2020	-	See response from Ms. Gonzalez Romero
Edwin Romero, Chairperson	Barona Group of the Capitan Grande	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date
Ralph Goff, Chairperson	Campo Band of Diegueno Mission Indians	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date
Michael Garcia, Vice Chairperson	Ewiiapaayp Tribe	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date
Robert Pinto, Chairperson	Ewiiapaayp Tribe	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date
Clint Linton, Director of Cultural Resources	lipay Nation of Santa Ysabel	3/4/2020	3/11/2020	-	Spoke with Mr. Linton who recommended a Kumeyaay monitor be retained to be present for Project-related cultural surveys and ground disturbance.
Virgil Perez, Chairperson	lipay Nation of Santa Ysabel	3/4/2020	3/11/2020	-	See response from Mr. Linton
Rebecca Osuna, Chairperson	Inaja-Cosmit Band of Indians	3/4/2020	3/11/2020	-	Spoke with Lisa Contreras, present Chairwoman of the Inaja-Cosmit Band of Indians, and she has no comments or concerns regarding the project.
Erica Pinto, Chairperson	Jamul Indian Village	3/4/2020	3/11/2020	4/10/2020	Called phone number, but was unable to leave voicemail. No response to date.
Carmen Lucas,	Kwaaymii Laguna Band of Mission Indians	3/4/2020	3/11/2020	-	Left voicemail. No response to date
Fred Nelson, Chairperson	La Jolla Band of Luiseño Indians	3/4/2020	3/11/2020	-	Called phone number, but was unable to leave voicemail. No response to date.
Gwendolyn Parada, Chairperson	La Posta Band of Diegueno Mission Indians	3/4/2020	3/11/2020	-	Spoke with Ms. Parada who recommended a Native American monitor be retained to monitor project-related ground disturbance

Contact	Tribe/Organization	Date Letter Mailed	Date of Follow-up Phone Call	Date of Follow-up Email	Response
Javaughn Miller, Tribal Administrator	La Posta Band of Diegueno Mission Indians	3/4/2020	3/11/2020	-	Same phone number for Ms. Parada. See comment above.
Angela Elliott Santos, Chairperson	Manzanita Band of Kumeyaay Nation	3/4/2020	3/11/2020	-	Called phone number, but was unable to leave voicemail. No email address was provided and no response has been received to date.
Michael Linton, Chairperson	Mesa Grande Band of Diegueno Mission Indians	3/4/2020	3/11/2020	4/10/2020	Spoke with receptionist who stated Mr. Linton will send a letter if he has comments, but if he has no comments he will not reply.
Shasta Gaughen, Tribal Historic Preservation Officer	Pala Band of Mission Indians	3/4/2020	3/11/2020	4/10/2020	The APE is located outside of Pala's Traditional Use Area, but is situated in close proximity to the Pala Reservation. Ms. Gaughen requested to be kept apprised of the Project's progress and recommended tribal monitoring.
Temet Aguilar, Chairperson	Pauma Band of Luiseño Indians	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date.
Mark Macarro, Chairperson	Pechanga Band of Luiseño Indians	3/4/2020	3/11/2020	4/10/2020	Called phone number, but was unable to leave voicemail. No response to date.
Paul Macarro, Cultural Resources Coordinator	Pechanga Band of Luiseño Indians	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date.
Jim McPherson, Tribal Historic Preservation Officer	Rincon Band of Luiseño Indians	3/4/2020	3/11/2020	-	In a letter dated, March 12, Rincon Tribal Historic Preservation Officer, Cheryl Madrigal, stated the APE is located in Rincon's area of interest and is concerned the project could impact cultural resources and/or human remains.
Bo Mazzetti, Chairperson	Rincon Band of Luiseño Indians	3/4/2020	3/11/2020	-	See response from Ms. Madrigal
San Luis Rey, Tribal Council	San Luis Rey Band of Mission Indians	3/4/2020	3/11/2020	-	In a letter dated March 17, 2020, San Luis Rey legal counsel, Merri Lopez-Keifer, stated cultural resources are known to be located in close proximity to the APE and recommended that a Luiseño monitor be retained to monitor and construction. Ms. Lopez-Keifer also asked that San Luis Rey be contacted to arrange a meeting.
John Flores, Environmental Coordinator	San Pasqual Band of Diegueno Mission Indians	3/4/2020	3/11/2020	4/10/2020	Angelina Gutierrez, Tribal Historic Preservation Office Monitoring Supervisor, indicated that the APE is located outside of San Pasqual's Traditional Use Area and deferred to other tribes.
Allen Lawson, Chairperson	San Pasqual Band of Diegueno Mission Indians	3/4/2020	3/11/2020	-	Left voicemail. No response to date.
Scott Cozart, Chairperson	Soboba Band of Luiseño Indians	3/4/2020	3/11/2020	-	Left voicemail. No response to date.
Joseph Ontiveros, Cultural Resource Department	Soboba Band of Luiseño Indians	3/4/2020	3/11/2020	-	Spoke with Mr. Ontiveros who deferred to other tribes in the area.
Lisa Haws, Cultural Resources Manager	Sycuan Band of the Kumeyaay Nation	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date
Cody J. Martinez, Chairperson	Sycuan Band of the Kumeyaay Nation	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date.
Ernest Pingleton, Tribal Historic Officer, Resource Management	Viejas Band of Kumeyaay Indians	3/4/2020	3/11/2020	4/10/2020	Left voicemail. No response to date.
Robert Welch, Chairperson	Viejas Band of Kumeyaay Indians	3/4/2020	3/11/2020	-	Left voicemail. No response to date.

As a result of the Native American Outreach, five formal responses were received from the Agua Caliente Band of Cahuilla Indians (Agua Caliente), the Rincon Band of Luiseño Indians, the San Luis Rey Band of Mission Indians (San Luis Rey), the Pala Band of Mission Indians (Pala), and the San Pasqual Band of Band of Mission Indians (San Pasqual). These responses are detailed in the following paragraphs.

In an email dated March 11, 2020, Arysa Gonzalez Romero, Historic Preservation Technician for the Agua Caliente, stated the APE is located outside the tribe's Traditional Use Area and deferred to groups located in closer proximity to the APE.

In a letter dated March 12, 2020, Cheryl Madrigal, Rincon's Tribal Historic Preservation Officer, stated the APE is located within Rincon's Area of Historic Interest and expressed concern the Project could impact cultural resources and/or human remains. Ms. Madrigal identified one Luiseño place named, *'éngxalash*, which is located within 1 mile of the APE.

In a letter dated March 17, 2020, Merri Lopez-Keifer, Chief Legal Counsel for the San Luis Rey, stated the tribe is affiliated with the APE and the surrounding region, and is aware of cultural resources within close proximity to the APE. Ms. Lopez-Keifer recommended that a Luiseño Native American monitor be present during all ground disturbing activities and cultural resource surveys. Ms. Lopez-Keifer also requested that any additional discussion regarding the Project be done in person as part of a meeting with representatives of San Luis Rey. Ms. Lopez-Keifer asks that all cultural resource studies completed in the APE or for the benefit of the Project be provided to the tribe.

In a letter dated April 10, 2020, Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians (Pala), stated the APE is located outside of Pala's Traditional Use Area but is situated in close proximity to the Pala Reservation. Ms. Gaughen requested that she be kept apprised of the Project's progress as a courtesy and that she be placed on the receiving list for Project updates, cultural studies, and/or any documentation regarding previously and/or newly recorded archaeological sites. Ms. Gaughen also requested that should the APE boundaries be modified to extend beyond their current limits, that she be updated regarding the change. Ms. Gaughen recommended that Approved Cultural Monitors be present on-site during all ground disturbing activities and cultural resources studies.

In a letter dated April 13, 2020, Angelina Gutierrez, Tribal Historic Preservation Office Monitoring Supervisor for the San Pasqual Band of Mission Indians (San Pasqual), stated the APE is located outside of San Pasqual's Traditional Use Area and defers to tribal groups located in closer proximity to the APE.

Historic Maps and Aerial Photographs

Historic maps and aerial photographs were examined in order to provide historical information about the APE and to contribute to an assessment of the APE's archaeological sensitivity. Available maps include: the 1870 U.S. Surveyor General's survey plat of Township 11 South, Range 5 West; the 1893 and 1898 Oceanside 15-minute topographic quadrangles; the 1901 San Luis Rey 30-minute topographic quadrangle; and the 1948 and 1968 San Luis Rey 7.5-minute topographic

quadrangles. Historic aerial photographs of the APE from 1938, 1947, 1953, 1964, 1967, 1980, 2005, and 2012 were also examined (historicaerials.com, 2019).

The available historic maps and aerial photographs indicate that the APE and surrounding area has largely been used for residential and commercial development associated with the City of Oceanside since the late 19th century. The 1870 U.S. Surveyor General's survey plat map shows a pond located immediately northeast of the APE. The 1893 and 1898 Oceanside 15-minute topographic maps, as well as the 1901 San Luis Rey 30-minute topographic map, show a grid of northeast-southwest and northwest-southeast oriented streets with a number of structures located immediately southeast of the APE on the southeast side of the Loma Alta Slough. The northwest-southeast oriented Southern California Railroad right-of-way is shown passing through the Slough as is a road that corresponds to present-day South Pacific Street. The 1948 topographic map shows a large number of structures lining the grid of streets indicated in the previous maps, as well as multiple structures located immediately to the southwest and northeast of the APE. The northwest-southeast oriented Highway 101, which corresponds to present-day South Coast Highway, is shown bisecting Loma Alta Creek immediately northeast of the Slough. The 1968 topographic map shows that the town center of Oceanside has expanded to the northwestern boundary of the Slough. The map also shows a sewage disposal facility, which corresponds to the present-day La Salina WWTP located immediately northwest of the APE and there appear to be three ponds or basins associated with the treatment facility within the APE.

The historic aerial photographs largely reflect what is presented in the topographic maps. The 1938 and 1947 historic aerial photographs show the residential development southeast of the APE; however, the area in the immediate vicinity of the Slough remains largely undeveloped with the exception of a handful of structures on the southwest side of South Pacific Street. The 1953 historic aerial photograph shows residential development has expanded to both the southern and northern margins of the Slough. The 1964 and 1967 aerial photographs show the sewage treatment facility located on the northwest side of the Slough and show that the APE southwest of the Southern California Railroad right-of-way consists of a large pond or basin bisected by a narrow spit of land. The photographs show commercial or industrial buildings in the APE on the northeast side of the railroad right-of-way. The 1980 aerial photograph shows that the La Salina WWTP has been expanded and that the ponds or basins present in the southwestern portion of the APE in the 1960s have been filled in. The photograph shows the northeastern portion of the APE was largely paved over and a number of structures are indicated. The 2005 aerial photographs indicate that the La Salina WWTP expanded to the northwestern boundary of the Slough and that Buccaneer Beach Park had been constructed on the southeast side of the APE. The 2012 aerial photograph shows the buildings in the northeastern portion of the APE, southwest of South Coast Highway have been demolished.

In sum, the historic topographic map and aerial photograph review indicates that the APE has been heavily disturbed, especially during the latter half of the 20th century with industrial, commercial, and recreational development including construction of the La Salina WWTP and Buccaneer Beach Park in the southwestern portion of the APE, and commercial/industrial development in the northeastern portion of the APE.

Geoarchaeological Review

The APE includes the Slough and adjacent floodplain at the confluence of Loma Alta Creek with the Pacific Ocean. The Slough is comprised of subtidal areas, emergent marsh, and surrounding uplands. Hydrologic conditions are highly seasonal. From May to October, the mouth of the Slough is typically blocked by sand, causing the Slough to fill with freshwater. During winter and spring months, sufficient freshwater flows from storms result in breaching of the sand and increased brackishness.

During the Last Glacial Maximum prior to 20,000 years ago, global sea levels were up to 400 feet lower than modern conditions (Berger, 2008) and the California shoreline was well west of its current position. With glacial retreat, there was a rapid rise in sea levels during the Late Pleistocene and Early Holocene; during this time the shoreline was still to the west of its current location. The rate of sea level rise slowed during the Middle Holocene, and sea levels in southern California have risen approximately 20-25 feet over the last 6,000 years (Reynolds and Simms, 2015). The rise in sea level led to a reduction in base level and increased deposition along the lower reaches of channels flowing into the Pacific Ocean, building alluvial floodplains and marshes.

Late Pleistocene to Early Holocene archaeological sites, if present, are likely to be oriented towards terrestrial subsistence resources, given the substantial distance to marine resources at this time. As sea level continued to rise, however, marine and estuary resources would have become more available, and is consistent with the presence of several nearby archaeological shell midden sites.

Geology

The APE is underlain by late Holocene-age alluvial floodplain (less than 10,000 years old) and late to middle Pleistocene-age (approximately 80,000 to 200,000 years old) old paralic (interfingering marine and continental) deposits (Kennedy and Tan, 2005). Due to their age, the Pleistocene deposits are considered to have a very low potential to contain archaeological resources, with the exception of the upper portion of this unit that has been preserved intact and been overlain by Holocene alluvium or imported fill. Holocene alluvium is considered to have a high potential to contain buried archaeological resources.

Soils

Soils across the entire APE have been mapped as Tujunga sandy loam (NRCS, 2015). The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Slopes range from 0 to 9 percent. Restrictive features are typically deeper than 80 inches. In urban areas there is often a thin layer of human-transported material at surface. Geotechnical testing carried out for the Project, identified a layer of disturbed fill above native soils in each of the four locations subject to geotechnical exploration. Disturbed fill was documented extending from the surface to 5-12.5 feet below the ground surface and included fragments of asphalt, gravel, and plastics (Taylor Group, 2020).

The typical soil pedon (profile) consists of a thin A-horizon overlying one or more alluvial C-horizons. Where present, soil structure is weak and fine, reflecting limited time since deposition of

the parent material and beginning of soil formation. The apparent youthfulness of this soil is consistent with the Late Holocene deposition of the parent material. The significant depth to restrictive feature implies that past human occupations within the floodplain have the potential to have been inundated and buried by alluvial deposits.

Conclusion

The geoarchaeological review indicates Holocene-age alluvial deposits underlying the APE have high potential for subsurface archaeological deposits. However, some areas of the APE have been heavily disturbed as part of the construction of the La Salina WWTP and development along the northern parcels. These areas consist of a layer of disturbed fill extending from the surface to 5-12.5 feet below the ground surface. Project-related ground disturbance may exceed the depths of previous disturbance in certain areas and could intrude into intact native soils. Based on this assessment, the APE should be considered moderately sensitive for the presence of subsurface archaeological deposits within native soils underlying the approximately 5-12.5-foot-deep layer of disturbed fill.

Cultural Resources Survey

Methods

Cultural resources surveys of the APE were conducted on September 2, 2015 as part of the Remediation Project, and on June 5, 2020 as part of the current Project by ESA archaeologist, Michael Vader, B.A. The surveys were aimed at identifying the presence of surface archaeological materials and historic-period built resources within the APE. All accessible portions of the APE with visible ground surface were surveyed in a systematic manner with transect intervals spaced no greater than 5 meters (approximately 16.5 feet) apart. Inaccessible portions of the APE and/or portions with no ground surface visibility were subject to a reconnaissance-level survey to identify the presence of historic-period built resources. Areas of the APE consisting of manicured lawns were subject to opportunistic survey wherein clearings and rodent burrows were intensively inspected for the presence of cultural resources.

Results

The APE consists of eight discrete areas that exhibit varying degrees and types of disturbance. These areas are labeled 1-8 in **Figure 6** and include: 1) the northeastern most, triangular-shaped parcel, which includes the Buel parcel, located in the northeast portion of the APE, on the southwest side of the South Coast Highway; 2) the Parent Family Trust parcel, which is connected to and located immediately southwest and adjacent to the triangular parcel; 3) the parcel located immediately east of the Parent Family Trust parcel; 4) the parcel located immediately south of the ATSF right-of-way; 5) a small area immediately northeast of the NCTD right-of-way; 6) the Loma Alta Creek and existing wetland; 7) the southeastern margin of La Salina WWTP; and 8) the northwestern margin of Buccaneer Beach Park. The following provides a detailed description of the survey conditions within each of these areas. No cultural resources were documented as a result of the survey.

1. The triangular-shaped parcel was covered in a thin layer of mulch and sparse seasonal grasses that reduced ground surface visibility to approximately 75 percent (**Figure 7**). A systematic survey of the parcel was conducted and no cultural resources were identified.
2. The Parent Family Trust parcel included a graded lot that is used for the storage of RVs and trailers. The northwestern portion of the parcel was fenced and inaccessible, but appeared to be comprised of a gravel lined parking lot with RVs and trailers parked within in (Figure 7). The eastern a portion of the lot was graded flat and clear of vegetation resulting in 100 percent ground surface visibility (**Figure 8**). The accessible portions of this parcel were subject to systematic survey and no cultural resources were identified.
3. The parcel immediately south of the Parent Family Trust parcel was covered in thick grasses which reduced visibility to 25 to 50 percent (Figure 8). The accessible portions of the parcel were subject systematic survey and no cultural resources were identified.
4. The parcel located immediately northeast of the NCTD right-of-way was based in gravel, resulting in 0 percent ground surface visibility (**Figure 9**). A reconnaissance-level survey of the parcel was conducted and no cultural resources were documented.
5. The parcel located immediately east of the NCTD right-of-way is gated at its northern margin, bounds Loma Alta Slough at its southern margin, bounds the NCTD right-of-way at its western margin and is barricaded by an existing fence at its eastern margin. As such, the area could not be accessed during the survey.
6. The Loma Alta Creek and existing wetlands were inundated or covered in thick vegetation including grasses and cattails, and contained no solid ground surface that could be surveyed (Figure 9). As such, the parcel could not be surveyed.
7. The southeastern margin of La Salina WWTP was largely built over and contained no undisturbed ground surface (**Figure 10**). A reconnaissance-level survey of the area was conducted in order to identify historic-period built resources. No cultural resources were documented.
8. The northwestern margin of Buccaneer Beach Park consists of manicured lawns and a northeast-southwest trending walking path (Figure 10). The lawns and walking path obscured the ground surface resulting in 0-5 percent ground surface visibility. This area was subject to an opportunistic survey wherein visible ground surface was intensively inspected for the presence of cultural resources. No cultural resources were documented.



SOURCE: ESA, 2015; 2020

Loma Alta Slough Wetlands Enhancement Project

Figure 6
Survey Coverage



Triangular-shaped Parcel (view to west)



RV/Trailer storage portion of Parent Family Trust Parcel (view to west)

SOURCE : ESA, 2015 and 2020

Loma Alta Slough Wetland Enhancement Project

Figure 7
Survey Photos



Eastern Portion of Parent Family Trust Parcel (view to NW)



Parcel south of Parent Family Trust Parcel (view to east)

SOURCE: ESA, 2015 and 2020

Loma Alta Slough Wetland Enhancement Project

Figure 8
Survey Photos



Parcel Immediately Northeast of NCTD Right-of-Way (view to NE)



Loma Alta Slough (view to south)

SOURCE: ESA, 2015 and 2020

Loma Alta Slough Wetland Enhancement Project

Figure 9
Survey Photos



La Salina WWTP (view to SW)



Northwestern Margin of Buccaneer Beach Park (view to east)

SOURCE: ESA, 2015 and 2020

Loma Alta Slough Wetland Enhancement Project

Figure 10
Survey Photos

Conclusions and Recommendations

No cultural resources were identified within the APE as a result of this assessment. As such, the Project would result in **No Historic Properties Affected** under Section 106 of the NHPA.

Although no known cultural resources would be impacted by the Project, the geoarchaeological review indicates the Holocene-age alluvium underlying the APE has a moderate potential to contain subsurface archaeological deposits. In addition, many of the comments received from Native American groups as part of ESA's outreach efforts recommend a Native American monitor should be retained to monitor Project construction. The historic map and aerial photograph review indicates the APE has experienced a high degree of past disturbances associated with industrial and recreational development including construction of the La Salina WWTP, construction of Buccaneer Beach Park, and development of the northeastern parcels. Project-related ground disturbance would extend to depths of 7 to 8 feet, possibly exceeding the depths of previous disturbances, which range from 5 to 12.5 feet below the ground surface. As such, Project-related ground disturbing activities could extend into undisturbed native soils containing archaeological deposits in some areas. Should intact archaeological deposits be encountered during Project implementation they may qualify as historical or unique archaeological resources under CEQA. Therefore, Project implementation could result in a significant impact to previously unidentified archaeological resources. ESA provides the following recommendations to ensure the Project would result in less than significant impacts to historical or unique archaeological resources under CEQA. In addition to these measures, the lead federal agency shall be afforded the opportunity to review discoveries in accordance with 36 CFR 800.13 – Post-review Discoveries.

1. **Retention of a Qualified Archaeologist:** Prior to the start of ground-disturbing activities, the City will retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior, 2008) to carry out all mitigation related to cultural resources.
2. **Construction Worker Cultural Resources Sensitivity Training:** Prior to start of ground-disturbing activities, the qualified archaeologist will conduct cultural resources sensitivity training for all construction personnel. Construction personnel will be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City will ensure that construction personnel attend the training and retain documentation demonstrating attendance.
3. **Construction Monitoring:** An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor will observe all ground-disturbing activities that extend beyond 4 feet below the ground surface, the minimum known depth of fill. The qualified archaeologist, in coordination with the City, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring will be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project area. The

Native American monitor will be selected from the Native American groups identified by the NAHC as having affiliation with the project area. The archaeological monitor and Native American monitor will be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The archaeological monitor will keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist will prepare a monitoring report that details the results of monitoring. The report will be submitted to the City and any Native American groups who request a copy. A copy of the final report will be filed at the SCIC.

4. **Inadvertent Discovery of Archaeological Resources:** In the event of the unanticipated discovery of archaeological materials, the contractor will immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction should not resume until the qualified archaeologist has conferred with the City on the significance of the resource. The USACE will also be afforded the opportunity to determine whether the discovery requires addressing under Section 106 Post-Review Discoveries provisions provided in 36 CFR 800.13.

If it is determined that the discovered archaeological resource constitutes a historical resource or unique archaeological resource under CEQA and/or a historic property under Section 106 of the NHPA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Data Recovery and Treatment Plan will be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and City will consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

5. **Inadvertent Discovery of Human Remains:** If human remains are encountered, the contractor will halt work in the vicinity (within 100 feet) of the discovery and contact the San Diego County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The City and USACE will also be notified. If the County Coroner determines the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate an MLD for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, the contractor will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

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APPENDIX A

Personnel



Candace R. Ehringer, RPA

Cultural Resources Program Manager

EDUCATION

MA, Anthropology,
California State
University, Northridge

BA, Anthropology, East
Carolina University

21 YEARS OF EXPERIENCE

QUALIFICATIONS

Register of Professional
Archaeologists, No.
15146

Meets Caltrans PQS for
Co-Principal Investigator

Meets Secretary of the
Interior's PQS for
Archaeology and History

Orange County Certified
Archaeologist

CA State BLM Permitted

HAZWOPER Certified

PROFESSIONAL AFFILIATIONS

Society for California
Archaeology

Society for Historical
Archaeology

California Preservation
Foundation

Association of
Environmental
Professionals

Caltrans Introduction to
Cultural Resources
Compliance, UC Davis
Extension, 2017

Candace is a cultural resources program manager with 21 years of experience in California. She provides technical and compliance oversight for archaeological survey, evaluation, and treatment; built environment studies, including the documentation and evaluation of buildings, structures, and districts; Tribal resources consultations; and paleontological resources survey and sensitivity assessments. Candace also has experience working with agencies and Tribes to identify Traditional Cultural Properties and tribal cultural resources. She is skilled in the evaluation, analysis of effects, and development of measures to avoid, minimize, or mitigate adverse effects for tribal, archaeological, historic, and paleontological resources under Section 106 and CEQA.

Candace manages multi-disciplinary cultural resources projects and is adept at building teams of specialists that are uniquely qualified for the project at hand. Her project work includes experience in every county in Southern California, as well as many in the Central Coast, Central Valley, and Northern California regions. She is proficient in the areas of CEQA, NEPA, Section 106, and AB 52 compliance, and routinely provides planning and strategic guidance to clients on complex projects within the larger scope of state and federal regulations.

Relevant Experience

California State Coastal Conservancy, Ballona Wetlands Restoration Project, Los Angeles, CA. Archaeologist. The historical Ballona Wetlands, which is now reduced to 577 acres, once occupied a 2,000-acre expanse of critical coastal habitat and included some of the most diverse wetland habitat types in the Los Angeles Basin due to the presence of both freshwater and saltwater environments. The Ballona Wetlands Restoration EIR/EIS evaluates four alternatives that include the following key elements: ecosystem restoration, flood and stormwater management (by allowing a naturalized, rather than concrete-lined, Ballona Creek), public access improvements, infrastructure and utility modifications (including abandonment and relocation of Southern California Gas Company monitoring wells and pipelines), a full-scale implementation and restoration program, a state-of-the-art monitoring and adaptive management program, and ongoing operations and maintenance activities. Candace provided support for the cultural resources component of the project, which has involved field survey and excavation, archival research, geoarchaeological assessment, SHPO and USACE outreach, and reporting to document cultural resources in the area. The area is considered exceptionally sensitive to local Native American groups and extensive consultation and coordination with local tribes and the California Department of Parks and Recreation has been essential.

Bonsall High School Project, Bonsall, San Diego County, CA. Cultural Resources Project Manager. ESA is preparing an EIR for the proposed project, which would

include the construction of a new high school that would accommodate 1,500 students in grades 9-12 and 50-60 district staff. The proposed high school would include 140,000 – 157,000 square feet (SF) of floor space and would be constructed in phases. Candace managed the cultural resources technical studies, which included archival research, survey, and reporting. One previously recorded cultural resource, P-37-028136 (Gird Road), was identified adjacent to the project area and will be used to access the area during construction; however, the road would not be re-paved, re-aligned, or otherwise altered as part of the project, and the no impacts would occur as a result of the project. The project area was identified as sensitive for prehistoric resources and mitigation measures were developed to reduce impacts.

Helix Water District, El Monte Valley Project, San Diego County, CA. *Cultural Resources Project Manager.* As part of an as-needed contract with Helix Water District (HWD), ESA provided professional environmental consulting services for the El Monte Valley Mining, Reclamation and Groundwater Recharge project. The project includes mining of approximately 10 million tons of aggregate from the El Monte Valley in San Diego County, reclamation of the mined areas to open space and rural recreation uses, and implementation of a groundwater recharge project utilizing highly treated wastewater. Candace managed the cultural resources portion of the project, including field survey, Native American coordination, research, and the preparation of a CEQA and Section 106 compliant technical report. The project approach conformed with County of San Diego, Guidelines for Determining Significance. The Bureau of Reclamation is the lead federal agency for the project.

Richard A Reynolds Desalination Plant Phase 2 Expansion-Solar Project MND, San Diego, CA. *Archaeologist.* ESA will be preparing an EIR for a PV solar facility to be co-located with the Richard A. Reynolds Desalination Plant. The purpose of the proposed project is to construct solar panel arrays within the bounds of the desalination facilities to provide enough electricity to power the Phase II expansion of the plant. Michael conducted the cultural resources survey and prepared a Phase 1 Cultural Resources Study for the project.

City of Santa Barbara, Mission Creek Lagoon and Laguna Channel Restoration Project, Santa Barbara County, CA. *Cultural Resources Project Manager.* Candace managed the preparation of a technical memorandum documenting a preliminary cultural resource study and conducted the field survey. The study identified several cultural resources that could pose a regulatory constraint on the project, including 18 historic built resources. The area was also identified as sensitive for archaeological resources. ESA is currently assisting the City of Santa Barbara identify a design alternative within the Project area that is economically feasible and meets the multiple objectives of flood control, water quality improvement, public safety and access, and habitat restoration.

Metropolitan Air Park, San Diego County, CA. *Archaeologist.* ESA is preparing a master development plan, EIR, and EA for Metropolitan Air Park at Brown Field Airport in the City of San Diego. The project involves a 50-year land lease from the City of San Diego for a 400-acre portion of the airport property to be developed into airport and non-airport related land uses, which requires the approval of the City of San Diego and the Federal Aviation Administration. Candace participated

in the cultural resources survey, prepared a research design, served as field director for subsurface testing at archaeological site CA-SDI-10622, and coordinated Native American involvement. She co-authored the technical report and provided recommendations regarding the site's significance. All documents were prepared in conformance with City of San Diego Historical Resources Guidelines, CEQA, and Section 106.

City of Newport Beach, Big Canyon Restoration Wetlands Project, Orange County, CA. *Principal Investigator. City of Newport Beach, Big Canyon Wetland and Creek Restoration Project IS/MND, Newport Beach, CA, CEQA Project Manager. ESA provided CEQA approval, permitting and hydrology analysis for the project. The proposed project grant of for the design, permitting and implementation of a treatment wetland in the Big Canyon Preserve off of Jamboree Drive in Newport Beach. ESA is supporting project partner Burns & McDonald on the preparation of this project including the development of the restoration plan, CEQA approval, and permitting approval for the City of Newport Beach. The treatment wetlands will be designed to treat dry weather flows for selenium and storm water runoff from the roadway for metals.*

City of Long Beach, Los Cerritos Wetlands and Oil Production Project EIR, Los Angeles County, CA. *Cultural Resources Specialist.* ESA is has prepared an EIR for the Los Cerritos Wetlands and Oil Production project in the City of Long Beach. The project includes a comprehensive wetlands restoration that will restore a privately owned oil field in the City of Long Beach through the creation of a wetlands mitigation bank. The project will occur on four properties and will relocate and modernize existing oil production facilities. In addition, the project will include the construction of facilities to support oil production and will include a visitor's center and pedestrian paths on the newly restored wetlands. Dr. Bever conducted peer review of archaeological, historical, and paleontological resources technical reports, provided assistance with AB 52 consultation, and prepared the cultural resources section of the EIR.



Michael Vader

Senior Associate

EDUCATION

BA, Physical Anthropology, University of California, Santa Barbara

M.A., Applied Archaeology (In Progress), California State University San Bernardino

13 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Pacific Coast Archaeological Society (PCAS)

SPECIALIZED EXPERIENCE

Analysis of faunal remains including fish and shellfish species

Archaeological Monitoring

Paleontological Monitoring

Environmental Compliance Monitoring

Human osteology and bioarchaeology

Michael is cultural resources specialist with experience working on survey, data recovery, and monitoring projects. Michael has experience with project management, has led crews on multiple surveys and excavations, and is familiar with environmental compliance documents. He has worked on a variety of energy and water infrastructure projects throughout California, including projects in Riverside, San Diego, Imperial, San Bernardino, Los Angeles, Orange, Santa Barbara, San Luis Obispo, Kern, Fresno, Madera, and Inyo Counties, as well as in Clark County Nevada. Michael regularly works as part of a team, coordinating with field staff and agency leads.

Relevant Experience

MFRO Facility for Agriculture Project, City of Escondido, CA. Archaeologist. The City of Escondido retained ESA to conduct Extended Phase I testing for the Membrane Filtration/Reverse Osmosis (MFRO) Facility for Agriculture Project at the request of the State Water Resources Control Board (SWRCB) to obtain funding from the State Revolving Fund. The project includes construction of an MFRO facility to provide advanced treatment for Title 22 quality reuse water for agricultural use. Michael prepared the Extended Phase I work plan, conducted the Extended Phase I excavations, and completed the Extended Phase I report.

Bonsall High School Project, Bonsall, San Diego County, CA. Archaeologist. ESA was retained by the Bonsall Unified School District to conduct a Phase I cultural resources assessment for the Bonsall High School Project in support of an Environmental Impact Report. The project would include the construction of a new high school that would accommodate 1,500 students in grades 9-12 and 50-60 district staff. Michael led the survey and prepared the Cultural Resources Assessment Report for the project.

Pacific Beach Vector Habitat Remediation Project, San Diego, , CA. Archaeologist. The City of San Diego retained ESA to prepare an ISMND for the Pacific Beach Vector Habitat Remediation Project as part of the County of San Diego Vector Habitat Remediation Program. The City is proposing this area for mitigation under the County Department of Environmental Health Vector Habitat Remediation Program because it is a known mosquito breeding habitat. The purpose of the Project is to decrease favorable habitat for mosquitos, improve the water quality in the Kendall Frost Mission Bay Marsh Reserve, and to create tidal marsh, transitional zone and upland habitat by improving the Noyes Street storm drain outfall which drains and discharges into the Reserve. Michael led the cultural resources survey and prepared the Phase I cultural resources assessment report in support of the ISMND.

Sorrento Valley Channel Restoration Project, San Diego, CA. Archaeologist. ESA has been retained by the City of San Diego to prepare an EIR for the

Sorrento/Los Peñasquitos Restoration Program. The Project consists of the restoration of the historic coastal salt marsh habitat within the Los Peñasquitos Lagoon to be completed in two phases. Michael assisted with the cultural resources survey and prepared the Phase I cultural resources assessment in support of the EIR.

El Monte Valley Mining and Reclamation Project, San Diego County, CA.

Archaeologist. El Monte Nature Preserve, LLC retained ESA to conduct an updated Phase I cultural resources survey in support of the El Monte Valley Mining and Reclamation Project. The project includes the extraction of 15-million tons of surface mineral over a 15-year period in the El Monte Valley on land that is zoned for extractive use, and the reclamation and restoration of the project area to open space with an open water pond. Michael led the updated survey, prepared the technical memorandum presenting the results of the survey, and assisted in Extended Phase I testing of archaeological site CA-SDI-13592.

Ballona Wetlands Ecological Reserve Restoration Project, Los Angeles, CA.

Archaeologist. The California State Coastal Conservancy retained ESA to conduct an Extended Phase I investigation at 20 previously recorded shell scatters and Phase II archaeological testing of four historic-period archaeological sites in support of an Environmental Impact Statement/Environmental Impacts Report being prepared for the proposed Ballona Ecological Reserve Restoration Plan Project which would restore native coastal wetland and upland habitats within the 600-acre Ballona Wetlands Ecological Reserve. Michael led the extended Phase I and Phase II fieldwork and assisted in the preparation of the technical report presenting the results and conclusions of the study.

Richard A Reynolds Desalination Plant Phase 2 Expansion-Solar Project MND, San Diego, CA. *Archaeologist.* ESA will be preparing an EIR for a PV solar facility to be co-located with the Richard A. Reynolds Desalination Plant. The purpose of the proposed project is to construct solar panel arrays within the bounds of the desalination facilities to provide enough electricity to power the Phase II expansion of the plant. Michael conducted the cultural resources survey and prepared a Phase 1 Cultural Resources Study for the project.

Richard A. Reynolds Desalination Plant Phase 2 Expansion - Cultural Resources, San Diego, CA. *Archaeologist.* ESA was contracted by the Sweetwater Authority to perform a cultural resources study for the Phase 2 Expansion at the Richard A. Reynolds Desalination Plant. The expansion would increase the desalinated potable water production at the desalination plant from its current 5 million gallons per day (mgd) capacity to 10 mgd. The project requires funding from the United States Bureau of Reclamation (BOR), making it subject to Section 106 of the National Historic Preservation Act. Michael conducted the cultural resources survey, coordinated with the BOR archaeologist, and prepared the cultural resources study for the expansion.



Chris Lockwood, PhD, RPA

Principal Investigator & Geoarchaeologist

EDUCATION

Ph.D., Anthropology
(Archaeology focus),
University of Washington

M.A., Anthropology
(Archaeology focus),
University of Washington

Postgraduate work,
Anthropology, Texas
A&M University

B.A., History, Washington
University in St. Louis

21 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Register of Professional
Archaeologists #2751080

HAZWOPER-certified

Chris has 21 years of experience in archaeology and cultural resources in a broad range of environments including coastal, fluvial, lacustrine, and urban settings. Chris has managed cultural resources projects ranging in scope from reconnaissance surveys to data recovery to construction monitoring. He has designed fieldwork methodologies, formulated Unanticipated Discovery Plans (UDP) and Archaeological Resources Monitoring and Treatment Plans (ARMTs), and assisted clients with cultural resources avoidance and mitigation. As a geoarchaeologist, Chris has used his dual training in earth sciences and anthropology to assess project risks for cultural resources and to evaluate project alternatives. Chris exceeds the Secretary of the Interior's Standards for Professional Archaeologist and is a Registered Professional Archaeologist.

Relevant Experience

Summitview and Fournery Road Improvement Project, Yakima, WA. *Cultural Resources Manager.* ESA assisted the County with environmental compliance on a road realignment and stream relocation project on the North Fork Cowitche Creek. ESA reviewed a previously prepared cultural resources report, updated the project Area of Potential Effects (APE) and conducted field investigations prior to construction. ESA also prepared a Project Monitoring and Inadvertent Discovery Plan. This required active coordination with Army Corps, Washington State Department of Archaeology and Historic Preservation (DAHP), and Tribal staff. ESA then trained on-site contractors on protocols to be followed in the event of an archaeological discovery, conducted all necessary subsurface monitoring during project construction, and documented the fieldwork results in a formal report submitted to the Corps.

SPU Emergency Forcemain Replacement Alternatives Study, Seattle, WA. *Archaeologist.* In September 2017, SPU discovered that a wastewater force main crossing under Shilshole Bay Waterway was leaking. SPU declared an emergency, implemented a temporary above-ground system to bypass dry weather flows, and began developing the Emergency Force Main Replacement Project. The proposed project would replace the portion of the force main that has failed. ESA led the preparation of the SEPA checklist and the expedited permitting documentation for the project. Because the project is located near the Hiram Chittenden Locks within a navigable waterway operated by the US Army Corps of Engineers Facility, Section 408 and Section 10 compliance is required. The project is also obtaining a new easement from the Washington Department of Natural Resources, Hydraulic Project Approval from WDFW, and Shoreline Exemption from Seattle Department of Construction and Inspections. Construction of the project is expected in early 2019.

Cultural Resources Survey Schneider Homes Windcrest Division II, Auburn, WA. *Archaeologist.* Schneider Homes is developing the Windcrest Division II residential development. The project requires a permit from the US Army Corps of Engineers, making it subject to Section 106 of the National Historic Preservation Act. USACE has requested a stop work until an archaeological survey is completed. The majority of the approximately 17 acre site has already been graded, but two fill areas (Tract F and a 640 sf area along 300th) remain unmodified. The USACE requested a subsurface survey for the two fill areas, as well as inspection of spoils piles currently on site. ESA is providing project management, archival research, fieldwork, and a technical report.

Duwamish Gardens Habitat Restoration Construction Management Services, Tukwila, WA. *Archaeologist.* This project involves construction of approximately 2.5 acres of shoreline habitat restoration and public park improvements along the Duwamish River. The work includes excavation, erosion controls, in-water work, removal of contaminated soils, cultural resources protection, planting, irrigation, stormwater system improvements, building and underground storage tank demolition, and other work necessary to complete the work as specified and shown in the contract documents.

Ballona Wetland Restoration, Los Angeles, CA. *Archaeologist.* The historical Ballona Wetlands, which is now reduced to 577 acres (and only 12 percent of that is tidally influenced), once occupied a 2,000-acre expanse of critical coastal habitat and included some of the most diverse wetland habitat types in the Los Angeles Basin due to the presence of both freshwater and saltwater environments. The Ballona Wetlands Restoration EIR/EIS evaluates seven alternatives that include the following key elements: ecosystem restoration, flood and stormwater management (by allowing a naturalized, rather than concrete-lined, Ballona Creek), public access improvements, infrastructure and utility modifications (including abandonment and relocation of Southern California Gas Company monitoring wells and pipelines), a full-scale implementation and construction program, a state-of-the-art monitoring and adaptive management program, and ongoing operations and maintenance activities. In addition, the Annenberg Foundation is proposing a visitor center on the site that would be created with the goal of promoting respect, appreciation, and stewardship of the natural ecosystems of the Ballona Reserve, Santa Monica Bay, and the greater Los Angeles urban ecosystem. The Annenberg Foundation, in partnership with CDFW, would design, construct, maintain, and operate the visitor center.

APPENDIX B

Sacred Lands File Search



550 West C Street
Suite 750
San Diego, CA 92101
619.719.4200 **phone**
619.719.4201 **fax**

www.esassoc.com

June 3, 2019

Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
FAX- 916-373-5471

Subject: SLF search request for the Loma Alta Slough Wetland Rehabilitation Project– D181419.00

To whom it may concern:

The City of Oceanside (City) has retained Environmental Science Associates (ESA) to prepare a Cultural Resources Assessment for the Loma Alta Slough Wetland Rehabilitation Project (Project) in support of an Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and a Clean Water Act Section 404 permit from U.S. Army Corps of Engineers (USACE). The Project proposes the expansion of the existing coastal wetland habitat within Loma Alta Slough to restore its functional value and accommodate public use through trails, educational signage and linkage with public transportation. Enlargement and modification of the slough's wetlands is expected to support coastal wildlife, improve water quality, buffer peak storm flows and plan for sea level rise. The Project is located within the Loma Alta Slough between South Pacific Street to the west and South Coast Highway to the east within the City of Oceanside. The enclosed map shows the Project located in Section 35 of Township 11 South, Range 5 West on the San Luis Rey, CA 7.5-minute USGS topographic quadrangle.

In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed Project, ESA is requesting that a Sacred Lands File search be conducted for sacred lands or traditional cultural properties that may exist within the Project area.

Thank you for your time and cooperation regarding this matter. To expedite the delivery of search results, please email them to mvader@esassoc.com. Please contact me at 619.241.9238 or at mvader@esassoc.com if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "M. Vader", is written over a light blue, rectangular background that resembles a piece of paper or a stamp.

Michael Vader
Cultural Resources



SOURCE: City of Oceanside; ESRI

Loma Alta Slough Wetlands Enhancement Project

Figure 1
Records Search