

**MITIGATED NEGATIVE DECLARATION
PORT COSTA WHARF DECONSTRUCTION
PROJECT**

Final December 2013



Prepared by:

California State Lands Commission
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Applicant:

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LIST OF ABBREVIATIONS AND ACRONYMS

AADT	annual average daily traffic
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing materials
AQMD	Air Quality Management District
BAAQMD	Bay Area Air Quality Management District
BCDC	San Francisco Bay Conservation and Development Commission
BMP	Best Management Practice
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCTA	Contra Costa Transportation Authority
CDFW	California Department of Fish and Wildlife
CEQ	Council of Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalents
CRHR	California Register of Historic Resources
CSLC	California State Lands Commission
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWP	Contra Costa County Watershed Program
dBA	A-weighted decibels
DDT	dichlorodiphenyltrichloroethane
DOT	U.S. Department of Transportation
DPM	Diesel particulate matter
DTSC	Department of Toxic Substances Control (Cal/EPA)

EBRPD	East Bay Regional Park District
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
ESA	Endangered Species Act
ESU	Evolutionarily Significant Units
FMP	Fishery Management Plan
GHG	Greenhouse Gas
HMMP	Hazardous Material Management Plan
hp	horsepower
I-	Interstate
JSUSD	John Swett Unified School District
LBP	lead-based paint
L _{dn}	day-night average sound level
LOS	Level of Service
MCE	Maximum Credible Earthquake
MHW	mean high water
MLLW	mean lower low water
MMP	Mitigation Monitoring Plan
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MOT	Marine Oil Terminal
mph	miles per hour
MT	metric ton
MUSD	Martinez Unified School District
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Protection Act
NMFS	National Marine Fisheries Service
NMOG	non-methane organic gases
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O ₃	ozone
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
OSPR	Office of Spill Prevention and Response (CDFW)
Pb	lead

PCBs	polychlorinated biphenyls
PM	particulate matter
PM ₁₀	particulate matter less than 10 micrometers
PM _{2.5}	particulate matter less than 2.5 micrometers
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RWQCB	San Francisco Bay Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SIP	State Implementation Policy
SO ₂	sulfur dioxide
SPRR	Southern Pacific Railroad Company
SR-4	State Route 4
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCDD	tetrachlorodibenzo-p-dioxin
TMDL	total maximum daily loads
TSCA	Toxic Substances Control Act
TXI	TXI/Pacific Custom Materials, Inc.
UPRR	Union Pacific Railroad
URBEMIS	urban emissions software
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEAP	Worker Environmental Awareness Program
WL	Watch List

2 This Mitigated Negative Declaration (MND) has been prepared by the California State
 3 Lands Commission (CSLC), as lead agency under the California Environmental Quality
 4 Act (CEQA) (Pub. Resources Code, § 21000 et seq.), to analyze and disclose the
 5 environmental effects associated with the proposed Port Costa Wharf Deconstruction
 6 Project (Project). The Project would authorize Phillips 66 Company (Phillips 66 or
 7 Applicant) to remove an existing non-operational marine oil terminal (MOT) wharf
 8 located near the town of Port Costa in accordance with the terms and conditions of its
 9 existing CSLC Lease No. PRC 2869.1, which expires on November 30, 2014. The
 10 original MOT was constructed around 1908 and later expanded. Operations at the MOT
 11 site ceased in 1968, and in 1970 a fire destroyed more than half of the wharf, rendering
 12 it unusable. The 1.16-acre lease area was revised to 0.48 acre in November 1984,
 13 following removal of timbers and other material destroyed in the fire. The CSLC
 14 prepared an MND because it determined that, while the Initial Study identified
 15 potentially significant impacts related to the removal of the existing wharf, measures
 16 have been incorporated into the Project proposal and agreed to by Phillips 66 that avoid
 17 or mitigate those impacts to a point where no significant impacts would occur.

18 **PROJECT LOCATION**

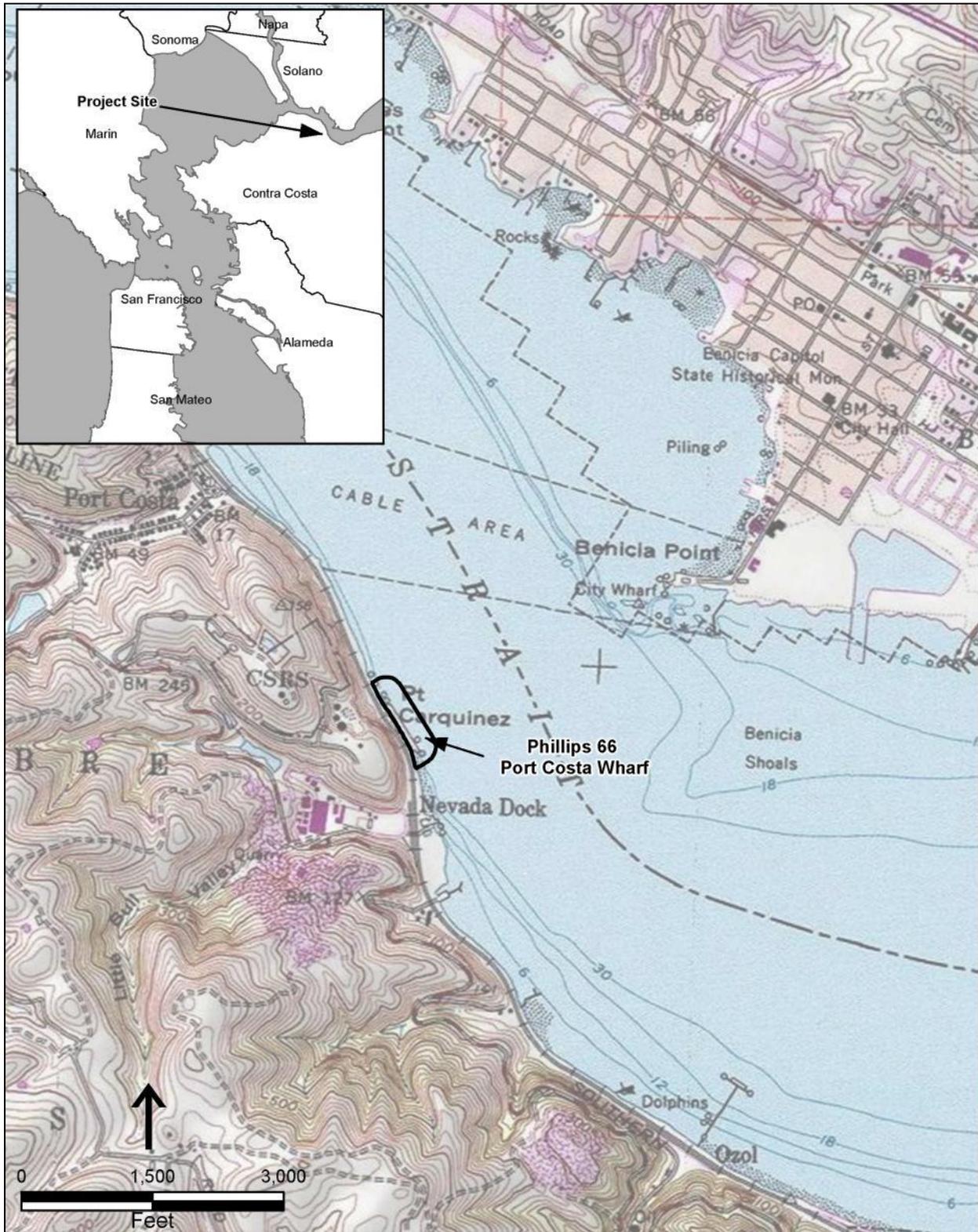
19 The Project site is located in the Carquinez Strait in unincorporated Contra Costa
 20 County, approximately 0.6 mile southeast of Port Costa and east of Carquinez Scenic
 21 Drive, and comprises approximately 8.89 acres. Benicia is about 0.75 mile northeast
 22 across the Carquinez Strait, Union Pacific Railroad (UPRR) tracks run parallel to the
 23 shoreline on an embankment to the west of the site, and segments of the East Bay
 24 Regional Parks District (EBRPD) Carquinez Strait Regional Shoreline Park are situated
 25 along the shoreline both downstream and upstream of the wharf remains. The Project
 26 would be carried out primarily offshore; the only onshore portions are two temporary
 27 staging areas, one within the former TXI/Pacific Custom Materials, Inc. (TXI) brickyard
 28 property located southwest of the wharf and the other offsite at the selected contractor's
 29 shore base. Figures ES-1 through ES-3 show the general Project site location and site
 30 maps.

31 **PROPOSED PROJECT**

32 To comply with its lease with the CSLC, Phillips 66 proposes to remove/deconstruct all
 33 concrete and wooden decks and associated fixtures, wood- and steel-reinforced
 34 concrete piles, mooring dolphins, pipes, and miscellaneous riprap and debris associated
 35 with the former MOT (Figure ES-2). The Project's goal is the safe removal of all
 36 remaining materials and improvements associated with the wharf, while maintaining
 37 embankment stability to ensure the safety of existing, adjacent rail operations.

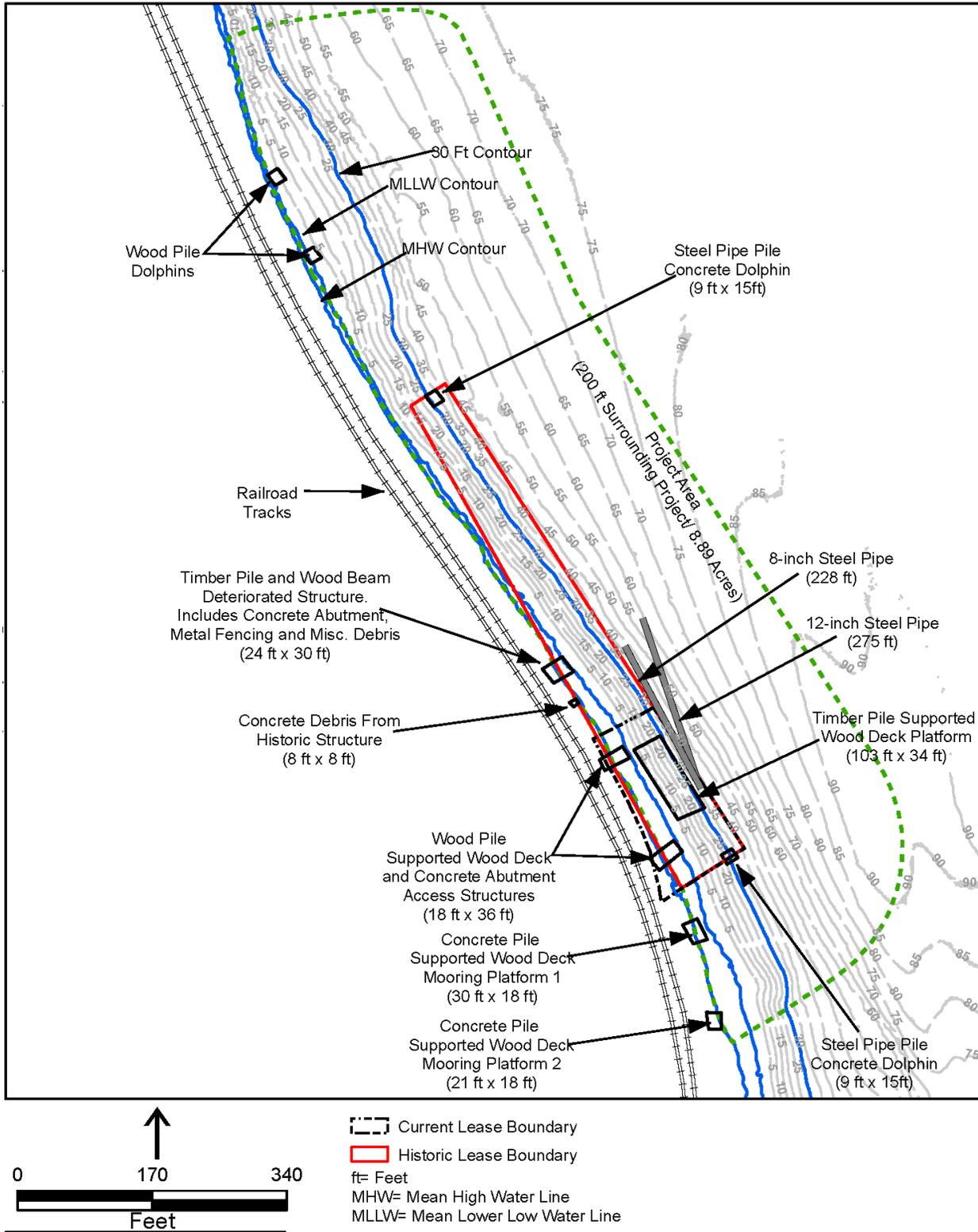
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Figure ES-1. Project Site Location



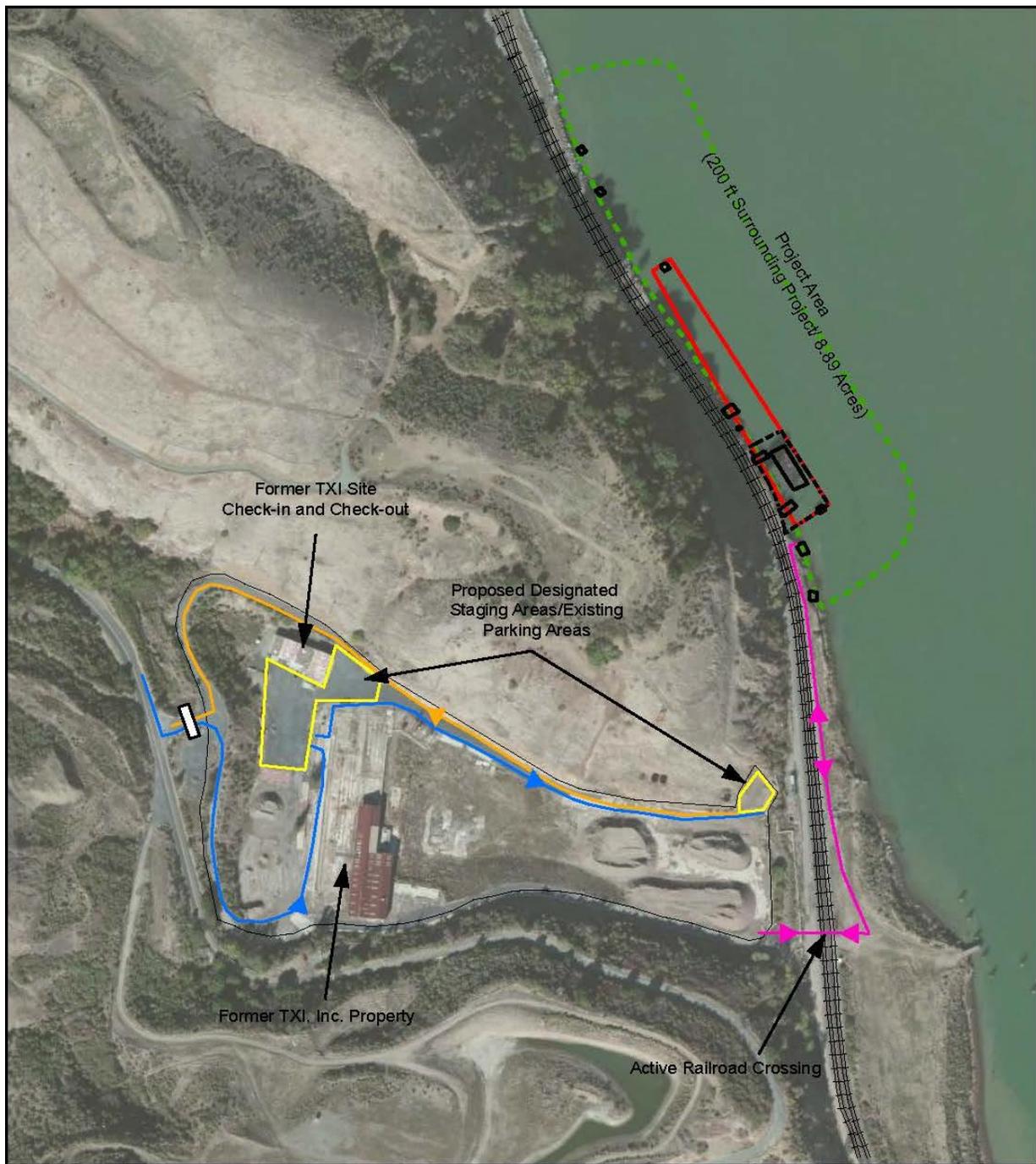
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Figure ES-2. Site Map

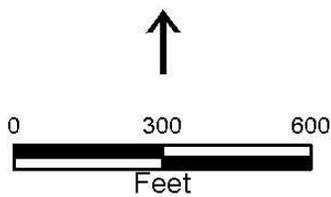


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Figure ES-3. Potential Onshore Parking and Storage Facilities



2



- Historic Lease Boundary
 - 200 ft Project Buffer
 - Proposed Staging Areas for Parking, Sanitation Stations and Other Incidental Uses (Not to exceed 1.5 acres) within Existing Parking Areas
 - Egress
 - Ingress
 - Pedestrian Path to Site
 - Entry Gate
- ft = Feet

1 Removal of the wharf remnants would involve several types of work activities, including
2 the use of cutting torches (hot-work), air- or electric-powered tools, rigging equipment,
3 and barge-mounted cranes. Removal of large structural pieces would have tag lines
4 attached to facilitate recovery from the Carquinez Strait in the event of an accident.
5 Deconstruction materials that cannot be salvaged would be disposed of through sale as
6 components for scrap or disposed of in a permitted landfill. As part of the Project, the
7 Applicant would attempt to totally remove the piles; however, if total removal is not
8 successful, the piles would be cut off approximately 2 feet below the mud line.
9 Deconstruction activities would be conducted for 8 hours a day, 5 days per week.
10 Phillips 66 plans to complete deconstruction and removal in no more than 5 months.

11 Temporary construction facilities in and near the Project site may be required during the
12 Project to support the safe and efficient execution of the work. Most temporary facilities
13 would be located on a barge or in the water (i.e., marker buoys) within the 8.89-acre
14 Project site. The deconstruction activities would only be conducted from vessels located
15 offshore and at the selected contractor's existing shore base and associated facilities.
16 Temporary facilities likely to be located offshore within the Project site include:

- 17 • barge-mounted first-aid and safety stations at the marine work site;
- 18 • barge-mounted portable sanitary stations at the marine work site;
- 19 • barge-mounted office and break areas at the marine work site;
- 20 • barge-mounted secured storage facilities;
- 21 • utilities as required to execute the work; and
- 22 • marker buoys delineating the deconstruction work area.

23 To facilitate completing the deconstruction work, incidental temporary facilities such as
24 parking, storage of non-hazardous materials (not used for the deconstruction work on
25 water), and sanitary stations located onshore near the Project site may also be provided
26 to allow for access from onshore locations for the Applicant, its contractors, site
27 monitors, or agency representatives. A temporary construction easement would be
28 needed within the adjacent uplands to accommodate these temporary facilities. The
29 proposed temporary upland facilities would be located about 700 feet southwest and
30 upland of the Project site on the adjacent former TXI property (see Figure ES-3). The
31 selected contractor's shore base and associated facilities may also be used and would
32 include secured storage facilities, shore-side staging areas, and landings/dock facilities.
33 These facilities already exist, and, should they be needed, are located off the Project
34 site and would not require new construction.

35 **ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES**

36 The evaluation of environmental impacts provided in this MND is based, in part, on the
37 Appendix G Checklist. An impact assessment matrix is provided as part of the
38 evaluation for each environmental issue area, with impact levels defined as follows:

- 1 • **Potentially Significant Impact.** This column is checked if there was substantial
2 evidence that a Project-related environmental effect may be significant. If one or
3 more “Potentially Significant Impacts” are identified, a Project Environmental
4 Impact Report must be prepared.
- 5 • **Less than Significant with Mitigation.** This column is checked when the
6 Project may result in a significant environmental impact, but the incorporation of
7 identified applicant or project-specific mitigation measures into the Project will
8 reduce the identified effect(s) to a less than significant level.
- 9 • **Less than Significant Impact.** This column is checked when the Project would
10 not result in any significant effects. The Project’s impact was less than significant
11 even without the incorporation of a project-specific mitigation measure.
- 12 • **No Impact.** This column is checked when the Project would not result in any
13 impact in the category or the category did not apply.

14 The environmental factors checked below in Table ES-1 would be potentially affected
15 by this Project; a checked box indicates that at least one impact would be a “Potentially
16 Significant Impact” except that the Applicant has agreed to Project revisions, including
17 the implementation of mitigation measures (MMs), that reduce the impact to “Less than
18 Significant with Mitigation,” as detailed in Section 3 of this MND.

19 **Table ES-1. Environmental Issues and Potentially Significant Impacts**

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forest Resources	<input checked="" type="checkbox"/> Air Quality/Greenhouse Gas Emissions
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology and Soils
<input checked="" type="checkbox"/> Hazards and Hazardous Materials	<input checked="" type="checkbox"/> Hydrology and Water Quality	<input type="checkbox"/> Land Use and Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population and Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities and Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

20 Table ES-2 lists proposed MMs designed to reduce or avoid potentially significant
21 impacts. With implementation of the proposed MMs, all Project-related impacts would
22 be reduced to less than significant. A Mitigation Monitoring Program (MMP) has been
23 developed as a component of the MND (see Section 5.0). Either CSLC staff or a
24 designee will oversee monitoring procedures and ensure that required measures are
25 implemented properly.

1 **Table ES-2. Summary of Proposed Project Mitigation Measures**

Air Quality
MM AIR-1a: Basic Construction Measures
MM AIR-1b: Vessels and Equipment
MM AIR-1c: Nearby Sensitive Receptors
Biological Resources
MM BIO-1a: Disturbance Minimization
MM BIO-1b: Worker Environmental Awareness Program (WEAP)
MM BIO-2: Lead-Based Paint (LBP) Management Plan
MM BIO-3: Deconstruction and Seafloor Debris Removal Plan
MM BIO-4a: Bird Nesting Prevention
MM BIO-4b: Pre-deconstruction Nesting Bird Survey and Monitoring
MM BIO-4c: Work Zones around Active Nests
MM BIO-5: Avoidance and Reduced Speed Limits
MM BIO-6: Best Management Practices for Aquatic Invasive Species.
Hazards and Hazardous Materials
MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory
MM HAZ-1b: Hazardous Materials Management Plan (HMMP)
MM HAZ-2: Post Construction Surveys
Hydrology and Water Quality
MM WQ-1: Water Quality/Storm Water Pollution Prevention Plan
Transportation and Traffic
MM TT-1: Traffic Management Plan

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1.1 PROJECT TITLE

Port Costa Wharf Deconstruction Project

1.2 CEQA LEAD AGENCY NAME AND ADDRESS

California State Lands Commission (CSLC)
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[\(916\) 574-1890](tel:(916)574-1890)

1.3 PROJECT APPLICANT NAME AND ADDRESS

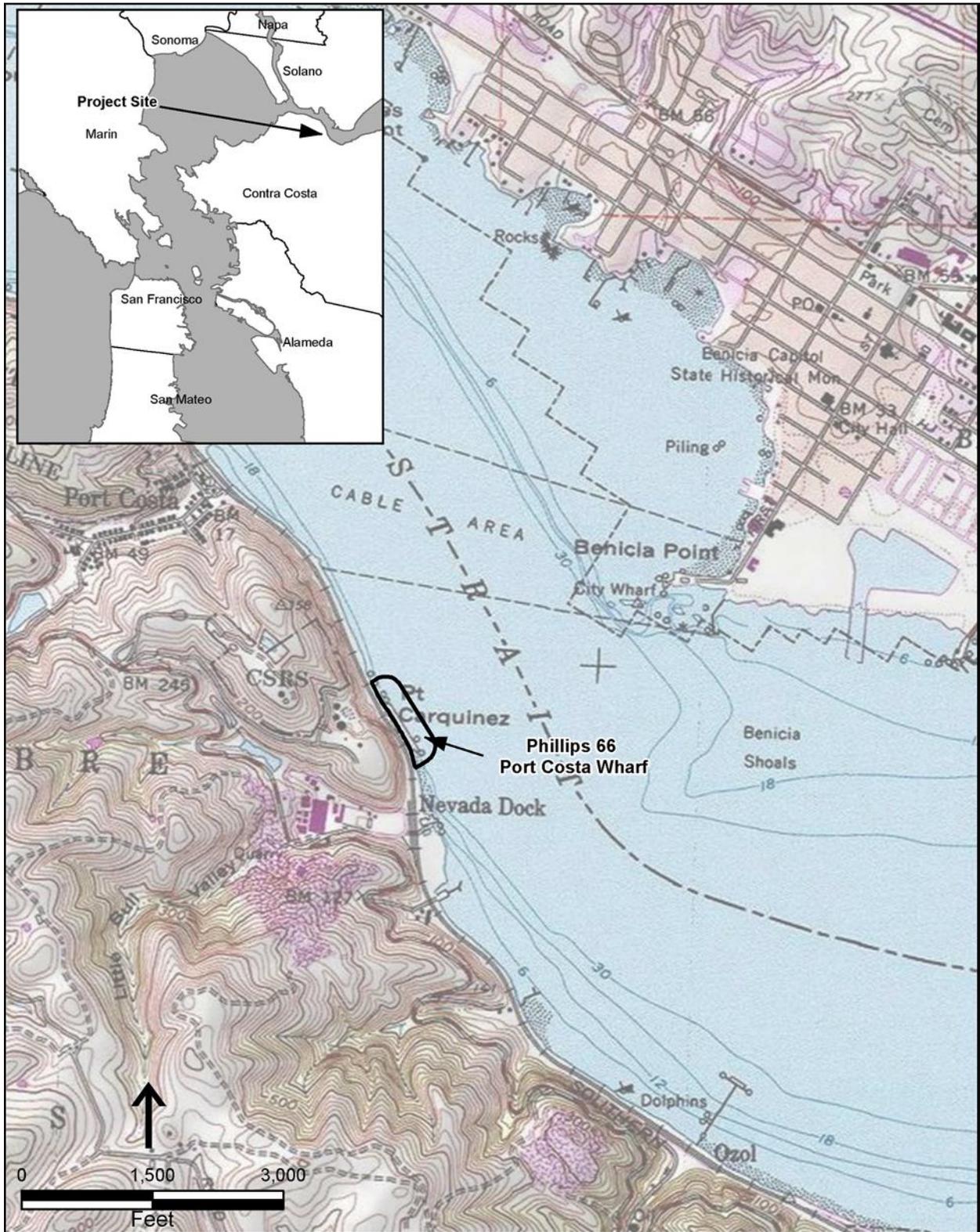
Phillips 66 Company
Sharon Evans, Program Manager
1380 San Pablo Avenue, Rodeo, CA 94572

1.4 PROJECT LOCATION AND REGULATORY GUIDANCE

Phillips 66 Company (Phillips 66 or Applicant) seeks authorization from the CSLC to remove a non-operational marine oil terminal (MOT) located near Port Costa (Port Costa Wharf), in the Carquinez Strait (see Figure 1-1) in accordance with the terms and conditions of its existing CSLC lease (PRC 2869.1), which expires in 2014. The CSLC is the lead agency under the California Environmental Quality Act (CEQA) responsible for preparing this Mitigated Negative Declaration (MND), because the CSLC has jurisdiction over sovereign lands or lands held in public trust by the State of California, which include the tide and submerged lands situated in the Carquinez Strait below the ordinary high water mark (OHWM). The MND may be used by the CSLC as supporting information in determining whether the Port Costa Wharf Deconstruction Project (Project) may have a significant effect on the environment and to exercise its jurisdictional responsibilities for the proposed Project. Other agencies with review and/or approval over the Project are noted in Section 1.7, Permits, Approvals, and Regulatory Requirements.

1

Figure 1-1. Project Site Location



1 1.5 SUMMARY OF FINDINGS

2 The Project is a demolition project that does not involve new permanent structures,
 3 facilities or activities; however, some impacts could result from the proposed removal
 4 and demolition of the MOT decks and piles. These impacts could be reduced to less
 5 than significant with the incorporation of mitigation measures. Based on the issues
 6 evaluated in Section 3, Environmental Checklist, the CSLC has determined that the
 7 Project would have no impact, less than significant impact, or less than significant
 8 impacts after the incorporation of mitigation measures to the following resource areas:

No Impact	Less than Significant Impact	Less than Significant with Mitigation
<ul style="list-style-type: none"> • Aesthetics • Agricultural Resources • Cultural Resources • Geology/Soils • Mineral Resources • Population and Housing • Public Services • Utilities and Service Systems 	<ul style="list-style-type: none"> • Land Use and Planning • Noise • Recreation 	<ul style="list-style-type: none"> • Air Quality/Greenhouse Gas Emissions • Biological Resources • Hazards and Hazardous Materials • Hydrology and Water Quality • Transportation and Traffic

9 1.6 PUBLIC REVIEW AND COMMENT

10 Consistent with the direction provided in State CEQA Guidelines sections 15072 and
 11 15073, this MND was circulated to local and State agencies and to interested
 12 individuals for review and comment during a 30-day public review period. Prior to taking
 13 action on adoption of the MND and approval of the Project, the CSLC will consider the
 14 proposed MND along with all comments received.

15 1.7 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

16 The CSLC's authority is set forth in Division 6 of the California Public Resources Code
 17 and it is regulated by the California Code of Regulations, Title 2, sections 1900–2970.
 18 The CSLC has authority to issue leases or permits for the use of sovereign lands held in
 19 the public trust, including all ungranted tidelands, submerged lands, and the beds of
 20 navigable lakes and waterways, as well as certain residual and review authority for
 21 tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub.
 22 Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or
 23 ungranted, as well as navigable lakes and waterways, are subject to the protections of
 24 the Common Law Public Trust. As general background, the State of California acquired
 25 sovereign ownership of all tidelands and submerged lands and beds of navigable lakes
 26 and waterways upon its admission to the U.S. in 1850. The State holds these lands for
 27 the benefit of all people of the State for statewide Public Trust purposes, which include

1 but are not limited to waterborne commerce, navigation, fisheries, water-related
2 recreation, habitat preservation and open space. On tidal waterways, the State's
3 sovereign fee ownership extends landward to the mean high tide line, except for areas
4 of fill or artificial accretion.

5 For the proposed Project, the CSLC has received an application to remove a non-
6 operational MOT (Port Costa Wharf). The CSLC must comply with CEQA when it
7 undertakes an activity defined by CEQA as a "project" which may cause either a direct
8 physical change in the environment or a reasonably foreseeable indirect change in the
9 environment and that must receive discretionary approval (i.e., the CSLC has authority
10 to approve, approve with conditions, or deny the requested lease, permit, or other
11 entitlement). CEQA requires the CSLC to identify the significant environmental impacts
12 of its actions and to avoid or mitigate those impacts, if feasible. In addition to the CSLC,
13 the Project is subject to the review and approval of other federal, State and local entities
14 with statutory and/or regulatory jurisdiction over aspects of the Project (see Table 1-1).
15 Table 1-2 identifies coastal-related U.S. and State laws and programs that are relevant
16 to the Project; additional laws, regulations, and policies are listed in Section 3,
17 Environmental Analysis and Checklist, of this MND for each environmental issue area.

18 **1.8 ORGANIZATION OF THIS MND**

- 19 • **Section 1.0** - Provides an Introduction to the purpose and need for the Project as
20 well as the Purpose and Scope of this MND.
- 21 • **Section 2.0** - Describes the Project, its location, layout and facilities, and
22 presents an overview of its operation.
- 23 • **Section 3.0** - Presents the CEQA Initial Study, which describes existing
24 environmental conditions, Project-specific impacts, mitigation measures, and
25 potential mandatory findings of significance.
- 26 • **Section 4.0** - Discusses Socioeconomic Effects and Environmental Justice.
- 27 • **Section 5.0** - Presents the Mitigation Monitoring Program (MMP).
- 28 • **Section 6.0** - Presents information on those who prepared the MND and lists
29 reference materials used to prepare the MND.

1 **Table 1-1. Other Agencies with Review/Approval over Project Activities**

Permitting Agency		Anticipated Approvals/Regulatory Requirements
Federal	U.S. Army Corps of Engineers (USACE)	Section 10 of the Rivers and Harbors Act Clean Water Act (CWA) Section 404 (Letter of Permission)
	U.S. Fish and Wildlife Service (USFWS)	Section 7 Consultation under Federal Endangered Species Act (Biological Opinion, if necessary)
	National Marine Fisheries Service (NMFS)	
	U.S. Coast Guard (USCG)	The Ports and Waterways Safety Act (Notification)
State	California Department of Fish and Wildlife (CDFW)	California Endangered Species Act Fish and Game Code sections 1600-1616 Streambed Alteration Agreement
	California Department of Transportation (Caltrans)	California Streets and Highways Code sections 660-734 Encroachment Permit Transportation Permit (tentative)
	San Francisco Bay Conservation and Development Commission (BCDC)	San Francisco Bay Plan (Administrative Permit)
	San Francisco Bay Regional Water Quality Control Board (RWQCB)	CWA Section 401 Water Quality Certification
Local, Regional, Other	Bay Area Air Quality Management District (BAAQMD)	2010 Bay Area Clean Air Plan (Consistency Determination)
	Contra Costa County	Contra Costa County Code (Demolition Permit and Consistency Determination)
	East Bay Regional Park District (EBRPD)	Encroachment Permit (if necessary)
	Union Pacific Railroad (UPRR)	Access Agreement (for work within the UPRR right-of-way)

Table 1-2. Major Coastal Laws, Regulations, and Policies Potentially Applicable to the Project (Multiple Environmental Issues)

U.S.	Coastal Zone Management Act (CZMA) (42 United States Code [USC] 4321 et seq.)	The CZMA recognizes a national interest in coastal zone resources and in the importance of balancing competing uses of those resources, giving full consideration to aesthetic, cultural and historic, ecological, recreational, and other values as well as the needs for compatible economic development. Pursuant to the CZMA, coastal states develop and implement comprehensive coastal management programs (CMPs) that describe uses subject to the CMP, authorities and enforceable policies, and coastal zone boundaries, among other elements. The CZMA also gives state coastal management agencies regulatory control (“federal consistency” review authority) over federal activities and federally licensed, permitted or assisted activities, if the activity affects coastal resources; such activities include military projects at coastal
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Table 1-2. Major Coastal Laws, Regulations, and Policies Potentially Applicable to the Project (Multiple Environmental Issues)

		locations and outer continental shelf oil and gas leasing, exploration and development. The California Coastal Commission (CCC) and San Francisco Bay Conservation and Development Commission (BCDC) coordinate California’s federally approved CMPs and federal consistency reviews within their respective jurisdictions.
CA	<p>McAteer-Petris Act (Gov. Code §§ 66650-66661)</p> <p>Suisun Marsh Preservation Act of 1977 (Pub. Resources Code §§ 29000-29014)</p> <p>Coastal Management Program for San Francisco Bay</p>	<p>BCDC, which was created by the State Legislature in 1965, is charged with:</p> <ul style="list-style-type: none"> • Regulating filling and dredging in San Francisco Bay (including San Pablo and Suisun Bays, sloughs and certain creeks and tributaries that are part of the Bay system, salt ponds, and certain other areas diked-off from the Bay). • Protecting Suisun Marsh, the largest remaining wetland in California, by administering the Suisun Marsh Preservation Act in cooperation with local governments. • Regulating new development within the first 100 feet inland from the Bay to ensure that maximum feasible public access to the Bay is provided. • Minimizing pressures to fill the Bay by ensuring that the limited amount of shoreline area suitable for high priority water-oriented uses is reserved for ports, water-related industries, water-oriented recreation, airports and wildlife areas. • Pursuing an active planning program to study Bay issues so that BCDC plans and policies are based upon the best available current information. • Administering the federal CZMA within the San Francisco Bay segment of the California coastal zone to ensure that federal activities reflect BCDC policies. • Participating in a region wide program to prepare a Long Term Management Strategy for dredging and dredge material disposal in San Francisco Bay. • Participating in California's oil spill prevention and response planning program. <p>The McAteer-Petris Act authorizes BCDC to prepare an enforceable plan for the long-term use of the bay and its shoreline through the San Francisco Bay Plan (Bay Plan) and to incorporate the Plan’s policies into State law. Permits from BCDC are required for most projects proposed along the shoreline within its jurisdiction. Nearly all of the policies and the implementing authority for the Coastal Management Program for San Francisco Bay are contained in individual pieces of comprehensive coastal zone management legislation (McAteer-Petris and Suisun Marsh Preservation Acts), in separate comprehensive plans (e.g., Bay Plan and Suisun Marsh Protection Plan), and in other appendices to the Program document.</p>

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND AND NEED FOR THE PROPOSED PROJECT

Phillips 66 seeks authorization to remove the existing non-operational marine oil terminal (MOT) located near the town of Port Costa, in the Carquinez Strait (see Figures 1-1 and 2-1) in accordance with the terms and conditions of its existing California State Lands Commission (CSLC) Lease No. PRC 2869.1, which expires on November 30, 2014. The original MOT, constructed around 1908 and later expanded, was used for storage and shipment of various petroleum products, including heavy fuel oil, residual fuel oil, gas oil, and catalytic cracker charge stock. Operations at the MOT site ceased in 1968, and in 1970 a fire destroyed more than half of the wharf, rendering it unusable. The 1.16-acre lease area was revised to 0.48 acre in November 1984, following the removal of timbers and other material destroyed during the fire. The Project's goal is the safe removal of all remaining materials and improvements associated with the wharf, while maintaining embankment stability to ensure the safety of existing, adjacent rail operations.

2.2 PROJECT LOCATION

The Project site is located in the Carquinez Strait in unincorporated Contra Costa County, about 0.6 mile southeast of the town of Port Costa and east of Carquinez Scenic Drive, and comprises approximately 8.89 acres including a 200-foot offshore buffer around the improvements to be removed. Benicia is about 0.75 mile northeast across the Carquinez Strait, Union Pacific Railroad (UPRR) tracks run parallel to the shoreline immediately west of the Project site, and segments of the East Bay Regional Parks District (EBRPD) Carquinez Strait Regional Shoreline Park are situated along the shoreline both downstream and upstream of the wharf remains. The site is located primarily offshore, with the only onshore portion being two temporary staging areas, one within the former TXI/Pacific Custom Materials, Inc. (TXI) brickyard property located southwest of the wharf and the other located offsite at the selected contractor's shore base. Figure 2-1 shows the general Project layout.

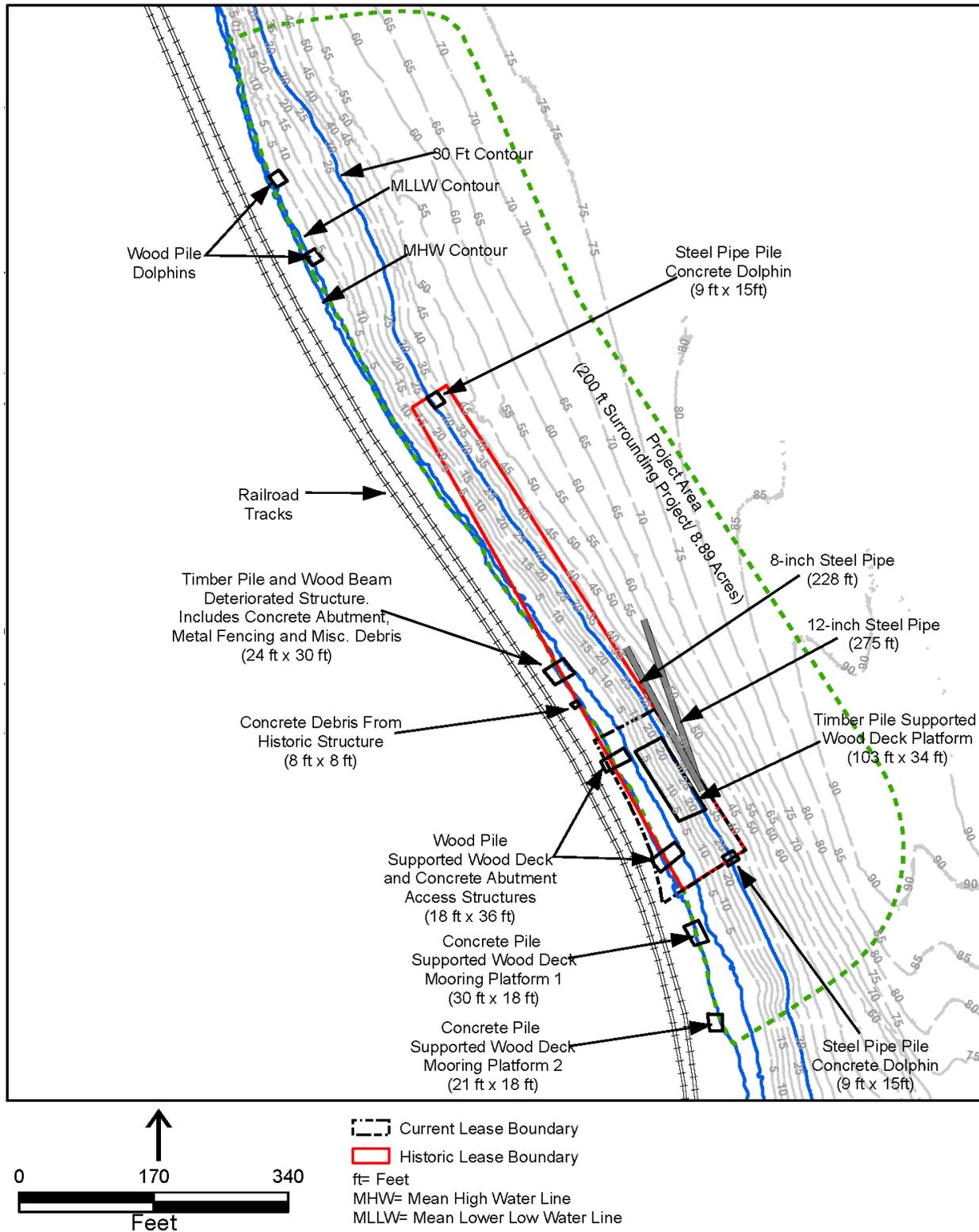
2.3 EXISTING FACILITIES

The remaining visible structures include:

- One approximately 34-foot by 103-foot remnant main wharf structure running parallel to the western shoreline of the Carquinez Strait;
- Three deteriorated timber-pile-supported wood-beam/deck platforms/piers of approximately 24-foot by 30-foot, 18-foot by 36-foot, and 18-foot by 36-foot size, respectively, each perpendicular to the shoreline, which were formerly connected to the larger wharf structure;

1

Figure 2-1. Project Site Map



- 1 • Two steel-pipe-pile and concrete-deck mooring dolphins of approximately 9-foot
2 by 15-foot size, located northwest and southeast of the main wharf structure;
- 3 • Two concrete-pile-supported wood-deck mooring platforms of 30 feet by 18 feet
4 and 21 feet by 18 feet, respectively, located on the shoreline south of the main
5 wharf structure; and
- 6 • Two wood-pile dolphins consisting of a total of 10 to 13 piles, located in the
7 northernmost section of the Project site.

8 Miscellaneous concrete, metal, and timber debris was observed along the shoreline.
9 Concrete slabs along the shore may have been former wharf abutments. The concrete
10 slabs and debris are generally functioning as riprap shore protection. It is not clear
11 where the debris came from, but it may be intentional riprap placed on the adjacent rail
12 bed embankment over a number of years. Phillips 66 proposes to keep the concrete
13 slabs and debris in place to minimize the potential for destabilizing the embankment.

14 **2.3.1 Description of the Proposed Project**

15 MOT deconstruction would be initiated using a CSLC-approved, Project-specific Marine
16 Safety Plan. Key MOT deconstruction work activities would include:

- 17 • Wharf deck fixtures removal;
- 18 • Concrete and wood deck and mooring dolphin deconstruction;
- 19 • Wood, concrete, and steel pile removal or deconstruction; and
- 20 • Removal of debris and marker buoys.

21 Removal of the wharf remnants would involve several types of work activities including
22 the use of cutting torches (hot-work), air- or electric-powered tools, rigging equipment,
23 and barge-mounted cranes. Large pieces of structures to be removed would have tag
24 lines attached to facilitate recovery from the Carquinez Strait in the event of an accident.
25 Deconstruction materials that cannot be salvaged would be disposed of through sale as
26 components for scrap or disposed of in a permitted landfill.

27 **2.3.2 Deck Fixtures Removal/Deconstruction**

28 Deck fixtures (e.g., metal fenders, mooring bits, mooring cleats, nails, coils, wiring,
29 chain-link fencing, and mooring posts and remnants of equipment) would be removed
30 and deconstructed. Fixture removal may proceed concurrently with deck deconstruction.

31 **2.3.3 Concrete Deck Deconstruction**

32 The MOT includes two mooring dolphin decks made of concrete. Each mooring dolphin
33 deck measures approximately 9 feet by 15 feet. The average deck thickness is about 2

1 feet. If necessary, a diamond-wire saw would be used to cut each mooring dolphin into
2 multiple smaller pieces for removal. The actual size of the concrete pieces would
3 depend on the availability of equipment at the time deconstruction services are procured
4 and would be detailed in a Deconstruction and Seafloor Debris Removal Plan that
5 would be prepared for review and approval by the CSLC prior to implementing the
6 deconstruction and removal work. Rigging would be secured to each piece prior to it
7 being cut free from the pile caps. Alternatively, the top slab may be removed by cutting
8 piles with cutting torches.

9 Prior to implementing the concrete deconstruction process, provisions would be made
10 to contain debris and cutting fluids associated with the concrete deconstruction process.
11 If cutting fluids are used during the drilling or concrete sawing process, the process
12 would be conducted in accordance with Federal and State environmental protection
13 regulations. Debris and cutting fluid containment details would be provided by the
14 selected contractor in a Project Work Plan.

15 **2.3.4 Wooden Deck Deconstruction and Removal**

16 The MOT facility includes:

- 17 • a central, predominantly wood landing platform measuring approximately 103
18 feet by 34 feet;
- 19 • three smaller pier platforms approximately 24 feet by 30 feet, 18 feet by 36 feet,
20 and 18 feet by 36 feet, respectively; and
- 21 • two mooring platforms with wood decking on concrete piles; one is approximately
22 30 feet by 18 feet and the other is approximately 21 feet by 18 feet.

23 The timber decking is likely creosote-treated and would be removed and disposed of at
24 facilities licensed to take creosote.

25 **2.3.5 Wood, Concrete, and Steel Pile Deconstruction and Removal**

26 The Applicant would attempt complete extraction of all piles, except for those directly
27 adjacent to the shoreline whose removal could result in the potential instability of the
28 railroad embankment. A review of historical aerial photographs indicated that the
29 railroad embankment adjacent to the Project area experienced significant erosional
30 failures around 1939. Dive survey results (conducted in March 2013) note that the piles
31 nearest shore are protected by medium size riprap comprised of concrete slabs and
32 debris. Since the riprap does not cover the whole area, it appears to have been placed
33 after installation of the wharf. The riprap was likely intended to serve as shoreline
34 protection from waves and vessel wakes and their potential effects on the existing
35 adjacent rail line. In order to minimize the risk of future embankment instability,

1 disturbance of the existing riprap and associated piles would be minimized to the extent
2 possible. Therefore, Phillips 66 proposes to keep the riprap in place to minimize the
3 potential for destabilizing the rail bed embankment and to cut off the piles directly
4 adjacent to the shoreline at the level of the existing riprap using a hydraulic shear or
5 another suitable device (AECOM 2013, Attachment F).

6 The MOT is located in the central area of the Carquinez Strait adjacent to the southern
7 edge of the shipping channel, which is approximately 0.5-mile wide in this area. A May
8 2012 bathymetric survey conducted by eTrac Engineering, Inc. (eTrac) indicated that
9 the general water depth under the MOT structures is currently approximately -20 feet
10 referenced to mean lower low water (MLLW). The federal channel is maintained to -30
11 feet MLLW. The water level in this area of the Strait increases to depths of -90 feet
12 MLLW within approximately 500 feet of the wharf. The location of the MOT is a high
13 energy environment where water moves through the Carquinez Strait between Suisun
14 Bay upstream and San Pablo Bay downstream. Predictions for several water years
15 indicate that Suisun Bay exports sediment during the wet season, and imports sediment
16 from San Pablo Bay during the dry season (Ganju and Schoellhamer 2006).

17 The 2012 bathymetric survey of the Project area, and a dive survey conducted in March
18 2013, did not report scour around any piles within the Project area. In addition, little net
19 deposition was noted within the Project site. Based on best engineering judgment, the
20 Project site appears to be currently stable relative to sediment deposition/scour in the
21 area of the proposed pile removal (AECOM 2013, Attachment F).

22 In areas where scour is not expected to occur, the general practice for pile removal in
23 the San Francisco Bay Area is removal to at least 2 feet below the mud line. This is
24 thought to be sufficient to ensure that the pile stubs remain buried within the sediments,
25 and do not have the potential to protrude above the seafloor, posing a potential hazard
26 to navigation (Cacchione 2008). Therefore, if the complete extraction of piles is not
27 successful, they would be cut off to a minimum depth of 2 feet below the mud line. In
28 addition, if piles are not completely extracted, a post-deconstruction bathymetric survey
29 would be conducted immediately following deconstruction and every 2 years for 6 years
30 to document that scour is not occurring within the Project footprint and that piles
31 embedded in the Carquinez Strait bottom have not become exposed by erosion.

32 The following best management practices (BMPs) would be used to minimize creosote
33 release, sediment disturbance, and total suspended solids generation during pile
34 removal/deconstruction:

- 35 • Install a floating surface boom to capture floating surface debris;
- 36 • Keep all equipment (e.g., bucket, steel cable) out of the water and grip piles
37 above the waterline;

- 1 • Slowly lift the pile from the sediment and through the water column; and
- 2 • Dispose of all removed piles, floating surface debris, sediment spilled on work
- 3 surfaces, and all containment supplies at a permitted upland disposal site that
- 4 accepts creosote-treated wood and materials contaminated with creosote.

5 2.3.5.1 Removal of Timber Piles

6 The MOT facility has approximately 117 timber piles that are likely creosote-treated.
7 Associated with the main wharf structure are approximately 63 timber piles. There are
8 approximately 28 piles lying on the Carquinez Strait bottom. The three smaller
9 piers/platforms running perpendicular to the shore are supported by approximately 13
10 timber piles total. Last, the two wood pile dolphins in the northern section of the Project
11 site are supported by approximately 13 timber piles total: six for the southern dolphin
12 and seven for the northern dolphin.

13 Complete removal of the creosote-treated timber piles from locations that would not
14 impact the stability of the shoreline embankment would be conducted consistent with a
15 CSLC-approved Marine Safety Plan. The Applicant proposes vibratory extraction for
16 complete pile removal. The vibratory extraction technique involves attaching a vibratory
17 hammer to the pile to break the seal between the pile and the sediment and pulling with
18 a crane or excavator. The crane or excavator operator would be trained to remove each
19 pile slowly to minimize turbidity in the water column as well as sediment disturbance.
20 For the creosote-treated timber piles, the extraction equipment would be kept out of the
21 water to avoid equipment (e.g., bucket, steel cable, vibratory hammer) pinching the
22 creosoted piling below the water line. Piles would not be broken off intentionally by
23 twisting, bending or other deformation to avoid the potential for releasing creosote to the
24 water column. The work surface on the barge deck would include a containment basin
25 for piles and any sediment removed during pulling. Upon removal from substrate, the
26 piles, and adjacent riprap not associated with the shoreline embankment (to the extent
27 possible), would be moved expeditiously from the water into the containment basin. The
28 piles would not be shaken, hosed-off, stripped or scraped off, left hanging to drip or any
29 other action intended to clean or remove adhering material from the pile.

30 Because of the embedded depth of the timber piles (likely 40 feet below mud line) and
31 their age (well over 50 years), the piles may break during the removal procedure.
32 Should timber piles break off during removal, the distance below the existing mud line
33 would be verified by measuring the distance from the mud line stain evident on the
34 portion of the piling brought to the surface to the break point of the piling. If the piling
35 breaks at too high a point or leaves a stub that is at an elevation higher than 2 feet
36 below the mud line, a diver may be used to inspect the area and provide further
37 direction on how to remove any timber remnants to a depth of 2 feet below the existing
38 mud line. If needed, the sediment around the base of the pilings would then be jetted

1 away to provide access for the cutting tool. A hydraulic shear or other suitable device
2 (e.g., a clam shell bucket or a pneumatic underwater chainsaw) would then be used to
3 cut the timber pile remnants 2 feet below the existing mud line. Final confirmation of
4 whether piling stubs or debris are present on or above the seafloor would be made with
5 a post-deconstruction bathymetric survey.

6 2.3.5.2 Removal of Concrete Piles

7 The various structures associated with the MOT include an estimated total of 11 20-inch
8 square concrete piles. The two wood-deck mooring platforms to the south of the wharf
9 are supported by eight and three concrete piles each. Neither the main wharf structure,
10 nor the three wood-deck platforms running perpendicular to the shoreline and formerly
11 connecting to the wharf, are supported by concrete piles.

12 Concrete piles would be removed after the timber decking is removed. As discussed
13 above, given the pile proximity to the embankment that supports the active rail line,
14 these piles, if attempted to be completely removed, could destabilize the rail bed
15 embankment. Therefore, the piles would be cut off to the level of the existing riprap
16 using a hydraulic shear or another suitable device. The Project would attempt to
17 process and recycle the concrete as aggregate rather than dispose of it at a local
18 landfill. The concrete remnants would be loaded onto a barge and transported back to
19 the selected contractor's onshore staging area where the concrete would be reduced
20 and recycled or disposed of as appropriate at a permitted facility. The material will not
21 be used for additional riprap.

22 2.3.5.3 Removal of Steel Piles

23 Each mooring dolphin is supported by approximately 12 steel piles for a total of up to 24
24 steel piles. Steel piles will be removed using methods similar to those described for
25 timber piles. Once the concrete decking and fixtures have been removed, the steel piles
26 would be extracted using a vibratory hammer or cut off 2 feet below the mud line if
27 extraction proves impossible. The steel pile remains would be loaded onto a barge,
28 transported to the chosen deconstruction contractor's staging area, and transported to a
29 recycling center if the waste material is acceptable for recycling.

30 2.3.6 Removal of Identified Debris

31 A bathymetric survey was conducted in May 2012 by eTrac. A follow-up underwater
32 inspection was conducted on March 19-21, 2013, by trained divers aided by a scanning
33 sonar head. Results of the survey are provided in Appendix B and summarized below.
34 The surveys detected a number of piles and a large truck tire on the seafloor. These
35 objects appeared to be in satisfactory condition to allow for easy rigging and intact
36 recovery to the surface, where they would be removed and disposed of during

1 deconstruction activities. The underwater inspections also identified two steel pipe
2 sections lying within a few feet of each other near the south end of, and parallel to, the
3 main wharf structure. One pipe section is 8 inches in diameter and 228 feet long, and
4 the other is 12 inches in diameter and 275 feet long. Due to the extreme currents
5 experienced in the area, some scour occurs on the offshore sides of the two pipes, with
6 mud cover accumulated on the inshore sides of the piping. This scour is relatively minor
7 and would lessen the difficulty of establishing recovery rigging.

8 The 8-inch-diameter pipe has two timber piles lying on top of it that are in generally
9 good condition and can be easily recovered. The 8-inch pipe terminates in a “tee” fitting;
10 one side of the tee is open, with the opposite side blind flanged. The northern end of the
11 pipe is flanged and blanked. The diver reported that some support members may be
12 attached at a few points along the 8-inch pipe that are presently buried. Excavation
13 would be required to determine if this is the case, however these miscellaneous
14 supports, if they exist, would not likely present a significant impediment to removal of
15 the piping. The 12-inch-diameter pipe trails down-slope at its northern extremity to a
16 depth of approximately 66 feet of water. It has a flanged valve in place on the south end
17 of the pipe, and northern end of the pipe is blind flanged. Three flanged couplings were
18 reported along the length of pipe, and appeared to be secure and tight.

19 Prior to removal, recovery approach and removal details would be outlined in a
20 Deconstruction and Seafloor Debris Removal Plan. The plan would address
21 characterization of the pipe contents, and assure that removal is carefully designed to
22 mitigate the potential of releasing potential hazardous materials (if any) into the Bay.
23 Following characterization, the pipe sections would be recovered and disposed of
24 during deconstruction activities.

25 Onshore, a number of concrete slabs/abutments serve as riprap along the shoreline and
26 are proposed to be left in place to reduce the potential for destabilizing the embankment
27 supporting the rail bed.

28 **2.3.7 Post-Project Surveys and Sea Floor Debris Removal**

29 After removal of the MOT is completed, a post-project survey would be conducted of the
30 lease area, including the MOT work area. The survey would document the condition of
31 the Strait’s floor and identify debris from previous MOT operations and/or from the
32 deconstruction activities. Identified debris would be removed from the Strait’s floor and
33 disposed of or recycled as appropriate in accordance with the Project’s Seafloor Debris
34 Removal Plan. Following are key details for sea floor debris removal:

- 35 1. The post-deconstruction survey would use the same methods employed in the
36 pre-deconstruction survey to verify debris is removed. Debris determined not to
37 be associated with the MOT or deconstruction process would not be recovered.

- 1 2. After the post-deconstruction survey has been completed, the deconstruction
2 contractor would attempt recovery of detected submerged debris from the
3 surface using appropriate equipment. If a diver is required to recover debris, the
4 debris would be rigged and raised to the deck of a barge or support vessel.
5 Rigging methods would depend on the sizes, weight, and type of debris. Heavy
6 debris would be choked with wire rope slings and raised to the surface using a
7 crane. If required, heavy lifts would be subject to a Rigging and Lifting Plan,
8 which would be approved by the CSLC prior to deconstruction activities. Lighter
9 pieces of debris may be fastened to soft-line and raised to the surface by hand.
- 10 3. As described above, the objects located by the dive team consist of piping timber
11 pilings and a large tire. These objects, as far as could be determined by touch,
12 are in generally good condition, although encrusted with marine growth, and
13 should hold together during recovery to the surface. The timber pilings and truck
14 tire can be rigged and recovered to the surface in single crane picks. Recovery of
15 the two steel pipes would likely require lifting one end up to the barge deck, and
16 cutting the piping into lengths required for handling and transport.
- 17 4. Recovered debris, if any, would be transported to the selected Contractor's shore
18 base and disposed onshore at local landfill facilities or recycled.
- 19 5. The following personnel and equipment may be used to identify and recover
20 debris:
 - 21 ○ Personnel: Deconstruction Manager, Contractor Project Manager,
22 Foreman, Crane Operator, Riggers, Tugboat Operator, Crew Boat
23 Operator, Crew Boat Deckhand, Divers, and Diver Tenders.
 - 24 ○ Equipment: Barge with 100-ton crane and 4-point anchor spread, support
25 tugboat, crew boat, industrial air compressor, jet pump (150 horsepower
26 [hp]), diver's air compressor, electrical generators, and airlift.

27 **2.3.8 Contractor's Shore Base**

28 At the present time, Phillips 66 has not selected a contractor to perform the Project.
29 However, several companies have expressed interest in bidding on the Project, and for
30 the purposes of this document, it is assumed that the contractor's shore base and the
31 facilities for equipment, barges, materials, and waste handling would occur offsite at one
32 of the existing commercial/industrial facilities, listed below:

- 33 • Power Engineering Construction Company has an available shore facility at
34 Intersection of West Hornet Avenue, Fairview, Alameda;
- 35 • C.S. Marine Constructors, Inc. has an available shore facility at Mare Island at
36 425 15th Street, Mare Island Berth 19, Vallejo;

- 1 • The Dutra Group has several local shore facilities, including on the Oakland
2 Estuary at 2199 Clement Avenue, Alameda, and at 615 River Road., Rio Vista;
- 3 • Manson Construction Co. has a shore facility at the Richmond Inner Harbor at
4 200 Cutting Boulevard., Richmond; and
- 5 • Vortex Marine Construction, Inc. has a small pier and office in a mixed-use area
6 along the Oakland Estuary at the Livingston Street Pier.

7 The furthest contractor shore base(s) (likely in Alameda) is approximately 40 miles
8 away from the Project site by water. Assuming the average boat travelling speed at 10
9 to 12 miles per hour, a roundtrip from the furthest contractor shore base to the Project
10 site would take approximately 6 to 8 hours. It was assumed in the air quality – emission
11 calculations (Appendix C) that the boat operation time is 8 hours per day, which covers
12 the roundtrip (as needed) between the contractor shore base and the Project site.

13 Please note that daily work crews will likely be picked up at commercial marina facilities
14 close to the MOT. Docks to be used for picking up work crews on a daily basis are
15 available at Vallejo Municipal Marina on Harbor Way, Vallejo, and at the Martinez
16 Marina in Martinez. Due to the proximity of an active rail line onshore, access to the site
17 would be by water.

18 **2.3.9 Deconstruction Schedule**

19 Deconstruction of the MOT is scheduled for 2014, prior to expiration of the CSLC lease.
20 Deconstruction activities would occur over approximately 3 to 5 months. Work would be
21 conducted Monday through Friday generally from 8 a.m. to 5 p.m. The Project is
22 currently projected to start in June 2014 (in-water work would not start until July 1,
23 2014) and be completed by the end of November 2014, based on the forecasted permit
24 schedule. The forecasted schedule corresponds with the recommended National Marine
25 Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) (C.
26 Spurr, CDFW, pers. comm. December 2013) deconstruction windows to protect
27 salmonids; however, because deconstruction methods do not include pile driving or
28 dredging activities and are expected to result in minimal sediment disturbance, adverse
29 effects on migrating salmonids are not expected. Deconstruction activities at the MOT
30 would be limited to normal workdays and hours. All environmental analyses were
31 conducted assuming a worst case scenario of a 5-month duration of deconstruction
32 activities.

33 **2.3.10 Project Workforce**

34 Deconstruction activities at the MOT would require approximately eight to 12
35 deconstruction personnel, depending on the deconstruction and removal stage. At the
36 peak of deconstruction and removal, an estimated 12 workers would be on site.

1 **2.4 DECONSTRUCTION PROCEDURES**

2 Deconstruction work activities include:

- 3 • Surveys of lead-based paint (LBP), asbestos-containing materials (ACM), and
4 other hazardous materials, and as needed, abatement and/or appropriate
5 disposal or reuse;
- 6 • Deconstruction of marine structures and cutting of concrete structures; and
- 7 • Processing, transport, and recycling/disposal of resulting deconstruction debris.

8 **2.4.1 Pre-Deconstruction Surveys, Abatement, Disposal, or Reuse**

9 Phillips 66 completed LBP and ACM surveys of the wharf structures in February 2013
10 (see Appendix A). Samples were collected and analyzed by a certified technician.
11 Results of the survey indicate that LBP is present on some wharf structures, but found
12 no ACM. Since LBP is present on the wharf, Phillips 66 would retain a licensed lead
13 abatement contractor to address LBP prior to the general deconstruction of the wharf.
14 An LBP Management Plan including health and safety procedures would be prepared
15 and included as part of the Project's Work Plan.

16 Although little, if any, is anticipated, potentially hazardous materials may also be
17 present, including remnants of mercury switches, petroleum product residues, and
18 hydraulic fluids. Prior to commencement of activities to abate these materials at the
19 wharf, Phillips 66 or its contractor would prepare a site-specific Health and Safety Plan
20 for these activities that would comply with applicable State and Federal regulations. If
21 any such equipment is identified, procedures would be implemented to flush, drain, or
22 remove the materials so that the hazardous waste can be safely removed without
23 risking releases. A Water Quality/Storm Water Pollution Prevention Plan would also be
24 prepared to include procedures to prevent a potential release of hazardous materials to
25 the Carquinez Strait, protect water quality, and ensure appropriate handling and
26 disposal of hazardous waste. Equipment such as switches and gauges that contain
27 mercury would be tagged prior to removal for special handling to prevent an inadvertent
28 discharge of mercury on the deck surfaces or in Carquinez Strait waters.

29 **2.4.2 Deconstruction Materials and Equipment**

30 Anticipated materials and equipment to complete the work are listed in Table 2-1. Work
31 activities at the Project site would be conducted entirely from vessels anchored
32 offshore, adjacent to the wharf structures. One construction derrick barge,
33 approximately 130 feet by 50 feet, would be required. The crane would be mounted on
34 this barge. A second support barge, approximately 80 feet by 40 feet, would also be on
35 site to collect and transport the demolition debris. Proper first-aid and safety stations,

1 portable sanitary stations, an office and break areas would also be located on these
 2 barges. Both barges would be brought to the site by a tugboat, which would stay in the
 3 Project area during deconstruction activities should the barges need to be moved. Each
 4 barge would be anchored with about two to four standard marine anchors. A work boat
 5 launched from the construction barge would transport workers to the Project site and
 6 allow workers to mobilize within the Project site.

7 **Table 2-1. Anticipated Project Materials and Equipment**

<u>Materials</u>	<u>Equipment</u>
<ul style="list-style-type: none"> • Diesel fuel • Gasoline to power small portable equipment • Compressed gases for metal cutting • Penetrating oil to lubricate corroded fittings • Marking paint • Diamond wire cable • Lumber for debris catchment scaffolding • Oil spill booms and sorbent material (on-hand as contingency) • Miscellaneous materials to be identified at the time specifications for deconstruction are developed. 	<ul style="list-style-type: none"> • Cranes (3): one 200-ton; one 20-ton; one Derrick crane • Barges (2): one approximately 50 feet by 130 feet; one approximately 40 feet by 80 feet • Excavator with shear • Concrete drill • Portable electrical generator(s) • Diamond wire saw • Pulverizer • Hydraulic pile cutter • Vibratory pile extractor • Tug boats (2): one 1,000-hp; one 500-hp • Anchor boat • Loader • Compactor • Dump truck • Roll-off bins • Diver support equipment • Hand tools • Miscellaneous equipment to be identified when deconstruction specifications are developed.

8 **2.4.3 Temporary Facilities**

9 Temporary construction facilities in and near the Project site may be required during the
 10 Project to support the safe and efficient execution of the work, including:

- 11 • barge-mounted first-aid and safety stations at the marine work site;
- 12 • barge-mounted portable sanitary stations at the marine work site;
- 13 • barge-mounted office and break areas at the marine work site;
- 14 • barge-mounted secured storage facilities;
- 15 • utilities as required to execute the work; and
- 16 • marker buoys delineating the deconstruction work area.

17 Most temporary facilities would be located on a barge or in the water within the 8.89-
 18 acre Project site. The deconstruction activities would only be conducted from vessels

1 located offshore and at the selected contractor's existing shore base and associated
2 facilities. Incidental temporary facilities such as parking, storage of non-hazardous
3 materials (not used for the deconstruction work on water), and sanitary stations located
4 onshore near the site may also be needed. These would allow for access from onshore
5 locations for the Applicant, its contractors, site monitors, agency representatives or
6 others wishing to observe the operations. A temporary construction easement would be
7 needed within the adjacent uplands to accommodate these temporary facilities. The two
8 proposed locations are approximately 700 feet and 1,600 feet southwest and upland of
9 the Project site on the adjacent TXI property (see Figure 2-2). This property contains
10 existing developed roads and parking areas that can accommodate upland access and
11 the temporary facilities so new facilities would not need to be constructed. Phillips 66
12 and its contractors would work with the property owner prior to the start of
13 deconstruction activities to secure temporary easements to the property. Once parked,
14 individuals would access the Project site on foot, making sure to notify UPRR in
15 advance and taking appropriate precautionary and railroad safety measures. Offsite, the
16 selected contractor's existing shore base and associated facilities may include secured
17 storage facilities, shore-side staging areas, and landings/dock facilities. These facilities
18 already exist, and, should they be needed, are located away from the Project site and
19 would not require any construction.

20 A list of potential offsite contractor facilities that would be used to execute the work has
21 been prepared (refer to Section 2.3.8); however, the analysis considered in this
22 document assumes a worst case that the facilities would not exceed 1.5 acres total and
23 that both temporary facilities identified herein, as shown in Figure 2-2, would be used.

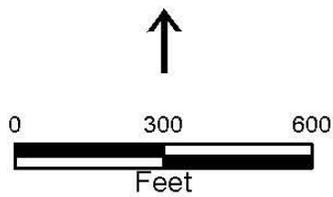
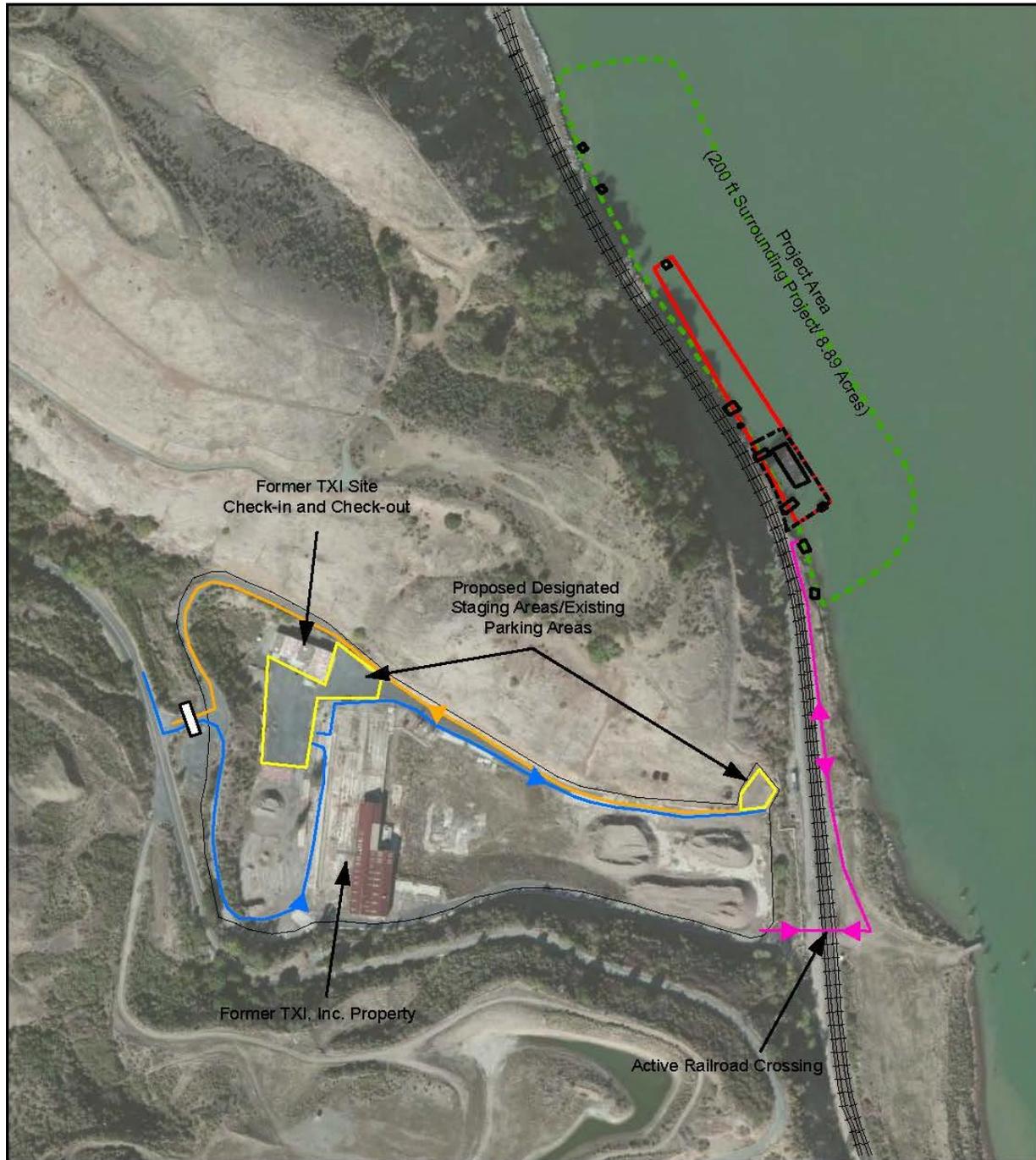
24 **2.5 COMPLIANCE, INSPECTION, AND MONITORING**

25 Environmental controls for the Project would include requirements for controlling and/or
26 mitigating potential impacts to water quality (such as debris and oil spills), air quality,
27 traffic, biological resources, and hazardous materials. An overall Project "Work Plan"
28 would be prepared that would include specific Project plans prepared by Phillips 66 (or its
29 designated contractors) for CSLC approval. The Work Plan would include the following:

- 30 • LBP Management Plan;
- 31 • Marine Safety Plan;
- 32 • Deconstruction and Seafloor Debris Removal Plan;
- 33 • Rigging and Lifting Plan;
- 34 • Traffic Control Plan;
- 35 • Critical Operations and Curtailment Plan;
- 36 • Marine Communication Plan;
- 37 • Marine Transportation Plan;
- 38 • Anchoring Plan; and
- 39 • Water Quality/Storm Water Pollution Prevention Plan.

1

Figure 2-2. Potential Onshore Parking and Storage Facilities



- Historic Lease Boundary
 - 200 ft Project Buffer
 - Proposed Staging Areas for Parking, Sanitation Stations and Other Incidental Uses (Not to exceed 1.5 acres) within Existing Parking Areas
 - Ingress
 - Pedestrian Path to Site
 - Entry Gate
- ft = Feet

3.0 ENVIRONMENTAL CHECKLIST AND ANALYSIS

This section contains the Initial Study that was completed for the proposed Project in accordance with the requirements of the California Environmental Quality Act (CEQA). The Initial Study identifies site-specific conditions and impacts, evaluates their potential significance, and discusses ways to avoid or lessen impacts that are potentially significant. The information, analysis and conclusions included in this Initial Study provide the basis for determining the appropriate document needed to comply with CEQA. For the Project, based on the analysis and information contained herein, the California State Lands Commission (CSLC), as CEQA lead agency, has found that there is substantial evidence that the Project may have a significant effect on the environment but revisions to the Project would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur. As a result, the CSLC has concluded that this Mitigated Negative Declaration (MND) is the appropriate CEQA document for the Project.

The evaluation of environmental impacts provided in this MND is based in part on the impact questions contained in Appendix G of the State CEQA Guidelines; these questions, which are included in an impact assessment matrix for each environmental category (Aesthetics, Agriculture and Forest Resources, Air Quality, Biological Resources, Cultural Resources, etc.), are “intended to encourage thoughtful assessment of impacts.” Each question is followed by a check-marked box with column headings that are defined below.

- **Potentially Significant Impact.** This column has been checked if there is substantial evidence that a Project-related environmental effect may be significant. If there are one or more “Potentially Significant Impacts,” a Project Environmental Impact Report (EIR) would be prepared.
- **Less than Significant with Mitigation.** This column has been checked when the Project may result in a significant environmental impact, but the incorporation of identified Project revisions or mitigation measures would reduce the identified effect(s) to a less than significant level.
- **Less than Significant Impact.** This column has been checked when the Project would not result in any significant effects. The Project’s impact is less than significant even without the incorporation of Project-specific mitigation measures.
- **No Impact.** This column has been checked when the Project would not result in any impact in the category or the category does not apply.

The environmental factors checked below would be potentially affected by this Project; a checked box indicates that at least one impact would be a “Potentially Significant Impact” except that the Applicant has agreed to Project revisions, including the

1 implementation of mitigation measures, that reduce the impact to “Less than Significant
2 with Mitigation.”

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forest Resources	<input checked="" type="checkbox"/> Air Quality/Greenhouse Gas Emissions
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology and Soils
<input checked="" type="checkbox"/> Hazards and Hazardous Materials	<input checked="" type="checkbox"/> Hydrology and Water Quality	<input type="checkbox"/> Land Use and Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population and Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities and Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

3 Detailed descriptions and analyses of impacts from Project activities and the basis for
4 their significance determinations are provided for each environmental factor on the
5 following pages, beginning with Section 3.1, Aesthetics. Relevant laws, regulations, and
6 policies potentially applicable to the Project are listed in the Regulatory Setting for each
7 environmental factor analyzed in this MND.

8 **AGENCY DETERMINATION**

9 Based on the environmental impact analysis provided by this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



10 _____
11 Signature
12 Cynthia Herzog, Senior Environmental Scientist
13 Division of Environmental Planning and Management
California State Lands Commission

11/14/13

Date

1 **3.1 AESTHETICS**

AESTHETICS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.1.1 Environmental Setting**

3 The former Port Costa marine oil terminal (MOT) wharf (Project) site is located along
 4 the southeast shore of the Carquinez Strait near the town of Port Costa, Contra Costa
 5 County, within scenic areas designated by the County. The Carquinez Strait waterway
 6 and shoreline are part of the “Scenic Waterways” system, as designated in the Open
 7 Space Element of the Contra Costa County General Plan 2005-2020; this designation
 8 identifies the major scenic resources in the County, which should be considered when
 9 evaluating nearby development proposals.

10 The Project site is visible from the Benicia-Martinez Bridge (Interstate 680 [I-680]) and
 11 from Benicia, including parts of the Carquinez Strait Scenic Loop Trail along the Benicia
 12 shoreline. The view from the Project site includes panoramic open water, with the
 13 Benicia shoreline to the north and northeast across the Carquinez Strait (approximately
 14 0.75 mile to the Benicia Pier), the Benicia-Martinez Bridge to the east, and sloped
 15 shoreline to the south and west. West of the wharf site, the upland area includes two
 16 active rail lines. Between the water line and Union Pacific Railroad (UPRR) rail lines are
 17 primarily disturbed areas consisting of concrete riprap and weedy vegetation. Beyond
 18 the rail lines, the upland area slopes steeply into a rocky hillside.

19 **3.1.2 Regulatory Setting**

20 Federal and State laws and regulations pertaining to this issue area and relevant to the
 21 Project are identified in Tables 1-2 and 3.1-1. Local goals, policies, and/or regulations
 22 applicable to this issue area are listed below.

Table 3.1-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Aesthetics)

CA	California Scenic Highway Program	The California Scenic Highway Program, managed by the California Department of Transportation, was created to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. State highways identified as scenic, or eligible for designation, are listed in California Streets and Highways Code section 260 et seq.
CA	San Francisco Bay Plan (see also Table 1-2)	The Bay Plan provides BCDC policies on Appearance, Design, and Scenic Views around the Bay. Several of these policies are to ensure and maintain the visual quality around the Bay.

1 The Contra Costa County General Plan 1995-2020 outlines development goals and
 2 policies that promote protection of the scenic qualities of the County. Specifically, the
 3 General Plan identifies the following scenic resource goals and policies that are
 4 applicable to the Project site:

- 5 • Goal 9-10 - To preserve and protect areas of identified high scenic value, where
 6 practical, and in accordance with the Land Use Element map.
- 7 • Goal 9-12 - To preserve the scenic qualities of the San Francisco Bay/Delta
 8 estuary system and the Sacramento–San Joaquin River/Delta shoreline.
- 9 • Policy 9-27 - The appearance of the County shall be improved by eliminating
 10 negative features such as non-conforming signs and overhead utility lines, and
 11 by encouraging aesthetically designed facilities with adequate setbacks and
 12 landscaping.
- 13 • Policy 9-28 - Maintenance of the scenic waterways of the County shall be
 14 ensured through public protection of the marshes and riparian vegetation along
 15 the shorelines and delta levees, as otherwise specified in the General Plan.

16 **3.1.3 Impact Analysis**

17 **a) Have a substantial effect on a scenic vista?**

18 **No Impact.** The Project site is located in a Contra Costa County designated scenic
 19 waterway. During MOT deconstruction activities, there would be several short-term,
 20 temporary impacts to views of the scenic waterway. Temporary impacts include
 21 anchoring of two barges offshore as well as smaller vessels needed to transport
 22 workers or other equipment; marker buoys; incidental temporary facilities upland from
 23 the MOT for parking, storage of non-hazardous materials (not used for the
 24 deconstruction work on water), and sanitary stations; and offsite secured storage
 25 facilities at the selected contractor’s shore base. The presence of marine vessels would
 26 be consistent with views of the Carquinez Strait, and all deconstruction facilities and
 27 materials would be removed at Project completion. Scenic impacts would be short-term,

1 occurring over the approximately 5-month deconstruction period. The removal of the
2 MOT structures would ultimately result in improved aesthetic benefits to the area.
3 Therefore, the Project would not have a substantial adverse effect on a scenic vista and
4 would result in beneficial impacts to the area.

5 ***b) Substantially damage scenic resources, including, but not limited to, trees,***
6 ***rock outcroppings, and historic buildings within a state scenic highway corridor?***

7 **No Impact.** No Federal, State, or locally designated scenic highway corridors are
8 located in, or are visible from, the Project site. Therefore, the Project would have no
9 impact on scenic resources including, but not limited to, trees, rock outcroppings, and
10 historic buildings within a State scenic highway corridor.

11 ***c) Substantially degrade the existing visual character or quality of the site and***
12 ***its surroundings?***

13 **No Impact.** The Project would remove the MOT structures from the scenic waterway,
14 improving views of the Carquinez Strait from Benicia and from the Carquinez Strait
15 Scenic Loop Trail along the Benicia shoreline. The Project is consistent with the Contra
16 Costa County's General Plan, Scenic Resource Policy 9-27, which promotes the
17 removal of negative features from scenic areas. Removal of the man-made MOT
18 structures would ultimately increase the aesthetic value of the Project site. Therefore,
19 the Project would not degrade the existing visual character or quality of the Project site
20 and its surroundings. Deconstruction would result in beneficial impacts to the area.

21 ***d) Create a new source of substantial light or glare which would adversely affect***
22 ***daytime or nighttime views in the area?***

23 **No Impact.** No new source of visual glare or substantial light is expected to occur due
24 to the Project. Deconstruction activities would be performed generally between 8 a.m.
25 and 5 p.m., except for periods when required by tide conditions. Deconstruction
26 activities would only occur during daylight hours; because the U.S. Coast Guard
27 (USCG) does not require additional lighting, none would be used. Presence of marine
28 vessels, temporary facilities, and equipment would be short-term and fully removed at
29 Project completion. Therefore, there would be no new impact on visual glare or light.

30 **3.1.4 Mitigation Summary**

31 The Project would not result in significant aesthetic impacts; therefore, no mitigation is
32 required.

1 **3.2 AGRICULTURE AND FOREST RESOURCES**

AGRICULTURE AND FOREST RESOURCES¹ - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.2.1 Environmental Setting**

3 **Prime Farmland**

4 The Project site is located along the southeast shoreline of the Carquinez Strait near the
 5 town of Port Costa, Contra Costa County. The Project is predominantly located within
 6 the waters of the Strait, with the only onshore components being temporary staging
 7 areas within the former TXI/Pacific Custom Materials, Inc. (TXI) property, which is an
 8 industrial area, and the selected contractor's shore base within industrial and
 9 unrestricted zoned areas away from the Project site. On the shoreline adjacent to the

¹ In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

1 Project site two active UPRR rail lines run between the waterline and a steep sloping
2 hillside.

3 The land north, west, and south of the Project site is part of the Briones Hills Agricultural
4 Preservation Area (Contra Costa County 2005), which comprises 64 square miles of
5 open space in both unincorporated and incorporated areas of Contra Costa County.
6 This area includes both publicly and privately held lands that are designated as
7 agricultural lands.

8 **3.2.2 Regulatory Setting**

9 Federal and State laws and regulations pertaining to this issue area and relevant to the
10 Project are identified in Tables 1-2 and 3.2-1. Local goals, policies, and/or regulations
11 applicable to this issue area are listed below.

**Table 3.2-1. Federal and/or State Laws, Regulations, and Policies Potentially
Applicable to the Project (Agriculture and Forest Resources)**

CA	Williamson Act (Gov. Code §§ 51200-51207)	This Act enables local governments to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open space use, and provides landowners with lower property tax assessments in return. Local government planning departments are responsible for the enrollment of land into Williamson Act contracts. Generally, any commercial agricultural use would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit.
----	---	--

12 The Land Use Element of the Contra Costa County General Plan 1995-2020 contains
13 policies related to agricultural land use. During project review, proposed uses on the
14 edges of land use designations are required to be evaluated to ensure compatibility with
15 adjacent planned uses. Measure C (passed in 1990) established a 65/35 Land
16 Preservation Standard to limit urban development to no more than 35 percent of the
17 land in the County. At least 65 percent of all land in the County is required to be
18 preserved for agriculture, open space, wetlands, parks, and other non-urban uses.

19 **3.2.3 Impact Analysis**

20 ***a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide***
21 ***Importance, as shown on the maps prepared pursuant to the Farmland Mapping***
22 ***and Monitoring Program of the California Natural Resources Agency, to non-***
23 ***agricultural use?***

24 ***b) Conflict with existing zoning for agricultural use, or a Williamson Act***
25 ***contract?***

1 **c) *Involve other changes in the existing environment which, due to their location***
2 ***or nature, could result in conversion of Farmland of Statewide Importance to non-***
3 ***agricultural use?***

4 **No Impact.** The Project involves the removal of an MOT, with Project activities confined
5 to the Carquinez Strait and the industrial shoreline. While the Project area is near the
6 Briones Hills Agricultural Preservation Area, no aspect of the Project would occur within
7 this Preservation Area. The Project would not involve any changes to underlying soils or
8 to the existing environment that could impact Farmland uses. The Project would not
9 convert Farmland or conflict with existing agricultural zoning use. Consequently, the
10 Project would have no impact to agricultural resources.

11 **d) *Result in the loss of forest land or conversion of forest land to non-forest***
12 ***use?***

13 **No Impact.** No forest lands or timberlands are located in the vicinity of the Project site;
14 therefore, there would be no impact.

15 **e) *Involve other changes in the existing environment which, due to their location***
16 ***or nature, could result in conversion of Farmland to non-agricultural use or***
17 ***conversion of forest land into non-forest use?***

18 **No Impact.** The Project would not alter the existing environment such that farmland or
19 forest land would be converted to non-agricultural or non-forest uses.

20 **3.2.4 Mitigation Summary**

21 The Project would not result in significant impacts to agriculture and forest resources;
22 therefore, no mitigation is required.

1 **3.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS**

AIR QUALITY AND GREENHOUSE GAS EMISSIONS – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 **3.3.1 Environmental Setting**

3 **Air Quality**

4 Due to the similar overall nature between the Project and the Coscol MOT
 5 Deconstruction and Pipeline Abandonment Project Final MND (ESA 2009), several
 6 elements from that document (as updated to reflect current conditions, regulations, and
 7 policies) are cited in this section to preserve consistency for the CSLC. Because the
 8 current lease size of Port Costa Wharf MOT is much smaller than the Coscol MOT, the
 9 effort to deconstruct and remove materials would also be smaller. As an indicator of this
 10 size comparison, the Port Costa remnant main wharf structure is approximately 34 feet
 11 by 103 feet, whereas the Coscol MOT central landing platform was 60 feet by 160 feet.
 12 (See Section 2.0, Project Description and the Coscol MOT Final MND for a comparison
 13 of all associated MOT structures as well as the materials, equipment, facilities and
 14 processes required for the deconstruction and removal from these sites.) Therefore, the

1 associated emissions, air quality impact and any required mitigation measures from all
2 respective Port Costa Wharf MOT deconstruction and removal activities would be lower
3 in magnitude. Similar to the Coscol MOT Deconstruction, the duration of the Project is
4 anticipated to last up to 5 months. Because of the relative larger size of the Coscol MOT
5 Deconstruction Project and comparable project durations, any similar elements used in
6 this document are considered a conservative upper bounds estimate of air quality
7 impacts and mitigation.

8 **Criteria Pollutants**

9 Criteria air pollutants are a group of pollutants for which Federal or State regulatory
10 agencies have adopted health-based ambient air quality standards. Criteria air
11 pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur
12 dioxide (SO₂), particulate matter (both PM₁₀ and PM_{2.5}), and lead (Pb). Most of the
13 criteria pollutants are directly emitted. However, ground-level O₃, also known as smog,
14 is a secondary pollutant that is produced by the photochemical reaction of sunlight with
15 volatile organic compounds, including non-methane organic gases (NMOG) and
16 nitrogen oxides (NO_x), that have been released into the atmosphere from the
17 combustion of fossil fuels.

18 Criteria air pollutants are classified in each air basin, county, or in some cases, within a
19 specific urbanized area. The classification is determined by comparing actual monitoring
20 data with State and Federal standards. If a pollutant concentration is lower than the
21 standard, the area is classified as “attainment” for that pollutant, and if an area exceeds
22 the standard, the area is classified as “non-attainment” for that pollutant. If not enough
23 data are available to determine whether the standard is exceeded in an area, the area is
24 designated “unclassified.”

25 The San Francisco Bay Area Air Basin (Basin) is monitored by the Bay Area Air Quality
26 Management District (BAAQMD) and is currently classified as non-attainment for State
27 PM₁₀ and PM_{2.5} standards as well as State 1- and 8-hour O₃ standards. With respect to
28 Federal standards, the Basin is classified as non-attainment for the 8-hour O₃ standard.
29 For all other State and Federal criteria air pollutant standards, the Basin is classified as
30 either unclassified or as attainment (BAAQMD 2012).

31 **Sensitive Receptors**

32 For the purposes of air quality and public health analyses, sensitive receptors are
33 generally defined as land uses with population concentrations that would be particularly
34 susceptible to disturbance from dust, air pollutant concentrations, or other disruptions
35 associated with project construction and/or operation. These receptors generally include
36 schools, day care centers, hospitals, residential areas, and parks. Some receptors are
37 considered more sensitive than others to air pollutants. The reasons for greater than

1 average sensitivity include pre-existing health problems, proximity to emissions sources,
2 or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes
3 are considered to be relatively sensitive to poor air quality because children, elderly
4 people, and the infirm are more susceptible to respiratory distress and other air quality-
5 related health problems than the general public. Residential areas are considered
6 sensitive to poor air quality because people usually stay home for extended periods of
7 time, with associated greater exposure to ambient air quality. Recreational uses are
8 also considered sensitive due to the greater exposure to ambient air quality conditions
9 because vigorous exercise associated with recreation places a high demand on the
10 human respiratory system.

11 The nearest receptors to the Project site are located in the unincorporated community of
12 Port Costa, which includes residential areas, a school, and a church as well as the
13 Carquinez Strait Regional Shoreline.

14 **Greenhouse Gas (GHG) Emissions and Climate Change**

15 Some gases in the atmosphere affect the earth's heat balance by absorbing infrared
16 radiation. These gases can prevent the escape of heat in much the same way as glass
17 in a greenhouse. This is often referred to as the "greenhouse effect," and it is
18 responsible for maintaining a habitable climate. There is widespread scientific
19 consensus that human-caused increases of the emissions of certain gases are
20 changing the solar energy heat balance in the atmosphere, enhancing the greenhouse
21 effect, and contributing to global warming. The gases believed to be most responsible
22 for global warming are carbon dioxide (CO₂), methane, nitrous oxide,
23 hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Of these gases, CO₂ and
24 methane are emitted in the greatest quantities from human activities. Emissions of CO₂
25 are largely by-products of fossil fuel combustion, whereas methane results primarily
26 from off-gassing associated with agricultural practices and landfills. CO₂ is the most
27 common reference gas for climate change. To account for the warming potential of
28 GHGs, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e).

29 Some of the potential resulting effects in California of global warming may include loss
30 in snow pack, sea level rise, and increases in extreme heat days per year, high O₃
31 concentration days, large forest fires, and drought years (California Energy
32 Commission 2012). Globally, climate change has the potential to impact numerous
33 environmental resources through potential, though uncertain, impacts related to future
34 air temperatures and precipitation patterns. The projected effects of global warming on
35 weather and climate are likely to vary regionally but are expected to include the
36 following direct effects (Intergovernmental Panel on Climate Change 2007):

- 37 • Higher maximum temperatures and more hot days over nearly all land areas;

- 1 • Higher minimum temperatures and fewer cold days and frost days over nearly all
2 land areas;
- 3 • Reduced diurnal temperature range over most land areas;
- 4 • Increase of heat index over land areas; and
- 5 • More intense precipitation events.

6 Secondary effects projected to result from global warming, include global rise in sea
7 level, impacts to agriculture, changes in disease vectors, and changes in habitat and
8 biodiversity. While the possible outcomes and the feedback mechanisms involved are
9 not fully understood, and much research remains to be done, the potential for
10 substantial environmental, social, and economic consequences over the long term may
11 be great.

12 The California Air Resources Board (CARB) estimated that in 2009, California produced
13 457 million gross metric tons (MT) of CO₂e GHG emissions (CARB 2011). The CARB
14 found that transportation is the source of 38 percent of the State's GHG emissions,
15 followed by electricity generation at 23 percent, and industrial sources at 18 percent.

16 The CARB is responsible for establishing and reviewing the State standards, compiling
17 the California State Implementation Policy (SIP), securing approval of that plan from the
18 U.S. Environmental Protection Agency (USEPA), and identifying toxic air contaminants.
19 The CARB also regulates mobile sources of emissions in California such as
20 construction equipment, trucks, and automobiles. For example, pursuant to California
21 Code of Regulations, Title 13, section 2485, on-road vehicles with a gross vehicular
22 weight rating of 10,000 pounds or greater cannot idle for longer than 5 minutes at any
23 location. This restriction does not apply when vehicles remain motionless during traffic
24 or when vehicles are queuing. In addition, off-road equipment engines, such as dozers,
25 trenchers, etc., cannot idle for longer than 5 minutes per California Code of Regulations,
26 Title 13, section 2449, subsection (d)(3). Exceptions to this rule include: idling when
27 queuing; idling to verify that the vehicle is in safe operating condition; idling for testing,
28 servicing, repairing, or diagnostic purposes; idling necessary to accomplish work for
29 which the vehicle was designed (such as operating a crane); idling required to bring the
30 machine to operating temperature as specified by the manufacturer; and idling
31 necessary to ensure safe operation of the vehicle.

32 The CARB also oversees the activities of California's air quality management districts
33 (AQMDs), which are organized at the county or regional level. County or regional
34 AQMDs are primarily responsible for regulating stationary sources at industrial and
35 commercial facilities within their geographic areas and for preparing the air quality plans
36 that are required under the Federal Clean Air Act and California Clean Air Act.

1 **3.3.2 Regulatory Setting**

2 Federal and State laws and regulations pertaining to this issue area and relevant to the
 3 Project are identified in Tables 1-2 and 3.3-1. Local goals, policies, and/or regulations
 4 applicable to this issue area are listed below.

Table 3.3-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Air Quality and GHGs)

U.S.	Federal Clean Air Act (FCAA) (42 USC 7401 et seq.)	<p>The FCAA requires the U.S. Environmental Protection Agency (USEPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. National standards are established for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb). In 2007, the U.S. Supreme Court ruled that carbon dioxide (CO₂) is an air pollutant as defined under the FCAA, and that the USEPA has authority to regulate GHG emissions. Pursuant to the 1990 FCAA Amendments, USEPA classifies air basins (or portions thereof) as in “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the NAAQS are achieved. The classification is determined by comparing monitoring data with State and Federal standards.</p> <ul style="list-style-type: none"> • An area is classified as in “attainment” for a pollutant if the pollutant concentration is lower than the standard. • An area is classified as in “nonattainment” for a pollutant if the pollutant concentration exceeds the standard. • An area is designated “unclassified” for a pollutant if there are not enough data available for comparisons.
CA	California Clean Air Act of 1988 (CCAA) (Assembly Bill [AB] 2595)	<p>The CCAA requires all air districts in the State to endeavor to achieve and maintain State ambient air quality standards for O₃, CO, SO₂, NO₂, and PM; attainment plans for areas that did not demonstrate attainment of State standards until after 1997 must specify emission reduction strategies and meet milestones to implement emission controls and achieve more healthful air quality. The 1992 CCAA Amendments divide O₃ nonattainment areas into four categories of pollutant levels (moderate, serious, severe, and extreme) to which progressively more stringent requirements apply. State ambient air standards are generally stricter than national standards for the same pollutants; California also has standards for sulfates, hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particles.</p>
CA	California Global Warming Solutions Act of 2006 (AB 32)	<p>Under AB 32, CARB is responsible for monitoring and reducing GHG emissions in the State and for establishing a statewide GHG emissions cap for 2020 that is based on 1990 emissions levels. CARB (2009) has adopted the AB 32 Climate Change Scoping Plan (Scoping Plan), which contains the main strategies for California to implement to reduce CO₂ equivalent (CO₂e) emissions by 169 million metric tons (MMT) from the State’s projected 2020 emissions level of 596 MMT CO₂e under a business-as-usual scenario. The Scoping Plan breaks down the amount of GHG emissions reductions the CARB recommends for each emissions sector of the State’s GHG inventory, but does not directly discuss GHG emissions generated by construction activities.</p>
CA	Senate Bills (SB) 97 and 375	<p>Pursuant to SB 97, the State Office of Planning and Research prepared and the Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Effective as of March 2010, the revisions to the CEQA Environmental Checklist Form (Appendix G) and the Energy Conservation Appendix (Appendix F) provide a framework to address global climate change impacts in the CEQA process; State CEQA Guidelines section 15064.4 was also added to provide an approach</p>

Table 3.3-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Air Quality and GHGs)

		<p>to assessing impacts from GHGs.</p> <p>SB 375 (effective January 1, 2009) requires CARB to develop regional reduction targets for GHG emissions, and prompted the creation of regional land use and transportation plans to reduce emissions from passenger vehicle use throughout the State. The targets apply to the regions covered by California’s 18 metropolitan planning organizations (MPOs). The 18 MPOs must develop regional land use and transportation plans and demonstrate an ability to attain the proposed reduction targets by 2020 and 2035.</p>
CA	Executive Orders (EOs)	<p>Under EO S-01-07, which set forth a low carbon fuel standard for California, the carbon intensity of California’s transportations fuels is to be reduced by at least 10 percent by 2020.</p> <p>EO S-3-05 established statewide GHG emission targets of reducing emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below the 1990 level by 2050.</p>
CA	Other	<p>Under California’s Diesel Fuel Regulations, diesel fuel used in motor vehicles, except harbor craft, has been limited to 500 parts per million (ppm) sulfur since 1993. The sulfur limit was reduced to 15 ppm beginning September 1, 2006, and harbor craft were included starting in 2009.</p> <p>CARB’s Heavy Duty Diesel Truck Idling Rule (Cal. Code Regs., tit. 13, § 2485) prohibits heavy-duty diesel trucks from idling for longer than 5 minutes at a time (except while queuing, provided the queue is located beyond 100 feet from any homes or schools).</p> <p>The Statewide Portable Equipment Registration Program (PERP) regulates portable engines/engine-driven equipment units. Once registered in the PERP, engines and equipment units may operate throughout California without the need to obtain individual permits from local air districts.</p>

1 Bay Area Air Quality Management District. The Project site is located in Contra Costa
2 County, which is within the jurisdiction of the BAAQMD. The BAAQMD has produced
3 guidance for evaluating potential air quality impacts of projects. These guidance
4 documents are developed so that projects do not exceed any thresholds of significance
5 in the guidance, and thereby will be in conformity with BAAQMD air quality plans. The
6 2011 BAAQMD CEQA Guidelines, which is an advisory document that describes the
7 criteria that the BAAQMD uses when reviewing and commenting on the adequacy of
8 environmental documents, identifies methodologies for predicting project emissions,
9 recommends thresholds for use in determining whether projects would have significant
10 adverse environmental impacts, and identifies measures that can be used to avoid or
11 reduce air quality impacts.² Although lead agencies may rely on the updated BAAQMD
12 CEQA Guidelines for assistance in calculating air pollution emissions, obtaining

² In May 2011, the BAAQMD updated its 1999 CEQA Guidelines, “Assessing the Air Quality Impacts of Projects and Plans,” as a guidance document to provide lead government agencies, consultants, and project proponents with uniform procedures for assessing air quality impacts and preparing the air quality sections of environmental documents for projects subject to CEQA. Use of the updated Guidelines is on hold until a decision by the Court of Appeal of the State of California, First Appellate District, on whether the BAAQMD complied with CEQA when it adopted the updated thresholds.

1 information regarding the health impacts of air pollutants, and identifying potential
2 mitigation measures, they should continue to rely on the BAAQMD’s 1999 Thresholds of
3 Significance and they may continue to make determinations regarding the significance
4 of an individual project’s air quality impacts based on the substantial evidence in the
5 record for that project (BAAQMD 2012).

6 Therefore, for this MND, the CSLC relies on application of the 1999 BAAQMD
7 Guidance. Within this guidance, there are no specific thresholds of significance for
8 construction emissions. Rather, the BAAQMD emphasizes implementation of effective
9 and comprehensive control measures rather than detailed quantification of construction
10 emissions. Based on this finding, Phillips 66 would use the applicable comprehensive
11 control measures, now known as Basic Construction Mitigation Measures and
12 Additional Construction Mitigation Measures found in the 2011 BAAQMD CEQA
13 Guidelines. Further explanation can be found in the Impact Analysis section below.

14 The Federal Clean Air Act and the California Clean Air Act require plans to be
15 developed for areas designated as nonattainment (with the exception of areas
16 designated as nonattainment for the State PM₁₀ standard). The BAAQMD adopted the
17 2010 Bay Area Clean Air Plan, which replaced the existing Bay Area 2005 Ozone
18 Strategy. This plan includes O₃ control measures and also considers the impacts of
19 these control measures on particulate matter, air toxics, and GHGs in a single,
20 integrated plan (BAAQMD 2010).

21 Contra Costa County. The Conservation Element of the Contra Costa County General
22 Plan includes goals and policies that aim to improve local and regional air quality
23 throughout the County (Contra Costa County 2005). The following air resources policies
24 may be applicable to the Project:

- 25 • Policy 8-103 - When there is a finding that a proposed project might significantly
26 affect air quality, appropriate mitigation measures shall be imposed.
- 27 • Policy 8-104 - Proposed projects shall be reviewed for their potential to generate
28 hazardous air pollutants.

29 **3.3.3 Impact Analysis**

30 ***a) Conflict with or obstruct implementation of the applicable air quality plan?***

31 **Less than Significant Impact.** There would be no long-term operations associated with
32 the Project, and the removal of the existing wharf would cause no growth of any kind in
33 the Basin. As such, the Project would be consistent with the assumptions contained
34 within the 2010 Bay Area Clean Air Plan.

1 **b) Violate any air quality standard or contribute substantially to an existing or**
 2 **projected air quality violation?**

3 **Less than Significant with Mitigation.** Deconstruction activities would cause short-
 4 term impacts associated with exhaust emissions and fugitive dust. The Project is
 5 expected to last up to 5 months, so there would be no long-term operations or
 6 emissions associated with the Project.

7 **Impact AIR-1: Temporary Deconstruction Emissions of Criteria Pollutants. Project**
 8 **deconstruction activities could result in substantial short-term emissions of**
 9 **criteria pollutants.**

10 BAAQMD recommends using urban emissions software (URBEMIS) or the California
 11 Emissions Estimator Model (CalEEMod) to quantify construction emissions for these
 12 types of proposed projects. Following quantification of Project-generated construction-
 13 related emissions, the total average daily emissions of each criteria pollutant and
 14 precursor should be compared with the lead agency’s determined project thresholds. If
 15 daily average emissions of construction-related criteria air pollutants or precursors do
 16 not exceed the lead agency’s determined thresholds for the project, the project has a
 17 less-than-significant impact to air quality. If daily average emissions of construction-
 18 related criteria air pollutants or precursors do exceed project thresholds, the proposed
 19 project has a significant impact to air quality and requires mitigation measures for
 20 emission reductions. The criteria pollutant emissions estimates below (see Table 3.3-2)
 21 for off-road equipment and vehicles were derived from CalEEMod, and the marine
 22 vessel emissions estimates were produced using a customized spreadsheet using
 23 CARB emission factors. CalEEMod has a module to account for certain mitigation
 24 measures, and these were implemented using the Basic Construction Mitigation
 25 Measures from the 2012 Updated BAAQMD CEQA Guidelines. Specific measures from
 26 **MM AIR-1** were implemented into CalEEMod to mitigate PM₁₀ emissions. The full
 27 calculation methodology, CalEEMod output, marine vessel spreadsheet, and other
 28 supporting materials can be found in Appendix C.

29 **Table 3.3-2. Mitigated Short-Term Criteria Pollutant Emissions for Port Costa**

Emission Sources	Maximum Daily (Pounds Per Day)				Total Tons			
	NO _x	ROG	PM ₁₀	PM _{2.5}	NO _x	ROG	PM ₁₀	PM _{2.5}
Off-Road Equipment & Vehicles	83.92	7.83	4.47	4.00	4.29	0.40	0.24	0.20
Marine Vessels	152.87	17.06	5.38	4.95	3.17	0.37	0.11	0.10
Total	236.79	24.89	9.85	8.95	7.46	0.77	0.35	0.30

Source: AECOM 2013

1 Criteria pollutant emissions of reactive organic gases (ROG) and NO_x from Project
2 emission sources would incrementally add to the regional atmospheric loading of O₃
3 precursors. The BAAQMD recognizes that construction equipment emits O₃ precursors,
4 but indicates that such emissions are included in the emissions inventory that serves as
5 the basis for regional air quality plans. Phillips 66 would implement **MM AIR-1** to keep
6 construction equipment in good working order and in compliance with emission
7 regulations. Therefore, exhaust emissions from deconstruction equipment would not
8 violate any air quality standard. Furthermore, there are no existing or projected air
9 quality violations associated with this Project to which emissions from deconstruction
10 activities could contribute.

11 Implementation of the following mitigation measures would reduce potentially significant
12 impacts to less than significant.

13 **MM AIR-1a. Basic Construction Measures.** The Applicant shall comply with the
14 following measures per the Bay Area Air Quality Management District's (BAAQMD's)
15 California Environmental Quality Act Guidelines:

- 16 • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded
17 areas, and unpaved access roads) shall be watered two times per day.
- 18 • All haul trucks transporting soil, sand, or other loose material off-site shall be
19 covered.
- 20 • All visible mud or dirt track-out onto adjacent public roads shall be removed
21 using wet power vacuum street sweepers at least once per day. The use of
22 dry power sweeping is prohibited.
- 23 • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- 24 • Idling times shall be minimized either by shutting equipment off when not in
25 use or reducing the maximum idling time to 5 minutes (as required by the
26 California airborne toxics control measure [Cal. Code Regs., tit. 13, § 2485]).
27 Clear signage shall be provided for construction workers at all access points.
- 28 • All construction equipment shall be maintained and properly tuned in
29 accordance with manufacturer's specifications. All equipment shall be
30 checked by a certified mechanic and determined to be running in proper
31 condition prior to operation.
- 32 • The Applicant shall post a publicly visible sign with the telephone number and
33 person to contact at the lead agency regarding dust complaints. This person
34 shall respond and take corrective action within 48 hours. The BAAQMD's
35 phone number shall also be visible to ensure compliance with applicable
36 regulations.

- 1 • If daily average emissions of construction-related criteria air pollutants or
2 precursors exceed CSLC’s determined thresholds for the project, the
3 Applicant shall implement additional construction mitigation measures
4 provided in Table 8-2 of the BAAQMD (2012) CEQA Guidelines.

5 **MM AIR-1b: Vessels and Equipment.** Project vessels and equipment that rely on
6 internal combustion engines for power and/or propulsion shall be kept in good
7 working condition and compliant with California emission regulations. Maintenance
8 logs shall be provided to the California State Lands Commission staff prior to
9 deconstruction and on a monthly basis during deconstruction.

10 **MM AIR-1c: Nearby Sensitive Receptors.** Residences in the Project vicinity shall
11 be notified of the Project schedule and duration a minimum of 2 weeks prior to
12 deconstruction activities. In addition, if work is planned during the school year,
13 schools in the vicinity shall also be notified of the Project schedule and duration.

14 ***c) Result in a cumulatively considerable net increase of any criteria pollutant for***
15 ***which the project region is non-attainment under an applicable federal or state***
16 ***ambient air quality standard (including releasing emissions which exceed***
17 ***quantitative thresholds for ozone precursors)?***

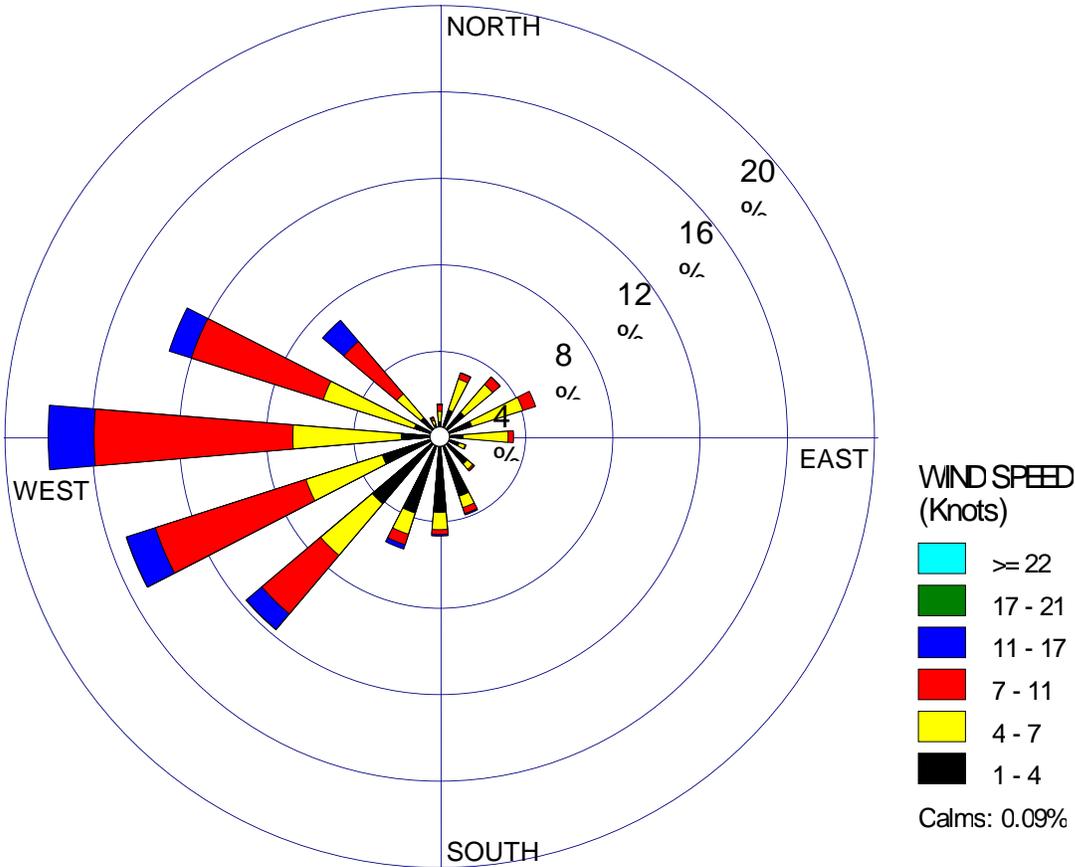
18 **Less than Significant Impact.** The BAAQMD CEQA Guidelines set forth a
19 methodology to evaluate cumulative impacts (BAAQMD 2012). For any project that
20 does not individually have significant air quality impacts, the determination of a
21 significant cumulative impact should be based on an evaluation of the consistency of
22 the project with the local general plan and of the general plan with the regional air
23 quality plan. As demonstrated above, the Project would be consistent with the 2010 Bay
24 Area Clean Air Plan and would not result in an operational air quality impact. In addition,
25 the Project would be consistent with the air quality policies in Contra Costa County. As
26 such, the Project would not result in a significant cumulative impact. Cumulative impacts
27 associated with criteria pollutants would be less than significant.

28 ***d) Expose sensitive receptors to substantial pollutant concentrations?***

29 **Less than Significant Impact.** Deconstruction activities for the entire Project would be
30 expected to last for up to 5 months. Because of the short deconstruction period and the
31 fact that much of the activity and associated emissions are expected to occur
32 approximately 0.6 mile from the nearest residential neighborhood of Port Costa,
33 operation of the Project would not expose sensitive receptors to substantial
34 concentrations of criteria air pollutants. A windrose taken from an unrelated study in
35 Martinez (see Figure 3.3-1), indicates that the wind in this area of the Carquinez Strait
36 primarily blows from West to East. This means that emissions from the Project would

1 tend to drift into the Strait away from any sensitive receptors including Port Costa to the
 2 northwest, Benicia to the northeast, and Martinez to the southeast.

3 **Figure 3.3-1. Windrose for Project Area**



4 (Source: ENSR/AECOM 2005)

5 The prevailing local wind direction along with the varying topography along the Strait
 6 would effectively disperse air emissions from the Project, minimizing exposure to any
 7 sensitive receptors. In addition to the criteria pollutants, toxic air contaminants would be
 8 generated by the use of diesel-fueled construction equipment. Diesel particulate matter
 9 (DPM) can be carcinogenic over long exposure durations (e.g., many years). However,
 10 nearby receptors would be exposed to construction emissions for only a portion of the
 11 potentially 5-month construction period. Consequently, DPM impacts on sensitive
 12 receptors would be less than significant. As such, the Project would not result in a
 13 significant cumulative impact from toxic air contaminants. Cumulative impacts
 14 associated with toxic air contaminants would be less than significant.

1 **e) Create objectionable odors affecting a substantial number of people?**

2 **Less than Significant Impact.** Deconstruction of the Project could conceivably
 3 generate odors from the combustion of fuels. The presence of an odor impact is
 4 dependent on a number of variables including:

- 5 1. Nature of the odor source (e.g., wastewater treatment or food processing plant);
- 6 2. Frequency of odor generation (e.g., daily, seasonal, activity-specific);
- 7 3. Intensity of the odor (e.g., concentration);
- 8 4. Distance of the odor source to sensitive receptors (e.g., miles);
- 9 5. Wind direction (e.g., upwind or downwind); and
- 10 6. Sensitivity of the receptor (BAAQMD 2012).

11 Project activities would primarily take place in an open area on Carquinez Strait where
 12 any odors would be dispersed. Therefore, impacts would be less than significant.

13 **f) Generate GHG emissions, either directly or indirectly, that may have a**
 14 **significant impact on the environment?**

15 **g) Conflict with the State goal of reducing greenhouse gas emissions in California**
 16 **to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions**
 17 **Act of 2006?**

18 **Less than Significant Impact.** Because the Project is expected to last no more than
 19 5 months, GHG emissions associated with the deconstruction and removal of the wharf
 20 and related structures would be short-term. Therefore, there would be no long-term
 21 operations or GHG emissions impacts associated with the Project.

22 The GHG emissions estimates below for off-road equipment and vehicles were derived
 23 from CalEEMod and the marine vessel GHG emissions estimates were produced using
 24 a customized spreadsheet using CARB emission factors. The full calculation
 25 methodology, CalEEMod output, marine vessel spreadsheet and other supporting
 26 materials can be found in Appendix C. GHG emissions estimates for the Project are
 27 presented below in Table 3.3-3.

28 **Table 3.3-3. GHG Emission Estimates**

Emission Sources	Total CO ₂ e (Metric Tons)
Off-Road Equipment & Vehicles	351.72
Marine Vessels	229.54
Total	581.26

Source: AECOM 2013

1 The BAAQMD does not have an adopted threshold of significance for construction-
2 related GHG emissions in its 2011 updated CEQA Guidelines. Rather, it states that lead
3 agencies should quantify and disclose GHG emissions that would occur during
4 construction/demolition, and make a determination on the significance of these
5 construction-generated GHG emissions. Although the 1999 Guidelines do not contain
6 thresholds to evaluate operational or construction-phase GHG emissions, the CSLC
7 hypothetically applied to the 1999 Guidelines to help evaluate construction-phase GHG
8 emissions. The 581 total MT CO₂e generated from the Project are below the 10,000 MT
9 CO₂e/year for stationary sources and below the 1,100 MT CO₂e/year for projects other
10 than stationary sources. This hypothetical comparison indicates that the total Project
11 GHG emissions are considered to be less than significant, and would not conflict with
12 the State goal of reducing GHG emissions in California to 1990 levels by 2020.

13 **3.3.4 Mitigation Summary**

14 Implementation of the following measures would reduce Project-related emissions to
15 less than significant.

- 16 • MM AIR-1a: Basic Construction Measures;
- 17 • MM AIR-1b: Vessels and Equipment; and
- 18 • MM AIR-1c: Nearby Sensitive Receptors.

1 **3.4 BIOLOGICAL RESOURCES**

BIOLOGICAL RESOURCES – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.4.1 Environmental Setting**

3 The Project site is located along the southeast shore of the Carquinez Strait near the
 4 town of Port Costa, Contra Costa County, which is within the San Francisco Estuary.
 5 The Carquinez Strait is a deep, narrow passage that joins San Pablo Bay in the west to
 6 Suisun Bay and upstream watersheds in the east. The former MOT is situated at the
 7 border of aquatic and terrestrial habitats, though the predominant habitat at the Project
 8 site is aquatic. Adjacent to the Project site is the UPRR right-of-way, which includes two
 9 active rail lines for both passenger and freight transport.

1 Although most of the deconstruction activities would take place within the main Project
2 site in the Carquinez Strait, there may be a need to provide other incidental temporary
3 facilities such as parking, storage, and sanitary stations located on shore near the
4 Project site to allow for access from onshore locations for the Applicant, its contractors,
5 site monitors, agency representatives or others wishing to observe the operations. The
6 two proposed locations are approximately 700 feet and 1,600 feet southwest and
7 upland of the main Project site on the former TXI property. See Figure 3.4-1 for the in-
8 water work area and the potential upland staging/existing parking areas.

9 In addition to the CEQA analysis presented below, a Biological Assessment for
10 consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine
11 Fisheries Service (NMFS) under Section 7 of the Endangered Species Act (ESA) is
12 provided in Appendix D.

13 **Habitats**

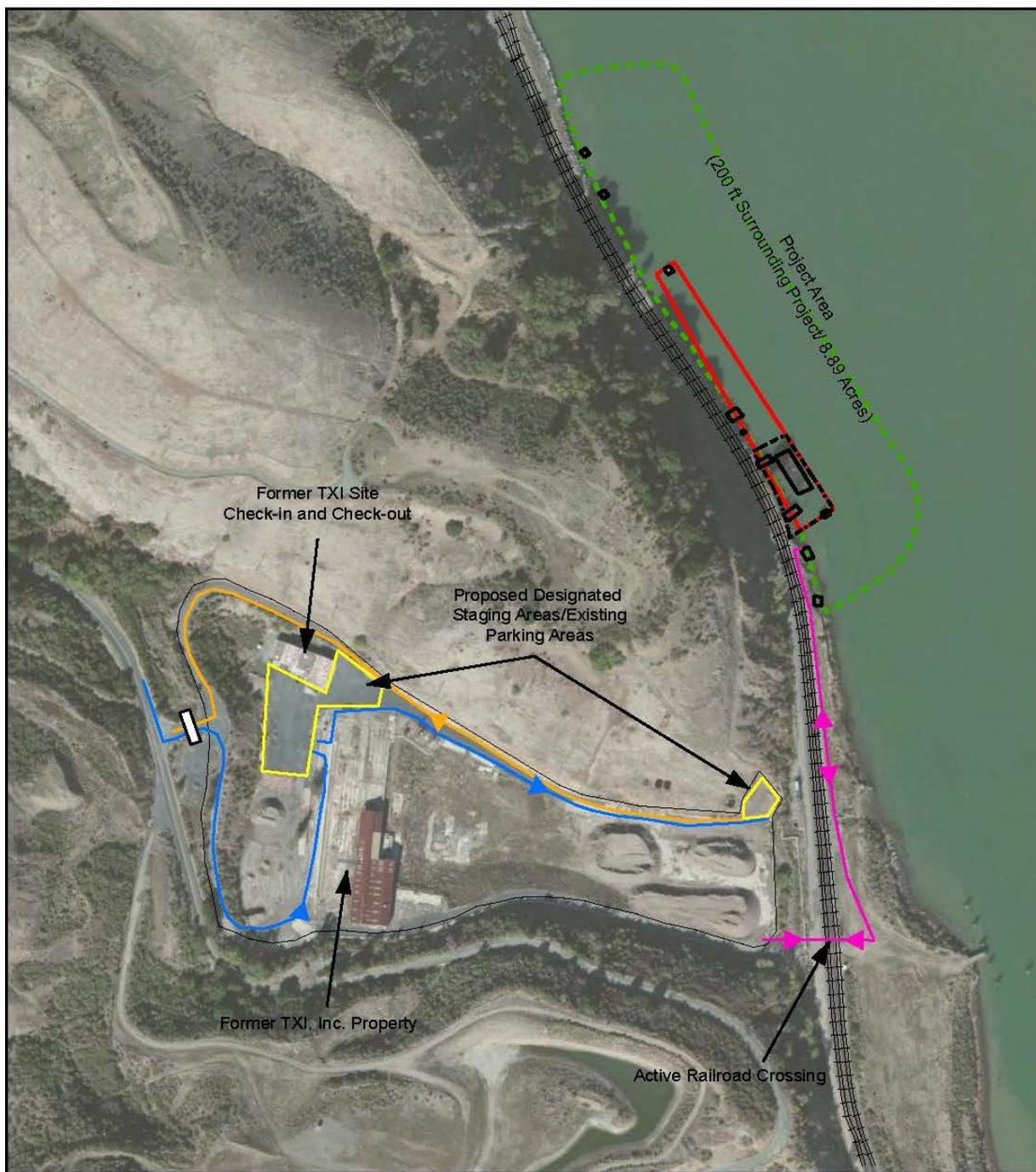
14 Aquatic habitat at the Project site consists of pelagic, soft sediment and hard bottom
15 areas. Sediment types include sand, silt, and clay (Monroe and Kelly 1992). A
16 bathymetric survey using sonar technology revealed that depths close to the shore and
17 within the Project site are 20 to 90 feet. No eelgrass (*Zostera marina*) was observed in
18 or near the action area.

19 Terrestrial habitat adjacent to the Project site includes ruderal and barren/developed
20 areas. AECOM biologists identified several plant species during a 2012 site
21 reconnaissance; vegetation was dominated by non-native annual grasses (e.g., *Avena*
22 spp. and *Bromus* spp.) and sweet fennel (*Foeniculum vulgare*) with several patches of
23 California poppy (*Eschscholzia californica*), coyote brush (*Baccharis pilularis*), and
24 Eucalyptus trees (*Eucalyptus* spp.).

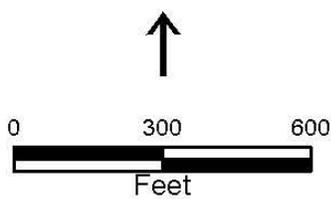
25 Much of the former TXI property has been heavily disturbed in the past and is barren or
26 paved over; this includes the two parking areas that are proposed as temporary use
27 areas for the Project and their access roads. Within the entire former TXI property, the
28 majority of the vegetation can be classified as Ruderal/Disturbed. The ruderal (weedy)
29 vegetation observed included non-native Eurasian annual grasses such as wild oats
30 (*Avena* spp.), annual brome grasses (*Bromus* spp.), ryegrass (*Lolium* spp.) and annual
31 fescues (*Festuca* spp.). Additional weedy species commonly observed in this area
32 include yellow star-thistle (*Centaurea solstitialis*), Russian knapweed (*Acroptilon*
33 *repens*), horseweed (*Conyza bonariensis*), and smilo grass (*Piptatherum miliaceum*).
34 There are also some remnants of ornamental plantings including several groups of
35 beach she-oak trees (*Casuarina equisetifolia*).

1

Figure 3.4-1. Proposed Upland Staging Areas



2



- Historic Lease Boundary
 - 200 ft Project Buffer
 - Proposed Staging Areas for Parking, Sanitation Stations and Other Incidental Uses (Not to exceed 1.5 acres) within Existing Parking Areas
 - Egress
 - Ingress
 - Pedestrian Path to Site
 - Entry Gate
- ft = Feet

1 The vegetation types observed in the areas surrounding the proposed temporary
2 staging areas during the site visit included Non-Native Grassland and Northern Coastal
3 Scrub. These vegetation types and their locations are described further below.

- 4 • Non-Native Grassland: Non-Native Grassland was observed in the hills to the
5 north and west of the former TXI property and in some of the less disturbed
6 areas within the property as well. This vegetation type is characterized by non-
7 native Eurasian annual grasses such as wild oats, annual brome grasses,
8 ryegrass and annual fescues. These grasses are interspersed with non-native
9 forbs such as black mustard (*Brassica nigra*), cardoon (*Cynara cardunculus*), and
10 filaree (*Erodium* spp.). Native wildflowers, such as California poppy may also be
11 present, particularly in years of higher rainfall. The species in the community are
12 predominantly annual and so active plant growth and flowering typically occur in
13 the rainy season; during the summer dry season the plants set seed and die.
- 14 • Northern Coastal Scrub: Northern Coastal Scrub primarily occurs on the north
15 facing slope just to the south of the former TXI property, though small patches of
16 it also occur on the slopes at the west end of the property as well. This
17 community is characterized by native shrubs and sub-shrubs including coyote
18 brush, California sagebrush (*Artemisia californica*), poison oak (*Toxicodendron*
19 *diversilobum*), toyon (*Heteromeles arbutifolia*), and bush monkeyflower (*Mimulus*
20 *aurantiacus*). Native perennial forbs, such as California bee plant (*Scrophularia*
21 *californica*) and California soap root (*Chlorogalum pomeridianum*) were also
22 observed.

23 A small area of wetland/riparian-type vegetation was observed in a small ditch on the
24 eastern end of the former TXI property approximately 100 feet south of the eastern
25 proposed staging area. Vegetation in this area included cattail (*Typha latifolia*),
26 cocklebur (*Xanthium strumarium*), tall nutsedge (*Cyperus eragrostis*), and willow (*Salix*
27 spp.). Further investigation into the history of the site indicates that TXI constructed the
28 ditch for use as a sediment basin in 2001 to comply with Clean Water Act (CWA)
29 stormwater regulations (Regional Water Quality Control Board [RWQCB] 2001). The
30 basin receives stormwater flows via two storm drains located at the downstream ends of
31 two concrete v-ditches that run along the north and south edges of the property.
32 According to the definition of waters of the U.S. from 40 Code of Federal Regulations
33 (CFR) 230.3(s), “waste treatment systems, including treatment ponds or lagoons
34 designed to meet the requirements of CWA...are not waters of the United States.” If the
35 sediment basin can be considered a treatment measure constructed to meet CWA
36 requirements, it would not be considered a jurisdictional water of the U.S. However,
37 since it appears that the basin has not been maintained since TXI ceased operations
38 and hydrophytic vegetation has naturalized in the basin, the U.S. Army Corps of
39 Engineers (USACE) could exert jurisdiction over the basin as a water of the U.S. A
40 preliminary jurisdictional delineation conducted by AECOM biologists found indicators of

1 an ordinary high water mark and hydrophytic vegetation, hydric soils, and hydrology,
2 which indicate that the basin could be considered a water of the U.S. if it does not
3 qualify as a waste treatment system under 40 CFR 230.3(s). If the USACE does not
4 exert jurisdiction over the channel, it would likely qualify as a water of the State subject
5 to regulation by the RWQCB and California Department of Fish and Wildlife (CDFW).

6 AECOM biologists also observed a concrete basin located between the eastern
7 proposed temporary parking area and the UPRR tracks. Based on RWQCB records,
8 this basin receives flows from Little Bull Valley Creek, which is considered a water of the
9 U.S. and the State and was placed into an underground culvert in 1965 (RWQCB 2001).
10 (The concrete basin also currently receives flows from the adjacent pump-and-treat
11 system for the former Tosco Port Costa site [URS, 2002] and likely receives the
12 overflow from the sediment basin described above.)

13 **Carquinez Strait and Suisun Bay**

14 The Carquinez Strait and Suisun Bay are unique because of their varying salinities
15 among seasons and years, and this creates a dynamic fish assemblage within them.
16 During normal hydrologic years, the Carquinez Strait and Suisun Bay generally support
17 a mesohaline community (NMFS 2007). Species typical of mesohaline/oligohaline
18 waters with soft sediment substrate in the San Francisco Bay include white sturgeon
19 (*Acipenser transmontanus*), green sturgeon (*Acipenser medirostris*), Sacramento
20 splittail (*Pogonichthys macrolepidotus*), longfin smelt (*Spirinchus thaleichthys*), and
21 starry flounder (*Platichthys stellatus*). Mesohaline/oligohaline hard bottom taxa include
22 prickly sculpin (*Cottus asper*).

23 The Carquinez Strait is an important migration corridor for many species of fish
24 including striped bass (*Morone saxatilis*), Chinook salmon (*Oncorhynchus tshawytscha*),
25 steelhead trout (*Oncorhynchus mykiss*) and northern anchovy (*Engraulis mordax*).
26 During wet years, when salinities are lower, distributions of freshwater, estuarine and
27 anadromous species can extend downstream into San Pablo Bay (Armor and
28 Herrgesell 1985), although it is unclear whether marine species are found more
29 upstream during dry years when salinities are higher.

30 **Special-status Species**

31 Several special-status species have the potential to occur in the Project vicinity. For the
32 purposes of this report, special-status species include those listed as endangered or
33 threatened under the ESA or California Endangered Species Act (CESA), candidate
34 species and species proposed for listing under the ESA or CESA, and species
35 otherwise protected by the State of California and included in the CDFW's California
36 Natural Diversity Database (CNDDDB). A CNDDDB search was conducted to obtain

1 recorded occurrences of special-status plant and animal species in the Project vicinity.
2 The search included the U.S. Geological Survey (USGS) 7.5-minute quadrangle that the
3 Project area occurs in, and the eight surrounding quadrangles. Spatial distribution of
4 CNDDDB records within 5 miles of the Project is shown in Figure 3.4-2 (fauna) and
5 Figure 3.4-3 (flora).

6 Because CNDDDB is limited to recorded observations, additional information on
7 species that may occur in the Project vicinity was obtained from NMFS (2012b).
8 Additionally, designated Critical Habitat within 5 miles of the Project is shown in
9 Figure 3.4-4.

10 The Project is not expected to result in adverse impacts to special-status mammals,
11 reptiles, amphibians, invertebrates, or plants, which are unlikely to occur in the Project
12 vicinity. Reconnaissance-level site surveys of the Project site and the proposed
13 temporary staging areas were conducted in May 2012 and February 2013, respectively,
14 by AECOM biologists to identify the presence of sensitive habitats or special-status
15 species. Results of the surveys are described below.

16 **Mammals**

17 Marine mammals are rarely observed in the Carquinez Strait or Suisun Bay; however,
18 California sea lions (*Zalophus californianus*) and humpback whales (*Megaptera*
19 *novaeangliae*) have been seen upstream from Carquinez Strait. These species are
20 protected under the Federal Marine Mammal Protection Act.

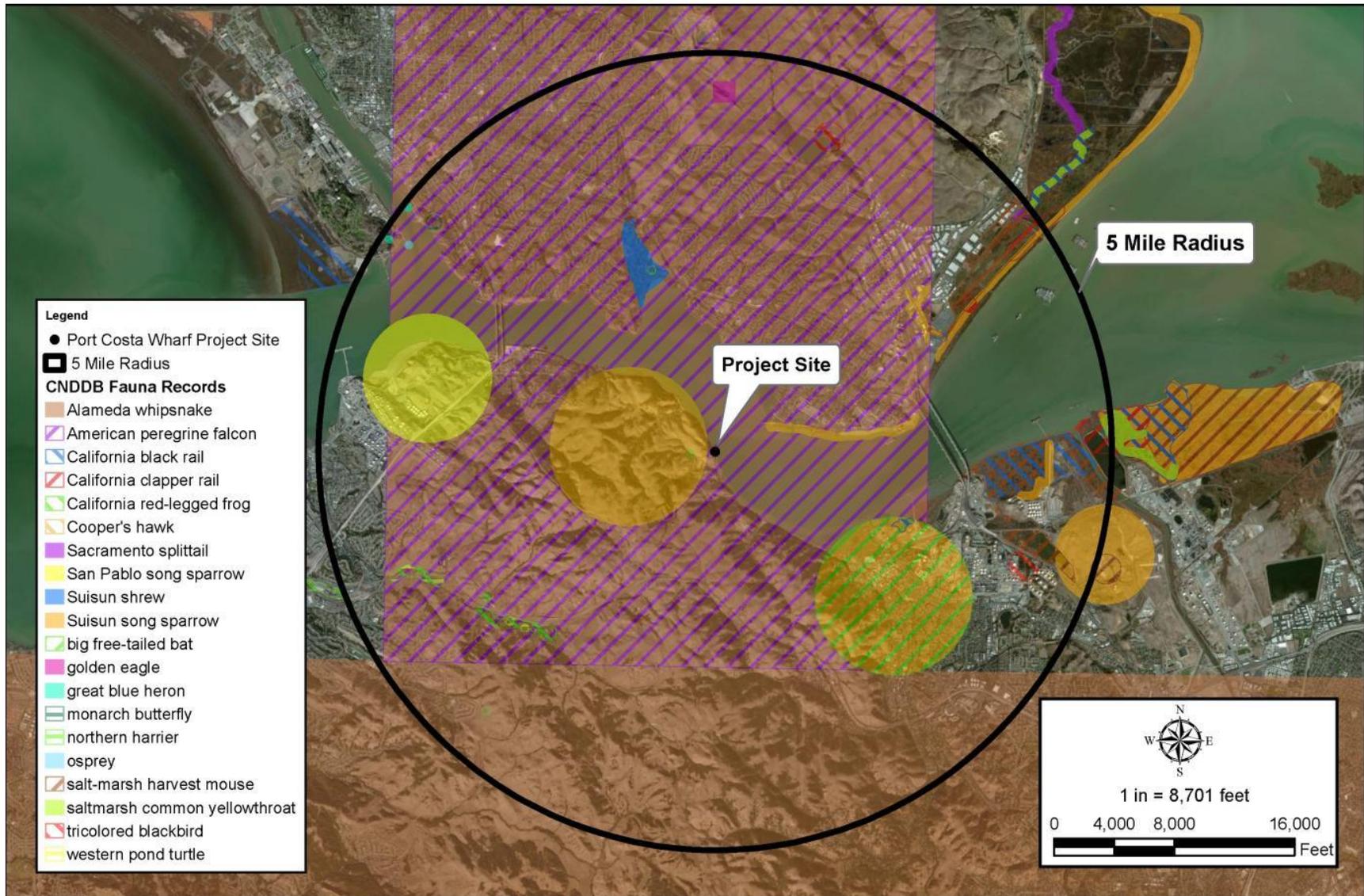
21 **Fish**

22 The following special-status species are known to occur in the Carquinez Strait and
23 Suisun Bay:

- 24 • Delta smelt (*Hypomesus transpacificus*), Federal and State Threatened
- 25 • green sturgeon (southern Distinct Population Segment), Federal Threatened,
26 Species of Special Concern
- 27 • steelhead trout (*Oncorhynchus mykiss irideus*; California Central Valley and
28 Central California Coast Evolutionarily Significant Units), Federal Threatened
- 29 • longfin smelt, State Threatened, Species of Special Concern
- 30 • river lamprey (*Lampetra ayresii*), Species of Special Concern
- 31 • Sacramento splittail (*Pogonichthys macrolepidotus*), Species of Special Concern

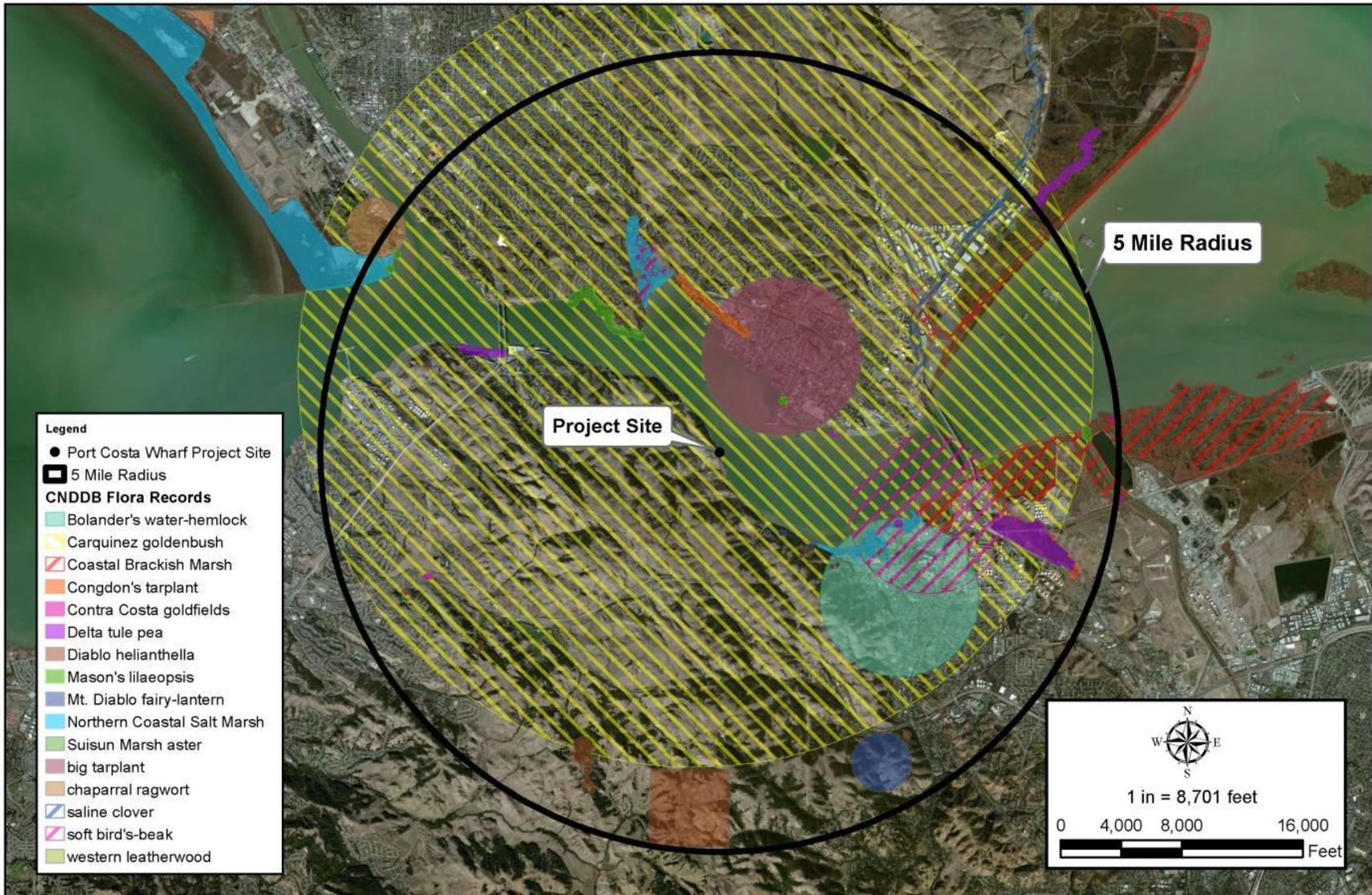
32 The Carquinez Strait is federally designated critical habitat for the delta smelt, green
33 sturgeon, and steelhead trout (see Figure 3.4-4).

1 **Figure 3.4-2. CNDDDB Fauna Records within 5 miles of the Project Area**

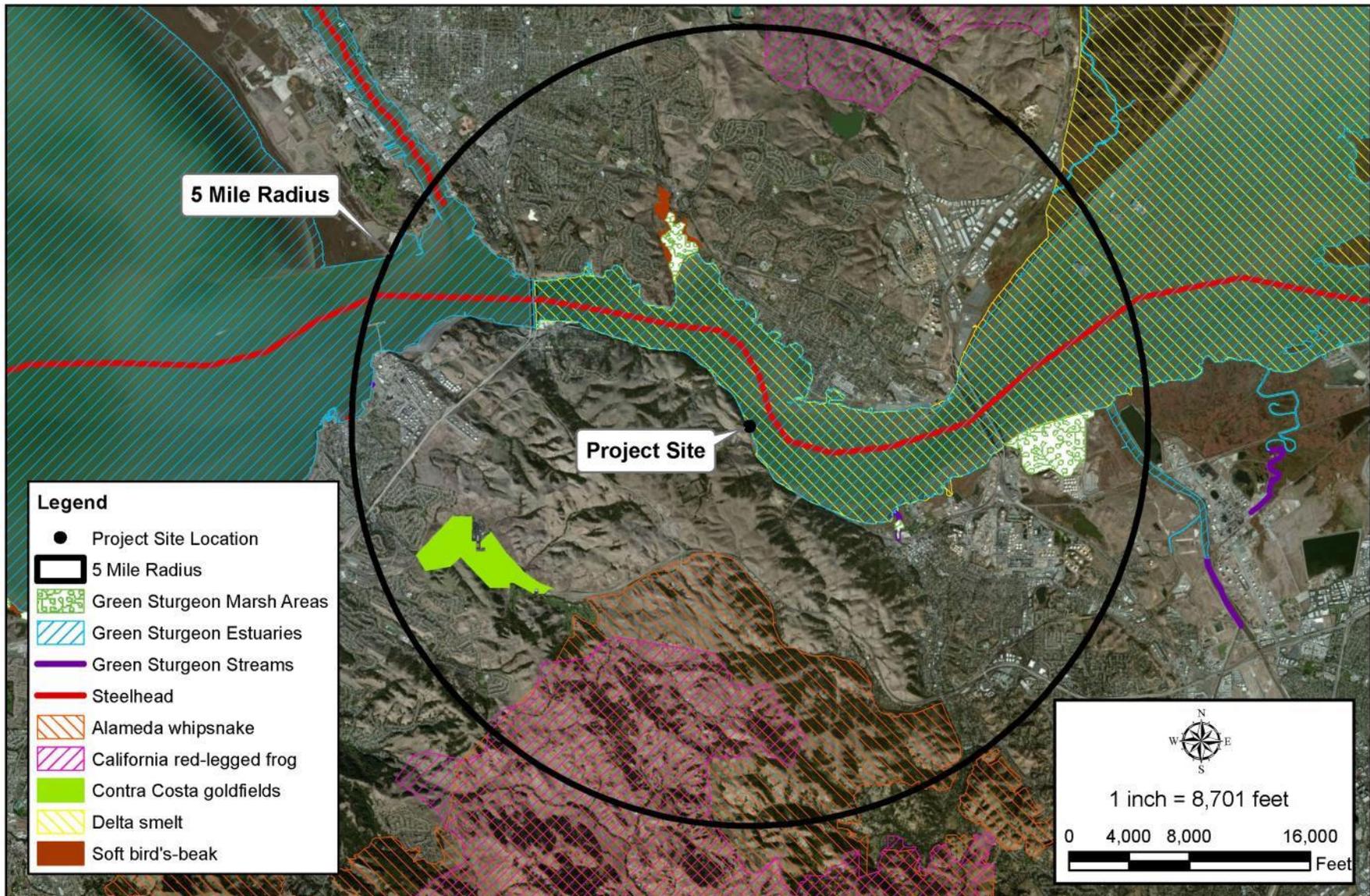


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2

Figure 3.4-3. CNDDDB Flora Records within 5 miles of the Project Area



1 **Figure 3.4-4. Designated Critical Habitat within 5 Miles of the Project Area**



1 According to the Magnuson-Stevens Fishery Conservation and Management Act, as
2 amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), essential fish
3 habitat (EFH) for species regulated under a Federal fisheries management plan must be
4 identified, conserved, and enhanced. The following federally managed species are
5 known to occur in the Carquinez Strait and have designated EFH there: English sole
6 (*Parophrys vetulus*); starry flounder; brown rockfish (*Sebastes auricultus*); northern
7 anchovy; Chinook salmon, both the Central Valley Spring-Run evolutionarily significant
8 unit (ESU) (Federal Threatened) and Sacramento River Winter-Run ESU (Federal and
9 State Endangered); and Coho salmon (*Oncorhynchus kisutch*) (Central California Coast
10 ESU [Federal and State Endangered])

11 **Birds**

12 One special-status species was potentially observed during the 2013 site visit. Several
13 song sparrows (likely the Suisun subspecies *Melospiza melodia maxillaries*, which is
14 endemic to the Carquinez Strait/Suisun Bay area and is considered a Species of
15 Special Concern by the CDFW) were observed in the vicinity of the proposed staging
16 areas on the eastern end of the former TXI property. The birds were flushed from
17 coyote brush and may be nesting in the near vicinity.

18 Figure 3.4-2 shows that an American peregrine falcon (*Falco peregrines anatum*) was
19 observed in the vicinity of the proposed staging areas in the Benicia USGS quadrangle.
20 This species is fully protected by the CDFW; therefore, the exact location of the
21 observed occurrence was not disclosed by CNDDDB. Although the presence of this
22 species is presumed extant by the CNDDDB, it is not likely to occur in or use areas within
23 or adjacent to the site. American peregrine falcon nesting and wintering habitats include
24 wetlands, woodlands, other forested habitats, cities, agricultural area, and coastal
25 habitats. This species is known to use cliffs, banks, dunes, mounds, and human-made
26 structures for their nests. They feed on passerines caught in flight. There is minimal
27 potential for this species to occur in or near the Project vicinity; it is more likely to occur
28 in higher quality habitat away from the site.

29 Aside from listed and proposed species being protected under the ESA and CESA,
30 other regulations protect various bird species. For example, the Migratory Bird Treaty
31 Act of 1918 makes it unlawful to pursue, hunt, capture, take, kill, or sell birds listed as
32 “migratory” species. In addition, Fish and Game Code section 3503 protects the nests
33 and eggs of most birds. Nesting season is generally February 1st through August 15th.

34 Although the Project site consists of only man-made structures with adjacent
35 ruderal/barren habitat, potential nesting and foraging habitats exist in the Project
36 vicinity. During the May 2012 site reconnaissance, several bird species were
37 observed in the Project vicinity, including multiple potential breeding pairs.

1 Additionally, although no nesting birds were observed in or near the proposed
 2 temporary staging areas during the 2013 reconnaissance, suitable nesting habitat is
 3 present. Therefore, there is potential for nesting birds to use these areas for nesting
 4 and/or foraging. Table 3.4-1 provides bird species observed during the surveys;
 5 however, it is not a complete list of potential bird species that could use the Project area
 6 for nesting and/or foraging.

7 **Table 3.4-1. Bird Species Observed in the Project Vicinity**

Common Name	Species Name	Status	Comments
American crow	<i>Corvus brachyrhynchos</i>	-	One adult was flying over Project site.
black phoebe	<i>Sayornis nigricans</i>	-	Several adults were observed foraging on and near the wharf.
California towhee	<i>Melzone crissalis</i>		One adult was flushed from coyote brush on east end of the former TXI property
Canada goose	<i>Branta canadensis</i>	-	Breeding pair was perched on wharf.
cliff swallow	<i>Petrochelidon pyrrhonota</i>	-	Colony with multiple nests under dolphins and Anchors 1 and 2.
common raven	<i>Corvus corax</i>	-	Two adults were observed flying over Project site.
dark-eyed junco	<i>Junco hyemalis</i>	-	One adult was observed foraging near Project site.
double-crested cormorant	<i>Phalacrocorax auritus</i>	WL	Multiple individuals were perched, swimming, and flying in action area.
Forster's tern	<i>Sterna forsteri</i>	-	Breeding adults were flying over the Project site.
great egret	<i>Ardea alba</i>	-	Multiple adults were observed flying over the Project site.
killdeer	<i>Charadrius vociferous</i>		One adult was observed flying over the Project site.
mallard	<i>Anas platyrhynchos</i>	-	Potential breeding pair was swimming at the Project site.
merlin	<i>Falco columbarius</i>	WL	One adult was observed perched on a wire on the western end of the former TXI property.
osprey	<i>Pandio haliaetus</i>	WL	Potential breeding pair was flying over and foraging at the Project site.
red-tailed hawk	<i>Buteo jamaicensis</i>	-	One adult was flying over the Project site and perched on a nearby eucalyptus tree.
(Suisun) song sparrow	<i>Melospiza melodia (maxillaries)</i>	SSC	Several were flushed from coyote brush on east end of the former TXI property.
turkey vulture	<i>Cathartes aura</i>	-	Multiple individuals were flying above the Project site.
western grebe	<i>Aechmophorus occidentalis</i>	-	One adult was swimming through the Project site.

WL = Watch List; SSC = Species of Special Concern

1 Multiple cliff swallow (*Petrochelidon pyrrhonota*) nests were observed throughout the
2 Project site; many were located on the two stand-alone dolphins and the decks. Several
3 eucalyptus trees and coyote brush in the vicinity could serve as potential nesting habitat
4 for a variety of bird species; however, the active rail lines in close proximity to the site
5 make birds nesting in the nearby vegetation unlikely. It is more probable that the Project
6 site is used for foraging habitat than for nesting habitat for species other than the cliff
7 swallow. Cliff swallows are adaptable and more tolerant to disturbances. Also, their
8 nests on the water have some distance from the rail lines that provides a buffer from the
9 noise of trains passing by.

10 **Reptiles and Amphibians**

11 Figure 3.4-2 shows that the temporary upland existing parking/staging area is within an
12 area mapped by CNDDDB for the Alameda whipsnake (*Masticophis lateralis*
13 *euryxanthus*), which is a Federal and State Threatened species. The CNDDDB record
14 indicates that an individual was observed on a northeast facing slope with scrub
15 community dominated by coyote brush within the USGS 7.5-minute quadrangle of
16 Benicia. The exact location is not disclosed by CNDDDB due to the sensitivity of this
17 species; therefore, it is uncertain whether the Alameda whipsnake was observed in the
18 Project vicinity. It is more likely that the recorded observation occurred in designated
19 critical habitat located approximately 2 miles south of the Project site (see Figure 3.4-4).
20 However, Northern Coastal Scrub was identified on the north facing slope just to the
21 south off-site of the former TXI property that could provide suitable habitat for this
22 species. Thus, the presence of suitable Alameda whipsnake habitat in the Project
23 vicinity indicates a minor potential for Alameda whipsnake to occur in or near the
24 proposed temporary staging areas. However, the suitable habitat extends south away
25 from and off the former TXI property and the Project site, and it is more likely for the
26 Alameda whipsnake to use that area rather than the degraded, ruderal area associated
27 with the proposed staging areas and the upland areas adjacent to the Project site.

28 No special-status amphibians are known to occur or were observed during the 2012 or
29 2013 site reconnaissance surveys in the Project vicinity.

30 **Plants**

31 As shown in Figure 3.4-3, Carquinez goldenbush (*Isocoma arguta*), a California Native
32 Plant Society Ranking 1B.1 – Rare, Threatened, or Endangered in California and
33 elsewhere; seriously Threatened in California, has been recorded in the Project vicinity.
34 This species was not observed during the site reconnaissance surveys and suitable
35 habitat was not present in the Project vicinity or the potential temporary staging areas.

1 **Invasive Species**

2 San Francisco Bay Estuary has been described as one of the most invaded ecosystems
3 in North America (Cohen and Carlton 1995). Invasive nonindigenous aquatic species
4 dominate many parts of the San Francisco Bay, to the extent that in some locations only
5 introduced species can be found. In 2010, the CDFW collected 497 species from San
6 Francisco Bay Estuary, of which 98 species were classified as introduced, including
7 three newly detected species to San Francisco Bay Estuary that had likely been spread
8 from other locations in California (CDFW Office of Spill Prevention and Response
9 [OSPR] 2011). The results indicate high numbers of introduced species are found in the
10 South Bay, San Pablo Bay, and Central Bay. Suisun Bay had the lowest number of
11 introduced species.

12 Nonindigenous aquatic species have been introduced to the San Francisco Bay via a
13 number of vectors, including the deliberate introduction of species for recreational or
14 commercial purposes. The shipping industry has been identified as one of the major
15 vectors of nonindigenous aquatic species, and vessel biofouling and ballast water are
16 considered the largest contributors of nonindigenous species to the San Francisco Bay
17 (CSLC 2013). Eighteen percent of established nonindigenous aquatic species are tied
18 to vessel biofouling as the primary likely vector and 9 percent for ballast water; however,
19 when considering established species with multiple possible vectors, 60 percent could
20 have been introduced via vessel biofouling as one of several possible vectors, and 53
21 percent could have been introduced via ballast water as one of several possible vectors
22 (OSPR 2011).

23 Invasive species may compete directly with native species for food or space, or prey
24 upon native species. They can also change the food chain or physical environment to
25 the detriment of native species. Approximately 42 percent of the species on the federal
26 Threatened or Endangered species list are at risk primarily because of predation,
27 parasitism, and competition from nonindigenous invasive species (OSPR 2011). One
28 such currently pernicious invasive species is the overbite clam (*Corbula amurensis*),
29 first found in the San Francisco Bay Estuary in 1986. Thought to have been introduced
30 into the San Francisco Bay Estuary by ballast water discharge from a vessel, this
31 planktivore is now so abundant that the current population is capable of filtering the
32 estuary's water column several times a day. In some portions of the Suisun Bay floor,
33 the clam accounts for the vast majority of biomass, and it has been implicated in the
34 pelagic organism decline by severely reducing the availability of phytoplankton in
35 Suisun Bay (San Francisco Estuary Project 2004, Greene 2011).

1 **3.4.2 Regulatory Setting**

2 Federal and State laws and regulations pertaining to this issue area and relevant to the
 3 Project are identified in Tables 1-2 and 3.4-2. Local goals, policies, and/or regulations
 4 applicable to this issue area are listed below.

Table 3.4-2. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Biological Resources)

U.S.	<p>Endangered Species Act (FESA) (7 USC 136, 16 USC 1531 et seq.)</p>	<p>The FESA, which is administered in California by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), provides protection to species listed as threatened or endangered, or proposed for listing as threatened or endangered. Section 9 prohibits the “take” of any member of a listed species.</p> <ul style="list-style-type: none"> • Take is defined as “...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” • Harass is “an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering.” • Harm is defined as “...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.” <p>When applicants are proposing projects with a Federal nexus that “may affect” a federally listed or proposed species, the Federal agency is required to consult with the USFWS or NMFS, as appropriate, under Section 7, which provides that each Federal agency must ensure that any actions authorized, funded, or carried out by the agency are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of areas determined to be critical habitat.</p>
U.S.	<p>Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 USC 1801 et seq.)</p>	<p>The MSA is the primary law governing marine fisheries management in U.S. Federal waters. Amendments to the 1996 MSA require the identification of Essential Fish Habitat (EFH) for federally managed species and the implementation of measures to conserve and enhance this habitat. Any project requiring Federal authorization, such as a USACE permit, is required to complete and submit an EFH Assessment with the application and either show that no significant impacts to the essential habitat of managed species are expected or identify mitigations to reduce those impacts. Under the MSA, Congress defined EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 USC 1802(10)). The EFH provisions of the MSA offer resource managers a means to heighten consideration of fish habitat in resource management. Pursuant to section 305(b)(2), Federal agencies shall consult with the NMFS regarding any action they authorize, fund, or undertake that might adversely affect EFH.</p>
U.S.	<p>Marine Mammal Protection Act (MMPA) (16 USC 1361 et seq.)</p>	<p>The MMPA is designed to protect and conserve marine mammals and their habitats. It prohibits takes of all marine mammals in the U.S. with few exceptions. The NMFS may issue a take permit under section 104 if the activities are consistent with the purposes of the MMPA and applicable regulations at 50 CFR, Part 216. The NMFS must also find that the manner of taking is “humane” as defined in the MMPA. If lethal taking of a marine mammal is requested, the applicant must demonstrate that using a non-lethal method is not feasible.</p>

Table 3.4-2. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Biological Resources)

U.S.	Migratory Bird Treaty Act (MBTA) (16 USC 703-712)	The MBTA was enacted to ensure the protection of shared migratory bird resources. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit. The responsibilities of Federal agencies to protect migratory birds are set forth in EO 13186. The USFWS is the lead agency for migratory birds. The USFWS issues permits for takes of migratory birds for activities such as scientific research, education, and depredation control, but does not issue permits for incidental take of migratory birds.
U.S.	Other	<ul style="list-style-type: none"> • The Bald and Golden Eagle Protection Act makes it illegal to import, export, take (including molest or disturb), sell, purchase or barter any bald eagle or golden eagle or parts thereof. • Clean Water Act (33 USC 1251 et seq.) and Rivers and Harbors Act (33 USC 401) (see section 3.8, Hydrology and Water Resources). • Executive Order 13112 requires Federal agencies to use authorities to prevent introduction of invasive species, respond to and control invasions in a cost-effective and environmentally sound manner, and provide for restoration of native species and habitat conditions in invaded ecosystems. • Executive Order 13158 requires Federal agencies to identify actions that affect natural or cultural resources within a Marine Protected Area (MPA) and, in taking such actions, to avoid harm to the natural and cultural resources that are protected by a MPA.
CA	California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.)	The CESA provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the California Department of Fish and Wildlife (CDFW), and prohibits the taking of such species without its authorization. Furthermore, the CESA provides protection for those species that are designated as candidates for threatened or endangered listings. Under the CESA, the CDFW has the responsibility for maintaining a list of threatened species and endangered species (Fish & G. Code, § 2070). The CDFW also maintains a list of candidate species, which are species that the CDFW has formally noticed as under review for addition to the threatened or endangered species lists. The CDFW also maintains lists of Species of Special Concern that serve as watch lists. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project site and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may affect a candidate species. The CESA also requires a permit to take a State-listed species through incidental or otherwise lawful activities (§ 2081, subd. (b)).
CA	California Marine Life Protection Act (MLPA) (Fish & G. Code, §§ 2850–2863)	Passed by the State Legislature in 1999, the MLPA required the CDFW to redesign its system of MPAs to increase its coherence and effectiveness at protecting the state's marine life, habitats, and ecosystems. For the purposes of MPA planning, a public-private partnership commonly referred to as the MLPA Initiative was established, and the State was split into five distinct regions (four coastal and the San Francisco Bay) each of which had its own MPA planning process. All four coastal regions have completed these individual planning processes. As a result the coastal portion of California's MPA network is now in effect statewide. Options for a planning process in the San Francisco Bay have been developed for consideration at a future date.

Table 3.4-2. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Biological Resources)

CA	Lake and Streambed Alteration Program (Fish & G. Code, §§ 1600-1616)	The CDFW regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. These regulations require notification of the CDFW for lake or stream alteration activities. If, after notification is complete, the CDFW determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFW has authority to issue a Streambed Alteration Agreement.
CA	Other relevant California Fish and Game Code sections	<ul style="list-style-type: none"> • The California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.) is intended to preserve, protect, and enhance endangered or rare native plants in California. This Act includes provisions that prohibit the taking of listed rare or endangered plants from the wild and a salvage requirement for landowners. The Act directs the CDFW to establish criteria for determining what native plants are rare or endangered. Under section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. • The California Species Preservation Act (Fish & G. Code §§ 900-903) provides for the protection and enhancement of the amphibians, birds, fish, mammals, and reptiles of California. • Fish and Game Code sections 3503 & 3503.5 prohibit the taking and possession of native birds' nests and eggs from all forms of needless take. These regulations also provide that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nests or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto. • Fish and Game Code sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), & 5515 (fish) designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time without permission by the CDFW. • Fish and Game Code section 3513 does not include statutory or regulatory mechanism for obtaining an incidental take permit for the loss of non-game, migratory birds.

- 1 The Contra Costa County General Plan 1995-2020 outlines conservation goals and
2 policies that promote protection of important flora and fauna resources in the County,
3 including important ecological habitats. the General Plan identifies the following
4 vegetation and wildlife resource goals and policies that are applicable to the Project site:
- 5 • Goal 8-E - To protect rare, threatened and endangered species of fish, wildlife
6 and plants, significant plant communities, and other resources which stand out as
7 unique because of their scarcity, scientific value, aesthetic quality or cultural
8 significance. Attempt to achieve a significant net increase in wetland values and
9 functions within the County over the life of the General Plan. The definition of rare,
10 threatened and endangered includes those definitions provided by the Federal
11 Endangered Species Act, the California Endangered Species Act, the California
12 Native Plant Protection Act, and the California Environmental Quality Act.

- 1 • Goal 8-F - To encourage the preservation and restoration of the natural
2 characteristics of the San Francisco Bay/Delta estuary and adjacent lands, and
3 recognize the role of Bay vegetation and water area in maintaining favorable
4 climate, are and water quality, fisheries and migratory waterfowl.
- 5 • Policy 8-6 - Significant trees, natural vegetation, and wildlife populations
6 generally shall be preserved.
- 7 • Policy 8-7 - Important wildlife habitats which would be disturbed by major
8 development shall be preserved, and corridors for wildlife migration between
9 undeveloped lands shall be retained.
- 10 • Policy 8-15 - Existing vegetation, both native and non-native, and wildlife habitat
11 areas shall be retained in the major open space areas sufficient for the
12 maintenance of a health balance of wildlife populations.
- 13 • Policy 8-17 - The ecological value of wetland areas, especially the salt marshes
14 and tidelands of the bay and delta, shall be recognized. Existing wetlands in the
15 county shall be identified and regulated. Restoration of degraded wetland areas
16 shall be encouraged and supported whenever possible.
- 17 • Policy 8-24 - The County shall strive to identify and conserve remaining upland
18 habitat areas which are adjacent to wetlands and are critical to the survival and
19 nesting of wetland species.

20 **3.4.3 Impact Analysis**

21 ***a) Have a substantial adverse effect, either directly or through habitat***
22 ***modifications, on any species identified as a candidate, sensitive, or special-***
23 ***status species in local or regional plans, policies, or regulations, or by the***
24 ***California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

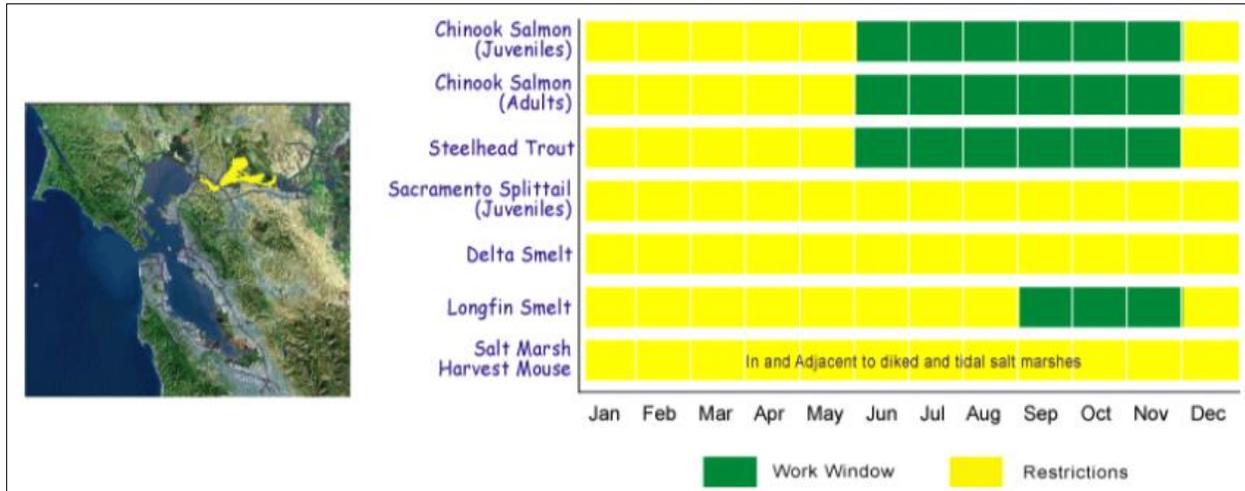
25 Because the majority of the Project site occurs below mean high water, the majority of
26 potential impacts would occur to special-status and federally managed aquatic species.

27 **Impact BIO-1: Physical displacement of fish species and disturbance of EFH due**
28 **to deconstruction and removal activities.**

29 **Less than Significant with Mitigation.** Deconstruction activities would include the
30 removal of decks, pilings, and debris; vessel movements and mooring; and generation
31 of underwater noise due to equipment operation. These activities could potentially result
32 in the following short-term effects on special-status and federally managed fish species:
33 physical displacement, loss of foraging area and prey species, and physical injury
34 caused by equipment.

1 Deconstruction activities associated with the Project could result in temporary impacts
 2 to special-status and federally managed species within the Project area. General
 3 activity may cause disturbance and displacement of fish species due to movements
 4 and noise from equipment operations. Fish would likely avoid the area during
 5 deconstruction activities. There would also be a temporary loss of foraging habitat and
 6 prey species, particularly when the piles are completely removed or removed to a
 7 depth of at least 2 feet below the sediment level. Additionally, injury or disturbance to
 8 special-status species from noise or physical injury caused by equipment operations in
 9 the water column may occur. Physical displacement of special-status and federally
 10 managed fish species and foraging habitat is considered a potentially significant impact;
 11 therefore, the Project could result in potentially significant impacts to fish species and
 12 EFH located in the Project area. The NMFS In-Water Work Windows for the Carquinez
 13 Strait and Suisun Bay are shown in Figure 3.4-5.

14 **Figure 3.4-5. NMFS In-Water Dredging Window (Carquinez Strait/Suisun Bay)**



Source: http://swr.nmfs.noaa.gov/overview/sroffice/2dredge_restriction_Suisun_carquinez.html

15 Implementation of the following mitigation measures would reduce potentially significant
 16 impacts to less than significant.

17 **MM BIO-1a: Disturbance Minimization.** The Applicant shall adhere to the following
 18 conditions to minimize disturbance to sensitive species:

- 19 • The Project disturbance area shall be limited to the minimum required to
 20 complete the Project.
- 21 • Vessel traffic and movements shall be minimized to reduce potential physical
 22 displacement or injury of fish.

- 1 • In-water work shall be conducted in compliance with the California
2 Department of Fish and Wildlife and National Marine Fisheries Service work
3 windows for fish species that occur in the Carquinez Strait and Suisun Bay to
4 limit the deconstruction activity to times when there is no spawning and a
5 reduced number of fish in the area.

6 **MM BIO-1b: Worker Environmental Awareness Program (WEAP).** Training for all
7 personnel involved in deconstruction activities shall be mandated. Training materials
8 shall be submitted to the California State Lands Commission staff for approval
9 2 weeks prior to deconstruction. Training shall include the importance of the marine
10 environment to special-status species and the environmental protection measures
11 that are being implemented to avoid and/or minimize negative impacts to Essential
12 Fish Habitat and the species that depend on them. The WEAP shall also cover other
13 important biological resources with potential to occur in and around the Project area,
14 including Alameda whipsnake, nesting birds, and wetlands.

15 **Impact BIO-2: Potential impacts of toxic materials to fish species.**

16 **Less than Significant with Mitigation.** Release of toxic materials to the marine
17 environment can result in deleterious physical impacts to special-status and federally
18 managed fish species as well as special-status birds, mammals, and habitats. During
19 wharf deconstruction, the piles would be completely removed or removed to a depth of
20 at least 2 feet below the sediment level. This sediment disturbance would increase
21 turbidity and could re-suspend contaminants, such as mercury or hydrocarbons, which
22 may have resulted from previous spills. Additionally, the pilings contain the wood
23 preservative creosote, a toxic substance made up of harmful chemicals such as
24 polycyclic aromatic hydrocarbons, phenols, and creosols. Removal of the pilings may
25 release creosote into the water, which could have negative impacts on fish species that
26 use the Project area during migration or for foraging. However, creosote could be
27 leaching out of the pilings as they exist; therefore, removal of the pilings would
28 potentially reduce creosote exposure over the long-term.

29 LBP has been found on wharf surfaces and would be abated in accordance with
30 Federal, State, and local regulations. Wharf structures may also contain other
31 hazardous materials such as mercury switches, petroleum product residues, and
32 hydraulic fluids. If detected, these substances would also be abated in accordance with
33 Federal, State and local regulations. Removal of the wharf remnants, if they contain
34 these contaminants, would have a beneficial, long-term effect.

35 There is also potential for the accidental release of oil or fuel into the Bay from
36 equipment operation, which could smother organisms or expose them to harmful
37 petroleum hydrocarbons. Other debris such as pilings or concrete could accidentally
38 drop into the Bay, which could impair habitat or release toxic materials into the water.

1 There is minimal potential for long-term effects that could result from deconstruction and
2 removal activity. Exposure to contaminants either re-suspended from beneath the
3 sediment or Bay muds surface during pile removal, from oil or fuel released during
4 equipment operation, or released from the wood pilings could have negative impacts on
5 special-status species. Also, if the embankment is disturbed and not properly stabilized,
6 potential erosion over time could lead to increased turbidity and increased exposure to
7 contaminants that may have accumulated in the soil during MOT operations. These
8 chemicals can bioaccumulate within individuals and biomagnify up the food chain.
9 Impacts could include reproduction impairment, suppressed immune function, liver
10 lesions, fin abnormalities, and issues with embryonic development.

11 Implementation of **MM WQ-1**, **MM HAZ-1b**, and the following mitigation measure would
12 reduce potentially significant impacts to less than significant.

13 **MM BIO-2: Lead-Based Paint (LBP) Management Plan.** Since LBP is present on
14 the wharf, Phillips 66 shall retain a licensed lead abatement contractor to address
15 LBP prior to the general deconstruction of the wharf. A LBP Management Plan
16 including health and safety procedures shall be prepared and submitted to the
17 California State Lands Commission staff for approval 2 weeks prior to deconstruction
18 and included as part of the Project's Work Plan.

19 **Impact BIO-3: Potential impacts of debris on nearby habitat.**

20 **Less than Significant with Mitigation.** Loss of equipment and debris into the Bay may
21 negatively impact special-status and federally managed species and their habitats.
22 Accidental loss of deconstruction equipment or debris into Bay waters could have a
23 negative impact on fish species and habitat in the Project vicinity; species and habitats
24 could be physically disturbed or smothered and there is potential for the release of
25 contaminants from the debris. Implementation of the following mitigation measure would
26 reduce potentially significant impacts to less than significant.

27 **MM BIO-3: Deconstruction and Seafloor Debris Removal Plan.** The Applicant
28 shall prepare a Deconstruction and Seafloor Debris Removal Plan for approval by
29 the California State Lands Commission staff 60 days prior to deconstruction to
30 address the following:

- 31 • Removal methods, equipment, and timing for all Project components.
- 32 • Procedures for monitoring and recording, by the on-site contractor's
33 supervisor and mitigation monitor of any deconstruction debris or equipment
34 that has dropped into Bay waters. The record shall include the dropped
35 object's description and location for recovery.
- 36 • Procedures for conducting a post-deconstruction bathymetric survey once
37 deconstruction is complete to verify that the wharf has been completely

- 1 removed and to identify any debris items that are associated with the
2 deconstruction process.
- 3 • Removal of sea floor debris inclusive of any equipment, tools, pilings, or other
4 materials or debris accidentally dropped into the Bay during deconstruction
5 activities. Large pieces of structures to be removed would have tag lines
6 attached to facilitate recovery from the Bay in the event of an accident.
 - 7 • Characterization of the content of the two steel pipe sections and alternative
8 recovery approaches based on sampling results. The approach(s) shall be
9 carefully designed to mitigate the potential of releasing any hazardous
10 materials (if found inside the pipes) into the Bay.

11 **Impact BIO-4: Potential impacts of deconstruction activities on special-status**
12 **birds.**

13 **Less than Significant with Mitigation.** Deconstruction activities may result in the
14 disturbance of individuals or nests of protected bird species. If nests are present during
15 deconstruction, they would be destroyed or potentially disturbed. This would result in
16 not only significant impacts, but also in a violation of regulations including the Migratory
17 Bird Treaty Act and other CDFW restrictions.

18 No listed or proposed species are expected to occur in or adjacent to the Project area;
19 therefore, no effects on species protected under the ESA or CESA are expected.
20 However, several State-protected special-status bird species are either known or have
21 potential to occur in the Project vicinity. These species may be affected by the Project:
22 double-crested cormorant, merlin, and osprey. In addition, song sparrows that may be
23 considered a Species of Special Concern were observed in the vicinity of the proposed
24 staging areas. Deconstruction activities would likely disturb State special-status bird
25 species using the area for nesting and/or foraging habitat. Birds would likely avoid the
26 area during deconstruction activities and these activities would likely displace potential
27 prey species for fish-eating birds.

28 The cliff swallows that use the Project site for nesting could be negatively affected by
29 the Project. Nesting season for this species is generally April through July, which falls
30 within the CDFW/NMFS in-water work windows for some of the fish species that occur
31 in the area (see Figure 3.4-4). Prior to nesting season, Phillips 66 would remove the
32 abandoned nests and implement netting to deter the establishment of new nests, and
33 the dolphin structures and decks would be prioritized for removal. Although this would
34 displace the colony, as they often return to the same nesting sites year after year, this
35 species is highly adaptable and tolerant to human activities and they would easily
36 procure another suitable nesting site.

1 Implementation of **MM BIO-1b** and the following mitigation measures would reduce
2 potentially significant impacts to less than significant.

3 **MM BIO-4a: Bird Nesting Prevention.** In consultation with the California
4 Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, no less than
5 1 month prior to nesting season, the Applicant shall implement deterrence measures
6 to prevent nesting birds from using any of the wharf structure slated for removal.
7 Measures shall include, but not be limited to, the following:

- 8 • Old nests or nests under construction shall be washed down with water or
9 knocked down using a pole.
- 10 • To minimize the likelihood of nesting birds using the mooring dolphins or
11 decks to support nests, these structures shall be prioritized for removal.
- 12 • Netting with mesh size 0.5 to 0.75 inch shall be installed to provide a physical
13 barrier between the birds and the nest site.

14 **MM BIO-4b: Pre-deconstruction Nesting Bird Survey and Monitoring.** No more
15 than 14 days prior to the start of deconstruction activities, a qualified avian biologist
16 shall conduct a nesting bird survey in the Project area to ensure that no nesting has
17 taken place. The qualified biologist shall also monitor the site during deconstruction
18 activity for any nesting in the Project vicinity.

19 **MM BIO-4c: Work Zones around Active Nests.** In the event that an active nest is
20 found in the Project vicinity, appropriate no-work buffers shall be established in
21 consultation with the California Department of Fish and Wildlife and the U.S. Fish
22 and Wildlife Service to prevent disturbance or destruction of the nest.

23 **Impact BIO-5: Potential impacts to Alameda whipsnake.**

24 **Less than Significant with Mitigation.** CNDDDB records indicate an occurrence of
25 Alameda whipsnake, a Federal and State Threatened species, within the USGS 7.5-
26 minute quadrangle in which the Project site occurs. The Project site is outside of the
27 designated critical habitat for this species, but potentially suitable habitat was identified
28 south of the TXI property approximately 300 feet from the eastern parking lot. Although
29 it is unlikely that Alameda whipsnake would occur within the proposed temporary
30 staging areas due to the degraded quality of the habitat, there is a slight possibility that
31 Project vehicles or equipment could result in take of Alameda whipsnake if one were
32 present along the access route or within the staging area.

33 Implementation of **MM BIO-1b** and the following mitigation measure would reduce
34 potentially significant impacts to less than significant:

1 **MM BIO-5: Avoidance and Reduced Speed Limits.** To reduce the potential for
2 Alameda whipsnake take to a less-than-significant level, only the roadway along the
3 northern edge of the former TXI/Pacific Custom Materials, Inc. (TXI) property shall
4 be used for ingress/egress so that Project vehicles are routed away from the
5 potential habitat to the south and potential wetland areas in the eastern portion of
6 the property. In addition, a speed limit of 10 miles per hour shall be implemented
7 within the TXI property.

8 ***b) Have a substantial adverse effect on any riparian habitat or other sensitive***
9 ***natural community identified in local or regional plans, policies, regulations or by***
10 ***the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

11 Results from the CNDDDB search indicate that there are records of two sensitive natural
12 communities near the Project area: northern coastal salt marsh and coastal brackish
13 marsh. These communities were recorded approximately 2 miles southeast of the site
14 and northern coastal salt marsh was recorded about 2 miles northwest of the site as
15 well. These communities were not identified within the Project site during a 2012 or
16 2013 site reconnaissance surveys conducted by AECOM biologists. However, a small
17 area of wetland/riparian-type vegetation was observed in a small ditch on the eastern
18 end of the former TXI property approximately 100 feet southeast of the eastern existing
19 proposed temporary parking lot.

20 **Impact BIO-6: Potential impacts to a small wetland/riparian area located 100 feet**
21 **southeast of the eastern proposed upland staging area.**

22 **Less than Significant with Mitigation.** Use of the proposed upland staging areas for
23 parking, incidental storage of non-hazardous materials (not used for the deconstruction
24 work on water), and sanitary stations may impact the sensitive wetland/riparian species
25 identified near the eastern end of the former TXI property. The two basins identified are
26 potential waters of the U.S. and State. Accidental spills from vehicles or disturbance due
27 to pedestrian use could impact this area. Implementation of **MM BIO-1b**, **MM BIO-5**, and
28 **MM WQ-1** would reduce potentially significant impacts to less than significant.

29 **Impact BIO-7: Potential spread of aquatic invasive species.**

30 **Less than Significant with Mitigation.** Aquatic invasive species could be introduced to
31 the Project area by vessels involved in deconstruction. Vectors for invasive species may
32 include ballast water and biofouling (i.e., the accumulation of aquatic organisms) on
33 vessel hulls or accessory structures. Introduced species have the potential to affect
34 indigenous species through competition, predation, parasitism, genetic dilution,
35 introduction of pathogens, and smothering and loss of habitat.

1 It is expected that most vessels contracted for the Project will originate from local ports,
2 thus reducing the possibility of introducing invasive species from outside the local area;
3 however, implementation of the following mitigation measure would further reduce
4 potentially significant impacts to less than significant.

5 **MM BIO-6: Best Management Practices (BMPs) for Aquatic Invasive Species.**

6 To reduce the potential for introducing aquatic invasive species to a less-than-
7 significant level, BMPs for ballast water management and biofouling removal shall
8 be implemented to avoid the spread of invasive species. Vessels over 300 gross
9 tons in size are currently regulated under the State's Marine Invasive Species
10 Program, and Project vessels of this size will comply with the State's requirements
11 for ballast water management and biofouling removal. The deconstruction contractor
12 shall also be required to inspect and remove biofouling from Project vessels less
13 than 300 gross tons prior to travelling to the Project area.

14 ***c) Have a substantial adverse effect on federally protected wetlands as defined***
15 ***by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal***
16 ***pool, coastal, etc.) through direct removal, filling, hydrological interruption, or***
17 ***other means?***

18 **Less than Significant Impact.** The Carquinez Strait is subject to CWA section 404 and
19 is regulated by the RWQCB and CDFW. Any impacts, such as degraded water quality
20 due to piling removal, would be short-term and less than significant. There would be no
21 alterations to the shoreline and no removal, filling, or hydrological interruption of any
22 wetlands would occur as a result of the Project. In addition, removal of creosote or any
23 other contaminants within the derelict wharf would be beneficial to water quality.

24 ***d) Interfere substantially with the movement of any native resident or migratory***
25 ***fish or wildlife species or with established native resident or migratory wildlife***
26 ***corridors, or impede the use of native wildlife nursery sites?***

27 **Impact BIO-8: Potential impacts of deconstruction to migratory fish.**

28 **Less than Significant with Mitigation.** Deconstruction activities, such as vessel
29 movements, mooring anchor placement, barge grounding, and piling removal, would
30 occur in the Carquinez Strait, which is a migratory corridor for several special-status and
31 federally managed fish species. Physical disturbance and noise could impact the
32 migration movement of these species. Implementation of **MM BIO-1a**, **MM BIO-3**, and
33 **MM WQ-1** reduce potentially significant impacts to less than significant.

34 ***e) Conflict with any local policies or ordinances protecting biological resources,***
35 ***such as a tree preservation policy or ordinance?***

1 **No Impact.** The Project is consistent with the policies and objectives of the
2 San Francisco Bay Plan (San Francisco Bay Conservation and Development
3 Commission [BCDC] 2007) regarding biological resources.

4 ***(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural***
5 ***Community Conservation Plan, or other approved local, regional, or State habitat***
6 ***conservation plan?***

7 **No Impact.** There are currently no Habitat Conservation Plans or Natural Community
8 Conservation Plans in or near the Project site.

9 **3.4.4 Mitigation Summary**

10 Implementation of the following measures would reduce Project-related impacts to
11 biological resources to less than significant.

- 12 • MM BIO-1a: Disturbance Minimization;
- 13 • MM BIO-1b: Worker Environmental Awareness Program (WEAP);
- 14 • MM BIO-2: Lead-Based Paint (LBP) Management Plan;
- 15 • MM BIO-3: Deconstruction and Seafloor Debris Removal Plan;
- 16 • MM BIO-4a: Bird Nesting Prevention;
- 17 • MM BIO-4b: Pre-deconstruction Nesting Bird Survey and Monitoring;
- 18 • MM BIO-4c: Work Zones around Active Nests;
- 19 • MM BIO-5: Avoidance and Reduced Speed Limits;
- 20 • MM WQ-1: A Water Quality/Stormwater Pollution Prevention Plan; and
- 21 • MM HAZ-1b: A Hazardous Materials Management Plan (HMMP).

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 site is located along the southeast shore of the Carquinez Strait near the
 5 town of Port Costa, Contra Costa County. The Carquinez Strait is a narrow tidal strait
 6 that is part of the tidal estuary of the Sacramento and San Joaquin rivers as they drain
 7 into the San Francisco Bay. The Project is predominately located within the waters of
 8 the Strait, with temporary staging areas located within the adjacent former TXI property
 9 and at the chosen contractor’s shore base.

10 Historical Records Search

11 A search of the California Historical Resources Information System (CHRIS) records
 12 determined that there are no cultural resources recorded within the Project site, and that
 13 three previously recorded sites are located within a 0.5-mile radius of the Project site.
 14 Site P-07-841 is a historic-era trash scatter recorded in January 2000, but has not been
 15 evaluated for significance. The recordation form states that the scatter appears to be
 16 the result of multiple dumping episodes. This site is on a hillside southwest of the
 17 Project site. Site P-07-842 is a 1915 concrete bridge that was also recorded in January
 18 2000, but was not evaluated for significance. It is located on Carquinez Scenic Drive in
 19 the bluffs southwest of the Project site. Site P-07-2942 is a segment of the Carquinez
 20 Scenic Drive (formerly State Route 14) that was recorded in August 2007, but has not
 21 been evaluated for significance. The recorded segment is located in the bluffs to the
 22 north, south, and southwest of the Project site.

1 The Project would remove remnants of a wharf, concrete abutments with wood decking
2 and dolphin bumpers that are over 45 years in age. The records search indicates that
3 these materials have not been recorded or evaluated previously. Additionally, an
4 operational UPRR/Amtrak railroad alignment over 45 years in age is located adjacent to
5 the Project site and has not been recorded or evaluated according to the Northwest
6 Information Center. However, considering the current use of the mainline railroad and
7 the nature of the Project (to remove the water features), it is unlikely that the railroad
8 would be affected.

9 **Archaeological Survey**

10 This analysis also included an archaeological survey for the Project's proposed
11 temporary staging areas located at the former TXI property. As part of the field survey,
12 the archaeologist walked a series of transects spaced approximately 5 meters apart
13 covering the temporary staging areas and access routes. These upland areas have
14 been heavily altered by grading, paving, and construction of two buildings. Most of the
15 former TXI property has been covered with gravel or is paved. Modern debris observed
16 included small scraps of metal, lumber, and other construction material. No native soil
17 was identified during the survey. No historic debris was identified.

18 **Ethnological Background**

19 The San Francisco Bay is within the traditional territory of the Costanoan or Ohlone
20 peoples (Levy 1978), who occupied a large territory along the California coastline from
21 San Francisco Bay to Big Sur. The Costanoan peoples were distinct sociopolitical
22 groups who spoke at least eight different languages of the same Penutian language
23 group. In 1769, the Costanoan peoples lived in approximately 50 independent nations
24 or tribelets, with each tribelet numbering from 50 to 500 people (Levy 1978).

25 The Project site is located in the Carquinez Strait, within the area occupied by speakers
26 of the Karkin language (Milliken 1995). This language was spoken only in a small area
27 on the south side of the Carquinez Strait. It is estimated there were about 200 speakers
28 of this language in 1770 A.D. (Levy 1978), and all of the Karkin speakers made up only
29 one tribelet.

30 The Costanoan engaged in hunting and gathering in both coastal and open valley
31 environments containing a variety of resources including seeds, nuts, berries, grasses,
32 roots, insects, birds, shellfish, marine mammals, deer, bear, elk, rabbit, and other small
33 mammals. Costanoans typically moved between semi-permanent seasonal camps to
34 take full advantage of seasonally available resources. Costanoan villages consisted of
35 dome-shaped structures with pole frameworks and thatch for roof and walls. Other
36 structures typically found in a Costanoan village included acorn granaries,
37 sweathouses, menstrual houses and dance houses, generally located in the center of a

1 village (Broadbent 1972). Each Costanoan tribelet had a headman (chief), who
2 controlled the clans and moieties, and whose position was usually passed from father to
3 son, with succession being subject to approval by the community. Tribelet political
4 organization also included a council of elders, official speakers, and shamans (Levy
5 1978). Costanoan tribelets experienced both friendly (marriage, trade) and hostile
6 relations with neighboring groups.

7 The arrival of the Spanish in 1775 initiated a rapid decline in Costanoan populations,
8 due in part to the introduction of diseases, a declining birth rate, and missionization. The
9 decline of Native American populations and culture in California was exacerbated by the
10 discovery of gold in 1848 and the subsequent influx of Euroamericans. Costanoan
11 populations experienced dramatic population reductions in the latter half of the 19th
12 century and the early 20th century. Costanoan languages were most likely extinct by
13 1935 (Levy 1978). Remaining Costanoan descendants united as a corporate entity
14 identified as the Ohlone Indian Tribe in 1971.

15 **Historical Background**

16 The Port Costa Wharf is located southeast of Port Costa, a small town founded in 1878.
17 Port Costa served as the port for the Central Pacific Railroad's ferry transfer operations.
18 Several slips and docks and a ferry terminal were constructed to support the ferry
19 transfer operations. Port Costa grew quickly and became a focal point for shipping grain
20 and wheat. Additional docks and wharves were constructed along Port Costa's
21 waterfront for easy transport of these goods. The waterfront, however, declined after the
22 grain market weakened and most of the shipping business transferred to San Francisco.
23 Less than a mile east of Port Costa was the Port Costa Brick Works, which built the
24 Nevada Docks, the largest docks on the Carquinez Strait in 1883. After the initial docks
25 burned in 1909, the plant expanded its waterfront operations and rebuilt the docks with
26 large warehouses. The brickyard closed in 2005 (Robinson and Crane 2007; Treadway
27 2007). Port Costa became a small tourist destination in the late 1960s and remains that
28 way today.

29 Southeast of Port Costa, Associated Oil Company began construction on new facilities
30 in 1906. The company officially began in 1901, after 35 independent oil producers in the
31 San Joaquin Valley agreed with W. S. Porter to join forces and create one company.
32 Porter was a pipe salesman with hopes of selling pipe for a line to carry crude oil from
33 the Kern River and McKittrick oil fields to the San Francisco Bay Area. When they
34 incorporated, the company controlled three-fourths of those oil fields and made Porter
35 the company general manager. By 1905, Associated Oil owned the pipe-line facilities
36 from the Coalinga oil field to tidewater at Monterey, and the following year it completed
37 its 8-inch pipeline from the San Joaquin oil field to its Port Costa wharf under its
38 subsidiary company, Associated Pipe Line Company. The Southern Pacific Railroad
39 Company (SPRR) allowed the oil company to construct the pipeline within their right-of-

1 way because SPRR used the fuel for operation of their steam engines and had financial
2 ties to the oil company (Hulaniski 1917; Royal Petroleum Company 2012). By 1909,
3 SPRR owned controlling interest in Associated Oil (Bean 1973). In the early years of
4 operation Associated Oil's facility at Port Costa included storage tanks, pipelines,
5 pumps, a rail car loading rack, and a wharf (URS 2002). A wharf existed at the current
6 location by 1886 but burned several times and was subsequently rebuilt (U.S. Coast
7 and Geodetic Survey 1886; Robinson and Crane 2007).

8 When Associated Oil was formed, the oil industry was booming in California. In 1919,
9 about two-thirds of California's oil came from the lower San Joaquin Valley, and the major
10 refineries were concentrated in the San Francisco Bay Area. However, in the 1920s
11 predominance in all aspects of the oil industry passed to the Los Angeles region (Franks
12 and Lambert 1985). By the end of the 1920s, California had firmly established itself as a
13 major supplier of crude oil and the center of America's petroleum industry (Franks and
14 Lambert 1985). Two overriding factors helped increase the desirability of crude oil from
15 California during this period. The first was the fact that many railroads on the West Coast,
16 increasingly followed by other railroads nationwide, converted from coal (largely imported)
17 to the cheaper, locally obtainable, and more plentiful oil as their fuel. This conversion also
18 took place on many oceangoing vessels (Franks and Lambert 1985). The second factor
19 driving the search for crude was the explosion of automobile use during the 1920s.
20 Gasoline, considered a useless byproduct of the refineries and deemed an extreme
21 nuisance, was difficult to dispose of at that time. However, in the new age of the internal
22 combustion engine, gasoline became the most important ingredient in a barrel of oil and
23 therefore a highly valued commodity (Rawls and Bean 1993).

24 At the same time that Associated Oil was created in California, Tidewater Oil, founded
25 in 1887 in New York, was becoming a major company in the petroleum industry. Like
26 Associated Oil on the West Coast, Tidewater Oil expanded its operations and entered
27 markets in the Midwest. By the 1930s, Tidewater was purchased by Standard Oil of
28 New Jersey and created a subsidiary, Mission Corporation, which managed Tidewater
29 operations. By 1932, J. Paul Getty owned Associated Oil Company and in 1934 he
30 purchased the Associated Pipe Line Company, which included the Port Costa Terminal.
31 The terminal complex then consisted of 33 acres of land, 12 storage tanks, pipelines
32 and the wharf. In 1937, Getty purchased Mission Corporation and merged Tidewater
33 with Associated to create Tidewater-Associated Oil. By the 1950s, the Port Costa wharf
34 shipped the majority of the company's residual fuel oil products. Tidewater-Associated
35 Oil's West Coast operations were purchased by Phillips Petroleum in 1966 (Royal
36 Petroleum Company 2012). In 2001, the Phillips merged with Conoco to become
37 ConocoPhillips. That same year Phillips purchased Tosco Corporation, which owned
38 the wharves beginning in 1976 (ConocoPhillips 2012; URS 2002). Today, the structures
39 are owned by Phillips 66 (formerly ConocoPhillips).

1 The Port Costa Terminal underwent several changes during its operation, including
2 changes to the wharf area. By 1938, the wharf contained an office and a lean-to, later
3 converted to a washroom. As operations increased in the 1940s, the wharf was
4 extended for mooring lines and in the mid-1950s new gates and fencing were installed
5 on the wharf approaches (Tidewater Associated Oil Company 1938, 1944, 1960).
6 Operations at the terminal and the wharf area ended under Philips' ownership and
7 remained closed when Tosco acquired the property (URS 2002).

8 **Historical Significance of the Structures**

9 The Port Costa Wharf does not appear to meet the criterion for listing under the
10 National Register of Historic Places (NRHP) or the California Register of Historic
11 Resources (CRHR). The wharf does not appear to meet NRHP/CRHR Criterion A/1
12 because it does not have important associations with significant events in history. The
13 wharf was one of several constructed in the Port Costa area along the Carquinez Strait
14 and was used for shipping petroleum products. It was built out of necessity for the
15 transfer of the petroleum products. It did not, however, play a significant role within this
16 context. Research revealed little about the individuals who worked at this facility, but the
17 structures have no known direct associations with individuals who made significant
18 contributions to history. Therefore, it does not appear to meet NRHP/CRHR Criterion
19 B/2. As an engineering feature the structures are not important examples of their type,
20 period, or method of construction. The dolphins and anchor shores are of a standard
21 design and do not embody distinctive characteristics. The remains of the wharf also are
22 not distinctive, and the wharf's construction is typical for the time period and used
23 standard materials, including wood, steel, and concrete. In consideration of all the
24 elements of NRHP/CRHR Criterion C/3, these structures do not appear to meet this
25 criterion. The structures do not appear likely to yield information important to history
26 under NRHP/CRHR Criterion D/4 because as structures they are not the principal
27 source of important information. A full analysis of the historic significance of the wharf
28 structures, including Department of Parks and Recreation 523 Forms, is included in
29 Appendix E.

30 In addition to lacking historical or engineering significance, these structures lack historic
31 integrity. These structures lack integrity of design because they are fragments of what
32 they were originally, which was a large wooden wharf, and no longer convey proportion
33 and scale. Because most of the wharf was burned and has large sections missing, the
34 remnants lack integrity of materials. They no longer retain key historic material and
35 cannot reflect the physical elements that were combined to create these structures. The
36 loss of design and materials as a result of fire damage also resulted in a loss of integrity
37 of workmanship. The structures no longer provide evidence of the technology or
38 engineering that went into their design and construction. The setting for the structures
39 was altered when the oil facilities closed, the tanks were removed, and the buildings
40 that originally sat on the wharf were removed. It no longer conveys a setting of an

1 industrial area. Those alterations also caused a loss of integrity of feeling and
 2 association. The structures have lost their ability to express a sense of time and place,
 3 and no longer have an association with Tidewater-Associated Oil Company or its
 4 storage and transfer facility.

5 In summary, these structures lack significance and have lost integrity of design,
 6 location, setting, materials, workmanship, feeling and association. They are not
 7 considered historic resources for the purposes of CEQA.

8 **3.5.2 Regulatory Setting**

9 Federal and State laws and regulations pertaining to this issue area and relevant to the
 10 Project are identified in Tables 1-2 and 3.5-1. Local goals, policies, and/or regulations
 11 applicable to this issue area are listed below.

Table 3.5-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (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 Resources Protection Act (ARPA)	<p>The ARPA states that archaeological resources on public or Indian lands are an 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</p>

Table 3.5-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Cultural Resources)

		certain artifacts consistent with the standards and requirements of the National Park Service (NPS) Federal Archeology Program.
U.S.	National Historic Preservation Act (NHPA) (16 USC 470 et seq.)	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 (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions, including commenting on Federal undertakings.
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.)	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 Historic Resources (CRHR); (2) a resource included in a local register of historical or identified as significant in an historical resource surveys; 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

Table 3.5-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Cultural Resources)

		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 The Contra Costa County General Plan 1995-2020 outlines Open Space goals and
 2 policies that promote protection of the cultural resources of the County. Specifically, the
 3 General Plan identifies the following cultural resource goals and policies that are
 4 applicable to the Project site:

- 5 • Goal 9-A - To preserve and protect the ecological, scenic and cultural/historic,
 6 and recreational resource lands of the County.
- 7 • Policy 9-1 - Historic and scenic features, watersheds, natural waterways, and
 8 areas important for the maintenance of natural vegetation and wildlife
 9 populations shall be preserved and enhanced.

10 **3.5.3 Impact Analysis**

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

13 **No Impact.** The wharf structures present at the Project site are not considered historic
 14 due to a lack in cultural significance and loss of integrity of design, location, setting,
 15 materials, workmanship, feeling and association. Additionally, a search of the CHRIS
 16 database found no records of cultural resources within the Project site. Therefore, as
 17 there are no known historical resources at the Project site, there would be no change in
 18 the significance of a historical resource.

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

1 **No Impact.** As a search of the CHRIS database found no records of cultural resources
2 within the Project site, there would be no change in the significance of a unique
3 archaeological resource.

4 ***c) Directly or indirectly destroy a unique paleontological resource or site or***
5 ***unique geologic feature?***

6 **No Impact.** The only ground disturbance during Project activities would occur in the
7 upper layers of Bay sediment. Therefore, there would be little chance the Project would
8 directly or indirectly destroy a unique paleontological resource, site, or geologic feature.

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

11 **No Impact.** Project activities are largely confined to work within waters of the Carquinez
12 Strait, with shoreline activities confined to equipment storage, parking, and sanitary
13 stations. Thus, the discovery of human remains is unlikely.

14 **3.5.4 Mitigation Summary**

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

1 **3.6 GEOLOGY AND SOILS**

GEOLOGY AND SOILS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.6.1 Environmental Setting**

3 **Regional Setting**

4 The Project site lies within the Coast Range Geomorphic Province of California, a
 5 region with independent and discontinuous northwest-trending mountain ranges, ridges,
 6 and intervening valleys (California Geological Survey [CGS] 2002). The Coast Range
 7 province is the largest of the state’s geomorphic provinces and rises abruptly from the
 8 shore in northern Humboldt County extending 400 miles south to the Santa Ynez River

1 in Santa Barbara County. In general, the Coast Range province is composed of marine
2 sedimentary bedrock, occasional volcanic rocks, and alluvial deposits (CGS 2002).

3 Historically active faults in the region include the Concord, Hayward, Greenville-Marsh
4 Creek-Clayton, Calaveras, and San Andreas Faults (Figure 3.6-1). Of the major fault
5 zones, the San Andreas Fault is capable of generating the largest maximum credible
6 earthquake (MCE), estimated at a magnitude of 8.3 on the Richter scale (Borcherdt
7 1975). The Hayward and Calaveras Faults can generate an MCE of magnitude 7.5, the
8 Greenville-Marsh Creek-Clayton Fault can generate an MCE of magnitude 7.2, and the
9 Concord Fault can generate an MCE of magnitude 7.0 (Table 3.6-1). Earthquakes of
10 this magnitude are sufficient to create severe ground accelerations in bedrock and
11 unconsolidated deposits that could potentially cause major damage to structures and
12 foundations (Greensfelder 1974).

13 **Project Setting**

14 Geology

15 The Project site is located in northern Contra Costa County along the southeast shore
16 of the Carquinez Strait near the town of Port Costa, Contra Costa County. The East Bay
17 Hills region is primarily composed of Cretaceous and Tertiary age sedimentary and
18 volcanic rock with Quaternary alluvium in the valleys, and Quaternary colluviums on
19 hillslopes. The onshore portion of the Project area is within undivided surficial deposits
20 of Holocene and Pleistocene age (Graymer et al. 1994). A map of the Project site
21 geology is presented as Figure 3.6-2. Quaternary geologic maps of the East Bay Hills
22 region characterize the onshore portions of the Project area as predominantly Holocene
23 alluvial fan deposits (Helley and Graymer 1997).

24 Faults and Seismicity

25 The East Bay Hills region is characterized by northwest to southeast trending ridges.
26 The structural trend of this region is controlled primarily by the active faulting and folding
27 related to the movement within the San Andreas Fault system. This portion of the East
28 Bay Hills lies between two major active structures within the fault system, the active
29 Concord Fault approximately 4 miles to the east, and the active Hayward Fault
30 approximately 10 miles to the west (Figure 3.6-1, Table 3.6-1). Faults zoned as active
31 by the CGS are those that have undergone seismic activity within the past 11,000 years
32 (Holocene epoch). While the Project site is generally between the Concord and
33 Hayward Faults, a search of the Alquist-Priolo Earthquake Fault Zone Maps indicates
34 that the Project does not lie within an Alquist-Priolo Earthquake zone (CGS 2010). No
35 known active faults cross the Project site. Two faults in the Project vicinity are
36 considered inactive by the CGS (Hart 1990): the Southampton Fault, located near the
37 site, and the Franklin Fault, located about 1.5 miles west of the site (Figure 3.6-1).

Figure 3.6-1. Regional Fault Map

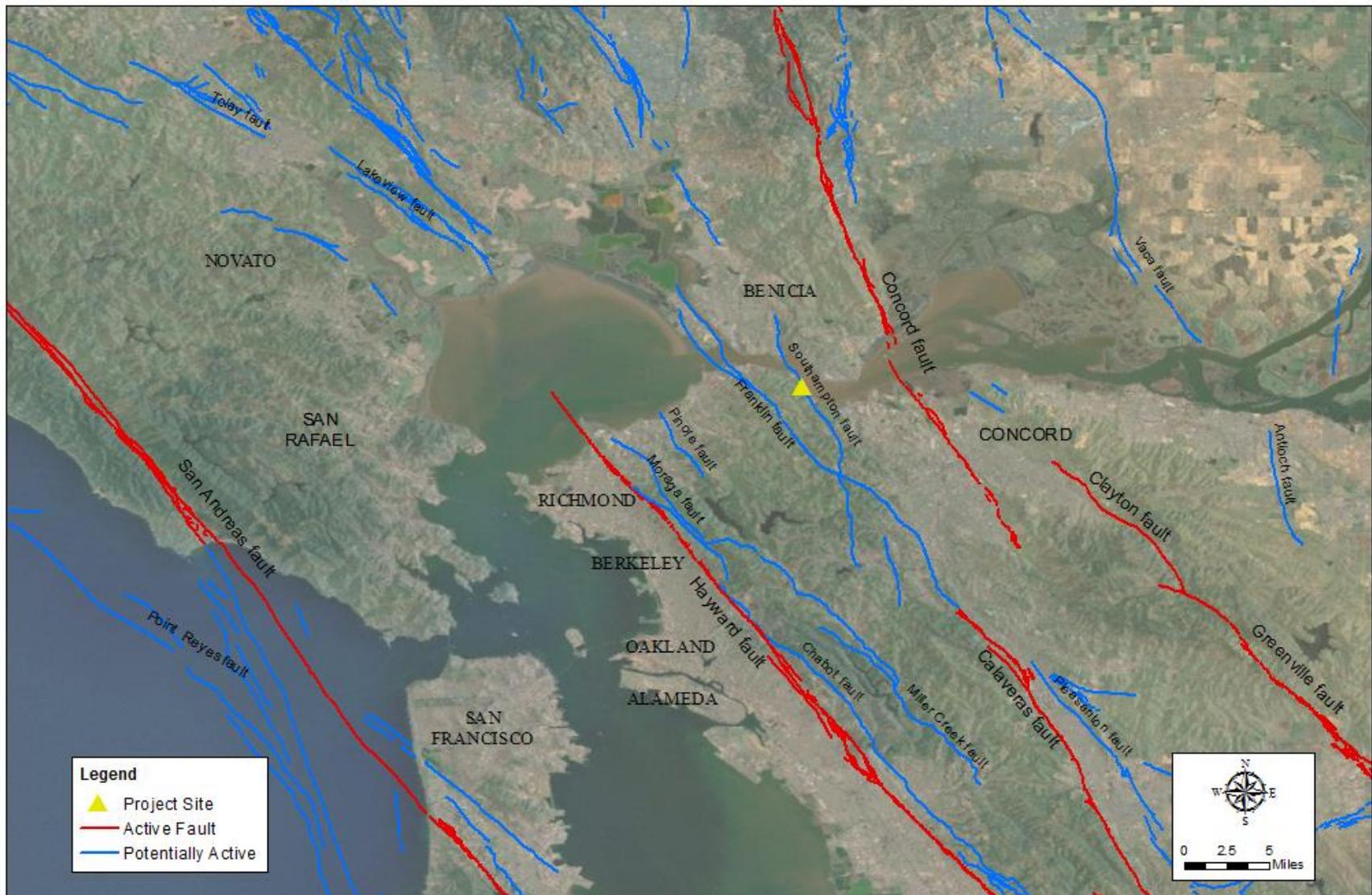
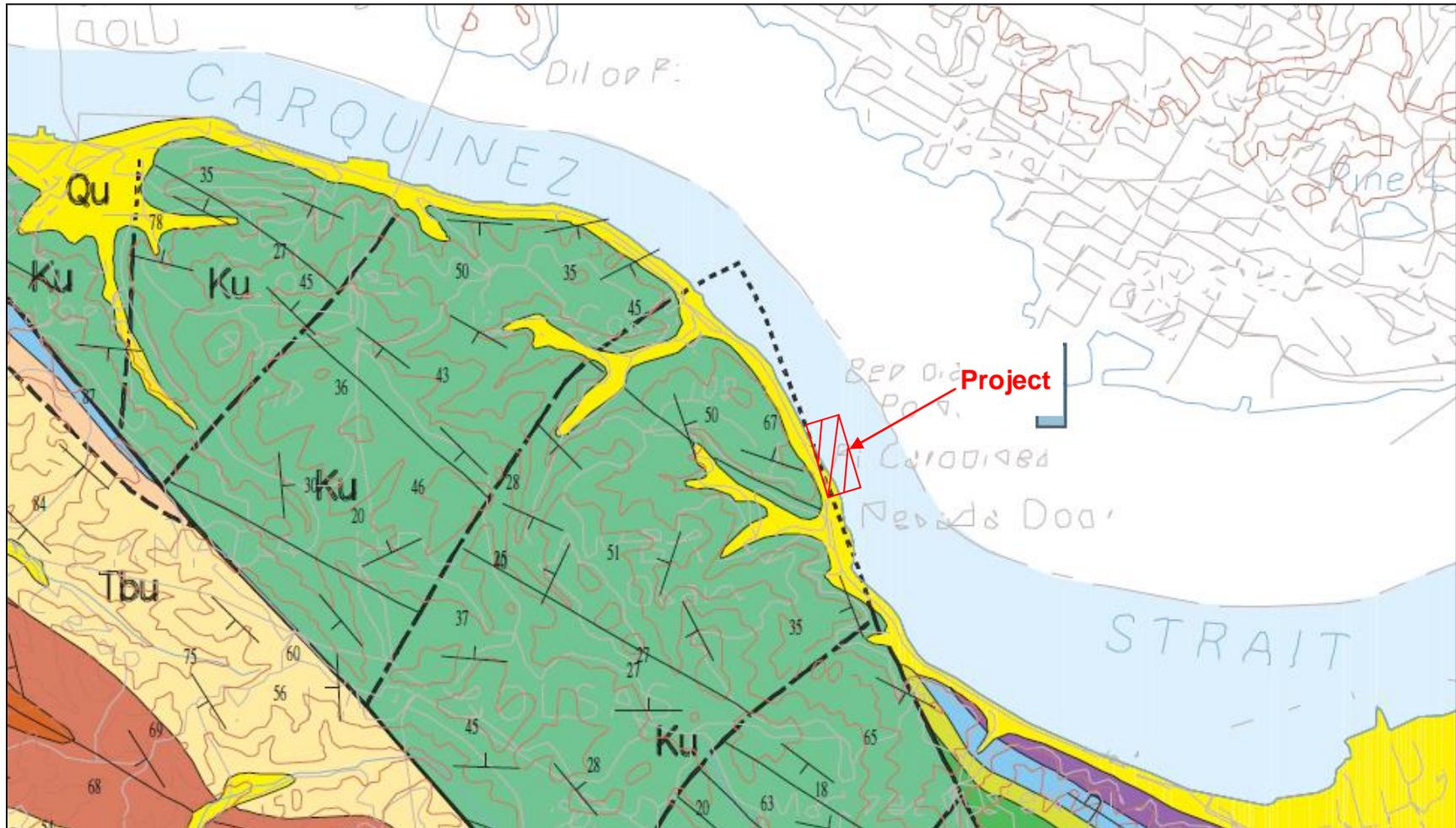


Figure 3.6-2. Geologic Map of the Project Site Vicinity



Map Legend

- Qu Surficial deposits, undivided (Holocene and Pleistocene)
 - Ku Great Valley Sequence (Cretaceous)
 - Tbu Upper sandstone and Shale – Briones Formation (Miocene)
- Source: Graymer et al. 1994

1 **Table 3.6-1. Active Faults in the Project Site Vicinity**

Fault	Distance/ Direction from Project Area	Fault Classifi- cation	Recency of Movement	Historical Richter Magnitude/ Year	Maximum Moment Magnitude Earthquake
Concord	4 miles east	Active	Historic (1955) Holocene	Historic active creep	7.0
Hayward	10 miles west	Active	Pre-Historic (possible 1836; 1868 ruptures) Holocene	M6.8, 1868	7.5
Greenville- Marsh Creek- Clayton	12 miles southeast	Active	Historic (1980 rupture) Holocene	M5.6 1980	7.2
Calaveras	15 miles southeast	Active	Historic (1961 rupture) Holocene	M5.6-6.4, 1861 M4-4.5 1970, 1990	7.5
San Andreas	28 miles southwest	Active	Historic (1906; 1989 ruptures) Holocene	M7.1, 1989 M8.25, 1906 M7.0 1938 Many < M6	8.3

Source: Borchardt et al. 1975; Jennings and Byrant 1994; Hart and Byrant 1997

2 Seismic Hazards

3 Seismic hazards include ground shaking, liquefaction, land sliding, lateral spreading,
4 differential settlement, and inundation by encroaching waves. No known active faults
5 traverse the Project site; therefore, fault rupture is not considered a potential geologic
6 hazard that could affect the Project.

7 Liquefaction

8 Liquefaction is the sudden loss of shear strength in saturated, granular sediments that
9 are subjected to ground shaking. It typically occurs when ground shaking causes the
10 water pressure between granules to exceed the pressure of the soil overburden, which
11 allows the soil to move like a fluid. The potential for liquefaction to occur depends on the
12 duration and intensity of earthquake shaking, the density of the soil, the distribution of
13 soil particle sizes, and the elevation of the groundwater. Based on the Association of
14 Bay Area Governments (ABAG) Liquefaction Susceptibility Map, the onshore portions of
15 the Project have a very low risk of liquefaction (ABAG 2011). The mapping program
16 does not include the submerged areas of the Carquinez Strait.

1 Landslides and Soil Erosion

2 The Project site is within waters of the Carquinez Strait. Additionally, between the water
 3 line and the rail lines are primarily disturbed areas consisting of concrete riprap and
 4 compacted soils, with little potential for soil erosion to occur.

5 **3.6.2 Regulatory Setting**

6 Federal and State laws and regulations pertaining to this issue area and relevant to the
 7 Project are identified in Table 3.6-2. Local goals, policies, and/or regulations applicable
 8 to this issue area are listed below.

**Table 3.6-2. Federal and/or State Laws, Regulations, and Policies
 Potentially Applicable to the Project (Geology and Soils)**

CA	Alquist-Priolo Earthquake Fault Zoning Act (Pub. Resources Code, §§ 2621-2630)	This Act requires that "sufficiently active" and "well-defined" earthquake fault zones be delineated by the State Geologist and prohibits locating structures for human occupancy across the trace of an active fault.
	California Building Code (CBC) (Cal. Code Regs., tit. 23)	The CBC contains requirements related to excavation, grading, and construction of pipelines alongside existing structures. A grading permit is required if more than 50 cubic yards of soil are moved. Sections 3301.2 and 3301.3 contain provisions requiring protection of adjacent properties during excavations and require a 10-day written notice and access agreements with adjacent property owners.
	California Seismic Hazards Mapping Act (Pub. Resources Code, § 2690 and following as Division 2, Chapter 7.8)	This Act and the Seismic Hazards Mapping Regulations (Cal. Code Regs., tit. 14, Div. 2, Ch. 8, Art. 10) are designed to protect the public from the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The Act requires that site-specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy. Special Publication 117, <i>Guidelines for Evaluating and Mitigating Seismic Hazards in California</i> (California Geological Survey 2008), constitutes guidelines for evaluating seismic hazards other than surface fault rupture and for recommending mitigation measures as required by section 2695, subdivision (a).

9 The Safety Element of the Contra Costa County General Plan 1995-2020 includes goals
 10 and policies to address seismic hazards within the County. No seismic hazard goals or
 11 policies are applicable to the Project site.

12 **3.6.3 Impact Analysis**

13 ***a) Expose people or structures to potential substantial adverse effects,***
 14 ***including the risk of loss, injury, or death involving:***

15 ***(i) Rupture of a known earthquake fault, as delineated on the most recent***
 16 ***Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist***

1 **for the area or based on other substantial evidence of a known fault? (Refer**
2 **to Division of Mines and Geology Special Publication 42.)**

3 **(ii) Strong seismic ground shaking?**

4 **No Impact.** The Project involves the removal of a wharf and does not include the
5 construction of any buildings or structures that could potentially be damaged or cause
6 injury or death. Work would be conducted from a barge adjacent to the structures to be
7 removed. The Project site is not crossed by active faults and does not lie within or near
8 an Alquist-Priolo Earthquake Zone. There is the potential for workers to be subjected to
9 ground shaking in the event of a significant earthquake within the region, but the
10 likelihood of this occurring during the relatively short deconstruction period (up to
11 5 months) is relatively remote. Therefore, this Project is not likely to expose people or
12 structures to potential substantial adverse effects due to rupture of a fault or seismic
13 ground shaking.

14 **(iii) Seismic-related ground failure, including liquefaction?**

15 **No Impact.** The mapping compiled by ABAG shows that the onshore areas adjacent to
16 the Project site have a very low risk of liquefaction. All MOT structures would be
17 removed from the Carquinez Strait, thereby decreasing the potential for Bay Mud
18 liquefaction effects on the structures. Therefore, the Project is not likely to expose
19 people or structures to potential substantial adverse effects due to seismic-related
20 ground failure including liquefaction.

21 **(iv) Landslides?**

22 **No Impact.** The onshore portion of the Project is limited to a temporary staging area
23 within the confines of an existing shore base of the selected contractor, which would be
24 located in a relatively flat industrially-developed area. Therefore, this Project is not likely
25 to expose people or structures to potential substantial adverse effects due to landslides.

26 **b) Result in substantial soil erosion or the loss of topsoil?**

27 **c) Be located on geologic unit or soil that is unstable, or that would become**
28 **unstable as a result of the project, and potentially result in on- or off-site**
29 **landslide, lateral spreading, subsidence, liquefaction, or collapse?**

30 **d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform**
31 **Building Code (1994), creating substantial risks to life or property?**

32 **e) Have soils incapable of adequately supporting the use of septic tanks or**
33 **alternative wastewater disposal systems where sewers are not available for the**
34 **disposal of wastewater?**

1 **No Impact.** The onshore portion of the Project is limited to a temporary staging area
2 within the confines of an existing shore base of the selected contractor, which would be
3 located in a relatively flat industrially-developed area. Therefore, this Project is not likely
4 to result in substantial soil erosion or the loss of topsoil. The site is not located on a
5 geologic unit or soil that is unstable or expansive. Project activities would not require
6 sewers, septic tanks, or alternative wastewater storage or disposal systems.

7 **3.6.4 Mitigation Summary**

8 The Project would not result in significant impacts to geology and soils; no mitigation is
9 required.

1 **3.7 HAZARDS AND HAZARDOUS MATERIALS**

HAZARDS AND HAZARDOUS MATERIALS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.7.1 Environmental Setting**

3 The presence of hazardous materials or other safety hazards at the Project site,
 4 including accidental releases such as spills or emissions during deconstruction
 5 activities, could affect residents, workers, and visitors within and adjacent to the site.

1 Transportation of hazardous materials for removal from the Project site could also
 2 present hazards. Additionally, if the complete extraction of piles is not successful, they
 3 would be cut off to a minimum depth of 2 feet below the mud line. Although unlikely, piles
 4 embedded in the Carquinez Strait bottom may become exposed by erosion over time.

5 The Port Costa Wharf is located in the Carquinez Strait in Contra Costa County. The
 6 Project site is composed of wooden wharf structure remnants, three deteriorated timber-
 7 pile-supported wood beam/deck platforms/piers, two steel-pipe-pile and concrete-deck
 8 mooring dolphins, two concrete-pile-supported wood-deck mooring platforms, and two
 9 wood-pile dolphins. Additional miscellaneous concrete, metal, and timber debris was
 10 observed along the shoreline.

11 A certified technician completed LBP and ACM surveys of the wharf structures in
 12 February 2013 (see Appendix A). Results of the survey indicate that LBP is present on
 13 some wharf structures, but no ACM. Since LBP is present on the wharf, Phillips 66
 14 would retain a licensed lead abatement contractor to address LBP prior to the general
 15 deconstruction of the wharf. An LBP Management Plan including health and safety
 16 procedures would be prepared and included in the Project's Work Plan to protect
 17 Project personnel working at the Project site. Other hazardous materials that likely exist
 18 within the wharf remnants include: creosote-treated timber pilings, remnants of
 19 equipment such as mercury switches, petroleum based residues, and hydraulic fluids.
 20 Hazardous materials would also be used and generated during deconstruction activities.
 21 All Project-associated hazardous materials would be removed from the Project site for
 22 proper disposal.

23 **3.7.2 Regulatory Setting**

24 Federal and State laws and regulations pertaining to this issue area and relevant to the
 25 Project are identified in Tables 1-2 and 3.7-1. Local goals, policies, and/or regulations
 26 applicable to this issue area are listed below.

**Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially
 Applicable to the Project (Hazards and Hazardous Materials)**

U.S.	Clean Water Act (CWA) (33 USC 1251 et seq.)	The CWA is comprehensive legislation (it generally includes reference to the Federal Water Pollution Control Act of 1972, its supplementation by the CWA of 1977, and amendments in 1981, 1987, and 1993) that seeks to protect the nation's water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. (<i>see below and in Section 3.8, Hydrology and Water Resources</i>).
U.S.	California Toxics Rule (40 CFR 131)	In 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. USEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in the State of California to protect human health and the environment. Under CWA section 303(c)(2)(B), the USEPA requires states to adopt numeric water quality criteria

Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hazards and Hazardous Materials)

		for priority toxic pollutants for which the USEPA has issued criteria guidance, and the presence or discharge of which could reasonably be expected to interfere with maintaining designated uses. These Federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries.
U.S.	Hazardous Materials Transportation Act (HMTA) (49 USC 5901)	The HMTA delegates authority to the DOT to develop and implement regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. Additionally, the USEPA’s Hazardous Waste Manifest System is a set of forms, reports, and procedures for tracking hazardous waste from a generator’s site to the disposal site. Applicable Federal regulations are contained primarily in CFR Titles 40 and 49.
U.S.	National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)	Authorized under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99 through 499; and by CWA section 311(d), as amended by the Oil Pollution Act of 1990 (OPA), Pub. L. 101 through 380. The NCP outlines requirements for responding to both oil spills and releases of hazardous substances. It specifies compliance, but does not require the preparation of a written plan. It also provides a comprehensive system for reporting, spill containment, and cleanup. The U.S. Coast Guard (USCG) and USEPA co-chair the National Response Team. In accordance with 40 CFR 300.175, the USCG has responsibility for oversight of regional response for oil spills in “coastal zones,” as described in 40 CFR 300.120.
U.S.	Oil Pollution Act (OPA) (33 USC 2712)	The OPA requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of the OPA motivated California to pass a more stringent spill response and recovery regulation and the creation of the Office of Spill Prevention and Response (OSPR) to review and regulate oil spill plans and contracts.
U.S.	Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.)	The RCRA authorizes the USEPA to control hazardous waste from “cradle-to-grave,” which encompasses its generation, transportation, treatment, storage, and disposal. RCRA’s Federal Hazardous and Solid Waste Amendments from 1984 include waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. The Department of Toxic Substances Control is the lead State agency for corrective action associated with RCRA facility investigations and remediation.
U.S.	Toxic Substances Control Act (TSCA) (15 USC 2601–2692)	The TSCA authorizes the USEPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.
U.S.	Other	<ul style="list-style-type: none"> • Act of 1980 to Prevent Pollution from Ships requires ships in U.S. waters, and U.S. ships wherever located, to comply with International Convention for the Prevention of Pollution from Ships (MARPOL). • Convention on the International Regulations for Preventing Collisions at Sea (COLREGS). These regulations establish “rules of the road” such as rights-of-way, safe speed, actions to avoid collision, and procedures to observe in narrow channels and restricted visibility. • Inspection and Regulation of Vessels (46 USC Subtitle II Part B). Federal regulations for marine vessel shipping are codified in 46 CFR parts 1 through

Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hazards and Hazardous Materials)

		<p>599 and are implemented by the USCG, Maritime Administration, and Federal Maritime Commission. These regulations provide that all vessels operating offshore, including those under foreign registration, are subject to requirements applicable to vessel construction, condition, and operation. All vessels (including motorboats) operating in commercial service (e.g., passengers for hire, transport of cargoes, hazardous materials, and bulk solids) on specified routes (inland, near coastal, and oceans) are subject to requirements applicable to vessel construction, condition, and operation. These regulations also allow for inspections to verify that vessels comply with applicable international conventions and U.S. laws and regulations.</p> <ul style="list-style-type: none"> • Navigation and Navigable Waters regulations (33 CFR) include requirements pertaining to prevention and control of releases of materials (including oil spills) from vessels, traffic control, and restricted areas, and general ports and waterways safety.
CA	Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Gov. Code § 8574.1 et seq.; Pub. Resources Code § 8750 et seq.)	<p>This Act and its implementing regulations seek to protect State waters from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill. The Act requires vessel and marine facilities to have marine oil spill contingency plans and to demonstrate financial responsibility, and requires immediate cleanup of spills, following the approved contingency plans, and fully mitigating impacts on wildlife. The Act assigns primary authority to the Office of Spill Prevention and Response (OSPR) division within the CDFW to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the State. The CSLC assists OSPR with spill investigations and response.</p>
CA	Other	<ul style="list-style-type: none"> • California Clean Coast Act (SB 771) establishes limitations for shipboard incinerators, and the discharge of hazardous material—including oily bilgewater, graywater, and sewage—into State waters or a marine sanctuary. It also provides direction for submitting information on visiting vessels to the CSLC and reporting of discharges to the State water quality agencies. • California Harbors and Navigation Code specifies a State policy to “promote safety for persons and property in and connected with the use and equipment of vessels,” and includes laws concerning marine navigation that are implemented by local city and county governments. This Code also regulates discharges from vessels within territorial waters of the State of California to prevent adverse impacts on the marine environment. This Code regulates oil discharges and imposes civil penalties and liability for cleanup costs when oil is intentionally or negligently discharged to the State waters. • California Seismic Hazards Mapping Act (Pub. Resources Code, § 2690) and Seismic Hazards Mapping Regulations (Cal. Code Regs., tit. 14, Div. 2, Ch. 8, Art. 10) (See Section 3.6, <i>Geology and Soils</i>). • Hazardous Waste Control Act (Cal. Code Regs., tit. 26) defines requirements for proper management of hazardous materials. • Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.) (See Section 3.8, <i>Hydrology and Water Quality</i>).

1 Contra Costa County General Plan. The following goals and policies regarding
 2 hazardous materials uses from the Contra Costa County General Plan (2005) were
 3 considered in this analysis:

<p>Safety Element</p>	<ul style="list-style-type: none"> • Goal 10-I - To provide public protection from hazards associated with use, transport, treatment, and disposal of hazardous substances. • Policy 10-61 - Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated. • Policy 10-62 - Storage of hazardous materials and wastes shall be strictly regulated. • Policy 10-63 - Secondary containment and periodic examination shall be required for all storage of toxic materials. • Policy 10-68 - When an emergency occurs in the transportation of hazardous materials, the County OES shall be notified as soon as possible.
<p>Public Facilities/ Services Element – Hazardous Waste Management</p>	<ul style="list-style-type: none"> • Goal 7-AM - To eliminate the generation and disposal of hazardous waste materials to the maximum extent feasible by: <ol style="list-style-type: none"> 1. Reducing the use of hazardous substances and the generation of hazardous wastes; 2. Recovering and recycling the remaining waste for reuse; 3. Treating those waste not amenable to source reduction or recycling so that the environment and community health are not threatened by their ultimate disposal; 4. Incinerating those wastes amenable to this technology; and 5. Properly disposing of residuals in approved residual repositories. • Policy 7-116 - The accelerated clean-up of contaminated sites, including containment of the sites as quickly as possible, shall be supported,

4 **3.7.3 Impact Analysis**

5 ***(a) Create a significant hazard to the public or the environment through the***
 6 ***routine transport, use, or disposal of hazardous materials?***

7 The Project would generate debris from the wharf, some of which may be hazardous.
 8 Additionally, the use of hazardous materials during deconstruction would be required to
 9 operate equipment. Such materials include, but are not limited to, the following: fuel
 10 (diesel and gasoline); compressed gases for metal cutting; penetrating oil to lubricate
 11 corroded fitting; and marking paint. Pre-deconstruction surveys indicate the presence of
 12 LBP on wharf structures. Other residual materials suspected to be present at the

1 derelict wharf include creosote, miscellaneous oils, and mercury (from switches and
2 gauges).

3 Shore base activities would include routine transportation and use of hazardous
4 materials. All hazardous materials to be used on the barges at the Project site and
5 slated for removal would be staged at the shore base in the course of routine
6 transportation.

7 The routine transport, use, or disposal of hazardous materials mentioned above could
8 have a potentially significant impact to the public or the environment; however,
9 implementation of **MM HAZ-1a** and **MM HAZ-1b**, discussed below, would reduce
10 impacts to less than significant.

11 A California Hazardous Materials Business Plan consistent with requirements of the
12 California Fire Code would be prepared and included as part of the HMMP and
13 implemented for the shore base. All hazardous materials and hazardous wastes to be
14 stored or used at the shore base would be identified and a record of the inventory
15 would be kept on site.

16 **Impact HAZ-1: Routine transport, use, and disposal of hazardous materials**
17 **could create a significant hazard.**

18 **Less than Significant with Mitigation.** The Project includes the routine transport, use,
19 and disposal of hazardous materials that could create a significant hazard to the public
20 or environment. All deconstruction activities would be conducted in accordance with
21 approved plans. Measures would be taken to control hazardous materials during routine
22 transport, use, and disposal. The following mitigation measures would reduce potential
23 impacts to less than significant.

24 **MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory.** The
25 Applicant shall keep a hazardous materials inventory for all hazardous materials to
26 be stored, used, or transported for the Project in, on, or around the wharf, work
27 barges, and the shore base. A current inventory shall be kept on site at all times and
28 shall include the name of the material; the type, capacity, number and location of
29 storage containers; type of hazard (pressure release, fire, explosion, asphyxiation,
30 toxicity, bioaccumulation, etc.); and the maximum storage capacity at each location.

31 **MM HAZ-1b: Hazardous Materials Management Plan (HMMP).** An HMMP shall be
32 prepared and submitted for approval to the California State Lands Commission staff
33 2 weeks prior to the start of deconstruction activities and kept on site. The HMMP
34 shall include specific methods for control and containment of hazardous materials
35 identified in the hazardous material inventories from deconstruction through

1 disposal. Emergency contacts shall be listed for use in the event of a release of
2 hazardous materials. The HMMP would include, but is not limited to, the following:

- 3 • A hazardous materials inventory that identifies the type, location, estimated
4 quantity and nature of each potentially hazardous material located at the
5 wharf.
- 6 • Equipment containing other hazardous materials, such as switches and
7 gauges that contain mercury, shall be tagged prior to removal for special
8 handling to prevent an inadvertent discharge on the deck surfaces or into Bay
9 waters.
- 10 • If hazardous materials are identified, a specialty abatement contractor shall
11 be acquired to mitigate these issues in compliance with State and Federal
12 regulations prior to the general deconstruction of the wharf.
- 13 • Any hazardous materials brought to the project site, e.g., diesel oil or paints,
14 will also be included in the HMMP.

15 ***b) Create a significant hazard to the public or the environment through***
16 ***reasonably foreseeable upset and accident conditions involving the release of***
17 ***hazardous materials into the environment?***

18 There is potential for accidental release of hazardous materials during deconstruction
19 activities. These releases could occur during routine transport, use, or disposal of
20 hazardous materials via leaking equipment or other accidental events. Additionally,
21 debris or equipment containing hazardous materials could be accidentally dropped into
22 waters of the Strait.

- 23 • **Petroleum, Oils, and Lubricants:** Accidental releases of petroleum, oils, and
24 lubricants from equipment during deconstruction activities may occur. Spill
25 prevention and containment would be implemented as part of **MM WQ-1** to
26 reduce the risk of accidental spills. If a spill occurs, it would be contained and
27 cleaned up immediately to the extent work can be accomplished safely.
- 28 • **Deconstruction Debris:** As part of **MM BIO-3**, the Deconstruction and Seafloor
29 Debris Removal Plan would address deconstruction debris recovery and a sea
30 floor debris removal. The plan would be used to minimize the likelihood of debris
31 loss. In the event of debris dropping into the water, it would be recovered and a
32 post-deconstruction bathymetric survey would be conducted to ensure debris
33 associated with the deconstruction process is removed. Removal of debris would
34 remove the potential for release of hazardous materials from the debris.
- 35 • **Lead-Based Paint:** As part of **MM BIO-2** and **MM HAZ-1a**, since LBP has been
36 found to be present at the wharf, Phillips 66 would acquire a specialty abatement
37 contractor to appropriately remove or mitigate LBP prior to the general
38 deconstruction of the wharf. An LBP Management Plan including health and

1 safety procedures would be developed in accordance with applicable State and
2 Federal regulations. Workers on site have the highest risk. To reduce impacts
3 should a release occur; all personnel would be trained to work with these
4 materials, proper personal protective equipment would be used, and engineering
5 controls would be implemented to contain the materials.

- 6 • **Pile Remnants:** In areas where scour is not expected to occur, the general
7 practice for pile removal in the San Francisco Bay Area is removal to at least 2
8 feet below the mud line. This is thought to be sufficient to ensure that the pile
9 stubs remain buried within the sediments, and do not have the potential to
10 protrude above the seafloor, posing a potential hazard to navigation (Cacchione
11 2008). Per **MM HAZ-2**, if the complete extraction of piles is not successful, they
12 would be cut off to a minimum depth of 2 feet below the mud line. However, if
13 piles are not completely extracted, a post-deconstruction bathymetric survey and
14 bi-annual surveys would be required for 6 years after completion of
15 deconstruction activities to document that scour is not occurring within the
16 Project footprint and that piles embedded in the Carquinez Strait bottom have not
17 become exposed by erosion.

18 **Impact HAZ-2: Release of hazardous materials by the Project could create a**
19 **significant hazard.**

20 **Less than Significant with Mitigation.** There is the potential for accidental spills and
21 releases of hazardous materials during the Project that could create a significant hazard
22 to the public or environment. All work would be done according to approved plans.
23 Several measures would be taken to manage hazardous materials and contain potential
24 spills. Implementation of **MM HAZ-1a**, **MM HAZ-1b**, **MM WQ-1**, **MM BIO-2**, **MM BIO-3**,
25 and the following mitigation measure would reduce potential impacts to less than
26 significant. Additionally, once the Project is complete, existing structures and debris
27 potentially containing hazardous materials would have been removed from the Strait,
28 preventing further potential contact with the public or the environment.

29 **MM HAZ-2: Post Construction Surveys.** If piles are not completely extracted, post-
30 deconstruction bathymetric survey shall be conducted immediately following
31 deconstruction and every 2 years, for 6 years after the completion of deconstruction
32 activities, to document that scour is not occurring within the Project footprint and that
33 piles embedded in the Carquinez Strait bottom have not become exposed by
34 erosion. Survey reports shall be submitted to the California State Lands Commission
35 staff within 30 days of completion to document compliance.

36 **c) Emit hazardous emissions or handle hazardous or acutely hazardous**
37 **materials, substances, or waste within one-quarter mile of an existing or**
38 **proposed school?**

1 **No Impact.** There are no existing or proposed schools within one-quarter mile of the
2 Project site.

3 ***d) Be located on a site which is included on a list of hazardous materials sites***
4 ***compiled pursuant to Government Code section 65962.5 and, as a result, would it***
5 ***create a significant hazard to the public or the environment?***

6 **No Impact.** The Project site is not listed on the Cortese List (Gov. Code, § 65962.5);
7 therefore, deconstruction activities would not create a significant hazard to the public or
8 the environment.

9 ***e) For a project located within an airport land use plan or, where such a plan has***
10 ***not been adopted, within two miles of a public airport or public use airport, would***
11 ***the project result in a safety hazard for people residing or working in the project***
12 ***area?***

13 **No Impact.** No airports are within 2 miles of the Project site.

14 ***f) For a project within the vicinity of a private airstrip, would the project result in***
15 ***a safety hazard for people residing or working in the project area?***

16 **No Impact.** No private airstrips are within 2 miles of the Project site.

17 ***g) Impair implementation of or physically interfere with an adopted emergency***
18 ***response plan or emergency evacuation plan?***

19 **No Impact.** The Project would not interfere with an adopted emergency response plan
20 or emergency evacuation plan. Deconstruction would not obstruct any roadways, as
21 most activities related to the deconstruction would occur from barges within the waters.
22 Roads would only be used for work commutes by construction personnel or those
23 wishing to observe deconstruction activities (the Applicant, monitors, or agency
24 representatives); transport of equipment, supplies, and materials to the shore base; and
25 transport of wastes and recovered materials away from the selected contractor's shore
26 base. There would be no permanent modifications to road alignments, amount of traffic,
27 or other changes to the environment that would interfere with an emergency response
28 plan. Therefore, no impact would occur.

29 ***h) Expose people or structures to a significant risk of loss, injury or death***
30 ***involving wildland fires, including where wildlands are adjacent to urbanized***
31 ***areas or where residences are intermixed with wildlands?***

32 **No Impact.** Deconstruction activities would be performed from a barge; there would be
33 no risk of wildfire.

1 **3.7.4 Mitigation Summary**

2 Implementation of the following measures would reduce Project-related impacts related
3 to hazards and hazardous materials to less than significant.

- 4 • MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory;
- 5 • MM HAZ-1b: Hazardous Materials Management Plan (HMMP);
- 6 • MM HAZ-2: Post Construction Surveys;
- 7 • MM WQ-1: Water Quality Plan/Storm Water Pollution Prevention Plan;
- 8 • MM BIO-2: Lead-Based Paint (LBP) Management Plan; and
- 9 • MM BIO-3: Deconstruction and Seafloor Debris Removal Plan.

1 **3.8 HYDROLOGY AND WATER QUALITY**

HYDROLOGY AND WATER QUALITY – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 **3.8.1 Environmental Setting**

2 **Regional Hydrologic Setting**

3 The Project site lies within the Carquinez Strait, which is part of the San Francisco Bay
4 Area Hydrologic Region. The San Francisco Bay Hydrologic Region encompasses
5 approximately 4,500 square miles and includes the counties of San Francisco, Marin,
6 Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda. The San
7 Francisco Bay Estuary (Bay) is the largest estuary on the west coast of the U.S. and
8 functions as the drainage outlet for the Central Valley's freshwater systems. The Bay
9 provides drinking water for more than 70 percent of the California population and
10 irrigation for approximately 4.5 million acres of farmland. It lies within the fourth largest
11 metropolitan region of the U.S.

12 The Bay's dynamic and complex environmental conditions support a high level of
13 diversity that drives a productive ecosystem. Many plant and animal species' survival
14 depends on the wide variety of habitats within the Bay system, which includes
15 deepwater channels, tidal flats, marshlands, freshwater streams, rivers, and lagoons.
16 Additionally, the salinities in different portions of the Bay vary among seasons and
17 years, and this creates a dynamic distribution of fish assemblages, invertebrates, plants,
18 birds, and animals within them.

19 The rate and timing of the freshwater flows coming from the rivers and streams that flow
20 into the Bay system influence its physical, chemical, and biological conditions. Flows
21 are seasonal, with over 90 percent of the annual runoff occurring between October and
22 April. However, much of this inflow is trapped upstream by dams, reservoirs, and canals
23 for water diversion projects, which potentially affects the Bay's characteristics.

24 The RWQCB (2011) identifies several beneficial uses of the Carquinez Strait that must be
25 protected. These beneficial uses include: industrial process supply, commercial and sport
26 fishing, estuarine habitat, fish migration, preservation of rare and endangered species,
27 spawning, wildlife habitat, water contact recreation, noncontact water recreation, and
28 navigation.

29 **Climate**

30 Contra Costa County has a moderate climate similar to Mediterranean climate, with
31 relatively cool summers and mild winters. Temperatures generally range between 50 to
32 66 degrees Fahrenheit and average annual precipitation is approximately 22 inches
33 (Contra Costa County 2005).

1 **Water Quality**

2 Under Section 303(d) of the CWA, states are required to list impaired waters based on
 3 whether or not they meet state water quality standards. The RWQCB has listed the
 4 entire Bay as an impaired water body. For the Carquinez Strait, pollutants of concern
 5 from both point and nonpoint sources that do not meet the State water quality standards
 6 include the following: chlordane; dichlorodiphenyltrichloroethane (DDT); dieldrin; dioxin
 7 compounds, exotic species; furan compounds; mercury; PCBs; PCBs – dioxin-like; and
 8 selenium (USEPA 2006).

9 **Groundwater**

10 Shallow groundwater aquifers are closely linked to the local surface waters. The San
 11 Francisco Bay Hydrologic Region has 28 identified groundwater basins comprising
 12 approximately 1,400 square miles in total, of which 5 percent is allocated for agricultural
 13 and urban uses and less than one percent is distributed for groundwater uses. The
 14 Arroyo del Hambre Valley Groundwater Basin is located just to the south of the Project
 15 site. The RWQCB (2011) lists potential beneficial uses of the Arroyo del Hambre Valley
 16 Groundwater Basin as municipal and domestic water supply, industrial process water
 17 supply, industrial service water supply, and agricultural water supply.

18 **3.8.2 Regulatory Setting**

19 Federal and State laws and regulations pertaining to this issue area and relevant to the
 20 Project are identified in Tables 1-2 and 3.8-1. Local goals, policies, and/or regulations
 21 applicable to this issue area are listed below.

Table 3.8-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hydrology and Water Quality)

U.S.	Clean Water Act (CWA) (33 USC 1251 et seq.)	<p>The CWA is comprehensive legislation (it generally includes reference to the Federal Water Pollution Control Act of 1972, its supplementation by the CWA of 1977, and amendments in 1981, 1987, and 1993) that seeks to protect the nation’s water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. These water quality standards are promulgated by the USEPA and enforced in California by the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). CWA sections include:</p> <ul style="list-style-type: none"> • <u>State Water Quality Certification</u>. Section 401 (33 USC 1341) requires certification from the State or interstate water control agencies that a proposed water resources project is in compliance with established effluent limitations and water quality standards. USACE projects, as well as applicants for Federal permits or licenses are required to obtain this certification. • <u>National Pollution Discharge Elimination System)(NPDES)</u>. Section 402 (33 USC 1342) establishes conditions and permitting for discharges of pollutants under the NPDES. • <u>Ocean Discharges</u>. Section 403 (33 USC 1343) addresses criteria and
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Table 3.8-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hydrology and Water Quality)

		<p>permits for discharges into the territorial seas, the contiguous zone, and the oceans.</p> <ul style="list-style-type: none"> • <u>Permits for Dredged or Fill Material</u>. Section 404 (33 USC 1344) authorizes a separate permit program for disposal of dredged or fill material in U.S. waters.
U.S.	Oil Pollution Act (OPA) (33 USC 2712)	The OPA requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of the OPA motivated California to pass a more stringent spill response and recovery regulation and the creation of the Office of Spill Prevention and Response (OSPR) to review and regulate oil spill plans and contracts.
U.S.	Rivers and Harbors Act (33 USC 401)	This Act governs specified activities (e.g., construction of structures and discharge of fill) in “navigable waters” of the U.S. (waters subject to the ebb and flow of the tide or that are presently used, have been used in the past, or may be susceptible for use to transport interstate or foreign commerce). Under section 10, excavation or fill within navigable waters requires approval from the USACE, and the building of any wharf, pier, jetty, or other structure is prohibited without Congressional approval.
CA	Porter-Cologne Water Quality Control Act (Cal. Water Code § 13000 et seq.) (Porter-Cologne)	<p>Porter-Cologne is the principal law governing water quality in California. The Act established the SWRCB and nine RWQCBs who have primary responsibility for protecting State water quality and the beneficial uses of State waters. Porter-Cologne also implements many provisions of the Federal CWA, such as the National Pollutant Discharge Elimination System (NPDES) permitting program. Pursuant to the CWA § 401, applicants for a Federal license or permit for activities that may result in any discharge to waters of the U. S. must seek a Water Quality Certification (Certification) from the State in which the discharge originates. Such Certification is based on a finding that the discharge will meet water quality standards and other appropriate requirements of State law. In California, RWQCBs issue or deny certification for discharges within their jurisdiction. The SWRCB has this responsibility where projects or activities affect waters in more than one RWQCB’s jurisdiction. If the SWRCB or a RWQCB imposes a condition on its Certification, those conditions must be included in the Federal permit or license.</p> <p>Statewide Water Quality Control Plans include: individual RWQCB Basin Plans; the California Ocean Plan; the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan (Bay-Delta Plan); the Water Quality Control Plan for Enclosed Bays and Estuaries of California; and the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan). These Plans contain enforceable standards for the various waters they address. For example:</p> <ul style="list-style-type: none"> • <u>Basin Plan</u>. Porter-Cologne (§ 13240) requires each RWQCB to formulate and adopt a Basin Plan for all areas within the Region. Each RWQCB establishes water quality objectives to ensure the reasonable protection of beneficial uses and a program of implementation for achieving water quality objectives within the basin plans. 40 CFR 131 requires each State to adopt water quality standards by designating water uses to be protected and adopting water quality criteria that protect the designated uses. In California, the beneficial uses and water quality objectives are the State’s water quality standards.

Table 3.8-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hydrology and Water Quality)

		<ul style="list-style-type: none"> The <u>California Ocean Plan</u> establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the State's ocean and coastal waters. For example, the Ocean Plan incorporates the State water quality standards that apply to all NPDES permits for discharges to ocean waters.
CA	Other	<ul style="list-style-type: none"> Under California Code of Regulations, Title 23, the Central Valley Flood Protection Board (CVFPB) regulates specific river, creek, and slough crossings for flood protection: (1) new crossings must maintain hydraulic capacity through such measures as in-line piers, adequate stream bank height (freeboard), and measures to protect against stream bank and channel erosion, and (2) improvements, including crossings, must be constructed in a manner that does not reduce the channel's capacity or functionality, or that of any Federal flood control project. California Water Code § 8710 requires that a reclamation board permit be obtained prior to the start of any work, including excavation and construction activities, if projects are located within floodways or levee sections. Structures for human habitation are not permitted within designated floodways.
CA	San Francisco Bay Plan (see also Table 1-2)	<p>Pursuant to the Bay Plan, BCDC responsibilities include the following:</p> <ul style="list-style-type: none"> Regulation of all filling and dredging in the Bay; Administration of the Federal Coastal Zone Management Act within the Bay segment of the California coastal zone; Regulation of new development within the first 100 feet inland from the Bay to ensure public access to the Bay is provided; Pursuit of an active planning program to implement studies of Bay issues so that BCDC plans and policies are based on the best available current information; Participation in the region-wide State and Federal program to establish a Long Term Management Strategy for dredging and dredged material disposal to be conducted in an environmentally sound and economically prudent way.

1 Contra Costa County Watershed Program (CWP). The Contra Costa CWP is a
2 collaboration between the County, the 19 incorporated cities and towns of the County,
3 and the County Flood Control and Water Conservation District. The CWP is responsible
4 for ensuring that the County's unincorporated areas comply with its municipal
5 stormwater NPDES permits, as authorized by Contra Costa County Ordinance 96-21,
6 Title 1014 Stormwater Management and Discharge Control. The County currently holds
7 two NPDES permits: the Municipal Regional Permit for discharges to the San Francisco
8 Bay and the East Contra Costa County Permit for discharges to the Delta. The CWP
9 oversees new development and construction projects; provides municipal maintenance,
10 inspection activities, public education, and industrial outreach; and implements
11 stormwater/urban run-off monitoring programs, pollution prevention programs, and illicit
12 discharge control activities.

1 Contra Costa County General Plan. General Plan policies relevant to the Project include
2 the following:

- 3 • Water Resources Goal 8-T: To conserve, enhance, and manage water
4 resources, protect their quality, and assure an adequate long-term supply of
5 water for domestic, fishing, industrial, and agricultural use.
- 6 • Water Resources Goal 8-V: To preserve and restore remaining natural
7 waterways in the county which have been identified as important and
8 irreplaceable natural resources.
- 9 • General Water Resources Policy 8-75: Preserve and enhance the quality of
10 surface and groundwater resources.

11 **3.8.3 Impact Analysis**

12 The Project site occurs in waters regulated by the San Francisco Bay RWQCB. The
13 RWQCB develops and implements the Water Quality Control Plan for the San
14 Francisco Region (Basin Plan), which designates beneficial uses and water quality
15 objectives for the region and includes programs of implementation to achieve State and
16 Federal water quality objectives. The SIP establishes a standardized method for
17 permitting discharges of toxic pollutants to inland surface waters, enclosed bays, and
18 estuaries of California subject to the Porter-Cologne Act and the CWA.

19 **a) *Violate any water quality standards or waste discharge requirements?***

20 Because the Project would take place in the Carquinez Strait, there is potential for the
21 degradation of water quality due to deconstruction activities.

22 **Impact WQ-1: The Project could result in a violation of water quality standards.**

23 **Less than Significant with Mitigation.** During wharf deconstruction, sediment
24 disturbance may increase localized turbidity and re-suspend contaminants. Removal of
25 pilings may also release creosote into the water. However, creosote could be leaching
26 out of the pilings as they exist; therefore, removal of the pilings could potentially reduce
27 creosote exposure over the long-term. There is also potential for the accidental release
28 of oil or fuel into the Strait from equipment operation during deconstruction activities or
29 from vehicles and equipment parked in the temporary upland staging areas within the
30 former TXI property. Also, if the embankment is disturbed and not properly stabilized,
31 potential erosion over time could lead to increased turbidity and increased exposure to
32 contaminants that may have accumulated in the soil during MOT operations.
33 Implementation of **MM HAZ-1b** and the mitigation measure described below would
34 reduce potentially significant water quality impacts to less than significant.

1 **MM WQ-1. Water Quality/Storm Water Pollution Prevention Plan.** In consultation
2 with the regional agencies, the Applicant shall prepare a plan to prevent adverse
3 impacts to nearby waterways and riparian areas associated with deconstruction. The
4 final approved plan shall be submitted to the California State Lands Commission
5 staff 2 weeks prior to deconstruction. The Plan shall include Best Management
6 Practices (BMPs) for handling creosote-containing materials, spill prevention and
7 containment, erosion and sedimentation prevention, and monitoring requirements.
8 Measures shall include, but not be limited to, such BMPs as:

- 9 • During deconstruction activities, a floating boom and skirt shall be deployed
10 around the Project site and absorbent booms and pads shall be provided on
11 marine vessels on site.
- 12 • Within upland areas, BMPs may include implementation of silt fences, straw
13 waddles and other measures determined appropriate for erosion and
14 sediment control.
- 15 • BMPs to control waste, such as discarded deconstruction materials,
16 chemicals, litter, and sanitary waste at the deconstruction site, shall be
17 implemented.
- 18 • Vessel fueling shall be required at the selected contractor's staging area or at
19 an approved docking facility. No cross-vessel fueling shall be allowed.
- 20 • Marine vessels generally shall contain petroleum products within tankage that
21 is internal to the hulls of the vessels. All deck equipment shall be equipped
22 with drip pans to contain leaks and spills. All fuels and lubricants aboard the
23 work vessels shall have a double containment system. Chemicals used within
24 the Project area and on marine vessels shall be stored using secondary
25 containment.
- 26 • The Applicant shall not store fuel or oil at the Project's parking and staging
27 areas upland of the work site. Fuel containment at the selected contractor's
28 existing shore base may store quantities of oil and fuel.

29 ***b) Substantially deplete groundwater supplies or interfere substantially with***
30 ***groundwater recharge such that there would be a net deficit in aquifer volume or***
31 ***a lowering of the local groundwater table level (e.g., the production rate of pre-***
32 ***existing nearby wells would drop to a level which would not support existing land***
33 ***uses or planned uses for which permits have been granted)?***

34 **No Impact.** The Project would not require the use of any groundwater supplies. No
35 impervious surfaces would be introduced as a result of the Project; therefore, no
36 interference with groundwater recharge would occur. Thus, the Project would have no
37 impact on the aquifer volume either through groundwater extraction or reduced
38 recharge.

1 **c) Substantially alter the existing drainage pattern of a site or area through the**
2 **alteration of the course of a stream or river, or by other means, in a manner that**
3 **would result in substantial erosion or siltation on- or off-site?**

4 **No Impact.** There would be no impact related to altered drainage patterns; no erosion
5 or siltation would occur on- or off-site as a result of the Project.

6 **d) Substantially alter the existing drainage pattern of a site or area through the**
7 **alteration of the course of a stream or river or, by other means, substantially**
8 **increase the rate or amount of surface runoff in a manner that would result in**
9 **flooding on- or off-site?**

10 **No Impact.** The Project would not result in any additional impervious surfaces and no
11 stream or river alterations would occur. There would not be an increase in runoff that
12 would cause flooding on- or off-site.

13 **e) Create or contribute runoff water which would exceed the capacity of existing**
14 **or planned stormwater drainage systems or provide substantial additional**
15 **sources of polluted runoff?**

16 **No Impact.** The Project would not create or contribute runoff exceeding the capacity of
17 existing or planned stormwater drainage systems. Stormwater BMPs would be
18 implemented as necessary. No polluted runoff would occur as a result of the Project.

19 **f) Otherwise substantially degrade water quality?**

20 See responses to subsections a) and e) above.

21 **g) Place housing within a 100-year flood hazard area as mapped on a Federal**
22 **Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood**
23 **hazard delineation map?**

24 **No Impact.** No housing is proposed as part of the Project; no impact related to
25 placement of housing in a 100-year flood hazard area would occur.

26 **h) Place within a 100-year flood hazard area structures that would impede or**
27 **redirect flood flows?**

28 **No Impact.** No structures are proposed as part of the Project; no impact related to
29 placement of structures within a 100-year flood hazard area would occur.

30 **i) Expose people or structures to a significant risk of loss, injury or death**
31 **involving flooding, including flooding as a result of the failure of a levee or dam?**

1 **No Impact.** Land areas adjacent to the Project site are not located within an inundation
2 area for any regional dams (ABAG 2012); therefore, there would be no impact.

3 ***j) Expose people or structures to a significant risk of loss, injury or death***
4 ***involving inundation by seiche, tsunami, or mudflow?***

5 **Less than Significant Impact.** According to the Contra Costa County General Plan
6 (2005), the risk of a tsunami is low near the Richmond shoreline of the San Pablo Bay
7 and diminishes further upstream. Although the event of a tsunami is possible near the
8 Project site, which is located near the center of the Carquinez Strait, it is not probable.
9 Additionally, there are no records of seiches occurring in the Bay. Therefore, the
10 potential impact is considered to be less than significant.

11 **3.8.4 Mitigation Summary**

12 Implementation of the following measures would reduce Project-related impacts
13 associated with hydrology and water quality to less than significant.

- 14 • MM WQ-1: Water Quality/Storm Water Pollution Prevention Plan; and
- 15 • MM HAZ-1b: Hazardous Materials Management Plan (HMMP).

1 **3.9 LAND USE AND PLANNING**

LAND USE AND PLANNING – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.9.1 Environmental Setting**

3 The Project is located in northwestern unincorporated Contra Costa County, near the
 4 Census-designated place of Port Costa, which has a population of 190 people (2010
 5 U.S. Census). The predominant land use in the Project vicinity is open water in the
 6 Carquinez Strait, public and semi-public lands (including the UPRR lines), and parks
 7 and recreation (see Figure 3.9-1). The densest nearby residential area is approximately
 8 0.6 mile northwest of the Project site. Other land uses near the Project site include
 9 agricultural and industrial lands to the west and southwest respectively. However, the
 10 industrial area approximately 0.15 mile southwest of the Project site (the former TXI
 11 property) was recently purchased by the East Bay Regional Parks District (EBRPD).

12 **Existing Land Uses**

13 Two existing onshore land uses are immediately adjacent to the Project site: the UPRR
 14 right-of-way public/semi-public lands and the Carquinez Strait Regional Shoreline Park
 15 (parks and recreation). Along the shoreline just southwest of the wharf are two active
 16 rail lines for both passenger and freight transport. Adjacent to the wharf is a small
 17 section of the Carquinez Regional Shoreline Park, which is managed by the EBRPD.
 18 The main portion of the park is northwest of the Project site, but a small section is along
 19 the shoreline near the wharf; however, access is limited and no trails pass through or
 20 near the site. The former TXI property, to be used for temporary Project parking, was
 21 formerly used for industrial use and was recently acquired by the EBRPD to become
 22 park lands. Currently, no public trails or facilities are on the former TXI property.

1

Figure 3.9-1. General Plan Designations



2
3

1 Offshore existing land uses adjacent to the Project site include a shipping channel and
 2 recreational boating area. The Carquinez Strait is a shipping channel used for
 3 commercial and military shipping bound for the Port of Sacramento and the Port of
 4 Stockton, as well as several local refineries. Additionally, there is a Contra Costa
 5 County Sanitation District No. 5 treated wastewater outfall just south of the Project site
 6 that extends approximately 60 feet offshore at a depth of about -17.5 feet MLLW. There
 7 is also a USACE designated dredge disposal site (SF-9) in the Carquinez Strait.

8 The former MOT is located in the Carquinez Strait, an unrestricted zone of Contra Costa
 9 County. Its land use designation is *Open Space: Water* (Contra Costa County
 10 Community Development Department 2005). The General Plan designation of the
 11 former TXI property, which may be used for temporary Project parking, is *Heavy*
 12 *Industry*.

13 **3.9.2 Regulatory Setting**

14 Federal and State laws and regulations pertaining to this issue area and relevant to the
 15 Project are identified in Tables 1-2 and 3.9-1. Local goals, policies, and/or regulations
 16 applicable to this issue area are listed below

Table 3.9-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Land Use and Planning)

CA	San Francisco Bay Plan (see also Table 1-2)	<p>BCDC has jurisdiction over the open water, marshes, and mudflats of the greater San Francisco Bay; the first 100 feet from the shoreline; the portion of the Suisun Marsh below the ten foot contour line; portions of most creeks, rivers, slough, and other tributaries that flow into the San Francisco Bay; and salt ponds, duck hunting preserves, game refuges, and other managed wetlands that have been diked off from San Francisco Bay. Permits from BCDC are required for most projects proposed along the shoreline, particularly if they include the following:</p> <ul style="list-style-type: none"> • Placing solid material, building or repairing docks or pile-supported or cantilevered structures, disposing of material, or mooring a vessel for a long period in San Francisco Bay or in certain tributaries that flow into the Bay; • Dredging or extracting material from the Bay bottom; • Substantially changing the use of any structure or area; • Constructing, remodeling, or repairing a structure; or • Subdividing property or grading land.
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17 Contra Costa County General Plan. The following goals and policies from the Contra
 18 Costa County General Plan (2005) were considered in this analysis:

- 19 • Land Use Element Goal 3-C - To encourage aesthetically and functionally
 20 compatible development which reinforces the physical character and desired
 21 images of the County and its subregions.
- 22 • Land Use Element Policy 3-16 - Community appearance shall be upgraded by
 23 encouraging redevelopment, where appropriate, to replace inappropriate uses.

- 1 • Conservation Element Goal 8-A - To preserve and protect the ecological
2 resources of the County.
- 3 • Conservation Element Policy 8-3 - Watersheds, natural waterways, and areas
4 important for the maintenance of natural vegetation and wildlife populations shall
5 be preserved and enhanced.
- 6 • Open Space Element Goal 9-A - To preserve and protect the ecological, scenic
7 and cultural/historic, and recreational resource lands of the County.
- 8 • Open Space Element Policy 9-2 - Historic and scenic features, watersheds,
9 natural waterways, and areas important for the maintenance of natural vegetation
10 and wildlife populations shall be preserved and enhanced.
- 11 • Open Space Element Goal 9-12 - To preserve the scenic qualities of the San
12 Francisco Bay/Delta estuary system and the Sacramento-San Joaquin
13 River/Delta Shoreline.

14 **3.9.3 Impact Analysis**

15 **a) *Physically divide an established community?***

16 **No Impact.** The Project would be located along the south bank of the Carquinez Strait
17 in unincorporated Contra Costa County. The closest established community is the town
18 of Port Costa, approximately 0.6 mile northwest of the site, which would not be
19 disturbed by the wharf removal. No changes to access would occur as a result of
20 Project activities.

21 **b) *Conflict with any applicable land use plan, policy, or regulation of an agency*** 22 ***with jurisdiction over the project (including, but not limited to the general plan,*** 23 ***specific plan, local coastal program, or zoning ordinance) adopted for the*** 24 ***purpose of avoiding or mitigating an environmental effect?***

25 **Less than Significant Impact.** The Project would remove the dilapidated wharf, a man-
26 made industrial feature in the Carquinez Strait. No long-term change in pattern, scale,
27 or character of land use onshore would occur; the former MOT has not been in use
28 since 1970.

29 Deconstruction activities would cause short-term impacts to land use in the Project
30 vicinity. Informal access to fishing along the shoreline could be limited and boat use
31 within the Project site would be restricted during the up-to-5 months of deconstruction
32 and removal activities. No impacts to the onshore adjacent public/semi-public lands or
33 recreation area are expected; most deconstruction and removal activities would only
34 occur from off shore. Use of the proposed upland staging areas would be minimal, and

1 would only occur on existing parking areas and roads within the former TXI property.
2 Therefore, the Project would not change current baseline land use conditions.

3 The Project would traverse areas designated in the Contra Costa County General Plan
4 as *Water, Open Space, Public/Semi Public, and Heavy Industry* in an area zoned
5 *Unrestricted*. Deconstruction of the wharf would be consistent with these land use and
6 zoning designations. By removing a derelict industrial structure and returning the Project
7 site to its pre-existing conditions, the Project aligns with goals and policies in the Land
8 Use, Conservation, and Open Space Elements of the County General Plan.
9 Additionally, removal of the former MOT would improve aesthetics, reinforcing the
10 physical character and desired images of Contra Costa County. The Project would
11 preserve the scenic qualities of the San Francisco Bay/Delta estuary system.

12 As listed in Table 1-1, Phillips 66 would obtain local ministerial approvals from Contra
13 Costa County and additional required permits prior to start of Project activities, including
14 the following:

- 15 • USACE, San Francisco District: Deconstruction of the wharf likely requires a
16 Letter of Permission under Section 10 of the Rivers and Harbors Act.
- 17 • BCDC: Working in the Carquinez Strait would require an Administrative Permit
18 from BCDC.
- 19 • RWQCB: In-water work would require a CWA Section 401 Water Quality
20 Certification.
- 21 • EBRPD: Because the Project site is adjacent to sections of the Carquinez Strait
22 Regional Shoreline Park, which lie north and south of the Project area, if any
23 activities are planned to occur within the Shoreline Park area, an Encroachment
24 Permit may be required by EBRPD.
- 25 • Contra Costa County Building Inspection Division: A Demolition Permit from the
26 Contra Costa County Building Inspection Division would be required for the
27 Project. Prior to issuance of this permit, Phillips 66 would have its Debris
28 Recovery Plan approved, per Contra Costa County Ordinance 2004-16 and
29 Chapter 418-14 of the County Code.

30 There would be no conflicts with any applicable land use plan, policy, or regulation of
31 any agency having jurisdiction over the Project. Therefore, this impact is considered
32 less than significant.

33 ***c) Conflict with any applicable habitat conservation plan or natural community***
34 ***conservation plan?***

1 **No Impact.** There are no habitat conservation plans or other approved governmental
2 habitat plans involving lands within the Project site. Thus, the Project would not conflict
3 with any adopted habitat conservation plans or natural community conservation plans.

4 **3.9.4 Mitigation Summary**

5 The Project would not result in significant land use and planning impacts; no mitigation
6 is required.

1 **3.10 MINERAL RESOURCES**

MINERAL RESOURCES - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.10.1 Environmental Setting**

3 The Project site is located along the southeast shore of the Carquinez Strait near the
 4 town of Port Costa, Contra Costa County. The Project is located within the waters of the
 5 Strait, with temporary staging areas to be located at the selected contractor’s shore
 6 base and within the former TXI property, located to the southwest of the Project site.

7 Mineral resources in Contra Costa County include rock, sandstone, and clay. Several
 8 active quarry mining operations in the County generate essential aggregate and mineral
 9 resources. These materials include: (1) diabase rock used extensively for roadbase and
 10 as riprap to prevent streambank erosion; (2) domegine sandstone used as a trench
 11 backfill and as the primary ingredient in the manufacture of heat-resistant glass; and (3)
 12 shale aggregate used for brick production.

13 **Contra Costa County**

14 Contra Costa County recognizes the value of its mineral resources as a supply for
 15 construction materials and for heat-resistant glass, as well as a significant employment
 16 source within the County. The County has identified significant areas of aggregate
 17 resources at Mount Zion, Mount Diablo, Port Costa, and in the area of Byron (Contra
 18 Costa County General Plan 2005-2020). Review of the Mineral Resources section of
 19 the County General Plan (Conservation Element) indicates that no mineral resources
 20 are located within the Project site. The nearest mineral resource is an area of clay near
 21 Port Costa where a mining operation currently extracts shale.

22 **3.10.2 Regulatory Setting**

23 Federal and State laws and regulations pertaining to this issue area and relevant to the
 24 Project are identified in Table 3.10-1. Local goals, policies, and/or regulations applicable
 25 to this issue area are listed below.

Table 3.10-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Mineral Resources)

CA	Surface Mining and Reclamation Act (SMARA) (Pub. Resources Code, §§ 2710-2796),	<p>In accordance with SMARA, the California Geological Survey classifies the regional significance of mineral resources and assists in the designation of lands containing significant aggregate resources. Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits. The MRZ categories are:</p> <ul style="list-style-type: none"> • MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. • MRZ-2: Areas where adequate information indicates significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence. • MRZ-3: Areas containing mineral deposits the significance of which cannot be evaluated from available data. • MRZ-4: Areas where available information is inadequate for assignment to any other MRZ.
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1 The Conservation Element of the Contra Costa County General Plan 1995-2020
 2 includes goals and policies to assist the County in meeting its defined mineral resource
 3 conservation and utilization needs. No Conservation goals or policies are applicable to
 4 the Project site.

5 **3.10.3 Impact Analysis**

6 ***a) Result in the loss of availability of a known mineral resource that would be of***
 7 ***value to the region and the residents of the state?***

8 ***b) Result in the loss of availability of a locally important mineral resource***
 9 ***recovery site delineated on a local general plan, specific plan or other land use***
 10 ***plan?***

11 **No Impact.** The Project site is not located within any Mineral Resource Areas as
 12 identified in the Contra Costa County General Plan 2005-2020. Therefore, the Project
 13 would not result in the loss of any known mineral resources that would be of value to the
 14 region or residents of the State. Also, there would be no loss of availability of a locally
 15 important mineral resource recovery site delineated on a local general plan, specific
 16 plan, or other land use plan.

17 **3.10.4 Mitigation Summary**

18 The Project would not result in significant impacts to mineral resources; no mitigation is
 19 required.

1 **3.11 NOISE**

NOISE – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.11.1 Environmental Setting**

3 The Project site is located on the southeast side of the Carquinez Strait in a relatively
 4 isolated and undeveloped area near the town of Port Costa surrounded by the
 5 Carquinez Shoreline Regional Park, agricultural lands, and a small section of industrial
 6 lands that was acquired by the EBRPD to become park lands. Adjacent to the Project
 7 area is a UPRR right-of-way with two rail lines. A hillside along the rail lines provides a
 8 geographical buffer between the wharf and the commercial and residential areas of Port
 9 Costa, which are approximately 0.6 mile northwest of the Project site.

10 According to the Contra Costa County General Plan (Contra Costa County 2005), the
 11 noise standard applicable in the Project vicinity, or other areas where the primary noise
 12 source is train passbys, is approximately 70 A-weighted decibels (dBA). The UPRR line
 13 runs adjacent to the Project area, and rail cars and locomotives have noise levels of 80

1 to 88 dBA at 50 feet, with their horns as loud as 110 dBA at 50 feet (Federal Transit
2 Administration 2006). However, these noise levels are not constant, as trains pass by
3 only intermittently.

4 **Sensitive Receptors**

5 Sensitive noise receptors are, in general, those areas of human habitation or substantial
6 use where the intrusion of noise has the potential to adversely impact the occupancy,
7 use, or enjoyment of the environment. These can include residences, schools,
8 hospitals, parks, and places of business requiring low levels of noise.

9 The primary human response to environmental noise is annoyance, although other
10 responses include: interference with sleep, concentration, and communication;
11 physiological and psychological stress; and hearing loss. The degree of annoyance has
12 been found to correlate well with the day-night average sound level (L_{dn}). A comparison
13 of L_{dn} with the percentage of the exposed population that is “highly annoyed” and with
14 the estimated population exposed to L_{dn} levels greater than 65 decibels provides an
15 estimate of the number of persons “highly annoyed” by aircraft or similar noise. These
16 levels of annoyance are based on long-term exposure. Annoyance for short-term
17 activities, such as construction noise and or new flight patterns, could be influenced by
18 other factors such as land use and attitude toward the activity creating the noise.

19 The Project site is 0.6 mile southeast from residences and businesses in Port Costa, the
20 closest area with sensitive receptors. Port Costa has a population of 190 people.

21 **3.11.2 Regulatory Setting**

22 Federal and State laws and regulations pertaining to this issue area and relevant to the
23 Project are identified in Tables 1-2 and 3.11-1. Local goals, policies, and/or regulations
24 applicable to this issue area are listed below.

Table 3.11-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Noise)

U.S.	<ul style="list-style-type: none">• The Noise Control Act (42 USC 4910) required the USEPA to establish noise emission criteria, as well as noise testing methods (40 CFR Chapter 1, Subpart Q). These criteria generally apply to interstate rail carriers and to some types of construction and transportation equipment. The USEPA published a guideline (USEPA 1974) containing recommendations for acceptable noise level limits affecting residential land use of 55 dBA L_{dn} for outdoors and 45 dBA L_{dn} for indoors.• The Department of Housing and Urban Development Environmental Standards (24 CFR Part 51) set forth the following exterior noise standards for new home construction (for interior noise levels, a goal of 45 dBA is set forth and attenuation requirements are geared to achieve that goal):<ul style="list-style-type: none">○ 65 L_{dn} or less – Acceptable○ 65 L_{dn} and < 75 L_{dn} – Normally unacceptable, appropriate sound attenuation measures
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Table 3.11-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Noise)

	<p>must be provided</p> <ul style="list-style-type: none"> ○ > 75 L_{dn} – Unacceptable • Federal Highway Administration Noise Abatement Procedures (23 CFR Part 772) are procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. It establishes five categories of noise sensitive receptors and prescribes the use of the Hourly L_{eq} as the criterion metric for evaluating traffic noise impacts. • NTIS 550\9-74-004, 1974 (“Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety”). In response to a Federal mandate, the USEPA provided guidance in this document, commonly referenced as the, “Levels Document,” that establishes an L_{dn} of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses including residences and recreation areas. The USEPA recommendations contain a factor of safety and do not consider technical or economic feasibility (i.e., the document identifies safe levels of environmental noise exposure without consideration for achieving these levels or other potentially relevant considerations), and therefore should not be construed as standards or regulations.
CA	<p>State regulations for limiting population exposure to physically and/or psychologically significant noise levels include established guidelines and ordinances for roadway and aviation noise under California Department of Transportation as well as the now defunct California Office of Noise Control. The California Office of Noise Control land use compatibility guidelines provided the following:</p> <ul style="list-style-type: none"> • An exterior noise level of 60 to 65 dBA Community Noise Equivalent Level (CNEL) is considered "normally acceptable" for residences. • A noise level of 70 dBA CNEL is considered to be "conditionally acceptable" (i.e., the upper limit of "normally acceptable" noise levels for sensitive uses such as schools, libraries, hospitals, nursing homes, churches, parks, offices, and commercial/professional businesses). • A noise level of greater than 75 dBA CNEL is considered "clearly unacceptable" for residences.

- 1 Contra Costa County. Contra Costa County does not have a noise ordinance.
- 2 However, the following goals and policies from the Contra Costa County General Plan
- 3 may be applicable to the Project (Contra Costa County 2005):
- 4 • Goal 11-B - To maintain appropriate noise conditions in all areas of the County.
- 5 • Goal 11-E - To recognize citizen concerns regarding excessive noise levels, and
- 6 to utilize measures through which the concerns can be identified and mitigated.
- 7 • Policy 11-8 - Construction activities shall be concentrated during the hours of the
- 8 day that are not noise-sensitive for adjacent land uses and should be
- 9 commissioned to occur during normal work hours of the day to provide relative
- 10 quiet during the more sensitive evening and early morning periods.

1 **3.11.3 Impact Analysis**

2 **a) Result in exposure of persons to, or generation of, noise levels in excess of**
3 **standards established in the local general plan or noise ordinance, or applicable**
4 **standards of other agencies?**

5 **No Impact.** The Project would not expose persons to, or generate, noise levels in
6 excess of standards established in the Contra Costa County General Plan. The County
7 requires that construction activities be concentrated during daytime hours on weekdays
8 so that evening and early morning periods are relatively quiet. Phillips 66 would conform
9 to this policy. Additionally, the Project area is approximately 0.6 mile southeast from the
10 nearest area with sensitive receptors (Port Costa). The hillside adjacent to the rail lines
11 provide a geographical buffer for noise levels, which attenuate over that distance. There
12 would be no impact related to noise exposure or generation resulting from the Project.

13 **b) Result in exposure of persons to, or generation of, excessive groundborne**
14 **vibration or groundborne noise levels?**

15 **No Impact.** Heavy equipment to be used for deconstruction activities may generate
16 perceptible vibration in the immediate vicinity of an active deconstruction site. However,
17 the Project site is approximately 0.6 mile southeast from the nearest area with sensitive
18 receptors (Port Costa), and vibration or groundborne noise levels would not be much
19 different than those caused by the active rail lines adjacent to the Project site.
20 Therefore, the Project would have no impact on vibration or groundborne noise levels.
21 No vibration impacts or residential annoyance would result from the Project.

22 **c) Result in a substantial permanent increase in ambient noise levels in the**
23 **project vicinity above levels existing without the project?**

24 **No Impact.** The Project would not permanently increase ambient noise levels in the
25 Project vicinity. Deconstruction activities would be temporary, and once the Project is
26 complete no noise would be generated in the area other than that from the rail lines.

27 **d) Result in a substantial temporary or periodic increase in ambient noise levels**
28 **in the project vicinity above levels existing without the project that would result in**
29 **a substantial nuisance to nearby sensitive receptors?**

30 **Less than Significant Impact.** Although the Project may result in a substantial
31 temporary increase in ambient noise levels in the Project area, levels would not likely
32 exceed existing levels generated on the adjacent rail lines by rail cars and locomotives
33 (80 to 88 dBA) and locomotive horns (110 dBA at 50 feet) (FTA 2006).

34 Deconstruction activities would require a variety of equipment including cranes,
35 excavators, drills, etc. During the up to 5-month duration of the Project, noise levels

1 generated by equipment operation would vary depending on which structures are being
 2 removed and which pieces of equipment are needed to remove them. Table 3.11-2 lists
 3 some of the various deconstruction equipment types that would likely be used and their
 4 noise levels at a distance of 50 feet from the source.

5 **Table 3.11-2. Maximum Noise Levels of Proposed Deconstruction Equipment**

Deconstruction Equipment	Noise Levels (dBA) at 50 feet
Crane	81
Derrick Crane	88
Excavator with Shear	81
Concrete Drill	99
Portable Electrical Generator	73
Diamond Wire Saw	90
Loader	85
Compactor	82
Dump Truck	76

Source: FHWA 2011

6 Because the nearest sensitive receptors are at least 0.6 mile from the Project site, the
 7 adjacent hillside provides a natural barrier that would partially block the noise, and
 8 deconstruction activities would be limited to the least noise sensitive times (weekdays
 9 between 8:00 am and 5:00 pm); therefore, noise generated from deconstruction activities
 10 would have a less than significant impact on nearby sensitive receptors.

11 ***e) For a project located within an airport land use plan area, or, where such a***
 12 ***plan has not been adopted, in an area within two miles of a public airport or***
 13 ***public use airport, would the project expose people residing or working in the***
 14 ***area to excessive noise levels?***

15 ***f) For a project located in the vicinity of a private airstrip, would the project***
 16 ***expose people residing or working in the project area to excessive noise levels?***

17 **No Impact.** The Project area is not located within the vicinity of a public or private
 18 airstrip and would not expose people to excessive airport noise. No impact would occur.

19 **3.11.4 Mitigation Summary**

20 The Project would not result in significant noise impacts; therefore, no mitigation is
 21 required.

1 **3.12 POPULATION AND HOUSING**

POPULATION AND HOUSING – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.12.1 Environmental Setting**

3 The Project site is located along the southeast shore of the Carquinez Strait in Contra
 4 Costa County. The nearest residential community is the unincorporated town of Port
 5 Costa, approximately 0.6 mile from the Project site. The Project would take place within
 6 the waters of the Carquinez Strait, with temporary staging areas located on the
 7 shoreline within the selected contractor’s shore base and within the former TXI property,
 8 located to the southwest of the Project site.

9 **Population**

10 Contra Costa County is one of nine counties in the San Francisco Bay Area and covers
 11 733 square miles. Contra Costa County is the Bay Area’s third most populous county,
 12 with 14.6 percent of the Bay Area’s population in 2010 (ABAG 2012a). Population
 13 estimates of 1,049,025 in 2010 represented an increase of more than 9.5 percent from
 14 the 2000 County population estimate of 948,816. ABAG estimates that the population of
 15 Contra Costa County will continue to increase in the next two decades, with projections
 16 of an estimated 1,157,000 people by 2020 and 1,255,300 people by 2030.

17 Port Costa’s has a population of 190 (2010 U.S. Census), a decrease of 18.1 percent
 18 from the 2000 population estimate of 232 people (ABAG 2012b). Within the Project site,
 19 the population is zero.

20 **Housing**

21 As of 2010, there were approximately 400,263 housing units in Contra Costa County, an
 22 increase of 11.4 percent since 2000. Household size is about the same; it was 2.72

1 persons per household in 1990 and 2.77 persons in 2010. The housing vacancy rate
2 increased from 2.9 percent in 2000 to 6.2 percent in 2010 (ABAG 2012a).

3 Port Costa is estimated to have 110 housing units in 2010, down 4.4 percent from 105
4 housing units in 2000 (ABAG 2012b; U.S. Census Bureau 2003). No residences are
5 within the Project site.

6 **3.12.2 Regulatory Setting**

7 No Federal or State laws relevant to this issue area are applicable to the Project. The
8 Housing Element of the Contra Costa County General Plan includes goals and policies
9 to assist the County in meeting its defined housing needs. No housing goals or policies
10 are applicable to the Project site.

11 **3.12.3 Impact Analysis**

12 ***a) Induce substantial population growth in an area, either directly (for example,***
13 ***by proposing new homes and businesses) or indirectly (for example, through***
14 ***extension of roads or other infrastructure)?***

15 **No Impact.** The Project is the removal of a former MOT and would not involve the
16 construction of any buildings or infrastructure. The Project would not result in an
17 increase in housing or population growth in the area. Therefore, no increase in
18 population growth, either directly or indirectly would result from the Project.

19 ***b) Displace substantial numbers of existing housing units, necessitating the***
20 ***construction of replacement housing elsewhere?***

21 ***c) Displace substantial numbers of people, necessitating the construction of***
22 ***replacement housing elsewhere?***

23 **No Impact.** The Project would not involve the removal of existing structures or housing
24 units. Therefore, the Project would not result in the displacement of existing housing
25 units or people.

26 **3.12.4 Mitigation Summary**

27 The Project would not result in significant impacts to population and housing; therefore,
28 no mitigation is required.

1 **3.13 PUBLIC SERVICES**

PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.13.1 Environmental Setting**

3 The Project site is located along the southeast shore of the Carquinez Strait near the
 4 town of Port Costa, Contra Costa County. Deconstruction activities would be located
 5 within the waters of the Strait with staging areas to be situated within the selected
 6 contractor’s shore base and at the former TXI property, located to the southwest of the
 7 Project site.

8 **Fire Protection**

9 The onshore portion of the Project is located in an area served by the Crockett-
 10 Carquinez Fire Department. The Crockett-Carquinez Fire Department is governed by
 11 the Contra Costa County Board of Supervisors and provides fire protection services and
 12 emergency medical response in the Crockett and Port Costa areas. The Department
 13 has three stations: Station 77 in Port Costa, and Stations 78 and 79 in Crockett. The
 14 closest Crockett-Carquinez Fire Station to the Project is Station 77, located at 49
 15 Canyon Lake in Port Costa.

16 The offshore areas of the Port Costa Wharf Project are in navigable waters served by
 17 the Marine Unit of Contra Costa County’s Sheriff’s Department, and the USCG. The
 18 Sheriff’s Department Marine Unit responds to fire incidents on County waterways with
 19 vessels that are equipped with water pumps; however, the Marine Unit’s officers are not
 20 trained firefighters. The Marine Unit will also transport fire departments to an incident
 21 upon request. The Marine Unit patrols the waterways along Contra Costa County based

1 out of three stations, one at the former Concord Naval Weapons Station, one at the City
2 of Antioch, and one at Discovery Bay. The Marine Unit is located at 70 Lauritzen Lane
3 in Oakley, and has five to six staff, with additional staff during the boating season.

4 The USCG responds to incidents involving injuries, loss of life or damage to vessels on
5 the waterways of Contra Costa County. The USCG responds to fire incidents on
6 waterways for rescue and lifesaving, but not for the purposes of fire suppression. The
7 closest USCG Station to the Project is located at 2 Harbor Way in Vallejo.

8 **Police Protection**

9 Law enforcement services in the Project area is provided by the Contra Costa County
10 Sheriff's Department. The Office of the Sheriff has a staff of 1,052 (720 sworn personnel
11 and 332 general employees). The Contra Costa County Sheriff's Department serves a
12 community of 7 square miles and over 20,000 people. The closest Sheriff's office to the
13 Port Costa Wharf is the Martinez office, located at 651 Pine Street in Martinez (Contra
14 Costa County Sheriff's Office 2012).

15 The waterways of Contra Costa County are served by the Contra Costa County Sheriff's
16 Department Marine Unit. The Marine Unit responds to crimes that occur within Contra
17 Costa waterways, boating accidents, rescues, and missing persons reports (Contra
18 Costa Sheriff's Office 2012).

19 **Schools**

20 Two school districts are within the Project vicinity: Martinez Unified School District
21 (MUSD) and John Swett Unified School District (JSUSD). Additionally, Contra Costa
22 College provides community college services in Martinez.

23 The MUSD includes four elementary schools, one middle school, one high school, a
24 continuation high school, one independent study program school, and one adult
25 education school. For the 2013-14 school year, the MUSD had a total K-12 grade
26 enrollment of nearly 4,100 students (MUSD 2013).

27 The JSUSD has one elementary school, one middle school, one high school, and one
28 continuing and alternative education high school. For the 2013-14 school year, the
29 JSUSD had a total K-12 grade enrollment of nearly 1,600 students (JSUSD 2013).

30 **Parks**

31 Impacts to park land are discussed in Section 3.14, Recreation; however, the Project
32 would have no impact on parks.

1 **3.13.2 Regulatory Setting**

2 Federal and State laws and regulations pertaining to this issue area and relevant to the
 3 Project are identified in Tables 1-2 and 3.13-1. Local goals, policies, and/or regulations
 4 applicable to this issue area are listed below.

Table 3.13-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Public Services)

U.S.	Code of Federal Regulations	<ul style="list-style-type: none"> • Under 29 CFR 1910.38, whenever an Occupational Safety and Health Administration (OSHA) standard requires one, an employer must have an Emergency Action Plan that must be in writing, kept in the workplace, and available to employees for review. An employer with 10 or fewer employees may communicate the plan orally to employees. Minimum elements of an emergency action plan are: <ul style="list-style-type: none"> ○ Procedures for reporting a fire or other emergency; ○ Procedures for emergency evacuation, including type of evacuation and exit route assignments; ○ Procedures to be followed by employees who remain to operate critical plant operations before they evacuate; ○ Procedures to account for all employees after evacuation; ○ Procedures to be followed by employees performing rescue or medical duties; and ○ The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan. • Under 29 CFR 1910.39, an employer must have a Fire Prevention Plan (FPP). A FPP must be in writing, be kept in the workplace, and be made available to employees for review; an employer with 10 or fewer employees may communicate the plan orally to employees. Minimum elements of a FPP are: <ul style="list-style-type: none"> ○ A list of all major fire hazards, proper hazardous material handling and storage procedures, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard; ○ Procedures to control accumulations of flammable and combustible waste materials; ○ Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials; ○ The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and ○ The name or job title of employees responsible for the control of fuel source hazards. ○ An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed and must also review with each employee those parts of the FPP necessary for self-protection. • Under 29 CFR 1910.155, Subpart L, Fire Protection, employers are required to place and keep in proper working order fire safety equipment within facilities.
CA	California Code of	Under Title 19, Public Safety, the California State Fire Marshal (CSFM) develops regulations relating to fire and life safety. These regulations have been prepared

Table 3.13-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Public Services)

	Regulations	and adopted to establish minimum standards for the prevention of fire and for protection of life and property against fire, explosion, and panic. The CSFM also adopts and administers regulations and standards necessary under the California Health and Safety Code to protect life and property.
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1 The Public Facilities/Services Element of the Contra Costa County General Plan 1995-
 2 2020 includes goals and policies to assist the County in meeting its defined public
 3 protection, fire protection, school, and public facility needs. No public services goals or
 4 policies are applicable to the Project Area.

5 **3.13.3 Impact Analysis**

6 ***a) Result in substantial adverse physical impacts associated with the provision***
 7 ***of, or the need for, new or physically altered governmental facilities, the***
 8 ***construction of which could cause significant environmental impacts, in order to***
 9 ***maintain acceptable service ratios, response times, or other performance***
 10 ***objectives for any of the following public services:***

- 11 ***(i) Fire protection?***
- 12 ***(ii) Police protection?***
- 13 ***(iii) Schools?***
- 14 ***(iv) Parks?***
- 15 ***(v) Other public facilities?***

16 **No Impact.** The Project is the removal of a non-operational MOT and would not involve
 17 the construction of any residences, buildings, or infrastructure. During deconstruction
 18 activities, there is the potential for a temporary increase in demand for fire and
 19 emergency response services; however, the Project would not require additional fire,
 20 police, or emergency medical services outside of those services already available.
 21 Therefore, there would be no substantial adverse physical impacts resulting from the
 22 Project that would require new or physically altered governmental facilities associated
 23 with fire protection, police services, schools, parks, or other public services.

24 **3.13.4 Mitigation Summary**

25 The Project would not result in significant impacts to public services; therefore, no
 26 mitigation is required.

1 **3.14 RECREATION**

RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 **3.14.1 Environmental Setting**

3 The Project site is located along the southeast shore of the Carquinez Strait near the
 4 town of Port Costa, Contra Costa County. The Carquinez Strait is used for industrial
 5 transport access, as well as recreational uses including bird watching, boating, and
 6 sailing. The Strait also supports sport fishing, commercial fishing, and shellfish
 7 harvesting.

8 West and northwest of the Project site is the Carquinez Strait Regional Shoreline, a
 9 1,415-acre park managed by the EBRPD, which is used primarily by hikers and bird
 10 watchers. The Carquinez Strait Regional Shoreline also contains a portion of the Bay
 11 Trail, a planned recreational corridor that will encircle San Francisco and San Pablo
 12 Bays with a continuous 500-mile network of hiking and bicycling trails. The EBRPD
 13 owns the former TXI property, which may be used for temporary Project parking and
 14 staging, but no public trails or other recreation facilities currently exist on that property.

15 The San Francisco Bay Area Conservancy Program was established by the California
 16 State Legislature in 1997 to address the resource and recreational goals of the San
 17 Francisco Bay area in a coordinated, comprehensive, and effective way. The
 18 conservancy declares that the nine counties that bound San Francisco Bay make up a
 19 region with unique natural resource and outdoor recreation needs. The conservancy
 20 may undertake projects and award grants to help preserve open space, promote the
 21 use of habitat restoration projects for environmental education, protect and restore fish
 22 and wildlife habitat, provide public access to open space areas, and restore urban
 23 waterfronts in the nine Bay Area counties

1 **3.14.2 Regulatory Setting**

2 Federal and State laws and regulations pertaining to this issue area and relevant to the
3 Project are identified in Table 1-2. Local goals, policies, and/or regulations applicable to
4 this issue area are listed below.

5 Contra Costa County. Measure C (passed in 1990) established a 65/35 Land
6 Preservation Standard to limit urban development to no more than 35 percent of the
7 land in Contra Costa County. At least 65 percent of all land in the County is required to
8 be preserved for agriculture, open space, wetlands, parks and other non-urban uses
9 (see the Land Use Element of the Contra Costa County General Plan 2005-2020 for
10 more information).

11 **3.14.3 Impact Analysis**

12 ***a) Would the project increase the use of existing neighborhood and regional***
13 ***parks or other recreational facilities such that substantial physical deterioration***
14 ***of the facilities would occur or be accelerated?***

15 **No Impact.** The Project involves the removal of a non-operational MOT and would not
16 result in increased use or visitation to existing neighborhood or regional recreational
17 facilities. Therefore, no substantial physical deterioration of recreational facilities would
18 occur due to the Project.

19 ***b) Does the project include recreational facilities or require the construction or***
20 ***expansion of recreational facilities that might have an adverse physical effect on***
21 ***the environment?***

22 **Less than Significant Impact.** The Project activities would occur within the Carquinez
23 Strait, which is used for several recreational uses including bird watching, boating, and
24 sailing. The Strait also provides views from hiking and bicycling trails along the EBRPD
25 Carquinez Shoreline Park. Although the Project would temporarily occupy 8.89 acres of
26 the Bay, there is ample area within the Strait to accommodate existing recreational uses
27 with little or no conflict between uses.

28 **3.14.4 Mitigation Summary**

29 The Project would not result in significant recreational impacts; therefore, no mitigation
30 is required.

1 **3.15 TRANSPORTATION/TRAFFIC**

TRANSPORTATION/TRAFFIC – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.15.1 Environmental Setting**

3 The Project site is located in unincorporated Contra Costa County, near the town of Port
 4 Costa, on the southeast side of the Carquinez Strait. The Carquinez Strait is bordered
 5 by Contra Costa County on the south side and Solano County on the north side. These
 6 counties plus Alameda and San Francisco Counties are integrated in a system of
 7 bridges, freeways, and roads as well as by ferries and trains. The Project site would be
 8 accessed by barge; however, a temporary shore base (location to be determined once a
 9 Contractor has been selected) would act as the hub for handling, storing, and
 10 processing equipment and materials for disposal. Temporary parking to provide access
 11 for regulators and others monitoring the deconstruction, incidental non-hazardous

1 materials storage (not used for the deconstruction work on water) and sanitary facilities
2 would also be provided at the former TXI property, located upland from the Project site.

3 The connected transportation corridors of the San Francisco Bay Area would serve the
4 transport needs of the Project. The major roadways that would potentially serve the
5 Project are described below.

- 6 • Interstate 80 (I-80) is a transcontinental Interstate Highway connecting California
7 and New York City. In the San Francisco Bay Area I-80 connects downtown San
8 Francisco to Sacramento. At its closest distance to the Project site (near the City
9 of Crockett), the annual average daily traffic (AADT) is about 111,000 vehicles
10 (California Department of Transportation [Caltrans] 2012).
- 11 • Interstate 680 (I-680) connects the communities of Benicia, Concord, Walnut
12 Creek, Danville, Sunol, and San Jose. It is one of the busiest freeways in the
13 East Bay, with a section between Interstate 580 and the Benicia Bridge having
14 up to ten lanes. At the Contra Costa/Solano County line, I-680's AADT is 106,000
15 vehicles (Caltrans 2012).
- 16 • Interstate 780 (I-780) connects I-80 and I-680 in Solano County. The AADT of I-
17 780 is 55,000 vehicles (Caltrans 2012).
- 18 • State Route 4 (SR-4) extends from I-80 in Contra Costa County to State Route
19 89 in Alpine County. The route traverses east to west and is a one- to two-lane
20 road near the Project site. The AADT of SR-4 near the Project area (at McEwen
21 Road) is 44,500 vehicles (Caltrans 2012).

22 These highways and arterial roads linked to them would likely be used for the duration
23 of the Project by construction personnel as well as for materials transport. Secondary
24 arterials, collector roads, and private roads could also be used for the Project, though to
25 a lesser extent.

26 **Level of Service**

27 Level of Service (LOS) ratings are used as a grading system by traffic engineers to
28 determine the effectiveness of transportation infrastructure. There are six levels used in
29 North America, A (best) through F (worst), each indicating traffic flow and corresponding
30 safe driving conditions of a given roadway. An LOS A indicates a free-flowing roadway
31 with no delays while LOS F indicates that a roadway has a high level of congestion
32 where traffic flows exceed design capacity and result in long delays.

33 During peak hours, the LOS for the above-described Interstate and State highways as
34 well as major arterial roads is likely LOS E to F. All major highways in the San Francisco
35 Bay Area experience congested conditions during peak hours, and these conditions spill
36 over to arterial roads. This can cause unacceptable LOS. Secondary arterials, collector

1 roads, and private roads likely maintain acceptable operations and are generally
 2 characterized as LOS D or better.

3 I-80, SR-4, and I-680 are the major regional transportation corridors in the Project
 4 vicinity. Main routes for the Project would consist of Interstates, State highways, local
 5 (county and city) maintained roads, and private roads. Deconstruction activities would
 6 be conducted from barges on the Carquinez Strait; however, a temporary shore base
 7 identified by the contractor selected to conduct the deconstruction would be needed for
 8 handling, storing, and processing equipment and materials for disposal. Thus, traffic
 9 resulting from the Project would be centered around the shore base. Additionally, the
 10 proposed temporary parking and staging area at the former TXI property would be
 11 accessed via secondary roads connecting the property to I-80 and SR-4, principally
 12 Carquinez Scenic Drive, which is a narrow, winding two-lane road.

13 Project workforce personnel would drive to the contractor’s shore base to access water
 14 transport to the Project site. Trucks used for materials hauling to various landfills or
 15 treatment facilities would use various routes, depending on which landfills would be
 16 receiving the materials. Therefore, the network of highways and roads would be used
 17 for the Project, resulting in temporary minimal traffic increases.

18 **3.15.2 Regulatory Setting**

19 Federal and State laws and regulations pertaining to this issue area and relevant to the
 20 Project are identified in Tables 1-2 and 3.15-1. Local goals, policies, and/or regulations
 21 applicable to this issue area are listed below.

**Table 3.15-1. Federal and/or State Laws, Regulations, and Policies
 Potentially Applicable to the Project (Transportation/Traffic)**

U.S.	Ports and Waterways Safety Act	This Act provides the authority for the USCG’s program to increase vessel safety and protect the marine environment in ports, harbors, waterfront areas, and navigable waters, including by authorizing the Vessel Traffic Service, controlling vessel movement, and establishing requirements for vessel operation.
CA	California Vehicle Code	Chapter 2, Article 3 of the Vehicle Code defines the powers and duties of the California Highway Patrol, which has enforcement responsibilities for the vehicle operation and highway use in the State.
CA	Other	The California Department of Transportation is responsible for the design, construction, maintenance, and operation of the California State Highway System and the portion of the Interstate Highway System in California.

22 Contra Costa Transportation Authority (CCTA). The CCTA is a public agency formed in
 23 1988 responsible for County-wide transportation planning. Its mission is to deliver a
 24 comprehensive transportation system that enhances mobility and accessibility while
 25 promoting a healthy environment and strong economy. One of the CCTA’s duties is to
 26 develop and implement the Congestion Management Plan (CMP), which identifies

1 comprehensive strategies necessary for the development of appropriate responses to
2 transportation needs. The CMP includes the following: traffic LOS standards for State
3 highways and principal arterials within the County; multi-modal performance measures
4 to evaluate current and future systems; a seven-year capital improvement program to
5 maintain or improve the system or to mitigate any regional impacts of land use projects;
6 and a travel demand element that promotes transportation alternatives to the single-
7 occupant vehicle.

8 No traffic or transportation objectives or goals within the Contra Costa County General
9 Plan (2005) are relevant to the Project.

10 **3.15.3 Impact Analysis**

11 Traffic impacts associated with the Project would be minimal and short-term.
12 Deconstruction and removal activities would occur over an up-to-5-month period. Eight
13 to 12 construction personnel would report to the site depending on the stage of the
14 Project. Additional trucks and other transport vehicles would cause a slight increase in
15 traffic while transporting waste materials between the selected contractor's shore base
16 and the landfills or treatment facilities for the duration of the Project. Travel to and from
17 the former TXI property to observe the operations could also cause slight increases in
18 traffic.

19 ***a) Cause an increase in traffic which is substantial in relation to the existing***
20 ***traffic load and capacity of the street system (i.e., result in a substantial increase***
21 ***in either the number of vehicle trips, the volume to capacity ratio on roads, or***
22 ***congestion at intersections)?***

23 The Project would cause a minimal increase in traffic which may be substantial in
24 relation to the existing traffic load and capacity of the street system. There would be a
25 temporary increase in the number of vehicle trips during the course of the Project.

26 Although the Project would require eight to 12 crew members, their vehicle trips to a
27 local marina to board the crew boat each morning would not substantially increase
28 traffic because if they were not assigned to this Project they would likely be assigned to
29 a different project in the region. Therefore, they would have little to no impact on
30 existing traffic load and capacity of the street system.

31 However, Project-generated trips would occur to and from the contractor's temporary
32 shore base that would be set up for vehicle, equipment, supply, and materials handling,
33 storage, and processing. These vehicle trips could have a potentially significant impact on
34 localized traffic and congestion in the region.

1 **Impact TT-1: Increased traffic and congestion on the existing street system due to**
2 **deconstruction activities.**

3 **Less than Significant with Mitigation.** Heavy truck trips would be required for hauling
4 equipment and materials to the selected contractor's existing shore base and to landfill
5 and recycling locations from the contractor's shore facilities. The bulk of the trips would
6 be due to disposal of materials retrieved from the wharf. Many tons of concrete, steel,
7 and treated wood would be hauled on barges from the Project area to the contractor's
8 shore base, where this waste would be processed and hauled to appropriate landfills or
9 recycling centers. Several trucks would make multiple daily trips to and from the
10 contractor's shore base once enough materials have accumulated at the shore base
11 (likely at the midpoint of the Project). Other truck trips generated by the Project would
12 be associated with the movement of equipment and materials to and from the
13 contractor's shore facilities. A small number of trips could also involve Project staff
14 access to the Project site via the former TXI property.

15 Primary impacts would potentially include intermittent decreases of roadway capacities
16 during the course of the Project due to slower movements and larger turning radii of the
17 trucks compared to passenger vehicles. The addition of these vehicles to already
18 congested highways could result in potentially significant traffic impacts. The following
19 mitigation measure would reduce this impact to less than significant.

20 **MM TT-1 Traffic Management Plan.** The Applicant shall prepare and implement a
21 Traffic Management Plan approved by the California Department of Transportation
22 and Contra Costa County. Truck activities shall be limited to off-peak weekday hours
23 (9:00 a.m. to 3:00 p.m.). If authorized, truck operations could be extended to include
24 weekday hours of 7:30 p.m. to 5:30 a.m. Appropriate haul routes shall be
25 determined to minimize traffic load and congestion. Ridesharing shall be encouraged
26 and appropriate signage and safety requirements shall be implemented at the shore
27 base.

28 ***b) Exceed, either individually or cumulatively, a level of service standard***
29 ***established by the county congestion management agency for designated roads***
30 ***or highways?***

31 **Less than Significant with Mitigation.** The Project could potentially exceed, either
32 individually or cumulatively, a short-term LOS standard established by the CCTA for
33 designated roads or highways. This would be due to the hauling and delivery vehicle
34 movement during the course of the Project (discussed above in (a)). However, **MM TT-1**
35 would reduce any impacts to LOS standards to less than significant.

36 ***c) Result in a change in air traffic patterns, including either an increase in traffic***
37 ***levels or a change in location that result in substantial safety risks?***

1 **No Impact.** The Project would not result in any changes to air traffic patterns.

2 **d) Substantially increase hazards due to a design feature (e.g., sharp curves or**
3 **dangerous intersections) or incompatible uses (e.g., farm equipment)?**

4 **No Impact.** The Project would not substantially increase hazards due to a design
5 feature or incompatible uses. No physical changes to existing roadways would occur as
6 a result of the Project and movement and operation of large equipment, oversized
7 loads, and hazardous materials would be conducted in compliance with appropriate
8 Federal, State, and local regulations.

9 **e) Result in inadequate emergency access?**

10 **No Impact.** The Project would not result in inadequate emergency access. Project
11 activities would not change or otherwise adversely impact access routes within the
12 Project area or temporary shore base.

13 **f) Result in inadequate parking capacity?**

14 **No Impact.** The Project would not result in inadequate parking capacity. Personnel
15 parking would be provided at the selected contractor's shore base, a local marina, and
16 the parking area on the former TXI property (for parties to observe the Project only). At
17 the Project's peak, the maximum workforce demand would be for 12 spaces, while
18 average parking demand would be for eight spaces. Project equipment and haul
19 vehicles would be stored and loaded at the contractor's temporary staging area within
20 its existing shore facilities. No additional demand for parking would occur once the
21 Project is complete.

22 **3.15.4 Mitigation Summary**

23 Implementation of the following measures would reduce Project-related to
24 transportation/ traffic to less than significant.

- 25 • MM TT-1: Traffic Management Plan.

1 **3.16 UTILITIES AND SERVICE SYSTEMS**

UTILITIES AND SERVICE SYSTEMS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **3.16.1 Environmental Setting**

3 The Project site is located on the southeast side of the Carquinez Strait. The Carquinez
 4 Strait is a deep, narrow passage that joins San Pablo Bay in the west to Suisun Bay and
 5 upstream watersheds in the east. The former MOT is situated at the border of aquatic
 6 and terrestrial habitats, and the predominant land use at the Project site is aquatic.
 7 Temporary staging areas would be provided at the selected contractor's shore base and
 8 at the former TXI property.

9 The Project site is located in a relatively isolated and undeveloped area. It is located
 10 near the town of Port Costa, which has a population of 190 people (2010 U.S. Census)
 11 and is surrounded by the Carquinez Shoreline Regional Park, agricultural lands, and a

1 small section of industrial lands (former TXI property) that was acquired by the EBRPD
2 to become park lands.

3 With respect to utilities and services, the primary needs of the Project include the ability
4 to recycle or dispose of non-hazardous solid waste associated with the removal of the
5 wharf, including treated wood, reinforced concrete, steel, and other solid wastes. There
6 would likely be hazardous materials and wastes to dispose of as well (see Section 3.7,
7 Hazards and Hazardous Materials).

8 Several solid waste facilities are located in the San Francisco Bay Area that can receive
9 non-hazardous wastes from the wharf deconstruction for recycling and/or disposal.
10 Facilities specialized for the treatment or disposal of hazardous wastes may lie outside
11 the immediate Bay Area, but they are accessible via the network of roads and highways
12 that serve the region.

13 A shore base facility would be needed to handle materials and transfer them to
14 recycling and/or disposal sites. This location would be provided by the selected
15 contractor, who has not yet been chosen for the Project.

16 **3.16.2 Regulatory Setting**

17 No Federal or State laws relevant to this issue area are applicable to the Project. The
18 Project would occur in several local jurisdictions:

- 19 • The Project site is located in unincorporated Contra Costa County;
- 20 • The shore base for handling, processing and transferring of wharf materials and
21 demolition equipment has not yet been selected. There are potential locations in
22 Alameda, Contra Costa, Solano, Napa, and Marin Counties; and
- 23 • Disposal and recycling sites for all materials associated with the Project have not
24 yet been selected, but landfill facilities exist in Alameda, Marin, Solano, and
25 Contra Costa Counties. Other recycling facilities such as scrap metal processing
26 yards exist in most of the nine Bay Area counties. The deconstruction contractor
27 would determine which facilities are used. Should the Project require the removal
28 and disposal of hazardous wastes, Phillips 66 and its contractors would comply
29 with all appropriate Federal, State, and local regulations (see Section 3.7
30 Hazards and Hazardous Materials).

31 Contra Costa County Construction and Demolition Ordinance. Each County is required
32 to prepare and adopt a Countywide Integrated Waste Management Plan that must
33 include source reduction and recycling elements. Contra Costa County has a
34 Construction and Demolition Ordinance that became effective in 2004. It applies to all
35 construction sites that are greater than 5,000 square feet. To obtain a County

1 Demolition Permit, Contra Costa County requires the preparation of a Debris Recovery
2 Plan that indicates that at least 50 percent of construction debris generated at the
3 jobsite are reused, recycled, or otherwise diverted. Additionally, a Debris Recovery
4 Report must be submitted prior to receiving a final inspection. If the applicant fails to
5 meet mandates or prove good faith efforts, the applicant is subject to fines and civil
6 penalties.

7 **3.16.3 Impact Analysis**

8 The Project would generate a substantial amount of waste materials associated with the
9 wharf (non-hazardous and potentially hazardous) as well as from equipment use and
10 operation. These materials would need to be recycled or properly disposed.

11 ***a) Conflict with wastewater treatment requirements of the applicable Regional*** 12 ***Water Quality Control Board?***

13 **No Impact.** The Project is not expected to conflict with wastewater treatment
14 requirements of the RWQCB. Although wastewater may be produced during removal of
15 the concrete structures via saw cutting, it is unlikely that pre-treatment would be
16 needed. The process would be conducted in accordance with Federal and State
17 environmental protection regulations as well as RWQCB requirements.

18 ***b) Require or result in the construction of new water or wastewater treatment*** 19 ***facilities or expansion of existing facilities, the construction of which could cause*** 20 ***significant environmental effects?***

21 **No Impact.** The Project would not result in the construction of new water or wastewater
22 treatment facilities or expansion of existing facilities. Water required for cutting the
23 concrete and other deconstruction work would be minimal; wastewater treatment
24 providers would not be overloaded as a result of the Project's projected demand.

25 ***c) Require or result in the construction of new storm water drainage facilities, or*** 26 ***expansion of existing facilities, the construction of which could cause significant*** 27 ***environmental effects?***

28 **Less than Significant Impact.** The Project would not result in the construction of new
29 storm water drainage facilities or expansion of existing facilities. The majority of the
30 work would occur from barges on the water, with temporary incidental parking and
31 staging areas on the shore. Temporary BMPs would be implemented to prevent
32 stormwater/runoff pollution during demolition activities. BMPs that may be implemented
33 include covering stockpiles with geotextile fabric and beaming them with straw wattles
34 to minimize stormwater contact and therefore reduce polluted runoff. Other BMPs can
35 be found in the Caltrans Construction Site BMPs Manual (Caltrans 2003). BMPs for the
36 Project would be small-scale and temporary; impacts would be less than significant.

1 **d) Require new or expanded water supply resources or entitlements?**

2 **No Impact.** Water use for the Project would be minimal and can be provided from
3 existing domestic water supplies. Mechanical devices would require a relatively small
4 amount of water to operate, and water used for dust control would likely be less than
5 what is typical of a commercial construction project. This Project would not require new
6 or expanded water supply resources or entitlements.

7 **e) Result in a determination by the wastewater treatment provider that would**
8 **serve the project that it has adequate capacity to serve the project's projected**
9 **demand in addition to the provider's existing commitments?**

10 **No Impact.** The Project would not result in the construction of new water or wastewater
11 treatment facilities or expansion of existing facilities. Water required for cutting the
12 concrete and other deconstruction work would be minimal; wastewater treatment
13 providers would not be overloaded as a result of the Project's projected demand.

14 **f) Be served by a landfill with sufficient permitted capacity to accommodate the**
15 **project's solid waste disposal needs?**

16 **Less than Significant Impact.** Waste materials from the wharf deconstruction would
17 likely include the following:

- 18 • Reinforced concrete
- 19 • Treated wood
- 20 • Non-hazardous scrap metal
- 21 • Miscellaneous discarded materials typical of a construction or demolition project
22 (e.g., cardboard boxes, crating, stretch wrap, and other packaging)
- 23 • Hazardous materials (e.g., remnant equipment containing mercury)

24 LBP may also be generated during deconstruction. Several active solid waste landfills
25 with adequate capacity for materials in the first three categories were identified within
26 the region. They are listed below, with their remaining capacity as reported by the
27 California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste
28 Information System database.

- 29 • Acme Fill Corporation; 950 Waterbird Way, Martinez, CA 94553; 175,000 cubic
30 yards; permitted by the Contra Costa County Health Services Department
31 Environmental Health Division
- 32 • Keller Canyon Landfill; 901 Bailey Road, Pittsburg, CA 94565; 63 million cubic
33 yards; permitted by the Contra Costa County Health Services Department
34 Environmental Health Division

- 1 • Potrero Hills Landfill; 3675 Potrero Hills Lane, Suisun City, CA 94585; 13 million
2 cubic yards; permitted by the Solano County Department of Resource
3 Management

4 Each of these sites is able to receive solid waste from construction/demolition. Thus,
5 adequate disposal and recycling capacity exists for all of the nonhazardous scrap and
6 waste materials associated with the wharf demolition. The limited amounts of hazardous
7 wastes that are generated can be serviced by current recycling or landfill disposal
8 facilities in California. Any impacts to landfills would be a less than significant.

9 ***g) Comply with federal, state, and local statutes and regulations related to solid***
10 ***waste?***

11 **No Impact.** Compliance with local statutes and regulations would assure compliance
12 with State and Federal requirements. Phillips 66 would prepare a Debris Recovery Plan
13 that is required by the County. This would include a list of the facilities and service
14 providers that would be used to handle materials from the wharf. This Plan would be
15 approved by the County through the issuance of the County Demolition Permit. With this
16 review in place, the Project would comply with Federal, State, and local statutes and
17 regulations related to solid waste.

18 **3.16.4 Mitigation Summary**

19 The Project would not result in significant impacts to utilities and service systems; no
20 mitigation is required.

1 **3.17 MANDATORY FINDINGS OF SIGNIFICANCE**

2 The lead agency shall find that a project may have a significant effect on the
 3 environment and thereby require an EIR to be prepared for the project where there is
 4 substantial evidence, in light of the whole record, that any of the following conditions
 5 may occur. Where prior to commencement of the environmental analysis a project
 6 proponent agrees to mitigation measures or project modifications that would avoid any
 7 significant effect on the environment or would mitigate the significant environmental
 8 effect, a lead agency need not prepare an EIR solely because without mitigation the
 9 environmental effects would have been significant (per State CEQA Guidelines §
 10 15065):

MANDATORY FINDINGS OF SIGNIFICANCE –	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 **3.17.1 Impact Analysis**

12 ***a) Does the project have the potential to degrade the quality of the environment,***
 13 ***substantially reduce the habitat of a fish or wildlife species, cause a fish or***
 14 ***wildlife population to drop below self-sustaining levels, threaten to eliminate a***
 15 ***plant or animal community, reduce the number or restrict the range of a rare or***
 16 ***endangered plant or animal, or eliminate important examples of the major periods***
 17 ***of California history or prehistory?***

1 **Less than Significant with Mitigation.** As is discussed in Section 3.4, Biological
2 Resources, potentially significant impacts on biological resources could occur during the
3 deconstruction of the MOT. However, implementation of **MM BIO-1a** through **MM BIO-**
4 **5, MM WQ-1, MM WQ-2,** and **MM HAZ-1b** would reduce impacts on biological
5 resources to less than significant.

6 ***b) Does the project have impacts that would be individually limited, but***
7 ***cumulatively considerable? (“Cumulatively considerable” means that the***
8 ***incremental effects of a project are considerable when viewed in connection with***
9 ***the effects of past projects, the effects of other current projects, and the effects***
10 ***of probable future projects.)***

11 **Less than Significant with Mitigation.** The Project is the deconstruction of an existing
12 inoperable MOT. As documented in Section 3.3, the Project would have no impact in
13 the areas of Aesthetics, Agricultural Resources, Cultural Resources, Geology and Soils,
14 Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and
15 Service Systems; accordingly the Project does not have cumulatively considerable
16 impacts for those resource areas.

17 The Project would have less than significant impacts in Hydrology and Water Quality,
18 Land Use and Planning, and Noise, and would have less than significant with mitigation
19 incorporated impacts in Air Quality, Biological Resources, Hazards and Hazardous
20 Materials, Transportation and Traffic, and Recreation. As documented in Section 3.3,
21 the nature of the potential impacts in these resource areas would be localized and of
22 short duration.

23 Consequently, for these impacts to act cumulatively on any past, present, or reasonably
24 foreseeable future projects (hereafter called “cumulative projects”), the cumulative
25 projects would have to have individual impacts in the same resource areas at the same
26 time and in the same localized area as the Project.³ Available planning records for
27 Contra Costa County and local media were researched to identify any cumulative
28 projects located within a 0.5-mile radius of the Project site (0.5 mile is the furthest extent
29 that the Project would have an incremental unmitigated noise impact; Project-related
30 impacts in the other resource areas would be unlikely to be distinguishable at any
31 greater distance). The only cumulative project within a 0.5-mile radius of the Project
32 area is the planned conversion of the former TXI brick plant and property as a
33 continuation of the Carquinez Regional Shoreline Park. Before this land is opened to the

³ For air quality, the BAAQMD CEQA Guidelines state that for any project that does not individually have significant air quality impacts, the determination of a significant cumulative impact should be based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan. As demonstrated in Section 3.3, the Project would be consistent with the adopted clean air plan and the Ozone Strategy and would not result in an operational air quality impact. In addition, the Project would be consistent with the air quality policies in Contra Costa County. As such, the Project would not result in a cumulatively considerable impact for Air Quality.

1 public, the EBRPD, which recently acquired the property, would develop a recreational
2 plan and accompanying CEQA environmental document for whatever recreational uses
3 are proposed. Since the Wharf deconstruction would result in temporary less than
4 significant impacts with mitigation and the Park may result in beneficial air quality,
5 biological, hazards and hazardous materials, and transportation impacts, it is unlikely
6 that the Project as mitigated would have any cumulatively considerable adverse effects.

7 ***c) Does the project have environmental effects that would cause substantial***
8 ***adverse effects on human beings, either directly or indirectly?***

9 **Less than Significant with Mitigation.** As discussed in Section 3.3 above, the
10 deconstruction of the MOT as well as material recycling activities at the contractors
11 shore base for the Project could result in substantial adverse impacts on human beings
12 either directly or indirectly. Some of these potential impacts would occur through air
13 emissions released by construction equipment and activities. Implementation of **MM**
14 **AIR-1a** through **MM AIR-1d** would reduce potential construction-related air quality
15 impacts to less than significant. Potential impacts due to the transport, use, or disposal
16 of hazardous materials and/or the accidental spilling or discharge of debris from the
17 deconstruction process could endanger workers and/or residents adjacent to the Project
18 area. These potential impacts would be reduced to less than significant through
19 implementation of **MM HAZ-1a** and **MM HAZ-1b**. Although it would be less likely, the
20 potential discharge of hazardous materials into the bay waters could contaminate
21 fisheries, which in turn if the contaminated fish were consumed could pose a substantial
22 adverse impact on humans. However, implementation of **MM WQ-1**, **MM HAZ-1b**, **MM**
23 **BIO-2**, and **MM BIO-3** would reduce impacts on these biological resources to less than
24 significant.

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4.0 SOCIOECONOMIC EFFECTS AND ENVIRONMENTAL JUSTICE

This section addresses environmental justice issues associated with the Project, which would involve the removal of an inactive marine oil terminal (MOT). This analysis focuses on whether the Project has the potential to adversely and disproportionately affect minority populations and/or low-income communities.

4.1 ENVIRONMENTAL SETTING

This section analyzes potential impacts on minority and low-income populations within the potential impact area of the Project. Evaluation of the presence or absence of these populations in the Project vicinity is based on the U.S. Bureau of the Census, Census 2010 data.

4.1.1 Regional

A summary of the racial diversity and income levels of the residents of the State of California and for Contra Costa County is provided in Table 4-1. Contra Costa County contains a lower percentage of minority population and low-income residents than on the average for the State as a whole. Contra Costa County has a minority population of 41.4 percent and a poverty level rate of 9.0 percent, while the State has a minority population of 42.4 percent and a poverty level rate of 13.7 percent.

Table 4-1. Summary of Census 2010 Demographics for the Region

Location	Total Population	Percent Minority	Per Capita Income	Percent Below Poverty Level
Contra Costa County	1,049,025	41.4	\$37,818	9.0
Total for California	37,253,956	42.4	\$29,188	13.7

Source: U.S. Census Bureau, Census 2010

4.1.2 Project Study Area

The Project would occur along the shoreline of the Carquinez Strait in an unincorporated portion of Contra Costa County. The Project site is located primarily offshore, with the only onshore portion being two temporary staging areas, one situated within the former TXI property located southwest of the wharf and the other at the selected contractor's shore base. No residential communities are in the immediate vicinity of the Project site. The closest residential communities are Port Costa (located about 0.6 mile northwest of the Project site) and Benicia (located about 0.75 mile northeast of the Project site, across the Carquinez Strait).

1 For this analysis, a potential impact area of 0.5 mile centered on the Port Costa Wharf
2 was used. This potential impact area encompasses the Project site plus a
3 conservatively sized buffer for evaluating environmental justice implications of potential
4 Project impacts. The environmental justice study area is made up of the two Census
5 Block Groups overlapping the 0.5-mile radius impact area: Block Group 2 of Census
6 Tract 3570 and Block Group 2 of Census Tract 3180. In addition, the communities of
7 Port Costa and Benicia were included in the environmental justice analysis as the
8 closest residential communities to the Project site.

9 **4.2 REGULATORY SETTING**

10 **4.2.1 Federal**

11 Executive Order 12898, dated February 11, 1994, requires the U.S. Environmental
12 Protection Agency (USEPA) and all other Federal agencies (as well as State agencies
13 that receive Federal funding) to identify and address any disproportionately high and
14 adverse human health or environmental effects of programs, policies, and activities on
15 minority and/or low-income communities. In 1997, the Council on Environmental Quality
16 released the Environmental Justice Guidance to assist Federal agencies in their
17 compliance with Executive Order 12898. The guidance specifies that agencies should
18 examine geographic distribution by race, ethnicity, and income, as well as delineation of
19 tribal lands and resources.

20 **4.2.2 State**

21 Under Assembly Bill (AB) 1553 (October 2011), the Governor's Office of Planning and
22 Research (OPR) is required to include environmental justice procedures in its general
23 plan guidelines. The OPR updated the General Plan Guidelines in October 2003 to
24 incorporate the requirements of AB 1553. In the General Plan Guidelines,
25 environmental justice is defined as "the fair treatment of people of all races, cultures,
26 and incomes with respect to the development, adoption, implementation, and
27 enforcement of environmental laws, regulations and policies."

28 In 2002 the California State Lands Commission (CSLC) adopted an Environmental
29 Justice Policy to ensure equality and fairness in its processes, decision-making, and
30 regulatory affairs. The policy stresses the equitable treatment of all members of the
31 public and the commitment of the CSLC in considering environmental justice in its
32 programs and projects. The Policy is implemented, in part, through the identification of
33 relevant populations that could be adversely and disproportionately impacted and
34 through communication with such groups to minimize or eliminate potential
35 environmental impacts.

1 **4.2.3 Regional/Local**

2 An Environmental Justice Policy was adopted by the Contra Costa County Board of
3 Supervisors in 2003 to ensure the fair treatment of people of all races, cultures and
4 income levels. Under the Policy, the County will conduct its programs, policies and
5 activities that substantially affect human health or the environment in a manner that
6 minimizes or eliminates the impact on minority and low-income populations.

7 **4.3 CSLC ENVIRONMENTAL JUSTICE POLICY**

8 Environmental justice is defined by California law as “the fair treatment of people of all
9 races, cultures, and incomes with respect to the development, adoption,
10 implementation, and enforcement of environmental laws, regulations, and policies.” This
11 definition is consistent with the Public Trust Doctrine principle that the management of
12 trust lands is for the benefit of all of the people. The CSLC adopted an environmental
13 justice policy in October 2002 to ensure that environmental justice is an essential
14 consideration in the agency’s processes, decisions, and programs. Through its policy,
15 the CSLC reaffirms its commitment to an informed and open process in which all people
16 are treated equitably and with dignity, and in which its decisions are tempered by
17 environmental justice considerations.

18 As part of the CSLC environmental justice policy, the CSLC pledges to continue and
19 enhance its processes, decisions, and programs with environmental justice as an
20 essential consideration by:

- 21 1) Identifying relevant populations that might be adversely affected by CSLC
22 programs or by projects submitted by outside parties for its consideration.
- 23 2) Seeking out community groups and leaders to encourage communication and
24 collaboration with the CSLC and its staff.
- 25 3) Distributing public information as broadly as possible and in multiple languages,
26 as needed, to encourage participation in the CSLC’s public processes.
- 27 4) Incorporating consultations with affected community groups and leaders while
28 preparing environmental analyses of projects submitted to the CSLC for its
29 consideration.
- 30 5) Ensuring that public documents and notices relating to human health or
31 environmental issues are concise, understandable, and readily accessible to the
32 public, in multiple languages, as needed.
- 33 6) Holding public meetings, public hearings, and public workshops at times and in
34 locations that encourage meaningful public involvement by members of the
35 affected communities.

- 1 7) Educating present and future generations in all walks of life about public access
2 to lands and resources managed by the CSLC.
- 3 8) Ensuring that a range of reasonable alternatives is identified when siting
4 facilities that may adversely affect relevant populations and identifying, for the
5 CSLC's consideration, those that would minimize or eliminate environmental
6 impacts affecting such populations.
- 7 9) Working in conjunction with Federal, State, regional, and local agencies to
8 ensure consideration of disproportionate impacts on relevant populations, by
9 instant or cumulative environmental pollution or degradation.
- 10 10)Fostering research and data collection to better define cumulative sources of
11 pollution, exposures, risks, and impacts.
- 12 11)Providing appropriate training on environmental justice issues to staff and the
13 CSLC so that recognition and consideration of such issues are incorporated into
14 its daily activities.
- 15 12)Reporting periodically to the CSLC on how environmental justice is a part of the
16 programs, processes, and activities conducted by the CSLC and by proposing
17 modifications as necessary.

18 **4.3.1 Methodology**

19 The CSLC environmental justice policy does not specify a methodology for conducting
20 programmatic-level analysis of environmental justice issues.

21 This analysis focuses primarily on whether the Project's impacts have the potential to
22 affect areas of high-minority populations and/or low-income communities
23 disproportionately and thus would create an adverse environmental justice effect. For
24 the purpose of the environmental analysis, the Project's inconsistency with the CSLC's
25 Environmental Justice Policy would occur if the Project would:

- 26 • Have the potential to disproportionately affect minority and/or low-income
27 populations adversely; or
- 28 • Result in a substantial, disproportionate decrease in employment and economic
29 base of minority and/or low-income populations residing in immediately adjacent
30 communities.

31 **4.3.2 Project Analysis**

32 **Communities of Concern Identified Within the Project Study Area**

33 To determine whether disproportionate effects to minority or low-income populations
34 would potentially occur due to Project activities, the "communities of concern" criteria

1 identified above have been applied to the two Census Block Groups within the study
 2 area, the Census-designated place of Port Costa, and the City of Benicia.

3 **Minority Communities of Concern**

4 Table 4-2 shows a summary of minority and low-income data from the 2010 U.S.
 5 Census for the four potential communities of concern (Block Group 2 of Census Tracts
 6 3570 and 3180, Port Costa, and Benicia), as well as the communities of comparison
 7 (Contra Costa and Solano Counties). None of the four areas analyzed has a percentage
 8 of minorities that exceed 50 percent. Additionally, none has a minority percentage
 9 higher than its community of comparison. Therefore, based on the minority
 10 “Communities of Concern” criteria identified above, there are no minority communities of
 11 concern for the Project.

12 **Table 4-2. Minority and Low-Income Populations in Study Area Communities**

Location	Total Population	Minority Population	Percent Minority	Per Capita Income	Below Poverty Level	
					Population	Percent
Contra Costa Co.	1,049,025	434,513	41.4	\$37,818	94,412	9.0
• Block Group 2 Census Tract 3570	1,093	206	18.8	\$42,172	103	9.5
• Block Group 2 Census Tract 3180	1,128	199	17.6	\$34,599	106	9.4
• Port Costa	190	18	9.5	\$58,713	0	0
Solano Co.	413,344	202,593	49.0	\$28,649	42,988	10.4
• Benicia	26,997	7,429	27.5	\$43,112	1,404	5.2

Source: US Census Bureau, Census 2010

13 **Low-Income Communities of Concern**

14 From Table 4-2 above, none of the areas analyzed has a population below poverty level
 15 of over 50 percent, but two of the areas (Block Group 2 of Census Tracts 3570 and
 16 Block Group 2 of and Census Tract 3180) have a population below poverty level above
 17 that of their corresponding County percentage. While Contra Costa County has a below
 18 poverty level rate of 9.0 percent, Tract 3570 has a rate of 9.5 percent and Tract 3180
 19 has a rate of 9.4 percent. However, these poverty rates are less than 20 percent above
 20 the county level (threshold is 10.8 percent), and therefore are not considered
 21 communities of concern.

1 **4.4 CONCLUSION**

2 **No Impact.** No communities of concern were identified within the study area for this
3 Project (the Port Costa wharf site). Therefore, Project activities are not likely to cause
4 disproportionately high and adverse human health or environmental effects to
5 environmental justice populations or cause a disproportionate decrease in employment
6 and economic base of minority and/or low-income populations residing in the County
7 and/or immediately surrounding cities.

5.0 MITIGATION MONITORING PROGRAM

1

2 The California State Lands Commission (CSLC) is the lead agency under the California
3 Environmental Quality Act (CEQA) for the proposed Project. A monitoring and reporting
4 program for Implementation of mitigation measures for the Project must be approved
5 and adopted by CSLC in order to comply with Public Resources Code section 21081.6,
6 subdivision (a) (Findings) and State CEQA Guidelines sections 15091.9, subdivision (d)
7 (Findings) and 15097 (Mitigation Monitoring or Reporting).

8 5.1 MONITORING AUTHORITY

9 It is important that impacts from a Project are mitigated to the maximum extent feasible.
10 The purpose of a Mitigation Monitoring Program (MMP) is to ensure compliance with
11 and implementation of mitigation measures. An MMP can be used as a working guide
12 for implementation, monitoring, and reporting for the Project's mitigation measures.

13 The CSLC may delegate duties and responsibilities for monitoring to other
14 environmental monitors or consultants as necessary. Some monitoring responsibilities
15 may be assumed by other agencies, such as affected jurisdictions, cities, and/or the
16 CDFW. The CSLC or its designee will ensure that qualified environmental monitors are
17 assigned to the Project.

18 Any MMP that requires the approval of the CSLC must allow at least 60 days for
19 adequate review time. If a mitigation measure (MM) requires that a mitigation program
20 be developed during the design phase of the project, the Applicant must submit the final
21 program to CSLC staff for review and approval at least 60 days before deconstruction
22 begins. Other agencies and jurisdictions may require additional review time. The
23 environmental monitor is responsible to ensure that appropriate agency reviews and
24 approvals are obtained.

25 The CSLC or its designee will also ensure that any deviation from the procedures
26 identified under the monitoring program is approved by the CSLC. Any deviation and its
27 correction shall be reported immediately to the CSLC or its designee by the
28 environmental monitor.

29 5.2 ENFORCEMENT RESPONSIBILITY

30 The CSLC is responsible for enforcing the MMP. The assigned environmental
31 monitor(s) shall identify issues, record them, notify appropriate agencies or individuals,
32 and report them to the CSLC or its designee.

1 **5.3 MITIGATION COMPLIANCE RESPONSIBILITY**

2 The Applicant is responsible for the successful implementation of and compliance with
3 the mitigation measures identified in the MMP. This includes all field personnel and
4 contractors working for the Applicant.

5 **5.4 GENERAL MONITORING PROCEDURES**

6 **Environmental Monitors.** Many of the monitoring procedures would be conducted
7 during the deconstruction phase of the Project. Along with the CSLC, the environmental
8 monitor(s) are responsible for coordinating with the Applicant to integrate the mitigation
9 monitoring procedures into the deconstruction process. To ensure implementation and
10 success of the MMs, an environmental monitor must be on site during the deconstruction
11 activities that have the potential to create significant environmental impacts or impacts for
12 which mitigation is required. The environmental monitor is responsible for ensuring that
13 the MMP is followed.

14 **Workforce Personnel.** The MMP's success would rely on the full cooperation of Project
15 personnel and supervisors. Many of the MMs require action from site supervisors and
16 their crews for successful implementation. The following actions would be taken to
17 ensure success: (1) Relevant mitigation procedures would be written into contracts
18 between the Applicant and any contractors; and (2) a Worker Environmental Awareness
19 Program (WEAP) (under MM BIO-1b) would be implemented and all personnel would be
20 required to participate. Trainings would include the importance of the various
21 environmental resources and MMs to prevent or minimize potential impacts to them.

22 **General Reporting Procedures.** Site visits and specified monitoring procedures would
23 be conducted by an environmental monitor assigned to the relevant deconstruction activity.
24 A monitoring record form would be submitted to the Applicant, and once the Project is
25 complete, a compilation of all the logs would be submitted to the CSLC. A checklist
26 would be developed by the environmental monitor to track all procedures required for
27 each mitigation measure and to ensure that the timing specified for the procedures is
28 followed. The environmental monitor would note any issues that may occur and take
29 appropriate action to resolve them.

30 **Public Access to Records.** Records and reports would be open to the public; the
31 CSLC or its designee would provide them upon request.

32 **5.5 MITIGATION MONITORING TABLE**

33 The following Table presents the mitigation monitoring needs for each environmental
34 discipline.

1 **Table 5-1. Mitigation Monitoring Program**

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
<i>Air Quality</i>						
Temporary Deconstruction Emissions of Criteria Pollutants.	<p>MM AIR-1a. Basic Construction Measures. The Applicant shall comply with the following measures per the Bay Area Air Quality Management District's (BAAQMD's) California Environmental Quality Act Guidelines:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [Cal. Code Regs., tit. 13, § 2485]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • The Applicant shall post a publicly visible sign 	Wharf and contractor base	Observe activities for compliance	Prior to and during deconstruction	Phillips 66	Exhaust and dust emissions are minimized

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.					
Temporary Deconstruction Emissions of Criteria Pollutants.	MM AIR-1b: Vessels and Equipment. Project vessels and equipment that rely on internal combustion engines for power and/or propulsion shall be kept in good working condition and compliant with California emission regulations. Maintenance logs shall be provided to the California State Lands Commission staff prior to deconstruction and on a monthly basis during deconstruction.	Wharf, upland staging area, and contractor base	Verification (maintenance logs) provided to CSLC	Prior to and during deconstruction	Phillips 66	Exhaust emissions minimized
	MM AIR-1c: Nearby Sensitive Receptors. Residences in the Project vicinity shall be notified of the Project schedule and duration a minimum of 2 weeks prior to deconstruction activities. In addition, if work is planned during the school year, schools in the vicinity shall also be notified of the Project schedule and duration.	Wharf, upland staging area, and contractor base	Verify coordination with local population	Prior to deconstruction	Phillips 66	Provides advance notice of potential air emissions
Biological Resources						
Physical displacement of fish species and disturbance of Essential Fish Habitat due to deconstruction activities.	MM BIO-1a: Disturbance Minimization. The Applicant shall adhere to the following conditions to minimize disturbance to sensitive species: <ul style="list-style-type: none"> • The Project disturbance area shall be limited to the minimum required to complete the Project. • Vessel traffic and movements shall be minimized to reduce potential physical displacement or injury of fish. • In-water work shall be conducted in compliance with the California Department of 	Wharf	Observe activities for compliance	During deconstruction	Phillips 66	Reduce potential physical displacement of fish

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	Fish and Wildlife and National Marine Fisheries Service work windows for fish species that occur in the Carquinez Strait and Suisun Bay to limit the deconstruction activity to times when there is no spawning and a reduced number of fish in the area.					
	MM BIO-1b: Worker Environmental Awareness Program (WEAP). Training for all personnel involved in deconstruction activities shall be mandated. Training materials shall be submitted to the California State Lands Commission staff for approval 2 weeks prior to deconstruction. Training shall include the importance of the marine environment to special-status species and the environmental protection measures that are being implemented to avoid and/or minimize negative impacts to Essential Fish Habitat and the species that depend on them. The WEAP shall also cover other important biological resources with potential to occur in and around the Project area, including Alameda whipsnake, nesting birds, and wetlands.	Wharf, upland staging area, and contractor base	Submit training materials to CSLC for approval and submit attendance records to CSLC	Prior to deconstruction	Phillips 66	Ensure that personnel are aware of special-status fish, birds, and marine mammals and protection measures
			Review and approve training materials	Prior to deconstruction	CSLC	
Potential impacts of toxic materials to fish species.	MM BIO-2: Lead-Based Paint (LBP) Management Plan. Since LBP is present on the wharf, Phillips 66 shall retain a licensed lead abatement contractor to address LBP prior to the general deconstruction of the wharf. A LBP Management Plan including health and safety procedures shall be prepared and submitted to the California State Lands Commission staff for approval 2 weeks prior to deconstruction and included as part of the Project's Work Plan.	Wharf	Prepare LBP Management Plan and submit to CSLC for approval. Observe activities for compliance	Prior to and during deconstruction	Phillips 66	Reduce lead contamination and exposure
			Review and approve LBP Management Plan	Prior to deconstruction	CSLC	
Also implement MM WQ-1: Water Quality/Storm Water Pollution Prevention Plan. See below.						

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	Also implement MM HAZ-1b. Hazardous Materials Management Plan (HMMP) . See below.					
Potential impacts of debris on nearby habitat.	MM BIO-3: Deconstruction and Seafloor Debris Removal Plan. The Applicant shall prepare a Deconstruction and Seafloor Debris Removal Plan for approval by the California State Lands Commission staff 60 days prior to deconstruction to address the following: <ul style="list-style-type: none"> Removal methods, equipment, and timing for all Project components. Procedures for monitoring and recording, by the on-site contractor's supervisor and mitigation monitor of any deconstruction debris or equipment that has dropped into Bay waters. The record shall include the dropped object's description and location for recovery. Procedures for conducting a post-deconstruction bathymetric survey once deconstruction is complete to verify that the wharf has been completely removed and to identify any debris items that are associated with the deconstruction process. Removal of sea floor debris inclusive of any equipment, tools, pilings, or other materials or debris accidentally dropped into the Bay during deconstruction activities. Large pieces of structures to be removed would have tag lines attached to facilitate recovery from the Bay in the event of an accident. Characterization of the content of the two steel pipe sections and alternative recovery approaches based on sampling results. The approach(s) shall be carefully designed to mitigate the potential of releasing any hazardous materials (if found inside the pipes) into the Bay. 	Project Area	Prepare Deconstruction Plan and submit to CSLC for approval. Observe activities for compliance	Prior to and during deconstruction	Phillips 66	Reduce disturbances of local population and biota
			Review and approve Deconstruction Plan	Prior to deconstruction	CSLC	

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
Potential impacts of deconstruction activities on special-status birds.	MM BIO-4a: Bird Nesting Prevention. In consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, no less than 1 month prior to nesting season, the Applicant shall implement deterrence measures to prevent nesting birds from using any of the wharf structure slated for removal. Measures shall include, but not be limited to, the following: <ul style="list-style-type: none"> • Old nests or nests under construction shall be washed down with water or knocked down using a pole. • To minimize the likelihood of nesting birds using the mooring dolphins or decks to support nests, these structures shall be prioritized for removal. • Netting with mesh size 0.5 to 0.75 inch shall be installed to provide a physical barrier between the birds and the nest site. 	Wharf, upland staging area, and contractor shore base	Implement measures and observe activities for compliance	Prior to deconstruction	Phillips 66 in consultation with CDFW and USFWS	Reduce impacts on nesting birds
	MM BIO-4b: Pre-deconstruction Nesting Bird Survey and Monitoring. No more than 14 days prior to the start of deconstruction activities, a qualified biologist shall conduct a nesting bird survey in the Project area to ensure that no nesting has taken place. The qualified biologist shall also monitor the site during deconstruction activity for any nesting activity in the Project vicinity.	Wharf, upland staging area, and contractor base	Conduct survey and observe activities for compliance	Prior to deconstruction	Phillips 66 in consultation with CDFW and USFWS	Reduce impacts on nesting birds
	MM BIO-4c: Work Zones around Active Nests. In the event that an active nest is found in the Project vicinity, appropriate no-work buffers shall be established in consultation with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service to prevent disturbance or destruction of the nest.	Wharf, upland staging area, and contractor base	Establish buffers and observe activities for compliance	During deconstruction	Phillips 66 in consultation with CDFW and USFWS	Reduce impacts on nesting birds
	Also implement MM BIO-1b: Worker Environmental Awareness Program. See above.					

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
Potential impacts to Alameda whipsnake.	MM BIO-5: Avoidance and Reduced Speed Limits. To reduce the potential for Alameda whipsnake take to a less-than-significant level, only the roadway along the northern edge of the former TXI/Pacific Custom Materials, Inc. (TXI) property shall be used for ingress/egress so that Project vehicles are routed away from the potential habitat to the south and potential wetland areas in the eastern portion of the property. In addition, a speed limit of 10 miles per hour shall be implemented within the TXI property.	Wharf, upland staging area, and contractor base	Implement speed limits and serve activities for compliance	During deconstruction	Phillips 66	Reduce impacts to Alameda whipsnake
Also implement MM BIO-1b: Worker Environmental Awareness Program. See above.						
Potential impacts to a small wetland/riparian area located 100 feet southeast of the eastern proposed upland staging area.	MM BIO-5 Avoidance and Reduced Speed Limits. See above.	Wharf, upland staging area, and contractor base	Implement speed limits and observe activities for compliance	During deconstruction	Phillips 66	Reduce impacts to the wetland/riparian area in the former TXI property
Also implement MM WQ-1. Water Quality Plan/Storm Water Pollution Prevention Plan. See below. Also implement MM BIO-1b: Worker Environmental Awareness Program. See above.						
Potential impacts of deconstruction to migratory fish.	Implement MM BIO-1a: Disturbance Minimization. See above. Implement MM WQ-1. Water Quality Plan/Storm Water Pollution Prevention Plan. See below.					
Potential impacts due to aquatic invasive species.	MM BIO-6: Best Management Practices (BMPs) for Aquatic Invasive Species. To reduce the potential for introducing aquatic invasive species to a less-than-significant level, BMPs for ballast water management and biofouling removal shall be implemented to avoid the spread of invasive species. Vessels over 300 gross tons in size are currently regulated under the State's Marine Invasive Species Program, and Project vessels of this size will comply with the State's requirements	Offshore Project area	Implement measures and observe activities for compliance	During deconstruction	Phillips 66	

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	for ballast water management and biofouling removal. The deconstruction contractor shall also be required to inspect and remove biofouling from Project vessels less than 300 gross tons prior to travelling to the Project area.					
Hazards and Hazardous Materials						
Routine transport, use, and disposal of hazardous materials could create a significant hazard.	MM HAZ-1a. Barge and Shore Base Hazardous Materials Inventory. The Applicant shall keep a hazardous materials inventory for all hazardous materials to be stored, used, or transported for the Project in, on, or around the wharf, work barges, and the shore base. A current inventory shall be kept on site at all times and shall include the name of the material, the type, capacity, number and location of storage containers, type of hazard (pressure release, fire, explosion, asphyxiation, toxicity, bioaccumulation, etc.), and the maximum storage capacity at each location.	Wharf and contractor base	Prepare inventory and observe activities for compliance	Prior to and during deconstruction	Phillips 66	Reduce hazards risk for personnel and the environment
	MM HAZ-1b. Hazardous Materials Management Plan (HMMP). An HMMP shall be prepared and submitted for approval to the California State Lands Commission staff 2 weeks prior to the start of deconstruction activities and kept on site. The HMMP shall include specific methods for control and containment of hazardous materials identified in the hazardous material inventories from deconstruction through disposal. Emergency contacts shall be listed for use in the event of a release of hazardous materials. The HMMP shall include, but is not limited to, the following: <ul style="list-style-type: none"> • A hazardous materials inventory that identifies the type, location, estimated quantity and nature of each potentially hazardous material located at the wharf. 	Wharf and contractor base	Prepare HMMP and submit to CSLC for approval. Observe activities for compliance	Prior to and during deconstruction	Phillips 66	Reduce hazards risk for personnel and the environment
			Review and approve HMMP	Prior to deconstruction	CSLC	Reduce release of toxic materials into the water

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	<ul style="list-style-type: none"> Equipment containing other hazardous materials, such as switches and gauges that contain mercury, shall be tagged prior to removal for special handling to prevent an inadvertent discharge on the deck surfaces or into Bay waters. If hazardous materials are identified, a specialty abatement contractor shall be acquired to mitigate these issues in compliance with State and Federal regulations prior to the general deconstruction of the wharf. Any hazardous materials brought to the Project site, e.g., diesel oil or paints, shall also be included in the HMMP. 					
Release of hazardous materials by the Project could create a significant hazard.	MM HAZ-2: Post Construction Surveys. If piles are not completely extracted, post-deconstruction bathymetric survey shall be conducted immediately following deconstruction and every 2 years, for 6 years after the completion of deconstruction activities, to document that scour is not occurring within the Project footprint and that piles embedded in the Carquinez Strait bottom have not become exposed by erosion. Survey reports shall be submitted to the California State Lands Commission staff within 30 days of completion to document compliance.		Conduct surveys and observe activities for compliance	Post deconstruction	Phillips 66 and CSLC	Reduce hazards risk for public and the environment
	Also implement MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory. See above. Also implement MM HAZ-1b: Hazardous Materials Management Plan (HMMP). See above. Also implement MM WQ-1: Water Quality Plan/Storm Water Pollution Prevention Plan. See below. Also implement MM BIO-2: LBP Management Plan. See Biological Resources above. Also implement MM BIO-3: Deconstruction and Seafloor Debris Removal Plan. See Biological Resources above.					

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
Hydrology and Water Quality						
WQ-1: The Project could result in a violation of water quality standards.	<p>MM WQ-1: Water Quality/Storm Water Pollution Prevention Plan. In consultation with the regional agencies, the Applicant shall prepare a plan to prevent adverse impacts to nearby waterways and riparian areas associated with deconstruction. The final approved plan shall be submitted to the California State Lands Commission staff 2 weeks prior to deconstruction. The Plan shall include Best Management Practices (BMPs) for handling creosote-containing materials, spill prevention and containment, erosion and sedimentation prevention, and monitoring requirements. Measures shall include, but not be limited to, such BMPs as:</p> <ul style="list-style-type: none"> • During deconstruction activities, a floating boom and skirt shall be deployed around the Project site and absorbent booms and pads shall be provided on marine vessels on site. • Within upland areas, BMPs may include implementation of silt fences, straw wattles and other measures determined appropriate for erosion and sediment control. • BMPs to control waste, such as discarded deconstruction materials, chemicals, litter, and sanitary waste at the deconstruction site, shall be implemented. • Vessel fueling shall be required at the selected contractor's staging area or at an approved docking facility. No cross-vessel fueling shall be allowed. • Marine vessels generally shall contain petroleum products within tankage that is internal to the hulls of the vessels. All deck equipment shall be equipped with drip pans 	Wharf, upland staging facilities, and contractor base	Prepare plan and submit to RWQCB. Observe activities for compliance	Prior to and during deconstruction	Phillips 66 in coordination with the RWQCB	No spills reaching uncontained areas

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	<p>to contain leaks and spills. All fuels and lubricants aboard the work vessels shall have a double containment system. Chemicals used within the Project area and on marine vessels shall be stored using secondary containment.</p> <ul style="list-style-type: none"> The Applicant shall not store fuel or oil at the Project's parking and staging areas upland of the work site. Fuel containment at the selected contractor's existing shore base may store quantities of oil and fuel. 					
Also implement MM HAZ-1b: Hazardous Materials Management Plan (HMMP) . See above.						
Transportation/Traffic						
TT-1: Increased traffic and congestion on the existing street system due to deconstruction activities.	MM TT-1: Traffic Management Plan. The Applicant shall prepare and implement a Traffic Management Plan approved by California Department of Transportation and Contra Costa County. Truck activities shall be limited to off-peak weekday hours (9:00 a.m. to 3:00 p.m.). If authorized, truck operations could be extended to include weekday hours of 7:30 p.m. to 5:30 a.m. Appropriate haul routes shall be determined minimize traffic load and congestion. Ridesharing shall be encouraged and appropriate signage and safety requirements shall be implemented at the shore base.	Contractor base	Prepare plan and submit to Caltrans and County for approval. Observe activities for compliance	Prior to and during deconstruction	Phillips 66 in consultation with Caltrans and Contra Costa County	Minimize traffic impacts on local circulation

6.0 REPORT PREPARATION SOURCES

This Mitigated Negative Declaration (MND) was prepared by the staff of the California State Lands Commission's (CSLC) Division of Environmental Planning and Management (DEPM). The analysis in the MND is based on information provided on behalf of the Phillips 66 Company. The information and references provided in Section 3 were independently reviewed by DEPM staff.

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Appendix A

Lead and Asbestos Survey

Appendix B

Underwater Inspection Report

Appendix C

Air Quality-Emissions Calculations

Appendix D

Biological Assessment

Appendix E

Cultural Memo Final

Appendix F

Pile Cutoff Depth Evaluation Memorandum