

## 4.8 Cultural Resources

### 4.8.1 Introduction

This section reviews the existing conditions related to cultural resources in the Russian River Estuary (Estuary Management Project or proposed project) area and presents the potential impacts on cultural and paleontological resources. As previously noted in **Chapter 2.0, Project Description**, the Estuary Study Area comprises the Russian River Estuary (Estuary), which extends approximately seven miles from the mouth of the Russian River upstream to Duncans Mills just beyond the confluence of Austin Creek. Under certain closed conditions, the Estuary may backwater to Monte Rio, and as far upstream as Vacation Beach. Where appropriate, discussion of cultural resource impacts within the Estuary Study Area and the larger maximum backwater area, which extends upstream past Austin Creek approximately to Vacation Beach, is provided (Please refer to **Figure 2-3 in Chapter 2.0, Project Description**). Cultural resources include prehistoric and ethnographic Native American archaeological sites, historic-period archaeological sites, historic-period buildings and structures, and elements or areas of the natural landscape that have traditional cultural significance. A paleontological resource is defined as fossilized remains of vertebrate and invertebrate organisms, fossil tracks, and plant fossils. The section also describes the federal, state, and local regulations related to cultural and paleontological resources that would apply to the proposed project.

### 4.8.2 Setting

#### Prehistoric Context

Categorizing the prehistoric period into broad cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. This section provides a brief discussion of the chronology for the Estuary Study Area.

A framework for the interpretation of the region is provided by Milliken et al. (2007), who have divided human history into four broad periods: the *Paleoindian Period* (11,500 to 8000 B.C.), the *Early Period* (8000 to 500 B.C.), the *Middle Period* (500 B.C. to A.D. 1050), and the *Late Period* (A.D. 1050 to 1550). Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

The *Paleoindian Period* (11,500 to 8000 B.C.) was characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during *Paleoindian Period* has not yet been discovered in the San Francisco Bay Area.

The first evidence of human habitation of the San Francisco Bay Area is associated with the *Early Period* (8000 to 500 B.C.). During the *Early Period*, consisting of the *Early Holocene* (8000 to

3500 B.C.) and *Early Period* (3500 to 500 B.C.), in general, geographic mobility continued from the *Paleoindian Period* and is characterized by the millingslab and handstone as well as large wide-stemmed and leaf-shaped projectile points. The first cut shell beads and the mortar and pestle are first documented in burials during this period, indicating the beginning of a shift to sedentism.

During the *Middle Period*, which includes the *Lower Middle Period* (500 B.C. to A.D. 430), and *Upper Middle Period* (A.D. 430 to 1050), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens<sup>1</sup> are recorded from this period. By the *Upper Middle Period*, mobility was being replaced by the development of numerous small villages. Around A.D. 430 a “dramatic cultural disruption” occurred evidenced by the sudden collapse of the *Olivella* saucer bead trade network.<sup>2</sup>

With the onset of the *Late Period* (A.D. 1050 to 1550), social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched points, and a diversity of beads and ornaments.

## Ethnographic Setting

The Estuary Management Project Study Area constitutes the border between the ethnographic territories of two distinct Native American tribes: Coast Miwok and Kashia (Kashaya) Pomo.

### **Coast Miwok**

Coast Miwok territory encompasses all of present-day Marin County and parts of Sonoma County, from Duncan’s Point on the coast, east to between the Sonoma and Napa Rivers. (Barrett, 1908; Kelly, 1978; Kroeber, 1925). The Coast Miwok language, a member of the Miwokan subfamily of the Penutian family, is divided into two dialects: Western, or Bodega, and Southern, or Marin, which in turn is subdivided into valley and coast. *Miwok* refers to the entire language family that was spoken by Coast Miwok, as well as Lake, Valley, and Sierra Miwok. Each large village had a tribal leader but there does not appear to have been defined larger organization (Kelly, 1978:414).

Settlements focused on bays and estuaries, or along perennial interior watercourses. The economy was based on fishing, hunting, and gathering, revolving around a seasonal cycle during which people traveled throughout their territory to make use of resources as they became available. Marine foods, including kelp, clams, crabs, and especially fish, were a year-round staple. Acorns were gathered in season and stored for use throughout the year. Tobacco was generously used by most men.

Dwellings were conical in shape and grass-covered. Each large village had a circular, dug-out sweathouse. Basketry techniques included both coiled and twined forms often with the use of multicolored motifs and patterns. Beginning as early as 1600 A.D. the Coast Miwok began to

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<sup>1</sup> A midden is defined as culturally-darkened soil created from deposited organic materials.

<sup>2</sup> The network included wide-ranging changes in *Olivella* bead forms and distribution patterns.

produce and use clamshell disk beads as money (Stewart and Praetzelis, 2003:177). The obsidian trading network was established in the Early Holocene period. Coast Miwok had a powerful sense for the value of property. Some Coast Miwok villages defended their territory against trespassers. Although land was not considered privately owned, ownership did apply to certain food-producing trees as well as hunting, fishing, and clam-digging locations (Kelly, 1978:418).

By the mid-1800s Spanish missionization, diseases, raids by Mexican slave traders, and dense immigrant settlement had disrupted Coast Miwok culture, dramatically reducing the population, and displacing the native people from their villages and land-based resources. By the time of California's initial integration into the United States in the late 1840s, the Coast Miwok population had dwindled from approximately 2,000 individuals to one-eighth of its size before European contact (Kelly, 1978:414).

In 1920 the Bureau of Indian Affairs purchased a 15.45 acre tract of land in Graton for the Marshall, Bodega, Tomales, and Sebastopol Indians. This land was put into a federal trust and these neighboring peoples that included both Coast Miwok and Southern Pomo were consolidated into one recognized group called the Graton Rancheria. In 1958 the U.S. government enacted the Rancheria Act of 1958, transferring tribal property into private ownership. Forty-four Rancherias in California were affected, including the Graton Rancheria.

Throughout the remaining century, tribal members continued to protect their cultural heritage and identity despite being essentially landless. On December 27, 2000 President Clinton signed into law legislation restoring federal recognition to the Federated Indians of Graton Rancheria. The tribe currently has approximately 1,100 members.

### ***Kashia Pomo***

The Kashia (Kashaya), or Southwestern Pomo, territory is along the Pacific Coast from Duncan's Point north to Stewarts Point and inland to the Austin Creek watershed (McLendon and Oswalt, 1976:277). The principle village *Metini* was located near Fort Ross where the main residences of the headmen and women were located. Other large principle villages and smaller subsidiary villages supported an estimated 1,500 people. During the summer, the communities moved to the coast where they gathered abalone, mussels, fish, and marine mammals as well as sea plants and sea salt. In the late fall they journeyed back inland to sheltered village locations. Kashia basketry is a ritual art and incorporates stone, bone, shell, horn, fibers and feathers in unique designs.

The history of the Kashia differs from other Pomo-speaking tribes in that their first direct contact with non-Native peoples was not with Spaniards, Mexicans, or Euroamericans, but rather with Russians. The Russian colony at Fort Ross operated from 1812 to 1842 and as a result many Kashia Pomo escaped missionization. When the Russians left, Mexican and Euroamericans began to settle the coast and forced changes to the Kashia's traditional way of life. Beginning in the 1870s they lived in three villages, two of which were located on property owned by Charles Haupt, who was married to a Kashia woman. In 1914 Haupt petitioned the U.S. government on behalf of the Kashia for a 40-acre parcel near Stewarts Point.

The current population of the Kashia Pomo is approximately 250 and many still live on the reservation; although the majority has moved to larger cities in Sonoma County. Because of the slower assimilation process, many Kashia can still speak their language. A grant from the Administration for Native Americans and the Department of Health and Human Services has helped establish the Kashia Band of Pomo Indians Language Website focused on increasing tribal member's knowledge of their language, history, and culture.

### ***Native American Contact***

On November 12, 2009, ESA submitted a sacred lands search request to the Native American Heritage Commission (NAHC) and received a response on November 19, 2009, stating that the NAHC sacred lands file search did not indicate the presence of Native American cultural resources in the immediate Estuary Study Area. On July 26, 2010, a letter was sent to the Federated Indians of Graton Rancheria and the Kashia Band of Pomo Indians, the two federally-recognized tribes with ethnographic territory along the mouth of the Russian River. A letter was also sent to Suki Waters, whose name was provided by the NAHC. The letters included the Notice of Preparation for the proposed project and offered an invitation to meet with the Water Agency and USACE to discuss the project and any related concerns.

### **Historic Background**

The Estuary Management Project area is on the border of historic Rancho Muniz and Rancho Bodega. Rancho Muniz was a 17,761-acre Mexican land grant given by Governor Pio Pico in 1845 to Manuel Torres. The grant extended along the coast from Salt Point State Park to the Russian River and included Fort Ross. The 35,487-acre Rancho Bodega was given by Governor Manuel Micheltorena to Stephen Smith in 1844. The grant extended along the Pacific coast from the Russian River to the north and Estero Americano to the south (Hoover et al., 2002).

The Mexican government had been concerned about the Russian presence at Fort Ross. When the Russians left in 1841 they sold the Fort and lands to John Sutter; however the Mexican government did not believe the land or improvements were the Russian's to sell and offered the land grants to Torres and Smith. Torres sold his land in 1849 to German immigrants William Benitz and Ernest Rufus. Following United States cession of California, Rancho Muniz was patented in 1860 and Rancho Bodega in 1859.

In 1867 John Rule purchased 4,000 acres of Rancho Muniz at the mouth of the Russian River. The following year, Charles Jenner reportedly received permission from Rule to erect a small house on the north side of the Russian River and named the spot Jenner Gulch. In 1905 the Redwood Lumber Company mill was erected on the south side of the river. It was later rebuilt upriver at Duncans Mills. Jenner School opened in 1905 for children of the mill workers. In the 1920s the Penny brothers owned and lived on the 29-acre island in the Russian River (now called Penny Island; Twohy, n.d.).

## Background Research and Records Search Results

A records search was conducted for the Estuary Study Area (the stretch of Russian River from the Mouth at the Pacific Ocean to Duncans Mills including the area of greatest water level [13 foot contour]) at the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University on July 14, 2009 (File No. 10-00074) and November 29, 2010 (File No. 10-0510). The records were accessed by utilizing the Arched Rock and Duncans Mills, California, U.S. Geological Survey 7.5-minute quadrangle base maps. The records search was conducted to: (1) determine whether known cultural resources had been recorded within or adjacent to the Estuary Study Area; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

During the records search, ESA reviewed the following sources: the *California Inventory of Historical Resources* (DPR, 1976), *California Historical Landmarks* (DPR, 1990), *California Points of Historical Interest*, and *Historic Properties Directory Listing* (OHP, 2009). The Historic Properties Directory includes listings of the National Register of Historic Places and the California Register of Historical Resources, and the most recent listings of California Historical Landmarks and California Points of Historical Interest. Historic maps were also reviewed. The records search indicated that 25 cultural resources studies on file at the NWIC have been conducted within and adjacent to the Estuary Study Area (**Table 4.8-1**). The records search also indicated that eight cultural resources have been previously recorded within a half mile of the Estuary Study Area (**Table 4.8-2**). None of these resources are located within the immediate area of the project.

**TABLE 4.8-1  
CULTURAL RESOURCES STUDIES WITHIN OR ADJACENT TO THE ESTUARY STUDY AREA**

Study No.	Title	Author	Survey Area	Findings	Year
S-965	Letter Report to Caltrans re: Russian River Bridge Replacement	Jackson	Vicinity of Russian River Bridge	No cultural resources recorded	1975
S-5010	Archaeological Excavation of a Historical Feature on Penny Island, Sonoma County	Schwaderer and Stradford	Penny Island in Russian River	Coffin (possible 1920s Penny brother burial)	1982
S-6280	A Cultural Resources Assessment of the Proposed Expansion at Duncans Mills Campground, Duncans Mills, Sonoma County	Bard and Findlay	13 acres along north bank of Russian River, south of Duncans Mills	No cultural resources recorded	1982
S-6967	Negative Archaeological Survey Report: Highway 1 in Jenner	Gross	1.35 miles between Jenner and Russian River Bridge	No cultural resources recorded	1984
S-7994	Letter Report to Caltrans re: culvert repair of Sonoma 1	Fitzgerald	South of Duncans Mills between postmile 3.3 and 3.4	No significant cultural resources (one obsidian isolate tool fragment found)	1986
S-9422	Cultural Resources Survey of the Willow Creek Unit, Sonoma Coast State Beach	Stewart	Various units of State Park land along Pacific Coast and Russian River	Numerous archaeological sites found; none in Study Area	1986

**TABLE 4.8-1 (Continued)**  
**CULTURAL RESOURCES STUDIES WITHIN OR ADJACENT TO THE ESTUARY STUDY AREA**

Study No.	Title	Author	Survey Area	Findings	Year
S-9573	Negative Archaeological Survey Report: Culvert replacement at various locations along Hwy 1 in Marin and Sonoma	Caltrans	Various	No cultural resources recorded	1990
S-10783	Negative Archaeological Survey Report: Hwy 1 drainage system	Hayes	0.2 mile west of Jenner	No cultural resources recorded	1989
S-11049	Cultural Resources Inventory, Sonoma Coast State Beach from Goat Rock to Bodega Head, Sonoma County	Alvarez	Approximately 12 miles of coast from Goat Rock to Bodega Head	Numerous archaeological sites found; none in Study Area	1989
S-12991	An Archaeological Study of a Portion of the Mann Property, Jenner, Sonoma County	Origer	6 acres southeast of Jenner	No cultural resources recorded	1991
S-15638	An Archaeological Investigation for the Proposed Jenner Water System Upgrade, Jenner, Sonoma County	Alvarez	Jenner	No cultural resources recorded	1988
S-21289	Negative Archaeological Survey Report: Repair on Hwy 116	Chavez	150 feet of Hwy 116 west of Duncans Mills	No cultural resources recorded	1998
S-26601	A Cultural Resources Evaluation of the Proposed Improvements to APN 099-110-25, located at 9470 Riverside Drive, Jenner, Sonoma County	Flynn	Small parcel in Jenner	No archaeological resources recorded at the location of two dilapidated cabins (not historically significant)	1995
S-27156	Negative Archaeological Survey Report: Culvert Replacements on Hwy 1 and Hwy 116	Caltrans	Various	No cultural resources recorded	2003
S-29390	A Cultural Resources Evaluation of Four Parcels Located in Jenner, Sonoma County	Evans	77 acres north of Jenner	No cultural resources recorded	2004

SOURCE: NWIC

**TABLE 4.8-2**  
**ARCHAEOLOGICAL SITES WITHIN ½-MILE OF THE ESTUARY STUDY AREA**

NWIC Designation	Age	Description	In Study Area?
P-49-001802	Historic-period	Historic-period grave, wooden casket	No
CA-SON-355	Prehistoric	Shell scatter, midden, and lithics	No
CA-SON-357	Prehistoric	Possibly Chala'nchawi, an ethnographic and historic-period village site and burial ground	No
CA-SON-520	Prehistoric	Shell scatter and midden	No
CA-SON-1708H	Historic-period	Concrete and wood breakwater	No
CA-SON-1710	Prehistoric	Shell scatter	No
CA-SON-1720	Prehistoric	Obsidian flake scatter	No
CA-SON-1727	Prehistoric	Shell scatter and midden	No

SOURCE: NWIC

Culturally significant plants in the vicinity of the Russian River are listed in **Table 4.8-3** (provided by Nick Tipon, Chairman of the Sacred Sites Protection Committee of the Federated Indians of Graton Rancheria). Traditional use of plants for food, medicine, basketry, and other uses continue to be an integral part of Coast Miwok and Kashia lifeways. **Section 4.4, Biological Resources**, of this EIR discusses the Estuary Management Project in relation to plant species.

### 4.8.3 Regulatory Framework

#### Federal

Archaeological and architectural resources (buildings and structures) are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470f) and its implementing regulations, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979.

Prior to implementing an “undertaking” (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies (e.g., U.S. Army Corps of Engineers) to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing on the National Register of Historic Places (National Register). Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the National Register. Under the NHPA, a find is significant if it meets the National Register listing criteria at 36 CFR 60.4, as stated below:

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.

Federal review of projects is normally referred to as the Section 106 process. The Section 106 process normally involves step-by-step procedures that are described in detail in the implementing regulations (36 CFR Part 800) and summarized here:

1. Establish a federal undertaking;
2. Delineate the Area of Potential Effects;

**TABLE 4.8-3  
CULTURALLY-SENSITIVE PLANT SPECIES IN THE VICINITY OF THE ESTUARY MANAGEMENT STUDY AREA**

Common Name	Scientific Name	Coast Miwok Word	Southern Pomo Word	Use
Angelica	<i>Angelica californica</i>	Hutuu	ba cowa	Medicinal/Ceremonial/Food
Bay Laurel	<i>Umbellularia californica</i>	sow'-las (Tree) sotok (nuts) tcisa	bahsa (tree) beh e (nut)	Food/Medicinal
Black Oak	<i>Quercus californica</i>	kotis	yohsiy	Food
Blackberry	<i>Rubus ursinus</i>	wate	ti bahqay	Food/Medicinal
Bluedick	<i>Dichelostemma capitatum</i>	waila (Tomales) putcu (Bodega)	hi bu la	Food
Buckeye	<i>Aesculus californica</i>	yawi (tree) 'ulem (mush)	bah sa	Food/Tool/Ceremonial
Bulrush	<i>Schoenoplectus californicus</i>	looko (big) sappa (small)	siw'is	Food/Baskets/Clothing
Buttercup	<i>Ranunculus californicus</i>	sitila	qa baja	Food
California Poppy	<i>Eschscholzia californica</i>	munkai	si dohcho	Medicinal
Coast Live Oak	<i>Quercus agrifolia</i>	saata	sa can	Food/Fuel
Coffeeberry	<i>Rhamnus californica</i>	po'-tah (Tomales) ko'-tah (Bodega)	si bas bak le	Medicinal
Coyote Brush	<i>Baccharis pilularis</i>	tcu'u	Medicinal / Shelter	
Cudweed	<i>Gnaphalium canescens</i>	Medicinal		
Currant	<i>Ribes victoris Greene</i>	kawisu	Food	
Dogbane	<i>Apocynum cannabinum</i>	tsopogo	Cordage / Medicinal	
Dogwood	<i>Cornus sericia L. ssp.</i>	mahsa	Baskets	
Douglas Iris	<i>Iris douglasiana</i>	lawik	si wi ta	Cordage/Medicinal
Elderberry	<i>Sambucus caerulea</i>	bat ink le	Tool	
Grey Willow	<i>Salix lasiandra</i>	luma	k a lan	Food/Baskets/Medicinal
Gumplant	<i>Grindelia hirsutula</i>	q aqa we	Tool / Medicinal	
Huckleberry	<i>Vaccinium ovatum</i>	po' te	Food	
Ithuriel's spear	<i>Triteleia laxa Benth.</i>	putcu	bim'u	Food
Jimson Weed	<i>Datura stramonium L.</i>	monoy	qa lqasia	Medicinal
Lupine	<i>Lupinus chamissonis</i>	soppoko	galgas'a	Baskets/Tools
Mugwort (sage)	<i>Artemisia douglasiana</i>	kicin (Tomales) po'-to-po'-to (Bodega)	qa p ula	Ceremonial/Medicinal
Redbud	<i>Cercis orbiculata</i>	ta pa' tapu	'ah ay ta	Crafts/Tool
Redwood	<i>Sequoia sempervirens</i>	lume	kas'in	Shelter/Medicinal
Rush	<i>Juncus textilis Buch.</i>	katce	ci ba	Baskets/Shelter
Salmonberry	<i>Rubus spectabilis Pursh</i>	Food		
Seaweed	<i>Porphyra abbottae</i>	haskula	'o t ono	Food
Sedge	<i>Carex barbarae</i>	kissi	co sink le	Tools/Baskets
Showy Indian Clover	<i>Trifolium Amoenum</i>	kaali	kaali	Food
Silverweed	<i>Potentilla anserina</i>	citila	Medicinal / Food	
Soaproot	<i>Chlorogalum pomeridianum</i>	hakka	ha 'an	Food/Tool/Ceremonial
Strawberry	<i>Fragaria chiloensis pacifica</i>	i'-yum	muhway mi	Food/Medicinal
Sunflower	<i>Helianthus annuus</i>	hii pakas	Food	
Tobacco	<i>Nicotiana bigelovii</i>	kayaw	ka'wak le	Medicinal
Toyon	<i>Heteromeles arbutifolia</i>	puylak (berries) puiak	bu'du	Food
Valley Oak	<i>Quercus lobata</i>	hakya	sunk le	Food
Wax Myrtle	<i>Morella californica</i>	Food		
Yarrow	<i>Achillea millefolium L. var.</i>	kickin	sunam ketey	Medicinal
Yerba Buena	<i>Satureja douglasii</i>	yerba beenu	yerba beena	Medicinal

3. Identify and evaluate historic properties in consultation with the SHPO and interested parties;
4. Assess the effects of the undertaking on properties that are eligible for inclusion in the National Register;
5. Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation; and
6. Proceed with the project according to the conditions of the agreement.

## **State**

The State of California implements the National Historic Preservation Act (NHPA) of 1966, as amended, through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation (OHP), an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdiction.

### ***California Public Resources Code and Health and Safety Code***

Several sections of the California Public Resources Code (PRC) protect cultural resources. Under 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, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor. Section 5097.98 states that if Native American remains are identified within a project area, the lead agency must work with the appropriate Native Americans as identified by the NAHC and develop a plan for the treatment or disposition of, with appropriate dignity, the human remains and any items associated with Native American burials. These procedures are also addressed in Section 15046.5 of the CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibit disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

PRC Section 5024.1[a] states that the California Register of Historic Resources (California Register) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change." PRC Section 5024.1[b] states that the criteria for eligibility to the California Register are based on National Register criteria, and that certain resources are determined by the statute to be automatically included in the California Register, including California properties formally eligible for or listed in the National Register.

Title 14, Section 4307 of the California Code of Regulations also prohibits any person from removing, inuring, defacing or destroying any object of paleontological, archaeological or historical interest or value.

### ***California Environmental Quality Act***

CEQA, as codified in PRC Sections 21000 et seq. and implemented via the CEQA Guidelines (14 CCR § 15000 et seq.), is the principal statute governing the environmental review of projects in the State. The CEQA Guidelines define a historical resource as: (1) a resource in the California Register; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

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

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

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history [14 CCR Section 4852(b)].

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important archaeological resources, either historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083 regarding unique archaeological resources. A unique archaeological resource is “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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 historic event or person [PRC Section 21083.2 (g)].”

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

## Local

Local policies established in the *Sonoma County General Plan 2020* that govern geologic resources in the Estuary Study Area are summarized in Section 4.8 in **Appendix 4.0, Local Regulatory Framework Governing Environmental Resources**.

## 4.8.4 Environmental Impacts and Mitigation Measures

### Significance Criteria

Based on the Appendix G of the CEQA Guidelines, project implementation would have significant impacts and environmental consequences on cultural resources if it would result in any of the following:

1. A substantial adverse change in the significance of a historical resource that is either listed or eligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or a local register of historic resources;
2. A substantial adverse change in the significance of a unique archaeological resource;
3. Disturbance or destruction of a unique paleontological resource or site or unique geologic feature; or
4. Disturbance of any human remains, including those interred outside or formal cemeteries.

For the purposes of this analysis, an additional criterion is established to evaluate significant impacts associated with the proposed Estuary Management Project. Project implementation would have a significant impact if it would:

1. Affect the distribution of natural vegetation communities along the Estuary shoreline, such that availability of culturally significant plants is reduced.

### ***Issues Not Discussed Further***

The impact analysis for paleontological resources is based on the paleontological potential of the rock units to be disturbed by project-related activities. Impacts to paleontological resources could occur when excavation activities inadvertently disturb or destroy unique or significant fossils. The only excavation activity to occur would be associated with the proposed lagoon outlet channel creation and maintenance. The material excavated would be beach and lagoon sands, which are loose, recently deposited materials that do not contain unique or significant fossils. Organisms are fossilized only after being substantially buried for thousands of years. All other disturbances due to the project would be limited to the surface and would not affect subsurface geologic units. The proposed project is not expected to adversely affect paleontological resources; therefore this issue is not discussed further.

### **Approach to Analysis**

The analysis considers direct and indirect impacts on both known cultural and paleontological resources as well as inadvertent discoveries within the proposed Estuary Study Area. Potential impacts on architectural and structural resources are assessed by identifying the activities that could affect the architectural resources that have been identified as historical resources for the purposes of CEQA. While most historic buildings and many historic-period archaeological properties are generally significant because of their association with important events, people, or styles (under California Register Criteria 1, 2, and 3), the significance of most prehistoric and historic-period archaeological properties is usually assessed under Criterion 4. This criterion stresses the potential for discovering important historical information within the site rather than the resource's significance as a surviving example of a type of construction or its association with an important person or event.

Once a resource has been identified as significant, it must be determined whether the project would "cause a substantial adverse change in the significance" of the resource (CEQA Guidelines 15064.5[b]). A substantial adverse change in the significance of a historical resource or unique archaeological resource means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]). A historical resource is materially impaired through the demolition or alteration of the historical resource's physical characteristics that convey its historical significance and that justify its inclusion in the California Register (CEQA Guidelines Section 15064.5[b][2][A]).

As noted in **Chapter 2.0, Project Description**, the Water Agency would continue its current practice of artificial breaching outside of the lagoon management period of May 15 through October 15. Timing, implementation, access, sensitivity to pinniped haulout, personnel, equipment and general procedures would be equivalent to current practices, as described in **Section 2.2.2**. No change to artificial breaching outside of the lagoon management period would occur under the Estuary Management Project.

## Impact Analysis

Impacts associated with traffic and transportation are summarized and categorized as either “less than significant,” “less than significant with mitigation,” or “significant and unavoidable.”

### **Impact 4.8.1: The Estuary Management Project could cause a substantial adverse change in the significance of a historical resource or unique archaeological resource. (Less than Significant with Mitigation)**

Ground-disturbing activities associated with the outlet channel creation and maintenance would occur in recently deposited and annually disturbed materials that have a very low potential to contain cultural materials. The variations in the annual water surface elevation on the Russian River would remain within previously recorded levels following project implementation. There is a low potential for archaeological materials to be uncovered from the implementation of the Estuary Management Project.

While unlikely, the possibility of encountering archaeological materials cannot be entirely discounted. In the event that cultural materials are found during project implementation the following mitigation measure would reduce impacts to historical or archaeological resources to less-than-significant.

## Mitigation Measures

**Mitigation Measure 4.8.1:** The Water Agency will implement the following measure:

***Inadvertent Discovery of Historical and Unique Archaeological Resources.*** If discovery is made of items of historical or archaeological interest, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. After cessation of excavation the contractor shall immediately contact the Water Agency, State Parks, and the U.S. Army Corps of Engineers. The contractor shall not resume work until authorization is received from both agencies.

1. In the event of unanticipated discovery of archaeological materials occurs during construction, the Water Agency shall retain the services of a qualified

professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site.

2. In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the California and/or National Registers, and the site cannot be avoided, the Water Agency shall provide a research design and excavation plan, prepared by a qualified archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be approved by the Water Agency, State Parks, and U.S. Army Corps of Engineers. Implementation of the research design and excavation plan shall be conducted prior to work being resumed. Upon project approval, the Water Agency will coordinate with State Parks and U.S. Army Corps of Engineers to develop an action plan that can be implemented in the event that flooding is imminent and breaching must occur immediately.

**Impact Significance after Mitigation:** Less than Significant.

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**Impact 4.8.2: Human remains. The Estuary Management Project could disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)**

Ground-disturbing activities associated with the outlet channel creation and maintenance will occur in recently deposited and annually disturbed materials that have a very low potential to contain human remains. The variations in the annual water surface elevation on the Russian River will remain within previously recorded levels following project implementation. There is a low potential for the discovery of human remains from the implementation of the Estuary Management Project.

***Mitigation Measures***

In the unlikely event of uncovering human remains during project implementation the following mitigation measure would reduce impacts to less-than-significant.

**Mitigation Measure 4.8.2:** The Water Agency will implement the following measures:

***Discovery of Human Remains.*** If potential human remains are encountered, the Water Agency shall halt work in the vicinity of the find and contact the Sonoma County coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. The Water Agency will also notify by telephone the U.S. Army Corps of Engineers archaeologist and permit manager. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent (MLD) makes recommendations for means of treating the human remains and any associated grave goods as provided in Public Resources Code

Section 5097.98. Work shall cease in the immediate area until the recommendations of the appropriate MLD are concluded.

**Impact Significance after Mitigation:** Less than Significant.

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**Impact 4.8.3: Culturally sensitive plants. The Estuary Management Project could adversely affect the distribution of natural vegetation communities along the Estuary shoreline, such that availability of culturally significant plants is reduced. (Less than Significant)**

As discussed in **Impact 4.4.6 in Section 4.4, Biological Resources**, the Estuary Management Project would increase the duration of fresh or brackish water lagoon conditions from the currently experienced duration of five to 14 days to the estimated duration of one to five months. The following discussion provides a general description of the incremental changes that may occur on vegetation communities within the study area with implementation of the proposed Estuary management practices. Plant species identified in **Table 4.8-2** are common species that are known to occur in a variety of habitats. A subset of the plants listed in **Table 4.8-2** are known to occur in Coastal and Valley Freshwater Marsh or North Coast Riparian Forest and North Coast Riparian, including blackberry, buckeye, elderberry, grey willow, huckleberry, rush, and sedge. As previously discussed in **Section 4.4, Biological Resources**, these vegetation types may be affected as a result of increased duration and frequency of higher water levels.

Of the approximately 26.5 acres of Coastal and Valley Freshwater Marsh within the mapped estuary study area within the 14 foot elevation, approximately nine acres (or 36 percent) occur between 4.5 and 7 feet in elevation, and approximately 13 acres (or 48 percent) occur between 7 and 9 feet in elevation. Under current conditions, the nine acres that occur below 7 feet have been inundated 52 of the 101 recorded breaching events occurring over the last 14 years. Inundation has been for a duration of between five to 14 days, before artificial breaching restores water surface elevations. The 13 acres occurring above 7 feet have been inundated 48 times, for a similar duration of between five to 14 days. With increased duration of inundation, these vegetation types may convert or shift towards higher elevations. Under the Estuary Management Project, both the 9.5 acres of freshwater marsh occurring below 7 feet, and the 13 acres of freshwater marsh occurring between 7 and 9 feet, would be inundated for a period of one to five months, depending upon outlet channel performance and resulting water surface elevations. Following this period of inundation, a portion of the marsh vegetation within the 4.5 to 7 foot elevation range may convert to open water or mudflat habitat if vegetation is not able to tolerate prolonged inundation (i.e. a substantial increase in depth and duration), while the marsh vegetation in the higher elevation of 7 and 9 feet may not be substantially affected. The greatest extent of marsh habitat occurs in and around Penny Island and at the confluence of Willow Creek and the Russian River. These areas could potentially see the greatest conversion from a vegetated community to an open water or mudflat habitat.

Riparian communities, such as North Coast Riparian Forest and North Coast Riparian Scrub, may also be impacted by changes in extent and duration of inundation. Of the 26 acres of North Coast

Riparian Forest within the mapped area, 1.8 acres (or 7 percent) occur between 4.5 and 7 feet in elevation and 3.6 acres (or 14 percent) occur between 7 and 9 feet in elevation. Additionally, of the approximately 31 acres of North Coast Riparian Scrub within the mapped 14 foot contour area, approximately 4.5 acres (or 14 percent) lies within 4.5 and 7 feet in elevation and approximately 10.5 acres (or 33 percent) occur between 7 and 9 feet in elevation. These areas may convert to Coastal or Valley Freshwater Marsh, which is dominated by more inundation-tolerant vegetation. However, plant species identified in **Table 4.8-2** are common species with wide distribution; as such, although specific geographic distribution may be altered within the context of changes to vegetative assemblages described above, it is anticipated these plant species would remain available within the Estuary and surrounding area. The Estuary Management Project would have a less than significant effect on culturally significant plants.

**Impact Significance:** Less than Significant; no mitigation required.

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### 4.8.5 References

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