# 3.7 Cultural Resources

# 3.7.1 Introduction

This section describes cultural resources in the study area and the potential impacts of the types of restoration projects that would be permitted under the Order. (Section 2.6, *Categories of Restoration Projects in the Order.*) Although tribal cultural resources are discussed separately in Section 3.18, this section provides the associated regulatory context because some of the same mitigation measures for reducing impacts on cultural resources also apply to tribal cultural resources.

The environmental setting and evaluation of impacts on cultural resources is based on a review of existing published documents, including city and county general plans; information regarding example projects similar to those permitted under the Order that may be implemented by other agencies; and other information sources listed in Chapter 8, *References*.

No comments specifically addressing cultural resources were received in response to the notice of preparation (NOP). See Appendix B for NOP comment letters.

# Key Terms

For this analysis, the term *cultural resource* is defined as follows:

Indigenous and historic-era sites, buildings, structures, districts, and landscapes, or other evidence associated with human activity considered of value to a culture, a subculture, or a community for scientific, traditional, religious, or other reason. These resources include the following types of CEQA-defined resources: historical resources, archaeological resources, and human remains.

CEQA Guidelines section 15064.5 defines the term *historical resource* as follows:

- A resource in the California Register of Historical Resources (California Register)
- 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)
- 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 by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and PRC Section 15064.5 apply. If an archaeological site does not meet the criteria for a historical resource contained in the State CEQA Guidelines (PRC Section 15000 et seq.), the site may be treated in accordance with the provisions of PRC Section 21083, pertaining to unique archaeological resources.

The term *indigenous*, rather than *prehistoric*, is used as a synonym for "Native American–related" (except when quoting). *Pre-contact* is used as a chronological adjective to refer to the period before the arrival of Euroamericans in the subject area. "Indigenous" and "pre-contact" are often but not always synonymous: The former term refers to a cultural affiliation and the latter is chronological.

This section also includes the key terms defined below.

- Architectural Resource. This resource type includes historic-era buildings, structures (e.g., bridges, canals, roads, utility lines, railroads), objects (e.g., monuments, boundary markers), and districts. Residences, cabins, barns, lighthouses, military-related features, industrial buildings, and bridges are some examples of architectural resources.
- Archaeological Resource. This resource type consists of indigenous, or pre-contact, and historic-era archaeological resources:
  - Indigenous archaeological resources consist of village sites, temporary camps, lithic scatters, roasting pits/hearths, milling features, petroglyphs, rock features, and burials. Associated artifacts include obsidian and chert flakedstone 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). Indigenous sites that were occupied into the historic era can have both pre-contact and historic-era artifacts.
  - *Historic-era archaeological resources* consist of town sites, homesteads, agricultural or ranching features, mining-related features, refuse concentrations, and features or artifacts associated with early military and industrial land uses. Associated artifacts include stone, concrete, or adobe footings and walls; artifact-filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

If a resource is considered a ruin (e.g., a building lacking structural elements, a structure lacking a historic configuration), it is classified as an archaeological resource.

# 3.7.2 Environmental Setting

This section describes the cultural resources that could be affected by the types of restoration projects that would be permitted under the Order. The area of analysis covers the entire geographic extent of California and includes many types of cultural resources.

The ethnographic setting, indigenous resources, and historic-era resources are described here to allow analysis at a program level of detail. This description does not preclude the need for or replace any project-level environmental review.

# Ethnographic Setting

Beginning in the early 16th century, but primarily during the late 19th and early 20th centuries, Native American lifeways and languages (i.e., ethnographic data) were documented throughout California. Whether provided by professional ethnographers or archaeologists, field personnel from government agencies such as the Bureau of Indian Affairs, soldiers, merchants, settlers, or travelers, ethnographic accounts partly illuminate the traditions, beliefs, and cultures of Native American groups during specific points in time. Synthesized narratives such as the *Handbook of North American Indians,* Volume 8: *California* (Heizer 1978) categorize Native traditions and practices documented at the time in California; however, the complexity of regional diversity should not be overlooked.

At least six primary language families exist in California, and there may be more than 300 different dialects of approximately 100 languages. The "geolinguistic mosaic of the ethnographic period, with a startling diversity of languages and language families" indicates numerous major population shifts and migrations (Golla 2007:71). Ethnographers have also quantified at least 60 greater Indian cultures and as many as 250 specific tribes throughout the state.

Similarities between California's native populations crossed geographic, climatic, and cultural boundaries. Acorns, where available, were a staple throughout California. Native populations relied on deer, elk, small mammals, birds, and fish, and they used resources to their fullest extent, with little to no waste product. Ethnographically documented communities were generally focused on a central tribe with smaller satellite tribelets, although this characteristic varied by region. Shamanism and ceremonialism played important roles in the lives of most California Native Americans; the specific religious traditions themselves differed between groups. Basketry was widespread, and some southern tribes also manufactured pottery. Hunting, trapping, and fishing technologies were shared across tribal and cultural boundaries, but varied depending on environmental conditions.

Native American fishing techniques along inland waterways included constructing fish weirs or dams across rivers to trap anadromous fish during upstream migration. Weirs were constructed of wood poles, logs, and small stakes to obstruct fish passage up a waterway. Some fish weirs were built and used by small groups, mainly individual families, but communal constructions were also common (Gould 1975). Organized labor teams from many surrounding villages worked cooperatively to collect logs for the construction of a communal fish weir, catch fish, gather firewood, and process the catch. The dam would be in place for approximately 10 days before the group would tear it down. Other methods of fishing included net traps, harpoons, spears, platforms, and clubs (Kroeber and Barrett 1960). Tule balsa canoes and dugout canoes were also used for fishing (Wilson and Towne 1978). Among the other important riverine subsistence species were steelhead, candlefish, lamprey, eel, and trout.

Trade was well developed in California. The use of shell beads as currency was an important economic and cultural practice for many tribes. Food, ornaments, household items, clothing, industrial materials such as obsidian, finished items including canoes, pottery, basketry, and tobacco were used for trade items. Trade networks were well

established, and although it appears that there were not professional traders, central villages served as focal points for trading (Heizer 1978).

Regional differences in Native American beliefs are significant, yet there is a common identity and relationship with the environment. California Native peoples believe that nature is interrelated and immersed with sacred power. Most California tribes tell creation myths that often explain the origins of the earth, human existence, and individual cultural attributes. Stories have often taught morality or defined the establishment of elements. Modern Native American beliefs vary but are rooted in their ancestral land and traditions.

# Indigenous Resources and Waterways

Water—whether present in springs, creeks, rivers, lakes, bays, or the ocean—is one of the most important resources necessary for human use and settlement. Water, and access to water, provides sustenance, travel and trade corridors, and traditional boundaries. Indigenous cultural resources are present along waterways throughout California.

Indigenous archaeological resources generally found along California's waterways include permanent or semi-permanent habitation sites, temporary camps or food processing localities, and isolated artifacts. Archaeological materials that can be found at sites along waterways 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; stone milling equipment (e.g., mortars, pestles, handstones, milling slabs); and battered stone tools, such as hammerstones and pitted stones. Native American human remains can also be found at indigenous archaeological sites. These types of resources are generally not within stream channels; rather, they are located on riverbanks and in surrounding areas.

Other indigenous archaeological site types that could be in or adjacent to waterways are fish weirs and platforms. Flooding and sediment deposition episodes over millennia have buried many of these archaeological sites, resulting in complex archaeological sites with components both at and below the surface.

# **Historic Setting**

The earliest European presence in California came with the Spanish discovery and exploration of the California coast in the mid-16th century. Alta California had been claimed for Spain in 1542 by the Portuguese explorer Juan Cabrilho, who sailed up the Pacific coast as far as Fort Ross. Because of the prosperity of its more southern colonies and the great distances required to travel so far north, Spain largely ceased overland and maritime exploration of Alta California until the 18th century. Spain had originally focused its energy and attention on its southern colonies in New Spain; however, in the 18th century, the increased presence of Russian settlements in the Aleutian Islands and the British acquisition of Canada encouraged Spain to explore and occupy Alta California to prevent Russian and British encroachment from the north.

European expansion into Alta California began when Spanish Mexico instigated the establishment of a string of Franciscan missions throughout the region. The California

mission system had two goals: to Christianize and enculturate the native population of California, and to gain political and social control of the area for the Spanish government in Mexico. Mission San Diego de Alcalá, the first of 21 California missions, was founded in July 1769. Over the next 50 years the mission system was extended farther north. Alongside the missions came a network of military establishments or *presidios* and civilian settlements or *pueblos*. Exploration of California's hinterland focused predominantly on identifying rancho sites to support the mission network and on recapturing runaway Natives.

Although the original Spanish plan for the mission system included secularization, the process did not begin until Mexico gained independence from Spain. Fueled by reports of Franciscan padres degrading the Native peoples and failing to provide food and services to the military, the Mexican government began secularization in mid-1834. The mission lands were to be divided among the Native American neophytes, but only rarely did this actually happen. More often the mission lands were granted to high-ranking Mexican Californian soldiers, politicians, and socialites.

Mexican Californians, or *Californios*, were well known for their hospitality and easygoing lifeways. Early accounts describe ranchos with large households, operated by a sizeable Native American labor force. Most ranchos were intensively involved in the hide-and-tallow trade, supporting huge herds of cattle on their vast landholdings. The cattle were driven to *matanzas*, or slaughter sites, that were usually as close to water transportation as possible for easy transport onto foreign trade vessels. The relationship between the *Californios* and the foreign ships had been active since the early 1820s. The ships imported all manner of trade goods, because little manufacturing of refined goods occurred in Mexican California.

Beginning in the 1830s, Americans began to migrate to California, and many became Mexican citizens. Some married into prominent *Californio* families, and some of these families were eventually granted lands by the governor. Many of these first immigrants became acculturated into Mexican society and politics, including some who went on to become prominent businessmen and landowners.

The discovery of gold in California in 1848 instigated one of the largest migrations in history. Thousands came by land and sea in search of fortunes. Most came to dig for gold, but many came with the foresight that miners needed supplies. Earlier residents of California, including many *Californios* and previous Euroamerican immigrants, capitalized on the new immigrant population.

After the acquisition of California by the U.S. that same year, many *Californios* also struggled to hold on to their vast landholdings. The Treaty of Guadalupe Hidalgo promised that property belonging to the Mexicans would be "inviolably respected," but the new Americans generally believed that California's lands should be public property as a privilege gained with the military victory. The newly arrived immigrants ignored the vague land-grant maps, or *diseños*, that marked the boundaries of each rancho territory. Squatters settled on land officially owned by Mexicans and violence often erupted. Many *Californios* lost substantial amounts of land, despite legal efforts to hold on to it.

Although many claims were confirmed, the Mexican landowners were often bankrupt by the end of the long and costly proceedings.

Mining camps and towns were established almost immediately throughout California's gold-bearing regions, which are generally located along the western foothills of the Sierra Nevada and along the Klamath and Trinity River basins. At the outset, the mining population was made up almost exclusively of single men; but miners needed food and supplies, and people who could provide those goods followed. Ultimately, women and children also relocated to mining communities.

The influx also brought a wide-ranging diversity of cultures and nationalities. California gold mining was very successful; in 1852, California produced more than \$81 million worth of gold, 60 percent of the world's production for that year (Clark 1957:223).

Almost immediately after the discovery of gold, investors began talking about the construction of a transcontinental railroad that would connect Eastern goods, money, and services to the new Western enterprises. Before construction of the railroad, however, California's extensive network of inland waterways was crucial for travel to the interior.

# Historic-Era Resources and Waterways

Potential historic-era resources within California's river system include submerged vessels. The California State Lands Commission maintains a shipwreck database that identifies approximately 1,550 recorded shipwrecks in the state, about 70 of which are in the river system (California State Lands Commission 2019). The vast majority of these resources are wood-hulled, Gold Rush–era vessels submerged in the Sacramento, American, Feather, Yuba, and San Joaquin Rivers in central California. The title to all abandoned shipwrecks is under the jurisdiction of the California State Lands Commission. Any submerged vessel remaining in state waters for more than 50 years is considered a potential historical resource.

Other historic-era resources often present in California's waterways are mining sites and features that are submerged in or adjacent to the state's streams. Resource types include mining remains, such as tailings piles and river diversions; water conveyance features, such as ditches, flumes, and dams; and community remains, including foundations, dugouts, and refuse deposits located along riverbanks and in the vicinity (Caltrans 2008). Like submerged vessels, many of these other Gold Rush–era resources are concentrated within California's Sierra Nevada foothills but may be present anywhere in the state's waterways.

California's waterways are a patchwork of both highly altered riverine systems and wild and scenic drainages that are undisturbed by modern development. The construction of dams, levees, canals, and reservoirs during modern times—whether for power generation, irrigation, flood control, or transportation—has greatly altered the state's waterways, and with it, much of the surface evidence of the types of pre-contact and historic-era sites described above. Natural processes such as flooding, erosion, and deposition have also altered or destroyed many of the cultural resources found along California waterways.

Regardless of these natural and human-made disturbances, the state's waterways remain abundant with both recorded and unrecorded cultural resources, all of which provide a detailed record of California's rich cultural heritage.

# 3.7.3 Regulatory Setting

This section discusses federal, state, and regional and local plans, policies, regulations, and laws, and ordinances pertaining to cultural resources.

Future permitted restoration projects that would be implemented under the Order may be subject to the laws and regulations listed below, as well as other local or individual restoration projects requirements, depending on the project location.

# Federal

# **National Historic Preservation Act**

Historic properties are considered through compliance with the National Historic Preservation Act (NHPA), as amended (U.S. Code Title 54, Section 307103 [54 USC 307103]) and its implementing regulations (54 USC 307103, Code of Federal Regulations Title 36, Section 800 [36 CFR 800], 36 CFR 60, and 36 CFR 63). The NHPA establishes the federal government's policy on historic preservation and the programs, including the National Register of Historic Places (National Register), through which that policy is implemented. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the [National Register]" (54 USC 300308).

When a project implemented under the Order requires a federal permit, compliance with Section 106 of the NHPA (Section 106) is also required. Under Section 106, generally, it is the responsibility of the lead federal agency—in this case, USACE—to consider the effects of a proposed undertaking on historic properties. The federal agency must consult with the State Historic Preservation Officer (SHPO), federally recognized Indian tribes, and other interested parties before granting a permit, funding, or other authorization. The agency must also afford the Advisory Council on Historic Preservation and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect a property eligible for listing in the National Register. Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to an Indian tribe or a Native Hawaiian organization 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 (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.

In addition to meeting one of the above criteria, a resource must retain integrity to be considered a historic property. Integrity is measured by the degree to which the resource retains its historical attributes and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of changes to the resources.

Certain types of resources are usually excluded from consideration for listing in the National Register but can be considered if they meet special requirements in addition to meeting one or more of the National Register listing criteria. The following seven criteria considerations deal with resources usually excluded from listing in the National Register:

- Religious resources
- Moved resources
- Birthplaces and graves
- Cemeteries
- Reconstructed resources
- Commemorative resources
- Resources that have achieved significance within the past 50 years

# American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978 (42 USC 1996) protects and preserves the right of Native Americans to believe, express, and exercise traditional religious rights and cultural practices, including access to sites of religious importance to Native Americans.

# State

The State of California consults on implementation of the NHPA and oversees statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation, an office of the California Department of Parks and Recreation, implements the policies of the NHPA statewide. The Office of Historic Preservation also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the state's jurisdiction.

# California Environmental Quality Act

CEQA (California Public Resources Code [PRC] Section 21000 et seq.) is the principal statute governing environmental review of projects occurring in California. CEQA requires lead agencies to determine whether a project would have a significant effect on cultural resources and tribal cultural resources, among other resource types.

The State of California implements provisions of CEQA through its statewide comprehensive cultural resources surveys and preservation programs. Typically, a resource must be more than 50 years old to be considered a potential historical resource. The California Office of Historic Preservation advises recording any resource 45 years or older, because there is commonly a 5-year lag between resource identification and the date that planning decisions are made.

#### Historical Resources

The State CEQA Guidelines recognize that a historical resource includes all of the following:

- A resource in the California Register of Historical Resources (California Register) (PRC Section 5024.1, Title 14 California Code of Regulations (CCR), Section 4850 et seq.)
- 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)
- 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 by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record (PRC 5024.1, Title 14 CCR, Section 4850 et seq.)

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and PRC Section 15064.5 apply. If an archaeological site does not meet the criteria for a historical resource contained in the State CEQA Guidelines (PRC Section 15000 et seq.), the site may be treated in accordance with the provisions of PRC Section 21083, pertaining to unique archaeological resources.

# Unique Archaeological Resources

As defined in PRC Section 21083.2, a "unique archaeological resource" is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

The State CEQA Guidelines note that if an archaeological resource is not a unique archaeological, historical, or tribal cultural resource, the effects of the project on those

cultural resources shall not be considered a significant effect on the environment (PRC Section 15064.5[c][4]).

# Tribal Cultural Resources

Impacts on tribal cultural resources also are considered under CEQA (PRC Section 21084.2). PRC Section 21074(a) defines tribal cultural resources as any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - Included or determined to be eligible for inclusion in the California Register
  - Included in a local register of historical resources, as defined in PRC Section 5020.1(k)
- Resources determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of [PRC] Section 5024.1. In applying these criteria, the lead agency would consider the significance of the resource to a California Native American tribe.\

# **California Register of Historical Resources**

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

To be eligible for the California Register, a cultural resource must be significant at the federal, state, and/or local level under one or more of the following four criteria:

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

A resource eligible for the California Register must be of sufficient age and retain enough of its historic character or appearance (integrity), to convey the reason for its significance. The California Register consists of resources that are listed automatically

and those that must be nominated through an application and public hearing. The California Register automatically includes the following resources:

- California properties listed in the National Register and those formally determined eligible for the National Register
- California Registered Historical Landmarks from No. 770 onward
- California Points of Historical Interest that have been evaluated by the California Office of Historic Preservation and have been recommended to the State Historical Commission for inclusion in the California Register

The following other resources may be nominated to the California Register:

- Historical resources with a significance rating of Category 3, 4, or 5 (properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register)
- Individual historic resources
- Historic resources contributing to historic districts
- Historic resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone

# California Public Resources Code Section 5097

PRC Section 5097.99, as amended, prohibits obtaining or possessing Native American artifacts or human remains that are taken from a Native American grave or cairn. Knowingly or willfully obtaining or possessing Native American artifacts or human remains is a felony punishable by imprisonment. Similarly, unlawful removal of any such items with an intent to sell or dissect or with malice or wantonness is a felony punishable by imprisonment.

#### **California Native American Historic Resource Protection Act**

The California Native American Historic Resources Protection Act of 2002 imposes civil penalties, including imprisonment and fines up to \$50,000 per violation, on persons who unlawfully and maliciously excavate upon, remove, destroy, injure, or deface a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register.

# California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code protects human remains by prohibiting the disinterment, disturbance, or removal of human remains from any location other than a dedicated cemetery. PRC Section 5097.98 (reiterated in State CEQA Guidelines Section 15064.59[e]) also identifies steps to follow if human remains are accidentally discovered or recognized in any location other than a dedicated cemetery.

#### **Regional and Local**

The study area encompasses all counties and cities throughout California. Each county and city has local regulations and a general plan with cultural resources goals and

policies that guide development and encourage providing and maintaining open space resources and preserving areas of outstanding cultural value in their communities. Many cities and counties in the study area have goals and policies that promote the preservation of the area's cultural resources—archaeological, architectural, and tribal cultural resources.

# 3.7.4 Impacts and Mitigation Measures

# Methods of Analysis

Cultural resource impacts from the types of restoration projects permitted under the Order are evaluated in terms of how typical construction and operation of project components could impact existing historical and archeological resources. However, the precise locations and detailed characteristics of potential future individual restoration projects are yet to be determined. Therefore, this cultural resource analysis focuses on reasonably foreseeable changes from implementation of the types of projects and actions that might be taken in the future consistent with the level of detail appropriate for a program-level analysis.

Permanent impacts are considered those that would continue through the life of a project as a result of the environmental conditions caused by restoration projects permitted under the Order (e.g., new infrastructure such as pumps would be located indefinitely in one location, resulting in the removal of sediment and soils within the facility's footprint). Temporary impacts are considered those that would be temporary in nature (e.g., construction-related activities).

The approach to assessing cultural resources was to identify and review existing environmental studies, data, model results, and other information for projects that are consistent with those identified in Section 2.6, *Categories of Restoration Projects in the Order*, and Section 2.7, *Typical Construction, Operation, and Maintenance Activities and Methods*.

#### **Historical Resources**

Impacts on historical resources were assessed by identifying the types of restoration projects and activities associated with them that would be implemented under the Order, such as new construction, demolition, or substantial alteration, that would affect resources that have been identified as historical.

Individual properties and districts identified as historical resources under CEQA include those that are significant because of their association with important events, people, or architectural styles or master architects, or for their informational value (California Register Criteria 1, 2, 3, and 4) and that retain sufficient historic integrity to convey their significance. Criterion 4 is typically applied to the evaluation of archaeological resources, and not to architectural resources. Historical resources may include architectural resources and archaeological resources.

Once a resource has been identified as significant, it must be determined whether the impacts of the project would "cause a substantial adverse change in the significance" of the resource (State CEQA Guidelines Section 15064.5[b]). A substantial adverse change in the significance of a historical 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" (State CEQA Guidelines Section 15064.5[b][1]).

A historical resource is materially impaired through demolition or alteration of the resource's physical characteristics that convey its historical significance and that justify its inclusion in (or eligibility for inclusion in) the California Register or a qualified local register (State CEQA Guidelines Section 15064.5[b][2]). Therefore, material impairment of a historical resource constitutes a significant impact.

#### **Archaeological Resources**

The significance of most pre-contact and historic-era archaeological sites is typically assessed relative to California Register Criterion 4. This criterion stresses the importance of the information potential contained within an archaeological site, rather than the significance of the site as a surviving example of a type or its association with an important person or event.

Archaeological resources may qualify as historical resources under the definition provided in State CEQA Guidelines Section 15064.5(a). Alternatively, they may be assessed under CEQA as unique archaeological resources. "Unique archaeological resources" are defined as archaeological artifacts, objects, or sites that contain information needed to answer important scientific research questions (PRC Section 21083.2).

A substantial adverse change in the significance of an archaeological resource is assessed similarly to such changes to other historical resources; that is, a "substantial adverse change" in significance means the "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" (State CEQA Guidelines Section 15064.5[b][1]).

As stated previously, a historical resource is materially impaired when a project demolishes or materially alters the resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register (State CEQA Guidelines Section 15064.5[b][2]). Therefore, material impairment of archaeological resources that are considered historical resources or unique archaeological resources would be a significant impact.

#### **Human Remains**

Human remains, including those buried outside of formal cemeteries, are protected under several state laws, including PRC Section 5097.98 and Health and Safety Code Section 7050.5. For the purposes of this analysis, intentional disturbance, mutilation, or removal of interred human remains would be a significant impact.

# Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, an impact related to cultural resources is considered significant if the types of projects that would be permitted under the Order would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5
- Disturb any human remains, including those interred outside of dedicated cemeteries

#### Impacts and Mitigation Measures

Table 3.7-1 summarizes the impact conclusions presented in this section for easy reference.

# Table 3.7-1 Summary of Impact Conclusions—Cultural Resources

Impact Statement	Construction Activities	Constructed Facilities and Operations and Maintenance
<b>3.7-1:</b> Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5.	SU	SU
<b>3.7-2:</b> Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.	SU	SU
<b>3.7-3</b> : Implementing future restoration projects permitted under the Order could disturb any human remains, including those interred outside of dedicated cemeteries.	SU	SU

SOURCE: Data compiled by Environmental Science Associates in 2019 and 2020 NOTE: SU = significant and unavoidable

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with the general protection measures and mitigation measures listed below would be required when applicable to a given

project. Not all general protection measures and mitigation measures would apply to all restoration projects. The applicability of the general protection measures and mitigation measures would depend on the individual restoration activities, project location, and the potentially significant impacts of the individual restoration project. Implementation of the mitigation measures would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

# Impact 3.7-1: Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5.

# **Effects of Project Construction Activities**

Construction of restoration projects permitted under the Order could involve ground disturbance, vibration, and removal of architectural resources (e.g., agricultural outbuildings, irrigation facilities, power poles, utility lines, piping) and vegetation (e.g., trees, stumps). Constructing these projects also has the potential to introduce new visual elements or modify existing visual elements (e.g., impoundments, tanks, ancillary buildings and structures). However, the exact details, including precise locations, of any such construction activities have yet to be determined. Therefore, it is not known whether implementing the restoration projects permitted under the Order would affect any historical resources.

Construction of new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) could result in significant impacts on historical resources in several ways:

- Construction could introduce new elements to a historic setting associated with historical resources or could physically alter historical resources.
- Ground-disturbing construction activities could alter existing landscapes.
- Vibration generated during construction work could physically damage or alter nearby architectural resources that have the potential to qualify as historical resources.

If construction activities for any of the future restoration projects permitted under the Order were to result in either a direct impact (e.g., physical modification, damage, or destruction) or an indirect impact (e.g., alteration to setting, including visual) on any architectural resources that qualify as historical resources as defined in State CEQA Guidelines Section 15064.5, the impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

# Effects of Constructed Facilities (Natural or Artificial Infrastructure) and Operations and Maintenance of those Facilities

Constructed facilities and operations and maintenance (O&M) for future restoration projects permitted under the Order could involve ground disturbance, vibration, and modifications to architectural resources (e.g., disturbance to architectural resources could result from vegetation removal or soil/sediment removal within or near the

facilities.) However, the exact details, including precise locations, of any such facilities and operational activities have yet to be determined. Therefore, it is not known whether implementing the restoration projects permitted under the Order would affect any architectural resources.

Constructed facilities and operations of new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) could cause vibration that could physically damage or alter nearby architectural resources. This vibration could result in significant impacts on historical resources, if any such architectural resources qualify as historical resources.

If constructed facilities and O&M for any of the future restoration projects permitted under the Order were to result in either a direct impact (e.g., physical modifications, damage, or destruction) or an indirect impact (e.g., alterations to setting, including visual) on any architectural resources that qualify as historical resources as defined in State CEQA Guidelines Section 15064.5, the impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

#### Impact Conclusion

Project construction and constructed facilities and O&M for restoration projects permitted under the Order are the types of activities that have the potential to affect historical (i.e., architectural) resources. However, the exact details, including precise locations, of any such activities have yet to be determined. Therefore, it is not known whether implementing the restoration projects permitted under the Order would affect any architectural resources. Factors necessary to identify specific impacts on historical resources include the project's design, footprint, and type; the precise location of construction activities and facilities; and the type and location of operational activities. If any of the future restoration projects permitted under the Order were to affect architectural resources that qualify as historical resources as defined in State CEQA Guidelines Section 15064.5, the impact would be **potentially significant**. As described above, the Order does not include any general protection measures applicable to this impact.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with Mitigation Measure CUL-1 would be required when applicable to a given project. Implementation of this mitigation measure would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

# Mitigation Measure CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources

Before implementation of any project permitted under the Order, the need for an inventory and significance evaluation of architectural resources in the project area shall be assessed, and, if necessary, based upon the type of restoration activity conducted and potential for built features to be present or disturbed. The assessment should consist of a review of maps and aerial photos to see if existing buildings dams, levees, roads, or other built features are in the CEQA project area. If so, and the age of these features is either unknown or is known to be older than 45 years

old, then an inventory and evaluation should be completed by, or under the direct supervision of, a qualified architectural historian, defined as one who meets the U.S. Secretary of the Interior's Professional Qualifications Standards for Historical History or History. This inventory and evaluation shall include the following:

- Map(s) and verbal description of the project CEQA Area of Potential Effects (C-APE) for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources.
- A records search at the appropriate repository of the California Historical Resources Information System for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity.
- Background research on the history of the C-APE and vicinity for all projects determined to need additional historical architecture assessment.
- If, after review, features of the built environment are determined to be less than 45 years old, a summary statement of their age and references for this determination will be included in the project area description. No further analysis is necessary.
- If historic-era built resources are determined to likely be present, an architectural field survey of the C-APE, unless previous architectural field surveys no more than two years old have been conducted for the C-APE, in which case a new field survey is not necessary. Any architectural resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms).
- An evaluation of any architectural resources identified in the C-APE for California Register eligibility (i.e., whether they qualify as historical resources, as defined in State CEQA Guidelines Section 15064.5).
- An assessment of potential project impacts on any historical resources identified in the C-APE. This should include an analysis of whether the project's potential impacts on the historical resource would be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties and applicable guidelines.
- A technical report meeting U.S. Secretary of the Interior's Standards for architectural history technical reporting This report will document the mitigation measures taken and any study results, and following CEQA lead agency review and approval, completes the requirements of this mitigation measure.

If potentially significant impacts on historical resources are identified, an approach for reducing such impacts shall be developed before project implementation and in

coordination with interested parties (e.g., historical societies, local communities). Typical measures for reducing impacts include:

- Modifying the project to avoid impacts on historical resources.
- Documentation of historical resources, to the standards of and to be included in the Historic American Building Survey, Historic American Engineering Record, or Historic American Landscapes Survey, as appropriate. As described in the above standards, the documentation shall be conducted by a qualified architectural historian, defined above, and shall include large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation shall be submitted to the U.S. Library of Congress.
- Relocation of historical resources in conformance with the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.
- Monitoring construction-related and operational vibrations at historical resources.
- For historical resources that are landscapes, preservation of the landscape's historic form, features, and details that have evolved over time, in conformance with the U.S. Secretary of the Interior's Guidance for the Treatment of Cultural Landscapes.
- Development and implementation of interpretive programs or displays, and community outreach.

Mitigation Measure CUL-1 would be implemented to reduce the impacts of restoration projects permitted under the Order. However, because the extent and location of such actions are not known at this time, it is not possible to conclude that the mitigation measure, or equally effective mitigation measures, would reduce significant impacts to a less-than-significant level in all cases. Therefore, this impact would be **significant and unavoidable**.

Impact 3.7-2: Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.

# **Effects of Project Construction Activities**

Construction of restoration projects permitted under the Order could involve ground disturbance (e.g., excavation, grading, drilling). However, the exact details, including precise locations, of any such construction activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any archaeological resources.

Construction of new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) for restoration projects permitted under the Order could partially or completely destroy archaeological resources, resulting in a significant impact.

If construction activities for any of the restoration projects permitted under the Order were to result in an impact on any archaeological resources as defined in State CEQA Guidelines Section 15064.5, the impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

# Effects of Constructed Facilities (Natural or Artificial Infrastructure) and Operations and Maintenance of those Facilities

Constructed facilities and operations for restoration projects permitted under the Order could involve ground disturbance (e.g., excavation, drilling, grading). However, the exact details, including precise locations, of any such facilities and operational activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any archaeological resources.

Constructed facilities and operations associated with new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) could include ground-disturbing activities that could result in significant impacts on archaeological resources through partial or complete destruction.

If constructed facilities and O&M for any of the restoration projects permitted under the Order were to result in an impact on any archaeological resources as defined in State CEQA Guidelines Section 15064.5, the impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

# **Impact Conclusion**

Construction activities and constructed facilities and O&M for restoration projects permitted under the Order are the types of activities that have the potential to affect archaeological resources. However, the exact details, including precise locations, of any such activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any archaeological resources. Factors necessary to identify specific impacts on archaeological resources include the project's design, footprint, and type; the precise location of construction activities and facilities; and the type and location of O&M activities. If any archaeological resources, as defined in State CEQA Guidelines Section 15064.5, were affected by the Order, the impact would be **potentially significant**. As described above, the Order does not include any general protection measures applicable to this impact.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with Mitigation Measure CUL-2 and CUL-3 would be required when applicable to a given project. Implementation of this mitigation measure would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

# Mitigation Measure CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources

Before implementation of any project permitted under the Order that includes ground disturbance, an archaeological records search and sensitivity assessment, inventory

and significance evaluation of archaeological resources identified in the C-APE shall be conducted. The inventory and evaluation should be done by or under the direct supervision of a qualified archaeologist, defined as one who meets the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, and shall include the following:

- Map(s) and verbal description of the project C-APE for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources.
- A records search at the appropriate repository of the California Historical Resources Information System (CHRIS) for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity. This task can be performed by either the qualified archaeologist or the appropriate local CHRIS center staff.

Outreach to the California Native American Heritage Commission, including a request of a search of the Sacred Lands File for the C-APE, to determine if any documented Native American sacred sites could be affected by the project.

- Consultation with California Native American Tribes pursuant to PRC Section 21080.3 to determine whether any indigenous archaeological resource or tribal cultural resources could be affected by the project. Project proponents shall submit a Sacred Lands File & Native American Contacts List Request to the Native American Heritage Commission (NAHC) at the initial stages of project development (or as early as practicable) to determine if a project would have an impact on Native American cultural resources. The project proponent shall coordinate with the approving Water Board or other CEQA lead agency, if applicable, as soon as possible whenever tribes that are traditionally and culturally affiliated to a project area are identified. Any tribe identified by the NAHC will require notification of the proposed project by the lead agency as soon as practicable during early design. Tribes will be consulted if a request is received after initial notification. Consultation will include discussion regarding project design, cultural resource survey, protocols for construction monitoring, and any other tribal concern. Construction of the project will not commence until the approving Water Board or other CEQA lead agency achieves compliance with the California Environmental Protection Agency Tribal Consultation Protocol (April 2018).
- If the C-APE is in or adjacent to navigable waterways, outreach to the California State Lands Commission to request a search of their Shipwrecks Database, to determine whether any submerged archaeological resources may be present in the C-APE.
- Background research on the history, including ethnography and indigenous presence, of the C-APE and vicinity.

- An archaeological sensitivity analysis of the C-APE based on mapped geologic formations and soils, previously recorded archaeological resources, previous archaeological studies, and Native American consultation.
- If an archaeological study is not warranted based on the above review, a summary of the assessment and justification of the determination will be prepared. If the CEQA lead agency agrees with the determination, no further study is needed.

If a study is warranted, as a result of these archival studies and consultations, an archaeological field survey of the C-APE will be conducted. The field survey shall include, at a minimum, a pedestrian survey. If the archaeological sensitivity analysis suggests a high potential for buried archaeological resources in the C-APE, a subsurface survey shall also be conducted. If previous archaeological field surveys no more than two years old have been conducted for the C-APE, a new field survey is not necessary, unless their field methods do not conform to those required above (e.g., no subsurface survey was conducted but C-APE has high potential for buried archaeological resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms).

- An evaluation of any archaeological resources identified in the C-APE for California Register eligibility (i.e., as qualifying as historical resources, as defined in State CEQA Guidelines Section 15064.5) as well as whether they qualify as unique archaeological resources, pursuant to PRC Section 21083.2. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, and consultation with relevant Native American representatives (for indigenous resources).
- An assessment of potential project impacts on any archaeological resources identified in the C-APE that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2). This shall include an analysis of whether the project's potential impacts would materially alter a resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register.
- A technical report meeting U.S. Secretary of the Interior's Standards for archaeological technical reporting. This report will document the mitigation measures taken and any study results, and, following CEQA lead agency review and approval, completes the requirements of this mitigation measure.

If potentially significant impacts on archaeological resources that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2) are identified, develop, before project implementation and in coordination with interested or consulting parties (e.g., Native American representatives [for indigenous resources], historical societies [for historicera resources], local communities) an approach for reducing such impacts. If any such resources are on or in the tide and submerged lands of California, this process

shall also include coordination with the California State Lands Commission. Typical measures for reducing impacts include:

- Modify the project to avoid impacts on resources.
- Plan parks, green space, or other open space to incorporate the resources.
- Develop and implement a detailed archaeological resources management plan to recover the scientifically consequential information from archaeological resources before any excavation at the resource's location. Treatment for most archaeological resources consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project.
- Develop and implement interpretive programs or displays, and conduct community outreach.

# *Mitigation Measure CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation*

If archaeological resources are encountered during project construction or operation of any project permitted under the Order, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The lead agency and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the lead agency of their initial assessment. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, the lead agency shall consult with culturally affiliated California Native American Tribes to assess the find and determine whether it is potentially a tribal cultural resource.

If the lead agency determines, based on recommendations from the qualified archaeologist and culturally affiliated California Native American Tribes, that the resource is indigenous, that the resource may qualify as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of an identified indigenous resource is not feasible, the lead agency shall consult with a qualified archaeologist, culturally affiliated California Native American Tribes, and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and State CEQA Guidelines Section 15126.4. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Once treatment measures have been determined, the lead agency shall prepare and implement an archaeological (and/or

tribal cultural) resources management plan that outlines the treatment measures for the resource. Treatment measures typically consist of the following steps:

- Determine whether the resource qualifies as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074) through analysis that could include additional historical or ethnographic research, evaluative testing (excavation), or laboratory analysis.
- If it qualifies as a historical resource (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resource (per PRC Section 21083.2), implement measures for avoiding or reducing impacts such as the following:
  - Modify the project to avoid impacts on resources.
  - Plan parks, green space, or other open space to incorporate resources.
  - Recover the scientifically consequential information from the archaeological resource before any excavation at the resource's location. This typically consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project.
  - Develop and implement interpretive programs or displays.
- If it qualifies as a tribal cultural resource (per PRC Section 21074) implement measures for avoiding or reducing impacts such as the following:
  - Avoid and preserve the resource in place through measures that include but are not limited to the following:
    - Plan and construct the project to avoid the resource and protect the cultural and natural context.
    - Plan greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria.
  - Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following:
    - Protect the cultural character and integrity of the resource.
    - Protect the traditional use of the resource.
    - Protect the confidentiality of the resource.
  - Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place.

Mitigation Measures CUL-2 and CUL-3 would be implemented to reduce the impacts of restoration projects permitted under the Order. However, because the extent and

location of such actions are not known at this time, it is not possible to conclude that the mitigation measures, or equally effective mitigation measures, would reduce significant impacts to a less-than-significant level in all cases. Therefore, this impact would be **significant and unavoidable**.

# Impact 3.7-3: Implementing future restoration projects permitted under the Order could disturb human remains, including those interred outside of dedicated cemeteries.

# **Effects of Project Construction Activities**

Construction activities by project proponents for restoration projects permitted under the Order could involve ground disturbance (e.g., excavation, grading, drilling). However, the exact details, including precise locations, of any such construction activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any human remains, with either known or unknown locations, including any associated with archaeological resources.

Construction of new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) for restoration projects permitted under the Order could result in significant impacts on human remains through physical damage or destruction.

If construction activities for restoration projects permitted under the Order were to disturb or damage any human remains, the impact would be **potentially significant**. This Order does not authorize any activity adversely impacting an important historical or archeological resource; disturbing any human remains; or eliminating important examples of the major periods of California history or prehistory, unless the activity is authorized by the appropriate historical resources agencies.

# Effects of Constructed Facilities (Natural or Artificial Infrastructure) and Operations and Maintenance of those Facilities

Constructed facilities and operations by project proponents for restoration projects permitted under the Order could involve ground disturbance (e.g., excavation, drilling, grading). However, the exact details, including precise locations, of any such facilities and operational activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any human remains, either known or unknown, including those associated with archaeological resources.

Constructed facilities and operations associated with new infrastructure or modifications to existing infrastructure (e.g., bridges, culverts, fishways and screens, dams, levees, water conveyance features) could include ground-disturbing activities that could result in significant impacts on human remains through physical damage or destruction.

If constructed facilities and O&M for any of the restoration projects permitted under the General Order were to disturb or damage any human remains, the impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

#### Impact Conclusion

Construction activities and constructed facilities and O&M by project proponents for restoration projects permitted under the Order are the types of activities that have potential to affect human remains. However, the exact details, including precise locations, of any such activities have yet to be determined. Therefore, it is not known whether implementing restoration projects permitted under the Order would affect any human remains, either known or unknown, including those associated with archaeological resources. Factors necessary to identify specific impacts on human remains include the project's design, footprint, and type; the precise location of construction activities and facilities; and the type and location of operational activities. If any of the restoration projects permitted under the Order were to disturb or damage human remains, the impact would be **potentially significant**. As described above, the Order does not include any general protection measures applicable to this impact.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with Mitigation Measure CUL-4 would be required when applicable to a given project. Implementation of this mitigation measure would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

# *Mitigation Measure CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation*

If human remains are encountered during construction or operation and maintenance of any project permitted under the Order, all work shall immediately halt within 100 feet of the find and the lead agency shall contact the appropriate county coroner to evaluate the remains and follow the procedures and protocols set forth in State CEQA Guidelines Section 15064.5(e)(1). If human remains encountered are on or in the tide and submerged lands of California, the lead agency shall also contact the California State Lands Commission. If the coroner determines that the remains are Native American in origin, the appropriate county shall contact the California Native American Heritage Commission, in accordance with California Health and Safety Code Section 7050.5(c) and PRC Section 5097.98. Per PRC Section 5097.98, the project's lead agency shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the lead agency has discussed and conferred, as prescribed PRC Section 5097.98, with the most likely descendants and the property owner regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Mitigation Measures CUL-2, CUL-3, and CUL-4 would be implemented to reduce the impacts of restoration projects permitted under the Order. However, because the extent and location of such actions are not known at this time, it is not possible to conclude that the mitigation measures, or equally effective measures, would reduce significant impacts to a less-than-significant level in all cases. Therefore, this impact would be **significant and unavoidable**.