

4.9 LAND USE AND RECREATION

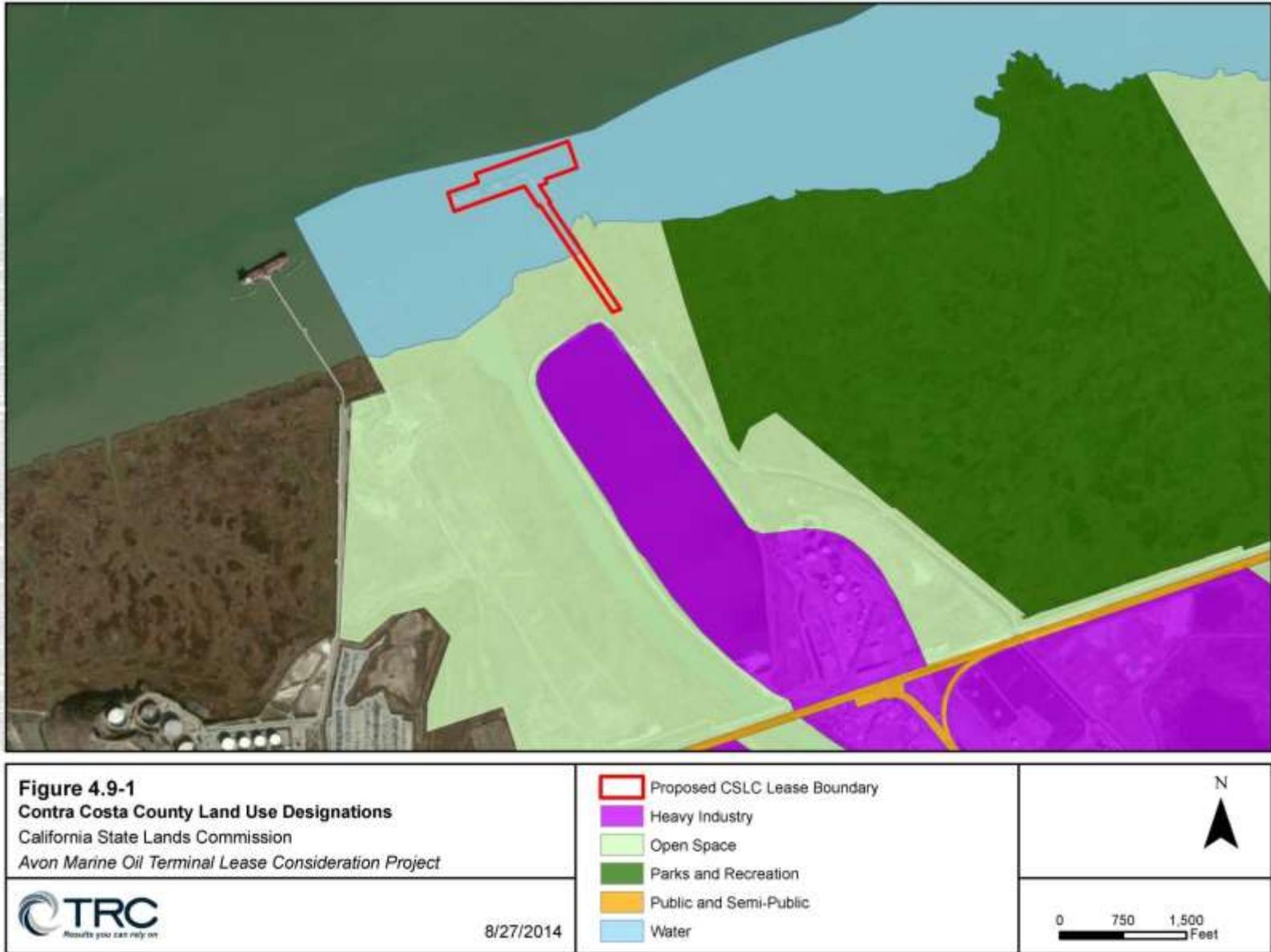
Section 4.9 provides a detailed description of the existing land use and recreation conditions around the Tesoro Avon Marine Oil Terminal (Avon Terminal) Lease Consideration Project (Project) study area, outlines applicable land use plans and policies, and summarizes potential land use and recreation-related impacts and mitigation measures (MMs) associated with the proposed lease renewal and Marine Oil Terminal Engineering Maintenance Standards (MOTEMS) compliance-related renovation.

4.9.1 ENVIRONMENTAL SETTING

4.9.1.1 Land Uses near the Avon Terminal

The Avon Terminal is located in unincorporated Contra Costa County, on the south shore of Suisun Bay, east of the Benicia-Martinez Bridge (Interstate 680). Land immediately surrounding the Avon Terminal is primarily open marsh land, with the Point Edith Wildlife Area bordering immediately east, and open marsh land located directly west. The Terminal is located on public land leased from the California State Lands Commission (CSLC). The Avon Terminal is a heavy industrial facility located in an area characterized by open space areas, wildlife preserves, the Suisun Bay shoreline, and several heavy industrial facilities. Figure 4.9-1 shows the Contra Costa County land use designations in the vicinity of the Avon Terminal. There are no sensitive land uses, such as hospitals, retirement communities, or schools, located adjacent to or near the Avon Terminal. The nearest residential area is almost 2 miles southwest of the Avon Terminal, and is adjacent to heavy industrial uses on land zoned as single-family residential. The following summarizes land uses that surround the Project site.

- North of the Avon Terminal are Suisun Bay and Carquinez Strait, which provide industrial transport access, commercial and recreational water uses, and wildlife habitat. Suisun Bay provides transport access for cargo vessels, and supports hunting (primarily waterfowl), sport fishing, commercial shrimp fishing, shellfish harvesting, recreational boating and kayaking, shoreline hiking, and other water-related recreational activities. A portion of the Grizzly Island Wildlife Area is also located along the shoreline north of the Avon Terminal, across Suisun Bay.
- South of the Avon Terminal is the shoreline of Suisun Bay, which is characterized by open marsh land. Further inland are the bio-oxidation pond and Tesoro Refining and Marketing Company, LLC's (Tesoro) Golden Eagle Refinery (Refinery).
- West of the Avon Terminal are the shoreline of Suisun Bay and open-space marshlands, managed by the State, the Plains Products Marine Oil Terminal (Plains Terminal), and the Benicia-Martinez Bridge.



- 1 • East of the Avon Terminal is Suisun Bay and Point Edith Wildlife Area. Land
2 further east is occupied by a mix of Wildlife Areas and privately owned land. The
3 Military Ocean Terminal Concord is located approximately 4.5 miles east of the
4 Avon Terminal, which consists of an approximately 6,526-acre tidal area,
5 including 2,045 acres of offshore islands.

6 The Avon Terminal operates on approximately 11.24 acres of sovereign land, under the
7 jurisdiction of the CSLC as an export facility, transferring petroleum products (including
8 premium fuel oil, gas oil, diesel, and cutter stock) from Tesoro's Refinery to tanker
9 vessels. Pursuant to the McAteer-Petris Act of 1965, the San Francisco Bay
10 Conservation and Development Commission (BCDC) has regulatory jurisdiction over
11 land-use activities within the first 100 feet from the shore of San Francisco Bay, which
12 gives the BCDC jurisdiction over the Avon Terminal. According to the *San Francisco*
13 *Bay Plan* (amended 2011), which is produced by the BCDC to guide jurisdictional
14 development activities, the Avon Terminal site is designated for Water-Related Industry.
15 The Avon Terminal is consistent with this use designation.

16 Although Contra Costa County does not have jurisdiction over the Avon Terminal, the
17 county does have jurisdiction over the land occupied by the associated onshore
18 Refinery. The county's General Plan (GP) designates the Refinery as Heavy Industrial
19 (H-I), and the area is designated H-I in the county Zoning Code, as well. The GP land
20 use and zoning designations are consistent with existing and surrounding uses.

21 **4.9.1.2 Recreational Uses on Suisun Bay and Carquinez Strait**

22 As a heavy industrial use, no recreational facilities or activities are directly associated
23 with the Avon Terminal. However, there are a number of recreational facilities
24 (designated parks, wildlife preserves, open space, etc.) and recreational uses (nature
25 viewing, hiking, boating, hunting, fishing, surfing, etc.) in the Project vicinity, including:

- 26 • hiking, bird watching, or nature viewing in open space and wildlife preserves near
27 the site;
- 28 • water uses on Suisun Bay and Carquinez Strait by recreational boat users and
29 sport fishermen, including recreational marinas such as the Martinez Marina,
30 Benicia Marina and Yacht Club, Glen Cove Marina, McAvoy Yacht Harbor, and
31 Pittsburg Marina; and
- 32 • near-shoreline picnicking and park activities associated with the East Bay
33 Regional Park District facilities.

34 Recreational facilities in the immediate Project vicinity are shown on Figure 4.9-2, and
35 described by jurisdiction in the following paragraphs.

4.9 Land Use and Recreation

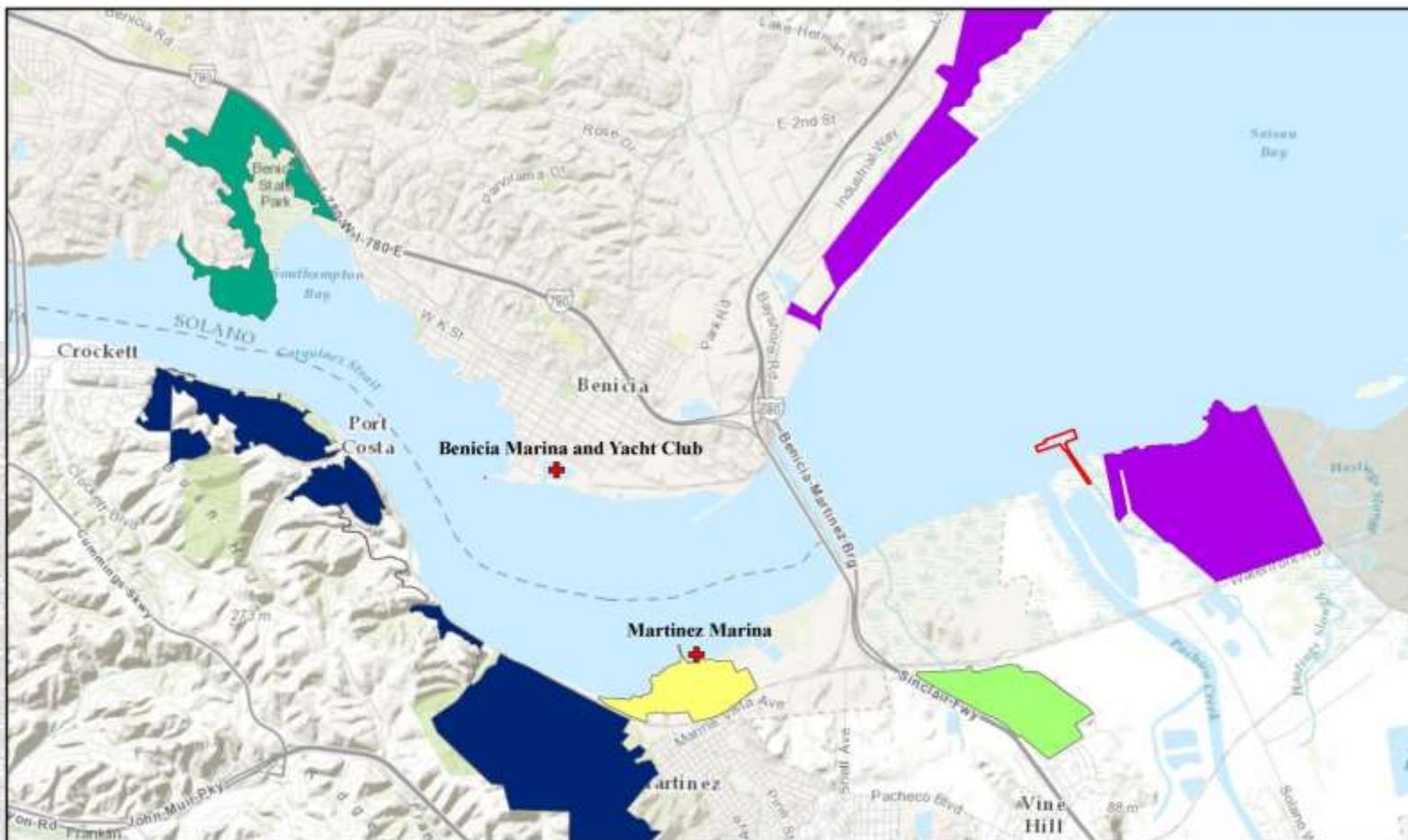


Figure 4.9-2
Recreational Uses
 California State Lands Commission
 Avon Marine Oil Terminal Lease Consideration Project

- + Marinas and Yacht Clubs
- Proposed CSLC Lease Boundary
- Carquinez Strait Regional Shoreline
- Martinez Regional Shoreline
- Point Edith Wildlife Area
- Benicia State Recreation Area
- Waterbird Regional Preserve

N

0 0.5 1 Miles



8/27/2014

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1 **San Francisco Bay Conservation and Development Commission**

2 The BCDC controls a tidal marsh east of the Avon Terminal, which provides access to
3 the shoreline trail, wildlife observation, and non-motorized small boat access (BCDC
4 2011).

5 **California Department of Fish and Wildlife**

6 The California Department of Fish and Wildlife (CDFW) manages several Wildlife Areas
7 in the Suisun Bay region, including Point Edith and Grizzly Island. The 760-acre Point
8 Edith Wildlife Area is located on the eastern border of the Avon Terminal approachway
9 on the shoreline of Suisun Bay (CDFW 2014d). Grizzly Island occupies approximately
10 15,300 discontinuous acres in a patchwork of 10 distinct parcels around the Suisun Bay
11 shoreline (CDFW 2014c). The nearest parcel of the Grizzly Island Wildlife Area is
12 located approximately 1.75 miles northwest of Avon Terminal, across Suisun Bay, and
13 the remaining parcels are located further north and east across the bay.

14 **East Bay Regional Park District**

15 The East Bay Regional Park District manages several open-space recreational parks
16 near the Project site and on the shorelines of Suisun Bay and Carquinez Strait. Table
17 4.9-1 provides a brief summary of these facilities and their locations, relative to the Avon
18 Terminal.

Table 4.9-1: East Bay Regional Park District Parks near the Project Site

Regional Park	Description	Location	Approximate Distance from Avon Terminal	Acreage
Martinez Regional Shoreline	Marshland, hiking and horse trails, boating, multi-use field facilities	City of Martinez shoreline	3.5 miles to the west	314
Carquinez Strait Regional Shoreline	Marshland, hiking and horse trails	Along Carquinez Scenic Drive between Crockett and Martinez	5 miles to the west	1,415
Waterbird Regional Preserve	Wetland; associated uplands with hiking trails	East of Interstate 680	1.75 miles to the southeast	198
Point Pinole Regional Shoreline	Hiking and horse trails, fishing, camping	Giant Highway, Richmond	16 miles to the west	2,315
Browns Island	No facilities	Island north of Pittsburg	14 miles to the east	595
Bay Point Regional Shoreline	Hiking, bird watching, fishing	End of McAvoy Road, Bay Point	7 miles to the east	150

Source: East Bay Regional Park District 2012

1 **4.9.1.3 Recreational Uses on San Francisco Bay and San Pablo Bay**

2 This section describes the land use and recreation setting within San Francisco Bay and
 3 San Pablo Bay for the evaluation of risks to recreation uses from oil spills from vessels
 4 servicing the Avon Terminal. Table 4.9-2 lists major recreational park areas and sensitive
 5 land uses, including wildlife reserves/refuges, in San Francisco and San Pablo Bays.

Table 4.9-2: Major Shoreline Recreational Areas, San Francisco and San Pablo Bays

Bay/Shoreline Parks	
Angel Island State Park	Waterfront Park
Bay View Park	McInnis County Park
Bayside Park	Middle Harbor Shoreline Park
Benicia State Recreation Area	Miller/Knox Regional Shoreline
Berkeley Waterfront – Cesar Chavez Park	Mountain View Shoreline Park
Candlestick Point State Recreation Area*	Oyster Bay Regional Shoreline*
Carquinez Strait – Vallejo Shoreline	Oyster Point Marina Park
Carquinez Strait Regional Shoreline	Point Isabel Regional Shoreline
China Camp State Park	Point Molate
Coyote Hills Regional Park	Point Pinole Regional Shoreline
Coyote Point County Park	Point San Pablo Peninsula*
Eastshore State Park*	Robert W. Crown Memorial State Beach and
Gateway Shoreline Park*	Elsie Roemer Bird Sanctuary
Golden Gate National Recreation Area	San Francisco Bay Area Water Trail*
Hayward Regional Shoreline	San Leandro Shoreline Park System
Keil Cove-Bluff Point Park*	San Pablo Bay Regional Shoreline Park
Martin Luther King, Jr. Regional Shoreline Park	West Contra Costa Sanitary Landfill*
Martinez Regional Shoreline and Martinez	Wilson Point Beach and Park
Refuges/Preserves/Wildlife Areas	
Alameda National Wildlife Refuge*	Mount Tamalpais Waterfowl Refuge
Bair Island Ecological Reserve	Napa-Sonoma Marshes Wildlife Area*
Brooks Island Regional Preserve	Palo Alto Baylands Nature Reserve
Browns Island Regional Shoreline	Petaluma Marsh
Castro Rocks	Point Edith Wildlife Area
Don Edwards San Francisco Bay National Wildlife Refuge	Rat Rock
Eden Landing Ecological Preserve	Ravenswood Open Space Preserve
Greco Island	Red Rock
Grizzly Island Wildlife Area	Redwood Shores Ecological Reserve
Hamilton Field*	San Francisco Bay National Estuarine Research Reserve (China Camp State Park)
Hill Slough Wildlife Area	San Pablo Bay National Wildlife Refuge
Marin Baylands National Wildlife Refuge*	Skaggs Island Naval Reservation*
Marin Islands National Wildlife Refuge and State Ecological Reserve	The Brothers
	The Sisters

Source: BCDC 2006

*Proposed facility

1 Developed parks and recreational and sightseeing areas that provide access to the
2 shoreline are found along the urbanized sections of San Francisco Bay, particularly
3 along the waterfront areas of the San Francisco Peninsula. In addition, there are
4 approximately 140 boat-launching ramps/marinas and associated facilities (including
5 fishing piers) throughout San Francisco Bay. Extensive private boating (both sail and
6 power) occurs throughout San Francisco Bay. Undeveloped marsh areas are located to
7 the south. The San Francisco Bay National Wildlife Refuge and Coyote Hills Regional
8 Park, at the southern end of San Francisco Bay, provide opportunities for hiking and
9 biking in selected areas and near the shore.

10 The northern end of San Pablo Bay is not as urbanized as the southern portions of San
11 Pablo Bay. Most of the shoreline along north San Pablo Bay, and across the bay from
12 the Project area, consists of the San Pablo National Wildlife Refuge, where hiking and
13 hunting activities are allowed. Only a few boat ramps and fishing piers are in this area.

14 **4.9.1.4 Recreational Uses on the Outer Coast**

15 This section describes the land use and recreation setting along the Pacific outer coast,
16 for the evaluation of risks associated with oil spills from vessels servicing the Avon
17 Terminal. The outer coast consists of a broad mix of land uses, including undeveloped
18 open coastal areas, wetlands, unique shoreline and coastal resource areas, and areas
19 of concentrated development and urban uses. The conditions of the various uses range
20 from relatively undisturbed land areas to degraded coastal zones affected by urban
21 development and pollution. Opportunities for recreation vary along the shoreline.
22 Coastal features range from coastal bluffs and beaches to nearby mountains and
23 forests, offering a diversity of recreational opportunities. The more urbanized areas tend
24 to have more “developed” recreational opportunities, such as trails with manicured
25 vegetation, while less urbanized areas and remote locations tend to have more natural
26 settings with “undeveloped” recreational uses. Some of the less developed areas are
27 designated as preserves or wilderness. Recreational activities include nature viewing,
28 hiking, biking, and equestrian trails, with beaches providing a range of uses, such as
29 picnicking, shore fishing, volleyball, windsurfing/sailing, and surfing. All along the outer
30 coast are fishing piers and berthing and launching facilities for recreational boats;
31 however, the greatest concentrations of these facilities are found in urbanized areas.

32 **4.9.2 REGULATORY SETTING**

33 Federal and State laws that may be relevant to the Project are identified in Table 4-1.
34 Local laws, regulations, and policies are discussed below.

35 The *Contra Costa County General Plan (2005)* is a comprehensive, long-range planning
36 document stating the county’s development goals and policies. The GP includes
37 policies related to land use and recreation, recognizing both the natural environment
38 and port-oriented heavy industrial uses that are important to the county’s economic

1 base. Policies pertaining to land use and recreation that could be applicable to the
2 Project include the following:

3 Land Use Element

- 4 • Policy 3-42: Industrial development shall be concentrated in select locations
5 adjacent to existing major transportation corridors and facilities.
- 6 • Policy 3-43: Industrial employment centers shall be designed to be unobtrusive
7 and harmonious with adjacent areas and development.

8 Open Space Element

- 9 • Goal 9-A: To preserve and protect the ecological, scenic and cultural/historic,
10 and recreational resource lands of the County.
- 11 • Goal 9-36: To develop a sufficient amount of conveniently located, properly
12 designed park and recreational facilities to serve the needs of all residents.
- 13 • Goal 9-37: To develop a system of interconnected hiking, riding and bicycling
14 trails and paths suitable for both active recreational use and for the purpose of
15 transportation/circulation.
- 16 • Policy 9-16: Providing public facilities for outdoor recreation should remain an
17 important land use objective in the County, as a method of promoting high scenic
18 quality, for air quality maintenance, and to enhance outdoor recreation
19 opportunities for all residents.
- 20 • Policy 9-43: Regional-scale public access to scenic areas on the waterfront shall
21 be protected and developed, and water-related recreation, such as fishing,
22 boating, and picnicking, shall be provided.

23 Transportation and Circulation Element – Ports and Proprietary Wharves

- 24 • Goal 5-S: To maintain the economic viability of the county's existing ports,
25 wharves, and shipping lanes.
- 26 • Policy 5-80: Water-oriented industrial uses which require deep water access shall
27 be encouraged along the shoreline, while other industrial uses which could be
28 located on inland sites shall be discouraged.
- 29 • Policy 5-81: New or replacement proprietary wharfs shall be allowed adjacent to
30 industrial use areas, as long as environmental safeguards are followed and
31 public access to the shoreline is provided.

32 Zoning Code

33 The lease area is zoned Unrestricted (U) by the Contra Costa County Zoning Code. The
34 onshore Golden Eagle Refinery is zoned Heavy-Industrial (H-I).

1 **4.9.3 SIGNIFICANCE CRITERIA**

2 For the purpose of this analysis, an impact was considered to be significant and to
3 require mitigation if it would result in any of the following:

- 4 • Conflict with any applicable land use plan, policy, or regulation of an agency with
5 jurisdiction over the Project, adopted for the purpose of avoiding or mitigating an
6 environmental effect
- 7 • Cause residual impacts on sensitive shoreline lands and/or water and non-water
8 recreation due to an accidental release of oil
- 9 • Conflict with established or proposed land uses, including potentially sensitive
10 land uses

11 Environmental impacts are discussed in this section relative to the areas adjacent to the
12 Project. Potential land use and recreational impacts relate to MOTEMS compliance-
13 related renovation and continued operation of the Avon Terminal. Potential long-term
14 land and recreational use impacts relate to such issues as compatibility of the facilities
15 with existing and proposed land uses in the surrounding area (e.g., changes in land use,
16 land use conflicts, and effects on potentially sensitive land uses) and conformity with
17 governmental land use and recreation plans, policies, and regulations.

18 **4.9.4 IMPACT ANALYSIS AND MITIGATION**

19 The following subsections describe the Project's potential impacts on land use and
20 recreation; where impacts are determined to be significant, feasible MMs are described
21 that would reduce or avoid the impact.

22 **4.9.4.1 Proposed Project**

23 **Impact Land Use and Recreation (LUR)-1: Conflict with any applicable land use**
24 **plan, policy, or regulation of an agency with jurisdiction over the Project adopted**
25 **for the purpose of avoiding or mitigating an environmental effect. (Less than**
26 **significant.)**

27 The Avon Terminal is located on sovereign lands under the jurisdiction of the CSLC. As
28 such, the CSLC and BCDC are the only agencies with land use jurisdiction over the site.
29 The BCDC's *San Francisco Bay Plan* (amended 2011) is the most comprehensive
30 planning document for water-related development around San Francisco Bay.
31 According to the *San Francisco Bay Plan*, the Avon Terminal site is designated for
32 Water-Related Industry, and use of the Avon Terminal is consistent with this
33 designation.

1 Although Contra Costa County does not have jurisdiction over the Avon Terminal, the
2 county does have jurisdiction over the area that encompasses the Refinery. The
3 county's GP designates this land as an industrial area with the zoning designation of
4 Heavy Industrial. These land use and zoning designations are consistent with existing
5 and surrounding land uses.

6 The use of the Avon Terminal as an industrial facility in an area planned and zoned for
7 industrial uses is consistent with all applicable local and regional land use plans and
8 policies. Since applicable planning documents designate the Avon Terminal and
9 surrounding areas for industrial uses, which currently exist and are compatible, future
10 planning policies and plans over the proposed 30-year lease term would likely continue
11 to designate the area in a similar manner. Impacts would be less than significant.

12 **Mitigation Measure:** No mitigation required.

13 **Impact LUR-2: Cause residual impacts on sensitive shoreline lands and/or water**
14 **and non-water recreation due to an accidental release of oil at or near the Avon**
15 **Terminal. (Significant and unavoidable.)**

16 An accidental spill of oil at or near the Avon Terminal could cause residual impacts on
17 sensitive shoreline lands and recreation in Suisun Bay and Carquinez Strait, including
18 Point Edith Wildlife Area, Grizzly Island Wildlife Area, Bay Point Regional Shoreline,
19 Browns Island, Martinez Regional Shoreline, Martinez Waterfront Park, and Carquinez
20 Strait Regional Shoreline, and to recreational boats (refer to Section 4.9.1.2). In
21 addition, an extremely low-probability spill could reach the outer coast under summer
22 conditions (see Appendix B for the results of several oil spill trajectory models
23 previously conducted for projects at nearby locations). The greatest risk of a spill is from
24 small accidents at the Avon Terminal during continued operations. While there is less
25 risk of spill during tankering, the size of a spill that could result would be much greater
26 and more severe. The degree of impact is influenced by factors such as location, spill
27 size, type of material spilled, prevailing wind and current conditions, the vulnerability
28 and sensitivity of the shoreline, and effectiveness of early containment and cleanup
29 efforts.

30 The Avon Terminal primarily operates as an export facility, transferring petroleum
31 products (including premium fuel oil, gas oil, diesel, and cutter stock). Infrequently, the
32 Avon Terminal imports refinery feedstocks. Light product spills generally volatilize
33 relatively rapidly, and little remains within 24 to 48 hours after a spill. Heavy crude oil
34 may disappear over a period of several days, with remaining heavy fractions lasting
35 from several weeks to several months floating at or near the surface in the form of
36 mousse, tar balls, or mats.

1 If a spill were to occur at the Avon Terminal, transfer operations would be suspended.
2 The capability to immediately respond and deploy appropriate containment booms
3 would influence the extent of affected shoreline. Tesoro has contracted with Bay Area
4 Ship Services to assist with initial oil spill response services, including the immediate
5 execution of approximately 600 feet of harbor boom in approximately 30 minutes. In
6 addition, Tesoro contracts with Marine Spill Response Corporation to serve as the
7 primary Oil Spill Response Organization contractor in its Oil Spill Response Plan for
8 offshore, onshore, and shallow-water response services. Refer to Section 2.4.16,
9 Emergency Response, for a more thorough description of the Avon Terminal oil spill
10 response capabilities.

11 During MOTEMS renovation, an accidental spill or release of oil during use and
12 refueling of construction equipment could cause residual impacts on sensitive
13 shorelines and recreation areas, with the area of immediate concern being the Point
14 Edith Wildlife Area. However, the impact that could occur from a spill during renovation
15 would be much less than from a spill during continued operations. To minimize risks, the
16 refueling of derrick barges and tugboats would be conducted at nearby fuel docks to the
17 extent possible. Best management practices (BMPs) would be employed to minimize
18 the risk of oil releases during on-site vessel and equipment refueling. Refer to Section
19 2.5.9, Equipment Refueling, for a more detailed description of equipment refueling. If an
20 accidental spill or release of oil were to occur during renovation, activities would
21 immediately stop, and the Avon Terminal oil spill response capabilities could be used to
22 contain an accidental release.

23 Potential impacts from spills could be significant and unavoidable if first-response efforts
24 would not contain or clean up the spill, resulting in residual impacts that would affect the
25 general public's use of shoreline or water areas. If a spill occurs that would be contained
26 and cleaned up during the first response, that spill would be considered a less than
27 significant with mitigation impact to land use and recreation.

28 MMs OS-1a, OS-1b, OS-1c, OS-4a, and OS-4b, presented in Section 4.1, Operational
29 Safety/Risk of Accidents provide improved oil spill prevention measures. However, even
30 with the implementation of mitigation to minimize potential for a spill, spills are possible,
31 and the consequences of a spill could result in significant, adverse impacts to land use
32 and recreation. No additional feasible mitigation measures have been identified that
33 would further reduce the potential for significant impacts.

34 **Mitigation Measures:** MMs OS-1a, Remote Release Systems; OS-1b, Tension
35 Monitoring Systems; OS-1c, Allision Avoidance Systems; OS-4a, USCG Ports and
36 Waterways Safety Assessment Workshops; and OS-4b, Spill Response to Vessel Spills
37 apply to this impact.

1 **Rationale for Mitigation** The mitigation measures identified previously provide
2 improved oil spill capabilities, spill containment measures, and protection of sensitive
3 resources. However, even with implementation of these measures, the impact of a spill
4 on sensitive shoreline lands and recreational resource areas could be significant.

5 **Residual Impacts** With implementation of these measures, the risk to shoreline and
6 recreational resources can be reduced to less than significant for small spills; however,
7 impacts would remain significant for large spills.

8 **Impact LUR-3: Cause residual impacts on sensitive shoreline lands and/or water**
9 **and non-water recreation due to an accidental release of oil from vessels in**
10 **transit. (Significant and unavoidable.)**

11 Depending on spill size, location, and wind and current conditions, a spill within San
12 Francisco Bay could affect recreational boating, and shoreline and water-recreation
13 uses in the vicinity of the spill and its area of spread. Oil spill modeling for the vicinity of
14 the Avon Terminal (see Appendix B) shows the potential extent of oil spread based on
15 various scenarios of spill size, wind, tide, and current conditions. Refer to Section 4.1,
16 Operational Safety/Risk of Accidents for a more in-depth discussion of oil spill modeling
17 in the Project vicinity.

18 Shoreline uses that could be affected by a spill include Wildlife Areas, marshlands,
19 marinas, parks, and other recreational uses, as well as other marine terminals and port
20 and harbor operations. Passenger and cargo vessels, commercial fishing vessels,
21 recreational boaters, and others may have to slow, reroute, or halt operations during
22 cleanup and containment.

23 Existing land uses and recreational areas along the outer coast are diverse, ranging
24 from heavily used areas to areas that are undeveloped and fairly inaccessible,
25 especially along the northern coast. Spills that beach along heavily used areas and
26 recreational points would limit or preclude such uses and result in significant, adverse
27 impacts, depending on the characteristics of a spill and its residual effects. Oil that
28 spreads to beaches, sand dunes, tide pools, shoreline reserves, harbors, marinas, and
29 other recreational boating and fishing facilities would limit access to these areas due to
30 containment equipment and cleanup activities. Spills that reach the more remote
31 portions of the shoreline may not necessarily decrease the availability of recreational
32 uses because use may be minimal, but would result in impacts to biological resources
33 and water quality (refer to Section 4.2, Biological Resources and Section 4.3, Water
34 Quality for details). Portions of the coastline would also be visually affected by spills, as
35 discussed in Section 4.11, Visual Resources, Light and Glare.

1 Over the life of the proposed new lease, as more areas of the coastline are developed
2 or made accessible to the public, the likelihood that an established land use or
3 recreational amenity may be affected by a spill would also increase.

4 Transit of vessels to and from the Avon Terminal would temporarily increase during
5 renovation, with barges being used to transport equipment, workers, prefabricated
6 infrastructure, and other renovation-related items. However, transit of these vessels
7 would be temporary and contained to the project vicinity. Renovation activities are not
8 expected to increase the current average of 124 vessels served per year, and thus,
9 would not contribute a significant risk of spills from vessels in transit beyond current
10 conditions.

11 Potential impacts from spills could be significant and unavoidable if first-response efforts
12 would not contain or clean up the spill, resulting in residual impacts that would affect the
13 general public's use of shoreline or water areas. If a spill occurs that would be contained
14 and cleaned up during the first response, that spill would be considered a less than
15 significant with mitigation impact to land use and recreation.

16 Mitigation measures OS-1a, OS-1b, OS-1c, OS-4a, and OS-4b, presented in Section
17 4.1, Operational Safety/Risk of Accidents, provide improved oil spill prevention
18 measures. However, even with the implementation of mitigation to minimize potential for
19 a spill, spills are possible, and the consequences of a spill could result in significant,
20 adverse impacts to land use and recreation. No additional feasible mitigation measures
21 have been identified that would further reduce the potential for significant impacts.

22 **Mitigation Measures:** MMs OS-1a, Remote Release Systems; OS-1b, Tension
23 Monitoring Systems; OS-1c, Allision Avoidance Systems; OS-4a, USCG Ports and
24 Waterways Safety Assessment Workshops; and OS-4b, Spill Response to Vessel Spills
25 apply to this impact.

26 **Rationale for Mitigation** The mitigation measures presented previously provide
27 improved oil spill capabilities, spill containment measures, and protection of sensitive
28 resources. However, even with implementation of these measures, the impact of a spill
29 on sensitive shoreline lands and recreational resource areas could be significant.

30 **Residual Impacts** With implementation of these measures, the risk to shoreline and
31 recreational resources can be reduced to less than significant for small spills; however,
32 impacts would remain significant for large spills.

33 **Impact LUR-4: Conflict with established or proposed land uses, including**
34 **potentially sensitive land uses. (Less than significant.)**

35 The Avon Terminal is not immediately surrounded by any other facilities, with the
36 exception of the Plains Terminal to the west. Both of these are industrial facilities, and

1 are allowed land uses within the planning jurisdiction of the BCDC. There are no
2 sensitive or incompatible land uses such as hospitals, retirement communities, or
3 schools located near the Avon Terminal. The nearest residential use is located almost 2
4 miles southwest of the Avon Terminal, and is adjacent to heavy industrial uses, on land
5 zoned as single-family residential.

6 In 2006, Senate Bill 1556 mandated that the Delta Protection Commission adopt a plan
7 and implementation program for a continuous recreational corridor trail network through
8 the five Delta counties, linking the San Francisco Bay Trail system to the planned
9 Sacramento River trails in Yolo and Sacramento Counties. The Great California Delta
10 Trail (Delta Trail) is to include routes for bicycling and hiking, with interconnections to
11 other trails, park and recreational facilities, and public transportation. Continued
12 operation of the Avon Terminal and Golden Eagle Refinery prohibits public access to
13 the shoreline, so constructing the Delta Trail through the facility is not feasible.
14 However, the upland portion of the Avon Terminal is not under the jurisdiction of the
15 CSLC, and is not part of the proposed lease. Therefore, issues related to land use
16 associated with the planned trail segments are not applicable to this Environmental
17 Impact Report.

18 While the continued operations, as part of application for a new 30-year lease at the
19 Avon Terminal, would not conflict with any established or proposed land uses,
20 MOTEMS renovation at the Avon Terminal could be incompatible with uses of the
21 adjacent Point Edith Wildlife Area. However, renovation activities would only occur
22 within the lease area of the Avon Terminal, and would not extend the lease area into
23 Wildlife Area land. Furthermore, as the Point Edith Wildlife Area is under CDFW
24 jurisdiction, no sensitive land uses would be developed on those lands. Other land uses
25 in the vicinity of the Avon Terminal are primarily industrial or open space, and it is
26 unlikely that any sensitive land uses would be developed near the Avon Terminal during
27 the new lease period. Post-MOTEMS renovation transfer activities would not change
28 from the baseline, and would not create any physical land use incompatibilities.

29 **Mitigation Measure:** No mitigation required.

30 **4.9.4.2 Alternative 1: No Project**

31 **Impact LUR-5: Cause residual impacts on sensitive shoreline lands and/or water**
32 **recreation due to an accidental release of oil from marine-based sources; or**
33 **conflict with established or proposed land uses, including potentially sensitive**
34 **land uses. (Beneficial.)**

35 The No Project alternative involves lease denial and cessation of Avon Terminal
36 operations. The Avon Terminal would eventually be decommissioned, with its

1 components abandoned in place, removed, or a combination thereof. Decommissioning
2 of the Avon Terminal would be governed by an Abandonment and Restoration Plan.

3 The localized risk of a spill (i.e., risks associated with the specific location and access
4 route to the Avon Terminal) impacting shoreline land uses and precluding recreational
5 uses in the vicinity of the Avon Terminal would not occur, as the Avon Terminal would
6 not be in use. With no potential for spills in the immediate area, a beneficial impact
7 would occur near the Avon Terminal.

8 After decommissioning, the No Project alternative assumes the number of tankers
9 servicing the area would remain essentially the same due to regional demands, and
10 assumes that without the Avon Terminal, tankers would instead go to the Tesoro
11 Amorco Marine Oil Terminal (Amorco Terminal) approximately 2.5 miles away, or
12 service another terminal in the vicinity with the capacity to absorb operations. Therefore,
13 the risks associated with the transport of oil would not be removed from the region, but
14 simply shifted to a nearby facility. An incremental increase in risk associated with a rise
15 in vessel activity at the Amorco Terminal would also result, and the potential for oil spill
16 impacts at the Amorco Terminal would be similar to those of the Project.

17 If the Amorco Terminal were upgraded and expanded to absorb increased demands
18 and export operations, the Amorco Terminal is in an area primarily designated as H-I,
19 and no significant adverse land use or recreation impacts would be anticipated.

20 **Mitigation Measure:** No mitigation required.

21 **Impact LUR-6: Cause residual impacts on sensitive lands and/or recreation due to**
22 **an accidental release of oil from non-marine sources; or conflict with established**
23 **or proposed land uses, including potentially sensitive land uses. (Significant and**
24 **unavoidable.)**

25 This alternative assumes that there would be no Avon Terminal to transport product
26 and, therefore, Tesoro may consider land-based alternatives such as pipeline
27 connections to other San Francisco Bay Area terminals, rail car, and truck
28 transportation, or a combination thereof, to absorb petroleum export operations from the
29 Avon Terminal. Such land-based alternatives would need to be upgraded to absorb
30 throughput from the Avon Terminal, which would require lengthy and complex
31 regulatory processes, land-availability evaluations, and acquisition of easements or
32 rights-of-way.

33 Rail lines and associated handling facilities would require additional construction.
34 Pipeline shipments of gasoline or diesel products may require construction of new
35 pipelines and/or the purchase of existing pipeline capacity from other local petroleum
36 refinery competitors. However, with regard to either of these options, significant new
37 pipeline installations and connection modifications would be required. Permit

1 modification might be required for any increased use of the existing pipeline to the
2 Plains Terminal, or the Kinder Morgan Pipeline.

3 If pipeline and/or rail construction were needed, alignments would need to be identified,
4 and easements obtained. Conversion of some lands in highly developed urban areas
5 could either directly or indirectly affect land use, including recreational use. This could
6 result in significant impacts. In areas where property could be taken to construct
7 pipeline and/or railway alignments, impacts could be wholly or partially mitigated by
8 monetary means or land trades. However, impacts would remain significant in the event
9 that land is deeded to an easement and taken out of public use, such as a public park, if
10 that loss contributes to a decrease in park space with no means for replacement.
11 Incompatible land uses with adjacent property could also result in significant impacts.
12 During operation of the pipeline and or rail cars, accidental oil spills could result in
13 significant and unavoidable impacts.

14 **Mitigation Measures:** Should this alternative be selected, MMs would be determined
15 during a separate environmental review under the California Environmental Quality Act
16 (CEQA).

17 **4.9.4.3 Alternative 2: Restricted Lease Taking Avon Terminal Out of Service for Oil**
18 **Transport**

19 **Impact LUR-7: Cause residual impacts on sensitive shoreline lands and/or water**
20 **recreation due to an accidental release of oil from marine-based sources; or**
21 **conflict with established or proposed land uses, including potentially sensitive**
22 **land uses. (Beneficial.)**

23 As discussed in Impact LUR-5, the localized risk of a spill impacting shoreline land uses
24 and precluding recreational uses in the vicinity of the Avon Terminal would not occur, as
25 the Avon Terminal would not be used for oil transport. With no potential for spills in the
26 immediate area, a beneficial impact would occur near the Avon Terminal. However, this
27 alternative assumes that the number of tankers servicing the area would remain
28 essentially the same due to regional demands, and assumes that without the Avon
29 Terminal, incoming tankers would instead go to the Amorco Terminal, approximately 2.5
30 miles away, or use another marine oil terminal in the vicinity with the capacity to absorb
31 operations. Therefore, the risks associated with the transport of oil would not be
32 removed from the region, but simply shifted to a nearby facility. An incremental increase
33 in risk associated with a rise in vessel activity at the Amorco Terminal or other nearby
34 terminal would also result, and the potential for oil spill impacts at the Amorco Terminal,
35 or other nearby facility, would be similar to those of the Project.

36 **Mitigation Measure:** No mitigation required.

1 **Impact LUR-8: Cause residual impacts on sensitive lands and/or recreation due to**
2 **an accidental release of oil from non-marine sources; or conflict with established**
3 **or proposed land uses, including potentially sensitive land uses. (Significant and**
4 **unavoidable.)**

5 This alternative assumes that the existing Avon Terminal would be left in place, but
6 taken out of service for any petroleum product transfer. Without the Avon Terminal to
7 transport product, Tesoro may consider land-based alternatives, such as pipeline
8 connections to other San Francisco Bay Area terminals, rail car, or truck transportation,
9 or a combination thereof, to absorb petroleum export operations from the Avon
10 Terminal. In the case of the Restricted Lease alternative, land-based systems would
11 need to be upgraded to absorb throughput from the Avon Terminal, requiring lengthy
12 and complex regulatory processes, land-availability evaluations, and acquisition of
13 easements or rights-of-way. Refer to Impact LUR-6 for the impact discussion.

14 **Mitigation Measures:** Should this alternative be selected, MMs would be determined
15 during a separate environmental review under CEQA.

16 **4.9.5 CUMULATIVE IMPACT ANALYSIS**

17 Continued routine operations at the Avon Terminal would not contribute to cumulative
18 land use or recreation impacts, as the level of shipment activity and throughput is not
19 expected to change substantially over the proposed 30-year lease period. However,
20 during renovation an accidental spill or release of oil from use and refueling of
21 construction equipment could occur, which in combination with other marine oil terminal
22 projects in the region could result in potentially significant impacts to sensitive lands and
23 recreational uses in the area. To minimize risks from the Avon Terminal, the refueling of
24 derrick barges and tugboats would be conducted at nearby fuel docks to the extent
25 possible, and BMPs would be implemented for on-site refueling. When the cumulative
26 environment is considered, the contribution from the Project is small. Even so, impacts
27 to sensitive shoreline lands and/or water and non-water recreation due to an accidental
28 release of oil would remain potentially significant. Tesoro would be responsible for spills
29 at or near the Avon Terminal, but not for vessels transiting San Francisco Bay or the
30 outer coast.

31 **4.9.6 SUMMARY OF FINDINGS**

32 Table 4.9-3 includes a summary of anticipated impacts to land use and recreation and
33 associated mitigation measures.

Table 4.9-3: Summary of Land Use and Recreation Impacts and Mitigation Measures

Impact	Mitigation Measure(s)
<i>Proposed Project</i>	
LUR-1: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project, adopted for the purpose of avoiding or mitigating an environmental effect.	No mitigation required
LUR-2: Cause residual impacts on sensitive shoreline lands and/or water and non-water recreation due to an accidental release of oil at or near the Avon Terminal.	Refer to MMs OS-1a, OS-1b, OS-1c, OS-4a, and OS-4b
LUR-3: Cause residual impacts on sensitive shoreline lands and/or water and non-water recreation due to an accidental release of oil from vessels in transit.	Refer to MMs OS-1a, OS-1b, OS-1c, OS-4a, and OS-4b
LUR-4: Conflict with established or proposed land uses, including potentially sensitive land uses.	No mitigation required
<i>Alternative 1: No Project</i>	
LUR-5: Cause residual impacts on sensitive shoreline lands and/or water recreation due to an accidental release of oil from marine-based sources; or conflict with established or proposed land uses, including potentially sensitive land uses.	No mitigation required
LUR-6: Cause residual impacts on sensitive lands and/or recreation due to an accidental release of oil from non-marine sources; or conflict with established or proposed land uses, including potentially sensitive land uses.	Should this alternative be selected, MMs would be determined during a separate environmental review under CEQA
<i>Alternative 2: Restricted Lease Taking Avon Terminal Out of Service for Oil Transport</i>	
LUR-7: Cause residual impacts on sensitive shoreline lands and/or water recreation due to an accidental release of oil from marine-based sources; or conflict with established or proposed land uses, including potentially sensitive land uses.	No mitigation required
LUR-8: Cause residual impacts on sensitive lands and/or recreation due to an accidental release of oil from non-marine sources; or conflict with established or proposed land uses, including potentially sensitive land uses.	Should this alternative be selected, MMs would be determined during a separate environmental review under CEQA