Appendix F: Cultural Resources Assessment for the Southern Los Cerritos Wetlands Restoration Project

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

CULTURAL RESOURCES ASSESSMENT FOR THE SOUTHERN LOS CERRITOS WETLANDS RESTORATION PROJECT

Prepared for:
Los Cerritos Wetlands Authority
100 North Old San Gabriel Canyon Road
Azusa, CA 91702

Authors:
Desireé Martinez, M.A., Shannon Lopez, M.A., John Gust, Ph.D.

With contributions from:
Joyce Perry

Principal Investigator:
Desireé Martinez, M.A., RPA

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USGS 7.5' Quadrangles: Los Alamitos (1984), Seal Beach (1981)
Area: 105 acres
Key Words: Culturally sensitive area, Gabrielino/Gabrieleño/Tongva/Kizh, Juaneño/Acjachemen, *Puvungna*, *Motuucheyngna; Puvungna* Traditional Cultural Landscape

1518 West Taft Avenue
Orange, CA 92865
Office (714) 974-8300

Field Offices
San Diego • Riverside • Morro Bay • Sacramento • Arizona

cogstone.com
Toll free 888-333-3212

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INTRODUCTION

PURPOSE OF STUDY

This study was conducted to determine the potential impacts to cultural resources during the Southern Los Cerritos Wetlands Restoration Project (Project) as well as to document the *Puvungna* Traditional Cultural Landscape (PTCL; Figure 1). The Los Cerritos Wetlands Authority (LCWA) is the lead agency under the California Environmental Quality Act (CEQA).

Figure 1. Project vicinity map

PROJECT LOCATION AND DESCRIPTION

The Project, located on the border of Los Angeles and Orange counties (
Figure 2), affords the opportunity to restore salt marsh, seasonal wetlands, and other freshwater wetlands within an approximately 503-acre area. The Southern California Wetlands Recovery Project (WRP), a partnership of 17 state and federal agencies, has identified the acquisition and restoration of the Los Cerritos Wetlands as a high regional priority. The restored habitat will provide multiple benefits, including provision of critical habitat for listed species and other fish and wildlife, carbon sequestration, improved flood control, sea level rise resiliency, preservation of tribal cultural resources, and improved public access to open space.

The Project area is located within the southern portion of the Los Cerritos Wetlands Complex which adjoins the lower reach of the San Gabriel River where, prior to channelization, the mouth of the San Gabriel River migrated back and forth across the coastal plain. Historically, the complex covered approximately 2,400 acres and stretched approximately two miles inland, varying from freshwater and brackish wetlands in its inland areas to salt marsh closer to the ocean. Channelization of the San Gabriel River began in the 1930s and cut off tidal action to much of the wetland area. The size of the historic wetlands has been reduced by agriculture, placement of fill and excavation of channels and basins for oil fields and landfill burn dumps, and urban development. There is ongoing oil production throughout the area and much of the remnant salt marsh is within a grid of dikes, berms, roadways, and levees. Other channels which service upstream power plants also bifurcate sections of the complex. Today, remnants of the historic wetlands occur in degraded patches, divided into the following four areas: North, Central, Isthmus, and South.

Furthermore, the Los Cerritos Wetlands Complex is significant to the Gabrielino (Gabrieleño; Tongva; Kizh[1]) and Acjachemen (Juaneño) tribes. Tribal representatives described the Los Cerritos Wetlands and its surroundings as sacred lands that encompass a larger area of connected tribal sites. The Los Cerritos Wetlands are located in between the villages of *Puvungna* and *Motuucheyngna*, and are thus considered by tribes to be part of a larger cultural landscape. This landscape will be identified as the *Puvungna* Traditional Cultural Landscape in this study.

Through the conceptual restoration planning process, the LCWA determined what opportunities exist for Los Cerritos Wetlands restoration, public access, and interpretation that will meet the needs of the agency, community, and stakeholders. This included identifying opportunities for restoring tidal connections, creation of new wetland and associated upland habitats, consolidation of oil operations, improvement to passive recreation facilities, creation of a

[1] Since there is not an agreement on the general term to be used to identify the descendants of the original people who lived within the Los Angeles Basin, the term Gabrielino (Gabrieleño; Tongva; Kizh) will be used throughout this proposal to recognize each group's right of self-identification and tribal sovereignty.

visitor's center, and accommodation of special status species. This analysis culminated in the Los Cerritos Wetlands Conceptual Restoration Plan (CRP) that was adopted by the LCWA's Governing Board in August 2015.

The LCWA, as the lead agency, prepared then certified a Program Environmental Impact Report (PEIR) in January 2021. This PEIR used the CRP designs to create a program description for a 503-acre program area. The potential impacts of this proposed program were analyzed, and mitigation measures were determined for potentially impacted resources. This program also included phasing for potential projects to eventually tier-off from the program.

One of the near-term projects identified by the PEIR is located in the South Area on 105 acres identified as the South LCWA site (aka Hellman Ranch Lowlands) and the State Lands Commission site (together comprising the Project area), both managed by LCWA. This Project area was historically salt marsh but has been altered through anthropogenic activities. The site currently contains former sumps, landfills, foundations, and contaminated areas from prior oil operations and land uses.

The Project is led by the LCWA, a joint powers authority (JPA) formed by the following four agencies:

- San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC)
- California State Coastal Conservancy (CSCC)
- City of Long Beach
- City of Seal Beach

Figure 2. Aerial map showing the Los Cerritos Wetlands Complex and the South LCW restoration project area

PROJECT PERSONNEL

Cogstone Resource Management, Inc. (Cogstone) conducted pedestrian cultural resources and built environments surveys, a traditional cultural landscape study that included collecting and transcribing oral histories from tribal members, background research, and prepared this assessment report. Qualifications of key personnel are described below and short resumes are in Appendix A.

- Desiree Martinez served as Project Manager, provided QA/QC and conducted oral history interviews with members of the Gabrielino (Tongva) community, wrote and conducted the evaluation of the cultural landscape study, and co-authored this report. Ms. Martinez is a Registered Professional Archaeologist (RPA) and holds an M.A. in Anthropology from Harvard University and has more than 24 years of experience in California archaeology.

- John Gust, RPA, served as the Task Manager and Principal Investigator for Archaeology for the Project, and co-authored this report. Dr. Gust has a Ph.D. in Anthropology from the University of California (UC) Riverside, and over 10 years of experience in archaeology.

- Shannon Lopez conducted the built environment assessment and evaluation, and co-authored this report. Ms. Lopez holds an M.A. from California State University (CSU), Fullerton and has more than three years of experience as an architectural historian.

- Kim Scott prepared the geoarchaeological section of this report. Ms. Scott has an M.S. in Biology with paleontology emphasis from CSU San Bernardino, a B.S. in Geology with paleontology emphasis from University of California, Los Angeles, and over 25 years of experience in California paleontology and geology.

- Logan Freeberg prepared the Geographic Information System (GIS) maps throughout this report. Mr. Freeberg has a B.A. in Anthropology from UC Santa Barbara and a GIS certification from CSU Fullerton and over 18 years of experience in California archaeology.

REGULATORY ENVIRONMENT

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of the proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

TRIBAL CULTURAL RESOURCES

As of 2015, CEQA established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code, § 21084.2). In order to be considered a "tribal cultural resource," a resource must be either:

(1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
(2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

PUBLIC RESOURCES CODE

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic resources or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2) It is associated with the lives of persons important to local, California, or national history;
3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired,

or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

NATIVE AMERICAN HUMAN REMAINS

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

MITIGATION MEASURES

In addition to California State laws and codes, this Project is governed by Mitigation Measures developed for the Los Cerritos Wetlands Restoration Plan Program Environmental Impact Report (PEIR). Mitigation Measures can be found in Appendix B.

BACKGROUND

ENVIRONMENTAL SETTING

The Los Cerritos Wetlands Complex area is located in the Peninsular Ranges topographic province (Appendix C,
Figure C - 1). The Peninsular Ranges extends from Mount San Jacinto in the north, through the tip of Baja, Mexico in the south. Subparallel to these ranges on the east is the San Andreas Fault Zone. The northwestwards motion of the Pacific Plate has created these ranges and their corresponding valleys. The topographic variations across California, created by plate tectonics, resulted in California Native populations having access to different ecosystems, fertile valleys, mountains and hills (Lightfoot and Parrish 2009:52).

The current Los Cerritos Wetlands Complex is a remnant of a once much larger tidal estuary system that sits at the mouth of the San Gabriel River (Coastal Restoration Consultants 2021:5). The greater area has long been hydrologically dynamic. For example, the Santa Ana River which is channelized at its mouth now flows into the Pacific Ocean in Huntington Beach but "composite of early historic maps of the Orange County region shows that the Santa Ana drainage has migrated within an area measuring approximately seventeen miles along the coastline. During various points in time, the river fed (from north to south): Alamitos Bay, Anaheim Bay, Bolsa Bay, Santa Ana Marsh, and Newport Bay" (WPA 1936 in Wiley 2012).

Further, California has been recognized as full of diversity based on its plants, animals and landscapes which in turn has affected human occupation and settlement through time. Based on this diversity, the California Geological Survey has divided the state into 12 geomorphic provinces. The Los Cerritos Wetlands Complex area is located within the South Coast Province (Appendix C,
Figure C - 2; Lightfoot and Parrish 2009:61; Schoenherr 2017:1).

The Southern LCW Project area "contains multiple former sumps, landfills, and contaminated areas from prior oil operations, and is currently owned and maintained by the LCWA. Some areas of tidal southern coastal salt marsh still persist on the site, but other areas were converted by previous land owners from coastal salt marsh habitat to primarily ruderal uplands with no tidal connections. Former access roads still bisect the site…" (ESA 2020).

GEOLOGICAL SETTING

The Southern LCW Project area lies in the broad coastal plain of Los Angeles and Orange counties, California, named the Tustin Plain. The Tustin Plain is bounded by the Santa Ana

Mountains to the east, the Puente and Coyote Hills to the north, the Pacific Ocean to the west, and the San Joaquin Hills to the south. Orange County is part of the coastal section of the Peninsular Range Geomorphic Province, which is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Faults branching off from the San Andreas Fault to the east create the local mountains and hills.

STRATIGRAPHY

The Southern LCW Project area is mapped as middle to late Pleistocene old marine to nonmarine deposits and modern artificial fill (Appendix C,
Figure C - 3; Saucedo et al. 2016).

Old marine to non-marine deposits, middle to late Pleistocene (Qom)

These middle to late Pleistocene (500,000 to 11,700 years old), interfingering near shore marine and non-marine sediments were deposited along the ancient coast. Beach, estuarine, and reddish-brown alluvial deposits of clays to conglomerates are now frequently present as wave cut platforms brought to the surface by uplift (Saucedo et al. 2016).

Artificial fill, modern (af)

Modern artificial fill from dredging activities is less than 200 years old. These sediments will not contain scientifically significant fossils or artifacts if any are present. Only large areas of fill are typically mapped (Saucedo et al. 2016).

CULTURAL SETTING

Based on linguistic, ethnographic, and archaeological cultural affiliation, the Project Area has been occupied by the Gabrielino/Gabrieleño/Tongva/Kizh (McCawley 2002; Strudwick et al. 2007) and Juaneño (Acjachemen) since prior to the arrival of the Spanish and continuing to the present. The following summarizes the prehistoric setting, historic setting, and ethnography.

PRE-CONTACT HISTORY

Several Southern California regional syntheses exist (Appendix C,
Figure C - 4), however this study will use the cultural sequence developed by Mason and Peterson (2004) since it was developed locally using many dated sites (N=37) and over 300 radiocarbon dates (see Table 1)

Table 1. Southern California Cultural Sequence (after Mason and Peterson 2004)

Period	Years Before Present	Calendar Years (AD/BC)
Mission	181-116	AD 1769-1834
Late Prehistoric 2	650-200	AD 1300-1750
Late Prehistoric 1	1350-650	AD 600-1300
Intermediate	3000-1350	1050 BC-AD 600
Milling Stone 3	4650-3000	2700-1050 BC
Milling Stone 2	5800-4650	3850-2700 BC
Milling Stone 1	8000-5800	6050-3850 BC
Paleo-Coastal	Prior to 8000	Prior to 6050 BC

PALEOCOASTAL (PALEOINDIAN) PERIOD (PRIOR TO 6050 BC / 8000 BP)

The search for the earliest Paleo-Coastal communities has been predicated on the "Ice Free Corridor" theory; that at the end of the Pleistocene (~11,700 years Before Present [BP]) people from northeast Asia crossed Beringia and entered the western United States through a gap between the Laurentide and Cordilleran ice sheets; after which they moved to settle the coasts. Paleontological, geological and pollen analyses, however, has shown that the so-called "Ice Free Corridor" was not a viable migration option from 30,000 to 11,500 years ago (Mandryk et al. 2001). Additionally, with the increase in the number of accepted sites dated prior to 11,700 BP (e.g., Monte Verde, Chile at 14,800 BP) including several Coastal California Channel Island sites (e.g., Arlington Springs on Santa Rosa Island at 13,000 cal BP and Daisy Cave on San Miguel Island at 12,000 cal BP), new models for the settlement of the New World had to be considered (Erlandson et al. 1996; Johnson et al. 2002).

Paleo-Coastal subsistence patterns have predominantly been described as dependent on the hunting of megafauna as represented by large Clovis-like points in the archaeological record. However, this pattern has not been convincingly identified in coastal California (Erlandson et al. 2007:56). Instead at early sites such as Daisy Cave, there is evidence of much more diverse subsistence patterns, particularly the use of a variety of marine habitats. As an alternative to the "Ice Free Corridor" theory and considering the cultural material seen at early Channel Islands sites, Erlandson et al. (2007) argue that the earliest New World settlers followed the productive kelp forest habitats that exist along the Pacific Rim. This "kelp highway" allowed settlers to use near shore marine resources, such as large red abalones (Haliotis rufescens), black turban snails (Tegula funebralis), sea urchin (Strongylocentrotus spp.), pinnipeds, sea otter, and California sheephead (Semicossyphus pulcher) while portions of North America were covered by ice sheets. In addition to near-shore marine ecofacts found at early Channel Island sites, Paleocoastal artifacts include small stemmed Channel Island Barbed points, chipped stone crescents (proposed

to be used for bird hunting), fish gorges and evidence of boat technology (Erlandson et al. 2011). There is also evidence, based on the discovery of spire lopped Callianax biplicata beads dating to 9000 to 7000 cal BC of inter-regional trade with the Great Basin (Fitzgerald et al. 2005).

The earliest evidence of the settlement of the Southern Channel Islands comes from Eel Point (SCLI-43) on San Clemente Island around 6500 to 6000 cal BC, straddling the Paleo-Coastal/Milling Stone Period 1 boundary. Based on its distance from the mainland (77 kilometers), and the fact that it was never connected to the mainland, it can be assumed that seaworthy vessels were used, although no remnants of such vessels have been found to date (Cassidy et al. 2004; Yatsko 2000). Other evidence for the presence of seaworthy vessels on San Clemente Island includes a woodworking tool kit that is consistent with tools used to build watercraft historically (Rondeau et al. 2007). Eel Point also shows a marine subsistence pattern that is focused on hunting seals, sea lions, and dolphins as well as the collection of seashells (Porcasi and Fujita 2000). The earliest evidence of the occupation of San Nicolas Island occurred approximately 6555 BC (8505 BP) at CA-SNI-339 (Schwartz and Martz 1992). Earlier sites may have been lost due to rising sea levels after 10,000 BP (Martz 1994). Other sites show that the San Nicolas Islanders hunted sea mammals, near-shore fish such as perch, and a variety of shellfish (Bleitz-Sanburg 1987).

Milling Stone Period (6050-1050 BC / 8000-3000 BP)

Mason and Peterson divide the Milling Stone Period into three subdivisions: Milling Stone 1 (8000-5800 BP), Milling Stone 2 (5800-4650 BP), and Milling Stone 3 (4650-3000 BP). The climate at the beginning of Milling Stone Period 1 was warmer and drier than today with freezing winters rare near the coast. However, toward the end of the Milling Stone Period 1, the climate started to cool and stabilize to a climate similar to today's weather (King 2001).

Also, during the Milling Stone Period there is evidence of trade between the Great Basin and other areas of California. Coso Mountain obsidian artifacts have been found at archaeological sites in southern California while shell beads, particularly Olivella Grooved Rectangle beads, have been found as far away as Oregon and Nevada (King 2001; Raab and Howard 2002; Vellanoweth 1995, 2001). Vellanoweth (2001) argues that Olivella Grooved Rectangle beads may be used as an ethnic marker for Uto-Aztecan speaking peoples like the Gabrielino (Gabrieleño; Tongva; Kizh) since they were not made in Chumash territory to the north.

At 5000 BP on the southern California mainland, there was an increase in the quantity of ground stone tools (e.g., manos, metates, mortars, pestles) suggesting an intensification of the use of plant and marine resources, particularly seeds and shellfish (Arnold et al. 2004). Toward the end of the Milling Stone Period, the use of manos and metates subsided while the number of mortars and pestles grew. This switch may indicate that acorns started to make up a larger portion of the diet.

The presence of pottery within Gabrielino (Gabrieleño; Tongva; Kizh) territory prior to contact has been argued to be the result of trade or exchanges with those Native American communities that made pottery, i.e., the southwest or Colorado River Tribes. However, some archaeologists argue that they have identified fired hand shaped ceramic pieces using local materials. Nineteen irregular hand shaped and fired ceramic pieces from Little Harbor on Santa Catalina Island were dated to around 5000 years old (Porcasi 1998). Porcasi argues that these ceramic pieces are like those found at the Irvine site (CA-ORA-64) in Orange County and suggests they are evidence of a broad interaction sphere linking the southern Channel Islands with the desert interior. Boxt and Dillon (2013) argue that the Gabrielino (Gabrieleño; Tongva; Kizh) living at CA-LAN-2630, located on the campus of California State University, Long Beach, made ceramics prior to the post-Contact era from locally derived clays.

Intermediate Period (1050 BC-AD 600 / 3000-1350 BP)

During the Intermediate Period, the climate became warmer and drier, with lower rainfall, than the Milling Stone Period. The sea level rise slowed with surface temperatures lower than before; although paleoclimate data suggests that between circa (ca.) 3000 and 1700 BP, there was a period of heavier rainfall Early in the Intermediate Period, mortars and pestles replace milling stones and hand stones in artifact assemblages, which may signal a shift from the use of grass and hard seeds to acorn exploitation. During this time, there was an increase in the utilization of nearshore fish, sea mammal resources, and deep-water resources on the islands (Glassow 1980; King 2001, 2014; Tartaglia 1976). There was increased sedentism in the Intermediate Period, with villages being permanent or semi-permanent. Population growth resulted in intensive resource collection leading to the decline of local resources and the need to collect higher-cost resources. This is evident at Eel Point, where there is a focus on lower-ranked resources such as fish and small shellfish as is evident (Byrd and Raab 2007:223). The active management of terrestrial resources became evident on the mainland during this time, with intentionally set fires and intensive horticulture practices such as pruning, sowing, planting, and irrigation being used to increase the productivity of trees and plants (Arnold et al. 2004). This may have also occurred on the islands as well. Burial practices included flexed inhumations with large slate slabs or metates located on top of or near the head of the individual (Gamble and King 1997).

Late Prehistoric period (AD 600-1750 / 1350-200 BP)

Mason and Peterson divide the Late Prehistoric Period into two subdivisions: Late Prehistoric 1, 1350-650BP (AD 600-1300) and Late Prehistoric 2, 650-200 BP (AD 1300-1750). It is during the Late Prehistoric Period that the cultural manifestations observed in the ethnohistoric period begin to emerge. By AD 500, there is a change in the cultural manifestations seen in the archaeological record within Gabrielino (Gabrieleño; Tongva; Kizh) territory. This includes a change in interment practices from burial to cremation, dog burials, as well as a switch from z-twining to s-twining in basketry (Sutton 2009; Rozaire 1967). These features are considered the markers signaling the migration of Takic-speaking people from the desert to the coast, pushing

the Chumash to the north and the Yuman-speaking Kumeyaay people to the south. See the Ethnography section below for a description of the Takic language group which includes the Gabrielino (Gabrieleño; Tongva; Kizh) language. Known as the "Shoshonean intrusion" (or Shoshonean Wedge) theory, it is argued that the Takic groups settled along the coast and immediately "got with the program" and imitated the cultural practices and adaptions used by the previous Hokan-speaking populations they supposedly displaced (Kowta 1969; Koerper 1979; Kroeber 1925; Moratto 1984:560; Sutton 2009).

The Late Prehistoric Period saw the emergence of complex social organization with ascribed status evinced by the presence of abundant grave goods in child burials (King 1982; Martz 1984). Starting at AD 800, there is evidence of the exchange of Santa Catalina Island soapstone vessels to the mainland (e.g., Malaga Cove) with craft specialization intensifying at the end of the period (Howard 2002).

There has been considerable debate regarding to what extent climate change contributed to the development of complex societies in Southern California, including the Gabrielino (Gabrieleño; Tongva; Kizh) (Arnold 1992; Gamble 2005; Kennett and Kennett 2000; Koerper et al. 2002; Raab et al. 1995; Raab and Larson 1997). What is known is that new fishing strategies begin to be utilized by AD 500. These new practices include the development and use of the Gabrielino (Gabrieleño; Tongva; Kizh) ti'at, (*tomool* in Chumash), the sewn plank canoe (Arnold and Bernard 2005), and a new fishing kit which includes circular shell fishhooks manufactured from single pieces of abalone (*Haliotis* spp.), California mussel (*Mytilus californianus*), and Norris' top shell (*Norrisia norrisi*) (Strudwick 1986). Such a fishing kit was found at the Nursery site on San Clemente, consisting of a seagrass bag containing fishing tackle such as lithic drills, abraders, rib net-spacers, a bone knife and barbs, pry bars, abalone fishhooks and hook blanks, a steatite whale effigy, and serpentine sinkers (Bleitz and Salls 1993). Coupled together, these tools were used to obtain deep sea fish such as the broadbill swordfish, striped marlin, albacore, yellowfin tuna, bluefin tuna, blue shark, and shortfin mako (Arnold and Bernard 2005). Also, by AD 500–600 BC, the bow and arrow comes into the area and as a result, projectile points get smaller, although large points are still evident on the Channel Islands due to the continued used of spears on large marine mammals (Arnold and Bernard 2005).

Mission Period (AD 1769-1834)

Historic archaeologists identify the beginning of the Mission Period with the establishment of the first Spanish Mission in San Diego in 1769 and the settlement of Alta California by the Spanish. Even though Vizcaino had explored the Pacific coast in 1602, the Spanish did not immediately settle Alta California. Beginning in 1566, Spanish galleons from Manila, Philippines brought Asian goods to Acapulco, Mexico. During these long and arduous voyages, ships lacked substantial food resources resulting in the death of crew members and eventual loss of ships (Corle 1949:37). To ensure a safe return, the Spanish government decided that ports needed to be

built in Alta California in order to re-supply the ships with fresh meat, fruits and vegetables (Corle 1949:32; James 1913:14). Additionally in 1767, Marques de Grimaldi, the Minister of State, told Jose de Gálvez, the Visitor-General of Mexico, that the Russians and French were encroaching on its Alta California territory (Archibald 1978:1; James 1913:14). As a result, King Carlos II of Spain gave the order to "occupy and fortify San Diego and Monterey for God and the King of Spain" to fight foreign claims to Spanish land (James 1913:16).

In 1769, Gaspar de Portolá led one of three groups to Alta California to establish Spanish settlements, or presidios, at San Diego and Monterey Bay (McCawley 1996:188). Accompanying Portolá was Junípero Serra and other Franciscan priests who sought to establish missions to convert the Native Americans they encountered. They established several missions, sustained by Indian labor, that supplied the presidios with subsistence goods.

Another factor that changed trade relations in southern California during the Mission period was the missions' policy of 'reducción' (Webb 1983). The reduction of the Indian population in its initial settlement caused the fathers to look for more converts. The stability of the mission relied on the Indian population to make cloth, to cook, and to farm. As the population grew sparse, the fathers traveled further, past the mission lands, to gather new Indians to live in the missions and carry on the work.

ETHNOGRAPHY

The following section will provide an overview of the cultural patterns as recorded for the Gabrielino (Gabrieleño; Tongva; Kizh) and the Juaneño (Acjachemen). Although several anthropologists and ethnologists have collected information regarding the cultural practices, village location, and language of the Gabrielino (Gabrieleño; Tongva; Kizh) in the late 19th and early 20th centuries, it is not as extensive as it is for other southern California Tribes. These collections were recovered under a "salvage ethnography" paradigm, predicated on the notion that the Tribes would soon vanish, and it was imperative to collect as much information about pre-Columbian Native languages and lifeways as possible for future study. Thus, scholars looked for Tribal members who had knowledge of, and still practiced, the uncorrupted tribal lifeways. However, Gabrielino (Gabrieleño; Tongva; Kizh) communities and other California Tribes had been so decimated by years of colonial mission control, many who survived had been successfully converted into a Spanish/Mexican peasant labor force that spoke Spanish and practiced Catholicism. Scholars disregarded Tribal members that did not fit their preconceived notions of who a "pure" Indian was (Martinez 2010:216). As a result, there is a big hole in the ethnographic record on the use of the Los Cerritos Wetlands area as Gabrielino (Gabrieleño; Tongva; Kizh) and Juaneño (Acjachemen) community members who had that knowledge may have been overlooked.

GABRIELINO (GABRIELEÑO; TONGVA; KIZH)

Territory

As stated earlier, the study area is located within Gabrielino (Gabrieleño; Tongva; Kizh) territory (Appendix C,
Figure C - 5). Gabrielino (Gabrieleño; Tongva; Kizh) Traditional Territory included large portions of Los Angeles County, the northern part of Orange County, small sections of Riverside and San Bernardino counties as well as the four southern Channel Islands of Pimu (Santa Catalina), Santa Barbara, Kiinkepar (San Clemente), and Haraasgna (San Nicolas).

Their territory encompassed a number of ecological zones which affected their subsistence and settlement patterns. The Gabrielino (Gabrieleño; Tongva; Kizh) would supplement the resources gathered near them with resources from other ecological zones by obtaining them either directly or through trade (Bean and Smith 1978). Various scholars have divided these ecological zones differently. McCawley divides southern California into the Interior Mountains and Foothills, Valleys and Prairies, Exposed Coast, Sheltered Coast, and the Southern Channel Islands zones (McCawley 1996). The Los Cerritos Wetlands Complex is located in the Exposed Coast ecological zone. The resources available in this ecological zone include shellfish, rays, sharks, and fish. On the other hand, Heizer and Elasser (1980; Appendix C,
Figure C - 6) place the study area within their Foothill Ecological Culture Type and identify the Gabrielino (Gabrieleño; Tongva; Kizh) as Foothill Hunters and Gatherers, Coastal Tidelands Collectors, Coastal Sea Hunters-Fishers, and Valley and Plains Gatherers. Appendix C,
Figure C - 6 lists the resources that would have been available to the Gabrielino (Gabrieleño; Tongva; Kizh) in those ecological cultural types.

Origins

Much of the southern California archaeological literature argues that the Gabrielino (Gabrieleño; Tongva; Kizh) moved into southern California from the Great Basin around 4,000 BP, ‘wedging’ themselves between the Hokan-speaking Chumash, located to the north, and the Yuman-speaking Kumeyaay, located to the south (see Sutton 2009 for the latest discussion). This Shoshonean Wedge, or Shoshonean ‘intrusion’ theory, is counter to the Gabrielino (Gabrieleño; Tongva; Kizh) community’s knowledge about their history and origins. Oral tradition states that the Gabrielino (Gabrieleño; Tongva; Kizh) have always lived in their traditional territory, with their emergence into this world occurring at Puvungna, located in Long Beach (Martinez and Teeter 2015:26).

Language

The Gabrielino (Gabrieleño; Tongva; Kizh) language is classified as part of the Uto-Aztecan language family, under the Takic branch. It is now generally accepted that the Gabrielino (Gabrieleño; Tongva; Kizh) language is a stand-alone Takic language, distinct from the Cupan sub-group (Mithun 1999:539). Several Gabrielino (Gabrieleño; Tongva; Kizh) words lists,

descriptions of lifeways, and songs have been collected by ethnographers from various Gabrielino (Gabrieleño; Tongva; Kizh) community members over the years: Hale (1846), Loew (1876), Reid (1852[1968]), Merriam (1907), and Harrington (1917-1930s).

Settlement Patterns

Gabrielino (Gabrieleño; Tongva; Kizh) life centered on the village; composed of paternally related extended families, lineages, and/or clans, typically numbering 50-100 people. Houses, called *kiiy* in Gabrielino (Gabrieleño; Tongva; Kizh), were domed and circular with frames made from willow posts (or whale rib bones on the islands and along the coastline) covered with tule reed mats. Coastal *kiiys* had entryways that opened towards the sea with mats covering them. A large *kiiy* could hold up to three or four families and was perhaps 60 feet in diameter. Smaller homes were as little as 12 feet in diameter. Wind screens were usually adjacent to the *kiiy* and were used as open-air kitchens during fair weather. Large acorn granary baskets, sometimes coated with asphaltum and seated upon posted platforms, were also placed near the *kiiys*.

In addition to the habitation structures described above, other village structures included sweathouses, which were small semi-circular, semi-subterranean earth-covered buildings located near water to provide access for bathing, menstrual huts, and ceremonial open-aired enclosures, *yoyovars*, were located near chiefs' houses and near the center of villages.

In addition to the permanent villages, the Gabrielino (Gabrieleño; Tongva; Kizh) occupied temporary seasonal campsites that were used for a variety of activities such as hunting, fishing, and gathering plants (McCawley 1996:25). Hunting was primarily for rabbit and deer, while plant collection included acorns, buckwheat, chia, berries, and fruits. Coastal seasonal camps and camps near bays and estuaries were used to gather shellfish and hunt waterfowl (Hudson 1971).

Leadership

Each village had a *Tomyaar*, a leader whose position was typically inherited paternally, who regulated the village's religious and secular life. Each lineage had a leader that participated in the Council of Elders which in turn advised the *Tomyaar*. Through study of the personal names recorded in mission records and ethnohistorical information from other Southern California communities, King and Parsons (2014a:8-10) have identified a number Gabrielino (Gabrieleño; Tongva; Kizh) leadership roles that were not previously recognized. King and Parsons identified the title *Chari* as belonging to the town or settlement chief. The *Nu* was the bundle keeper, the person who protected sacred items that were bundled together, and the *Paha* (ceremonial assistant) was in charge of ceremonial preparation, including notifying people of the ceremony, carrying shell money between groups, and dividing money and food during ceremonies (Strong 1972:96). The *Nu* worked with the *Kika*, the household chief. The singer, *Eacuc*, was also known as a knowledge keeper.

Another important role in Gabrielino (Gabrieleño; Tongva; Kizh) society was the medicine person, known as a shaman in the anthropological literature. They were the doctors, therapists, philosophers, and intellectuals of the villages. Some *Tomyaars* were also influential medicine people in their own right (Kroeber 1925; Johnson 1962; Bean and Smith 1978; McCawley 1996). Both clans and villages were exogamous and patrilocal (Reid 1852). Villages were autonomous but came together seasonally for harvests and other cooperative activities including ceremonies.

Ceremonial Life and Beliefs

Gabrielino (Gabrieleño; Tongva; Kizh) life was also organized around the celebration and observance of various rituals and ceremonies. These included rites of passage, village rites, seasonal ceremonies, and participation in the widespread *Chingichngish* religion (various spellings; Kroeber 1925; McCawley 1996).

Gabrielino (Gabrieleño; Tongva; Kizh) concept of afterlife and burial practices came from *Chingichngish's* instructions to the Gabrielino (Gabrieleño; Tongva; Kizh). Upon death, it was believed that the heart of the person did not die, but was transported to *Shiishonga*, the land of the dead, located beyond Santa Catalina Island. If the deceased was a *tomyaar* or medicine person, they could reach *Tokuupar* or "heaven" or "sky" through the enactment of the proper rituals. For three days the community mourned, and the body was wrapped in a hide blanket or mat made of seagrass. After the mourning period, the body was carried to the village burial area. Mainland Gabrielino (Gabrieleño; Tongva; Kizh) tended to conduct cremations, while the Island Gabrielino (Gabrieleño; Tongva; Kizh) adhered to flexed inhumation burial practice. The hands were placed across the breast, and the entire body was bound.

For those villages practicing cremation, the remains were either interred or disposed of to the east of the village. Grave offerings included seeds, otter skins, baskets, soapstone pots, bone and shell implements, and shell beads. The amount of grave goods reflected the person's status. If the person held a leadership position, an item designating their office might also be placed with their body. Some interments featured dog burials placed above the corpse. The Gabrielino (Gabrieleño; Tongva; Kizh) saw the worlds of the living and the dead to be parallel places; therefore, the items buried or burned with the deceased were intended to accompany that person into the afterworld where their status would be recognized by the items that accompanied them. Graves were marked by baskets or rock slabs made of sandstone or slate. On San Nicholas Island, stone slabs decorated with ashpaltum would sometimes also be buried with the body. The living mourned for a year; the mourning period ended at the annual mourning ceremony conducted for all of those who had died in the past year (Bean and Smith 1978:545–546; McCawley 1996:155–158.)

Trade and Exchange Routes

The Gabrielino (Gabrieleño; Tongva; Kizh) played an important role in the various trade routes that extended throughout the western United States. In the seminal study Power and Persistence, Bean et al. (1978) discussed the Pacific Ocean-Great Plains trade system and demonstrated that the Gabrielino (Gabrieleño; Tongva; Kizh), Cahuilla, Panya (Halchidoma), Northern Pima and O'odham (Kohatk) were trade partners. The Santa Catalina Island Gabrielino (Gabrieleño; Tongva; Kizh) were the western anchor of the trade route with steatite items moving across the ocean via *ti'ats*, the mainland foot trails through the San Gorgonio Pass and into to Cahuilla territory. Today's Interstate 10 freeway follows that trail (Bean et al. 1978:5-1). In addition to steatite from Santa Catalina Island, other trade items from Gabrielino (Gabrieleño; Tongva; Kizh) territory included abalone shell, olivella beads, asphaltum, sea otter pelts and salt (Figure 3; Dobyns 1984). Food such as dried fish, marine mammal meat and acorns were also traded (Meighan 1959:391; Rosen 1980:27; McCawley 1996:79, 2002:47). In return the Gabrielino (Gabrieleño; Tongva; Kizh) received obsidian, furs, ceramic vessels, buckskins and other items.

Commodity	Ga-brie-lino	Ca-hui-lla	Pan-ya	Gila River Pima	Kohatk
Steatite	----→	---→	---→	--C--	
Abalone Shell	----→	---→	---→	--C--	
Olivella Beads	----→	---→	--C→	--C--	
Dried Fish	----→				
Dried Wild Mutton				--C--	←----
Dried Venison				--C--	←----
Sea Otter Pelts	----→	---→	--C-		
Salt	----→	←---		--C--	←---→
Asphaltum	----→	---→	--C-		
Acorns	--C-→	←--→	--C-	--C--	←----
Wild Gourd Seeds				--C--	←----
Seeds	C--	←---		C--	←----
Buckskins	C--	←---		C--	←----
Deer Tallow	C--	←---	←-C-	←-C--	←----
Obsidian	C--	←---			
Furs	C--	←---			
Red Paint	C--	←---	←-C→	--C	
Yellow Ochre				C--	←----
Maize		C--	←---		
Squash		C--	←---		
Gourds		C--	←---		
Turquoise		C--	←---		
Stone Axes		C--	←---		
Saguaro Syrup	C-?	←-?--	←-C-	←-C--	←-C--
Ceramic Vessels	C-?	←-?--	←-?--	←-C--	←-C--
Beans				--C-→	--C
Pumpkins				--C-→	--C
Melons				--C-→	--C
Cotton Fiber				--C-→	--C

Figure 3. Commodities Traded from Gabrielino (Gabrieleño; Tongva; Kizh) Territory to/from the Kohatk (O'odham) on the Gila River (from Bean et al. 1978)

Gates et al. (2013) connects Tongva territory to the Pacific to Rio Grande Trails Landscape that includes three major travel corridors from/to the Southern California coast (Appendix C, Figure C - 7). The trade route closest to the study area is the route that follows the US Interstate 10 freeway.

Village Use Areas and Locations

Based on research conducted on Santa Catalina Island and the mainland, the Gabrielino (Gabrieleño; Tongva; Kizh) community recognizes that in addition to the area used for habitation, i.e., houses and cooking areas, there are several other areas used outside the habitation area that are still considered part of the village (Posadas et al. 2011). These village use areas include short term camp sites, subsistence sites (e.g., hunting, gathering, fishing), sweat and ceremonial houses, quarries, tool production areas (e.g., lithic reduction), sacred sites, burial sites/cemeteries, and rites of passage areas (McCawley 1996:25). These village use areas are usually within 3-5 miles of the main habitation area. As a result, for the traditional cultural landscape study detailed later in this report, a review of archaeological sites within 3 miles of the Los Cerritos Wetlands Complex was completed to identify these associated village use areas.

There are two villages that lie within three miles of the Los Cerritos Wetlands Complex. *Puvungna*, located to the north, was, and continues to be, an important ceremonial center (in Tongva *puvu* = big ball of people, *ngna* = place of) for the Gabrielino (Gabrieleño; Tongva; Kizh) and Juaneño (Acjachemen). Portions of the National Register for Historic Places (NRHP)-listed *Puvungna* Indian Villages lay on the campuses of California State University, Long Beach, the Veterans Affairs Long Beach Healthcare System (VALBHS), and Rancho Los Alamitos Historic Ranch and Gardens. *Motuucheyngna* village has been identified on a portion of the former Hellman Ranch property, to the east and outside the Southern LCW Project area. *Motuucheyngna* was reported to mean flea (Harrington 1917-1930: R104 F24). More detailed information on these two villages is located in the Traditional Cultural Landscape section.

The Gabrielino (Gabrieleño; Tongva; Kizh) Community Today

Even with the devastating effects of disease, colonization, forced labor, and other genocidal activities perpetrated against them, 2,493 people in California (2,903 nationwide) identified themselves as Gabrielino on the 2010 United States Census; a testament to their survival (United States Census 2013a and 2013b). There are currently seven different Tribess or and Tribal organizations that some community members belong to: the Gabrieleno Band of Mission Indians - Kizh Nation, the Gabrielino-Tongva Indians of California Tribal Council, the Gabrielino Tongva Nation, the Gabrielino/Tongva San Gabriel Band of Mission Indians, the Gabrielino-Tongva Tribe, the Gabrielino-Shoshone Nation and the Ti'at Society/Traditional Council of Pimu. , although some Gabrielino people choose not to belong to any group. None of the groups are recognized by the United States federal government; however, five groups have filed letters of intent with the Office of Federal Acknowledgement (Office of Federal Acknowledgement

2013). In 1994, the California State Assembly and Senate jointly recognized the San Gabriel Band of Mission Indians' territory as encompassing the entire Los Angeles Basin area and the Channel Islands of Santa Catalina, San Nicholas, San Clemente, and Santa Barbara from Topanga in the west, to Laguna in the south, and to the base of the San Bernardino Mountains in the east (Resolution Chapter 146, Statutes of 1994 Assembly Joint Resolution 96).

Gabrielino (Gabrieleño; Tongva; Kizh) community members continue to fight against the misconception that they are extinct (Martinez et al. 2014; Teeter and Martinez 2009). To combat these uninformed notions, Gabrielino (Gabrieleño; Tongva; Kizh) community members work with various public entities and private philanthropic groups to educate the public about the deep history of the Gabrielino (Gabrieleño; Tongva; Kizh) within the Los Angeles area and their continued existence within a thriving metropolis. Additionally, community members are working with linguists to revitalize the Gabrielino (Gabrieleño; Tongva; Kizh) language (Marquez 2014).

Figure 4. A portion of the 1937/1938 Kirkman-Harriman Pictorial and Historical Map of Los Angeles County showing the County as it existed in 1860 with the Project area overlain

JUANEÑO (ACJACHEMEN)[2]

Territory

The Project area is within the traditional homeland of the Juaneño (Acjachemen) (Appendix C, Figure C - 8). The Acjachemen speak a language that is part of the Takic language family. The concept of territory is a complex one that carries distinct meanings within native people's perceptions, and for archeologists and researchers working within the European scholarship tradition. The European tradition favors a view of territory derived from clearly delineated boundaries and surveyed and fenced property lines. A traditional native view of territory is generally broader and more dynamic, accounting for various ways land has been used by many people, or simultaneously by different groups of people. With that in mind, the Acjachemen territory spans from coastal Long Beach to the north, Camp Pendleton to the south and includes all of Orange County as well as parts of western Riverside County (see Appendix C, Figure C - 8). At the arrival of the Euroamericans (1769) in California, the Acjachemen were living primarily in what we now know as Orange County, but their aboriginal territory extended as far south as San Onofre Creek in San Diego County and east to the ridge of the Santa Ana Mountains in Riverside County, an area of about 600 square miles in size. The Acjachemen believe that their ancestors have lived here from the beginning of time. Debate and controversy continually surround the gap between scientific theory and Acjachemen beliefs surrounding the time frame when the Acjachemen first inhabited the area. The population of the Acjachemen tribe in 1769 has been estimated at about 4,000 people. The ancestors shared boundaries with four other tribes: the Gabrielino [Gabrieleño; Tongva; Kizh] to the north, the Serrano and Luiseno to the east and south, and the Kumeyaay to the south.

The Acjachemen territory and even particular properties, such as mountains and rivers, are recorded in their memories, from traditional migration and creation stories that were told and retold, and songs that have been sung and danced for generations. Such features as special rocks, oak groves, fishing places, mountain ranges and places from where one can see the sun rise and set form a mental image, or map, of their homeland that combines history and geography into a whole body of traditional cultural knowledge.

Community Life

The Acjachemen depended upon gathering, hunting and fishing. Their lives centered on their permanent villages, with ready access to their specific hunting, fishing and collecting areas where they might stay for part of a season. Some of these areas were quite close by, but others were a day or more of travel from their villages. Individual families would travel inland or to the seashore at certain times of the year and set up temporary camps for a few days or weeks. When they returned to their village, they would carry baskets filled with the food they had collected. Houses were typically conical in shape and thatched with locally available plant materials. The

[2] The Juaneño (Acjachemen) ethnographic section was contributed by Joyce Perry, Tribal Manager and Cultural Resource Director for the Juaneño Band of Mission Indians, Acjachemen Nation.

principal house, or *kiicha,* belonged to the chief. It was usually the largest because he was apt to have a large family. Frequently, the chief had more than one wife, and relatives living nearby. Work areas were often shaded by rectangular brush-covered roofs (ramada). Each village had a ceremonial structure in the center called a *wamkish* enclosed by a circular fence where all religious activities were performed (Bean and Shipek 1978:553).

While the Acjachemen were not a nomadic people, if there was a serious drought, or their population grew too rapidly, they would sometimes relocate their village to another location. Archeological and ethnographic evidence clearly supports such movements. The Marine Corps Base Camp Pendleton Ethnographic Study, prepared by David Earle in 2020 references Boscana's recounting of an ancestral migration story of the Acjachemen.

"A chief named Oyaison had been chief of a village at Los Nietos Valley..had migrated with his eldest daughter, Corrone, to the vicinity of San Juan Capistrano…*The people that migrated under chief Oyaison had found people already living in the San Juan Capistrano area, and the migrants together with the original population settled a total of fifteen towns in the region*. (Harrington 1934:57-62, Johnson and O'Neil 2001:17)" (Earle 2020).

Religion

The hereditary village chief (*Nò-t*) held an administrative position that combined control of religious, economic and spiritual powers (Boscana 1933:43) Religion was an important aspect of their society. Religious ceremonies included rites of passage at puberty and mourning rituals (Kroeber 1925:636-647). At puberty, boys and girls underwent initiation rituals during which they were taught about the powerful beings governing them and punishing any infractions of the rules (Sparkman 1908:221-225). They were taught to respect their elders, give them food, to listen to them, and to refrain from anger. The boys' ceremony included drinking datura, dancing, and teaching the songs and rituals. The girls' ceremony included advice and instructions and necessary knowledge for village life, roasting in warm sand and rock painting (Bean and Shipeck 1978:555). Death is a major ritual for the Acachemen/ Luiseno. They observe at least a dozen mourning ceremonies. The Acjachemen participated in the widespread Chingichngish religion. There are several creation stories that the Acjachemen believe, inland and a coastal creation. Below is an excerpt of one of the inland creation stories:

"And so it is…before this world was as we know it today, there existed one above and another below. The two were brother and sister. The one above represented the heavens and the one below the earth. In time they were united and from their union came other beings full of life. This included rocks and stones of all kinds, particularly chert, for their arrows, trees and shrubs, herbs and grasses, and all kinds of animals. These were the First People, the *Kaamalam.*

After Earth had given birth to all the things in the world, she brought forth as her last child, one whom they called Wiyóot. Wiyóot's name signifies 'something which has taken root', denoting that his power and authority would extend over the earth as the largest trees spread their roots in every direction. Wiyóot had children, both male and female, and although he and his children were animate, they were not people like we know them today. As Wiyóot's descendants multiplied, the piece of earth his mother had given birth to continued to increase in size, always from the north to the south. And as the number of people increased, so did the size and shape of the earth."

Trade

Like many regions in California, the Acjcahemen homeland lies in a rich environment with an abundant variety of natural resources. Acjachemen relied on local materials to create tools, but also participated in trade with other California Indians, by trading their surplus in shell beads, mammal skins, salt dried fish, seaweed, and asphaltum (tar) with their inland neighbors for a variety of goods and luxury items.

The Juaneño (Acjachemen) Today

Despite the history of genocide, the devastating effects of the mission system, the Mexican period, and the American period, the Acjachemen have persisted. They are a vibrant community that continues to practice their traditional and cultural ways of life. Currently, there are three bands of Juaneño/Acjachemen. The Acjachemen are a non-federally recognized tribe. In 1993, the Juaneño Band of Mission Indians, Acjachemen Nation was jointly recognized by the California State Assembly and Senate as the original inhabitants of Orange County and parts of Los Angeles County, to parts of Riverside County, and to parts of Camp Pendleton (Resolution Chapter 121, Statutes of 1993 Assembly Joint Resolution 48). The Acjachemen are active in preservation of their language and sacred sites.

HISTORIC SETTING

CITY OF SEAL BEACH

The Project area is located within the boundaries of the City of Seal Beach. The history of what would become Seal Beach began soon after the founding of Anaheim in 1857. At that time, the Anaheim Landing Company constructed a port for the Santa Ana Valley known as Anaheim Landing. Located on a small bay where Anaheim Creek emptied into the Pacific Ocean (now Seal Beach), the port consisted of a wharf and warehouse. Despite multiple disasters due to the treacherous water, coastal trade continued at Anaheim Landing for approximately 15 years (Glasgow 2021).

In 1875, the arrival of the railroad in Anaheim provided an easier and safer shipping alternative

to the Landing. It was also during this period that the beaches surrounding the Landing had become a popular summer vacation location, with local newspapers reporting particularly large crowds numbering in the hundreds.

In 1901, Philip Stanton sold a plot of land which he had purchased from the Hellman Ranch to John C. Ord. After hiring a team of 30 mules, Ord relocated his Los Alamitos based general store to his new property at what is now the southwest corner of Main Street and Electric Avenue in Seal Beach. The Ord Company would buy additional property located at the eastern end of Anaheim Landing, which was later subdivided ca. 1903 (Alioto 2005).

On October 25, 1915, with a population of 250, the town of Seal Beach incorporated but under the name Bay City. The name was changed to Seal Beach shortly after incorporation in order to avoid confusion with San Francisco, which was also known as Bay City. In 1935, the site of Anaheim landing was designated a California Historical Landmark (Office of Historic Preservation 1935).

Substantial change would come to Seal Beach during World War II as the U.S. Navy purchased most of the land around Anaheim Landing to build the United States Navy's Naval Weapons Station Seal Beach. Construction of the Naval Weapons Station resulted in the demolition of 200 homes and the dredging of a 15-foot channel. Use of the water of Anaheim Bay is currently shared between the Navy and civilian craft (Glasgow 2021).

RANCHO LOS ALAMITOS

The Project area is within the boundaries of the former Rancho Los Alamitos, previously a contributor of the much larger Rancho Los Nietos (Appendix C, Figure C - 9).

In 1790, Spanish soldier Manuel Nieto was granted a 300,000-acre tract by his former military commander Pedro Fages (then recently appointed governor of California; Jurmain et al. 2011). When Manuel Nieto died in 1804, his massive landholdings, then known as Rancho Los Nietos, passed to his widow and children.

In 1834, Rancho Los Nietos was subdivided into five ranchos and one smaller ranch amongst Nieto's heirs: Rancho Los Coyotes, Rancho Las Bolsas, Rancho Cerritos, Rancho Santa Gertrudes, Rancho Alamitos, and Palo Alto (smaller ranch). Juan Jose Nieto, the eldest son, received the 28,027-acre Rancho Los Alamitos in addition to the 48,806-acre Rancho Los Coyotes. In 1837, Juan Nieto sold Rancho Los Alamitos and lived on Rancho Los Coyotes (Dixon 2004). On July 12, 1842, a deed of sale was issued to Abel Stearns for the "six square leagues of Rancho Los Alamitos." Just prior to Stearns' purchase of the rancho, an inventory was taken which documented the existence of three adobe buildings on the property. It is not known

what improvements Stearns made to the ranch or the preexisting adobes during his period of ownership (Jurmain et al. 2011).

Following the conclusion of the Mexican-American war and the subsequent annexation of California to the United States, the U.S. Land Commission confirmed Stearns' title to Rancho Los Alamitos in 1855. Despite Stearns' monumental success as a cattle rancher, which made him the richest man in Southern California, a series of natural disasters coupled with an economic recession resulted in the collapse of his cattle empire. Between 1860 and 1870, catastrophic flooding followed by a period of drought resulted in the ruin of many ranches and farms within Southern California; up to 70 percent of the cattle in Los Angeles County were dead from drought by 1864. Thus ended the reign of the great cattle barons of California (Jurmain et al. 2011).

In 1865, Stearns was taken to court for failure to repay a $20,000 loan against Rancho Los Alamitos. Due to Stearns' dire financial situation, he was unable to raise the funds required to pay back the loan and accrued interest. As a result, Stearns lost Rancho Los Alamitos to his creditor Michael Reese. In 1871, a portion of Rancho Los Alamitos was leased by John Bixby of the successful American ranching Bixby family. Due to the severe regional drought, the sheep ranching tenants of Rancho Los Alamitos were willing to sublease their land to Bixby to sustain themselves. Bixby saw the potential of the rancho's land to sustain agriculture and dairy cows (Jurmain et al. 2011).

In 1881, the entirety of the 26,395-acre Los Alamitos rancho was offered for sale for $125,000 following the death of Michael Reese. Bixby, who had already been leasing a large portion of the rancho, entered into a three-way partnership with Isaias W. Hellman and the J. Bixby & Co. and together obtained an $80,000 mortgage of the rancho. They began operations that same year under the name J.W. Bixby & Co. (Jurmain et al. 2011).

Taking advantage of the soaring profit of wheat exports to England due to severe crop failures across Europe, Bixby used much of the rancho to grow wheat for export during the 1870s and 1880s. The size of Rancho Los Alamitos was such that tenant farming was introduced in 1878. This system of sharecropping would continue to grow and by 1890 nearly 18% of farmers in California were tenant farmers. Also of note, by 1890, a substantial population increase in Southern California led Bixby to notice the shifting value and use of land. J.W. Bixby & Co decided to capitalize on the new trend of budding beachside communities and developed the townsite he called Alamitos Beach on 5,000 acres of the seaside portion of Rancho Los Alamitos (Jurmain et al. 2011).

In May of 1887, John Bixby died suddenly at age thirty-nine from what is believed to be appendicitis. As a result of his death, Rancho Los Alamitos was divided amongst its surviving

co-owners. Each recipient received 7,200 acres: J. Bixby & Co. received the inland section, Hellman received the section of land along the coast, and the remaining central area went to John Bixby's widow and children (Jurmain et al. 2011).

ISAIAS WOLF HELLMAN (OCTOBER 3, 1842-APRIL 9, 1920)

A Jewish immigrant from Bavaria, Isaias Wolf Hellman came to the United States in 1859 when he was 17 years old and immediately found work at a clothing store (Los Angeles Times 1920). In 1868, the Farmers & Merchants National Bank (the second bank in Los Angeles) opened its doors for business with Isaias Wolf Hellman as one of its co-founders. Known as a real estate magnate, Hellman had begun purchasing multiple properties in Southern California and pursued a successful career as a financier of local ranchos (including Rancho Los Alamitos) and wealthy landowners (such as James Irvine).

Hellman's influence grew and in 1887, the Los Angeles Clearinghouse Association was formed and he was elected President. In 1890, Hellman undertook the rehabilitation of the Nevada Bank of San Francisco which later merged with Wells Fargo. Isaias W. Hellman spent the majority of his working life in San Francisco where he died on April 19, 1920 at the age of seventy-eight (Los Angeles Times 1920).

HELLMAN RANCH

For 50 years, the majority of the work done on the Hellman Ranch used horse-drawn equipment. A single steam-powered excavator was used to excavate the many drainage ditches found on the property, including the Hellman Channel (Tyler 2018).

This ranch was used to provide feed for beef cattle the Hellman Company raised on a 35,000 acre ranch (Nacimiento Ranch) near Paso Robles, California. Cattle would be transported from the Nacimiento Ranch to the Seal Beach ranch to graze and then shipped to the Los Angeles Market. The land was divided into large parcels which were farmed by immigrant farmers who produced cash crops such as sugar beets. Support structures were constructed for the farmers which included homes, wells, barns and other ancillary buildings (Tyler 2018).

The rearing of cattle at the Hellman Ranch ceased during World War II when the U.S. Navy acquired most of the farmland in Seal Beach for the construction of what is now the Naval Weapons Station Seal Beach. This takeover by the Navy included large portions of Hellman's land. As a result, the Hellman Company pivoted use of the land from cattle to agriculture. In 1961, 541 acres of the ranch's best farmland was sold to the developers of Rossmoor Leisure World. Following the sale, the old ranch buildings were abandoned and were eventually sold to an aerospace company (Tyler 2018).

LOS ANGELES BASIN OIL INDUSTRY

In 1920, I.W. Hellman, President of the Los Alamitos Land Company, died and was replaced by rancher and co-owner of the company Fred H. Bixby. Bixby leased tracts of land owned by the Alamitos Land Company to Standard Oil, Royal Dutch Shell Company, and the Marland Oil Company. Roads were constructed through the Project area and foundations for the oil derricks were set on driven pilings. In 1926, the Marland Oil Company began drilling with great success on the Bixby Lease (part of the Seal Beach Oil Field) now known as the Synergy Oil Field and that same year went into full commercial oil production. Production of oil at the Seal Beach Oil Field reached its peak in 1927, averaging 70,000 barrels per day (ESA 2019).

Oil extraction from the Seal Beach Oil Fields eventually declined post World War II with major issues such as damage to multiple wells (518) from earthquakes and subsidence. By the mid-1970s, 223 oil wells were still in use but produced far less then offshore drilling facilities in San Pedro Bay (ESA 2019).

PROJECT AREA HISTORY

The Project area overlaps with the property boundaries and history of Hellman Ranch and the production of oil in association with the Los Angeles Basin's oil industry.

Based on the earliest known USDA aerial photographs of the Project area, in 1927 the Hellman Channel is clearly visible in its current configuration; however, this aerial photograph shows that the channel continued southeast and then turned northeast at the eastern end of the Project area boundary (Appendix D,
Figure D - 1). There are also two water retention ponds and multiple dirt access roads leading to and from the Project area.

In a 1928 USDA aerial photograph, two large tanks are visible near the northern center of the Project area (Appendix D,
Figure D - 2). What is believed to be two additional large water retention ponds are visible adjacent to an access road near the northeast side of the Project area. In a 1938 USDA photograph, multiple small structures/objects are visible at the westernmost end of the Project area near an access road (Appendix D,
Figure D - 3). By 1952, the majority of what is now 1st Street (which crosses into the Project area from the west) is visible in most of its current configuration (Appendix D,
Figure D - 4). A large structure (previously identified by ESA in 2019 as LCWA-CRE-004-H), is located on the State Lands [Commission] Parcel site (ESA 2019). While only the concrete foundation currently remains, ESA determined the building was related to the Airport Club Marina Palace and was initially constructed in 1950. The building was a large Quonset hut which was used as a gambling house and music venue (ESA 2019).

Between 1962 and 1965, the 90 degree bend at the northernmost point of the Hellman Channel is altered to its current configuration (Appendix D,
Figure D - 5 and Appendix D,
Figure D - 6). Sometime between 1965 and 1974, a long portion of the northeast/southwest access road near the center of the Project area was removed (Appendix D,
Figure D - 7).

In 1974, two large rectangular water retention basins are present (which remain today) at the western end of the Project area, adjacent to 1st Street. It is assumed these basins are associated with the nearby oil fields which are outside the boundaries of the Project area. The structures located at the western end of the Project area (LCWA-CRE-004-H) are no longer present. Only the concrete foundation is visible. There are no notable alterations within the Project area between 1974 and present day (Appendix D,
Figure D - 8 and Appendix D,
Figure D - 9).

RECORDS SEARCH

CALIFORNIA HISTORIC RESOURCES INFORMATION SYSTEM

For the Los Cerritos Wetlands Restoration Plan Program Environmental Impact Report (PEIR), ESA archaeologist Vanessa Ortiz completed a search of the California Historic Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) located on the campus of California State University, Fullerton on May 19, 2019. The records search was for the entire Los Cerritos Wetlands Complex which included the proposed Project area as well as a one-mile radius.

Cogstone archaeologist Logan Freeberg requested a second and expanded records search from the SCCIC on March 23, 2021. The updated records search focused on identifying cultural sites within a three-mile buffer around the entire Los Cerritos Wetlands Complex. SCCIC Assistant Coordinator Michelle Galaz completed the search on April 30, 2021. Results of the record search indicate that 13 previous studies have been completed within the Los Cerritos Wetlands Complex while an additional 99 studies have been completed previously within a one-mile radius of the Los Cerritos Complex (Appendix E, Table E - 1).

Three prehistoric cultural resources have been recorded within the Southern LCW Project area: P-30-000256 (Landing Hill #1), P-30-000258 (Landing Hill #3), and P-30-000260. Outside of the Southern LCW Project area, a total of 350 cultural resources have been previously

documented within the 3-mile radius from the Los Cerritos Wetlands Complex area. These consist of 30 cultural resources within 0 – 0.25 miles, 56 cultural resources within 0.25 – 0.5 miles, 34 cultural resources within 0.5 – 1 miles, 121 cultural resources within 1 – 2 miles and 109 cultural resources within 2 – 3 miles of the Los Cerritos Wetlands Complex area (Appendix F, Table F – 1).

P-30-000256 (LANDING HILL #1)

P-30-000256 was recorded as a prehistoric habitation site with milling stones located on Landing Hill above the coastal plain and tidal flats of Alamitos and Anaheim Bays, and close to food sources. The site was surface collected for many years prior to being recorded and much of it has been destroyed by development (McKinney 1969a based on information from Redwine 1959).

P-30-000258 (LANDING HILL #3)

P-30-000258 was recorded as a prehistoric habitation site that covered the highest of the small knolls on Landing Hill. Numerous chipped stone and ground stone artifacts were identified on the surface including 60 manos, 13 mortar fragments, 16 hammerstones, and a broken and mended sandstone bowl. This site has been largely destroyed by housing development (McKinney 1969b based on information from Redwine 1959).

P-30-000260

P-30-000260 was a prehistoric archaeological site that covered a small flat on the edge of Landing Hill. It is described as a seasonal camp marked mainly by shell remains and fragmented ground and chipped stone artifacts (McKinney 1969c based on information from Redwine 1959).

OTHER SOURCES

In addition to the SCCIC records search, a variety of sources were consulted in July 2021 to obtain information regarding the cultural context of the Project area. Sources included the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), California Built Environment Resource Database (BERD), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI) (Table 2). Specific information about the Project area, obtained from historic-era maps and aerial photographs, is also presented in the Project area History section.

Table 2. Additional Sources Consulted

Source	Results
National Register of Historic Places (NRHP)	Negative
Historic USGS Topographic Maps	The earliest USGS topographic quadrangle maps of the Project area are the 1886 Los Bolsas and 1896 Downey (both 1:62,500), which show the Project area as a wetland with improved roads close to its eastern border (Appendix G, Figure G - 1.) Little change is depicted until 1935, when the Los Alamitos (1:31,680) map shows a road in the south portion of the Project area (Appendix G, Figure G - 2). The San Gabriel River has not yet been channelized. The 1941 Las Bolsa and 1942 Downey (both 1:31,680) USGS topographic quadrangles show additional dirt roads and three buildings within the Project area (Appendix G, Figure G - 3). Depictions on USGS quadrangle maps change little to the present except for the 1974 Los Alamitos (1:24,000) USGS topographic quadrangle, based on an aerial photograph, and shows additional small roads, two larger retaining basins, and features encircled by roads that may be smaller retaining basins.
Historic US Department of Agriculture Aerial Photographs	Per the earliest known USDA aerial photographs, in 1927 (NETROnline 1927) there are multiple access roads visible within the Project area boundaries. Due to the poor quality of the photograph, observation of additional built environment is limited. In 1927, the Hellman Channel is clearly visible in its present location and configuration. Multiple dirt access roads are present, leading to and from the Project area. At least two large tanks are present at the northern center of the Project area. At least three water retention ponds are also visible. The 1952 USDA historic aerial photograph shows a large structure (previously identified by ESA in 2019 as LCWA-CRE-004-H) located on a State Lands [Commission] Parcel site (NETROnline 1952). While only the concrete foundation remains, ESA determined the building was related to the Airport Club Marina Palace and was initially constructed in 1950. The building was a large 32uonset hut which was used as a gambling house and music venue (ESA 2019). The 1974 USDA historic aerial photograph shows two water retention basins in place (NETROnline 1974). The features remain today. It is assumed these basins are associated with the nearby oil fields which are outside the boundaries of the Project area.
California Register of Historical Resources (CRHR)	Negative
Built Environment Resource Directory (BERD)	Negative
California Historical Landmarks (CHL)	Negative
California Points of Historical Interest (CPHI)	Negative

Source	Results
Bureau of Land Management (BLM) General Land Office Records	Table 3. Abel Stearns; 1874; Mexican Land Grant; Accession No. CACAAA 084787; Township 5 South, Range 12 West, Sections 11, 12 and 14; as part of 27143-acre land grant.
Local Registers (Historical Societies/Archives)	There is currently no active historical society in Seal Beach. Based on information found on the social media page for the Seal Beach Historical Society the organization is defunct and the whereabouts of its documentary holdings is unknown.

Table 3. Land Patents

Name(s)	Year	Accession Number	Type	T; R; Section
Abel Stearns	1874	CACAAA084787	Serial Patent	T: 5S; R: 12W, Sections 11, 12 and 14

Abel Stearns was one of the richest and most influential citizens of Los Angeles during his lifetime. Born in Massachusetts in 1799, he eventually made his way to California and settled in Los Angeles around 1833. Mr. Stearns made a large amount of money in trade and eventually purchased large swaths of real estate including Ranchos Los Alamitos, Las Bolas, La Laguna de Los Angeles and half interest in Los Coyotes. In 1849 he was a member of the first Constitutional Convention representing the district of Los Angeles. Mr. Stearns became one of the largest land and cattle owners in California. His wife, Dona Arcadia, who was the daughter of Don Juan Bandini, inherited the entire estate upon his death in 1871 (Barrows 1899).

SACRED LANDS FILE SEARCH

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) for the Los Cerritos Wetlands Complex for the PEIR in 2019. The NAHC responded that the search was positive but did not specifically identify the Sacred Land (Appendix H). Cogstone did not request an additional SFL search as Anthony Morales of the Gabrieleno/Tongva San Gabriel Band of Mission Indians identified that the sacred lands were the village of *Puvungna* which was nominated to the Sacred Lands file on November 19, 2019, and the village of *Motuucheyngna* which was nominated on May 9, 2019.

TRIBAL COORDINATION AND INTERVIEWS

TRIBAL ADVISORY COUNCIL

Consultation with Native American Tribes under AB 52 as well as other potentially interested Tribes was conducted for the PEIR (Section 3.15, ESA 2020). As a result of that process, a

Tribal Advisory Group (TAG) was created to collaborate first, with all tribes that consulted with LCWA through the AB 52 process for the PEIR, and potentially second, other interested Tribes, to engage tribal perspectives early on and throughout planning development, and to incorporate traditional ecological knowledge into restoration designs. Nine Tribes were invited to participate in TAG meetings (Table 4; Appendix I). The Gabrielino-Shoshone Nation was not part of the original AB 52 consultation for the PEIR as they had been inactive for several years but are now included for their knowledge of the area.

Table 4. Tribes invited to TAG

Tribe
Gabrieleño Band of Mission Indians – Kizh Nation
Gabrieleño/Tongva San Gabriel Band of Mission Indians
Gabrielino Tongva Indians of California Tribal Council
Gabrielino/Tongva Nation
Gabrielino-Shoshone Nation
Gabrielino-Tongva Tribe
Juaneño Band of Mission Indians Acjachemen Nation – Belardes
Juaneño Band of Mission Indians Acjachemen Nation – Romero*
Ti'at Society/Traditional Council of Pimu

*Teresa Romero has been replaced as Chairwoman by Heidi Lucero as of July 10, 2021.

The first TAG meeting was held on May 25, 2021, via Zoom. Four Tribal participants representing four Tribes attended (the Gabrieleno Shoshone Tribe, Gabrielino/Tongva Nation, the Gabrielino Tongva Indians of California, and Gabrielino-Tongva San Gabriel Band of Mission Indians). Participants were provided an overview of the purpose and goals of the TAG, information on the Southern LCW Restoration Project, results of the cultural resources records search, and information on the cultural landscape study of the greater Los Cerritos Wetlands Complex. After the meeting, minutes of the TAG meeting were prepared by LCWA and sent to representatives of the nine Tribes via email.

During the first TAG meeting, Tribal representatives requested an in-person field visit. On July 23, 2021, LCWA staff and consultants met with five Tribal representatives and three California Coastal Commission staff members (
Figure 5; Appendix J). Prior to the meeting, Tribal representatives were provided a list and map of the prehistoric sites within a 3-mile buffer around the Los Cerritos Complex and information about interviews to be conducted for the TCL study. Hard copies of these documents were made available to site visit participants, who walked the Southern LCW Restoration Project area as LCWA representatives provided information about the proposed project. Tribal members asked

questions and provided feedback on the proposed restoration plan. Detailed comments are summarized in the Tribal Feedback section below.

TRIBAL INTERVIEWS

To better understand the Gabrielino's (Gabrieleño; Tongva; Kizh) and Juaneño's (Acjachemen) relationship to the Los Cerritos Wetlands, saltwater marshes, and the greater cultural landscape encompassing the Los Cerritos Wetlands, including the villages of *Puvungna* and *Motuucheyngna*, Cogstone conducted interviews with Tribal members recommended by Tribal representatives.

Figure 5. Meeting with LCWA. Coastal Commission, and TAG on July 23, 2021.

Interviews were conducted in conjunction with UCLA's "Diverse Perspectives on Water" project. Funded by the National Science Foundation, the "Diverse Perspectives on Water" project is investigating how Gabrielino (Gabrieleño; Tongva; Kizh) and Tataviam viewed/views water in the past, present, and future in Los Angeles County. Prior to each interview, each interviewee was provided an Interview Consent Form and list of possible interview questions (Appendix K).

UCLA staff, Dr. Jessica Cattelino and Sedonna Goeman-Shulsky, conducted digital video recording of the interviews of four of the interviewees while Cogstone staff recorded interviews via digital audio recorder and took digital photographs. Each participant was provided an honorarium for their participation.

Los Cerritos Wetlands Authority staff conducted an interview with Matt Teutimez, Gabrieleño Band of Mission Indians – Kizh Nation, via Zoom. The Gabrieleño Band of Mission Indians – Kizh Nation's history and stories are not interchangeable with the history of other tribes interviewed in this study.

The Lawrence de Graaf Center for Oral and Public History at the California State University, Fullerton transcribed the digital audio interviews.

Copies of the interview transcripts, photos and interview audio and video will be provided to all interviewees. The interview transcripts, photos and video may be donated to the Graaf Center for Oral and Public History, upon consent of participants. Five Tribal members were interviewed (Table 5).

Table 5. Tribal members interviewed

Name	Tribe	Date	Location
Cindi Alvitre	Ti'at Society/Traditional Council of Pimu	August 14, 2021	Gum Grove Park, Seal Beach, CA
Mercedes Dorame	Gabrielino Tongva Indians of California Tribal Council	August 14, 2021	Gum Grove Park, Seal Beach, CA
Craig Torres	Ti'at Society/Traditional Council of Pimu	August 28, 2021	Southern LCW Project area, Seal Beach, CA
Nicholas Rocha	Gabrielino Shoshone Nation	August 28, 2021	Southern LCW Project area, Seal Beach, CA
Matt Teutimez	Gabrieleño Band of Mission Indians – Kizh Nation	October 7, 2021	Via Zoom

Rocha, Torres, and Alvitre were also given a tour of the Southern LCW Project area by D. Martinez.

<u>Cindi Alvitre</u>

Ms. Alvitre is Director of the Ti'at Society/Traditional Council of Pimu and has been an educator and artist activist for over three decades. She served as the first woman chair of the Gabrieleno/Tongva Tribal Council and in 1985, she and Lorene Sisquoc co-founded the Mother Earth Clan, a collective of Indian women who created a model for cultural and environmental

education, with a particular focus on traditional art. In the late 1980s, she co-founded the Ti'at Society sharing in the renewal of the ancient maritime practices of the coastal/island Tongva, extending into the public realm as participants in the World Festival of Sacred Music and Moompetam, the American Indian Festival at the Aquarium of the Pacific in Long Beach. Cindi is currently a professor in American Indian Studies and the NAGPRA Coordinator for California State University, Long Beach.

Mercedes Dorame

Ms. Dorame is a Tongva artist and currently visiting faculty at CalArts. She is the daughter of Robert Dorame, Chair of the Gabrielino Tongva Indians of California Tribal Council. As an artist, she calls on her Tongva ancestry to engage the problematics of (in)visibility and ideas of cultural construction. As a Native American monitor, she observed construction at the Hellman Ranch site, located to the east of the Southern LCW Restoration Project and at the Playa Vista/Ballona wetlands. Dorame's work is in the permanent collections of the Hammer Museum, San Francisco Museum of Modern Art, The Triton Museum, The Allen Memorial Art Museum, The de Saisset Museum, The Montblanc Foundation Collection, and The Phoebe A. Hearst Museum.

Craig Torres

Mr. Torres is an Tongva artist and cultural educator descended from the indigenous communities of the Yaavetam (Los Angeles) and Komiikravetam (Santa Monica Canyon). He is a member of the Ti'at Society/Traditional Council of Pimu. As a Tongva cultural educator he has taught at many schools, culture and nature centers, museums as well as other governmental agencies on Tongva history, culture and contemporary issues. He is an ongoing consultant at Rancho Los Alamitos Historic Ranch and Gardens in Long Beach, working with the Tongva program that he helped develop. He has also been involved with the Chia Café Collective which provides cooking demos and classes with California native plants and provided education on the importance of preserving native plants, habitats and landscapes for future generations (Drake et al. 2016). He is also an advocate of "indigenizing" public and residential landscapes to California native plants and raising the public's awareness of drought and water issues. As an artist, he derives his inspiration from his Tongva cultural heritage. He works in digital media as a graphic designer, mixed media as well as utilized some of his designs as inspiration for community collaborative "sacred art" installations.

Nicholas Rocha

Mr. Rocha is currently the Chair of the Gabrielino Shoshone Nation and is on the cultural advisory board for Anahuacalmecac International Baccalaureate World School in Los Angeles. His mother, Vera Rocha, was chief of the Gabrielino Shoshone Nation while his father was its spiritual leader. The Rocha family has been involved with Native America activism and politics for many years including bringing a lawsuit against the City of Los Angeles in 1996 along with

the Wetlands Action Network/Ballona Valley Preservation League/Earth Trust Foundation, and Friends of Sunset Park to protect the Ballona Wetlands, a salt marsh located in west Los Angeles.

Matthew Teutimez

Mr.Teutimez is a biologist and has both a Bachelor and Master of Science in Biology from California State University of Long Beach. He brings his indigenous perspective to his projects, melding his educational background and traditional ecological knowledge passed down from generation to generation. Mr. Teutimez's father, John Teutimez Jr. is a tribal elder, and he is cousin to current Tribal Chairperson Andrew Salas. The family can trace their lineage through the decades of colonization, through the Spanish, Mexican, and American periods, tying back to the San Gabriel Mission and workers of the ranchero families that occupied Long Beach and Seal Beach. Mr. Teutimez also sits on California's Environmental Protection Agency's Tribal Advisory Council.

Attempts to interview Juaneño (Acjachemen) Tribal members have been unsuccessful.

Overview of the responses to the interview questions are incorporated in the Tribal Feedback as well as summarized in the Cultural Landscape sections below.

Figure 6. Mercedes Dorame and Cindi Alvitre, Gum Grove Park, Seal Beach, CA August 14, 2021.

Figure 7. Craig Torres and Nicholas Rocha, Los Cerritos Wetlands, Seal Beach, CA August 28, 202

SURVEY

METHODS

The survey stage is important in a Project's environmental assessment phase to verify the exact location of each identified cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources sensitivity. All undeveloped ground surface areas within the Project area were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the Project area, including ground surface visibility and items of interest, were taken with a digital camera. Cogstone archaeologist Desiree Martinez conducted an intensive cultural resources pedestrian survey of selected areas of the Project area (northern edge of the Hellman Channel) on July 21 and August 28, 2021. Cogstone archaeologist Sandy Duarte completed an intensive-level pedestrian survey on August 5 and 6, 2021, of those areas not covered by dense vegetation.

Built environment survey methods include thoroughly photographing all elevations/facades of a structure including close-up photographs of important character defining features such as overall shape of the structure, its materials, craftsmanship, decorative details, etc. Cogstone Architectural Historian Shannon Lopez documented the Hellman Channel on July 21, 2021.

RESULTS

Ground visibility within the Project area was very poor (less than 3 percent) due to dense vegetation. As a result, Ms. Duarte surveyed approximately 20 acres of the 105 acres within the Project area which consisted of bare and semi-bare surrounding areas, having 95 percent visibility (Appendix L, Figure L - 1). The intensive pedestrian survey consisted of one- to three-meter wide transects in accessible areas. The wetlands and surrounding areas are covered with glasswort, prickly lettuce, sage brush, mule fat, wild tobacco, bladderpod, and an abundance of other native and non-native flora (
Figure 8). Most of the Project area surveyed has been highly disturbed from anthropogenic activities. Most of the Project area's surface was covered with dredge sediments and various sized shell fragments including clam, oysters, scallops, barnacles, California Horn Snail, etc. (Figure 9).

Figure 8. Overview of the Southern LCW Project area showing dense vegetation, facing northeast

Figure 9. Overview dredge sediments and shell within the Project area

NEWLY RECORDED CULTURAL RESOURCES

Six new cultural resources were recorded: one historic earthen irrigation channel, two prehistoric isolates (2021_08_05_SD.1-I and 2021_08_28_DRM.1-I), two historic sites (2021_08_06_SD.1 and 2021_08_06_SD.2) and one prehistoric site (2021_08_06_SD_3).

Hellman Channel

This segment of the historic Hellman Channel within the Southern LCW Project area is 4,161 feet long (Figure 10). This channel was likely constructed ca. 1928 and originally used for irrigation purposes on the Hellman Ranch. The channel is not lined and is gravity fed. The depth of the channel is between 1-2 feet and varies in width, approximately 4 feet at its narrowest point and around 15 feet at its widest. The bank of the channel is covered with dense vegetation. Several concrete conduits located in various points along the channel allow water to flow under an asphalted road crossing.

Figure 10. Segment of Hellman Channel near 1st Street; facing east

2021_08_05_SD.1-I

2021_08_05_SD.1-I is an isolated prehistoric artifact consisting of 1 piece of obsidian debitage, located north of 1st Street (

Figure 11; Appendix L, Figure L - 1). The isolate measures 2.7 centimeters (cm) x 2.5 cm x 2 cm.

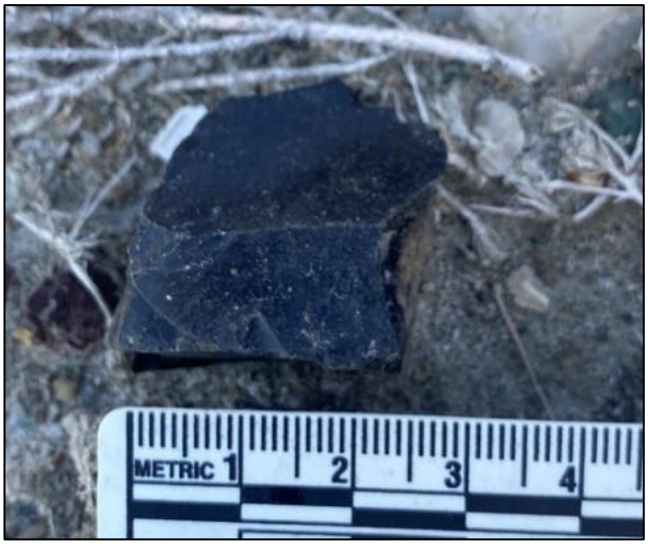

Figure 11. 2021_08_05_SD.1-I, isolated obsidian debitage

2021_08_28_DRM_1-I

2021_08_28_DRM_1-I is a prehistoric isolate consisting of 1 prehistoric exfoliated granitic unifacial mano and an exfoliated chalcedony scraper found in three pieces (
Figure 12; Appendix L, Figure L - 1). The mano measures 12.7 cm in diameter and 3.81 cm in thickness. When whole the scraper measured 2.54 cm x 2 cm and 0.5 cm in thickness. No other cultural resources or features were present.

Figure 12. 2021_08_28_DRM_1-I, granitic mano and chalcedony scraper

2021_08_06_SD.1

2021_08_06_SD.1 is a historic-age refuse site consisting of two piles of wood planks and boards, a pile of broken concrete, and some metal scraps
Figure 13,
Figure 14,
Figure 15,
Figure 16 and Appendix L, Figure L - 1). The wood and concrete had no diagnostic features.

Figure 13. Overview of first wood pile within 2021_08_06_SD.1, facing south

Figure 14. Overview of second wood pile within 2021_08_06_SD.1, facing north

Figure 15. Overview of concrete pile within 2021_08_06_SD.1, facing south

Figure 16. Metal scrap within 2021_08_06_SD.1.

2021_08_06_SD.2

2021_08_06_SD.2 is a historic-age refuse site consisting of deteriorated red bricks (Figure 17), a pile of tile fragments (
Figure 18) and a historic soda fired ceramic pipe sherd (
Figure 19). The site measures approximately 72 feet by 43 feet and is adjacent to the northern edge of the Hellman Channel (Appendix L, Figure L - 1).

Figure 17. Overview of deteriorating red brick within 2021_08_06_SD.2

Figure 18. Overview of ceramic tile in 2021_08_06_SD.2

Figure 19. Historic soda fired ceramic pipe sherd

2021_08_06_SD.3

2021_08_06_SD.3 is a prehistoric site consisting of a lithic scatter of a quartz flake (
Figure 20), a modified tool of pink quartzite (
Figure 21), and a grey quartzite scraper (
Figure 22). This site is approximately 60 meters east of 2021_08_06_SD.2. The site measures 60 meters by 14 meters and is adjacent to the northern edge of the Hellman Channel (Appendix L, Figure L - 1).

Figure 20. Quartz Flake within 2021_08_06_SD.3

Figure 21. Pink Quartzite tool within 2021_08_06_SD.3

Figure 22. Grey Quartzite scraper within 2021_08_06_SD.3

PREVIOUSLY RECORDED SITES

Portions of three previously recorded cultural resources are located within the Southern LCW Project area. P-30-000256 was revisited. This northwest portion of the site sits atop a bluff and spills down slope into the wetlands. Approximately 15 percent of the site was visible. No cultural resources were observed.

The portions of P-30-000258 and P-30-000260 that lie within the Southern LCW Project area were not accessible due to dense vegetation and were not revisited.

EXTENDED PHASE I TESTING

Cogstone returned in September/October for Extended Phase I presence-absence testing of three resources recorded during the August 2021 survey and site visits. These resources (temporary names) are 2021_08_05_SD.1/I and 2021_08_28-DRM_1-I cultural isolates, and site 2021_08_06_SD.3. Planned excavation is summarized in Table 6 below (and investigation methods are summarized in the next section and detailed in Gust and Martinez 2022). Eric Zahn of Tidal Influence met with the archaeological crew on the first day of excavation to provide optimal access routes to the resources and to point out sensitive vegetation. Native American monitors representing Tribal Advisory Group participants accompanied the archaeological crew on a rotating basis (Table 7).

Table 6. Planned excavation

Site Name	Site Type and Description	Type of Excavation	Depth of fill	Planned Disturbance (Grading)
2021_08_05_SD.1/I	Isolate-obsidian debitage	Shovel Test Pit (STP) 50 cm diameter x 1.2 m (1.3 x 4 feet) deep	3 feet	3 feet
2021_08_06_SD.3	Site-lithic scatter	Test Excavation Unit (TEU) 1m x1m x 1.6m (3 x 3 x 5 feet)	4 feet of fill	2-3 feet of cut
2021_08_28-DR_1-I	Isolate-granitic mano and chalcedony scraper	STP 40 cm diameter x 30 cm (1.3 x 1 foot) deep	0 feet	No planned ground disturbance

Table 7. Native American monitoring schedule

Date	Monitor	Representing
9/28/2022	none	Planned representative was ill and unavailable
9/29/2022	Robert Dorame	Gabrielino Tongva Indians of California Tribal Council
9/30/2022	Dominic Robles	Ti'at Society/Traditional Council of Pimu
10/3/2022	John Blunt	Gabrielino Tongva Nation
10/4/2022	Sam Dunlap	Gabrielino Tongva Tribe

METHODS

The testing crew included a single supervisor-level archaeologist and a qualified field technician. The principal archaeologist was on-site a on spot-check basis.

Cogstone contacted Dig-Alert (digalert.org) prior to the start of excavation, to obtain the locations of underground utilities.

Extended Phase I testing within the Southern LCW consisted of excavation with three prehistoric resources (2021_08_05_SD.1/I, 2021_08_06_SD.3, and 2021_08_28-DRM_1-I) identified during fields visits/pedestrian survey in 2021 (Appendix L, Figure L - 1; see Table 6). Excavations were accomplished using a a round-tipped shovel, pick, and dig bar in 10-centimeter (4-inch) levels. Sediments at each excavation location were screened through 1/8-inch hardware mesh. Sediment color was identified using a Munsell® Soil Color Chart, and any natural stratigraphy or effects of bioturbation were described using standard methods and terminology. All surface artifacts that could be reidentified were collected and the crew was prepared to collect all prehistoric artifacts and all temporally diagnostic historic-aged artifacts. A Handheld Trimble GeoXH 6000 high resolution GPS unit was used to record each excavation location. Color digital photographs were taken before, during, and after fieldwork. Other documentation included field notes on the condition of the deposit and excavation records. After excavation was complete, each excavation location was backfilled using sediments from the excavation.

2021_08_05_SD.1/I

Work at 2021_08_21.SD/I was originally planned to consist of one 50 cm diameter x 1.2 m (1.3 feet x 4 feet) deep STP (STP 1). Sediment color varied from white (2.5Y8/1) at the surface to dusky red (2.5Y3/2) to 30 centimeters to dark brown (7.5Y3/3) from 30 centimeters to the bottom of the pit. Sediments in STP 1 were silty sand that become progressively less silty and more compact with depth. Clay content varied from minimal within first 20 centimeters to increasingly large dense nodules from 20 centimeters (8 inches) to 50 centimeters (20 inches) (Figure 23). At approximately 50 centimeters further excavation was stopped by a large piece of reddish in color dimensional lumber. Due to this obstruction, a second STP (designated STP 1B)

was excavated 5.2 meters (17 feet) due south of STP 1. Sediments within STP 1B were similar to those in STP 1 except it had greater clay content within the first 20 centimeters. A similar piece of reddish dimensional lumber was encountered at 58 centimeters (23 inches) (Figure 24). No other subsurface cultural material was found in STP 1 or STP 1B.

Figure 23. STP 1 at 2021_08_05_SD.1/I post-excavation, view to the north. Note dimensional lumber at bottom of STP.

Figure 24. STP 1B at 2021_08_05_SD.1/I post-excavation. Note dimensional lumber at bottom of STP.

2021_08_28_DRM_1.I

Work at 2021_08_28_DRM_1.I consisted of a single STP (STP 2) excavated to the planned depth of 30 centimeters (1 foot) (Figure 25). Sediment color varied from white (2.5Y8/1) at the surface to very dark grayish brown (2.5 Y3/2) in the first 10 centimeters (4 inches) to grayish brown inches (2.5Y5/2) from 10 centimeters (4 inches) to 30 centimeters (12 inches). A thin layer of salt covered STP 2 at the surface. Sediments consisted of wet silty sand with minimal clay and a small amount of shell that diminishes with increasing depth. No cultural material was found subsurface within STP 2.

Figure 25. STP 2 at 2021_08_28_DRM_1.I post-excavation.

2021_08_06.SD.3

Planned work at 2021_08_06.SD.3 consisted of a single 1 meter (3 feet) by 1 meter (3 feet) TEU excavated to 1.6 meters (5.2 feet) deep. A possible hand stone (mano) was found 3.1 (10 feet) meters northwest of TEU on the surface but the not all of the cultural material identified during survey was reidentified during testing. Starting at a few centimeters below the surface the content of the TEU became approximately 20 percent very dark gray (5YR3/1) silty sand and 80 percent rocky material predominated by fragments of broken concrete. One lithic flake and two possible lithic flakes were found in the first ten centimeters (4 inches) (Level 1) and some chert and quartzite were also present. Contents of Levels 2 and 3 were a similar 80 percent rocky material/20 percent very dark gray (5YR3/1) silty sand, with a small number of shell fragments mixed within fragments of modern plastic bags. One potential lithic flake was recovered from 16 to 26 centimeters (6 to 10 inches) below surface, and another was found at 20 to 30 (8 to 12 inches) centimeters below surface. Starting at approximately three centimeters (1 inch) deep within Level 4 the rocky material content began to decrease. No artifacts were recovered from

the very dark gray (5YR3/1) silty sand within Level 4 other than a possible piece of wood. A brick fragment was found within the now nearly 100 percent very dark gray (5YR3/1) silty sand within Level 5. Small bits of asphaltum was also present from near the top of Level 1 to the bottom of Level 5. The first 5 centimeters of Level 6 consisted of the same very dark gray (5YR3/1) silty sand (Figure 26).

When the excavation reached 55 centimeters (22 inches) below surface, a shift in excavation methods was necessary due to time constraints. Instead of continuing the unit an STP (STP 3) was placed in the center of TEU 1. At approximately 85 centimeters (33 inches) below surface the dark reddish brown (2.5Y3/1) silty sand became wet and compacted and no longer contained shell or asphaltum. These sediments continued to 152 centimeters (5 feet) below surface where the STP was stopped due to time constraints and difficulty removing sediments from the STP for screening (Figure 27). Natural sediments were reached in this testing operation as fill depth was estimated to be approximately 4 feet (120 centimeters). No potentially prehistoric cultural material was found below 30 centimeters (1 foot) and any potentially historic-age material found was mixed with modern trash. Lithic artifacts from TEU 1 are shown in Figures 28 to 31.

Figure 26. TEU 1 at 2021_08_06.SD.3 post excavation at 55 centimeters deep, view to the north.

Figure 27**. STP 3 in TEU 1 at 2021_08_06.SD.3 post excavation at 152 centimeters deep, view to the north.**

Figure 28. Lithic flake (4) 1.4from TEU 1, 0 to 10 centimeters below surface.

Figure 29. Possible lithic flakes from TEU 1, 0 to 10 centimeters below

surface.

Figure 30. Possible lithic flake from TEU 1, 16 to 26 centimeters below surface.

Figure 31. Possible lithic flake from TEU 1, 20 to 30 centimeters below surface.

RESULTS

None of the three resources that underwent tended phase I presence/absence testing in September/October 2022 were found to have associated intact buried cultural deposits. Specific information for each tested resource follows.

2021_08_05_SD.1/I

According to Eric Zahn of Tidal Influence (personal communication to John Gust on October 3, 2022) this resource was in an area that previously contained sump pits used in fossil fuel extraction. The reddish dimensional lumber found in the bottom of STPs 1 and 1B is consistent with this as cedar and redwood, both reddish in color, are commonly used in wet situations due to their natural resistance to rotting. Excavation for a sump pit would have disrupted any cultural deposits once present.

2021_08_28_DRM_1.I

The planned STP in this resource was excavated according to plan and revealed no cultural material subsurface.

2021_08_06.SD.3

Testing excavation in this resource was deeper than within the two isolates. The only potentially prehistoric material was found no deeper than 30 centimeters (1 foot) below surface and then

mixed with modern trash and concrete debris. Natural sediments were reached in the last approximately 30 centimeters (1 foot) without encountering cultural deposits.

GEOARCHAEOLOGICAL SENSITIVITY ANALYSIS

METHODS

For this assessment, University of California Davis National Resources Conservation Service California Soils Resource Lab (UCD SoilWeb, accessed September 2021) soils maps were consulted along with the United States Department of Agriculture National Resources Conservation Service (USDA-NRCS, accessed September 2021) soils descriptions, and geologic maps. Soils of the Project area were determined using the UCD maps.

Subsurface site preservation depends on many factors. Soils and locations were analyzed for grain sizes, slope, and environmental indicators that contribute to the preservation of sites. Primarily, sites accumulate where people have the highest probability of living; on lower slope gradients near water sources but in areas that are unlikely to experience regular flooding. Additionally, lower slope gradients decrease erosion and increase deposition assisting in site burial. Both pebbly and coarser grain sizes as well as clay rich soils preserve artifacts poorly. The age of a soil also determines the likelihood of buried archaeological sites and must be assessed as the older soils are less likely to contain sites unless items were intentionally buried in them. Soils likely too old for site preservation have duripans (hardpans), and argillic (clay rich) horizons, while younger soils with a higher potential for preservation are indicated by the lack of a B horizon or the presence of a cambic horizon. Both Holocene alluvial and aeolian units have a higher potential for artifacts as the soils were co-deposited with the local cultural groups.

CLASSIFICATIONS FOR BURIED SITE POTENTIAL ARE AS FOLLOW

Very low: Soils are underlain by deposits that predate human occupation of the region. Soils that include B horizons, especially if they are argillic or silicic (duripan) horizons are also classified as very low. Additionally, exposed bedrock, borrow pits, heavily eroded or gullied land, or water bodies have a very low potential. Areas of high erosion, water, borrow pits, rock outcrops, or sediments mapped as Pleistocene or older are classified as having a very low potential.

Low: Soils are underlain by deposits that predate human occupation of the region, high-energy deposits unlikely to contain cultural materials in a primary context, are residual soils (soils weathered in place above bedrock), or include B horizons. Low-potential areas include Inceptisols. These are formed in residual soils weathered directly from bedrock and, thus, have a

low potential for buried sites. Areas where soils are weathered from bedrock, dissected alluvial fans, and locations where soils are forming on mountains are classified as having a low potential.

Medium: Soils are underlain by deposits that are most likely terminal Pleistocene or Holocene in age, possibly have intact buried surfaces, or have sediments that are likely to have been deposited in a low-energy environment. Alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans, floodplains, and drainages are classified as having a medium potential.

High: Soils are underlain by deposits that are most likely terminal Pleistocene or Holocene in age, or sediments represent low-energy deposits, or have a high potential to contain buried intact geomorphic surfaces that could have been used by humans in the past. Alluvial stream terraces and floodplains, terrace escarpments, alluvial fans (fan skirts, fan aprons, and inset fans), and areas with aeolian deposits are classified as having a high potential.

RESULTS

The Project area is mapped as middle to late Pleistocene old marine to nonmarine deposits and modern artificial fill. The location of the Southern LCW Project area adjacent to the Pacific Ocean and San Gabriel River would have made the area highly appealing for settlement. However, the minimal topography indicates that the area would have likely been marshy and subject to flooding. The slightly raised Landing Hill located to the south and east of the Project area would have been a more likely area to find settlements, as is evident by the many archaeological sites documented. Several soils are present within the Project area, some of which formed in the marsh habitat and others that are introduced to the Project area as fill and denote disturbance (Appendix M, Figure M - 1; USDA-NRCS 2021).

SOILS MAPPED OVER ARTIFICIAL FILL

At the surface, all areas mapped as artificial fill will have a very low potential as any artifacts present would be not in situ. Soils impacted include Balcom clay loam (112), Bolsa silty clay loam, drained (125), Bolsa, drained (1230LA), and Myford sandy loam (173, 175; Appendix M, Figure M - 1).

Based on the geology map, a good portion of the sediments below the artificial fill are probably middle to late Pleistocene old marine to nonmarine deposits (Qom), late Pleistocene to Holocene young alluvial fan deposits (Qya2) associated with the San Gabriel River, late Pleistocene to Holocene young paralic estuarine deposits (Qype), and late Holocene paralic estuarine deposits (Qpe; Appendix C,
Figure C - 3). Pleistocene deposits mostly predate human settlement, and both estuary and marine environments are unfavorable to settlement. As such, all of these sediments are assigned a low to very low potential for buried sites.

SOILS MAPPED OVER MIDDLE TO LATE PLEISTOCENE OLD MARINE TO NONMARINE DEPOSITS

Unit 112, the Balcom clay loam, is assigned a very low potential for buried sites due to the topography of the adjacent steep slope, the potentially marshy flats, as well as the age of the underlying sediments. Additionally, the presence of B horizons decrease the potential for buried sites.

Unit 125, the Bolsa silty clay loam, drained is assigned a low potential for buried sites due to the potentially marshy flats and the age of the underlying sediments.

Units 173 and 175, Myford sandy loam, are assigned a very low potential for buried sites due to the topography of the adjacent steep slope, the potentially marshy flats, as well as the age of the underlying sediments. Additionally, the presence of B horizons decrease the potential for buried sites.

TRIBAL FEEDBACK

As previously stated, in compliance with Mitigation Measure CUL16: Future Native American Input for the PEIR, the LCWA created a Tribal Advisory Group (TAG) to solicit recommendations regarding the Southern LCW Restoration Project. Members of the TAG recommended Tribal members to be interviewed for their cultural knowledge of the area. Mitigation Measure CUL17 of the PEIR states that a Tribal Access Plan will be created "to preserve and enhance tribal members' access to, and use of, the restoration Project area for religious, spiritual, or other cultural purposes." The following is a summary of comments, concerns, and information gathered through TAG meetings, site visits and interviews. Further, comments provided in Section 3.15: Tribal Cultural Resources of the PEIR are also included here, as one of the Tongva elders who provided comments passed away in early 2021 and would have been interviewed for her extensive knowledge of salt marshes.

PAST USE OF SALT MARSHES

A search of the ethnographic record, including the J.P. Harrington and C. Hart Merriam notes, did not turn up any significant description of the use of salt marshes or the Los Cerritos Wetlands by the Gabrielino (Gabrieleño; Tongva; Kizh) or the Acjachemen. Merriam (n.d.: Roll 8) did record the Luiseno name of the "Salinas" at today's Redondo Beach as *Engva*. Historically, Redondo Beach, located 18 miles northwest of the Project area, was well known for the Pacific Salt Works that was established there in 1854 (Gnerre 2010). It was also used by the local Gabrielino (Gabrieleño; Tongva; Kizh). Alfred Kroeber recorded from Jose Zalvidea that the

Gabrielino (Gabrieleño; Tongva; Kizh) name of the village was *Ongoving* (Kroeber 1907: 143). McCawley spells it *'Ongoovanga* (McCawley 1996: 63).

Merriam records the Gabrielino (Gabrieleño; Tongva; Kizh) words for salt as "*Ung-er*" from Mrs. J.V. Rosemyre, a Tongva woman who lived in Bakersfield, California in 1903. She further stated that the salt made from salt grass was "*se'-e-mōt*" and that the salt was used for fever (Merriam n.d. 1556: Roll 49).

The LCWA met with Julia Bogany of the Gabrieleno/Tongva San Gabriel Band of Mission Indians, who stated that the Los Cerritos Wetlands was probably used as a "salt works" much like the Redondo area (Coastal Restoration Consultants 2021:61-62). She provided further information as summarized in the PEIR:

> In the Tongva history, it is known that salt marsh used to exist in this area because their tribe would travel from the ocean to the salt marsh on canoes. The salt marshes were important to the Tongva because throughout prehistoric times, the Tongva traded salt gathered from salt flats in the salt marsh. Multiple stories exist that document the salt trade, for example, the tribe used to trade salt to a hospital in San Bernardino to treat patients. The Los Cerritos Wetlands is the only prehistoric salt marsh left in the area from Pacific Palisades, and the Los Cerritos Wetlands was and continues to be an important cultural resource to the Tongva and Acjachemen tribes (Section 3.15.2.3 of the PEIR).

Lowell Bean also documented salt being traded from the Gabrielino (Gabrieleño; Tongva; Kizh) to the Cahuilla and vice versa (
Figure 3).

SALT AS MEDICINE

Cindi Alvitre stated that salt was and continues to be an important medicine.

> I'll give you an example of that, is I grew up with a father who when we got sick we would go to the ocean, he would gather the salt water, the ocean water—we could do that back in the fifties—and we would, like, use a neti pot and we would breathe it in through our nose…And then at some point we stopped doing it because the water was polluted. And that's when we started accessing Hawaiian salt. You know the Hawaiian salt is very holy, just like to the Pueblo people it's (salt) very holy. It's holy to all people… also we would use it where you take like a tablespoon of salt, good salt, and as hot as you can take the water, if you're getting the flu or something, and you drink it. And it'll just—it literally flushes everything out of your system.

Torres also recalls using salt water as medicine.

> The one thing that sticks out in my mind is, especially with my mom, is using salt water, not necessarily from the ocean, because we couldn't go down and use the salt water for health, but gargling with salt water all the time when we got sick, you know? And I think it really stems from us traditionally using that salt water for healing in the past, because she would always talk about that, gargle with salt water, gargle with salt water. And so that's what sticks out in my mind as a child, always having her talking about that whenever we got sick.

Alvitre further stated that:

> …every time there's a bad kid you just want to bathe him in that water…Bathing in the water was like, not a Christian baptism, but it was a way of rebalancing yourself. So that motivation is always connecting to the water, to that sacredness, that holiness, that place that has so much energy and life.

Rocha explains that it is also not just about salt water, but the salt air as well that can be healing. He recalls is mother would say:

> … it's not so much salt water, because everything lives in a relationship in the community, you know, air is an organism and salt water with the air. My mom used to call it salt air therapy. Not only does it have the spirit, it kind of makes you mentally stable. You know, you come out here, you breath the air, and that stimulates the body and it gets you focused…You know, it's—something generates that from inside them and my mom always had the theory of salt air as therapy. If someone was mad, someone was angry, somebody was sad, this was a place we came. And you were good. I mean, it works; it works beautifully. I recommend it.

Torres commented that he felt healed being out in the Los Cerritos Wetlands on the day of the interview:

> … I just came from the desert right now, where it was like 114 degrees. And being back here on the coast with the fog there is something—I mean, I feel healed just being here right now, you know, compared to being out in the desert yesterday. And so, there's something—I don't know if it's just the ions, the ancestors, or just the…—because this is the place where they lived for thousands of generations—and being back home, as opposed to the desert. But there's

> something to be said about—you know, we were talking about this too on the ride, just a while ago. It's like this fog and this salt in the air, for me it's healing.

FISHING

Mr. Rocha recalls the stories that his mother would tell him about the Los Cerritos Wetlands, "So, my mom would talk about the days her uncles used to come out here in a four-man skiff and fish for crab, shrimp, mussels, whatever."

Mr. Teutimez stressed the value of shellfish both as a food source and the value of the shells cultural uses, and would like to get them back into our estuaries.

COLLECTING PLANTS AND ANIMALS

Dorame stated that her dad Robert told her that he used to eat watercress from the wetlands located on the west side of Los Angeles.

> …he said his mother would take him to the shore but only let him—put his hands behind his back so he wouldn't take too much. So he actually had to eat it out of the water with his mouth because it was a means of respecting that you weren't taking too much of what you could consume in that moment.

Alvitre recounted:

> Like, my father would go into the wetlands. I mean, we were more Newport Back Bay, [those] wetlands. Of course it's the same wetlands system, but what we're lacking now is, again, that access and even the use of a lot of those foods because of the denial of access. The birds, the water fowl—that's a food source. The eggs are a food source. The fish, different kinds of fish that come into the wetlands at high tide and low tide, being able to recognize that and know which one of those are good.

Rocha stated that when his family would travel through the area, his mother, Vera, would tell stories of the gifts that could be found within the wetlands.

> As soon as my mom always asked this question, we knew what was going to become of this conversation. She would say, "Not much pickleweed anymore. We've got to get the pickleweed." My dad would always answer with the same response, "What the heck do we want with that for? It's poisoned. It's no good no more." And my mom would say, "Well, I remember the pickleweed." I remember her mom telling her stories about how uncles and relatives, ancestors, used to

> come out here when the tide rolled out, to see what the tide left them, what presents the tide left them. There were things in abundance back then…But she would tell stories about the baby green sea turtles out here, that you'll find that they'll be dropping from the sky because the terns would pick them up. And then the terns would be fighting for them and they'll be dropping from the sky and you'd have to put them back in the water. There were stories of even fishing for halibut out here and other things: soft shell crab, oysters, mussels. Things were in abundance. When the tide rolled out it left a lot of gifts. And when the eel grass was visible, you know, that was one of the best times to go on an adventure…

Additionally, while on the tour of the Project area, Rocha stated that pickleweed was used in the abalone stew his family would make. Rocha mentioned that although his mother would talk about the gifts of the wetlands, they never went in because of the oil drilling and contamination. Table 8 lists a few salt marsh plants that have been identified as used by the Gabrielino (Gabrieleño; Tongva; Kizh) and their uses. The interviewees would like to be able to incorporate these plants into their community once again.

Table 8. Selected salt marsh plants

Common name	Scientific name	Tribal Uses
Pickleweed	*Salicornia pacifica*	Food
California sea lavender/ western marsh rosemary	*Limonium californicum*	Food; medicine
Southern tar plant	*Centromadia parryi ssp. australis*	
Salt grass	*Distichlis spicata*	Used to season food
California boxthorn	*Lycium californicum*	Edible berries
Watercress	*Nasturtium officinale*	Food, leaves eaten (personal communication; Dorame 2021)
Bladderpod	*Peritoma arborea*	Food; flowers boiled (Ramirez and Small 2015: 12-17)
Evening primrose	*Oenothera elata*	Food; medicine
Yebra Mansa	*Anemopsis californica*	Medicine; tea used for colds and sore throat (Drake in Ramirez and Small 2015); poultice doe cuts and wounds (Mojado in Ramirez and Small 2015)

Common name	Scientific name	Tribal Uses
Shore grass	*Distichlis littoralis*	
Eelgrass	*Zostera marina*	Food; use of rhizomes, seeds and leaves

CURRENT USE OF THE LOS CERRITOS WETLANDS AND SALT MARSHES

None of the interviewees or Tribal representatives at the site visit stated that they currently use the Los Cerritos Wetlands or other salt marshes for the collection of plants or animals or other cultural activities. Although Ms. Dorame and her father have close connections to the Ballona Wetlands and have participated in the creation of educational programming and more recently the installation of a monument created to honor the Gabrielino/Tongva ancestors at the Ballona Wetlands Discovery Center (
Figure 32), neither are using the salt marsh to gather plants or for other cultural activities.

Figure 32. Monument at the Ballona Discovery Center created by Robert Dorame

FUTURE USE OF SALT MARSHES

COLLECTION OF PLANTS AND AANIMALS

As previously stated, although the use and connection of the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen communities to salt marshes have been cut because of urbanization and colonization, all of the interviewees stated they would like reconnect the community with the salt marsh through the harvesting of plants and animals.

Alvitre stated:

> You know, as Craig [Torres] would say, it's all about that relational reciprocity. You know, that's something that is …important—it's one of our core values as Tongva people is to have that relationship because it's not a matter of today the practice is very common amongst indigenous people, Native American people, is they just go *buy* the feathers. They go *buy* the abalone, or buy this or buy that. I practice it, too; I'm no different than anybody else. And we don't have a relationship with that which we use. Two or three hundred years ago it was different because you did have a relationship. You had to have a relationship with it, and to disrespect it or to abuse it would have the consequences, would not be very good. So that's—how do we teach that core value to our young people and to our old people and to all of us, you know, to have those spaces so we *can* have that relationship with the cormorants and learn about them; so we can learn about those ancient pelicans, you know, the herons, the egrets, the hawks that are here. And oh my gosh there's so many, many—the black-crowned night heron. What are their stories? You know, the different fish! Nobody—I never hear much people talking about the fish, you know? Sea bass and bonito and clams and mussels and abalone—well, that's a whole other thing.

Mr. Rocha stated that he would like to come out to the wetlands to fish for crab, shrimp, mussels like his mother and her uncles used to.

Mr. Teutimez discussed the connection of Puvunga to cottonwoods and the importance of cottonwoods as medicinal plants.

> …we can talk about Puvungna. What does it mean? Because our names were very indicative of that location. The name explained the whole location, and the name there actually is very specific to me because of where my family grew up, Los Alamitos. Los Alamitos means the little cottonwood.

> That's actually one of the main trees [cottonwood] that I look for, for the medicines that I make for our Tribe….[their] bark has these oily components in it, and that oil was heavily used for healing of cuts, just like Neosporin.

HARVESTING SALT

Although harvesting salt from a salt marsh or from the salt grass is currently not practiced, all interviewees would like to re-establish those connections and use the salt for medicinal purposes.

COLLECTION OF DREDGED SHELL

During both the TAG visit and the tour provided to interviewees, Tribal representatives saw piles of large clam and other shell within the Southern LCW Project area. They requested prior to construction that they be allowed to collect the shell for educational and cultural activities.

RECONNECTING WITH THE LAND

Torres stated that being able to come out to the wetlands to teach the Tongva community how to be human is important.

> … I always tell people that the animals and the plants are going to teach us how to be human again because we've lost that. So that's the significance to me of this place is being out here physically on the landscape and just sitting here watching, and they will teach you how to behave as human. You know, because we've lost so much of what that is and that connection to what has sustained our ancestors for thousands of generations, and we need that. We need that for the healing of our human communities, but also the healing of our relatives, the plant communities, the animal communities, the air, the water—everything.

Alvitre agreed when she stated, "That's kind of the whole point there, too, is for us to re-learn and to reconnect, to renew."

PLACE TO LAUNCH TULE BOATS

As stated in the section Past Use of the Salt Marsh above, salt marshes connected the communities from the ocean to the interior using boats, both tule and ti'ats. Currently there is a resurgence in the creation and use of tule boats within the Gabrielino and Acjachemen communities, however due to urbanization, there are not a lot of safe places to practice paddling. For example, members of the Gabrielino, Acjachemen, and greater southern California Native American community members demonstrated the building of a tule boat at the Moompetam American Indian Festival held at the Aquarium of the Pacific, September 24, 2018. After the festival was over, the community lowered the tule boat into the harbor (
Figure 33). While in the water, the paddlers had to contend with not only the private boats pulling and out of their slips but the larger touring Aquaboats that were docking. Since the tule

boat was so small, it was dangerous to paddle. A dozen community members tried paddling over the course of an hour until the boat became waterlogged. As a result, Tongva and Acjachemen community members stated that they would like to use the wetlands to teach the next generation how to paddle and use the boats to collect resources. Using the wetlands in this way would be creating a place where community members could gather, assemble, and build a tule boat and launch it safety into the water.

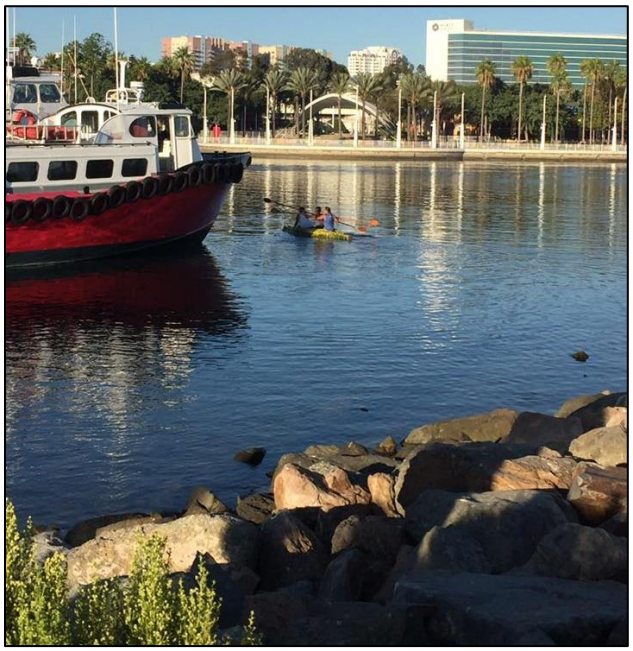

Figure 33. Heidi Lucero (Acjachemen) and Frank Magallanes (Ti'at Society) paddling a tule boat made during the Moompetam American Indian Festival at the Aquarium of the Pacific, September 24, 2018 in the City of Long Beach Rainbow Harbor surrounded by private boats.

CO-STEWARDSHIP

Having access to collect plant material, conduct ceremony and other cultural activities in the Los Cerritos Wetlands is important. However, the tribal interviewees discussed the idea of co-management (co-steward) the wetlands. Co-stewardship means using methods that are grounded in the Gabrielino's and Acjachemen' s relationship to the land and relatives as instructed by their Creator. "These relationships include, but are not limited to, a combination of knowledge, experience, tradition, places, locality, all living and nonliving things, skills, practices, theories, social strategies, moments, spirituality, history, heritage, and more; and may not be fully embraced by people who fail to understand all those dimensions" (NCRS 2010). Co-stewardship also means having the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen community involved in all planning and decision making so that natural processes can be sustained and to ensure that the use by the community does not diminish the potential to meet the needs and aspirations of future generations.

EDUCATION

Ms. Bogany, during consultation for the PEIR, stated that she would like to see all members of the Gabrielino/Tongva community be invited to help with "the physical and interpretive design" of the Los Cerritos Wetlands. This would include signage as well as "including actual 'harvest' of the salt as a cultural and educational activity" (Moffat and Nichol 2015: 59)

Although both Rocha and Torres agreed that the Los Cerritos Wetlands have a lot to teach the public, any educational programming created should first be focused on the Gabrielino/Tongva community. Torres states:

> Educating our younger generations, specifically Tongva community, on this place and what comes from this place. Reconnecting them to this place, getting them to re-establish their relationship with this place and the nature that comes from this place, and then they become responsible for educating the public about that. Not a place that is filled with non-Native docents that are interpreting it, but our own people, our own communities. And giving them the responsibility and obligation to talk about, 'this is where your identity comes from; it comes from the land. Without it you're nothing.' And getting them to understand that so then they can go out and educate the larger public about this place.

Torres stated that he would like to see some type of outdoor classroom that does not affect the landscape or viewshed of the wetlands. "It becomes part of the landscape, you know, instead of being intrusive and being a huge building right there, it becomes so much part of the landscape that you don't even see it as a building." Rocha suggested a traditional building like a *kiiy*.

Alvitre stated that any public educational materials created for the wetlands should include discussion of a:

> … whole history that's been erased and that history needs to be corrected. And it's as if we have a responsibility of identifying all these very specific areas and redefining and rearticulating what that use is to the public, because it's important that our history is recorded…, it's about the public realizing that the health of the wetlands is also reliant on their behavior and their own practices, right? We're at that point on our planet right now that people need to change that around, you know? So, it's almost as if we have a responsibility. Here we are trying to heal our communities and trying to bring back life to our communities, but at the same time we also have that responsibility to share a lot of the information that we can with the public so they renew their relationship with the natural world, that they

> have to renew that. It's everybody's responsibility, but who has the language for that? Who has the experience and the history? It's the Tongva.

GATHERING PLACE

All of the interviewees agreed that a place should be created for the Gabrielino/Tongva community to gather for ceremonies or practice cultural traditions within the wetlands in private. Currently, the Gabrielino (Gabrieleño; Tongva; Kizh) community must use public parks, campgrounds, beaches, university/college property, and personal backyards to conduct ceremonies. None of these locations are ideal as the possibility of interference, unwanted onlookers, and/or noise from traffic affects the atmosphere that is necessary to conduct the ceremony.

Dorame lamented that, "There's no space where we can go and just have that sovereignty of existence and ceremony and medicine and teaching the next generation."

Rocha felt similarly when he stated:

> I want to see something that involves family; that involves our drums; involves our rattles. So much not as a pow-wow grounds, but just like a community area where we come together for prayer, morning prayers, you know, tide prayers—anything. We would like to see something like that, where the sound reverberates and where people won't complain about a drum…How nice would it be to hear some drums, you know, at this point in time? A nice little primary where the sound can reverberate, where we can appease Mother Earth by song or by poems––something.

Alvitre suggested that a community gathering space would need to accommodate a number of people, she did not give a number, with the possibility of staying overnight. Dorame also suggested that the community space could be used as a healing space. Alvitre further stated that this space should be closed to the public and only be available for Gabrielino community members as having a place open to the public has:

> … been part of the problem. Like at *Puvungna* we have it there, but it's public space and people just wander in and out, you're doing ceremony. Wherever we're at people just kind of wander in and out and it's a distraction. You know, they start asking questions and yeah. And we deserve more than that.

Alvitre elaborated that having ceremonies being disrupted in public spaces by people who ask what she is doing, "… changes the energy; it changes even our feelings and our peace. It changes our own peace, that we can't be comfortable, we can't feel safe, we can't feel interfered." Thus it

becomes important to have that private space, away from the public, to have that peace.

LAND CAPABILITY

Mr. Teutimez noted how the current state of natural systems affects what can be done in restoring the land.

> So, when we do coastal restoration, you pretty much have to say, okay, what era do we want to go back in, because in the 1600s this part was a whole different component, and in the 1800s, because the river changed and now it's flowing this way, it's a whole different component. So, it's pretty much whatever the land provides for us is what we're going to be allowed to revegetate and to help re-heal and put in there. So, we can try and do these other components, but it's up to the land in terms of how it's going to take, because that's just the cycles. You know, we may get a huge flood event and, boom, now we've taken off all these layers of stuff and then other developing stuff grows. Or it becomes a ponding area or a ponded area, you know? It's just, it's so dynamic it's hard for us as humans to put it into a box.

NURSERY

Rocha stated that he would like to see a nursery be created to grow the plants that would be used to restore the area.

> So I would like to see a dedicated nursery area where we can generate the plants from here to be restored. You know, to the place where they came from, not relocated from somewhere else. Because the medicine stays strong; the spirit stays strong in them. …kids could come and learn how to regenerate plant life that is farmed in this area and contribute back to it instead of taking away. That would be great; I'd like to see that.

NAME OF THE PROJECT AREA

Both Rocha and Torres commented that it would be great to name the Project area with a Gabrielino/Tongva name.

CONCERNS

CONTAMINATION

Although those interviewed and during the site visit were excited about possibility of using the Southern Los Cerritos Wetlands as described above, there were concerns about contamination as a result of the urban runoff and oil extraction. Further, since the area was part of the Hellman

Ranch which was used for agriculture, tribal representatives at the site visit asked if the area has been tested for pesticides and DDT (Dichlorodiphenyltrichloroethane).

ACCESS

One of the major barriers to using areas such as the Los Cerritos Wetlands for cultural practices is the lack of access or the difficulty of gaining access. Los Angeles County urban sprawl has destroyed or significantly impacted areas that were used by the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen community prehistorically and historically. If there are lands that have prime habitat, they are usually privately owned and marked with no trespassing signs. Some tribal community members have jumped over barbed wire fences, parked on the sides of narrow two-lane highways to climb on their truck roof, or hiked for miles to gather plants. These are dangerous actions which can only be done by the young and/or able bodied.

These access limitations also do not allow elders or community members with mobility issues to participate in gathering. As explained above, part of a Gabrielino (Gabrieleño; Tongva; Kizh)'s responsibility to our plant, animal and rock relatives is to acknowledge our reciprocal responsibility to them. If elders cannot offer prayers during collection, weed, and trim the plants themselves, they are not fulfilling their relative's expectations which may cause harm in the future. Thus, it becomes important to have easily accessible plant communities for elders to drive up to or only have a very short walk on a flat and un-rocky trail.

All of the interviewees commented that permit applications to use land are lengthy, costly and/or need a lot of lead time to obtain in time for the appropriate season to conduct community gatherings or harvest medicine. Thus, the LCWA should create a process, in collaboration with the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen Tribes, which will allow community members to collect or use the land as easily as possible. This means not requiring permits or providing long term permits (e.g., 5-year permits) at no cost.

THE *PUVUNGNA* TRADITIONAL CULTURAL LANDSCAPE

As previously stated in the introduction, the Los Cerritos Wetlands complex is significant to the Gabrielino (Gabrieleño; Tongva; Kizh) and Juaneño (Acjachemen) tribes. Tribal representatives described the Los Cerritos Wetlands and its surroundings during Tribal consultation of the PEIR as sacred lands. Located in between the villages of *Puvungna* to the north and *Motuucheyngna* to the east, all three are considered by Tribes to be part of a larger cultural landscape (Appendix C, Figure C - 10. Location of villages within the *Puvungna* Traditional Cultural Landscape). Although the LCWA identified the Los Cerritos Wetlands complex as part of a larger cultural landscape as a tribal cultural resource under CEQA, no name was giving to the larger cultural

landscape. This study will use *Puvungna* Traditional Cultural Landscape (PTCL) to identify this larger landscape (Appendix C, Figure C - 11).

RESEARCH APPROACH

Cogstone adheres to using Indigenous Archaeology methods during all work. Indigenous Archaeology was first defined as conducting archaeological research "with, for, and by indigenous people" (Nicholas and Andrews 1997:3). Indigenous Archaeology practitioners have extended this definition to include all work that deals with the indigenous past, present, and future (Martinez 2010). When applied to cultural resources management assessments, this means ensuring the recordation of cultural sites is done in collaboration with indigenous communities so that it captures site use from an indigenous perspective. This includes identifying a site as significant even if it does not meet the significance criteria under the California Register of Historical Resources (CRHR) and recording culturally significant spaces even if there are no physical remnants on the surface.

The CRHR does not provide guidance on identifying traditional cultural landscapes. Although this study will be using an Indigenous Archaeology method to identify resources, this study must also use federal and state regulations to identify, assess and evaluate cultural resources which are described below.

TRADITIONAL CULTURAL PROPERTIES

In addition to the NRHP criteria listed above, a property may be listed on the National Register based on its *traditional cultural significance.*

> Traditional in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.
>
> Examples of properties possessing such significance include:
>
> - a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
> - a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long term residents;
> - an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;

- a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

> A traditional cultural property, then, can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community (Parker and King 1998:1).

The National Register Bulletin 38 (Parker and King 1998) discusses other characteristics to be used when considering a traditional cultural property for its eligibility to the National Register which will be used in this study.

IDENTIFYING LANDSCAPES

Although a landscape approach to archaeological sites can be traced to the 1920s (Stoddard and Zubrow 1999), its application began in the mid-1970s in Britain as a way to blend field archaeology with landscape history (Aston and Rowley 1974:11; Fleming 1997:267). Since that time, scholars have taken landscape archaeology in a variety of directions.

Early archaeological studies viewed the landscape solely as the backdrop onto which material culture was placed. It was seen as a factor that influenced how past peoples arranged themselves, whether by the landscape's available resources and/or its physical characteristics (i.e., settlement patterns) (Ashmore and Knapp 1999:1; Wandsnider 1992). Recently, scholars have recognized that the landscape is more than just a synonym for the natural environment. Instead, landscapes represent "a way in which… people have signified themselves and their world through their…relationship with nature, and through which they have underlined and communicated their own social role and that of others with respect to external nature" (Cosgrove 1985:13).

Also important within a landscape approach is the recognition that the so-called "empty" spaces; areas lacking clusters of material remains or "sites," are just as significant as those with tangible cultural phenomena (Anschuetz et al. 2001:161; Wobst 2005). Thus, consideration of the entire landscape surrounding an archaeological site, including its physical and metaphysical properties, must be included in order to gain more nuanced understandings of the past.

> We will have to allow for the 'natural' (that is 'non-artefactual') and

> 'cultural' (that is, 'artefactual') variables to be enculturated, to be significant to human action, and to articulate, like artifacts, with social life (Wobst 2005:28).

The application of landscape theory has been utilized in several California regions and time periods (Allen 2011; Eerkens et al. 2007; Fleming 1997; Kryder-Reid 2007; Laylander and Schaefer 2010; Perry and Delaney-Rivera 2011; Robinson et al. 2011; Whatford 1994). A sub-section of these studies includes understanding how people and places are connected via trails and pathways. For example, the Chuckwalla Valley Prehistoric Trails Network Cultural Landscape study, undertaken by the Bureau of Land Management and the California Energy Commission, was generated in response to the destruction of archaeological sites by recent massive renewable energy development in the California desert. The study aims to understand how "sites that may lack individual distinction" may have "greater significance and research value when contributing to a larger data base" (Laylander and Schaefer 2010).

Part of using Indigenous Archaeology methods is recognizing that how archaeologists identify and record areas used by Native Americans does not reflect how the Native American community sees those same spaces. Archaeologists work with the tangible, drawing circles around clusters of artifacts, putting dots on maps, and connecting the dots to understand prehistoric Native American lifeways. Further, archaeologists use various technologies to understand the patterning of the lines, dots, and polygons they created to signify tangible cultural phenomena. This arbitrary boxing of data leads to the misinterpretation of prehistoric settlement patterns, socio-economic connections, and the cosmological significance of an area. Native American communities did not live on dots, in lines or within bounded spaces. Instead, they lived among the hills and mountains, between meandering streams, and around watering holes, all the while surrounded by a landscape given to them by the first beings. The areas used by Native peoples may have had visible and invisible boundaries with tangible and intangible cultural remains. Thus, what is most important for this study is to transcend traditional interpretations of site type, placement and significance, in order to align more squarely with the Native American understandings of how "everything is connected" (Martinez et al. 2012).

California state regulations do not provide guidance on identifying cultural landscapes; however, the National Park Service has several bulletins that define different types of landscapes. The Advisory Council on Historic Preservation has also issued some guidance. Both are briefly described below.

LANDSCAPE DEFINITIONS

The five types of historic properties identified in the NHPA were further categorized by NPS - 28: Cultural Resource Management Guideline (National Park Service 1998) based on common

attributes for the ease of management: archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources (NPS 1998). Of importance to this study are the categories of cultural landscapes and ethnographic resources. According to the Management Guideline:

> *Cultural landscapes* are settings we have created in the natural world. They reveal fundamental ties between people and the land–ties based on our need to grow food, give form to our settlements, meet requirements for recreation, and find suitable places to bury our dead. Landscapes are intertwined patterns of things both natural and constructed: plants and fences, watercourses and buildings…They are special places: expressions of human manipulation and adaptation of the land.
>
> *Ethnographic resources* are basic expressions of human culture and the basis for continuity of cultural systems. A cultural system encompasses both the tangible and the intangible. It includes traditional arts and native languages, religious beliefs and subsistence activities. Some of these traditions are supported by ethnographic resources: special places in the natural world, structures with historic associations, and natural materials.

Preservation Brief 36 "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes" (Birnbaum 1994) defines four general types of cultural landscapes: historic sites, historic designated landscapes, historic vernacular landscapes, and ethnographic landscapes. Ethnographic landscapes are those that contain "a variety of natural and cultural resources that associated people define as heritage resources" (Birnbaum 1994:2). The *Puvungna* Traditional Cultural Landscape and its use by the Gabrielino (Gabrieleño; Tongva; Kizh) would be considered an ethnographic landscape.

ADVISORY COUNCIL ON HISTORIC PRESERVATION GUIDANCE

Although Bulletin 38 supports the nomination of and the National Register includes traditional cultural landscapes, the guidelines are vague with many cultural resources practitioners not knowing how to identify and nominate cultural landscapes to the NRHP. As a result, the Preserve America Summit Panel (Advisory Council on Historic Preservation 2007:19) recommended in its report that Bulletin 38 should be reviewed and/or revised in order to address these concerns. Additionally, with the increase of the renewable energy projects and their possible effects on Native American sacred landscapes as identified through the Section 106 consultation process, the Advisory Council on Historic Preservation (ACHP) created a traditional cultural landscapes initiative and adopted an action plan in November 2011. The action plan also suggested that Bulletin 38 be revised and recommended raising awareness within the

preservation community about the existence and importance of Native American traditional cultural landscapes by developing tools to assist all participants in their recognition (Advisory Council on Historic Preservation 2011, 2012a, 2012b). Although official guidance for the identification of landscapes is currently still under development, this report will use current scholarship in landscape studies to identify and understand the Los Cerritos Wetlands Complex and surrounding areas as a cultural landscape.

BACKGROUND

GABRIELINO (GABRIELEÑO, TONGVA) RELATIONSHIP TO THE LAND: MAXAAX[3]

To better understand how the Gabrielino (Gabrieleño, Tongva) have used, are using, or may use the Los Cerritos Wetlands Complex, one must understand the Gabrielino's (Gabrieleño, Tongva) relationship to the land. This relationship started with the Gabrielino (Gabrieleño, Tongva) creation as Craig Torres, a Tongva cultural educator, recounts:

> Tongva Creation narratives convey that a pre-human *'Amuupavetam* (First People) during a time of great earth changes, transformed themselves and became the landscape of the Middle World, Upper World and Lower Worlds…we are all connected.
>
> Human Beings were the last to emerge and appear on the landscape and were the most vulnerable of all creation. Because of the "gifts" and sacrifices made by the *'Amuupavetam*, humans reciprocated a responsibility and obligation to be part of and care take the whole of nature.
>
> Human existence on Mother Earth was only possible because certain beings enabled others to survive through their very existence. Reciprocal relationships of giving, gifting, swapping, and sharing embedded in the Tongva word *maxaax* and practiced with all of the nature…rock/stone, plant, animal, and air, water, fire and earth (
> Figure 34; Torres n.d.a).

For the Gabrielino (Gabrieleño, Tongva) everything around them is seen as a relative (i.e., water, air, land, rocks, animals, plants, etc.), not resources to be used by humans. This view recognizes the reciprocal relationship that was established at creation. Mr. Torres also teaches that before sustainability protocols such as the "reduce, reuse and recycle" campaign can be implemented, people need to know the other three R's: Recognition, Respect, and Responsibility (

3. This section does not reflex the views of the Kizh.

Figure 35).

In other words, the public needs to recognize the indigenous people of the land, the original caretakers and recognize the special relationship as described above. This also includes ensuring, as LWCA is doing through this study, that the Gabrielino (Gabrieleño, Tongva) can continue this relationship unfettered. The second R stands for respect; respect that the Gabrielino (Gabrieleño, Tongva) and their relatives have co-evolved with each other for thousands of years. The last R stands for responsibility, that the public and the Tongva have a responsibility to the relatives to protect their habitat and ensure their continued survival.

As a result of these teachings, the Gabrielino (Gabrieleño, Tongva) community is looking for spaces and places where they can fulfill the obligations given to them through their oral traditions. The Gabrielino (Gabrieleño, Tongva) community is looking to re-establish and/or strengthen their relationships to the land and relatives. This would include space to plant, tend, harvest, etc. plants.

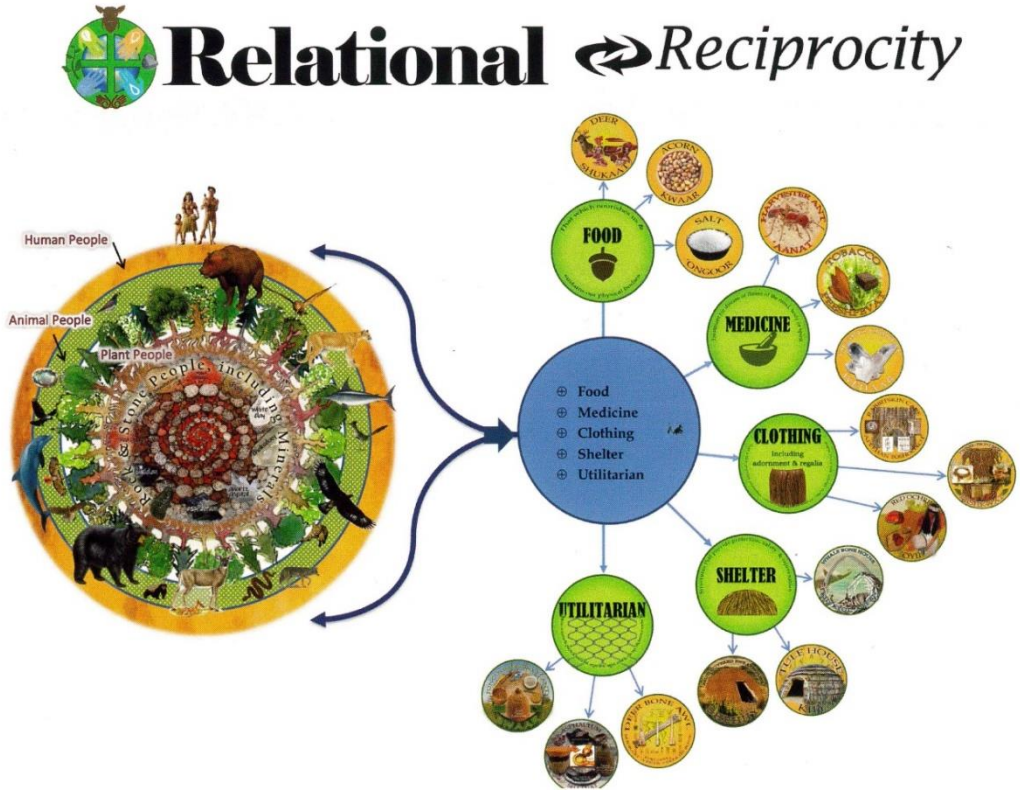

Figure 34. Relationships to relatives (Torres n.d.a)

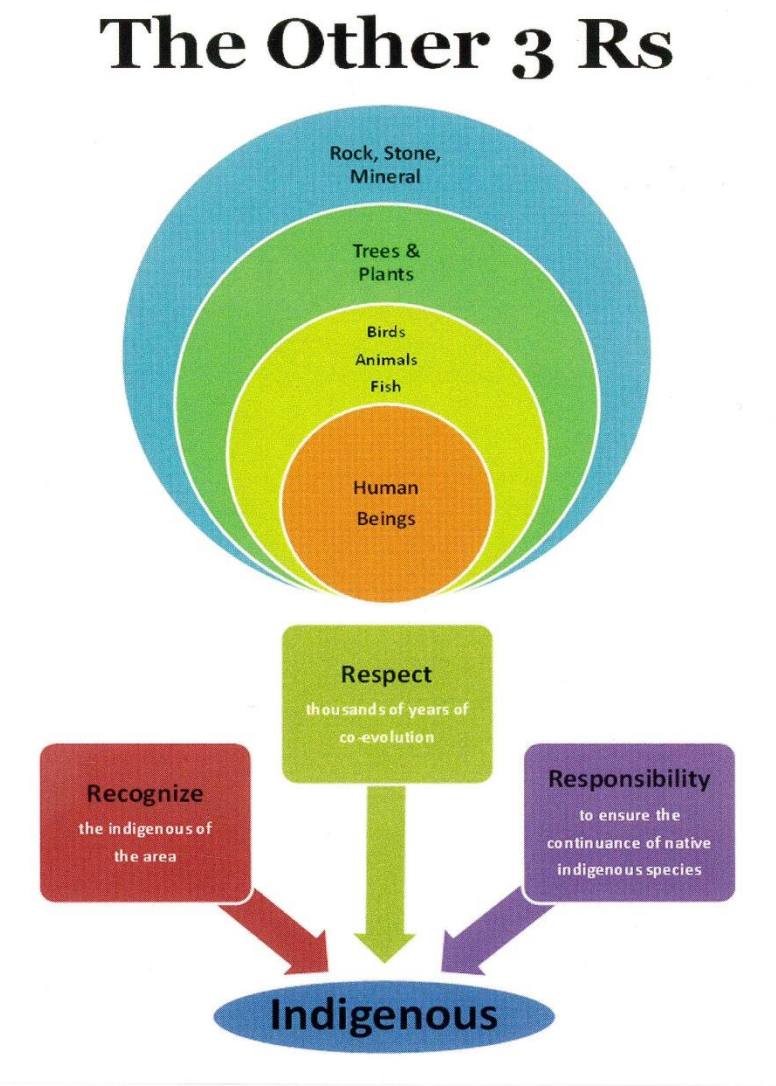

Figure 35. The other three Rs (Torres n.d.b).

PUVUNGNA

The location of the creation of the Gabrielino (Gabrieleño; Tongva; Kizh) and the Acjachemen was at *Puvungna*, an important ceremonial center located north of the Los Cerritos Wetlands Complex area. Portions of the National Register for Historic Places (NRHP)-listed *Puvungna* Indian Villages lay on the campuses of California State University, Long Beach, the Veterans Affairs Long Beach Healthcare System (VALBHS), and Rancho Los Alamitos Historic Ranch and Gardens (see Appendix C, Figure C - 10). In Tongva *puvu* = big ball of people, *ngna* = place of (personal communication, Craig Torres).

According to Boscana (1846:32, 33), in versions of the coastal creation story documented from the Acjachemen (Juañeno) but also applicable to the Gabrielino (Gabrieleño; Tongva; Kizh), two

influential deities, Ouiot, the monster-chief, and Chingichngish, the supreme-creator god, emerged, at different times, at the village of *Puvungna* with Ouiot being burned there and Chingichngish dying there. Millikan and Hildebrandt (1997:15) summarize of the roles of Ouiot and Chingichngish in the origin stories among the Juaneño, Luiseño, and Gabrielino:

> [T]hree successive sets of power entities or beings were involved with the creation of the world and institution of religious life. The first generation, a brother/sister set of entities took the form of sky and earth. They created the second generation, the First People, entities whose essences are now found in certain animals, certain ritual objects, and certain rocks, hills, and mountains. One of those entities, Ouiot (Wiyut), became the "captain" or "father" of all the First People. Following the death of Ouiot, the First People assumed their present forms and humans as we know them were created. Chingichngish, the third generation of power entities, appeared among people for a short time as a teacher. He remains active in the background of existence, as the source of both positive power and punishment for behavior.

After Ouiot was killed, a very large gathering of Ouiot's people cremated his body at *Puvungna*. After the ceremonies, Chingichngish appeared and taught the people laws and established the rites and ceremonies needed for the preservation of life (Boscana 1846:33). He also taught the people what to wear, how to heal the sick, how to build the ceremonial structure (*yovaar*), how to rear the children, and how to live according to his laws (Boscana 1846:33-34). The *toloache* ritual, which involved the ingestion of the intoxicating *Datura meteloides* (also known as Jimson weed), was also associated with the Chingichngish belief system.

Although Boscana identified the Chingichngish belief system as having begun at *Puvungna*, others have recorded its origination from either Santa Catalina Island or San Clemente Island (Kroeber 1925:621-622). A Luiseño informant told Dubois (1908) that the Chingichngish religion came from the north, then to Santa Catalina and San Clemente Islands, to San Juan Capistrano, to San Luis Rey, and finally to the San Diego Kumeyaay/Diegueno territory. The spread of this belief system likely followed the same routes that goods and other cultural ideas followed. Some scholars argue that the Chingichngish belief system originated post-contact based on its similarities to Christian themes and motifs (Bean and Vane 1978:699; Lepowsky 2004).

The village site was still known historically as it was occupied at least until 1805 as evident by baptisms of individuals from the village at San Gabriel Mission and San Juan Capistrano (Harrington 1934:149).

In the original NRHP nomination of the *Puvungna* Indian Villages, archaeological sites CA-LAN- 234, CA-LAN-235 and CA-LAN-306 were identified as being the best representative sites to represent *Puvungna* on the register (Dixon 1973). Both CA-LAN- 234 and CA-LAN-235 are identified as being located on the CSU, Long Beach and VA campuses and CA-LAN-306 is located at Rancho Los Alamitos. However, Dixon mentions that the location of *Puvungna* moved through time, on the small hill that overlooks swamps and marshes. As a result, the Gabrieleño/Tongva San Gabriel Band of Mission Indians has identified that the location of *Puvungna* includes: CA-LAN-102, CA-LAN-231 thru 236, CA-LAN-270 and 271, CA-LAN-273 thru 275, CA-LAN-306, CA-LAN- 699 thru 705, CA-LAN-830 and 831, CA-LAN-1000 thru 1007. Most of these are located on CSULB campus, the furthest away being CA-LAN-270 (known as the Los Altos site) which is located 1 mile north of campus (3.9 miles north-northwest of the Los Cerritos Wetlands Complex).

The portion of *Puvungna* that is located on the CSULB campus continues to be used by the Gabrielino/Tongva, Acjachemen and greater Native American community. Community gatherings, ceremonies, classes, and other cultural activities are held on site (Figure 36 and Figure C - 11). Ancestor poles, wooden poles in honor of Gabrielino and Acjachemen Tribal members that have passed away, dot the area.

Figure 36. Prayer pole decorated for solstice at *Puvungna* at CSULB.

Figure 37. Discussions at *Puvungna* at CSULB with Tongva walk participants, July 20, 2019.

Figure 38. Reburial at *Puvungna* at CSULB in 2016 (left to right) Steve Villa, CSU Chancellor Timothy White, CSULB President Jane Close Conoley, NAGPRA Coordinator Cindy Alvitre, CSULB's Director of American Indian Studies Craig Stone and NAGPRA Chair Louis Robles Jr. (Daily 49'er 2016).

The reburial of Gabrielino ancestors, repatriated from museums under the Native American Graves Protection and Repatriation Act (NAGPRA) have recently occurred within the boundaries of the *Puvungna* village site outside the Southern LCW Project area as well (Figure C - 10).

MOTUUCHEYNGNA

As previously stated, *Motuucheyngna* village has been identified as being located to the east and outside the Southern LCW Project area on what is now called Heron Point, a residential community that was built in the early 2000s, located on Landing Hill (Appendix C, Figure C - 10; Cleland et al. 2007). *Motuuchey* was identified by Harrington informant Jose de la Santos Juncos as being located at "El Puerto de los Alemanes [Port of the Germans]" also known as Anaheim Landing. *Motuuchey* was reported to mean flea in Gabrielino (Harrington 1986:R104 F24).

In 1997, the Hellman Properties LLP proposed a mixed residential development located on Landing Hill. The city of Seal Beach had prepared an EIR for the Hellman Ranch Specific Plan which identified that the archaeological sites that were located within the Southern LCW Restoration Project area would be adversely affected and thus a testing and data recovery plan was created and carried out by EDAW in 2001. During construction grading in 2002, two Native American remains were identified within the boundaries of ORA-264 by the Native American monitor (Cleland et al. 2007:5). Construction was halted by the CCC until a Supplemental Mitigation Plan (SMP) could be drafted. At total of 6 sites were tested and data recovered (CA-ORA-260-264 and ORA-1472). Work outlined within the SMP was conducted from 2003 to 2005. Thirty-five individuals were removed. The ancestors and all cultural items were reburied within a cultural easement located within the Heron Point parcel.

Radiocarbon and obsidian hydration dates taken at all of the sites tested showed that the area was first occupied by at least 6380 cal BP (4430 B.C.), the Millingstone 2 period with the last occupation occurring at 530 cal BP (1420 A.D.) (Cleland et al. 2007:52). Sites CA-ORA-260-264, CA-ORA-850-852, and ORA-1472 are considered the *Motuucheyngna* Village and was identified as a sacred land to the Native American Heritage Commission in 2019 by the Gabrieleño/Tongva San Gabriel Band of Mission Indians.

As part of the SMP, a Cultural Preservation Area was created over the area of the highest density of burials with tribal access to it in perpetuity. The Hellman Ranch Trail was created that links Heron Point to Gum Grove Park. Interpretative signage and a gathering circle were also created (Figure C - 9 and Figure C - 8). Members of the Gabrielino(Gabrieleño, Tongva) and greater Native American community have used the gathering circle as a meeting place.

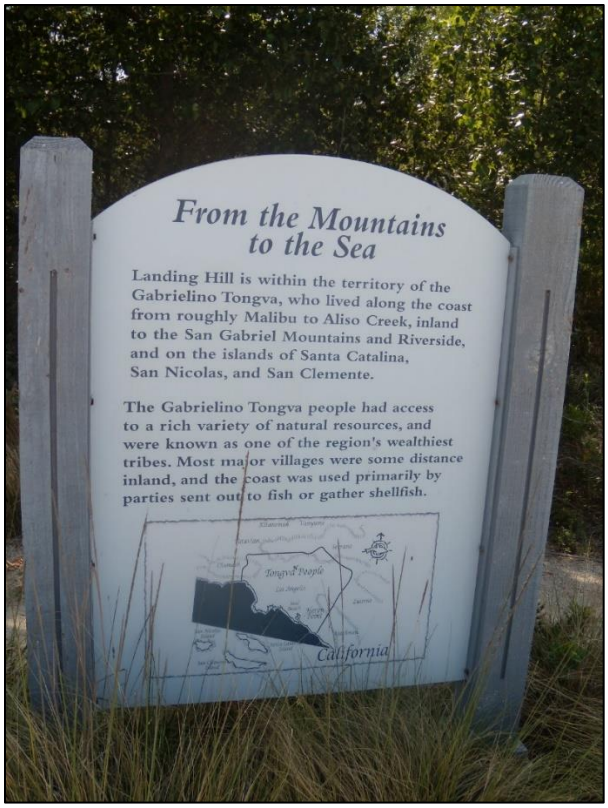

Figure 39. Sign along the Hellman Ranch trail.

Figure 40. Overview of gathering place created along the trail connecting Heron Point and Gum Grove Park

CONNECTION BETWEEN LOS CERRITOS WETLANDS COMPLEX, *PUVUNGNA* AND *MOTUUCHEYNGNA*

The investigation of the ethnographic record did not identify any specific information on the Los Cerritos Wetlands or connections between these three locations; however, four tribal interviewees did state that the three places were probably connected based on the documented settlement patterns and knowledge of the trade routes in the area. As summarized in the Tribal Feedback section above, Ms. Bogany stated that the Los Cerritos Wetlands Complex was the connector from the ocean to *Puvungna* and *Motuucheyngna*. Mr. Rocha also talked about how the Gabrielino used the rivers, in particular the San Gabriel River, in this instance to connect to other villages throughout Gabrielino Territory. Mr. Rocha said:

> I don't have no information on the villages, exactly. But I know that the river itself was made, uh, made a route for trade and commerce within the Native community. You could canoe or kayak from one point to another relatively pretty easy. Within a span of two and a half hours you could be here from the heart of San Gabriel Valley, by canoe. So, there are a lot of resources that grow here and only here, like the pickleweed, were relatively desired by the other Native communities. You know, this was a big source of trade as well. Like I said, the water, those were our freeways back in the day, you know? Even the freeways run along them now show the same route and usefulness, basically, but just on a different kind of media. So, if we look at it from that point of view, yeah, the water is how they connected us as a community with the other communities: the water community and Earth communities. It played a big role, a huge role, I would say; absolutely, yes. As much as you would need a transponder to take a freeway nowadays, yeah, that's how important they were to us, in comparison.

Mr. Torres concurred:

> And so I don't know how some of the villages are connected, but I can guarantee you that they were connected to each other. You know, if you're looking at sources of life, like the food sources and any other source that was abundant in one area, you know people were trading it because people weren't isolated. You look at the trade networks that connected us from the islands going all the way up to Mojave and who knows how far south. But that tells you right there that people were trading. So, if they were trading that far you know the villages connected up here were trading extensively. Because that's part of your survival. I mean that's just common sense to me is like, you know, you don't stand isolated, alone, and live in your community by yourself. You're constantly trading with other people, so yeah, the communities were definitely connected. In what ways? I don't-

> know,- but that's where archaeology will tell you whatever you're finding in the site, that's what the people were trading. And so (clears throat), it's important to think about that because I'm always telling people that when you look at a map of California Indians and you see these nice little outlines, you know, that's not the way our people were organized. It's more like a connect the dots where you have one village connected to another, to another, to another, and it extends further out based on intermarriage, trade relationships, ceremony—all these things that were connecting people way out in the desert, way down south. So, definitely these communities were connected to each other.

During Tribal consultation conducted by the CCC for the Coastal Development Permit for the Los Cerritos Wetland Oil Consolidation and Restoration Project (State Clearinghouse Number 2016041083), a number of representatives attested to the sacredness of the Los Cerritos Wetlands and its connection to *Puvungna* and *Motuucheyngna.*

In 2017, tribal representatives of the Gabrieleno-Tongva San Gabriel Band of Mission Indians, as well as a member of the Acjachemen Tribe described the project site as "sacred lands that are part of a larger area of connected tribal sites that constitute a Tribal Cultural Landscape that may be eligible for listing by the National Register as a Tribal Cultural Property. This Tribal Cultural Landscape includes several significant tribal sites and resources in close proximity to the project site, including the site of *Puvungna*, the Rancho Los Alamitos (Long Beach area), Hellman Ranch property [i.e. the Heron Point residential community] (immediately on the other side of the San Gabriel River, in Seal Beach) (CCC 2018: 125).

In 2018, representatives of the Gabrieleño Band of Mission Indians – Kizh Nation stated that the Los Cerritos Wetlands area is a sacred land, just as all land, water and animals are sacred (CCC 2018: 125).

EVALUATING THE *PUVUNGNA* CULTURAL LANDSCAPE

Following National Register Bulletin 38

APPROACH

National Register Bulletin 38 provides guidelines for identifying TCPs and determining whether they meet the National Register Criteria for Evaluation (36 CFR 60.4). This part of the report applies these guidelines to the *Puvungna* Traditional Cultural Landscape.

THE *PUVUNGNA* CULTURAL LANDSCAPE AS A "PROPERTY"

National Register Bulletin 38 states that the first step in evaluating a traditional cultural place for National Register eligibility is to determine if the entity under consideration is a “property.”

The definition of a “property” is as follows (National Register 1990:9):

> (T)he National Register does not include intangible resources themselves. The entity evaluated must be a tangible property -- that is, a district, site, building, structure, or object.

The *Puvungna* Traditional Cultural Landscape is clearly a "property" -- physical real estate made up of publicly and privately owned parcels.

NATIONAL REGISTER ELIGIBILITY CRITERIA

National Register Bulletin 38 says that determining whether the property has “integrity” is the second step in evaluation. In order to be eligible for inclusion in the NRHP, a property must have “integrity of location, design, setting, materials, workmanship, feeling, and association” (36 CFR Part 60). There are two distinct aspects of integrity that must be shown for the property to be included in the National Register.

(1) Does the property have an integral relationship to traditional cultural practices or beliefs?

(2) Is the condition of the property such that the relevant relationships survive?

INTEGRITY OF RELATIONSHIP

Assessing the integrity of the relationship between a property and the beliefs or practices that may give it significance involves understanding how the group that holds the beliefs or carries out the practices is likely to view the property. If the property is known or likely to be regarded by a traditional cultural group as important in the retention or transmittal of a belief, or to the performance of a practice, the property can be considered to have an integral relationship with the belief or practice, and vice-versa.

Although this study did not document any new information on the connection between the Los Cerritos Wetlands Complex, and the villages of *Puvungna* and *Motuucheyngna* the PTCL is important in the maintenance of Gabrielino and Acjachemen identity and the instruction of future generations in their cultural history. Through hard fought protests and negotiations with the landowners of CSULB, Rancho Los Alamitos and Heron Point, Gabrielino and Acjachemen

tribal members have access and use these spaces and places for community gatherings, ceremony and other traditional practices. Although access to the Los Cerritos Wetlands Complex have been cut within the last 50+ years, tribal members share their family's use of the area for traditional food and cultural practices as well as its connection to *Puvungna* and *Motuucheyngna*. Further, as discussed above, Tribal interviewees and Tribal representatives, during consultation with the CCC, see the PTCL as significant to their Tribes. Based on these elements, the integrity of the relationship exists.

INTEGRITY OF CONDITION

The question of physical alteration to a property is addressed as follows (National Register 1990:10).

> Like any other kind of historic property, a property that once had traditional cultural significance can lose such significance through physical alteration of its location, setting, design, or materials.

As has happened to many swaths of land in Southern California, the surface of the PTCL has changed over time and is definitely not the same as when Ouiot created the *'Amuupavetam* or when Chingichngish came and instructed the Gabrielino and Acjachemen on how to live.

Bulletin 38 emphasizes that (National Register 1990:10):

> … the integrity of traditional cultural properties must be considered with reference to the views of traditional practitioners; if its integrity has not been lost in their eyes, it probably has sufficient integrity to justify further evaluation.

Tribal interviewees and Tribal representatives, during consultation with the CCC, have stated that the PTCL is still significant to their community, even with all the changes.

NATIONAL REGISTER CRITERIA

The third step prescribed by Bulletin 38 is to evaluate a property against the National Register Criteria (36 CFR 60.4). The PTCL is clearly associated with significant events in the traditional history and cultural life of the Gabrielino and Acjachemen Tribes. As previously discussed, the villages of *Puvungna* (represented by CA-LAN- 234, CA-LAN-235 and CA-LAN-306) is already listed on the National Register because it is the place of emergence of the Gabrielino and Acjachemen into this world. However, that nomination identified only three sites to represent *Puvungna* and did not connect it to other sites, both habitation and subsistence sites, that are part of the manifestation of the *Puvungna* use area. The Gabrieleño/Tongva San Gabriel Band of Mission Indians has identified CA-LAN-102, CA-LAN-231 thru 236, CA-LAN-270 and 271, CA-LAN-273 thru 275, CA-LAN-306, CA-LAN- 699 thru 705, CA-LAN-830 and 831, CA-

LAN-1000 thru 1007 as part of the *Puvungna* Village sites and has described the connection between *Puvungna*, *Motuucheyngna* (aka *Puvungna* East) and the Los Cerritos Wetlands Complex. All of these qualify PTCL for inclusion in the National Register under Criterion A.

Although it is not necessary for a property to meet more than one of the National Register Criteria in order to be eligible for the NRHP, it could be argued that the PTCL is eligible under Criterion B for its association with historically significant "people," in this case *Ouiot* and *Chingichngish*, the creator and an important leader in Gabrielino and Acjachemen history.

CRITERIA CONSIDERATIONS

Step four in the evaluation process, according to Bulletin 38, is to determine whether any of the National Register "criteria considerations" apply. These "considerations" describe circumstances under which a property that might otherwise be eligible is *not* eligible. In effect they are criteria of *ineligibility*, but each allows for exceptions under which properties that might appear ineligible under the considerations are in fact *eligible* (Parker and King 1993:32).

Consideration A says that a "religious property" -- one owned by a religious institution or used for religious purposes – "requires additional justification" in determining eligibility "because of the necessity to avoid any appearance by government about the merit of any religion or belief." Bulletin 38 notes that applying this consideration can be "fraught with the potential for ethnocentrism and discrimination," noting that "(a)pplying the 'religious exclusion' without careful and sympathetic consideration to properties of significance to a traditional cultural group can result in discriminating against the group by effectively denying the legitimacy of its history and culture" (National Register 1990:13).

Although many Native American cultures, including the Gabrielino and Acjachemen, see "religion" as inextricably interwoven with culture and history, the PTCL is not a religious property and thus is not disqualified under Criteria Consideration A.

Considerations B (relocated properties), C (birthplaces and graves), D (cemeteries), E (reconstruction), F (commemoration) and G (significance achieved within the last fifty years) do not apply to the PTCL.

SUMMARY

The PTCL meets the criteria of eligibility for inclusion in the National Register of Historic Places and has sufficient integrity to justify being regarded as eligible for the Register. The area is recommended eligible for the National Register as a Traditional Cultural Property. Since it is recommended for the National Register, it is automatically recommended as eligible for the CRHR.

CALIFORNIA REGISTER EVALUATION

To be eligible for the CRHR a resource must:

1. be associated with events that have made a significant contribution to the broad patterns of history;
2. be associated with the lives of significant persons of the past;
3. embody distinctive characteristics of type, period, or method of construction or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity those components may lack individual distinction; or
4. yielded or may likely yield information important in history or prehistory.

In addition to having significance using the above criteria, resources must have "integrity of location, design, setting, materials, workmanship, feeling, and association" to the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions.

Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

Six new cultural resources and three previously recorded sites are located within the Southern LCW Restoration Project area.

ISOLATES

Two prehistoric isolates, **2021_08_05_SD.1-I** (one piece of obsidian debitage) and **2021_08_28_DRM_1.I** (prehistoric isolate consisting of 1 prehistoric exfoliated granitic unifacial mano and an exfoliated chalcedony scraper), were identified within the Southern LCW Restoration Project area. Extended Phase I testing in September/October 2022 confirmed that these resources lie upon imported fill and have no associated subsurface cultural deposits. Isolates are not eligible for listing on the CRHR and need no further consideration.

NEWLY RECORDED SITES

2021_08_06_SD.1 is a historic-age refuse site consisting of two piles of wood planks and boards, a pile of broken concrete, and some metal scraps. The wood and concrete exhibited no diagnostic features and did not extend subsurface. Based on the fieldwork, recordation, and background research conducted on this site, the site is recommended as not eligible for inclusion on the CRHR. No information has been found to suggest that this site is directly associated with events or persons that are significant in local, state, or national history (CRHR Criteria 1 and 2). There are no elements recorded for the site that would qualify as significant under CRHR Criterion 3. All data was collected when this resource was recorded, exhausting its potential to provide important information about prehistory within the region, state, or nation (CRHR Criterion 4). No further work is needed.

2021_08_06_SD.2 is a historic-age refuse site consisting of deteriorated red bricks, a pile of tile fragments, and a historic soda fired ceramic pipe sherd. The bricks, tile fragments and ceramic sherd do not exhibit diagnostic features and the site did not extend subsurface. Based on the fieldwork, recordation, and background research conducted on this site, the site is recommended as not eligible for inclusion on the CRHR. No information has been found to suggest that this site is directly associated with events or persons that are significant in local, state, or national history (CRHR Criteria 1 and 2). There are no elements recorded for the site that would qualify as significant under CRHR Criterion 3. All data was collected when this resource was recorded, exhausting its potential to provide important information about prehistory within the region, state, or nation (CRHR Criterion 4). No further work is needed.

2021_08_06_SD.3 is a prehistoric site consisting of a lithic scatter of a quartz flake, a modified tool of pink quartzite, and a gray quartzite scraper. Although the site contains two tools that may be indicative of resource processing site, the artifacts lay on the surface of documented fill consisting of sediments from the dredging of the San Gabriel River (Appendix M, Figure M - 1).

Extended Phase I testing in September/October 2022 found one lithic flake and four potential lithic flakes below surface but these were in context with modern plastic trash debris. No intact prehistoric cultural deposit was found associated with the resource. Presence of modern debris below the surface confirms that the surface artifacts are in secondary context

Based on the fieldwork, recordation, background research, and phase I testing conducted on this site, the site is recommended as not eligible for inclusion on the CRHR. No information has been found to suggest that this site is directly associated with events or persons that are significant in local, state, or national history (CRHR Criteria 1 and 2). There are no elements recorded for the site that would qualify as significant under CRHR Criterion 3. All data was collected when this

resource was recorded exhausting its potential to provide important information about prehistory within the region, state, or nation (CRHR Criterion 4). No further work is needed.

HELLMAN CHANNEL
Theme: Water conveyance system-Drainage
Period of Significance: ca. 1928-1976

This channel is associated with the historic theme of a water conveyance system (drainage ditch) located within the boundaries of the e Hellman Ranch which functioned as a successful cattle ranch and farming enterprise for multiple decades. The Hellman Channel is an unlined gravity fed system which is considered unremarkable in its construction or design. While this channel is associated with the Hellman Ranch, it was constructed eight years after the passing of the ranch's owner, I.W. Hellman in 1920. It is believed that this drainage ditch was constructed primarily for the support of the oil wells which were active nearby.

This segment of the Hellman Channel still retains most of its integrity of Location, Design, Materials, Workmanship, and Feeling. While the channel is no longer used in conjunction with the operations of the former Hellman Ranch, it still retains is use as a drainage ditch, therefore it retains some of its integrity of Association. There is notable loss of the channel's integrity of Setting due to visible development of residences along the southern boundary of the Los Cerritos Wetlands.

Based on the fieldwork, recordation, and background research conducted on this site, the site is recommended as not eligible for independent inclusion on the NRHP or CRHR. No information has been found to suggest that this site is directly associated with events or persons that are significant in local, state, or national history (NRHP Criteria A and B or the CRHR Criteria 1 and 2). There are no elements recorded for the site that would qualify as significant under NRHP Criterion C or the CRHR Criterion 3. All data was collected when this resource was recorded, exhausting its potential to provide important information about prehistory within the region, state, or nation (NRHP Criterion on D or the CRHR Criterion 4). No further work is needed.

PREVIOUSLY RECORDED SITES

P-30-000256 (LANDING HILL #1) was recorded as a prehistoric habitation site with milling stones located on Landing Hill. The site was surface collected for many years prior to being recorded and much of it has been destroyed by development (McKinney 1969a based on information from Redwine 1959). The portion of the site within the LCW Project area was revisited and no cultural resources were identified. Based on the fieldwork, recordation, and background research conducted on this site, the site is recommended as not eligible for inclusion on the CRHR. No information has been found to suggest that this site is directly associated with

events or persons that are significant in local, state, or national history (CRHR Criteria 1 and 2). There are no elements recorded for the site that would qualify as significant under CRHR Criterion 3. No intact cultural deposits were identified, thus it does not have the potential to provide important information about prehistory within the region, state, or nation (CRHR Criterion 4). No further work is needed.

P-30-000258 (LANDING HILL #3) AND P-30-000260 The portions of P-30-000258 (habitation site) and P-30-000260 (seasonal camp) within the Southern LCW Project area were not surveyed as they were covered by dense vegetation. As a result, both sites could not be evaluated for listing on the CRHR. It is recommended that these sites be avoided until such time they can be evaluated for the CRHR.

CONCLUSIONS

This study was conducted to determine the potential impacts to cultural resources during the Southern Los Cerritos Wetlands Restoration Project (Project) as well as to document the Los Cerritos Wetlands Traditional Cultural Landscape, as named in the PEIR and now known as the Puvungna Traditional Cultural Landscape (PTCL). The Los Cerritos Wetlands Authority (LCWA) is the lead agency under the California Environmental Quality Act (CEQA).

This Project is located within the southern portion of the Los Cerritos Wetlands Complex, on the border of Los Angeles and Orange counties, and affords the opportunity to restore salt marsh, seasonal wetlands, and other freshwater wetlands within an approximately 503-acre area. The Los Cerritos Wetlands Complex adjoins the lower reach of the San Gabriel River where, prior to channelization, the mouth of the San Gabriel River migrated back and forth across the coastal plain. Historically, the complex covered approximately 2,400 acres and stretched approximately two miles inland, varying from freshwater and brackish wetlands in its inland areas to salt marsh closer to the ocean.

For this study, Cogstone requested a supplementary cultural records search from the South Central Coastal Information Center extending the search radius to three miles around the Los Cerritos Complex, completed background research and attempted consultation with historic societies, performed limited pedestrian survey including site recordation, and collected oral histories from members of Gabrielino (Gabrieleño; Tongva; Kizh) Tribes. These efforts gathered data for a cultural resources assessment of the Project area, prehistoric and historic documentation of the Los Cerritos Wetlands, and an CRHR/NRHP eligibility evaluation of the *Puvungna* Traditional Cultural Landscape (PCTL; see Appendix C, Figure C - 11) as a traditional cultural property (TCP).

Nine cultural resources are located within the Southern LCW Restoration Project area. Six of these are newly recorded as part of this Project, and three were previously recorded. The newly recorded resources consist of two prehistoric cultural isolates (2021_08_05_SD.1-I and 2021_08_28_DRM_1.I) that were tested in September/October 2022 and confirmed to not have accompanying intact cultural deposits, two historic-aged refuse sites (2021_08_06_SD.1 and 2021_08_06_SD.2), a prehistoric lithic scatter site (2021_08_06_SD.3) also tested in September/October 2022 and found not to contain intact cultural deposits, and the Hellman Channel. Three previously recorded sites include P-30-000256 (Landing Hill #1), P-30-000258 (Landing Hill #3), and P-30-000260. All newly identified resources were recorded using DPR 523 series forms. Cultural isolates are not eligible for inclusion on the CRHR and need no further consideration. The remaining newly identified resources were evaluated for CRHR eligibility and are recommended as not eligible for listing in the CRHR. The Hellman Channel was also evaluated for NRHP eligibility and is recommended as not eligible for listing in the NRHP. No further work is recommended for any of these resources.

The previously recorded, P-30-000256 (Landing Hill #1) was revisited, surveyed, and revaluated using DPR 523 series forms. As no cultural resources were found during this visit, this site is also recommended as not eligible for listing in the CRHR, and no further work is recommended. The remaining two previously recorded sites, P-30-000258 (Landing Hill #3), and P-30-000260, are covered by dense vegetation and could not be visited or reevaluated as part of this Project. These sites should be avoided until they can be evaluated for CRHR listing eligibility.

Oral histories collected from members of the Gabrielino (Gabrieleño; Tongva; Kizh) Tribes, and other data collected and reviewed for this Project, indicate that the PTCL qualifies as a TCP under the four-part guidelines contained within National Register Bulletin 38. The guidelines consist of whether the potential TCP is a property; is an integral relationship between the group and the property; is in a condition to sustain the relationship; meets at least one of the criteria for listing in the NRHP; meet any of the criteria conditions that would make an otherwise eligible property not eligible for listing the NRHP.

The landscape is physical real estate comprised of public and private land and therefore qualifies as a “property.” The property is integral to the beliefs of the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen Tribes and in a condition that these relationships survive. The PTCL satisfies NRHP eligibility Criterion A as it is clearly associated with significant events in the traditional history and cultural life of the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen Tribes. The PTCL is not a religious property nor does it meet any of the other National Register Eligibility Considerations that would disqualify an otherwise eligible property. Thus, the PTCL is recommended as eligible for the CRHR/NRHP.

In lieu of new or additional mitigation measures, the Los Cerritos Wetlands Authority should continue Native American consultation with the Gabrielino (Gabrieleño; Tongva; Kizh) and Acjachemen Tribes on an ongoing basis in order to mitigate any negative effects on the PTCL. This collaboration will inform action from management and tribal perspectives.

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APPENDIX A. QUALIFICATIONS

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

DESIREÉ RENEÉ MARTINEZ
Task Manager

EDUCATION

1999 M.A., Anthropology (Archaeology), Harvard University, Cambridge
1995 B.A., Anthropology, University of Pennsylvania, Philadelphia

SUMMARY OF QUALIFICATIONS

Ms. Martinez is a Registered Professional Archaeologist (RPA) with 24 years of experience in archaeological fieldwork, research, and curation. She has expertise in the planning, implementation, and completion of all phases of archaeological work and has participated in archaeological investigations as a principal investigator, crew member, and tribal monitor. She exceeds the national standards in archaeology set by the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation.* She is accepted as a Principal Investigator for prehistoric and historic archaeology by the State Office of Historic Preservation. Her experience also includes compliance with CEQA, NEPA, NHPA Sec. 106, NAGPRA, SB 18, AB 52, California General Order 131-D exemption, and other cultural resource laws. Ms. Martinez has managed technical assessments and prepared cultural resources sections for EIR and EIS documents.

SELECTED EXPERIENCE

Deep Soil Mixing Pilot Project, Community of Pacific Palisades, Los Angeles County, CA. As part of an on-call contract with the Los Angeles Bureau of Engineering (LABOE), Cogstone provided cultural and paleontological resources monitoring as well as managed Native American monitoring during ground-disturbing activities. The City of Los Angeles was the lead agency under the California Environmental Quality Act (CEQA). Monitoring for the Project was conducted in compliance with the Contingency Plan conditions for the Coastal Development Permit (CDP) from the California Coastal Commission (CCC). No cultural or paleontological resources were identified. No further work was necessary. Sub to ICF. Task Manager. 2020

Veterans Affairs Long Beach Health Systems, Cultural Resources Services and Native American Monitoring, Long Beach, Los Angeles County, CA. Managed a variety of public works and infrastructure improvements on the VALBHS campus. Services have included archaeological surveys, testing, archaeological monitoring, providing and managing Gabrielino (Tongva) Native American monitoring, and compliance reporting. Native American monitoring was provided on a rotating basis from several Gabrielino (Tongva) tribes as per a Memorandum of Agreement between the VALBHS, State Historic Perseveration Office. Projects on the campus have included: an intensive-level archaeological survey utilizing ground-penetrating radar and magnetometry to identify subsurface cultural debris, accurately map abandoned utilities, and locate a historic trash pit within the APE; archaeological and Native American monitoring of construction activities of the Fisher House and Golf Course project area. Principal Investigator for Archaeology. 2014-2018

California State University, Long Beach, On-Call Archaeological Services, Physical Planning and Facilities Management, Long Beach, Los Angeles County, CA. Cogstone managed archaeological and Native American monitoring of excavations or trenching for public works and buildings projects. Improvements to athletic fields, recycling center, parking lots, roads, outdoor dining, racetrack, liberal arts, and performing arts buildings. Task Manager/Principal Investigator for Archaeology. 2015-2017

Kitts Highway Pathway Lighting Project, Naval Weapons Station Seal Beach, City of Seal Beach, Orange County, CA. Cogstone conducted cultural resources monitoring and managed Native American monitoring during the construction of an additional room and outdoor storage area. No cultural resources were observed or recovered. Upon completion of construction, a Cultural Resources Monitoring Compliance Report was produced. Principal Investigator for Archaeology. 2017

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

JOHN GUST
Principal Investigator for Archaeology

EDUCATION

2016 Ph.D., Anthropology, University of California, Riverside (UCR)
2011 M.A., Anthropology, UCR
2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
2002 B.A., Anthropology, minor in Geography/Environmental Studies, UCCS

SUMMARY OF QUALIFICATIONS

Dr. Gust is a Registered Professional Archaeologist (RPA) with 10 years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Dr. Gust has managed a variety of projects at Cogstone in the water, development, residential, transportation, telecommunications, and public works sectors. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

SELECTED EXPERIENCE

San Gabriel River Commuter Bikeway and Big Dalton Wash Commuter Bikeway, City of Baldwin Park, Los Angeles County, CA. Cogstone conducted a cultural and historic built environment resources assessment to determine the potential impacts to cultural and historical resources for the proposed construction of approximately five miles of new bikeway/pedestrian pathway. Services included pedestrian surveys, records searches, a Sacred Lands File search from the NAHC, preparation of DPR 523 forms, NRHP eligibility assessments, and reporting. The project required a Section 408 permit from the USACE due to the proximity of the federally managed San Gabriel River and tributaries. All work performed complied with Section 106 of the NHPA. The City of Baldwin Park acted as lead agency under CEQA. Sub to Infrastructure Engineering Corporation. Principal Investigator for Archaeology. 2020-2021

University of California Natural Reserve System San Joaquin Marsh Reserve Water Conveyance and Drainage Improvement Project, City of Irvine, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed long-term water management improvements and habitat value of the Marsh Reserve. Services included pedestrian survey, records searches, Sacred Lands File search from the NAHC, background research, subsurface testing, and reporting. Due to the proximity of the project to the San Diego Creek, the project required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE) and Section 106 NHPA compliance. University of California acted as the lead agency under CEQA and USACE acted as lead agency under NEPA. Sub to Moffat & Nichol. Principal Investigator for Archaeology. 2020-2021

Long Beach Municipal Urban Stormwater Treatment (MUST) Project, Los Angeles County, CA. In 2017, Cogstone prepared a cultural and paleontological resources assessment for the proposed construction of a stormwater facility. The project intended to improve the water quality of existing urban runoff to the Los Angeles River, and ultimately to the Long Beach Harbor. Services included pedestrian surveys, records searches, background research, built environment assessment, Native American consultation, and reporting. In 2020, Cogstone produced a Paleontological Resources Management Plan to propose effective mitigation of potential impacts to paleontological resources resulting from proposed construction of MUST and its associated Wetlands project. Sub to Michael Baker. Principal Investigator for Archaeology. 2020

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

SHANNON LOPEZ
Architectural Historian

EDUCATION

2018 M.A., History (with an emphasis in architecture), California State University, Fullerton
2012 B.A., History, Minor in Asian-Pacific Studies, California State University, Dominguez Hills

SUMMARY OF QUALIFICATIONS

Ms. Lopez is a qualified historian and she meets the Secretary of the Interior's *Standards and Guidelines for Architectural History.* Ms. Lopez is experienced in architectural history research and surveys along with photo documentation and recording of built environment resources for local and federal projects. Ms. Lopez is acknowledged as an approved Architectural Historian by Caltrans. She has extensive knowledge with Native American consultation, consultation with city and county historical societies, and analysis of primary and secondary sources. Additionally, she is an approved Reader at the Huntington Library by the Los Angeles Office of Historic Resources.

SELECTED EXPERIENCE

San Gabriel River Commuter Bikeway and Big Dalton Wash Commuter Bikeway, City of Baldwin Park, Los Angeles County, CA. Cogstone conducted a cultural and historic built environment resources assessment to determine the potential impacts to cultural and historical resources for the proposed construction of approximately five miles of new bikeway/pedestrian pathway. Services included pedestrian surveys, records searches, a Sacred Lands File search from the NAHC, preparation of DPR 523 forms, NRHP eligibility assessments, and reporting. The project required a Section 408 permit from the USACE due to the proximity of the federally managed San Gabriel River and tributaries. All work performed complied with Section 106 of the NHPA. The City of Baldwin Park acted as lead agency under CEQA. Sub to Infrastructure Engineering Corporation. Architectural Historian. 2020-2021

141st and Normandie Townhomes Project, City of Gardena, Los Angeles County, CA. Cogstone identified and evaluated the potential impacts to cultural, historic built environment, and paleontological resources for the proposed construction of 50 new, three-story townhomes, which will range in size from 1,252 to 1,689 square feet. Services included pedestrian survey, built environment evaluation, records searches, Sacred Lands File search from the NAHC, background research, and reporting. The City of Gardena acted as lead agency under CEQA. Sub to De Novo Planning. Architectural Historian. 2020

Los Angeles Harbor College, City of Los Angeles, Los Angeles County, CA. Cogstone conducted a study to determine the potential impacts to cultural resources for the proposed demolition, renovation, and construction at the college. Three of the building scheduled for demolition were considered historic in age and required evaluation under CEQA. Cogstone conducted a records search, historical society outreach, a pedestrian survey, and produced a Historic Resources Evaluation Report. Sub to PlaceWorks. Architectural Historian & Author. 2020

Long Beach Municipal Urban Stormwater Treatment (MUST) Project, Los Angeles County, CA. In 2017, Cogstone prepared a cultural and paleontological resources assessment for the proposed construction of a stormwater facility. The project intended to improve the water quality of existing urban runoff to the Los Angeles River, and ultimately to the Long Beach Harbor. Services included pedestrian surveys, records searches, background research, built environment assessment, Native American consultation, and reporting. In 2020, Cogstone produced a Paleontological Resources Management Plan to propose effective mitigation of potential impacts to paleontological resources resulting from proposed construction of MUST and its associated Wetlands project. Sub to Michael Baker. Architectural Historian. 2020

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

KIM SCOTT
Geoarchaeologist

EDUCATION

2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles
2013 M.S., Biology with paleontology emphasis, California State University, San Bernardino
2015 Immersion course in geomorphology/geoarchaeology, National Park Service

SUMMARY OF QUALIFICATIONS

Scott has more than 20 years of experience in California paleontology and sedimentary geology. She has extensive paleontology experience in the field and lab in surveying, monitoring, fossil salvage, taphonomy, locality mapping, fossil preparation, and report writing. She is experienced in preparing stratigraphic sections, determining paleoenvironment, and analyzing soils and geological maps for buried site potential. Scott serves as company safety officer and is the author of the company safety and paleontology manuals.

SELECTED EXPERIENCE

Faith Home/Garner Road Connection Project, Caltrans District 10, Stanislaus County, CA. Cogstone identified and evaluated cultural, paleontological, and historic resources present in or adjacent to the construction of a four-lane one-mile expressway. Cogstone produced an Archaeological Survey Report (ASR), Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Paleontological Identification and Evaluation Report (PIR-PER). Services included intensive level pedestrian surveys, mapping, records searches, DPR forms, and Native American consultation. Sub to Environmental Intelligence. Principal Investigator for Paleontology and Geoarchaeologist. 2017-2020

Interstate 605 and Katella, Caltrans District 12, City of Los Alamitos, Orange County, CA. The Orange County Transportation Authority with the California Department of Transportation District 12 and the City of Los Alamitos, proposed to update the I-605 and Katella Avenue interchange. Cogstone performed the survey, prepared a combined Paleontological Identification Report and Paleontological Evaluation Report, an Archaeological Survey Report with a geoarchaeological section on the potential for buried sites, a Historical Property Survey Report, and a Historical Resources Evaluation Report. Sub to WSP USA, Inc. Principal Investigator for Paleontology and Geoarchaeologist. 2018

State Route 57, Orangewood to Katella, Caltrans District 12, Cities of Orange and Anaheim, Orange County, CA. California Department of Transportation District 12, with assistance from the cities of Anaheim and Orange, proposed to widen and restripe portions of the northbound side of the freeway from Orangewood Avenue to Katella Avenue. Cogstone performed the survey, prepared a combined Paleontological Identification Report and Paleontological Evaluation Report, an Archaeological Survey Report with geoarchaeological section, and a Historical Property Survey Report. Sub to Michael Baker International. Principal Investigator for Paleontology and Geoarchaeologist. 2018

State Route 138 and Avenue G interchange, Caltrans District 7, unincorporated Los Angeles County, CA. The City of Lancaster, in conjunction with the California Department of Transportation District 7, proposed to improve the existing interchange of State Route 138 and Avenue G interchange in addition to widening of Avenue G to the east and west of the existing interchange. Cogstone performed the survey, prepared a combined Paleontological Identification Report and Paleontological Evaluation Report, an Archaeological Survey Report with geoarchaeological section, and a Historical Resources Compliance Report. Sub to Michael Baker International. Principal Investigator for Paleontology and Geoarchaeologist. 2017

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

LOGAN FREEBERG
GIS Supervisor

EDUCATION

2018 Geographic Information Systems (GIS) Certificate, California State University, Fullerton
2003 B.A., Anthropology, University of California, Santa Barbara

SUMMARY OF QUALIFICATIONS

Mr. Freeberg has over 18 years of experience in cultural resource management and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

SELECTED EXPERIENCE

Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, WEAP training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). GIS Supervisor. 2020-*ongoing*

San Gabriel River Commuter Bikeway and Big Dalton Wash Commuter Bikeway, City of Baldwin Park, Los Angeles County, CA. Cogstone conducted a cultural and historic built environment resources assessment to determine the potential impacts to cultural and historical resources for the proposed construction of approximately five miles of new bikeway/pedestrian pathway. Services included pedestrian surveys, records searches, a Sacred Lands File search from the NAHC, preparation of DPR 523 forms, NRHP eligibility assessments, and reporting. The project required a Section 408 permit from the USACE due to the proximity of the federally managed San Gabriel River and tributaries. All work performed complied with Section 106 of the NHPA. The City of Baldwin Park acted as lead agency under CEQA. Sub to Infrastructure Engineering Corporation. GIS Supervisor. 2020-2021

Los Angeles World Airports (LAWA) Ongoing Technical Support for Environmental, Mitigation Reporting, and Sustainability Issues Associated with LAWA Construction Projects, LAX, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring during proposed consolidation and modernization of existing facilities. The project involved redeveloping multiple facilities including hangars and associated structures for Delta Airlines and United Airlines, among others. Upon completion of monitoring, Cogstone prepared Cultural and Paleontological Resources Monitoring Compliance Reports. The City of Los Angeles acted as lead agency for the project. Sub to CDM Smith. GIS Supervisor. 2020-2021

Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the Native American Heritage Commission, and an intensive pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. GIS Supervisor. 2019-2020

APPENDIX B. MITIGATION MEASURES FROM THE PEIR

Mitigation Measure CUL-1: Cultural Resources Personnel Professional Qualifications Standards. Cultural resources consulting staff shall meet, or be under the direct supervision of an individual meeting, the minimum professional qualifications standards (PQS) set forth by the Secretary of the Interior (SOI) (codified in 36 Code of Federal Regulations [CFR] Part 61; 48 FR 44738-44739).

Mitigation Measure CUL-2: Historic Resources Assessment. For each near-term, mid-term, and long-term project, LCWA shall retain an SOI-qualified architectural historian (Qualified Architectural Historian) to conduct a historic resources assessment including: a records search at the South Central Coastal Information Center; a review of pertinent archives and sources; a pedestrian field survey; recordation of all identified historic resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the assessment. The report(s) shall be submitted to LCWA for review and approval prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Architectural Historian shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its completion. A Historic Resources Assessment shall not be required for any project site that has already undergone the same or similar assessment as part of the program as long as the assessment is deemed adequate by the Qualified Architectural Historian for the purposes of the project currently under consideration.

Mitigation Measure CUL-3: Historic Resources Evaluation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project site containing unevaluated historic resources, a Qualified Architectural Historian shall determine if the project has the potential to result in adverse impacts to identified historic resources. For any historic resource that may be adversely impacted, the Qualified Architectural Historian shall evaluate the resource for listing in the California Register under Criteria 1-4 in order to determine if the resource qualifies as a historical resource. If a historic resource is found eligible, the Qualified Architectural Historian shall determine if the project would cause a substantial adverse change in the significance of the resource. If a substantial adverse change would occur (i.e., the project would demolish the resource or materially alter it in an adverse manner), the Qualified Architectural Historian shall develop appropriate mitigation measures to be incorporated into subsequent CEQA documents. These measures may include, but would not be limited to, relocation, HABS/HAER/HALS documentation, development and implementation of an interpretative and commemorative program, or development and implementation of a salvage plan. All evaluations and resulting technical reports shall be completed and approved by LWCA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Architectural Historian shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA

Mitigation Measure CUL-4: Archaeological Resources Assessment. For each near-term, mid-term, and long-term project that involves ground disturbance, LCWA shall retain an SOI-qualified archaeologist (Qualified Archaeologist) to conduct an archaeological resources assessment including: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the Native American Heritage Commission; updated geoarchaeological review incorporating previously unavailable data (such as geotechnical studies); a pedestrian field survey; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report. The technical report shall: document the methods and results of the study; provide an assessment of the project's potential to encounter subsurface archaeological resources and human remains based on a review of the project plans, depth of proposed ground disturbance, and available project-specific geotechnical reports; and provide recommendations as to whether additional studies are warranted (i.e., Extended Phase I presence/absence testing or resource boundary delineation, Phase II testing and evaluation). The report(s) shall be submitted to LCWA for review and approval prior to approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its completion. An Archaeological Resources Assessment shall not be required for any project site that has already undergone the same or similar assessment as part of the program as long as the assessment is deemed adequate by the Qualified Archaeologist for the purposes of the project currently under consideration.

Mitigation Measure CUL-5: Extended Phase I Archaeological Investigation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project with a high potential to encounter subsurface archaeological resources as determined by the project-specific archaeological resources assessment conducted under Mitigation Measure CUL-4: Archaeological Resources Assessment, a Qualified Archaeologist shall conduct an Extended Phase I investigation to identify the presence/absence of subsurface archaeological resources. Prior to the initiation of field work for any Extended Phase I investigation, the Qualified Archaeologist shall prepare a work plan outlining the investigation's objectives, goals, and methodology (e.g., field and lab procedures, collection protocols, curation and reporting requirements, Native American input/monitoring, schedule, security measures). For investigations related to Native American archaeological resources, monitoring shall be required in accordance with Mitigation Measures CUL-13: Native American Monitoring. All work plans shall outline the protocols and procedures to be followed in the event that human remains and associated funerary objects or grave goods (i.e., artifacts associated with human remains) are encountered in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Disposition of archaeological materials recovered during Extended Phase I investigations shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Projects

occurring within the same timeframe may be covered by one overarching work plan. All investigations and resulting technical reports shall be completed and approved by LCWA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA. An Extended Phase I investigation shall not be required for any project site or resource that has already undergone the same or similar investigation as part of the program as long as the investigation is deemed adequate by the Qualified Archaeologist for the purposes of the project currently under consideration.

Mitigation Measure CUL-6: Phase II Archaeological Investigation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project site containing known unevaluated archaeological resources as identified by the project-specific archaeological resources assessment conducted under Mitigation Measure CUL-4: Archaeological Resources Assessment, a Qualified Archaeologist shall determine if the project has the potential to result in adverse impacts to identified archaeological resources (this may include initial Extended Phase I testing to identify the boundaries of resources, if necessary to properly assess potential impacts, following the procedures outlined under Mitigation Measure CUL-5: Extended Phase I Archaeological Investigation). For any archaeological resource that may be adversely impacted, the Qualified Archaeologist shall conduct Phase II testing and shall evaluate the resource for listing in the California Register under Criteria 1-4 in order to determine if the resource qualifies as a historical resource. LCWA shall consider the significance of the resource to Native American groups prior to requiring any Phase II subsurface testing. If the resource does not qualify as a historical resource, it shall then be considered for qualification as a unique archaeological resource. Native American or prehistoric archaeological resources shall also be considered as contributors to the tribal landscape to determine if they contribute to the significance of the landscape. Prior to the initiation of field work for any Phase II investigation, the Qualified Archaeologist shall prepare a work plan outlining the investigation's objectives, goals, and methodology (e.g., research design, field and lab procedures, collection protocols, data requirements/thresholds, evaluation criteria, curation and reporting requirements, Native American input/monitoring, schedule, security measures). The Qualified Archaeologist and LCWA shall coordinate with participating Native American Tribes during preparation of Phase II work plans related to Native American archaeological resources to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered in the evaluation, including those related to the tribal cultural landscape. For investigations related to Native American archaeological resources, Native American Tribal coordination and monitoring shall be required in accordance with Mitigation Measures CUL-12: Native American Coordination and CUL-13: Native American Monitoring. All work plans shall outline the protocols and procedures to be followed in the event that human remains and associated funerary objects or grave goods (i.e., artifacts associated with human remains) are encountered in

accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Disposition of archaeological materials recovered during Extended Phase I or Phase II investigations shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave good shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Projects occurring within the same timeframe may be covered by one overarching work plan. All investigations and resulting technical reports shall be completed and approved by LWCA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA.

Mitigation Measure CUL-7: Avoidance and Preservation in Place of Archaeological Resources. In the event historical resources or unique archaeological resources or resources that contribute to the significance of the tribal cultural landscape are identified, avoidance and preservation in place shall be the preferred manner of mitigating impacts to such resources. 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. If avoidance is determined by the LCWA to be infeasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations, then that resource shall be subject to Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** If avoidance and preservation in place of a resource is determined by LCWA to be feasible, then that resource shall be subject to Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan

Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan. A Qualified Archaeologist shall prepare a Phase III Archaeological Resources Data Recovery and Treatment Plan for significant archaeological resources (i.e., resources that qualify as historical resources or unique archaeological resources or that contribute to the significance of the tribal cultural landscape) that will be adversely impacted by a project. Consistent with *CEQA Guidelines* Section 15126.4, data recovery shall not be required for a historical resource if LCWA determines that testing or studies already completed have adequately recovered the scientifically consequential information for resources eligible under California Register Criterion 4. The Qualified Archaeologist and LCWA shall consult with interested Native American Tribes for recovery/treatment of Native American archaeological resources during preparation of the plan(s) to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered in assessing treatment, including those related to the tribal cultural landscape. Projects occurring within the same timeframe may be covered by one overarching plan. The plan(s) shall be submitted to LCWA for review and

approval prior to the start of field work for data recovery efforts for resources that are eligible under California Register Criterion 4 (data potential). Data recovery field work shall be completed prior to the start of any project-related ground disturbance. Treatment for archaeological resources that are eligible under California Register Criterion 1 (events), Criterion 2 (persons), or Criterion 3 (design/workmanship) shall be completed within 3 years of completion of the project. Each plan shall include:

a. *Research Design.* The plan shall outline the applicable cultural context(s) for the region, identify research goals and questions that are applicable to each resource or class of resources, and list the data needs (types, quantities, quality) required to answer each research question. The research design shall address all four California Register Criteria (1–4) and identify the methods that will be required to inform treatment, such as subsurface investigation, documentary/archival research, and/or oral history, depending on the nature of the resource. The research design shall also include consideration of Native American or prehistoric archaeological resources as contributors to the tribal cultural landscape.

b. *Data Recovery for Resources Eligible under Criterion 4.* The plan shall outline the field and laboratory methods to be employed, and any specialized studies that will be conducted, as part of the data recovery effort for resources that are eligible under California Register Criterion 4 (data potential). If a resource is eligible under additional criteria, treatment beyond data recovery shall be implemented (see CUL-6c).

c. *Treatment for Resources Eligible under Criteria 1, 2, or 3.* In the event a resource is eligible under California Register Criterion 1 (events), Criterion 2 (persons), or Criterion 3 (design/workmanship), then resource-specific treatment shall be developed to mitigate project-related impacts to the degree feasible. This could include forms of documentation, interpretation, public outreach, ethnographic and language studies, publications, and educational programs, depending on the nature of the resource, and may require the retention of additional technical specialists. Treatment measures shall be generally outlined in the plan based on existing information on the resource. Once data recovery is completed and the results are available to better inform resource-specific treatment, the treatment measures shall be formalized and implemented. Treatment shall be developed by the Qualified Archaeologist in consultation with LCWA and Native American Tribal representatives for resources that are Native American in origin, including those related to the tribal cultural landscape.

d. *Security Measures.* The plan shall include recommended security measures to protect archaeological resources from vandalism, looting, and non-intentionally damaging activities during field work.

e. *Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.* The plan shall outline the protocols and procedures to be followed in the event *that* human remains and associated funerary objects or grave goods are uncovered. Protocols and procedures shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries.

f. *Reporting Requirements.* Upon completion of data recovery for resources eligible under Criterion 4, the Qualified Archaeologist shall document the findings in an Archaeological Data Recovery Report. The draft Archaeological Data Recovery Report shall be submitted to the LCWA within 360 days after completion of data recovery, and the final Archaeological Data Recovery Report shall be submitted to LCWA within 60 days after the receipt of LCWA comments. The Qualified Archaeologist shall submit the final Archaeological Data Recovery Report to the South Central Coastal Information Center within 30 days of its acceptance by LCWA. Upon completion of all other treatment for resources eligible under Criteria 1, 2, or 3, the Qualified Archaeologist shall document the resource-specific treatment that was implemented for each resource and verification that treatment has been completed in a technical document (report or memorandum). The document shall be provided to LCWA within 30 days after completion of treatment.

g. *Curation or Disposition of Cultural Materials.* The plan shall outline the requirements for final *disposition* of all cultural materials collected during data recovery. Disposition of all archaeological materials shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials**.** Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries**.**

h. *Protocols for Native American Coordination and Monitoring.* The plan shall outline the role and responsibilities of Native American Tribal representatives in *accordance* with Mitigation Measure CUL-12: Native American Coordination**.** It shall outline communication protocols, timelines for review of archaeological resources documents, and provisions for Native American monitoring. The plan shall include provisions for full-time Native American monitoring of all data recovery field work for resources that are Native American in origin, including those related to the tribal cultural landscape, in accordance with Mitigation Measure CUL-13: Native American Monitoring**.**

Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan. For each near-term, mid-term, and long-term project that involves ground disturbance, a Qualified Archaeologist shall prepare an Archaeological Resources Mitigation and Monitoring Plan taking into account the final LCWA-approved project design plans, depths/locations of ground disturbance, proximity to known archaeological resources, and potential to encounter

subsurface archaeological resources. Projects occurring within the same timeframe may be covered by one overarching plan. The Qualified Archaeologist and LCWA shall coordinate with participating Native American Tribes during preparation of the plan(s). Each plan shall include:

a. *Establishment of Environmentally Sensitive Areas.* The plan shall outline areas that will be designated Environmentally Sensitive Areas (including maps), if needed. Significant or unevaluated *archaeological* resources that are being avoided and are within 50 feet of the construction zone shall be designated as Environmentally Sensitive Areas. The resources shall be *delineated* with exclusion markers to ensure avoidance. These areas shall not be marked as archaeological resources, but shall be designated as "exclusion zones" on project plans and protective fencing in order to discourage unauthorized disturbance or collection of artifacts that are scientifically important, are considered, including those related to the tribal cultural landscape.

b. *Provisions for Archaeological Monitoring.* The plan shall outline requirements for archaeological monitoring and the archaeological monitor(s) role and responsibilities in accordance with Mitigation Measure CUL-11: Archaeological Resources Monitoring. Ground disturbance in locations/depths that have been previously monitored as part of the program shall not be subject to additional monitoring.

c. *Procedures for Discovery of Archaeological Resources.* Procedures to be implemented in the event of an archaeological discovery shall be fully defined in the plan and shall be in accordance with Mitigation Measure CUL- 14: Archaeological Resources Discoveries. Procedures outlined shall include stop-work and protective measures, notification protocols, procedures for significance assessments, and appropriate treatment measures. The plan shall state avoidance or preservation in place is the preferred manner of mitigating impacts to historical resources, unique archaeological resources, and contributors to the significance of the tribal cultural landscape, but shall provide procedures to follow should avoidance be infeasible in light of factors such as the nature of the find, project design, costs, and other considerations. If, based on the recommendation of a Qualified Archaeologist, it is determined that a discovered archaeological resource constitutes a historical resource or unique archaeological resource or is a contributor to the significance of the tribal cultural *landscape*, then *avoidance* and preservation in place shall be the preferred manner of mitigating impacts to such a resource in accordance with Mitigation Measure CUL-7: Avoidance and Preservation in Place of Archaeological Resources. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Data Recovery and Treatment Plan shall be prepared and implemented following the procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan. LCWA shall consult with appropriate Native American representatives in determining treatment of resources that are Native American in origin to ensure cultural values ascribed to the

resources, beyond those that are scientifically important, are considered, including those related to the tribal cultural landscape

d. *Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.* The plan shall outline the protocols *and* procedures to be followed in the event that *human* remains and associated funerary objects or grave goods are uncovered. Protocols and procedures shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries.

e. *Reporting Requirements.* The plan shall outline provisions for weekly and final reporting. The Qualified Archaeologist shall prepare weekly status reports detailing activities and locations observed (including maps) and summarizing any discoveries for the duration of monitoring to be submitted to LCWA via email for each week in which monitoring activities occur. The Qualified Archaeologist shall prepare a draft Archaeological Resources Monitoring Report and submit it to LCWA within 180 days after completion of the monitoring program or treatment for significant discoveries should treatment extend *beyond* the cessation of monitoring. The final Archaeological Resources Monitoring Report shall be submitted to LCWA within 60 days after receipt of LCWA comments. The Qualified Archaeologist shall also submit the final Archaeological Resources Monitoring Report to the South Central Coastal Information Center.

f. *Curation or Disposition of Cultural Materials.* The plan shall outline the requirements for final disposition of all cultural materials collected during data recovery. Disposition of all archaeological materials shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries.

g. *Protocols for Native American Coordination and Monitoring.* The plan shall outline requirements for Native American coordination and monitoring, and the Native American monitor(s) role and responsibilities in accordance with Mitigation Measures CUL-12: Native American Coordination and CUL-13: Native American Monitoring**.**

Mitigation Measure CUL-10: Construction Worker Cultural Resources Sensitivity Training. For each near term, mid-term, and long-term project that involves ground disturbance, LCWA shall retain a Qualified Archaeologist to implement a cultural resources sensitivity training program. The Qualified Archaeologist, or their designee, and a Native American representative shall instruct all construction personnel of the importance and significance of the area as a tribal cultural landscape, the types of archaeological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains, confidentiality of discoveries, and safety precautions to be taken

when working with cultural resources monitors. In the event that construction crews are phased, additional trainings shall be conducted for new construction personnel. LCWA or their contractors shall ensure construction personnel are made available for and attend the training. LCWA shall retain documentation demonstrating attendance

Mitigation Measure CUL-11: Archaeological Resources Monitoring. For each near-term, mid-term, and long-term project, full-time archaeological monitoring of ground disturbance (i.e., demolition, pavement removal, pot-holing or auguring, boring, drilling, grubbing, vegetation removal, brush clearance, weed abatement, grading, excavation, trenching, or any other activity that has potential to disturb soil) shall be conducted in areas and at depths where there is a potential to encounter archaeological materials or human remains, including excavations into existing artificial fill and native soils, based on the project-specific archaeological resources assessment prepared under Mitigation Measure CUL-4: Archaeological Resources Assessment. Ground disturbance in locations/depths that have been previously monitored as part of the program shall not be subject to additional monitoring. The archaeological monitor(s) shall be familiar with the types of resources that could be encountered and shall work under the direct supervision of a Qualified Archaeologist. The number of archaeological monitors required to be on site during ground-disturbing activities is dependent on the construction scenario, specifically the number of pieces of equipment operating at the same time, the distance between these pieces of equipment, and the pace at which equipment is working, with the goal of monitors being able to effectively observe soils as they are exposed. Generally, work areas more than 500 feet from one another will require additional monitors. The archaeological monitor(s) shall keep daily logs detailing the types of activities and soils observed, and any discoveries. Archaeological monitor(s) shall have the authority to halt and re-direct ground disturbing activities in the event of a discovery until it has been assessed for significance and treatment implemented, if necessary, based on the recommendations of the Qualified Archaeologist in coordination with LCWA, and the Native American representatives in the event the resource is Native American in origin, and in accordance with the protocols and procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** Reporting of archaeological monitoring shall be conducted in accordance with the provisions outlined in Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan

Mitigation Measure CUL-12: Native American Coordination. LCWA shall seek input from participating Native American Tribes during the preparation of documents required under Mitigation Measures CUL-5: Extended Phase I Archaeological Investigation**,** CUL-6: Phase II Archaeological Investigation**,** CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**,** Mitigation Measure CUL 9: Archaeological Resources Monitoring and Mitigation Plan, and CUL-14: Archaeological Resources Discoveries**,** including but not limited to work plans, research designs, treatment plans, and associated technical reports. LCWA shall provide participating Native American Tribes with electronic copies of draft documents and

afford them 30 days from receipt of a document to review and comment on the document. Native American comments will be provided in writing for consideration by LCWA. LCWA shall document comments and how the comments were/were not addressed in a tracking log

Mitigation Measure CUL-13: Native American Monitoring. For each near-term, mid-term, and long-term project, full-time Native American monitoring of ground disturbance (i.e., demolition, pavement removal, pot-holing or auguring, boring, drilling, grubbing, vegetation removal, brush clearance, weed abatement, grading, excavation, trenching, or any other activity that has potential to disturb soil) shall be conducted in areas and at depths where there is a potential to encounter archaeological materials or human remains, including excavations into existing artificial fill and native soils, based on the project-specific study prepared under Mitigation Measure CUL-4: Archaeological Resources Assessment. LCWA shall retain a Native American monitor(s) from a California Native American Tribe that is culturally and geographically affiliated with the program area (according to the California Native American Heritage Commission) to conduct the monitoring. If more than one Tribe is interested in monitoring, LCWA shall contract with each Tribe that expresses interest and prepare a monitoring rotation schedule. LCWA shall rotate monitors on an equal and regular basis to ensure that each Tribal group has the same opportunity to participate in the monitoring program. If a Tribe cannot participate when their rotation comes up, they shall forfeit that rotation unless LCWA can make other arrangements to accommodate their schedule. The number of Native American monitors required to be on site during ground disturbing activities is dependent on the construction scenario, specifically the number of pieces of equipment operating at the same time, the distance between these pieces of equipment, and the pace at which equipment is working, with the goal of monitors being able to effectively observe soils as they are exposed. Generally, work areas more than 500 feet from one another require additional monitors. Native American monitors shall have the authority to halt and re-direct ground disturbing activities in the event of a discovery until it has been assessed for significance. The Native American monitor(s) shall also monitor all ground disturbance related to subsurface investigations and data recovery efforts conducted under Mitigation Measures CUL-5: Extended Phase I Archaeological Investigation**,** CUL-6: Phase II Archaeological Investigation**,** and CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan for any resources that are Native American in origin, according to the rotation schedule, including those related to the tribal cultural landscape.

Mitigation Measure CUL-14: Archaeological Resources Discoveries. In the event archaeological resources are encountered during construction of the proposed program, all activity in the vicinity of the find shall cease (within 100 feet), and the protocols and procedures for discoveries outlined in Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan shall be implemented. The discovery shall be evaluated for potential significance by the Qualified Archaeologist. If the Qualified Archaeologist determines that the resource may be significant (i.e., meets the definition for historical resource in *CEQA Guidelines*

subdivision 15064.5(a) or for unique archaeological resource in PRC subdivision 21083.2(g) or is a contributor to the tribal cultural landscape), the Qualified Archaeologist shall develop an Archaeological Resources Data Recovery and Treatment Plan for the resource following the procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** When assessing significance and developing treatment for resources that are Native American in origin, including those related to the tribal cultural landscape, the Qualified Archaeologist and LCWA shall consult with the appropriate Native American representatives. The Qualified Archaeologist shall also determine if work may proceed in other parts of the project site while data recovery and treatment is being carried out. LCWA shall consult with the State Lands Commission Staff Attorney regarding any cultural resources discoveries on state lands.

Mitigation Measure CUL 15: Curation and Disposition of Cultural Materials. LCWA shall curate all Native American archaeological materials, with the exception of funerary objects or grave goods (i.e., artifacts associated with Native American human remains). LCWA shall consult with Native American representatives regarding the final disposition of Native American archaeological materials and on the selection of the curation facility, with preference given to tribal museums. LCWA shall first consider repositories that are accredited by the American Association of Museums and that meet the standards outlined in 36 CFR 79.9. If a suitable accredited repository is not identified, then LCWA shall consider non-accredited repositories as long as they meet the minimum standards set forth by 36 CFR 79.9. If a suitable non-accredited repository is not identified, then LCWA shall donate the collection to a local California Native American Tribe(s) (Gabrielino or Juañeno) for educational purposes. Disposition of Native American human remains and associated funerary objects or grave goods shall be determined by the landowner in consultation with LCWA and the Most Likely Descendant in accordance with Mitigation Measure CUL 18: Human Remains Discoveries. LCWA shall curate all historic-period archaeological materials that are not Native American in origin at a repository accredited by the American Association of Museums that meets the standards outlined in 36 CFR 79.9. If no accredited repository accepts the collection, then LCWA may curate it at a non-accredited repository as long as it meets the minimum standards set forth by 36 CFR 79.9. If neither an accredited nor a non-accredited repository accepts the collection, then LCWA shall offer the collection to a public, non-profit institution with a research interest in the materials, or to a local school or historical society in the area for educational purposes. If no institution, school, or historical society accepts the collection, LCWA may retain it for on-site display as part of its interpretation and educational elements. The final disposition of cultural resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. Prior to start of each project, LCWA shall obtain a curation agreement and shall be responsible for payment of fees associated with curation for the duration of the program.

Mitigation Measure CUL16: Future Native American Input. LCWA shall consult with participating California Native American Tribes, to the extent that they wish to participate, during future design of project-level components, plant and native plant selections or palettes, and development of content for educational and interpretative elements, such as signage and Visitors Center displays.

Mitigation Measure CUL17: Tribal Access Plan. Prior to the start of construction, LCWA shall develop a written access plan to preserve and enhance tribal members' access to, and use of, the restoration Project area for religious, spiritual, or other cultural purposes. This plan will allow access to the extent LCWA has the authority to facilitate such access, and be consistent with existing laws, regulations, and agreements governing property within the program area. The access plan may place restrictions on access into certain areas, such as oil operations and other exclusive easements the LCWA does not have access rights to. This access plan shall be developed in coordination with participating California Native American Tribes, to the extent that they wish to participate.

Mitigation Measure CUL-18: Human Remains Discoveries: If human remains are encountered, then LCWA or its contractor shall halt work in the vicinity (within 100 feet) of the discovery and contact the appropriate County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the County Coroner determines the remains are Native American, then the Coroner will notify the California Native American Heritage Commission (NAHC) within 24 hours in accordance with Health and Safety Code subdivision 7050.5(c), and Public Resources Code Section 5097.98. The California Native American Heritage Commission shall then identify the person(s) thought to be the Most Likely Descendant (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. LCWA and the landowner shall discuss and confer with the MLD on all reasonable options regarding the MLD's preferences for treatment. Until LCWA and the landowner have conferred with the MLD, the contractor shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and 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. If the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or

the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.

APPENDIX C. MAPS AND FIGURES

Figure C - 1. Topographic provinces (after Lightfoot and Parrish 2009)

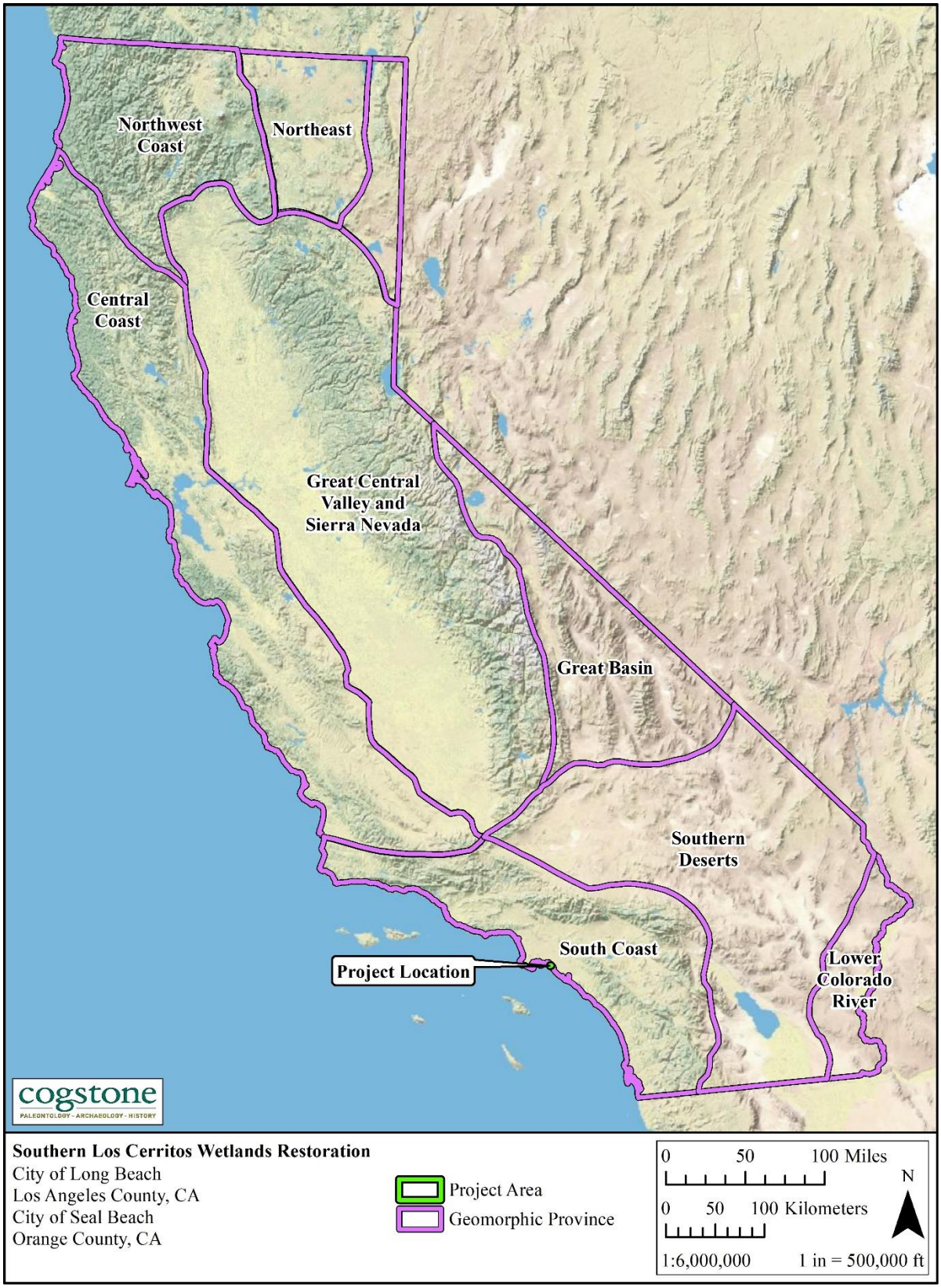


Figure C - 2. Geomorphic provinces (after Lightfoot and Parrish 2009)

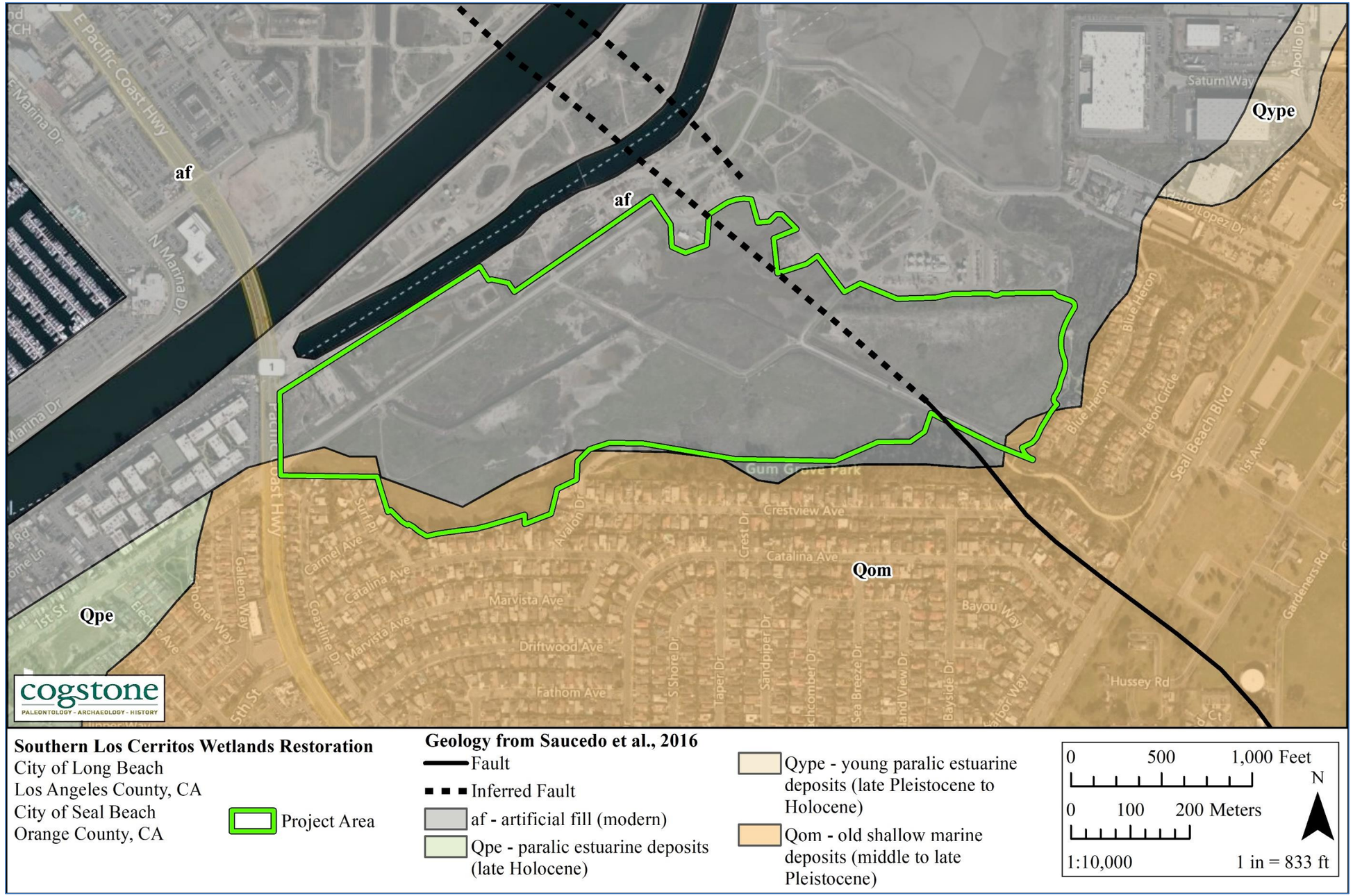


Figure C - 3. Geology of the Southern LCW Project area

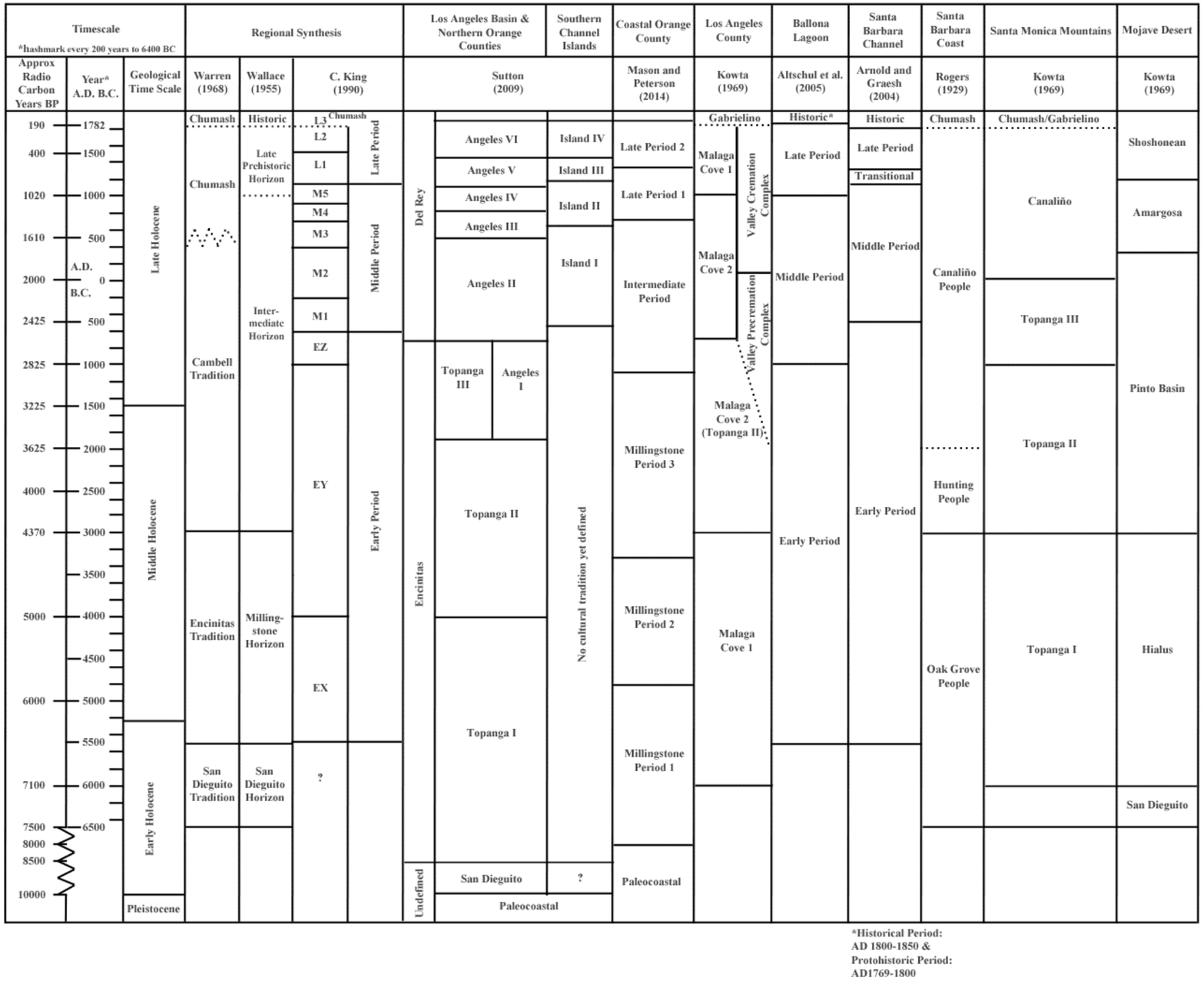


Figure C - 4. Southern California Timeline

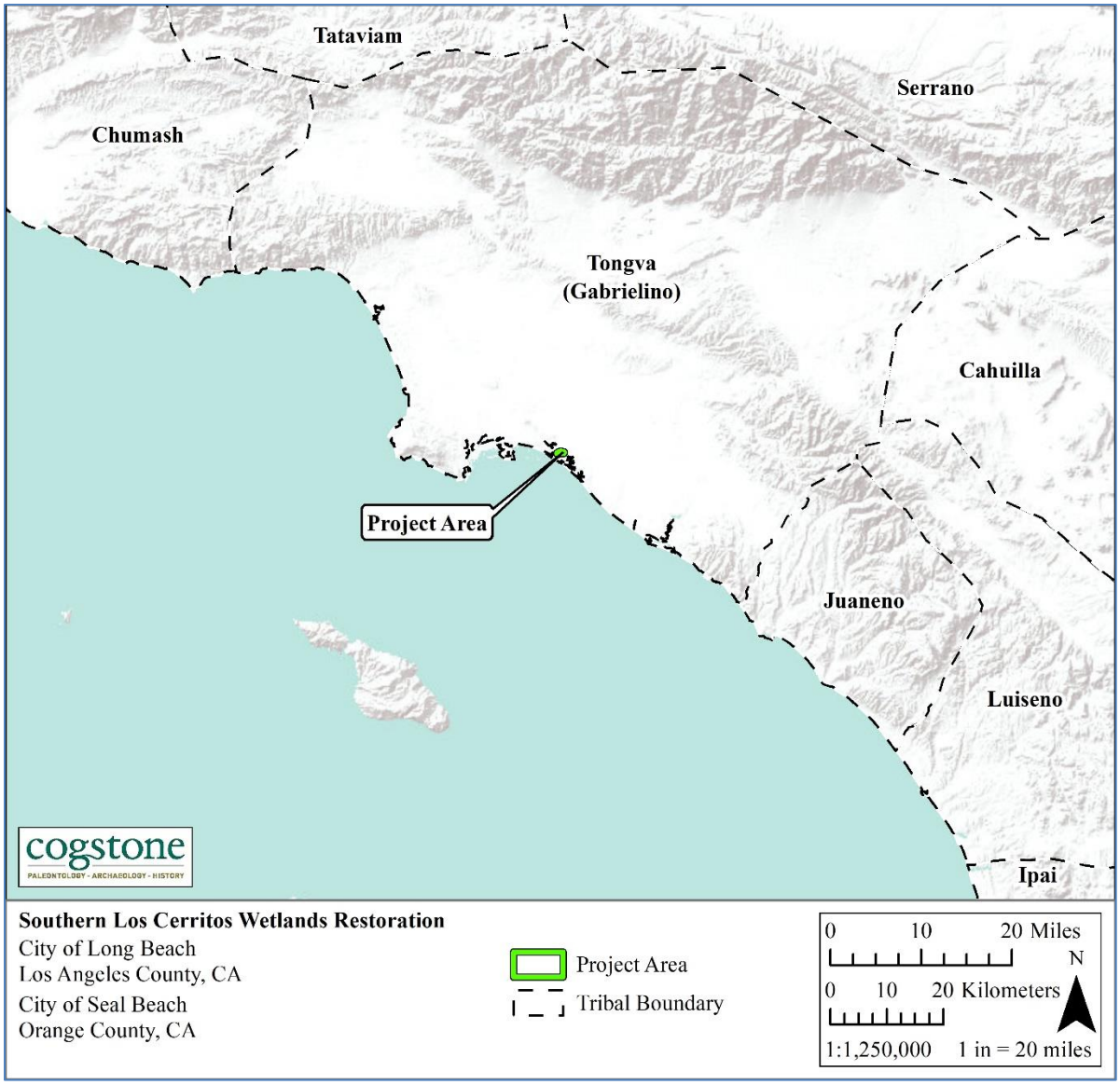


Figure C - 5. Gabrielino (Tongva) Territory (after McCawley 1996)

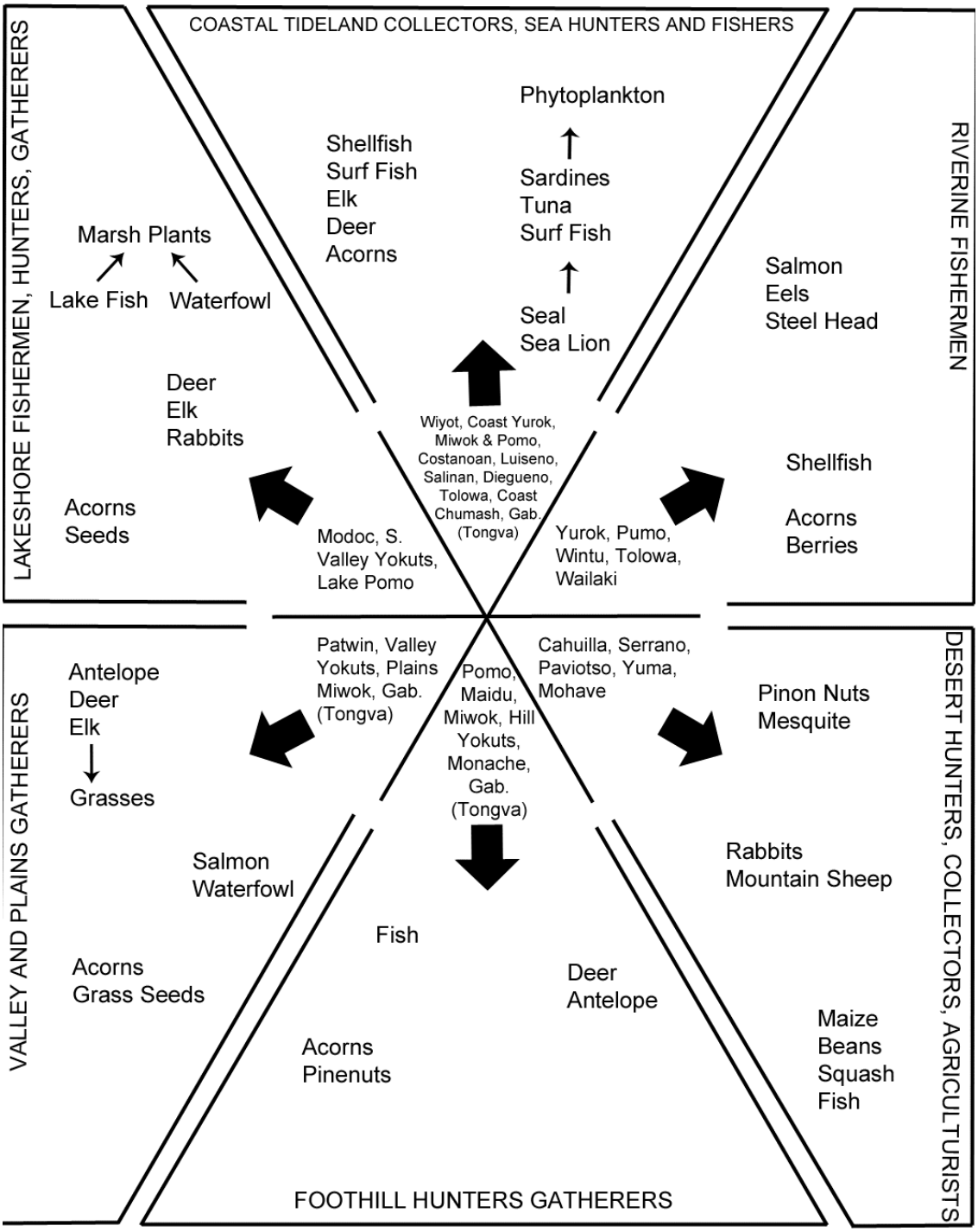


Figure C - 6. Resources used by Native American tribes by ecological zones (based on Heizer and Elsasser 1980: Figure 32)

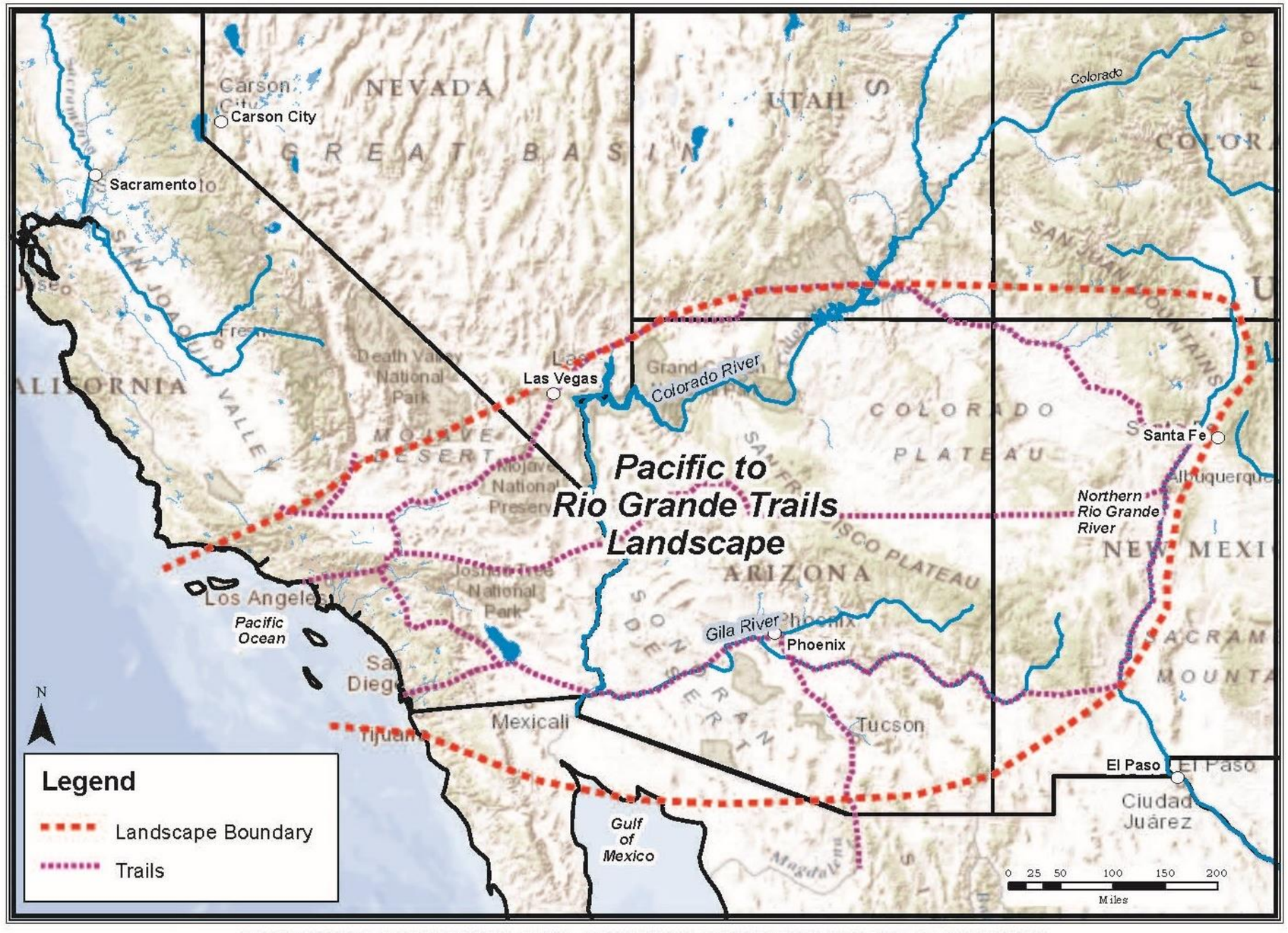


Figure C - 7. Pacific Rio Grande Trails Landscape (Gates et al. 2013: Figure 4)

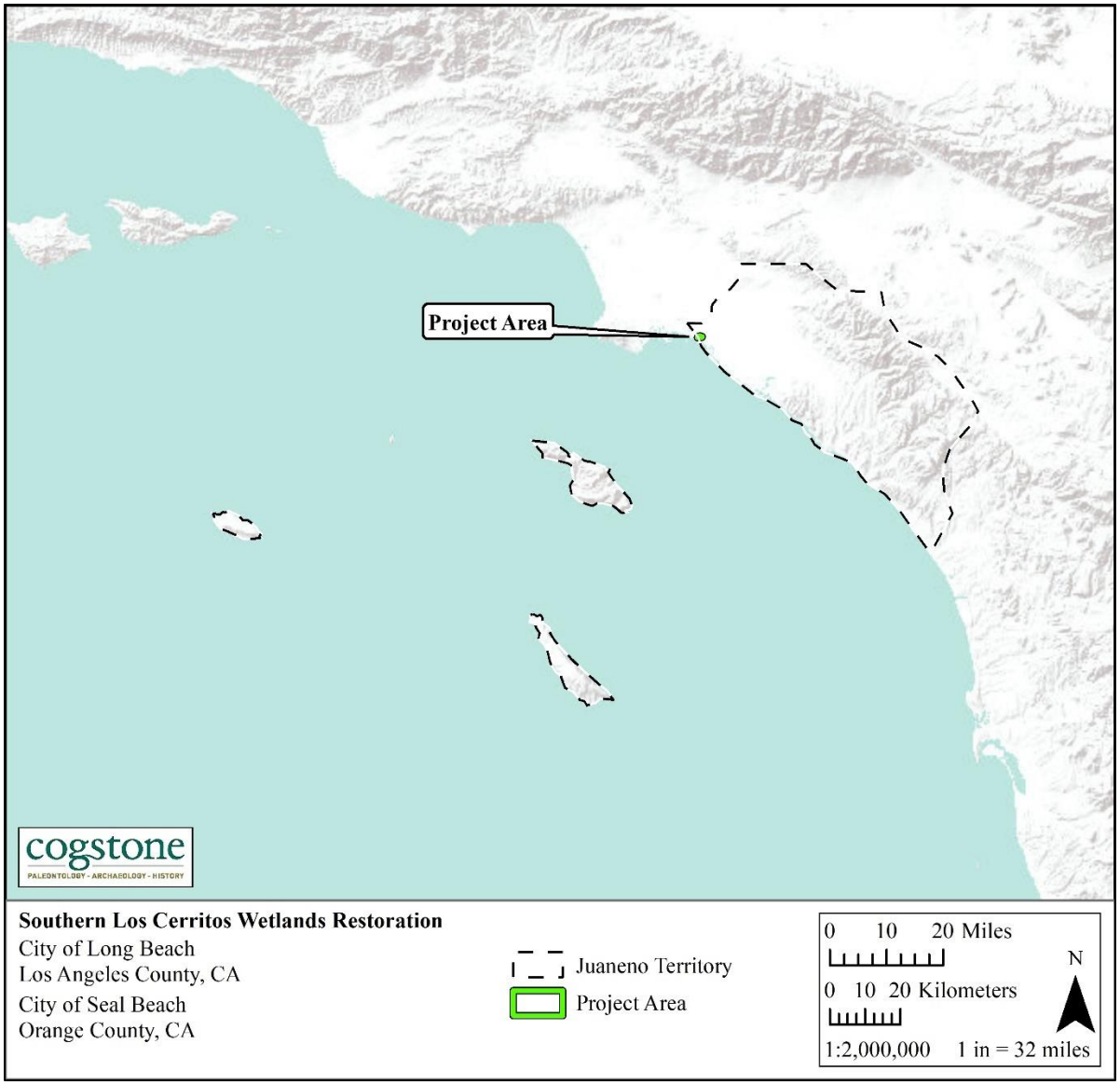


Figure C - 8. Juaneño territory map (data courtesy of Juaneño Band of Mission Indians, Acjachemen Nation)

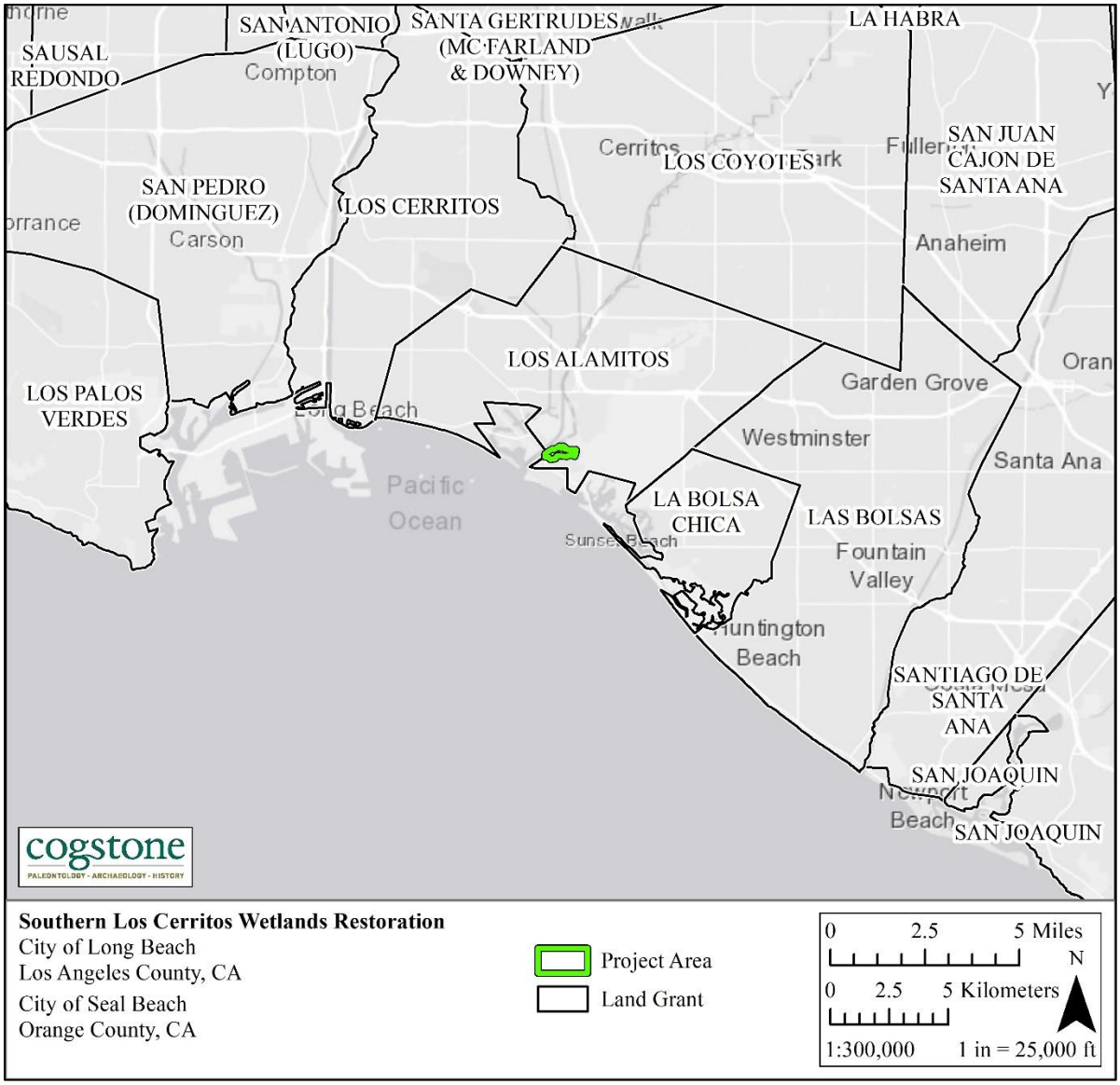


Figure C - 9. Land grant map

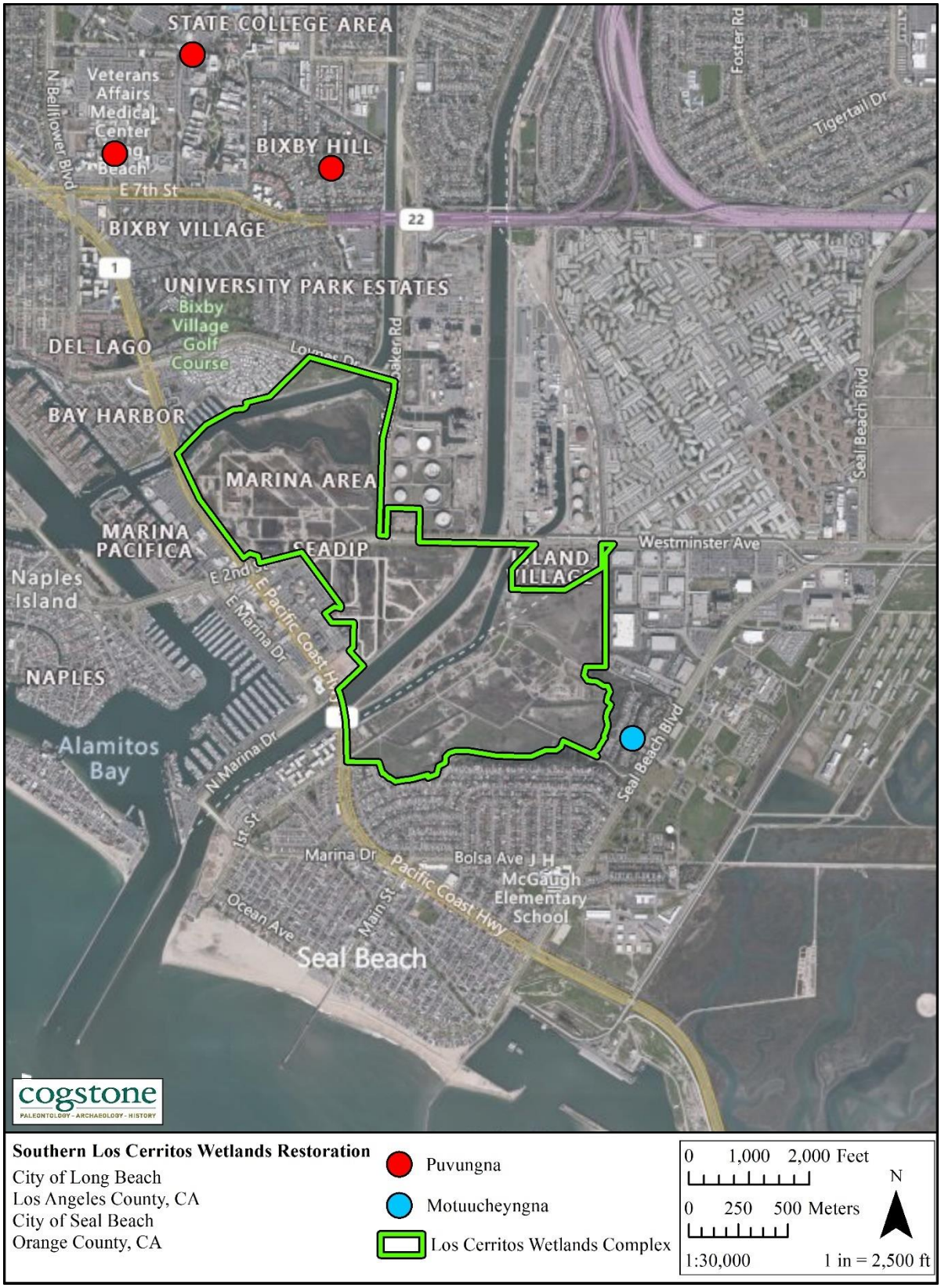


Figure C - 10. Location of villages within the *Puvungna* Traditional Cultural Landscape

Figure C - 11. Extent of *Puvungna* Traditional Cultural Landscape

APPENDIX D. USDA HISTORIC AERIAL PHOTOGRAPHS

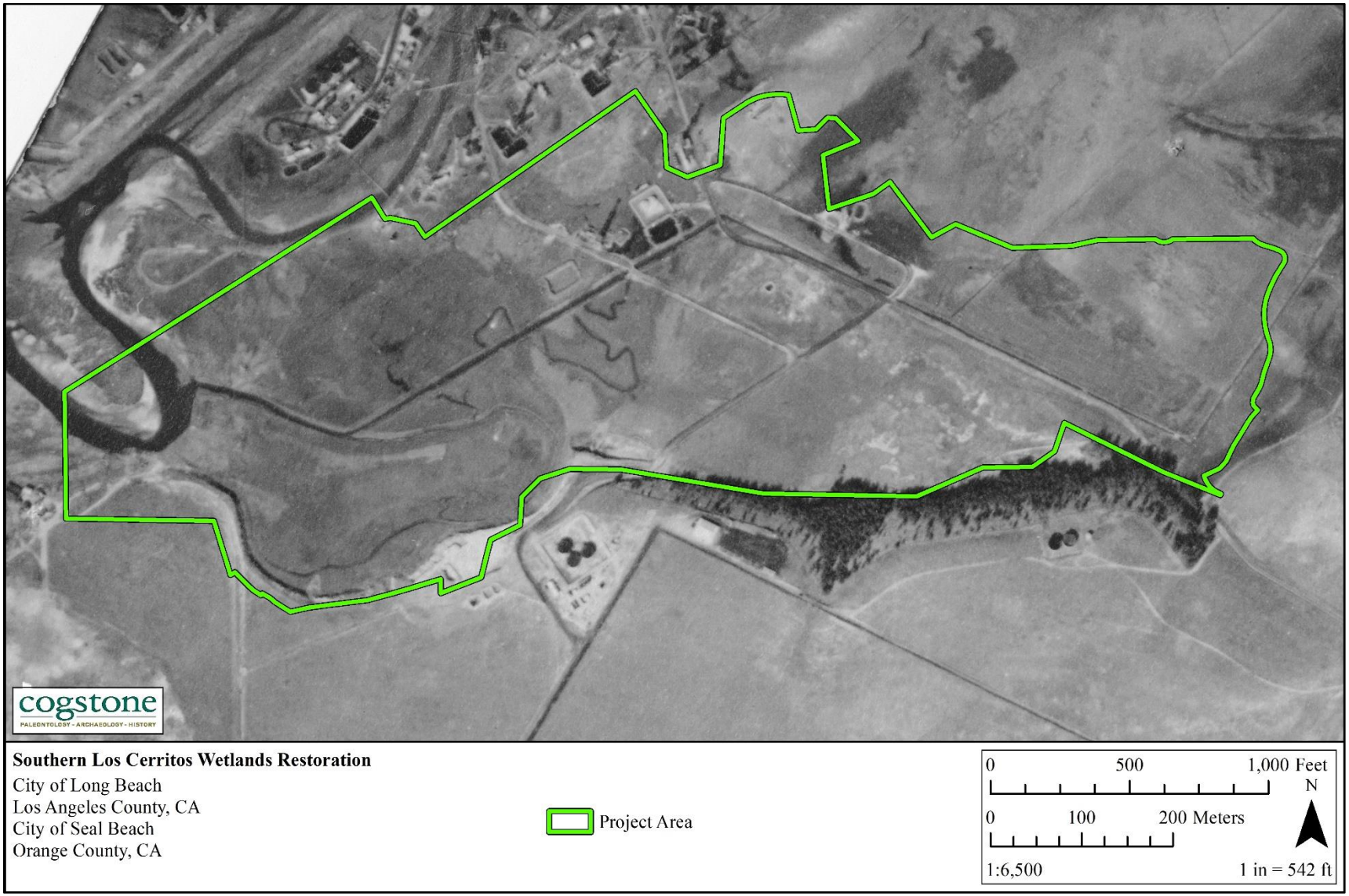


Figure D - 1. 1927 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

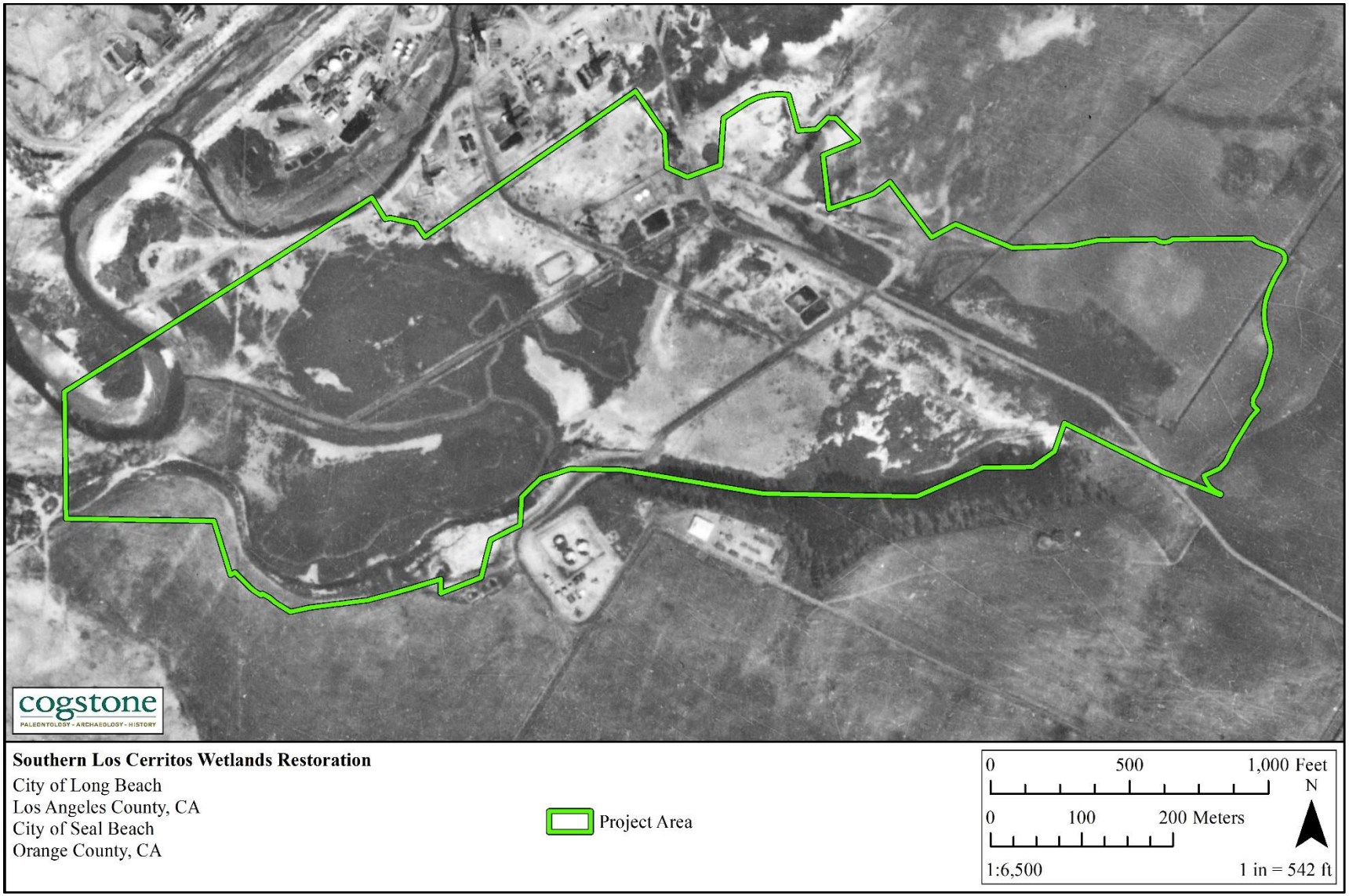


Figure D - 2. 1928 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

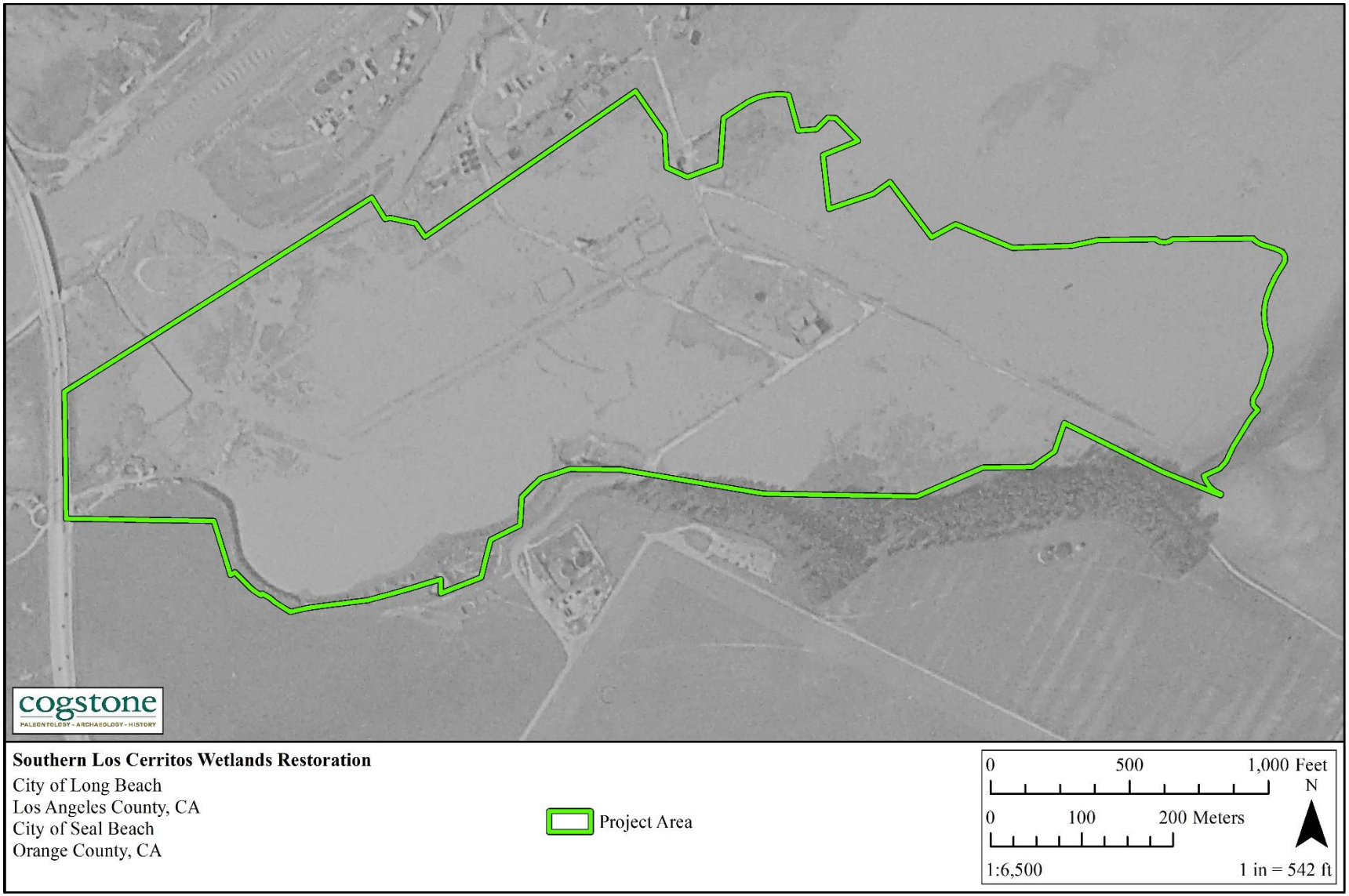


Figure D - 3. 1938 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

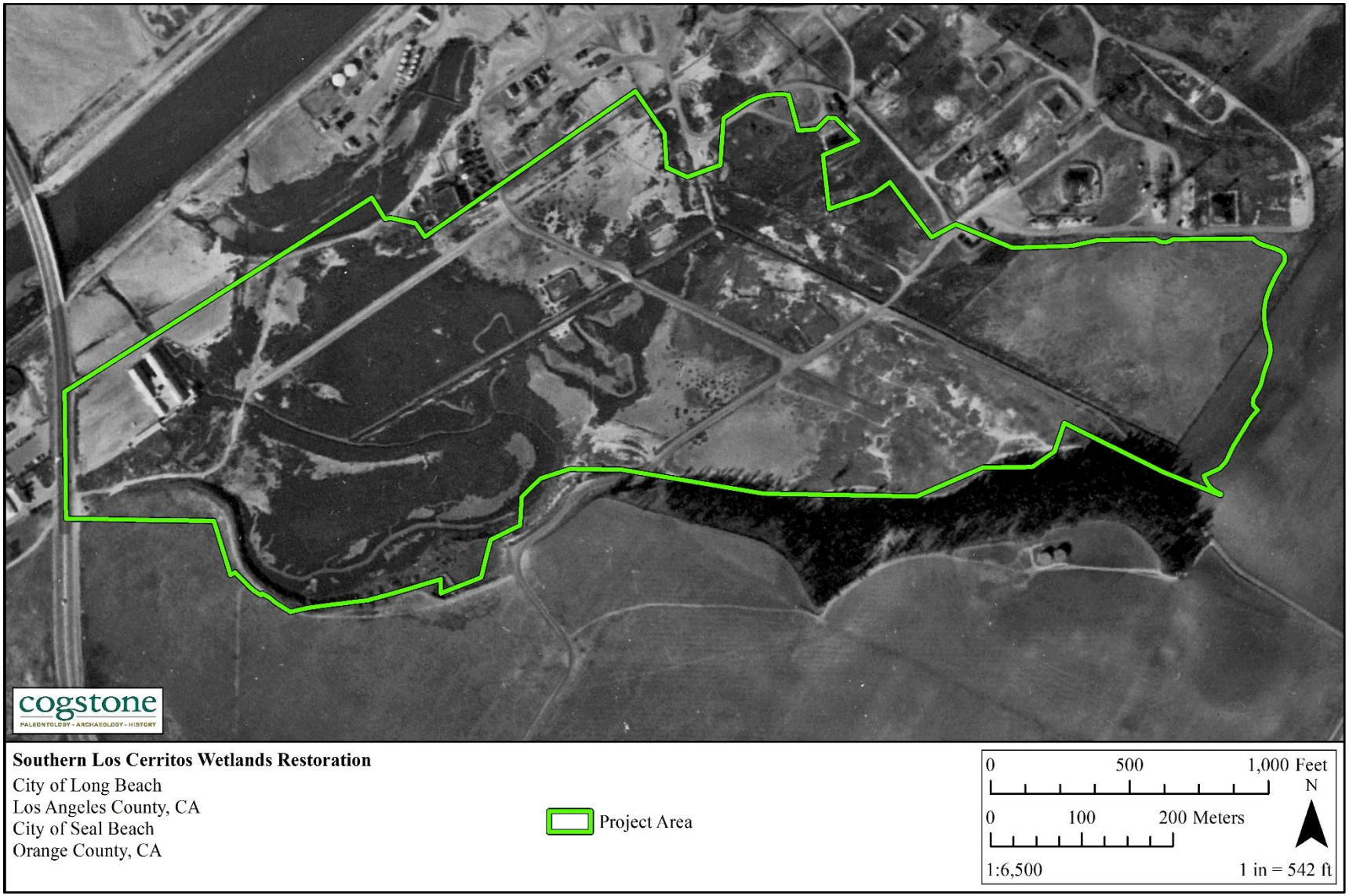


Figure D - 4. 1952 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

Figure D - 5. 1962 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

Figure D - 6. 1965 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

Figure D - 7. 1974 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

Figure D - 8. 1994 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

Figure D - 9. 2001 USDA Historic Aerial Photograph (Courtesy of UCSB: FrameFinder)

APPENDIX E. PREVIOUS CULTURAL RESOURCE STUDIES

Table E – 1. Previous Studies within a One-mile radius of the Los Cerritos Wetlands Complex

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
LA-00012	Crabtree, Robert H.	Environmental Data Base for The [sic] in the City of Long Beach, California	1973	0 - 1 Mile
LA-00057	Leonard, Nelson N. III	A Reconnaissance and Evaluation of the Archaeological Resources of the Veterans Administration Hospital Long Beach, California	1974	0 - 1 Mile
LA-00491	Dixon, Keith A.	Inventory of Archaeological Resources, CSULB Campus	1977	0 - 1 Mile
LA-00503	Dixon, Keith A.	Archaeological Resources and Policy Recommendations of Long Beach	1974	0 - 1 Mile
LA-00522	Cooley, Theodore G.	Test Level Investigations Conducted on Sites CA-LAN-274 and 275.	1979	0 - 1 Mile
LA-00939	Allen, Lawrence P.	The Sims Pond Site, CA-LAN-702, Alamitos Bay, Los Angeles County, California	1980	0 - 1 Mile
LA-01488	Mason, Roger D. and Wayne H. Bonner	Archaeological and Paleontological Report on the Channel Point Property	1985	0 - 1 Mile
LA-02114	McKenna, Jeanette A.	Archaeological Investigations of the Proposed California Shores Property, Long Beach, California	1990	Within Project area
LA-02399	Winman, Lois J. and E. Gary Stickel	Los Angeles-Long Beach Harbor Areas Cultural Resource Survey	1978	0 - 1 Mile
LA-02794	Dixon, Keith A.	Reviving an Archaeological Project at Rancho Los Alamitos	1972	0 - 1 Mile
LA-02795	Desautels, Roger J., K. Dixon, and M. Rosen	Correspondence Between R. Desautels, K. Dixon, and M. Rosen	1979	0 - 1 Mile
LA-02864	Dixon, Keith A.	Comment on Second Incomplete Draft of Implementation Guidelines for the Preservation of Archaeological Resources in Campus Development Project, California State University, Long Beach; Work in Progress as of July 1993	1993	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
LA-03583	Bucknam, Bonnie M.	The Los Angeles Basin and Vicinity: A Gazetteer and Compilation of Archaeological Site Information	1974	0 - 1 Mile
LA-03853	Anonymous	Phase 1 Archaeological Survey and Cultural Resources Assessment of the Point View Project Study Area, City of Rancho Palos Verdes, Los Angeles County, California	1996	0 - 1 Mile
LA-04091	Milliken, Randell and William R. Hildebrandt	Assessment of Archaeological Resources at the Rancho Los Alamitos Historic Ranch and Gardens	1997	0 - 1 Mile
LA-04157	McLean, Deborah K., Ivan Strudwick, and William McCawley	Cultural Resources Assessment for the Marketplace Restaurant and Retail Site, City of Long Beach, Los Angeles County, Ca.	1997	Within Project area
LA-04266	Brooks, Sheilagh T.	A Deeply-buried Human Skull and Recent Stratigraphy at the Present Mouth of the San Gabriel River, Seal Beach, California	1960	0 - 1 Mile
LA-04269	Zahniser, Jack L.	Archaeological Salvage Excavations at 4-LAN-306 (known As *Puvungna*) Summer, 1973	1974	0 - 1 Mile
LA-04270	Underwood, Jackson	Archaeological Testing for the Information Booth Project, California State University, Long Beach	1993	0 - 1 Mile
LA-04274	Underwood, Jackson	Archaeological Survey and Testing for the Pipeline Project California State University, Long Beach	1993	0 - 1 Mile
LA-04275	Underwood, Jackson	Archaeological Testing at the Central Plant Site, California State University, Long Beach	1993	0 - 1 Mile
LA-04276	Underwood, Jackson	Archaeological Testing of Phase I, the Pedestrian Walkway, Parking Structure B California State University, Long Beach	1993	0 - 1 Mile
LA-04277	Underwood, Jackson	Archaeological Testing at the Ticket Booth Site, California State University, Long Beach	1993	0 - 1 Mile
LA-04355	Widell, Cherilyn E.	A Cultural Resources Management Plan for the California State University, Long Beach	1994	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
LA-05215	McKenna, Jeanette A.	A Cultural Resources Investigation of the Proposed Long Beach Ocean Desalination Project, Long Beach, Los Angeles County, California	2001	0 - 1 Mile
LA-05727	Cottrell, Marie G.	A Report of Test Excavations: CA-LAN-702	1975	0 - 1 Mile
LA-05890	Strudwick, Ivan H., W. McCawley, D.K.B. McLean, and B.L. Strum	Cultural Resource Survey of the Bixby Ranch Parcel Near Alamitos Bay, Los Angeles County, California	1996	Within Project area
LA-06089	McCormick, Steven and Ferraro, David D.	Literature Review, Field Reconnaissance, and Grading Monitoring of an Abandoned Oil Field in Long Beach, California	2002	0 - 1 Mile
LA-06107	Shepard, Richard S.	Phase I Cultural Resources Assessment: Los Alamitos Pump Station Project in Long Beach, Los Angeles County, and Seal Beach, Orange County, California	2003	Within Project area
LA-06160	Baksh, Michael, Christopher J. Doolittle, David D. Earle, Donn R. Grenda, and William McCawley	*Puvungna*: A Review of the Ethnohistoric, Archaeological, and Ethnographic Issues Surrounding a Gabrielino Rancheria Near Alamitos Bay, Los Angeles County, California Draft	1994	0 - 1 Mile
LA-06163	Cottrell, Marie G.	Archaeological Test Excavations at CA-LAN-702	1975	0 - 1 Mile
LA-08487	Strudwick, Ivan H.	Cultural Resource Survey of the Alamitos Electrical Generating Station Fuel Oil Tank Farm, City of Long Beach, Los Angeles County, California	2004	0 - 1 Mile
LA-08489	Duke, Curt and Judith Marvin	Cultural Resource Assessment: Cingular Wireless Facility No. Sm 118-03, Long Beach, Los Angeles County, California	2003	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
LA-08494	Shepard, Richard S.	Archaeological Survey Report: Minor Widening of Pacific Coast Highway (PCH, State Route 1) at 2nd Street in the City of Long Beach, Southern Los Angeles County, California	2004	0 - 1 Mile
LA-08497	Raab, Mark L. and Matthew Boxt	A Research Design and Implementation Guidelines for the Preservation of Archaeological Resources in Campus Development Projects, California State University, Long Beach: Work in Progress As of 27 October, 1993	1993	0 - 1 Mile
LA-08498	Raab, Mark L. and Matthew Boxt	A Cultural Resources Management Plan for the California State University, Long Beach, Work in Progress As of 3-19-1994	1994	0 - 1 Mile
LA-09839	Taniguchi, Christeen	Historic Architectural Survey Report: Long Beach VA Hospital Seismic Corrections Project, Long Beach, Los Angeles County, CA	2006	0 - 1 Mile
LA-09840	Wills, Carrie	Phase I Cultural Resources Assessment, Long Beach VA Hospital Seismic Corrections Project, Long Beach, Los Angeles County, California	2006	0 - 1 Mile
LA-10483	Fulton, Terri	Cultural Resources Assessment for the Alamitos Bay Marina Rehabilitation Project, City of Long Beach, Los Angeles County, California	2009	0 - 1 Mile
LA-10527	Weinman, Lois J.	Los Angeles-Long Beach Harbor Areas Regional Cultural History, Los Angeles County, California	1978	0 - 1 Mile
LA-11137	Trinh, Phoung	LOP Facsimile Transmittal SPL-2009-00807-PHT	2009	0 - 1 Mile
LA-12224	Mason, Roger, Cary Cotterman, and Josh Smallwood	Phase I Archaeological Survey and Phase II Historic Building Evaluations for the Seismic Corrections, Mental Health and Community Living Center Project Depart of Veterans Affairs Medical Center, Long Beach, Los Angeles County, California	2011	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
LA-12808	Chasteen, Carrie, Tiffany Clark, Richard Hanes, and Michael Mirro	Cultural Resources Study of the Wilmington Oil and Gas Field, Los Angeles County, California in Support of Analysis of Oil and Gas Well Stimulation Treatments in California Environmental Impact Report	2014	0 - 1 Mile
LA-12960	McKenna, Jeanette A.	Cultural Resources Overview: The City of Long Beach Southeast Area Specific Plan, Los Angeles County, California	2016	Within Project area
OR-00481	Van Horn, David M.	Archaeological Survey Report: the 9 Acre LA Dept. of Water and Power Property Located at the Corner of 1st and Ocean Ave. in the City of Seal Beach	1979	0 - 1 Mile
OR-00493	Anonymous	Archaeological Survey Report: the Hellman Property in Seal Beach	1980	Within Project area
OR-00619	Frierman, Jay D.	Field Assessment of CA-ORA-322; Naval Weapons Station, Seal Beach	1981	0 - 1 Mile
OR-00639	Anonymous	Archaeological Test Report on the Hellman Property Located in Seal Beach	1981	Within Project area
OR-00790	Brock, James P.	Cultural Resource Assessment of Two Study Areas in the Seal Beach National Wildlife Refuge	1985	0 - 1 Mile
OR-01049	Redwine, Peter	Landing Hill	1958	Within Project area
OR-01272	Stickel, Gary E.	A Baseline Archaeological Study for the City of Seal Beach California	1991	0 - 1 Mile
OR-01290	De Barros, Philip and Roger D. Mason	Cultural Resources Survey Report for the Unocal Property at 99 Marina Drive Seal Beach, California	1993	0 - 1 Mile
OR-01301	Kelsey, Harry and Nicholas Magalousis	Historical Review and Archaeological Report for the Unocal On-shore Facility at 99 Marina Drive in Seal Beach California in Two Parts	1993	0 - 1 Mile
OR-01348	De Barros, Philip and Roger D. Mason	Addendum to Cultural Resources Survey Report for the Unocal Property at 99 Marina Drive Seal Beach, California	1993	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-01414	Van Horn, David M.	The 20+ Acre Site of Proposed New Residential Housing on the Naval Weapons Station, Seal Beach	1981	0 - 1 Mile
OR-01421	Smith, Brian F. and Larry J. Pierson	Remediation Project at Buildings 10, 69, and 923 at the Naval Weapons Station, Seal Beach.	1995	0 - 1 Mile
OR-01482	Mason, Roger and Larry Carbone	Archaeological Resources Protection Plan for Installation Restoration Sites 4,8,9, Swmu 56 at Naval Weapons Station, Seal Beach, Orange County, California	1996	0 - 1 Mile
OR-01568	Clevenger, Joyce M.	Extended Phase I Exploratory Survey for the Milcon P-902 Naval Weapons Station Seal Beach, Orange County, California	1997	0 - 1 Mile
OR-01581	Whitney-Desautels, Nancy A.	Cultural Resource Assessment of the Hellman Ranch, Seal Beach	1997	0 - 1 Mile
OR-01599	Clevenger, Joyce M., Kathleen Crawford, and Andrew Pigniolo	Archaeological, Historical, and Architectural Phase 1 Overview Survey, Phase II Evaluation Survey and Historic and Archaeological Resource Protection (harp) Plan of Naval Weapons Station, Seal Beach, California	1993	0 - 1 Mile
OR-01607	Bissell, Ronald M.	Archaeological Monitoring of Trenching for Improvements on and Near the Softball Facility, Seal Beach Naval Weapons Station, Orange County, California	1997	0 - 1 Mile
OR-01608	Stickel, Gary E.	A Research Design and Investigation Program for Test Level Evaluations of Archaeological Sites Located on the Hellman Ranch, City of Seal Beach, California	1996	Within Project area
OR-01609	York, Andrew L., James H. Cleland, and Michael Baksh	A Research Design for the Evaluation of Archaeological Sites Within the Hellman Ranch Specific Plan Area	1997	Within Project area
OR-01610	Stickel, Gary E.	An Archaeological Site Survey of the Hellman Ranch, City of Seal Beach, California	1996	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-01643	York, Andrew, James H. Cleland, and Michael G. Baksk	A Research Design for the Evaluation of Archaeological Sites Within the Hellman Ranch Specific Plan Area	1997	0 - 1 Mile
OR-01816	Stickel, Gary E.	A Research Design and Investigation Program for Test Level Evaluations of Archaeological Sites Located on the Hellman Ranch, City of Seal Beach, California	1996	Within Project area
OR-01866	Clevenger, Joyce M.	Phase I Archaeological Survey of a Parcel Proposed for an Experimental Anaerobic Bioremediation Program Naval Weapons Station, Seal Beach	1996	0 - 1 Mile
OR-01897	Unknown	Historic Properties Overview and Evaluations on the Naval Weapons Station, Seal Beach	1997	0 - 1 Mile
OR-01931	Davy, Douglas M.	Archaeological Resources Protection Plan, Decommissioning of the Research, Testing, and Evaluation Area, Naval Weapons Station, Seal Beach, Orange County, California	1997	0 - 1 Mile
OR-01958	Clevenger, Joyce and Kathleen Crawford	Phase I - Overview Survey and Phase II - Archaeological, Historical, and Architectural Eligibility Study of Cultural Resources on the Naval Weapons Station, Seal Beach	1995	0 - 1 Mile
OR-01960	Mason, Roger and Richard Cerreto	Archaeological Resource Protection Plan for the Background Study Sampling Areas at Naval Weapons Station, Seal Beach, Orange County, California	1995	0 - 1 Mile
OR-01969	Clevenger, Joyce, and Kathleen Crawford	Final Historic and Archaeological Resources Protection (harp) Plan for the Naval Weapons, Station, Seal Beach	1997	0 - 1 Mile
OR-01989	Berryman, Judy, and Roy Pettus	Archaeological Resources Protection Plan for the Site Inspection Work Plan at the Research, Testing, and Evaluation Area, Naval Weapons Station, Seal Beach, Orange County, California	1995	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-02033	Mason, Roger D.	Research Design for Evaluation of Coastal Archaeological Sites in Northern Orange County, California	1987	0 - 1 Mile
OR-02070	Bissell, Ronald M.	Archaeological Monitoring at Installation Restoration (IR) Site 73, Naval Weapons Station (NAVWPNSTA), Seal Beach, California (CH2M Hill Prime Contract No. N6871-96-d-2299)	2000	0 - 1 Mile
OR-02072	Bissell, Ronald M.	Archaeological Services at Naval Weapons Station (NAVWPNSTA), Seal Beach, California (CH2M Hill Prime Contract No. N6871-96-d-2299), Relative to Sampling at Installation Restoration (IR) Sites 12, 16, 25, 37, 38, 42, 44/45, Aoc 6, Swmu 24, 56, 57, Osr, an	2000	0 - 1 Mile
OR-02284	Mason, Roger and Cerreto, Richard	Archaeological Resources Protection Plan for Installation Restoration Sites 5, 8, 12, 16, 21, 40, 44, and 46 at Naval Weapons Station, Seal Beach Orange County, Ca	1995	0 - 1 Mile
OR-02286	Bissell, Ronald M.	Archaeological Monitoring at Repair Site #21, Naval Weapons Station (NAVWPNSTA) Seal Beach, Ca	2000	0 - 1 Mile
OR-02604	Duke, Curt	Cultural Resource Assessment at & T Wireless Services Facility No. 13001a Orange County, California	2002	0 - 1 Mile
OR-02687	Miller, Jason A.	Archaeological Monitoring of Trenching for the Main Telephone Cable Feed Vault on the Seal Beach Naval Weapons Station, California	2000	0 - 1 Mile
OR-02688	Baillie, David	Replacement of a Segment of Clay Sewer Pie, Naval Weapons Station, Seal Beach, Orange County, California	2002	0 - 1 Mile
OR-02774	Shepard, Richard S.	Phase I Cultural Resources Assessment: Los Alamitos Pump Station Project in Long Beach, Los Angeles County, and Seal Beach, Orange County, California	2003	Within Project area

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-03172	Tang, Bai "Tom" and Casey Tibbet	Historic Resources Evaluation Report Seal Beach Bike Trail Project City of Seal Beach, Orange County 12-ORA-1-pm 31.11/32.72-kp 50.07/52.66 Ea Oc 3700	2004	0 - 1 Mile
OR-03173	Willey, Lorraine M., and Jackson Underwood	Archaeological Testing of a Portion of Site CA-ORA-322/1118 Gardeners Road and Bolsa Avenue Naval Weapons Station Seal Beach, California	2003	0 - 1 Mile
OR-03379	Chatters, James Carl	Final Archaeological Data Recovery Report for a Portion of Prehistoric Archaeological Site CA-ORA-322/1118 to Mitigate Impacts of Soil Removal Remediation	2003	0 - 1 Mile
OR-03391	York, Andrew L., James H. Cleland, Lorraine Willey, and Charlane Gross	Mitigation Plan for Significant Cultural Resource Discoveries Hellman Ranch Specific Plan Area Seal Beach, California	2003	0 - 1 Mile
OR-03562	Monica Strauss	Negative Archaeological Monitoring Report for the 400 Marina Drive Development Project, City of Seal Beach, CA	2009	0 - 1 Mile
OR-03714	Bonner, Wayne H.	Cultural Resources Survey and Historic Architectural Assessment Results for Sprint Telecommunications Facility Candidate OG54XC414D (Browning), 1971 Irvine Boulevard, Tustin, Orange County, California	2004	0 - 1 Mile
OR-03715	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA 02899D (Fire Station), 120 1/2 West Walnut Street, Station #5, Santa Ana, Orange County, California	2008	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-03735	Bai "Tom" Tang	Due-Diligence Historical Archaeological Resources Review, City of Seal Beach Sewer Capital Improvement Projects, City of Seal Beach, Orange County, California	2008	0 - 1 Mile
OR-03762	Ehringer, Candace	Negative Archaeological Monitoring Report for the Hellman Ranch Tank Farm Replacement Project, City of Seal Beach, California	2009	Within Project area
OR-03821	Tang, Bai and Michael Hogan	Identification and Evaluation of Historic Properties City of Seal Beach Sewer Capital Improvement Projects (Southern Portion/Downtown Area) City of Seal Beach, Orange County, California	2009	0 - 1 Mile
OR-03828	Cleland, James, Andrew York, and Lorraine Willey	Piecing Together the Prehistory of Landing Hill: A Place Remembered	2007	0 - 1 Mile
OR-03870	Mason, Roger	Historic Property Survey Report for the West Orange County Connection, Phase II - I-405/I605 HOV Connector Project, Orange County, California	2009	0 - 1 Mile
OR-03922	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33981-E (Faith Christian Assembly), 13820 Seal Beach Boulevard, Seal Beach, Orange County, California	2010	0 - 1 Mile
OR-04002	Underwood, Jackson	Work Plan for Presence/Absence Archaeological Testing of a Portion of Site CA-ORA-322/1118 Gardeners Road and Bolsa Avenue Naval Weapons Station, Seal Beach, California	2002	0 - 1 Mile
OR-04023	Underbrink, Susan	Cultural Resources Records Search and Survey Report for the Ocean Place Project, Seal Beach, Orange County, California	2005	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-04030	Whitaker, Adrian R.	Evaluation of a Redeposited Site (CA-ORA-1711) for the Marine Corps Reserve Training Center, Project P-063, Naval Weapons Station, Seal Beach, Orange County, California	2011	0 - 1 Mile
OR-04031	Padon, Beth	Subject: Phase I Archaeological Study Report for Alumni Center at the University of California Irvine Campus	2011	0 - 1 Mile
OR-04034	Bucknam, Bonnie M.	The Los Angeles Basin and Vicinity: A Gazetteer and Compilation of Archaeological Site Information	1974	0 - 1 Mile
OR-04035	Weinman, Lois J., and E. Gary Stickel	(also LA2399) Los Angeles-Long Beach Harbor Areas Cultural Resource Survey	1978	0 - 1 Mile
OR-04047	Lehman, Jane	Seal Beach Railroad Right of Way Property, Seal Beach Blvd. - 17th Street - 16th Street - Electric Ave., Seal Beach, CA	2007	0 - 1 Mile
OR-04089	Whittenberg, Lee	Section 106 Compliance Information City of Seal Beach Water Tank Fence Replacement Project, Seal Beach Naval Weapons Station	2001	0 - 1 Mile
OR-04105	Wlodarski, Robert J.	Cultural Resources Records Search and Archaeological Survey Results for the proposed Clear Wireless, LLC, Site CA-ORC5863A (OG03XC029C) located at 211 8th Street, Seal Beach, Orange County, California 90740	2010	0 - 1 Mile
OR-04143	Baillie, David	Sprinkler System Replacement at CA-ORA-322/1118, Reference #5758 Ser. N45W/0153	2004	0 - 1 Mile
OR-04172	Chasteen, Carrie	Historic Property Survey Report San Diego Freeway (I-405) Improvement Project SR-73 to I-605, Orange and Los Angeles Counties	2011	0 - 1 Mile
OR-04189	Gundrum, Darrell	Naval Weapons Station Seal Beach Proposal to Improve Security and Access Control Measures at Two Installation Gates: Gate 1 and Gate 9	2005	0 - 1 Mile

Report Number	Author(s)	Title	Year	Distance from the Southern LCW Project area
OR-04223	Flynn, Chris	Notification of Finding of No Adverse Effect with Standard Conditions for the Bridge Deck Maintenance and Sealing at 30 Locations Throughout Orange County, California	2011	0 - 1 Mile
OR-04307	Baille, David	Reevaluation of the National Register Eligibility Status of Naval Weapons Station Seal Beach, Orange County and Naval Weapons Station Seal Beach, Detachment Fallbrook, San Diego County	2003	0 - 1 Mile
OR-04346	Bissell, Ronald	Discovery Plan, Archaeological Services at Naval Weapons Station (NAVWPNSTA), Seal Beach, California for the Upgrade of Main Telephone Cable Feed Vault	2000	0 - 1 Mile
OR-04505	Brunzell, David	Cultural Resources Assessment of the Seal BH 1 Project, Seal Beach, Orange County, California (BCR Consulting Project No. TRF1427)	2015	0 - 1 Mile
OR-04553	Bonner, Wayne H.	Phase I Survey Marina Drive, Seal Beach	1999	0 - 1 Mile

APPENDIX F. PREVIOUSLY RECORDED CULTURAL RESOURCES

Table F – 1. Previously Recorded Cultural Resources within a 3-mile radius of the Los Cerritos Wetlands Complex

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-000102	CA-LAN-102	Prehistoric Archaeological Site	Shell Midden	1966	Unevaluated	1 - 2 miles
19-000231	CA-LAN-231	Prehistoric Archaeological Site	Shell, Dark Soil	1961	Unevaluated	1 - 2 miles
19-000232	CA-LAN-232	Prehistoric Archaeological Site	Shell, Dark Soil	1961	Unevaluated	1 - 2 miles
19-000233	CA-LAN-233	Prehistoric Archaeological Site	Shell, Dark Soil	1961	Unevaluated	1 - 2 miles
19-000234	CA-LAN-234	Prehistoric Archaeological Site	*Puvungna* Village Site, Surface Shell, Chipping Waste	1960	NR: 1D	2 - 3 miles
19-000235	CA-LAN-235	Prehistoric Archaeological Site	*Puvungna* Village Site, Surface Shell, Chipping Waste	1960	NR: 1D	2 - 3 miles
19-000236	CA-LAN-236	Prehistoric Archaeological Site	Shell, Dark Soil	1961	Unevaluated	2 - 3 miles
19-000271	CA-LAN-271	Prehistoric Archaeological Site	Shell Midden	1959	Unevaluated	1 - 2 miles
19-000272	CA-LAN-272	Prehistoric Archaeological Site	Partial Burial	1961	Unevaluated	0 - 0.25 mile
19-000273	CA-LAN-273	Prehistoric Archaeological Site	Shell Midden	1961	Unevaluated	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-000274	CA-LAN-274	Prehistoric Archaeological Site	Shell Midden	1961	Unevaluated	1 - 2 miles
19-000275	CA-LAN-275	Prehistoric Archaeological Site	Shell Midden	1961	Unevaluated	1 - 2 miles
19-000306	CA-LAN-306	Prehistoric Archaeological Site	Gabrielino Village Site	1951, 1964, 1972, 1973, 1997	1D	1 - 2 miles
19-000698	CA-LAN-698	Prehistoric Archaeological Site	Surface Shell, Chipping Waste	1974	Unevaluated	2 - 3 miles
19-000699	CA-LAN-699	Prehistoric Archaeological Site	Shell, Chipping Waste	1974	Unevaluated	2 - 3 miles
19-000700	CA-LAN-700	Prehistoric Archaeological Site	Shell Midden	1974	Unevaluated	2 - 3 miles
19-000701	CA-LAN-701	Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1974	Unevaluated	2 - 3 miles
19-000702	CA-LAN-702	Prehistoric Archaeological Site	Shell Midden	1974	Unevaluated	1 - 2 miles
19-000703	CA-LAN-703	Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1974	Unevaluated	2 - 3 miles
19-000705	CA-LAN-705	Prehistoric Archaeological Site	Shell Midden	1974	Unevaluated	2 - 3 miles
19-001000	CA-LAN-1000	Prehistoric Archaeological Site	Shell Midden	1979; 1994	Unevaluated	2 - 3 miles
19-001001	CA-LAN-1001	Prehistoric Archaeological Site	Shell Midden	1979	Unevaluated	2 - 3 miles
19-001002	CA-LAN-1002	Prehistoric Archaeological Site	Shell Midden	1979	Unevaluated	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-001003	CA-LAN-1003	Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1979, 1994	Recommended - not a resource	2 - 3 miles
19-001004	CA-LAN-1004	Prehistoric Archaeological Site	Shell Midden	1979, 1994	Recommended - not a resource	2 - 3 miles
19-001005	CA-LAN-1005	Prehistoric Archaeological Site	Shell Midden	1979, 1994	Recommended - not a resource	2 - 3 miles
19-001006	CA-LAN-1006	Prehistoric Archaeological Site	Shell Midden	1979	Unevaluated	1 - 2 miles
19-001007	CA-LAN-1007	Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1979	Unevaluated	1 - 2 miles
19-001821	CA-LAN-001821	Prehistoric Archaeological Site	Habitation Site	1990	Unevaluated	0.25 - 0.5 mile
19-002616		Prehistoric Archaeological Site	Seasonally-Utilized Food Processing/Consumption Station	1997	Unevaluated	2 - 3 miles
19-002629		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977, 1994	Unevaluated	2 - 3 miles
19-002630		Prehistoric Archaeological Site	Seasonally-Utilized Food Processing/Consumption Station	1994	Unevaluated	2 - 3 miles
19-003040		Historic Archaeological Site	Oil Extraction Facility with Tank Farms	2000	Unevaluated	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-004780	CA-LAN-4780H	Historic Archaeological Site	Surficial Refuse Scatter	2016	Unevaluated	0.5 - 1 mile
19-004781		Historic Archaeological Site	LSA-LYC1501-S-2	2017	Unevaluated	0 - 0.25 mile
19-004797	CA-LAN-4797H	Historic Archaeological Site	Navy Hospital Refuse Site	2015	Recommended not eligible	2 - 3 miles
19-004805	CA-LAN-4805H	Multi-Component Archaeological Site	Shell Deposit and Historic Glazed Ceramics	2015	Unevaluated	2 - 3 miles
19-120038		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120039		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120040		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120041		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120042		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120043		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120044		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-120045		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	1 - 2 miles
19-120046		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120047		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	1 - 2 miles
19-120048		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	1 - 2 miles
19-120049		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	1 - 2 miles
19-120050		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120052		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	2 - 3 miles
19-120053		Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1977	Unevaluated	1 - 2 miles
19-178684		Historic Archaeological Site	Rancho Los Alamitos	1981	nominated for NRHP	1 - 2 miles
19-186115		Historic Built Environment	Long Beach Marine Stadium	1993, 1994, 2009	NR: 5S1	0 - 0.25 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-186681		Historic Built Environment	200 Nieto Ave.	2002	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
19-186880		Multi-Component Archaeological Site	Alamitos Generating Station Fuel Oil Tank Farm	2004	Unevaluated for NRHP; Recommended not eligible for CRHR	0.5 - 1 mile
19-186926		Historic Built Environment	Los Alamitos Pump Station	2003	Unevaluated	0 - 0.25 mile
19-187654		Historic Built Environment	HRI #152957, 212 Quincy Ave.	2003	Recommend eligible of NRHP, Criterion B	2 - 3 miles
19-187656		Historic Built Environment	HRI #150929, 5901 East 7th St.		Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
19-187657		Historic Built Environment	Bixby Ranch Field Office, 6433 Westminster Ave.	1996, 2016	Recommended eligible for NRHP under Criterion A/CRHR under Criterion 1	0.5 - 1 mile
19-188776		Historic Built Environment	3933 E. Broadway	2002, 2006, 2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-189429		Historic Built Environment	5320 E 2nd St, Lorbeer Building	2009	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
19-189860		Historic Built Environment	SCE Transmission Tower M-1 T-2, APN #7238-030-802	2010	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
19-189879		Historic Built Environment	1627 Stevely Ave.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189880		Historic Built Environment	6979 E. El Cedral St.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189881		Historic Built Environment	6979 E. El Cedral Street	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189882		Historic Built Environment		2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189883		Historic Built Environment	1921 N. Hidden Lane	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189884		Historic Built Environment	1967 N. Hidden Lane	2011	Recommended not eligible for NRHP/CRHR	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-189885		Historic Built Environment	2015 N. Hidden Lane	2011	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189886		Historic Built Environment	7140 E. Atherton Street	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189887		Historic Built Environment	7100 E. Atherton Dr.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189888		Historic Built Environment	1819 Lees Avenue	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189889		Historic Built Environment	1921 Lees Avenue	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189925		Historic Built Environment	1820 N. Studebaker Rd.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189926		Historic Built Environment	2017 Ostrom Ave.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-189927		Historic Built Environment	2129 Vuelta Grande Ave.	2010	Recommended not eligible for NRHP/CRHR	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
19-189991		Historic Built Environment	HRI #181096 Hafley House, 5561 E La Pasada St., Long Beach	2011	NR: 1S; 3S	2 - 3 miles
19-190055		Historic Built Environment	Anthony's Shopping Plaza, APN: 7231-013-028, 1800-1818 Palo Verde Ave, Long Beach	2012	Recommended not eligible for NRHP/CRHR	2 - 3 miles
19-190670		Historic Built Environment	Wineke Building, 3233 E Broadway, L.B., APN:7264-004-022	2009	Recommended not eligible for NRHP/CRHR	2 - 3 miles
30-000143	CA-ORA-000143	Multi-Component Archaeological Site	Landing Hill #10	1964, 1965, 1969, 1997	Unevaluated	0.25 - 0.5 mile
30-000256	CA-ORA-000256	Prehistoric Archaeological Site	Habitation debris	1969, 1996	Unevaluated	Within Project area
30-000257	CA-ORA-000257	Prehistoric Archaeological Site	Lithic scatter	1969, 1996	Unevaluated	0 - 0.25 mile
30-000258	CA-ORA-000258	Prehistoric Archaeological Site	Lithic Scatter, Hearths/pits, Habitation Debris	1969, 1996	Unevaluated	Within Project area
30-000259	CA-ORA-000259	Prehistoric Archaeological Site	Lithic Scatter, Habitation Debris	1969, 1996	Unevaluated	0 - 0.25 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-000260	CA-ORA-000260	Prehistoric Archaeological Site	Lithic Scatter, Habitation Debris	1969, 1996	Unevaluated	Within Project area
30-000261	CA-ORA-000261	Prehistoric Archaeological Site	Shell Midden, Groundstone	1969	Unevaluated	0 - 0.25 mile
30-000262	CA-ORA-000262	Prehistoric Archaeological Site	Lithic Scatter, Habitation Debris	1969, 1996	Unevaluated	0 - 0.25 mile
30-000263	CA-ORA-000263	Prehistoric Archaeological Site	Lithic Scatter, Habitation Debris	1969, 1996	Unevaluated	0 - 0.25 mile
30-000264	CA-ORA-000264	Prehistoric Archaeological Site	Lithic Scatter, Burials, Habitation Debris	1969	Unevaluated	0 - 0.25 mile
30-000298	CA-ORA-298	Prehistoric Archaeological Site	Shell Midden	1971	NR: 2S2	1 - 2 miles
30-000322	CA-ORA-000322/H	Multi-Component Archaeological Site	Foundations/structure pads, Privies/dumps/trash scatter, Wells/cisterns, Lithic Scatter, Ceramic Scatter, Habitation Debris	1971, 1988, 1992, 1996, 2000	Nominated for NRHP under Criterion D	0 - 0.25 mile
30-000850	CA-ORA-000850	Prehistoric Archaeological Site	Shell Scatter	pre-1976; 1996	Unevaluated	0 - 0.25 mile
30-000851	CA-ORA-000851	Prehistoric Archaeological Site	Habitation Debris	pre-1976; 1996	Unevaluated	0 - 0.25 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-000852	CA-ORA-000852	Prehistoric Archaeological Site	Habitation Debris	1996	Unevaluated	0 - 0.25 mile
30-001352	CA-ORA-1352	Prehistoric Archaeological Site	Shell	1972	Unevaluated	1 - 2 miles
30-001455	CA-ORA-001455	Prehistoric Archaeological Site	Habitation Debris, Shell Midden	1996, 1997	Unevaluated	0.25 - 0.5 mile
30-001463	CA-ORA-1463	Prehistoric Archaeological Site	Shell Midden, Chipping Waste	1985	Unevaluated	1 - 2 miles
30-001473	CA-ORA-001473	Prehistoric Archaeological Site	Habitation Debris	1996	Unevaluated	0 - 0.25 mile
30-001502		Prehistoric Archaeological Site	Shell, Artifact Scatter	1999; 2010	Recommended eligible for NRHP under Criterion D	1 - 2 miles
30-001503		Prehistoric Archaeological Site	Shell Scatter	1999; 2011	Recommended eligible for NRHP under Criterion D	2 - 3 miles
30-001504		Prehistoric Archaeological Site	Shell Scatter	1999	Unevaluated	2 - 3 miles
30-001505		Prehistoric Archaeological Site	Shell Scatter	1999	Unevaluated	2 - 3 miles
30-001539		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	0.25 - 0.5 mile
30-001540	CA-ORA-001540	Prehistoric Archaeological Site	Habitation Debris	2000	Unevaluated	0.25 - 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-001541		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	0.25 - 0.5 mile
30-001542	CA-ORA-001542/H	Multi-Component Archaeological Site	Privies/dumps/trash scatter, Habitation Debris	2000	Unevaluated	0.25 - 0.5 mile
30-001543		Historic Built Environment	30-001543-1	2000	Unevaluated	0 - 0.25 mile
30-001544	ORA-001544	Prehistoric Archaeological Site	Lithic Scatter, Habitation Debris	2000	Unevaluated	0 - 0.25 mile
30-001545	ORA-001545	Prehistoric Archaeological Site	Habitation Debris	2000	Unevaluated	0 - 0.25 mile
30-001546	ORA-001546	Prehistoric Archaeological Site	Habitation Debris	2000	Unevaluated	0.25 - 0.5 mile
30-001568		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	2 - 3 miles
30-001570		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	2 - 3 miles
30-001571		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	2 - 3 miles
30-001572		Prehistoric Archaeological Site	Shell Scatter	2000	Unevaluated	2 - 3 miles
30-001644	ORA-001644	Prehistoric Archaeological Site	Habitation Debris	2006	Unevaluated	0.25 - 0.5 mile
30-001711	ORA-001711	Prehistoric Archaeological Site	Habitation Debris	2011	evaluated to not be a resource	0.25 - 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-001714	CA-ORA-1714	Prehistoric Archaeological Site	Shell, Artifact Scatter	2011; 2015	Recommended eligible for NRHP under Criterion D	2 - 3 miles
30-001746	CA-ORA-1746H	Multi-Component Archaeological Site	Historic Refuse, Shell Scatter	2014	Unevaluated	2 - 3 miles
30-001782		Historic Archaeological Site	Concrete and Wood Piling Bulkhead	2018	Recommended not eligible for NRHP/CRHR	0.25 - 0.5 mile
30-001783		Historic Archaeological Site	Seal Beach Electric Generating Station	2018	Recommended not eligible for NRHP/CRHR	0.25 - 0.5 mile
30-001784		Historic Archaeological Site	Unnamed Historic Road Remnants	2018	Recommended not eligible for NRHP/CRHR	0.25 - 0.5 mile
30-001785		Historic Archaeological Site	Segment of Historic Coast Boulevard Alignment	2018	Recommended not eligible for NRHP/CRHR	0.25 - 0.5 mile
30-100142		Historic Archaeological Isolate	Glass Bottle		Unevaluated	2 - 3 miles
30-100209		Prehistoric Archaeological Isolate	Flake	2014	Unevaluated	2 - 3 miles
30-156069		Historic Built Environment	Old Seal Beach City Hall, 201 8th St.	2011	NR: 1S	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-162271		Historic Built Environment	HRI #090012, Anaheim Landing	2014; 1980; 1935	CPHI no. 219	0.5 - 1 mile
30-162293		Historic Built Environment	HRI #090904, Seal Beach Red Car, Main St. and Electric Ave.	1985	NR: 7P	0.25 – 0.5 mile
30-176491		Historic Built Environment	Underground utilities, Naval Weapons Station, Seal Beach	1992	Recommended not eligible for NRHP; Unevaluated for CRHR	0 - 0.25 mile
30-176492		Historic Built Environment	Building #16 / Recreation Building, QC	1998	Unknown	0.25 – 0.5 mile
30-176493		Historic Built Environment	Building #22 / Administration Office Bldg., QC	1998	Unknown	0.25 – 0.5 mile
30-176494		Historic Built Environment	Building #24 / Filling Sta-Storage Bldg., QC	ca. 1992	Unknown	0.25 – 0.5 mile
30-176495		Historic Built Environment	Building #26 / EM Barracks Bldg.	ca. 1992	Unknown	0 - 0.25 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176496		Historic Built Environment	Bldg. #38, 70, 74, 103,	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176497		Historic Built Environment	Building #90 / Compressed air plant Bldg.	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176498		Historic Built Environment	Building #92 / Pump House No. 2	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176499		Historic Built Environment	Building #93 / Flammables Storehouse	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176500		Historic Built Environment	Building #98 / Steam-out shed building	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176501		Historic Built Environment	Building #99 / Heating Plant Building	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176502		Historic Built Environment	Building #100/ Compressed Air Bldg.	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176503		Historic Built Environment	Building #101 / Vacuum Dust Removal Bldg.	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176504		Historic Built Environment	Building #102 / Ammo Rework Facility	1992	Unevaluated	1 - 2 miles
30-176505		Historic Built Environment	Water tank No. 2	1992	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176506		Historic Built Environment	Pass and ID Office	1992	Recommended not eligible for NRHP; Unevaluated for CRHR	0 - 0.25 mile
30-176507		Historic Built Environment	Building #201 / General Storehouse	1992	Recommended not eligible for NRHP; Unevaluated for CRHR	0 - 0.25 mile
30-176508		Historic Built Environment	Building #202, Sentry Shelter, Naval Weapons Station, Seal Beach	1992	Recommended not eligible for NRHP; Unevaluated for CRHR	0 - 0.25 mile
30-176509		Historic Built Environment	Building #203 / Fire Station	1999	NR: 6Y	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176510		Historic Built Environment	Building #204 / Administration Building	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176511		Historic Built Environment	Building #205 / Flagpole	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176512		Historic Built Environment	Building #206 / Administration Office Bldg.	ca. 1992	NR: 6Y	0 - 0.25 mile
30-176513		Historic Built Environment	Building #207 / Water Storage Tank, QC	1992	NR: 6Y	0 - 0.25 mile
30-176514		Historic Built Environment	Building #208 / PW Pest Cont/Garden Sup Bldg.	ca. 1992	Recommended not eligible for NRHP; Unevaluated for CRHR	0.25 – 0.5 mile
30-176515		Historic Built Environment	Building #210	1992, 2007	Recommended not eligible for NRHP; Unevaluated for CRHR	0 - 0.25 mile
30-176515		Historic Built Environment	Building #213	1992, 2007	Recommended not eligible for NRHP; Unevaluated for CRHR	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176515		Historic Built Environment	Building #215	1992, 2007	Recommended not eligible for NRHP; Unevaluated for CRHR	0.25 – 0.5 mile
30-176516		Historic Built Environment	Building #211, 214, 216, Quarters A, B, C	1992, 2007	NR: 6Y	0 - 0.25 mile
30-176517		Historic Built Environment	Building #226 / Printing Shop	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176518		Historic Built Environment	Building #227 / Sub-station	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176519		Historic Built Environment	Building #229 / QED Comptroller Office Building, QC	ca. 1992	Unknown	0.25 – 0.5 mile
30-176520		Historic Built Environment	Building #230 / PW Office, QC	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176521		Historic Built Environment	Building #231 / PW Metal Storage Building	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176522		Historic Built Environment	Building #232 /PW Oil Storage Building	ca. 1992	Unknown	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176523		Historic Built Environment	Building #233 / PW Vehicle Parking Shed	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176524		Historic Built Environment	Building #234 / PW Carpenters Shop Annex	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176525		Historic Built Environment	Building #235	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176526		Historic Built Environment	Building #237 / Boiler Housing Bldg.	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176527		Historic Built Environment	Building #238 / Flammables Storehouse	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176528		Historic Built Environment	Building #239 / General Warehouse Building	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176529		Historic Built Environment	Building #240 / Railroad Equip Maintenance Shop	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176530		Historic Built Environment	Building #241 / Container Repair Bldg.	ca. 1992	NR: 6Y	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176531		Historic Built Environment	Building #242 / Gen Storage Shed Bldg., QC	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176532		Historic Built Environment	Building #243 / Incinerator Bldg., QC	ca. 1992	NR: 6Y	0.5 - 1 mile
30-176533		Historic Built Environment	Building #244 / Quonset Hut Storehouse	ca. 1992	NR: 6Y	0.25 – 0.5 mile
30-176544		Historic Built Environment	Anderson Street Water Tower, 101 Anderson Street	1976	Nominated for NRHP	1 - 2 miles
30-176752		Historic Built Environment	Parasol Restaurant, 12241 Seal Beach Blvd.	2004	NR: 3CS	2 - 3 miles
30-176778		Historic Built Environment	Taco Surf Restaurant and Cantina, 16281 Pacific Coast Highway	2004	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176803		Historic Built Environment	NASA Saturn S-II Historic District, Naval Weapons Station, Seal Beach	ca. 1998	Unknown	0.5 - 1 mile
30-176840		Historic Built Environment	Administrative Area, Naval Weapons Station, 800 Seal Beach	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Baseball Diamond, MWR Support Facilities	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Softball Diamond, MWR Support Facilities	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Tennis Facility, MWR Support Facilities	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Patio, MWR Support Facilities	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Restroom, MWR Support Facilities	ca. 1998	Unknown	0.25 – 0.5 mile
30-176841		Historic Built Environment	Lifeguard Stand, MWR Support Facilities	ca. 1998	Unknown	0.5 - 1 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176842		Historic Built Environment	BEQ Complex, 800 Seal Beach Blvd.	ca. 1998	Unknown	0.25 – 0.5 mile
30-176843		Historic Built Environment	Bunker 33, 800 Seal Beach Blvd.	ca. 1998	Unknown	0.25 – 0.5 mile
30-176844		Historic Built Environment	Building 59, Guided Missile Facilities	ca. 1998	NR: 6Y	0.5 - 1 mile
30-176844		Historic Built Environment	Building 137, Guided Missile Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176844		Historic Built Environment	Building 61, Guided Missile Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176845		Historic Built Environment	Building 89, Quality Evaluation Labs & Support Facilities	1998	Unknown	0.5 - 1 mile
30-176845		Historic Built Environment	Buildings 432-437, Quality Evaluation Labs & Support Facilities	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176846		Historic Built Environment	Bldg. 78, Missile Facilities by Lapota, Naval Weapons Station, Seal Beach	1998	Unknown	0.5 - 1 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176846		Historic Built Environment	Bldg. 915, Missile Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176846		Historic Built Environment	Bldg. 923 | Missile Facilities by Lapota, Naval Weapons Station, Seal Beach	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176846		Historic Built Environment	Bldg. 906 (orig. demolished), Missile Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176847		Historic Built Environment	Bldg. 264, Naval Weapons Station, Seal Beach	1998	Unknown	0.25 – 0.5 mile
30-176847		Historic Built Environment	Building 85, Naval Weapons Station, Seal Beach	1998	Unknown	0.5 - 1 mile
30-176847		Historic Built Environment	Building 248, Naval Weapons Station, Seal Beach	1998	Unknown	0.5 - 1 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176847		Historic Built Environment	Building 86 (demolished), Naval Weapons Station, Seal Beach	1998	Unknown	0.5 - 1 mile
30-176847		Historic Built Environment	Building 414, Naval Weapons Station, Seal Beach	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176847		Historic Built Environment	Building 921 (demolished), Naval Weapons Station, Seal Beach	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176848		Historic Built Environment	Building 88, Anti-Submarine Warfare Complex	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176848		Historic Built Environment	Building 87, Anti-Submarine Warfare Complex	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176849		Historic Built Environment	Old Ordnance Disposal Area, Naval Weapons Station, Seal Beach	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176850		Historic Built Environment	Buildings 426-431, Small Arched Vault Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176850		Historic Built Environment	Building 104, Small Arched Vault Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176850		Historic Built Environment	Building 318, Small Arched Vault Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176850		Historic Built Environment	Building 599, Small Arched Vault Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176850		Historic Built Environment	Building 456, Small Arched Vault Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176851		Historic Built Environment	Building 849, Sentry Shelters	1998	Unknown	0.5 - 1 mile
30-176851		Historic Built Environment	Building 848, Sentry Shelters	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176851		Historic Built Environment	Building 107, Sentry Shelters	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176852		Historic Built Environment	Buildings 224, 246, 247, 249, 251, 252, 253, Prefabricated Buildings	1998	Unknown	0.5 - 1 mile
30-176852		Historic Built Environment	Prefabricated Buildings, Naval Weapons Station, Seal Beach	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176853		Historic Built Environment	Building 236, Public Works Support Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176853		Historic Built Environment	Building 250, Public Works Support Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176853		Historic Built Environment	Building 254, Public Works Support Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176853		Historic Built Environment	Building 260, Public Works Support Facilities	ca. 1998	Unknown	0.5 - 1 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176853		Historic Built Environment	Building 228, Public Works Support Facilities	ca. 1998	Unknown	0.5 - 1 mile
30-176855		Historic Built Environment	Building 259, Converted Lighters	1998	Unknown	0.25 – 0.5 mile
30-176855		Historic Built Environment	Building 306, Converted Lighters	1998	Unknown	0.5 - 1 mile
30-176855		Historic Built Environment	Building 303, Converted Lighters	1998	Unknown	0.5 - 1 mile
30-176855		Historic Built Environment	Building 413 (demolished), Location based on UTM coords.	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176856		Historic Built Environment	Building 317, Wharf Area	1998	Unknown	0.5 - 1 mile
30-176856		Historic Built Environment	Building 321, Wharf Area	1998	Unknown	0.5 - 1 mile
30-176856		Historic Built Environment	Building 311, Wharf Area	1998	Unknown	0.5 - 1 mile
30-176856		Historic Built Environment	Building 349, Wharf Area	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176856		Historic Built Environment	Building 344, mooring, Mapped to aerial	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176856		Historic Built Environment	Building 345, mooring, Mapped to aerial	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176856		Historic Built Environment	Building 352, mooring, Mapped to aerial	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176856		Historic Built Environment	Building 348, Wharf Area	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176857		Historic Built Environment	Buildings 354, 356, 357, 358, 359, 360, Shipboard Electronic Systems Evaluation Facility	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176858		Historic Built Environment	Buildings 401, 422, 423, 424, and Various, Small Arms Range	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176859		Historic Built Environment	Building 420, LORAC Support Structure	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176860		Historic Built Environment	Building 502, Support Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176860		Historic Built Environment	Building 922, Support Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176860		Historic Built Environment	Building 925, Support Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176860		Historic Built Environment	Building 920, Support Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176860		Historic Built Environment	Building 909, Support Facilities by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176861		Historic Built Environment	3-Vault Ammunition Magazines by Brooks and Miller, 15 buildings (see record)	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176862		Historic Built Environment	Building 813, Box Vault Magazines by Brooks and Miller	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176862		Historic Built Environment	Building 811, Box Vault Magazines by Brooks and Miller	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176862		Historic Built Environment	Building 859, Box Vault Magazines by Brooks and Miller	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176863		Historic Built Environment	Building 850, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176863		Historic Built Environment	Building 868, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176863		Historic Built Environment	Building 877, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176863		Historic Built Environment	Building 866, Helicopter Landing Pad, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176863		Historic Built Environment	Buildings 878 & 879, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176863		Historic Built Environment	Building 867, 800 Area Non-Magazine Structures	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176864		Historic Built Environment	Building 852, Box Vault Magazine by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176865		Historic Built Environment	Building 858, Single Arch Magazines by Ivor Lyons	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176865		Historic Built Environment	Building 856, Single Arch Magazines by Ivor Lyons	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-176865		Historic Built Environment	Building 854, Single Arch Magazines by Ivor Lyons	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176866		Historic Built Environment	Building 863, Multi-Arch magazines by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176866		Historic Built Environment	Building 865, Multi-Arch Magazines by Lapota	1998	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-176867		Historic Built Environment	Buildings 883 & 884, Single Arch Magazines by Lapota	ca. 1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-176868		Historic Built Environment	Buildings 910 & 911, 3-Vault Missile Magazines	1998	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-177074		Historic Built Environment	Los Alamitos Channel	2011	Unknown	0.5 - 1 mile
30-177289		Historic Built Environment	1860 Saint John Road	2010	NR: 3CD	1 - 2 miles
30-177290		Historic Built Environment	13040 Del Monte Dr.	2011	NR: 3CD	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177291		Historic Built Environment	1515 Northwood Road	2010	NR: 3CD	1 - 2 miles
30-177292		Historic Built Environment	13100 Oak Hills Dr.	2010	NR: 3CD	1 - 2 miles
30-177293		Historic Built Environment	13040 Oak Hills Dr.	2010	NR: 3CD	1 - 2 miles
30-177294		Historic Built Environment	1040 Foxburg Road	2010	NR: 3CD	1 - 2 miles
30-177295		Historic Built Environment	136 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177296		Historic Built Environment	156 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177297		Historic Built Environment	196 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177298		Historic Built Environment	200 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177299		Historic Built Environment	212 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177300		Historic Built Environment	216 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177301		Historic Built Environment	213 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177302		Historic Built Environment	217 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177303		Historic Built Environment	214 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177304		Historic Built Environment	218 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177305		Historic Built Environment	215 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177306		Historic Built Environment	219 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177307		Historic Built Environment	216 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177308		Historic Built Environment	220 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177309		Historic Built Environment	217 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177310		Historic Built Environment	221 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177311		Historic Built Environment	218 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177312		Historic Built Environment	222 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177313		Historic Built Environment	219 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177314		Historic Built Environment	223 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177315		Historic Built Environment	220 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177316		Historic Built Environment	224 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177317		Historic Built Environment	221 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177318		Historic Built Environment	225 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177319		Historic Built Environment	222 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177320		Historic Built Environment	226 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177321		Historic Built Environment	223 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177322		Historic Built Environment	227 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177323		Historic Built Environment	224 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177324		Historic Built Environment	228 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177325		Historic Built Environment	225 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177326		Historic Built Environment	229 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177327		Historic Built Environment	226 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177328		Historic Built Environment	230 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177329		Historic Built Environment	227 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177330		Historic Built Environment	231 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177331		Historic Built Environment	228 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177332		Historic Built Environment	232 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177333		Historic Built Environment	229 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177334		Historic Built Environment	233 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177335		Historic Built Environment	230 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177336		Historic Built Environment	234 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177337		Historic Built Environment	231 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177338		Historic Built Environment	235 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177339		Historic Built Environment	232 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177340		Historic Built Environment	236 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177341		Historic Built Environment	233 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177342		Historic Built Environment	237 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177343		Historic Built Environment	234 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177344		Historic Built Environment	238 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177345		Historic Built Environment	235 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177346		Historic Built Environment	239 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177347		Historic Built Environment	236 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177348		Historic Built Environment	240 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177349		Historic Built Environment	237 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177350		Historic Built Environment	241 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177351		Historic Built Environment	238 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177352		Historic Built Environment	242 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177353		Historic Built Environment	239 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177354		Historic Built Environment	243 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177355		Historic Built Environment	240 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177356		Historic Built Environment	244 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177357		Historic Built Environment	241 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177358		Historic Built Environment	245 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177359		Historic Built Environment	242 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177360		Historic Built Environment	246 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177361		Historic Built Environment	243 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177362		Historic Built Environment	247 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177363		Historic Built Environment	244 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177364		Historic Built Environment	248 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177365		Historic Built Environment	245 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177366		Historic Built Environment	249 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177367		Historic Built Environment	246 College Park Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles
30-177368		Historic Built Environment	250 College Park Drive	2010	Recommended not eligible for NRHP; Unevaluated CRHR	1 - 2 miles

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-177393		Historic Built Environment	11491 Martha Ann Dr.	2010	Recommended not eligible for NRHP; Unevaluated CRHR	2 - 3 miles
30-177445		Historic Built Environment	Main Gate 1 Entrance Wall, Naval Weapons Station Seal Beach	ca. 1999	Unknown	0 - 0.25 mile
30-179841		Historic Built Environment	Quarters H, J-M | Building 212, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0 - 0.25 mile
30-179841		Historic Built Environment	Quarters H, J-M | Building 217, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179841		Historic Built Environment	Quarters H, J-M | Building 218, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-179842		Historic Built Environment	Sea Breeze Village, Sewer Lift Station, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179843		Historic Built Environment	Sea Breeze Village, Maintenance Building, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179844		Historic Built Environment	Sea Breeze Village, Mailbox Covers, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179845		Historic Built Environment	Sea Breeze Village, Building Type VI, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-179846		Historic Built Environment	Sea Breeze Village, Building Type V, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179847		Historic Built Environment	Sea Breeze Village, Building Type IV, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179848		Historic Built Environment	Sea Breeze Village, Building Type III, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179849		Historic Built Environment	Sea Breeze Village, Building Type II, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile
30-179850		Historic Built Environment	Sea Breeze Village, Building Type I, Naval Weapons Station, Seal Beach	ca. 1999	Unknown	0.25 – 0.5 mile

Primary Number	Trinomial	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status Code	Distance from Project area
30-179859		Historic Built Environment	Naval Weapons Station, Seal Beach, 800 Seal Beach Blvd.	ca. 1999	Nominated for NRHP under Criteria A, C, D	0 - 0.25 mile

APPENDIX G. HISTORIC TOPOGRAPHIC MAPS

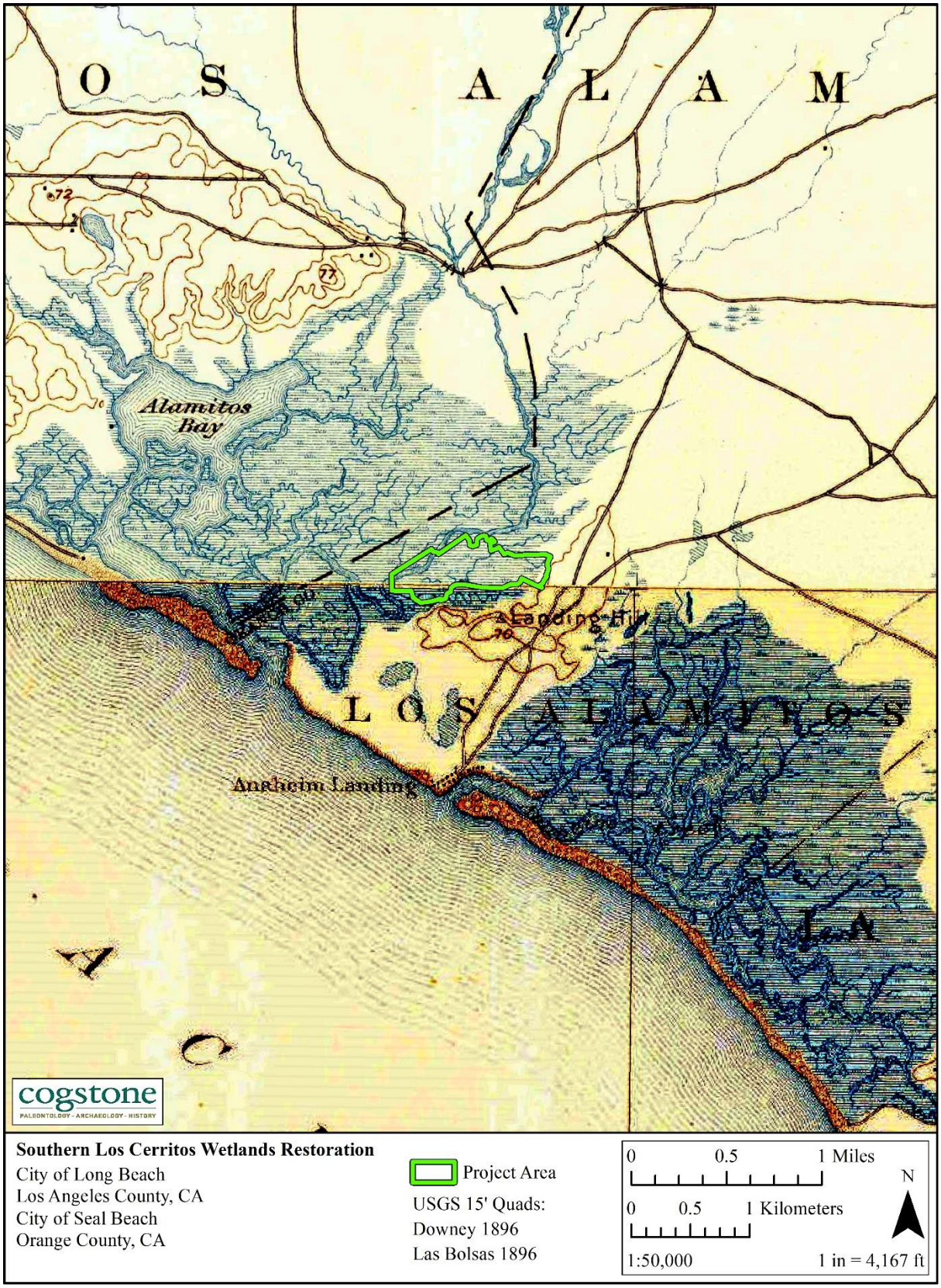


Figure G - 1. 1896 USGS Downey topographic map (1:62,500)

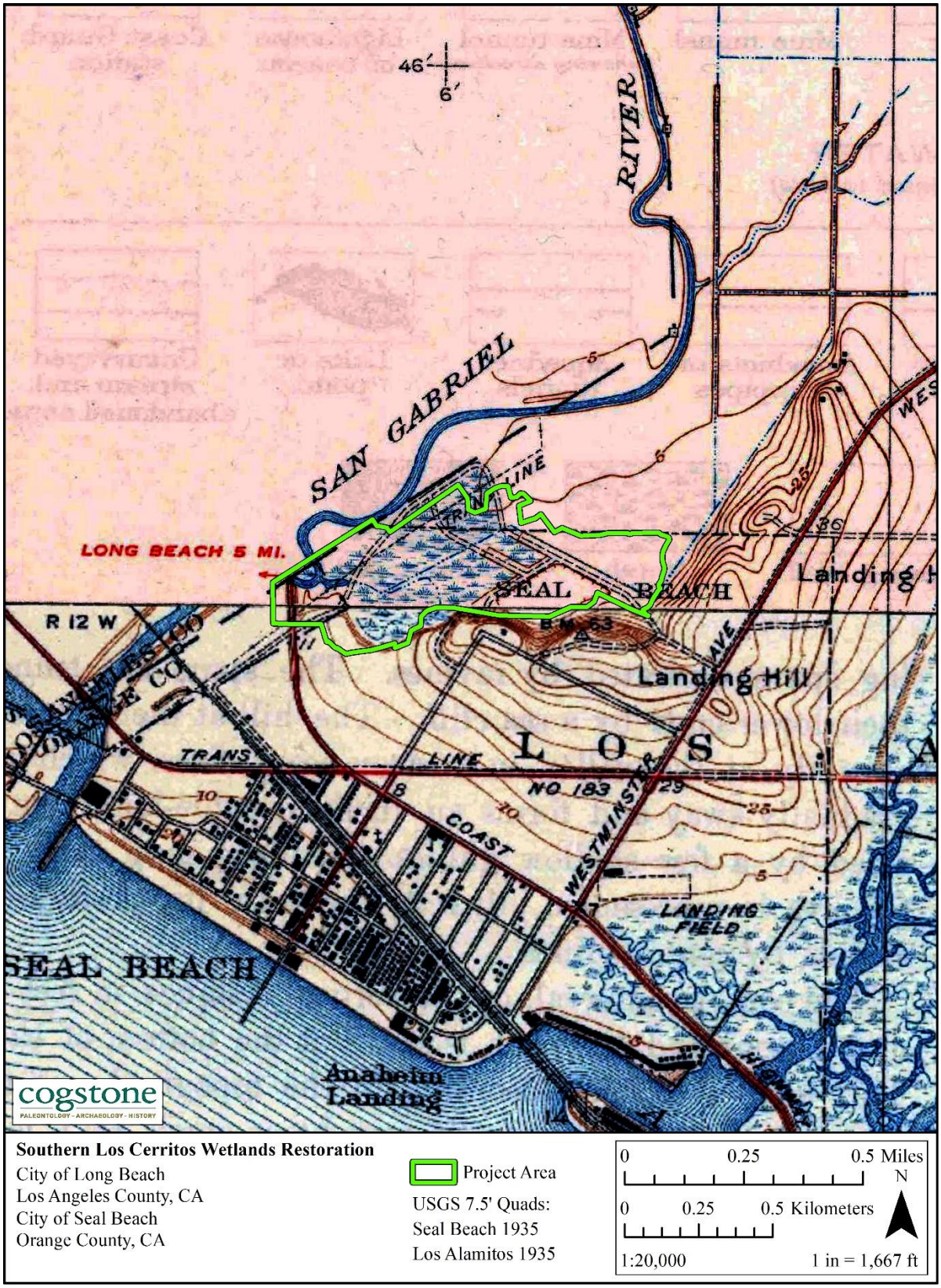


Figure G - 2. 1935 USGS Los Alamitos topographic map (1:31,680)

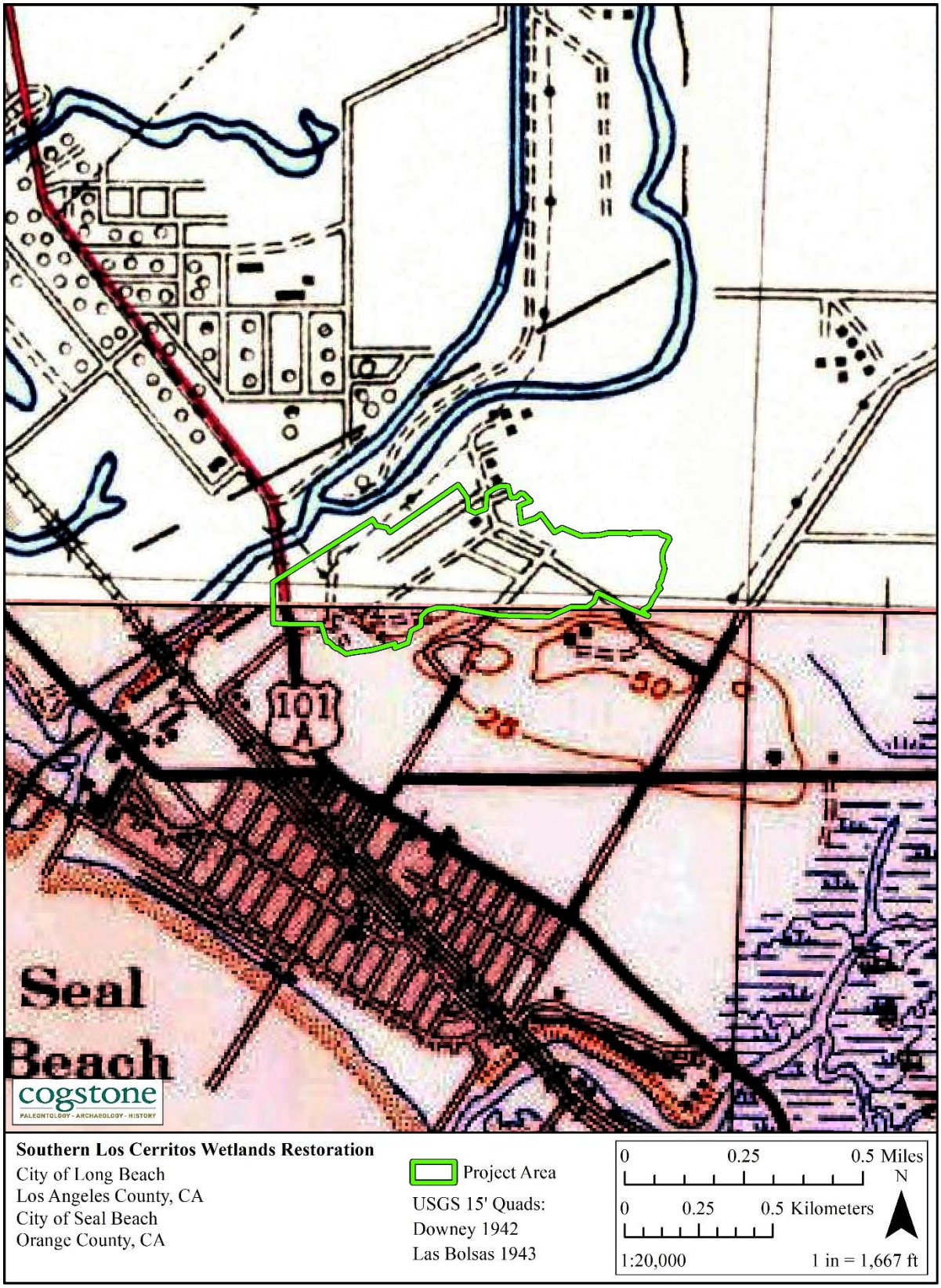


Figure G - 3. 1942 USGS Downey topographic map (1:31,680)

APPENDIX H. SACRED LANDS FILE SEARCH

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

Gavin Newsom, Governor

March 21, 2019

Candace Ehringer
ESA

VIA Email to: cehringer@esassoc.com

RE: Los Cerritos Wetlands Restoration Plan Program Environmental Impact Report Project, Los Angeles and Orange Counties

Dear Ms. Ehringer:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Associate Governmental Program Analyst

Attachment

APPENDIX I. SAMPLE TAG INVITATION

Los Cerritos Wetlands Authority

April 27, 2021

Cindi Alvitre
Ti'at Society/Traditional Council of Pimu
3094 Mace Avenue Apt B
Costa Mesa, CA 92626

Re: Invitation to Los Cerritos Wetlands Tribal Advisory Group

Dear Cindi Alvitre,

The Los Cerritos Wetlands Authority (LCWA) hopes this letter find your families healthy during this trying time. The LCWA invites the Ti'at Society/Traditional Council of Pimu to join the Los Cerritos Wetlands Tribal Advisory Group (TAG). I am reaching out to you because you consulted with the LCWA through AB52 for the Los Cerritos Wetlands Restoration Plan Program EIR (PEIR), certified on January 7, 2021. The LCWA acknowledges the importance of the wetlands to your tribe and we would like to continue to consult with you regarding LCWA's habitat restoration plans for a portion of the Los Cerritos Wetlands.

As you know, the LCWA is a local public agency established in 2006 with two state conservancies, the State Coastal Conservancy and San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, and the cities of Long Beach and Seal Beach. The LCWA was established to acquire, manage, and restore the Los Cerritos Wetlands. Since 2006, LCWA has acquired 170 acres of the wetlands, established community restoration programs, and have been actively planning restoration of the entire 500-acre Los Cerritos Wetlands Complex (see attached Project Location Map).

The LCWA has received funding to move forward on project level designs on 105-acres of wetlands in Seal Beach, near Heron Point, called the South Los Cerritos Wetlands Restoration Project (South LCW Project). We are convening the TAG in order to collaborate first with all tribes that consulted with LCWA through the AB52 process, and potentially other Tribes in the future, in order to involve tribal perspectives early on and throughout planning development, and to incorporate traditional ecological knowledge into restoration designs.

As part of the South LCW Project, the LCWA looks to accomplish the following:

- Conduct focused biological, geotechnical, and archeological surveys
- Complete 65% restoration designs and project level CEQA
- Complete a Traditional Cultural Landscape Study of the Los Cerritos Wetlands

Los Cerritos Wetlands Authority · El Encanto · 100 N. Old San Gabriel Canyon Road · Azusa, CA 91702
◆ Office-626.815.1019 ◆ Fax-626.815.1269 ◆

In the PEIR, the LCWA agreed with the consulting Tribes that the Los Cerritos Wetlands is part of a tribal traditional cultural landscape (TCL) and could be significantly impacted by projects conducted within the wetlands. Because the TCL was not formally documented, the LCWA has hired Cogstone Resource Management to conduct a TCL study. This will include:

- A records search for a 5 mile buffer around the entire Los Cerritos Wetlands to put the wetlands into a larger regional context.
- Conducting ethnographic and historic research to document past use of the Los Cerritos Wetlands, and wetlands in general, by the Tongva and Acjachemen. This would include documenting the collection of salt from the wetlands and the connection of the Cerritos wetlands to the villages of Puvungna and Motuucheyngna.
- Collecting oral histories from Tribal community members as recommended by the Tribal representatives and digitally record their explanations of current and past usage of the wetlands. At the end of the project, digital and hard copies of the finalized oral history will be provided to each participant and Tribe. Participants will be compensated for their time.

Currently we have government and private grant funding to compensate each Tribe's participation on TAG. Please see the LCW Tribal Advisory Group framework document attached which includes a more detailed description of this group. It is a draft, so we welcome any feedback you have.

Since there are multiple concurrent planning efforts taking place within the Los Cerritos Wetlands, we want to take this opportunity to clarify the differences between the LCWA's South LCW planning effort and the Los Cerritos Wetlands Oil Consolidation and Restoration Project, a parallel planning process taking place within the North Area of the wetlands. While the LCWA's restoration plan (i.e. PEIR) does encompass the boundaries of much of the Wetlands Oil Consolidation and Restoration Project, that project is led by Beach Oil Mineral Partners (BOMP) and not LCWA. The LCWA is a co-applicant of the project's Coastal Development Permit because the 5-acre property owned by LCWA is involved in the land swap. LCWA has been involved in the planning process in an advisory role to ensure the developed plans for the Los Cerritos Wetlands Oil Consolidation and Restoration Project are in line with LCWA's habitat restoration goals. While the LCWA maintains an active partnership with BOMP for the improvement of the Los Cerritos Wetlands, we do not oversee or advise on their day to day operations or tribal consultation and monitoring efforts.

The formation of the TAG is something the LCWA looks forward to, and we hope that you will join us! We want to schedule the initial intertribal TAG meeting on May 25, 2021 from 10am-12pm. The meeting will be held remotely.

Los Cerritos Wetlands Authority · El Encanto · 100 N. Old San Gabriel Canyon Road · Azusa, CA 91702
◆ Office-626.815.1019 ◆ Fax-626.815.1269 ◆

Please contact Sally Gee, Project Manager, (1.) if your tribe is interested in participating in the TAG, (2.) if you can attend the initial TAG meeting on the date and time mentioned above, and (3.) provide us with the name and contact information of your tribal representative(s). If your tribe is no longer interested in participating, please let us know that as well. Ms. Gee is also available to answer any questions you may have. We look forward to working with you.

Sally Gee, LCWA Project Manager
100 N. Old San Gabriel Canyon Rd. Azusa, CA 91702
Office: 626-815-1019 x 104
sgee@rmc.ca.gov

Sincerely,

Mark Stanley
Executive Officer

Attachments:

LCW Tribal Advisory Group_Draft Framework 2021.04
Project Location Map

Los Cerritos Wetlands Tribal Advisory Group
Draft Framework

Lead: Los Cerritos Wetlands Authority (LCWA)

- representatives from the State Coastal Conservancy and the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy

Participants:

- Tribes (traditional knowledge input, design input, and tribal cultural experts)
- LCWA Consultants (present and solicit feedback on designs/ stewardship)

Goal of Tribal Advisory Group from LCWA perspective:

- Establish a long-term relationship between tribal entities and the LCWA
- Incorporate traditional ecological knowledge and tribal perspectives into restoration designs and a Traditional Cultural Landscape Study for the LCW
- Keep tribal community updated on progress of projects
- Provide enhanced access to the LCW to tribal community

Suggested meeting schedule: 2-4 meetings annually depending on project milestones and need through the end of 2022, 2-hour meetings

Topics of discussion:

- Tribal Goals and Objectives of restoration in the LCW complex
- Southern Los Cerritos Wetlands Restoration Project
    - Restoration design input
        - Biological resources
        - Cultural resources
        - Landscape design
        - Traditional Ecological Knowledge
    - Public access design input
        - Signage/ educational materials (future phases)
    - Private tribal dedication area
    - Cultural interpretation of technical studies
    - Native American monitoring (data collection/ construction phase)
    - Traditional Cultural Landscape Study
- Public programming/ stewardship activities (could happen now, no funding)

Initial meeting (May 2021):

- Discuss role, purpose, and expectations of the tribal advisory group and compensation
- Establish membership and how to add members (LCWA expectation: start with 6 tribes who consulted on the AB52 process, allow other tribes to ask to join)
- Agreement on topics of discussion
- Update status of LCWA's restoration planning

Funding: Each Tribe will receive a stipend to compensate representatives for meeting participation and document reviews. A Tribe may appoint multiple representatives to the project, but the stipend amount will not increase with additional members.

Exhibit A

SOURCE: ESRI

Los Cerritos Wetlands Restoration Plan Program EIR

Regional Location

ESA

SOURCE: Mapbox, LCWA

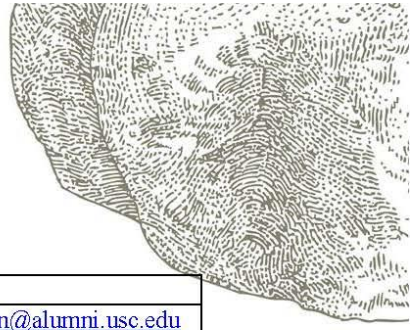
Los Cerritos Wetlands Restoration Plan Program EIR

Figure 2-4
South Area

ESA

APPENDIX J. JULY 23, 2021 SITE VISIT SIGN IN SHEET

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY



Los Cerritos Wetlands Tribal Site Visit
7/23/2021

Name	Tribe/Company/Agency	Phone	Email
Christina Conley	Gabrielino Tongva Indians of California	626-407-8761	Christina.marsden@alumni.usc.edu
Christine Pereira	Coastal Commission	714-610-1864	Christine.pereira@coastal.ca.gov
Dani Ziff	Coastal Commission	310-991-5042	Dani.ziff@coastal.ca.gov
Sandonné Goad	Gabrielino-Tongva Nation	951-807-0479	sgoad@gabrielino-tongva.com
Gabrielle Crowe	Gabrielino-Shoshone Tribe	909-615-9837	grochacpp@gmail.com
Clark Stevens	New West Land Co.	310-614-6636	Clark@newwestland.com
Amber Dobson	Coastal Commission	562-590-5071	Amber.dobson@coastal.ca.gov
Sam Dunlap	Gabrielino Tongva Tribe	909-262-9351	samdunlap@earthlink.net
Eric Zahn	Tidal Influence	858-353-6113	eric@tidalinfluence.com
Joyce Perry	Juaneño Band of Mission Indians	949-293-8522	kaamalam@gmail.com

1518 West Taft Avenue
Orange, CA 92865
Office (714) 974-8300

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San Diego – Riverside – Morro Bay – Sacramento – Arizona

Federal Certifications WOSB, EDWOSB, SDB
State Certifications DBE, WBE, SBE, UDBE

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APPENDIX K. INTERVIEW CONSENT FORM AND QUESTIONS

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

CONSENT TO PARTICIPATE IN RESEARCH

Los Cerritos Wetlands Landscape Study

Cogstone will be conducting a study to identify past, present and future use of the Los Cerritos Wetlands, led by Desiree Martinez, Cogstone Archaeologist. Interviews will be used for the landscape study for the Los Cerritos Wetlands Authority. You were selected as a possible participant in this study because of your knowledge and expertise. Your participation in this research study is voluntary.

LARGER PROJECT BACKGROUND

The Los Cerritos Wetlands Authority has received funding to move forward on project level designs on 105-acres of wetlands in Seal Beach, near Heron Point, called the South Los Cerritos Wetlands Restoration Project (South LCW Project). As part of the South LCW Project, the LCWA looks to accomplish the following:

- Conduct focused biological, geotechnical, and archeological surveys
- Complete 65% restoration designs and project level CEQA
- Complete a Traditional Cultural Landscape Study of the Los Cerritos Wetlands

Cogstone has been hired to conduct the Traditional Cultural Landscape Study, including interviewing Tribal members from the Gabrielino Tongva and Acjachemen Nations.

WHAT SHOULD I KNOW ABOUT A RESEARCH STUDY?

- Whether or not you take part is up to you.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

WHY IS THIS RESEARCH BEING DONE?

This project is being done to better understand the Tongva and Acjachemen relationship to the Los Cerritos Wetlands, salt water marshes, and the greater cultural landscape, encompassing 3 miles around the Los Cerritos Wetlands, including the villages of Puvungna and Motuucheyngna. The project outcomes—summary within the cultural landscape study to inform the restoration.

1518 West Taft Avenue
Orange, CA 92865
Office (714) 974-8300

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Federal Certifications WOSB, EDWOSB, SDB
State Certifications DBE, WBE, SBE, UDBE

ARE THERE ANY RISKS IF I PARTICIPATE?

- Although unlikely, there may be questions which bring up sensitive topics. You may choose to not answer anything.
- You have the option of remaining anonymous within the report

ARE THERE ANY BENEFITS IF I PARTICIPATE?

You will be compensated $250 for your participation. Furthermore, it is our hope that your communities and all people of Los Angeles will benefit from this research in the form of better-informed policy and clearer understandings of what it will take for Los Angeles to become water sustainable and respect Indigenous sovereignty.

WHAT WILL HAPPEN IF I TAKE PART IN THIS STUDY?

If you volunteer to participate in this study, the researcher(s) will ask you to do the following:

- Answer the question listed in the document "LCW Tribal Interview Questions"
- Interviewer will write notes during the interview
- Consent to audio recording of the interview
- Consent to video recording of the interview
- Consent to digital photographs to be taken during the interview

You will be given a copies of:

- audio recording of the interview
- video recording of the interview, if any
- photos photographs to be taken during the interview
- transcript of audio and/or video recording

WILL INFORMATION ABOUT ME AND MY PARTICIPATION BE KEPT CONFIDENTIAL?

If you choose to use your real name or consent to being recorded on a group video, your information will not be kept confidential.

If you request confidentiality, researchers will do their best to make sure that your private information is kept confidential. Even so, participating in research may involve a loss of privacy or a breach in confidentiality, especially if you are participating in conversation circles or events with other people beyond the research team. Study data will be physically and electronically secured, but with electronic data there is always a risk of breach of data security.

Use of personal information that can identify you:

You will be identified as yourself unless otherwise requested. You may request to use an alias or to be kept out of a video.

How information about you will be stored:
Data produced by this project will include video/audio recordings of interviews and transcripts of these recordings, as well as written notes. These materials will be kept on a password protected server at Cogstone Resource Management. Participants will be provided copies of materials on a DVD or flash drive.

People and agencies that will have access to your information:
Research team members will have access to the recordings for the purposes of transcription and analysis. You can decide whether you want your name or an alias to be used in publications.

How long information from the study will be kept:
Videos, audio, written researcher notes and transcripts will be kept in perpetuity at Cogstone and may be donated to a research facility for future research.

WILL I BE PAID FOR MY PARTICIPATION?

Interviewees and conversation circle participants will receive a $250 honorarium in gratitude for your participation. Please fill out and return a W9 to Desiree

WHO CAN I CONTACT IF I HAVE QUESTIONS ABOUT THIS STUDY?

The research team:
If you have any questions, comments, or concerns about the research, you can talk to Desiree Martinez dmartinez@cogstone.com (626) 722-1938.

WHAT ARE MY RIGHTS IF I TAKE PART IN THIS STUDY?

- You can choose whether you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- You may refuse to answer any questions that you do not want to answer.

Los Cerritos Wetlands Landscape Study Interviews (Cogstone 5418)

Los Cerritos Wetlands Consent Form

Name:			
Tribal Entity:			
Address:			
Phone:		**Email:**	

Check all that apply:

I Agree To:	**Yes**	**No**
… participate in this study	❑	❑
… have my name used within the Cultural Landscape study	❑	❑
…audio recording during the interview	❑	❑
…video recording of the interview	❑	❑
…photographs to be taken during the interview	❑	❑

Signature: _____ ***Date:*** _____

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

Los Cerritos Wetlands Questions

1. How did your tribal community use the Los Cerritos Wetlands in the past?
2. How did your tribal community use salt marshes in the past?
3. Have you or your family personally used the Los Cerritos in the past? If yes please explain how.
4. Do you know of other families that have used the Los Cerritos Wetlands?
5. Do you have any information regarding the connection of the Los Cerritos wetland and the villages of Puvungna or Motuucheyngna?
6. Do you know of other places, villages, water sources etc. that have connections to the Los Cerritos Wetlands?
7. What plants and animals within salt marshes, and Los Cerritos Wetlands in particular, are important to your tribal community?
8. What types of activities would you like to be able to do within the Los Cerritos Wetlands in the future?
9. What types of spaces would your tribal community like to have in the Los Cerritos Wetlands?
10. Anything to add?
11. Recommendations or other people to interview?

1518 West Taft Avenue
Orange, CA 92865
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State Certifications DBE, WBE, SBE, UDBE

CONFIDENTIAL APPENDIX L. SURVEY RESULTS AND EXTENDED PHASE I TESTING LOCATON MAPS

APPENDIX M. SOILS MAP

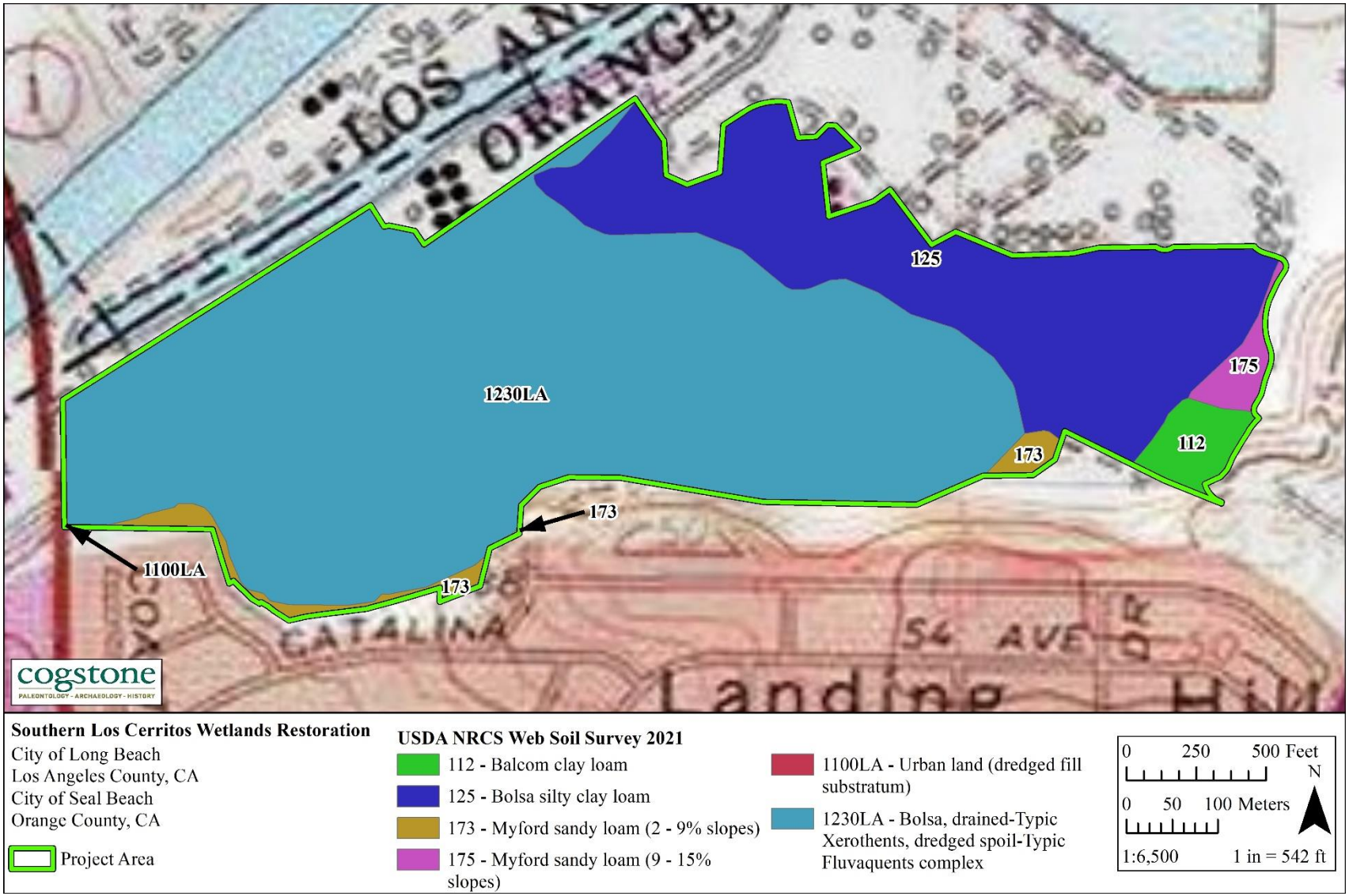

Figure M - 1. Soils map

CONFIDENTIAL APPENDIX N. DPR SITE RECORDS