



5.4 CULTURAL RESOURCES

The purpose of this section is to identify cultural resources existing in the Project area and assess the significance of such resources. The analysis in this section has been prepared in accordance with CEQA Guidelines Section 15064.5, which considers potential impacts on prehistoric and historic resources. Cultural resources relate to archaeological remains, historic buildings, traditional customs, tangible artifacts, historical documents, and public records that make the Project area unique or significant. Mitigation measures to avoid or lessen impacts to cultural resources are identified, as necessary. The cultural resources analyses presented below are based on the following studies:

- Cultural Resources Assessment for the Cambria Emergency Water Project (CRA) (Cogstone, September 2015);
- Paleontological Resources Assessment for the Cambria Emergency Water Project (PRA) (Cogstone, September 2015); and
- Archaeological Monitoring Summary for Cambria Sustainable Water Facility Project (Cultural Resource Management Services (CRMS), January, 2015).

These studies are included in <u>Appendix F</u>, <u>Cultural Resources Reports</u>.

The purpose of the CRA and PRA was to determine the Project's potential effects on archaeological, historic, and paleontological resources. The Regulatory Environment, Background, Geological Setting, Stratigraphy, Natural Setting, Prehistoric Setting, Native Americans at Contact and Historic Setting discussions are also presented in <u>Appendix F</u>.

5.4.1 ENVIRONMENTAL SETTING

GEOLOGIC SETTING

The Project site is situated in the southern area of the Coast Range Province. The province consists of northwest-trending mountain ranges and valleys that run subparallel to the San Andreas Fault. A depression containing the San Francisco Bay separates the northern Coast Range from the southern. The Southern Coast Range is bounded by the Pacific Ocean to the west, Transverse Ranges to the south, Great Valley to the East, and Northern Coast Ranges to the north (Wagner 2002).

STRATIGRAPHY

Jurassic to Cretaceous Franciscan Assemblage

Outcrops of late Jurassic and Cretaceous (161.2 - 65.5 million years old) Franciscan Assemblage in the vicinity of the Project site consist of a mélange of sheared rocks. Graywacke and sheared





argillite are the most prevalent rock types. Tectonic fragments of chert, greenstone, serpentine, and blueschist are also present (Dibblee 2007).

Pleistocene Marine Terrace Deposits

The Pleistocene (2.59 million to 11.7 thousand years ago) marine terrace deposits consist of unconsolidated cobble-pebble gravel (Dibblee 2007).

Holocene Alluvium

These alluvial sediments were deposited during the Holocene epoch (11,700 years ago to present). Deposits are characterized by unconsolidated, undissected sand, silt, clay, and gravel (Dibblee 2007).

NATURAL SETTING

The Project site is situated north of the San Simon Creek, northeast of the San Simon Creek Lagoon, and east of Van Gordon Creek. The climate of the general area falls within the Mediterranean regime, with hot dry summers and cool wet winters. The marine layer plays a mediating role in daily temperature fluctuation.

The Central Coast is dominated by an exposed shoreline with a mixture of rocky and sandy substrates that shifted in expanse through the Holocene (this section excerpted and summarized from Jones et al 2007). Lagoons and estuaries developed as the products of sea level rise and the drowning of river valleys during the Late Pleistocene through Middle Holocene that provided significant shelter from the open ocean. Archaeological findings from the Pismo Beach and Arroyo Grande areas indicate the presence of an extensive paleoestuary called Halcyon Bay, that had largely disappeared by Late Holocene as a result of rising sea levels and infilling of sediments.

The Central Coast's terrestrial environment is marked by a series of relatively low (600–1,500 meters) northwest-southeast trending mountain ranges with the precipitous Santa Lucia Range causing a rain shadow effect on the interior ranges (Gabilan, Diablo, La Panza, and Temblor) and making them progressively more xeric to the east. Climate is solidly Mediterranean with rainfall coming almost exclusively between late fall and spring. Regional rainfall totals are heavily influenced by the El Niño–Southern Oscillation. El Niño events of moderate, strong, and very strong intensity occur every five to fifteen years and are generally associated with warm sea surface temperatures and increased storm activity. For the most part, Central Coast rivers provided little in the way of important aquatic resources.

Owing to its mid-latitude location, the Central Coast is marked by a complex mosaic of hardwood and relict closed-cone pine forests near the coast, blue oak–gray pine forest, valley oak savanna

and chaparral in the interior valleys, and California prairie in the most xeric areas. Grassland and coastal sagebrush are more abundant in the south while resource-poor redwood forest occurs at moderate elevations in the north. Overall, the vegetative mosaic is slightly less complex than that to the south because of the linear patterning caused by parallel mountain ranges. Marshes comprised a significant proportion of the precontact landscape in the vicinity of estuaries and small inland lakes.

PREHISTORIC SETTING

Prehistoric Chronology and Culture History

The latest synthesis of information on Central Coast chronology and culture history presented here is excerpted and summarized from Jones, et al (2007). Six cultural periods have been defined with representative and time-diagnostic artifacts (CRA Figure 4). From oldest to youngest these are Paleo-Indian, Millingstone, Early, Middle, Middle/Late Transition and Late.

PALEO-INDIAN

Broader patterns in the regional prehistory, first recognized at Diablo Canyon, are reflected in three major cultural divisions marked by highly distinctive tool assemblages: the Millingstone Culture, the Hunting Culture and Late Period. This progression of three distinctive complexes can be readily detected over the whole Central Coast region. Earlier human presence in the area is suggested but no substantive components of this age have yet been identified.

MILLINGSTONE CULTURE

Millingstone is consistently marked by large numbers of well-made handstones and/or millingslabs, crude core and cobble-core tools and less abundant flake tools and large side-notched projectile points. In the Central Coast region, few Millingstone components have been found farther than 25 kilometers inland from the shore and most interior Millingstone sites have produced marine shells indicating that site inhabitants also exploited coastal environments.

Faunal remains indicate that Millingstone peoples practiced broad-spectrum hunting and gathering, exploiting shellfish, fish, birds and mammals, although robust faunal assemblages are not common. In an extremely important study of Millingstone age burials, stable isotope analyses have revealed a diet composed of 70 to 84 percent marine food. Given the low frequency of fish and pinniped bones in most Millingstone assemblages, this suggests heavy use of shellfish, which is supported by dense concentrations of shells in many deposits and dietary reconstructions based on these and other faunal remains.





HUNTING CULTURE

Hunting Culture was defined by the same basic yet striking pattern in which large projectile points become extremely abundant after ca. cal b.c. 3500/3000. Hunting Culture sites are often marked by highly visible accumulations of biface derived debitage and a range of site types has been recognized including middens, flaked and ground stone scatters and scatters of flaked stone only that include lithic procurement stations/quarries.

The Early Period of the Hunting Culture is marked by co-occurrence of contracting-stemmed and Rossi square-stemmed (Central Coast Stemmed Series) points and large side-notched variants (as a holdover from Millingstone). Cobble-core tools occur in lower frequencies than in earlier times. Line fishing implements are limited to bi-pointed bone gorges. Early Period burials show a preference for flexed position and grave associations that commonly included Rossi square-stemmed projectile points, fish gorges and Class L beads. Hunting Culture faunal assemblages show variability; while most Early Period components emphasize deer, some show focus on rabbits or sea otters. Fish remains from the Early Period components show increases over the Millingstone Culture. Shellfish were part of the diet at all coastal sites.

Middle Period expressions of the Hunting Culture show retention of contracting-stemmed points and disappearance of square-stemmed and large side-notched variants. Beads are dominated by G2 saucers, replacing L2 thick rectangles and ground stone assemblages show continued use of both slabs/handstones and portable mortars/pestles. Circular shell fishhooks appear for the first time but bone gorges persist. Pitted stones are often the most abundant artifacts in Middle Period sites. Grooved stone net sinkers are common as well. Well-made bone flutes are occasionally found as burial accompaniments. Graves from all of these sites show continued preference for the flexed burial position. Other common Middle Period burial accompaniments include bone tubes and large quantities of Olivella G2 beads.

Toward the end of the Middle Period, the appearance of small leaf-shaped projectile points marks the arrival of bows and arrows, although this new weapon seems to have been relatively unimportant at first. Animal resources exploited are similar to those of the Early Period although there is a change of emphasis with more fish and less shellfish. Radiocarbon-dated acorn remains from Morro Bay suggest that this important resource was exploited to some unknown degree by Hunting Culture people.

SALINAN AND CHUMASH CULTURES

The Middle/Late Transition or terminal phases of the Hunting Culture represent dramatic changes in assemblages and settlement sometime after ca. cal a.d. 1000, highlighted by the appearance of large numbers of arrow points, disappearance of most stemmed points and changes in bead types.



Late Period assemblages are easily distinguished from the Hunting Culture throughout the region by profusions of Desert Side-notched and Cottonwood arrow points, small bifacial bead drills, bedrock mortars, hopper mortars, Class E (lipped) and K (cupped) Olivella beads and steatite disk beads. Most Late Period sites produce a few bead drills and small amounts of Olivella bead manufacturing debris, suggesting that low-level bead production was common and widespread. This contrasts significantly with the Santa Barbara Channel, where bead industries were profuse. Circular shell fishhooks were still used and there is some evidence for persistence of contracting-stemmed points in low frequencies.

The Late Period is marked by a profusion of single-component sites in the interior and on the coast with a decided focus on the former. Typical Late Period occupations are marked by small middens with associated or nearby bedrock mortars. As with earlier periods, residential features are uncommon, but circular house floors roughly three to four meters in diameter are known. While expansive sites have been documented at some locations, Late Period middens are often fairly small (30 to 40 meters in diameter) with several discrete deposits clustered in one area. For the most part, the Late Period shows strong if not remarkable consistency in assemblages, site types and settlement patterns across the region despite linguistic variability.

Native Americans at Contact

While Spanish seafarers made brief stops on the Central Coast as early as 1542, long-term contact was initiated in 1769 by the Portolá overland expedition (this section excerpted and summarized from Jones et al 2007). At that time most of the central California coast was occupied by a large number of small, autonomous tribelets. Actual ethnographic observations of these societies were afforded only to the earliest Spanish explorers and missionaries, and the documentation resulting from these early contacts is woefully incomplete. Attempts at more systematic anthropological description were not initiated until early in the 20th century following at least 150 years of precipitous population decline. Speakers of Native languages were still present in the early 1900s, and the earliest salvage ethnographies emphasized documentation of dying languages.

Analysis of records from the Spanish missions has provided the names of tribelets and other communities for the areas in which the Salinan and Northern Chumash (Obispeño) languages were spoken. Actual village locations and tribelet boundaries remain poorly documented, and there are remarkably few firm associations between named villages and archaeological sites, and even fewer cases where village sites have been excavated.

The manner in which subsistence was accomplished within tribelet communities in terms of systems of seasonality and settlement is frustratingly unclear, but the accounts of the earliest Spanish explorers consistently allude to relatively small groups that moved seasonally and exploited a wide range of terrestrial and marine resources. Early observers noted that the local inhabitants "do not have fixed places for their villages, but wander here and there wherever they can find provisions at hand." This type of description is common in early Spanish accounts





throughout the region. These sources repeatedly mention the use of tule balsas and bows and arrows, and the exploitation of acorns, pine nuts, buckeye nuts, seeds, strawberries, blackberries, sardines and other fish, shellfish, deer, antelope, rabbits, and quail. Early accounts also refer to regular controlled burning.

While the early historic accounts imply band like mobility and subsistence, certain aspects of the ethnohistoric record suggest a higher level of sociopolitical complexity. The greatest conundrum in Central Coast ethnohistory is reconciling apparent bandlike subsistence practices with early accounts of ascribed political power, highly formalized leadership statuses, economic redistribution, and widespread warfare. Most historic accounts allude to groups of 40 to 60 people, which is a typical size for mobile bands. However, one early encounter at Avila Beach near San Luis Obispo suggested as many as 300 people aggregated in one place, while another in the Nacimiento Valley by the Portolá expedition suggested as many as 600 people harvesting pine nuts.

More intriguing signs of complexity include suggestions of significant concentrations of political power and prestige especially among the Obispeño (Northern Chumash), where early accounts repeatedly describe one exceptionally prestigious chief, Buchon, who traveled with an entourage, directed attacks on other groups, and was able to command tribute even after his death. The repeated references to Buchon's power and influence have been commonly interpreted as an ethnically based (Chumash) sociopolitical system more complex than that of the Salinan, Esselen, or Ohlone tribelets. There are, however, clear suggestions of formal leadership status, hereditary chiefly power, and accumulation of wealth by chiefs among the Ohlone and Salinan as well. Other hallmarks of significant complexity represented in the Santa Barbara Channel (e.g., craft specialization in the form of bead and canoe manufacture, full sedentism, and an intensive maritime economy) were absent from the Central Coast.

Historic Setting

The earliest European explorers to land in San Luis Obispo County (SLO County) were Pedro de Unamuno in 1587 and Rodriguez Cermeño in 1595. After Sebastián Vizcaíno charted the Central Coast in 1602 and 1603, there were no explorations of the area until 1769, when the overland expedition of Gaspar de Portolá and the Franciscan Father Crespí traveled through the area. Portola's group camped on the banks of Santa Rosa Creek near present day Coast Union High School in Cambria (Krieger 1990:20). Mission San Luis Obispo de Tolosa, the fifth in California's chain of missions, was established by Father Junípero Serra on September 1, 1772. The mission prospered, with an assistancia, or assistant mission rancho established at Santa Margarita in the 1790s. Another granary and chapel were constructed near present-day Avila Beach in 1808. Twenty-five years later, on July 25, 1797, Mission San Miguel Arcángel was founded. Cambria was part of mission grazing lands during these years.



After California's annexation by Mexico in 1822, Mexican government officials and retired Army officers, with their eyes on the huge tracts of Mission lands, pushed for secularization of the missions. Cambria is within the 13,184 acre Santa Rosa Rancho granted to Julian Estrada in 1841 by Mexican Governor Juan Alvarado (Krieger 1990:43). The Great Drought of 1862-65 killed most of the livestock (sheep and cattle) in the area and most Rancho owners were forced to sell their lands.

Fledgling Cambria began near Leffingwell Cove but was later moved to the present location and was a center for lumber, ranching, and mining. By 1870 dairy interests were developing with a strong Portuguese and Swiss Italian presence (Krieger 1990:67-74). Modern day Cambria is known for its tourism and artistic community.

ARCHAEOLOGICAL AND HISTORICAL RECORDS SEARCH

A search for archaeological and historical records was completed by the Central Coast Information Center (CCIC) of the California Historic Resources Inventory System (CHRIS) on April 28, 2014. The records search covered the entire Project Area plus a 0.5-mile radius. The record search indicates a total of eight cultural resources investigations have been completed previously within parts of the Project area; refer to <u>Table 5.4-1</u>, <u>Previous Studies Within a 0.5-Mile Radius of the Project</u>.

Table 5.4-1
Previous Studies Within a 0.5-Mile Radius of the Project

Author	Doc No. (E-)	Title	Date	Quad	Distance from Project
Hoover, R.	45	Archaeological Component for the Cambria Wastewater and Sewage Disposal Project Environmental Impact Report	1974	Cambria	Included Project site
Greenwood, R.	76	Culture Resource Management Study for the Hearst Ranch	1976	Pico Creek, Cambria	Included Project site
Gibson, R.	171	Archaeological investigations at SLO-187B; A Mitigation for Cambria Water Transmission Facilities at San Simeon Creek/Van Gordon Road, SLO County, CA	1979	Cambria	Included Project site
Gibson, R.	732	Archaeological investigations at SLO-187B, a mitigation project for Cambria water transmission facilities at San Simeon Creek/Van Gordon Road, SLO County	1983	Cambria	Included Project site
Gibson, R.	2183	Results of the Archaeological Subsurface Testing at SLO- 221 and SLO-1373, San Simeon Creek, SLO County	1992	Cambria	Included Project site
Breschini, G.	2305	Impact Assessment of Expanded Waste Water Facilities Adjacent to San Simeon Creek, SLO County, CA. Subsurface Testing: Cambria Community Services District Waste Water Treatment Facility	1991	Cambria	Included Project site
Gibson, R.	3722	Archaeological Resources Inventory for the Cambria Community Services District Effluent Disposal Field Improvements, San Simeon Creek, SLO County, California	rvices District Effluent Disposal Field 1994		Included Project site
Jones, D. et al.	4753	San Simeon State Park Archaeological Site Assessment:2001	2002	Pico Creek, Cambria	Included Project site





The results of these studies indicate a total of 20 cultural resources have been previously documented within the 0.5-mile search radius; refer to <u>Table 5.4-2</u>, <u>Archaeological and Historic Resources Within a 0.5-Mile Radius of the Project</u>. Of these 20 previously documented cultural resources, five are located within the Project site, including three prehistoric sites and two multicomponent sites.

Table 5.4-2 Archaeological and Historic Resources within a 0.5-Mile Radius of the Project

Trinomial (CA-SLO-)	Primary No. (P-40-)	Description	Quad	Distance from Project
72	72	Prehistoric shallow midden with sparse shell, temporary camp area	Pico Creek, Cambria	Within 0.5 Mile
185	185	Prehistoric bedrock mortars and small midden deposit	Cambria	Within 0.5 Mile
186	186	Prehistoric midden deposit (village site)	Cambria	Within 0.5 Mile
187	187	Prehistoric open village site as indicated by midden deposit	Cambria	Onsite
188	188	Prehistoric bedrock mortar on outcrop of hard metamorphic rock	Cambria	Within 0.5 Mile
221/H	221	Multi-component agricultural area showing surface indications of roofing tile fragments, and many lithic artifacts (Mission San Miguel Estancia?)	Cambria	Onsite
229	229	Prehistoric large occupation site	Pico Creek, Cambria	Within 0.5 Mile
378	378	Prehistoric large permanent camp Site	Cambria	Onsite
383	383	Prehistoric sparse lithic scatter	Pico Creek, Cambria	Within 0.5 Mile
799	799	Prehistoric bedrock mortar	Cambria	Within 0.5 Mile
800	800	Multi-components foundation with historic and prehistoric artifact scatters	Cambria	Within 0.5 Mile
966H	966	Historic cabin foundation and associated retaining walls	Cambria	Within 0.5 Mile
967H	967	Historic foundation, trail markers and historic scatter (Whitaker Ranch complex)	Cambria	Within 0.5 Mile
1373	1373	Multi-components extensive midden deposit with shellfish remains, lithics, groundstone and bone. Proto- Historic adobe and Historic scatters	Cambria	Onsite
1374	1374	Prehistoric bedrock mortars and shell fragments	Cambria	Onsite
1551	1551	Multi-component sparse historic and prehistoric scatter of shell, glass, porcelain, brick and few lithics	Cambria	Within 0.5 Mile
1554	15534	Prehistoric sparse lithic scatter	Cambria	Within 0.5 Mile
2197	2197	Prehistoric lithic and groundstone scatter including one steatite pendant	Cambria	Within 0.5 Mile
	38036	Prehistoric unifacially worked cobble, core tool	Cambria	Within 0.5 Mile
	40842	Historic steel bridge	Cambria	Within 0.5 Mile

PALEONTOLOGICAL RESOURCES RECORD SEARCH

A search for paleontological records was performed on behalf of Cogstone by the University of California Museum of Paleontology (UCMP). Cogstone conducted additional searches in the Paleobiology Database (PBDB) and literature. No fossils are recorded within or in the immediate vicinity of the Project site (Finger 2014, UCMP 2014). However, fossils have been recovered from similar sediments in other areas of the County. While the majority of the Franciscan Assemblage is unfossiliferous, it has produce rare, scientifically significant fossils. An example is the type specimen of an extinct marine reptile, *Plesiosaurus hesternus*, which was collected from the Franciscan Assemblage in SLO County (UCMP 2014; Scott and Gust 2006). Ice age taxa known from Pleistocene marine sediments in the County include dolphin (*Delphinidae*), whale (*Cetacea*), sea cow (*Hydrodamalis* sp.), sea otter (*Latax lutris*), mammoth (*Mammuthus* sp.), Western horse (*Equus* cf. occidentalis), ancient bison (*Bison antiquus*), extinct camel (*Camelops* cf. hesternus), and ground sloth (*Paramylodon harlani*) (PBDB 2014). Holocene alluvium is too young to contain fossilized material.

NATIVE AMERICAN CONSULTATION

A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC) on April 24, 2014. On April 29, the Commission replied that there are no known sacred lands within 0.5-mile of the Project site. The NAHC provided a list of seven Native American individuals, representing five separate Native American organizations to contact for further information regarding the general Project vicinity.

Cogstone sent letters to the seven Native American contacts on April 30, 2014 requesting any information related to cultural resource or heritage sites within or adjacent to the Project site. Additional contact attempts were made by telephone on August 31, 2015 and September 9, 2015. As of September 10, 2015, three responses have been received.

- On May 13, 2014, Ms. Patti Dunton of the Salinan Tribe of Monterey and SLO County responded, stating that the Tribe has concerns that the Project has the potential to impact known cultural resources within the Project site around San Simeon Creek. Ms. Dunton requested a monitor be present during any ground disturbance activities.
- On August 31, 2015, Ms. Judith Bomar-Grindstaff responded that she does not have concerns regarding the Project because "people need water."
- On September 9, 2015, Mr. Robert Duckworth of the Salinan Nation Cultural Preservation Association responded requesting a list of the artifacts encountered during Project construction. Cogstone mailed this list to Mr. Duckworth on September 10, 2015.



SURVEY METHODS

The reconnaissance stage is important to verify the exact location of each cultural or paleontological resource, the condition or integrity of the resource, and proximity of the resource to areas of sensitivity. Chad Jackson, Cogstone Staff Archeologist, completed an intensive-level pedestrian survey of the Project area on May 9, 2014. The survey consisted of walking in parallel transects spaced at approximately 15-meter intervals over the Project wherever possible, while closely inspecting the ground surface.

SURVEY RESULTS

Archaeological and Historical Survey Results

Ground surface visibility was nonexistent to poor in portions of the Project site due to dense vegetation. Locating previously recorded sites within these areas was impossible. In areas of fair-ground surface visibility, cultural materials were observed at the surface of archaeological sites CA-SLO-187, CA-SLO-221/H, CA-SLO-378, and CA-SLO-1373, and no cultural materials were observed at CA-SLO-1374.

<u>CA-SLO-187</u>. Previous site records describe CA-SLO-187 as a prehistoric midden site that has been partially destroyed by previous cultivation and is bisected by the San Simeon State Park Road. Ground surface visibility at CA-SLO-187 was poor due to extremely dense vegetation. A small number of flakes were observed at the surface during the survey.

<u>CA-SLO-221/H</u>. Previous site records describe CA-SLO-221/H as a multi-component site; however, the site lost much of its integrity, as it was disturbed by plowing. Ground surface visibility at CA-SLO-221/H was poor due to extremely dense vegetation. One adobe brick fragment was found during the survey. The site has been disturbed by roads, levees, and artificial ponds or basins.

<u>CA-SLO-378</u>. Previous site records describe CA-SLO-378 as the remains of a prehistoric permanent campsite. The site had previously been leveled as much as two feet in most areas, and thus lost much of the integrity. Ground surface visibility at CA-SLO-378 was poor due to extremely dense vegetation. A small number of flakes were observed at the surface during the survey. The area has been previously disturbed by roads, a house, and the Van Gordon Reservoir.

<u>CA-SLO-1373</u>. Previous site records describe CA-SLO-1373 as a multi-component site. Ground surface visibility at CA-SLO-1373 was fair and the site appears to be relatively intact. A small amount of ceramic, glass, clams and faunal bone were visible at the surface during the survey.

<u>CA-SLO-1374</u>. Previous site records describe CA-SLO-1374 as a prehistoric site consisting of a single bedrock mortar and two small shell fragments. Ground surface visibility at CA-SLO-1374 was fair; however, no cultural materials were observed during the survey.

Paleontological Survey Results

Ground surface visibility was nonexistent to poor in portions of the Project site due to dense vegetation. No fossils were identified during the survey.

5.4.2 **REGULATORY SETTING**

FEDERAL

Antiquities Act of 1906 (16 United States Code [USC] 431-433)

The Antiquities Act of 1906 states, in part: That any person who shall appropriate, excavate, injure or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

Although there is no specific mention of natural or paleontological resources in the Act itself, or in the Act's uniform rules and regulations (Title 43 Part 3, Code of Federal Regulations [43 CFR3]), "objects of antiquity" has been interpreted to include fossils by the National Park Service (NPS), the Bureau of Land Management (BLM), the Forest Service (FS), and other Federal agencies. Permits to collect fossils on lands administered by Federal agencies are authorized under this Act (see "Permit Requirements of Federal Agencies section, below). Therefore, projects involving Federal lands will require permits for both paleontological resource evaluation and mitigation efforts.

Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469 et seq.)

This act, also called the Moss-Bennett Act, applies to most federal construction projects. It requires the federal agency to notify the Secretary of the Interior if a project threatens the loss or destruction of significant historic or archaeological data. FHWA's Section 106 compliance process provides substantially the same protection; consequently Moss-Bennett is not invoked on FHWA projects.



Historic Sites Act of 1935 (16 U.S.C. 461 et seq.)

Under this act, Congress established a national policy to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. This act authorized the Historic American Building Survey (HABS), the Historic American Engineering Record (HAER), the National Survey of Historic Sites, the establishment of National Historic Sites, and the designation of National Historic Landmarks. The act also authorized interagency, intergovernmental, and interdisciplinary efforts for the preservation of cultural resources. Implementing regulations of the act are found in 36 CFR Part 60 series.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) directs federal agencies to use all practical means to "Preserve important historic, cultural, and natural aspects of our national heritage..." (42 USC 4321 Section 101(b) (4)). Regulations for implementing the procedural provisions of NEPA are found in 40 CFR 1500 1508.

If the presence of a significant environmental resource is identified during the scoping process, federal agencies and their agents must take the resource into consideration when evaluating project effects. Consideration of paleontological resources may be required under NEPA when a project is proposed for development on federal land, or land under federal jurisdiction. The level of consideration depends upon the federal agency involved. [Caltrans 2003].

National Historic Preservation Act of 1966, as Amended

Enacted in 1966, the National Historic Preservation Act (NHPA) has become the foundation and framework for historic preservation in the United States. Briefly, the NHPA authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places (NRHP); it establishes an Advisory Council on Historic Preservation (ACHP) as an independent federal entity; requires federal agencies to take into account the effects of their undertakings on historic properties; and affords the ACHP a reasonable opportunity to comment on any undertaking that may affect historic properties listed, or eligible for listing, in the NRHP. In addition, the NHPA delegates the heads of all federal agencies with the responsibility for the preservation of historic and archaeological properties owned or controlled by their agencies. As well, the NHPA authorizes funding for state programs with provisions for pass-through funding and participation by local governments. In summary, the NHPA provides the legal framework for most state and local preservation laws.

The National Park Service (NPS) has issued regulations governing the NRHP (36 CFR 60). Among the topics covered in detail in these regulations are the effects of listing under federal law, definition of key terms (e.g., building, site, structure, and district), nomination procedures,





nomination appeals, and removing properties from the NRHP. Importantly, Section 60.4 of the regulations presents the criteria by which historic properties are evaluated for the NRHP.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- (A) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) That are associated with the lives of persons significant in our past; or
- (C) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) That have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

A point to be emphasized is that a historic property does not have to be nominated for, or listed in, the NRHP to be afforded protection under the NHPA. Indeed, most of the properties managed under this and other federal historic-preservation authorities have never been nominated for the NRHP. The significance of a historic district, site, building, structure or object —and thus its required consideration under the law—is determined by the property's eligibility for the NRHP with respect to the criteria set forth in 36 CFR 60.4.

The NHPA established the Section 106 review procedure to protect historic and archaeological resources that are listed in or eligible for listing in the NRHP from impacts of projects by a federal agency, projects funded or permitted by a federal agency, or projects located on federally-owned land or Native American-owned land. State Historic Preservation Officers and programs in all states and U.S. territories receive federal funding to carry out the provisions of the NHPA. This funding comes from a yearly appropriation by the legislative branch of the federal government.

STATE

California Environmental Quality Act (CEQA)

CEQA (Chapter 1, Section 21002) 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 proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

If paleontological resources are identified during the initial project scoping studies as being within a proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

Cultural resources management work must also comply with the CEQA Statutes and Guidelines (California 2005), and any potential historic and prehistoric resources that might exist within the proposed Project area would have to be evaluated under these guidelines. Enacted in 1971, CEQA and the guidelines direct lead agencies to determine whether an archaeological site is a "historically significant" cultural resource. For purposes of this section, the term "historical resources" shall include the following:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR) (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC) or identified as significant in an historical resource survey meeting the requirements PRC Section 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) including the following:
 - (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (B) Is associated with the lives of persons important in our past;





- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1(g) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or Section 5024.1 (CEQA Guidelines 15064.5).

In addition to having significance, cultural resources must have integrity for the period of significance under consideration. 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 CRHR, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

The term "unique archaeological resource" has the following meaning under CEQA:

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

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historical event or person [PRC Section 21083.2(g)].





A project with an effect that may cause a substantial adverse change in the significance of a historical resource or unique archaeological resource is a project that may have a significant effect on the environment. Effects on cultural properties that qualify as historical resources or unique archaeological resources can be considered adverse if they involve physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The State of California Office of Historic Preservation (OHP) administers the California Register program. As a recipient of federal funding, the OHP meets the requirements of the NHPA with a SHPO who enforces a designation and protection process, has a qualified historic preservation review commission, maintains a system for surveys and inventories, and provides for adequate public participation in its activities. As the recipient of federal funds that require pass-through funding to local governments, the OHP administers the Certified Local Government program for the State of California. The OHP also administers the California Register of Historical Landmarks and California Points of Local Historical Interest programs.

California Health and Safety Code

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code (HSC) 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 PRC 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.

Public Resources Code

PRC Section 5097.5 states that 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, 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 State Historical Resources Commission has designed this program for use by state and local agencies, private groups and citizens to identify, evaluate, register and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archeological resources.

The California Register program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the CEQA.

To be eligible for listing in the California Register, a resource must meet at least one of the following criteria:

- 1. 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. Associated with the lives of persons important to local, California or national history.
- 3. 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.
- 4. 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.

Assembly Bill 52 (AB 52)

AB 52 went into effect on July 1, 2015. It specifies that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project





that may have a significant effect on the environment. A lead agency is required to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

The provisions of AB 52 are applicable to projects that have a Notice of Preparation (NOP) (or a notice of Negative Declaration or Mitigated Negative Declaration) filed on or after July 1, 2015. The Project's NOP was filed on March 6, 2015, thus, is not subject to the provisions of AB 52.

LOCAL

Local Coastal Program Policies

- LCP 1 Protection of Archaeological Resources. The county shall provide for the protection of both known and potential archaeological resources. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored at the time of a development proposal to avoid development on important archaeological sites. Where these measures are not feasible and development will adversely affect identified archaeological or paleontological resources, adequate mitigation shall be required. [This policy shall be implemented as a standard.]
- LCP 3 Identification of Archaeological Sites. Development within an archaeological sensitive areas shall not occur until a preliminary site survey is conducted for the site, and if necessary, mitigation measures implemented. [This policy shall be implemented pursuant to CZLUO Section 23.07.104.]
- LCP 5 Mitigation Techniques for Preliminary Site Survey Before Construction. Where substantial archaeological resources are found as a result of a preliminary site survey before construction, the county shall require a mitigation plan to protect the site. Some examples of specific mitigation techniques include:
 - a. Project redesign could reduce adverse impacts of the project through relocation of open space, landscaping or parking facilities.
 - b. Preservation of an archaeological site can sometimes be accomplished by covering the site with a layer of fill sufficiently thick to insulate it from impact. This surface can then be used for building that does not require extensive foundations or removal of all topsoil.



- c. When a project impact cannot be avoided, it may be necessary to conduct a salvage operation. This is usually a last resort alternative because excavation, even under the best conditions, is limited by time, costs and technology. Where the chosen mitigation measure necessitates removal of archaeological resources, the county shall require the evaluation and proper deposition of the findings based on consultation with a qualified archaeologist knowledgeable in the Chumash culture.
- d. A qualified archaeologist knowledgeable in the Chumash culture may need to be on-site during initial grading and utility trenching for projects within sensitive areas. [This policy shall be implemented pursuant to CZLUO Section 23.07.104.]
- LCP 6 Archaeological Resources Discovered during Construction or through Other Activities. Where substantial archaeological resources are discovered during construction of new development, or through non-permit related activities (such as repair and maintenance of public works projects) all activities shall cease until a qualified archaeologist knowledgeable in the Chumash culture can determine the significance of the resource and submit alternative mitigation measures. [This policy shall be implemented pursuant to CZLUO Sections 23.05.140 and 23.07.104.]

Coastal Zone Land Use Ordinance Standards

CZLUO Chapter 23.04.200 (Protection of Archaeological Resources Not Within the Archaeologically Sensitive Areas Combining Designation). All development applications that propose development that is not located within the Archaeologically Sensitive Areas combining designation and that meets the following location criteria shall be subject to the standards for the Archaeologically Sensitive Areas Combining Designation in Chapter 23.07: development that is either within 100 feet of the bank of a coastal stream (as defined in the Coastal Zone Land Use Ordinance), or development that is within 300 feet of such stream where the slope of the site is less than 10 percent. (NOTE: Project is within 100 feet of stream; therefore subject to Chapter 23.07).

CZLUO Chapter 23.05.140 (Archeological Resources Discovery). In the event archeological resources are unearthed or discovered during any construction activities, the following standards apply:

a. Construction activities shall cease, and the Environmental Coordinator and Planning Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.





b. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner is to be notified in addition to the Planning Department and Environmental Coordinator so that proper disposition may be accomplished.

<u>CZLUO Chapter 23.07.104 (Archaeologically Sensitive Areas)</u>. To protect and preserve archaeological resources, the following procedures and requirements apply to development within areas of the coastal zone identified as archaeologically sensitive.

- a. Archaeologically sensitive areas. The following areas are defined as archaeologically sensitive:
 - 1. Any parcel within a rural area which is identified on the rural parcel number list prepared by the California Archaeological Site Survey Office on file with the county Planning Department.
 - 2. Any parcel within an urban or village area which is located within an archaeologically sensitive area as delineated by the official maps (Part III) of the Land Use Element.
 - 3. Any other parcel containing a known archaeological site recorded by the California Archaeological Site Survey Office.
- b. Preliminary site survey required. Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required. The survey shall be conducted by a qualified archaeologist knowledgeable in local Native American culture and approved by the Environmental Coordinator. The County will provide pertinent project information to the Native American tribe(s).
- c. When a mitigation plan is required. If the preliminary site survey determines that proposed development may have significant effects on existing, known or suspected archaeological resources, a plan for mitigation shall be prepared by a qualified archaeologist. The County will provide pertinent project information to the Native American tribe(s) as appropriate. The purpose of the plan is to protect the resource. The plan may recommend the need for further study, subsurface testing, monitoring during construction activities, project redesign, or other actions to mitigate the impacts on the resource. Highest priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. As a last resort, the review authority may permit excavation and recovery of those resources. The mitigation plan shall be submitted to and approved by the Environmental Coordinator, and considered in the evaluation of the development request by the Review Authority.

d. Archeological resources discovery. In the event archeological resources are unearthed or discovered during any construction activities, the standards of Section 23.05.140 of this title shall apply. Construction activities shall not commence until a mitigation plan, prepared by a qualified professional archaeologist reviewed and approved by the Environmental Coordinator, is completed and implemented. The County will provide pertinent project information to the affected Native American tribe(s) and consider comments prior to approval of the mitigation plan. The mitigation plan shall include measures to avoid the resources to the maximum degree feasible and shall provide mitigation for unavoidable impacts. A report verifying that the approved mitigation plan has been completed shall be submitted to the Environmental Coordinator prior to occupancy or final inspection, whichever occurs first.

Emergency Coastal Development Permit (E-CDP) Conditions

Refer to <u>Appendix C</u>, <u>E-CDP Conditions of Approval</u>, for a list of E-CDP Conditions. E-CDP Conditions 10 and 11 pertain to Cultural Resources.

5.4.3 SUMMARY OF WATER MASTER PLAN PEIR CONCLUSIONS

WMP PEIR Section 5.7, *Cultural Resources*, analyzes impacts concerning archaeological/historical and paleontological resources, as summarized below:

Archaeological/Historical Resources. Implementation of the WMP could cause an adverse change in the significance of an archaeological/historical resource. The WMP would be subject to compliance with existing County regulations, providing appropriate design and construction measures to avoid known resources. All development would also be subject to compliance with appropriate CZLUO policies and NCAP standards. Implementation of the recommended mitigation and compliance with SLO County standards would reduce impacts to a less than significant level. Further review could be necessary on a project-by-project basis to evaluate site-specific impacts to archaeological/historical resources.

<u>Paleontological Resources</u>. WMP implementation could cause an adverse change in the significance of a paleontological resource. If paleontological resources are known to occur and are listed at the local, State, or national level, then existing County regulations providing appropriate design and construction measures would be followed to avoid impacts to known resources. The project would also be subject to compliance with CZLUO policies, standards, and processing requirements. Implementation of the recommended mitigation and compliance with SLO County standards would reduce impacts to a less than significant level. Further review could be necessary on a project-by-project basis to evaluate site-specific impacts to paleontological resources.





<u>Burial Sites.</u> WMP implementation is not anticipated to disturb unknown locations of human remains, including those outside of formal cemeteries. Proposed improvements would be subject to compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98. With implementation of the recommended mitigation and compliance with state regulatory requirements, impacts would be reduced to a less than significant level.

5.4.4 IMPACT THRESHOLDS AND SIGNIFICANCE CRITERIA

DEFINING SIGNIFICANT CULTURAL RESOURCES

CEQA Guidelines require lead agencies to consider the potential effects of a project on historical resources. A cultural resource is considered an "historical resource" if it qualifies as eligible for listing on the California Register of Historical Resources, is included in a local register of historical resources, is determined by the project lead agency to be historically significant or meets the criteria found in PRC Section 5024.1(g). The California Register of Historical Resources automatically includes properties listed on the National Register of Historic Places and those formally determined to be eligible for listing; California Historical Landmarks No. 770 and above; and California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion on the California Register of Historical Resources.

To be determined eligible for listing on the California Register of Historical Resources, a prehistoric or historical cultural resource must meet one or more of the following criteria:

- 1. The resource is associated with events that have made a contribution to the broad patterns of California history;
- 2. The resource is associated with the lives of important persons from our past;
- 3. The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important individual or possesses high artistic values; or
- 4. The resource has yielded, or may be likely to yield, important information in prehistory or history.

In addition to one or more of these criteria, an historical resource also must retain integrity, interpreted by the California Register of Historical Resources as the intactness of its character or appearance. Integrity is evaluated by examining the resource's location, design, setting, materials, workmanship, feeling and association. If the resource has retained these qualities, it



may be said to have integrity. It is possible that a cultural resource may not retain sufficient integrity to be listed on the National Register of Historic Places yet still be eligible for listing on the California Register of Historical Resources. If a cultural resource retains the potential to convey significant historical or scientific data, it may be said to retain sufficient integrity for potential listing on the California Register of Historical Resources.

Most significant Native American prehistoric sites are eligible because of their age, scientific potential and/or burial remains. An historical resource also may be one that is included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in an historical resource survey meeting the requirements of PRC Section 5024.1(g). Objects, buildings, structures, sites, areas, places, records or manuscripts may also be considered an historical resource if the lead agency determines that the resource is historically significant. The lead agency is tasked with providing evidence for this determination, generally following the criteria for listing on the California Register of Historical Resources. Subsurface testing of archaeological resources, analysis of recovered data, further archival review and interpretation may be required in order to determine the potential eligibility of a cultural resource for listing on the California Register of Historical Resources.

DEFINING SIGNIFICANT IMPACTS TO CULTURAL RESOURCES

The environmental analysis in this section is patterned after CEQA Guidelines Appendix G, adopted by the City of Seaside in its environmental review process. The issues presented in Appendix G have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5 (see <u>Section 8.0</u>, <u>Effects Found Not To Be Significant</u>);
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 (see Impact 5.4-1);
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (see Impact 5.4-2); or
- Disturb any human remains, including those interred outside of formal cemeteries.

CEQA Guidelines Section 15064.5(b) defines a "substantial adverse change" as physical demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is considered to be materially impaired if a project:





- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, the California Register of Historical Resources; or
- Demolishes or materially alters in an adverse manner those physical characteristics that
 account for its inclusion in a local register of historical resources pursuant to PRC Section
 5020.1(k) or its identification in an historical resources survey meeting the requirements
 of PRC Section 5024.1(g), unless the public agency reviewing the effects of the project
 establishes by a preponderance of evidence that the resource is not historically or
 culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion on the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

METHODOLOGY

Per CEQA Guidelines, lead agencies must consider the potential effects of a project on historical resources, as defined in Section 15064.5. As noted above, historical resources are those listed or eligible for listing on the California Register of Historical Resource or in a local register, or those identified through a survey that meets the requirements of PRC Sections 5020.1(k) and 5024.1(g). The identification of historical resources involves several steps, including identifying cultural resources within a project's boundaries; evaluating the resources to determine if they qualify as historical resources; and determining the direct or indirect effects of the project on significant historical resources.

Resources found not to be "historical resources" or otherwise "historically significant" require no further management. In general, effects on significant resources per CEQA may be reduced to less-than-significant levels by applying the proper treatment or management measures, such as avoidance, further documentation, and evaluation for eligibility to be included on the California Register of Historical Resources and/or data recovery.

Based on these standards, the Project's effects have been categorized as "less than significant impact" or "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a significant impact cannot be reduced to a less than significant level through the implementation of mitigation, it is categorized as a significant and unavoidable impact.



5.4.5 IMPACTS AND MITIGATION MEASURES

As discussed in detail in <u>Section 5.0</u>, <u>Environmental Analysis</u>, for purposes of the following impact analyses, "Sustainable Water Facility" (SWF) involves the built and operational Project components, whereas "Mitigation Measures (Project modifications)" involve proposed Project modifications in compliance various SWF mitigation measures.

IMPACT 5.4-1 ARCHAEOLOGICAL AND HISTORICAL RESOURCES

 WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL/HISTORICAL RESOURCE PURSUANT TO SECTION 15064.5?

Impact Analysis: There are five previously recorded archaeological/historical resources (CA-SLO-187, CA-SLO-221/H, CA-SLO-378, CA-SLO-1373, and CA-SLO-1374) within the Project site; see Table 5.4-1.

SUSTAINABLE WATER FACILITY

<u>CA-SLO-187</u>. CA-SLO-187 is bisected by the existing CCSD Water Supply Pipeline. No SWF facilities are located within CA-SLO-187 boundaries. Therefore, SWF construction would not impact CA-SLO-187.

<u>CA-SLO-221/H.</u> Existing Well 9P7 is located within CA-SLO-221/H boundaries. The MF Brackish Waste Discharge Pipeline and Well 9P7 Discharge Pipeline are within CA-SLO-221/H boundaries, and the Advanced Water Treatment Plant (AWTP) is adjacent to the site boundary. Therefore, SWF construction could adversely impact CA-SLO-221/H.

<u>CA-SLO-378</u>. The San Simeon Creek Lagoon Filtrate Pipeline and a construction laydown/staging area are within CA-SLO-378 boundaries. Therefore, SWF construction could adversely impact CA-SLO-378.

<u>CA-SLO-1373</u>. The AWTP, RO Concentrate Disposal Pipeline, San Simeon Creek Lagoon Filtrate Line, MF Brackish Waste Discharge pipeline, Well 9P7 Discharge Pipeline, and two construction laydown/staging yards are within CA-SLO-1373 boundaries. Therefore, SWF construction could adversely impact CA-SLO-1373.

<u>CA-SLO-1374</u>. No SWF facilities are located within the boundaries of CA-SLO-1374. Therefore, SWF construction would not impact CA-SLO-1374.

Overall, SWF construction-related activities (grading, trenching, and excavations) could adversely impact CA-SLO-221/H, CA-SLO-378, and CA-SLO-1373. Therefore, the SWF could





cause a substantial adverse change in the significance of an archeological resource. However, as described in the <u>Section 5.4.2</u>, <u>Regulatory Setting</u>, the SWF is subject to compliance with LCP Policies 3, 5, and 6 (implemented through compliance with CZLUO Sections 23.05.140 and 23.07.104) and E-CDP Conditions 10 and 11 (Mitigation Measures CUL-1 and CUL-2, respectively), which require an archaeological monitor and specify the protocol and procedures, in the event archaeological resources are unearthed. Additionally, the CRA recommends that, prior to the start of construction, earthmoving personnel receive cultural sensitivity training (see Mitigation Measure CUL-3) and that a qualified archaeologist and Native American monitor be present during construction (see Mitigation Measure CUL-4).

Compliance with LCP Policies (implemented through compliance with CZLUO standards) and Mitigation Measures CUL-1 through CUL-4 (includes E-CDP Conditions 10 and 11) would ensure Project impacts to archaeological resources are reduced to less than significant.

SWF Construction-Related Measures/Standards: Compliance with construction-related measures/standards occurred before/during SWF construction, as substantiated in the E-CDP MMRP and summarized below:

<u>CZLUO Section 23.07.104¹</u> (LCP 3, LCP 5, and LCP 6). The Project site is considered an Archaeologically Sensitive Area. A preliminary survey of the Project site was conducted by a qualified archaeologist, as described in the <u>Section 5.4.1</u>. A mitigation plan was prepared by a qualified archaeologist; see CUL-1 through CUL-4.

In compliance with E-CDP Condition 10 (CUL-1) and CUL-4, an archaeological monitor and a Native American monitor were present onsite during all SWF ground disturbing activities, whence monitoring for the presence of prehistoric and historic cultural resources took place; see CRMS Report in Appendix F. Prior to SWF construction the archaeological monitors performed surveys to identify archaeological deposits. The archaeological monitor observed all ground disturbing activities performed by tractor equipment and other vehicles, inspecting the soil and spoils piles for artifacts, ecofacts, and any other evidence of prehistoric or historic cultural resources. In addition, sidewalls were examined following soil and materials removal. The monitors performed regular site walks multiple times daily in search of cultural resources within the Project area, as new layers were continually being exposed. In compliance with E-CDP Condition 11 (CUL-2), it was the Applicant's responsibility to follow CZLUO Section 22.10.040 protocol and procedures, in the event archaeological resources were unearthed during site disturbance activities. Also in compliance with E-CDP Condition 11 (CUL-2) (and CZLUO Sections 23.05.140), when encountered, artifacts were mapped, photographed, and collected for reburial; see CRMS Report in Appendix F. In compliance with CUL-3, earthmoving personnel received cultural and paleontological sensitivity training prior to SWF construction.

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¹ The Project site is not located within the Archaeologically Sensitive Areas Combining Designation, however, is within 100 feet of a coastal stream bank, thus, is subject to compliance with standards for the Archaeologically Sensitive Areas Combining Designation in CZLUO Chapter 23.07; see CZLUO Section 23.04.200.



<u>CZLUO Section 23.05.140 (LCP 6)</u>. Refer to CZLUO Section 23.07.104 discussion above. In compliance with CZLUO Sections 23.05.140 and E-CDP Condition 11, when encountered, artifacts were mapped, photographed, and collected for reburial; see CRMS Report in <u>Appendix</u> F.

MITIGATION MEASURES (PROJECT MODIFICATIONS)

The Project modifications would require limited grading, trenching, and excavation for the surface water treatment plant (SWTP) and associated tanks/pumps in addition to various pipelines, including the 8-inch potable water pipeline, 8-inch surface water pipeline, 4-inch diameter filtrate pipeline extension to the San Simeon Creek Lagoon, and 4-inch pipeline to the proposed Baker tanks. A total of 5,400 linear feet (LF) of new pipeline would be implemented through trenching activities, as part of the Project modifications. Trenches would be approximately two feet wide and five feet deep. The 4-inch filtrate pipeline extension to San Simeon Creek Lagoon would be an aboveground pipeline, and no excavation would be required.

The SWTP would be housed in a container approximately 8.5 feet by 53 feet, and would require minimal grading/excavation for placement.

An analysis of potential impacts related to the Project modifications is provided below, based upon the resources identified above.

<u>CA-SLO-187</u>. No facilities associated with the Project modifications are proposed within the boundaries of CA-SLO-187, and no impacts to this resource would occur.

<u>CA-SLO-221/H.</u> The 8-inch potable water pipeline is proposed within CA-SLO-221/H boundaries, and the SWTP and 4-inch pipeline to the Baker tanks are adjacent to the CA-SLO-221/H boundary. Therefore, construction of these Project modifications could adversely impact this resource.

<u>CA-SLO-378</u>. No facilities associated with the Project modifications are proposed within the boundaries of CA-SLO-378, and no impacts to this resource would occur.

<u>CA-SLO-1373</u>. The SWTP, 8-inch surface water pipeline, 8-inch potable water pipeline, and 4-inch pipeline to the Baker tanks are within CA-SLO-1373 boundaries. Therefore, construction of Project modifications could adversely impact CA-SLO-1373.

<u>CA-SLO-1374</u>. No Project modifications are proposed within the boundaries of CA-SLO-1374. Therefore, the construction of Project modifications would not impact CA-SLO-1374.

Overall, construction of Project modifications (grading, trenching, and excavations) could adversely impact CA-SLO-221/H and CA-SLO-1373. Therefore, the Project modifications could





cause a substantial adverse change in the significance of an archeological resource. However, as described in the Section 5.4.2, the Project modifications are subject to compliance with LCP Policies 3, 5, and 6 (implemented through compliance with CZLUO Sections 23.05.140 and 23.07.104), which address protection of archaeological resources. Additionally, the Project modifications would be subject to compliance with Mitigation Measures CUL-1 through CUL-4, as described above. Compliance with LCP Policies (implemented through CZLUO standards) and Mitigation Measures CUL-1 through CUL-4 would ensure Project impacts to archaeological resources are reduced to less than significant.

Standards and Regulations:

LCP Policies

- LCP 3, Identification of Archaeological Sites;
- LCP 5, Mitigation Techniques for Preliminary Site Survey Before Construction; and
- LCP 6, Archaeological Resources Discovered during Construction or through Other Activities.

CZLUO

- Chapter 23.04.200, Protection of Archaeological Resources Not Within the Archaeologically Sensitive Areas Combining Designation;
- Chapter 23.05.140, Archeological Resources Discovery; and
- Chapter 23.07.104, Archaeologically Sensitive Areas.

Mitigation Measures: The following mitigation measures pertain to both the SWF and Project modifications, unless otherwise noted.

- CUL-1 The CCSD shall retain a qualified archaeological monitor, approved by the County Environmental Coordinator, to be present during all site disturbance activities. Monitoring reports shall be retained by the CCSD and shared with the Environmental Coordinator's Office upon request.
- CUL-2 In the event archaeological resources are unearthed or discovered during any site disturbance activities, the CCSD, or the applicant's successor, shall be responsible to follow protocol and procedures described in Section 22.10.040 of the Land Use Ordinance.
- CUL-3 Prior to the start of construction, earthmoving personnel shall receive a cultural and paleontological sensitivity training detailing the types of artifacts and fossils that may be encountered and procedures to follow if finds occur.
- CUL-4 The CCSD shall retain a qualified archaeological monitor and Native American monitor, approved by the County Environmental Coordinator, to be present during all site





disturbance activities within the boundaries of previously recorded sites. Monitoring reports shall be retained by the CCSD and shared with the Environmental Coordinator's Office upon request.

Level of Significance: Less Than Significant With Mitigation Incorporated.

IMPACT 5.4-2 PALEONTOLOGICAL RESOURCES

• WOULD THE PROJECT DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE?

Impact Analysis:

SUSTAINABLE WATER FACILITY

The Holocene alluvial deposits are not sensitive for fossil resources due to their young age and are given a Potential Fossil Yield Classification (PFYC) sensitivity ranking of two or low. Vertebrate fossils are known to occur intermittently, however, with low predictability in the Franciscan Assemblage and Pleistocene marine terrace deposits resulting in a PFYC ranking of 3a or moderate sensitivity.

Ground disturbance activities for the construction of wells include drilling between 40 and 100 feet in depth. Additionally, installation of the impermeable liner at the evaporation pond would require removal of vegetation. Nominal excavation would be necessary for the AWTP, since it would be within a container. Yard piping would be installed below ground, under the AWTP. Additionally, a maximum of 480 LF of excavation would be necessary for the conveyance pipelines, since most (4,150 LF) would be above ground.

While well excavations could encounter fossil bones or other materials from any of the sensitive sediments identified in the Project site, due to the method of excavation, the specimens would lack context that is critical to scientific significance. These types of unprovenanced fossils would only be significant if they result in identification of new species that are currently not known in the area. If they are identified as already-known species, they would be suitable for educational uses. Excavation for the AWTP is not anticipated to be deep enough to impact paleontologically sensitive sediments.

No paleontological resources are known within the SWF site or the immediate vicinity. However, the Franciscan Assemblage, which may be encountered at depth, and Pleistocene marine deposits similar to those within the Project site have produced significant paleontological resources within SLO County. The Holocene alluvium is not sensitive for fossils, but may be underlain by older, paleontologically sensitive sediments at depth. No fossils meeting significance criteria are anticipated from the deep well excavations due to lack of context of any recovered material. All





other excavations are anticipated to be shallow and would not impact paleontologically sensitive sediments. Based on the results of the PRA, the SWF is anticipated to have a negligible impact on paleontological resources. Therefore, a less than significant impact would occur in this regard. To further minimize potential impacts to paleontological resources, the PRA recommends that, prior to the start of construction, earthmoving personnel receive cultural sensitivity training (see Mitigation Measure CUL-3).

SWF Construction-Related Measures/Standards: Compliance with construction-related measures/standards occurred before/during the Project's construction. In compliance with CUL-3, earthmoving personnel received cultural and paleontological sensitivity training prior to construction.

MITIGATION MEASURES (PROJECT MODIFICATIONS)

As noted above, the Project modifications would require limited grading, trenching, and excavation for the SWTP, associated tanks/pumps, and pipelines. An analysis of potential impacts related to the Project modifications is provided below, based upon the resources identified above.

Based on the PRA, Project modifications would not affect any geological units not already affected by the SWF. The Project modifications would affect Holocene alluvial deposits and Pleistocene marine deposits, which have a low and moderate sensitivity ranking, respectively. In addition, the Project modifications would require nominal grading and excavation (limited grading since the SWTP would be housed in a container, and maximum depths for pipeline trenching would be approximately five feet.

While excavations could encounter fossil bones or other materials from sediments identified in the Project site, due to the method of excavation, the specimens would lack context that is critical to scientific significance. These types of unprovenanced fossils would only be significant if they result in identification of new species that are currently not known in the area. If they are identified as already-known species, they would be suitable for educational uses. Excavation for the Project modifications is not anticipated to be deep enough to impact paleontologically sensitive sediments.

No paleontological resources are known within the area to be disturbed by the Project modifications or the immediate vicinity. However, the Franciscan Assemblage, which may be encountered at depth, and Pleistocene marine deposits similar to those within the Project site have produced significant paleontological resources within SLO County. The Holocene alluvium is not sensitive for fossils, but may be underlain by older, paleontologically sensitive sediments at depth. All other excavations are anticipated to be shallow and would not impact paleontologically sensitive sediments. Based on the results of the PRA, the Project modifications are anticipated to have a negligible impact on paleontological resources. Therefore, a less than



significant impact would occur in this regard. To further minimize potential impacts to paleontological resources, the PRA recommends that, prior to the start of construction, earthmoving personnel receive cultural sensitivity training (see Mitigation Measure CUL-3).

Mitigation Measures: Refer to Mitigation Measure CUL-3 above.

Level of Significance: Less Than Significant With Mitigation Incorporated.

IMPACT 5.4-3 HUMAN REMAINS

• WOULD THE PROJECT DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF FORMAL CEMETERIES?

Impact Analysis:

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The probability that SWF construction would impact any human remains appears to be remote, given the degree of past disturbance of the site. Notwithstanding, ground-disturbing activities, such as grading or excavation, could disturb human remains. In the event that human remains are encountered during earth removal or disturbance activities, HSC Section 7050.5 requires that all activities cease immediately and a qualified archaeologist and Native American monitor be contacted immediately. The Coroner would also be contacted pursuant to PRC Sections 5097.98 and 5097.99. Should the Coroner determine the human remains to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC would then be required to contact the most likely descendant of the deceased Native American, who would then serve as consultant on how to proceed with the remains. Further, as described in the Section 5.4.2, the SWF is subject to compliance with LCP Policies 3, 5, and 6 (implemented through compliance with CZLUO Sections 23.05.140 and 23.07.104) and E-CDP Conditions 10 and 11 (CUL-1 and CUL-2), which address protection of archaeological resources. Compliance with HSC and PRC standards, LCP Policies (implemented through CZLUO standards), and E-CDP Conditions 10 and 11 (CUL-1 and CUL-2), would ensure SWF impacts to human remains are reduced to less than significant. Compliance with Mitigation Measures CUL-3 and CUL-4 would further minimize potential impacts in this regard.

SWF Construction-Related Measures/Standards: Compliance with construction-related measures/standards occurred before/during the Project's construction, as substantiated in the E-CDP MMRP; refer to Impact 5.4-1 above.





MITIGATION MEASURES (PROJECT MODIFICATIONS)

As noted above, the Project modifications would require limited grading and excavation within a similar area as SWF facilities. As such, the probability that construction of the Project modifications would impact any human remains appears to be remote, given the degree of past disturbance on the site. Similar to the SWF, the Project modifications would be subject to HSC, PRC, LCP and CZLUO provisions intended to minimize impacts related to impacts to human remains. Thus, impacts to human remains would be less than significant. Compliance with Mitigation Measures CUL-1 through CUL-4 would further minimize potential impacts in this regard.

Standards and Regulations:

LCP Policies

- LCP 3, Identification of Archaeological Sites;
- LCP 5, Mitigation Techniques for Preliminary Site Survey Before Construction; and
- LCP 6, Archaeological Resources Discovered during Construction or through Other Activities.

CZLUO

- Chapter 23.04.200, Protection of Archaeological Resources Not Within the Archaeologically Sensitive Areas Combining Designation;
- Chapter 23.05.140, Archeological Resources Discovery; and
- Chapter 23.07.104, Archaeologically Sensitive Areas.

Mitigation Measures: Refer to Mitigation Measures CUL-1 through CUL-4 above.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.4.6 CUMULATIVE IMPACTS

● WOULD THE PROPOSED PROJECT, COMBINED WITH OTHER CUMULATIVE DEVELOPMENT CAUSING RELATED IMPACTS, RESULT IN SIGNIFICANT CUMULATIVE IMPACTS TO CULTURAL RESOURCES?

Impact Analysis: For purposes of cultural resource analyses, cumulative impacts are considered for related projects proposed throughout the North Coast Planning Area, and according to the WMP; see <u>Section 4.0</u>, <u>Basis of Cumulative Analysis</u>. Cumulative projects would have the potential to affect cultural resources at their respective sites, since they would involve ground-disturbing activities.





As summarized above, WMP implementation could cause an adverse change in the significance of an archaeological/paleontological resource. Also, WMP implementation could disturb unknown locations of human remains, although, not anticipated. Compliance with State and SLO County standards, and implementation of the recommended mitigation would reduce WMP impacts to cultural resources to a less than significant level. Analysis determined that further review could be necessary on a project-by-project basis to evaluate site-specific impacts to archaeological/historical resources.

As concluded above, compliance with LCP Policies (implemented through CZLUO standards) and Mitigation Measures CUL-1 through CUL-4 (includes E-CDP Conditions 10 and 11) would ensure Project impacts to archaeological resources and human remains are reduced to less than significant. Based on the results of the PRA, the Project is anticipated to have a negligible impact on paleontological resources, thus, a less than significant impact would occur in this regard. Therefore, the Project's incremental effects to cultural resources are not cumulatively considerable.

Overall, impacts to cultural resources at each related project site would be evaluated on a project-by-project basis, and appropriate mitigation measures would be required, as necessary to reduce potential impacts to a less than significant level. Further, all related cumulative projects would be subject to compliance with the relevant Federal, State, and local regulatory framework, and the recommendations of the site-specific studies, if required.

Standards and Regulations:

LCP Policies

- LCP 3, Identification of Archaeological Sites;
- LCP 5, Mitigation Techniques for Preliminary Site Survey Before Construction; and
- LCP 6, Archaeological Resources Discovered during Construction or through Other Activities.

CZLUO

- Chapter 23.04.200, Protection of Archaeological Resources Not Within the Archaeologically Sensitive Areas Combining Designation;
- Chapter 23.05.140, Archeological Resources Discovery; and
- Chapter 23.07.104, Archaeologically Sensitive Areas.

Mitigation Measures: No additional mitigation is required.

Level of Significance: Less Than Significant Impact.



5.4.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Following compliance with the established regulatory framework and recommended mitigation, Project implementation would result in less than significant impacts to cultural resources.

5.4.8 SOURCES CITED

Cogstone, Cultural Resources Assessment for the Cambria Emergency Water Project, San Luis Obispo County, California, September 2015.

Cogstone, Paleontological Resources Assessment for the Cambria Emergency Water Project, San Luis Obispo County, California, September 2015.

County of San Luis Obispo, Coastal Plan Policies, Local Coastal Program Policy Document, A Portion of the San Luis Obispo County Land Use Element of the General Plan, Revised April 2007.

County of San Luis Obispo, Coastal Zone Land Use Ordinance, Revised November 2013.

County of San Luis Obispo, Framework for Planning Coastal Zone, Revised November 2011.

County of San Luis Obispo, General Plan, 1992-2010.

County of San Luis Obispo, North Coast Area Plan, Revised August 24, 2008.