

1 3.5 CULTURAL AND PALEONTOLOGICAL

CULTURAL AND PALEONTOLOGICAL Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 3.5.1 Environmental Setting

3 Project Setting

4 The Project area is at the southern border of the Suisun Bay/Sacramento River Delta in
 5 unincorporated Contra Costa County, within the larger San Francisco Bay Area. It is
 6 situated approximately 0.6 mile to the east of the Concord Naval Weapons Station,
 7 Military Ocean Terminal; 0.8 mile to the south of Middle Ground Island in Suisun Bay;
 8 approximately 1.9 miles to the west of McAvoy Yacht Harbor in Bay Point and further
 9 (about 3 miles total along the shoreline) to the west of the mouth of the Sacramento
 10 River; and 0.9 mile to the north of Port Chicago Highway.

11 The Project site is located primarily offshore, with the only onshore portion being an
 12 existing levee road that may provide onshore access for emergency services, and the
 13 contractor’s shore base at McAvoy Yacht Harbor in Bay Point.

14 Records Search

15 The California Historic Resources Information System maintains regional offices that
 16 manage site records for known cultural resource locations and related technical studies.
 17 The regional office for Contra Costa County is the Northwest Information Center at
 18 Sonoma State University in Rohnert Park. Information regarding cultural resource
 19 studies and archaeological sites was requested using a 1-mile radius around the Project
 20 area. Sources reviewed included all known and recorded archaeological and historic
 21 sites and cultural resource reports. Additional resources consulted for relevant
 22 information included California Points of Historical Interest, California Historical
 23 Landmarks, and historic maps.

1 The archaeological record search for the Project was requested on March 13, 2014, and
2 was completed on April 16, 2014. The search found one resource within the Project
3 boundaries. This is 07-000806 and is the Atchison, Topeka & Santa Fe Railroad. There
4 are 59 historic resources within the 1-mile radius; these are predominantly located
5 within the Naval Weapons Station. No known archaeological resources are located
6 within the 1-mile radius. There have been 33 studies conducted within the 1-mile radius.
7 Several of these cover portions of the Project area.

8 There are no sites currently listed in the National Register, or the list of California
9 Historical Landmarks within the Project area. About 2 miles west of the Project area is
10 the site of the Port Chicago Naval Magazine National Memorial commemorating the 320
11 lives lost on July 17, 1944, in the explosion of the Liberty ship SS *E.A. Bryan* and the
12 Victory ship SS *Quinault Victory* during munitions loading.

13 The title to all abandoned shipwrecks, archaeological sites, and historical or cultural
14 resources on or in the tideland submerged lands of California is vested in the State and
15 under the jurisdiction of the CSLC. The CSLC online database for shipwrecks (CSLC
16 2014) was checked on March 17, 2014. The database lists shipwrecks by county and is
17 based primarily on historical accounts of these incidents. The database was searched
18 by County and then using those shipwrecks searched further by latitude and longitude.
19 No known shipwrecks appear within the Project footprint or within 0.5 mile of the
20 Project; however, the locations of many shipwrecks remain unknown.

21 **Prehistoric Background**

22 This section describes the cultural changes in the San Francisco Bay Area. No
23 discussion of the Clovis time (11,500 to 8000 calibrated Before Present [cal. B.P.]) is
24 provided, as there has been no evidence related to this time found in the area,
25 presumably because it has been submerged or buried (Milliken et al. 2007). The
26 sequence used here is very broad and includes the Lower, Middle, and Late Archaic
27 periods, and the Emergent Occupation.

28 *Lower Archaic (8000 To 3500 cal. B.P.)*

29 A generalized mobile forager pattern among prehistoric groups is characterized by
30 portable milling stones, milling slabs (metates) and handstones (manos), as well as
31 wide-stemmed projectile points. Archaeobotanical remains suggest an economy
32 focused on acorns.

33 *Middle Archaic (3500 to 500 cal. B.P.)*

34 During the Middle Archaic there appears to be an increase in regional trade and
35 possibly signs of sedentism. The first cut shell beads appear in mortuaries. Mortars and

1 pestles are documented shortly after 4000 cal. B.P. Net sinkers are a typical marker for
2 this time. The burial complexes with ornamental grave associations seem to represent a
3 movement from forager to semi-sedentary land use (Milliken et al. 2007).

4 *Upper Archaic (500 cal. B.P. to cal. Anno Domini [A.D.] 1050)*

5 The Upper Archaic period shows continued specialization and an increase in the
6 complexity of technology. Acorns and fish are the predominant food sources. New bone
7 tools and ornaments appear, including whistles and barbless fish spears. Beads
8 become very prominent with several types. Mortars and pestles continue to be the sole
9 grinding tools. Net sinkers disappear at most sites. Mortuary practices change from a
10 flexed position to an extended position.

11 *Emergent (cal. A.D. 1050 to Historic)*

12 Many archaeologists believe that craft specialization, political complexity, and social
13 ranking were highly developed. New bead types and multi-perforated and bar-scored
14 ornaments appear. The bow and arrow replace the dart and atlatl as the favored hunting
15 tools (Moratto 1984). Cultural traditions seem to be very similar to those witnessed at
16 the time of European contact.

17 **Ethnographic Background**

18 The Project lies within the territory occupied by the Native American group known to the
19 Spanish as the Costanoan (Levy 1978). The contemporary descendants of this group
20 are members of the Ohlone Indian Tribe. The Costanoan group occupied the coast of
21 California from San Francisco to Monterey and inland to include the coastal mountains
22 from the southern side of the Carquinez Strait to the eastern side of the Salinas River
23 south of the Chalone Creek.

24 Costanoan is a linguistic term for a family of eight related languages. Each language
25 was spoken by a distinct group of people within a recognized geographic area. In the
26 Martinez area the spoken language was Karkin. This language was spoken only in a
27 very small area and probably all the speakers were related. Political units within each
28 ethnic group were called tribelets and each tribelet contained between 50 to 500 people.
29 Each tribelet had one or more permanent villages and probably several temporary
30 camps within its territory.

31 The Costanoans were hunter gatherers, with acorns being the most important plant
32 food. Various roots, nuts, berries and seeds were important. The Costanoan group's
33 practices included managed burning of chaparral to encourage sprouting of seed plants
34 and improve browsing for deer and elk. The favored animals for hunting were deer and
35 rabbit. Whales and sea lions were eaten when found stranded on the beach. Waterfowl

1 were captured in nets using decoys. Important fish were steelhead, salmon, and
 2 sturgeon, and mussels and abalone were the preferred shellfish. Dome thatched
 3 houses with rectangular doorways and a central hearth were the standard dwellings.
 4 Technology included tule balsa canoes, bows and arrows, and baskets.

5 *Historical Background*

6 A number of Spanish expeditions passed through the area between 1769 and 1776,
 7 including those led by Portola, Fages, Anza, and Rivera. Although the exact routes of
 8 the early explorers cannot be determined, no explorers are thought to have traveled
 9 near the Project area (Beck and Haase 1974; Milliken 1995). The Spanish government
 10 founded missions and secular towns with the land itself being held by the government.
 11 The Mexican government closed the missions in the early 1830s and former mission
 12 lands were given to individuals as land grants.

13 *Historical Significance of the Structures*

14 The outlet pipe and the two timber pilings were built in 1989 as part of the original power
 15 plant. The power plant itself was demolished in 2013. The outlet pipe and two timber
 16 pilings do not meet the criteria for significance for a historical resource because they are
 17 less than 50 years old and do not meet any of the significance criteria for either the
 18 California Register of Historical Resources or the National Register of Historic Places.

19 **3.5.2 Regulatory Setting**

20 **Federal and State**

21 Federal and State laws and regulations pertaining to this issue area and relevant to the
 22 Project are identified in Table 3.5-1.

Table 3.5-1 Laws, Regulations, and Policies (Cultural Resources)

U.S.	Archaeological and Historic Preservation Act (AHPA)	The AHPA provides for the preservation of historical and archaeological data that might be irreparably lost or destroyed as a result of (1) flooding, the building of access roads, the erection of workmen’s communities, the relocation of railroads and highways, and other alterations of terrain caused by the construction of a dam by an agency of the U.S. or by any private person or corporation holding a license issued by any such agency; or (2) any alteration of the terrain caused as a result of a Federal construction project or federally licensed project, activity, or program. This Act requires Federal agencies to notify the Secretary of the Interior when they find that any federally permitted activity or program may cause irreparable loss or destruction of significant scientific, prehistoric, historical, or archaeological data. The AHPA built upon the national policy, set out in the Historic Sites Act of 1935, "...to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance...."
U.S.	Archaeological	The ARPA states that archaeological resources on public or Indian lands are an

Table 3.5-1 Laws, Regulations, and Policies (Cultural Resources)

	Resources Protection Act (ARPA)	<p>accessible and irreplaceable part of the nation’s heritage and:</p> <ul style="list-style-type: none"> • Establishes protection for archaeological resources to prevent loss and destruction due to uncontrolled excavations and pillaging; • Encourages increased cooperation and exchange of information between government authorities, the professional archaeological community, and private individuals having collections of archaeological resources prior to the enactment of this Act; • Establishes permit procedures to permit excavation or removal of archaeological resources (and associated activities) located on public or Indian land; and • Defines excavation, removal, damage, or other alteration or defacing of archaeological resources as a “prohibited act” and provides for criminal and monetary rewards to be paid to individuals furnishing information leading to the finding of a civil violation or conviction of a criminal violator. <p>ARPA has both enforcement and permitting components. The enforcement provision provides for the imposition of both criminal and civil penalties against violators of the Act. The ARPA’s permitting component allows for recovery of certain artifacts consistent with the standards and requirements of the National Park Service (NPS) Federal Archeology Program.</p>
U.S.	National Historic Preservation Act (NHPA) (16 USC 470 et seq.)	<p>This applies only to Federal undertakings. Archaeological resources are protected through the NHPA, as amended, and its implementing regulation, Protection of Historic Properties (36 CFR 800), the AHPA, and the ARPA. This Act presents a general policy of supporting and encouraging the preservation of prehistoric and historic resources for present and future generations by directing Federal agencies to assume responsibility for considering the historic resources in their activities. The State implements the NHPA through its statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), within the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level and advises Federal agencies regarding potential effects on historic properties. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the State’s jurisdictions, including commenting on Federal undertakings.</p>
U.S.	Other	<ul style="list-style-type: none"> • Executive Order 13158 requires Federal agencies to (1) identify actions that affect natural or cultural resources that are within a MPA; and (2) in taking such actions, to avoid harm to the natural and cultural resources that are protected by a MPA. • NPS Abandoned Shipwreck Act of 1987 (43 USC 2101–2106). Under this Act, states have the responsibility for management of living and nonliving resources in State waters and submerged lands, including certain abandoned shipwrecks. The NPS has issued guidelines that are intended to: maximize the enhancement of cultural resources; foster a partnership among sport divers, fishermen, archeologists, sailors, and other interests to manage shipwreck resources of the states and the U.S.; facilitate access and utilization by recreational interests; and recognize the interests of individuals and groups engaged in shipwreck discovery and salvage. Specific provisions of the Act’s guidelines include procedures for locating and identifying shipwrecks, methods for determining which shipwrecks are historic, and preservation and long-term management of historic shipwrecks.
CA	CEQA (Pub. Resources Code, § 21000 et seq.)	<p>As the CEQA lead agency, the CSLC is responsible for complying with all provisions of the CEQA and State CEQA Guidelines that relate to “historical resources.” A historical resource includes: (1) a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR); (2) a resource</p>

Table 3.5-1 Laws, Regulations, and Policies (Cultural Resources)

		included in a local register of historical resources or identified as significant in an historical resource survey; and (3) any resource that a lead agency determines to be historically significant for the purposes of CEQA, when supported by substantial evidence in light of the whole record. The CRHR was created to identify resources deemed worthy of preservation on a State level and was modeled closely after the National Register. The criteria, which are nearly identical to those of the National Register but focus on resources of statewide significance (see State CEQA Guidelines § 15064.5, subd. (a)(3)), are defined as any resource that meets any 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 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. Properties listed, or formally designated as eligible for listing, on the National Register are automatically listed on the CRHR, as are certain State Landmarks and Points of Interest. A lead agency is not precluded from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1, subdivision (j), or 5024.1 (State CEQA Guidelines § 15064.5, subd. (a)(4)).
CA	Health and Safety Code § 7050.5	This code states that if human remains are exposed during construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code section 5097.998. The Coroner has 24 hours to notify the Native American Heritage Commission (NAHC) if the remains are determined to be of Native American descent. The NAHC will contact most likely descendants, who may recommend how to proceed.

1 **Local**

2 Contra Costa County General Plan Open Space Element, Historic and Cultural
3 Resource Goals include the following.

- 4 • 9-31 To identify and preserve important archaeological and historic resources
5 within the County.
- 6 • 9-32 Areas which have identifiable and important archaeological or historic
7 significance shall be preserved for such uses, preferably in public ownership

8 **3.5.3 Impact Analysis**

9 **a) Cause a substantial adverse change in the significance of a historical resource**
10 **as defined in §15064.5?**

11 **No Impact.** As described above, a records search was conducted for the Project vicinity
12 that found one resource (07-000806) within the Project boundaries, and a number of
13 others within the search radius. None of these identified historic resources would be
14 affected by Project activities. Additionally, the outfall pipe and piers are both less than

1 50 years old and do not qualify as significant historical resources. Therefore, there
2 would be no change in the significance of a historical resource.

3 ***b) Cause a substantial adverse change in the significance of a unique***
4 ***archaeological resource pursuant to §15064.5?***

5 **No Impact.** Project activities will occur predominantly in the waters of the Suisun Bay, in
6 areas that have been previously disturbed by the placement of the pipe. There are no
7 known archaeological sites within a 1-mile radius of the Project. The historic maps
8 indicate that the area has been marsh since at least 1894, which would reduce the
9 likelihood of unique archaeological resources. Therefore, there would be no change in
10 the significance of a unique archaeological resource.

11 ***c) Directly or indirectly destroy a unique paleontological resource or site or***
12 ***unique geologic feature?***

13 **No Impact.** The only ground disturbance during Project activities would occur in the
14 upper layers of sediment within the Bay during the removal of the pipeline and the
15 marker pilings; this area was previously disturbed by pipeline installation activities in the
16 relatively recent past. In addition, the geologic map indicates that this area is underlain
17 by mud flats from the late Holocene. Therefore, there would be no chance that the
18 Project would directly or indirectly destroy a unique paleontological resource, site, or
19 geologic feature.

20 ***d) Disturb any human remains, including those interred outside of formal***
21 ***cemeteries?***

22 **No Impact.** Project activities are largely confined to work within waters of the Suisun
23 Bay, with no or limited shoreline activities. There are no known existing cemeteries,
24 previously recorded Native American or other human remains within or directly adjacent
25 to the Project. The Project work would also occur in areas already disturbed by the
26 pipeline and piling installation activities, during which no human remains were found.
27 Therefore, the potential for the inadvertent discovery of Native American or other human
28 remains during subsurface activity associated with the Project is considered extremely
29 low.

30 **3.5.4 Mitigation Summary**

31 The Project would not result in significant impacts to cultural resources; no mitigation is
32 required.