APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



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1001 Instruction: Marine Transportation System Recovery (MTSR) and Geographic Waterway Zone (GWZ)

The following listed Maritime Transportation System Recovery (MTSR) Geographic Waterway Zones (GWZ) is utilized to identify maritime infrastructure (ports/facilities) and waterways within the Captain of the Port's Area of Responsibility. Each MTSR – GWZ boundary location mirrors the "Geographic Response Area" locations identified in the San Francisco Area Contingency Plan (ACP).

Example: MTSR_GWZ-A

MTSR = Marine Transportation System Recovery [Mirrors the Area Contingency Plan (ACP)]

GWZ- = Geographic Waterway Zone [Mirrors the ACP – Geographic Response Area]

A = The "letter" following the GWZ identifies the geographic zone of the waterway(s) boundary.

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-A	Humboldt Bay	[north of San Francisco] Humboldt Bay is located in Eureka, California.
MTSR_GWZ-B	Central San Francisco Bay	Waterways east of the Highway 101 (Golden Gate Bridge), and north of the I-80 (San Francisco / Oakland Bay Bridge), and south to the I-580 (Richmond / San Rafael Bridge).
MTSR_GWZ-C	South San Francisco Bay	Waterways south of I-80 (Oakland Bay Bridge), south to the State Route 84 (Dumbarton Bridge).
MTSR_GWZ-D	San Pablo Bay	Waterway north of I-580 (Richmond / San Rafael Bridge), northeast to I-80 (Carquinez Bridge).
MTSR_GWZ-E	Carquinez Strait	Waterway east of the I-80 (Carquinez Bridge), east to the I-680 (Martinez / Benicia Bridge and Union Pacific Railroad Bridge).
MTSR_GWZ-F	Suisun Bay	Waterways east of I-680 (Martinez / Benicia Bridge), east to the State Route 160 (Antioch Bridge).
MTSR_GWZ-G	Sacramento River (Deep-Water Channel)	Waterway from north of Browns Island northeast of Pittsburg, California (starting at the Sacramento River Deep-Water Channel), northeast to the Port of West Sacramento.

1001 Instruction: Marine Transportation System Recovery (MTSR) and Geographic Waterway Zone (GWZ) Continued

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-H	San Joaquin River (Deep-Water Channel)	Waterway west of the State Route 160 Antioch Bridge), east to the Port of Stockton.
MTSR_GWZ-I	Monterey Bay	[south of San Francisco] Monterey Bay is located in Monterey, California.

1002 Instruction: United Nations (UN) Automated Identification Systems (AIS) Codes for MTS

The following information is utilized for Marine Transportation System Recovery operations within U.S. Coast Guard – Sector San Francisco's Area of Responsibility.

Port & City	AIS Code	Facility & City	AIS Code
Port of Benicia	BNC	Alameda	NGC
Port of Humboldt Bay	EKA	Antioch	ANZ
Port of Oakland	OAK	Berkeley	JBK
Port of Redwood City	RWC	Concord	CCR
Port of Richmond	RCH	Crockett	CRM
Port of San Francisco	SFO	Emeryville	JEM
Port of Stockton	SCK	Larkspur	LK
Port of West Sacramento	SAC	Martinez	MRZ
		Monterey	MRY
		Moss Landing	MLG
		Petaluma	PUM
		Pittsburg	PBG

1002 Instruction: United Nations (UN) Automated Identification Systems (AIS) Codes for MTS Continued

Port & City	AIS Code	Facility & City	AIS Code
		Rio Vista	RVA
		Rodeo	ROD
		San Rafael	SRF
		Santa Cruz	SRU
		Sausalito	JMC
		Tiburon	XTN
		Treasure Island East Mooring	TIEM
		Vallejo	VLO

Note: An in-depth overview of the use of UN AIS Codes can be found in the following references;

- 1. International Maritime Organization's "Guidance on the use of the UN/LOCODE" [Reference T2-OSS/2.7.1]. The information is available on the U.S. Coast Guard Navigation Center web-site. https://www.navcen.uscg.gov/?pageName=locode
- 2. U.S. Coast Guard Sector San Francisco's Vessel Traffic Service (VTS) Area Geography "Codes and Abbreviation for VTS Destinations" web-site.

http://www.uscg.mil/d11/vtssf/userManual/userManualOnline/vtsAreaGeography/geography main.htm

1003 Instruction: Legend for Charts and MTS Infrastructure Identification Section

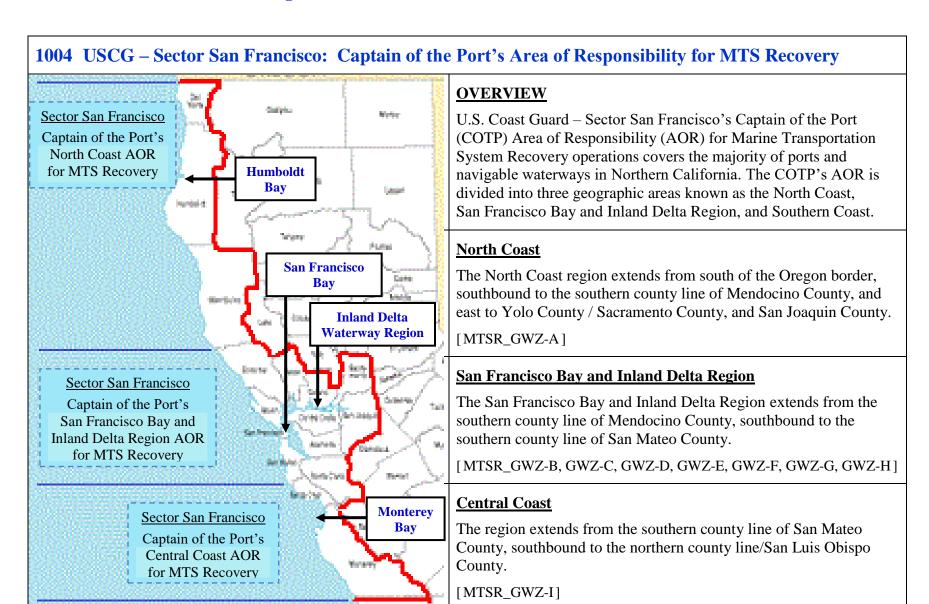
LEGEND

The following Categories are pursuant to MTS Infrastructure identification listings on Charts and Information's Sections

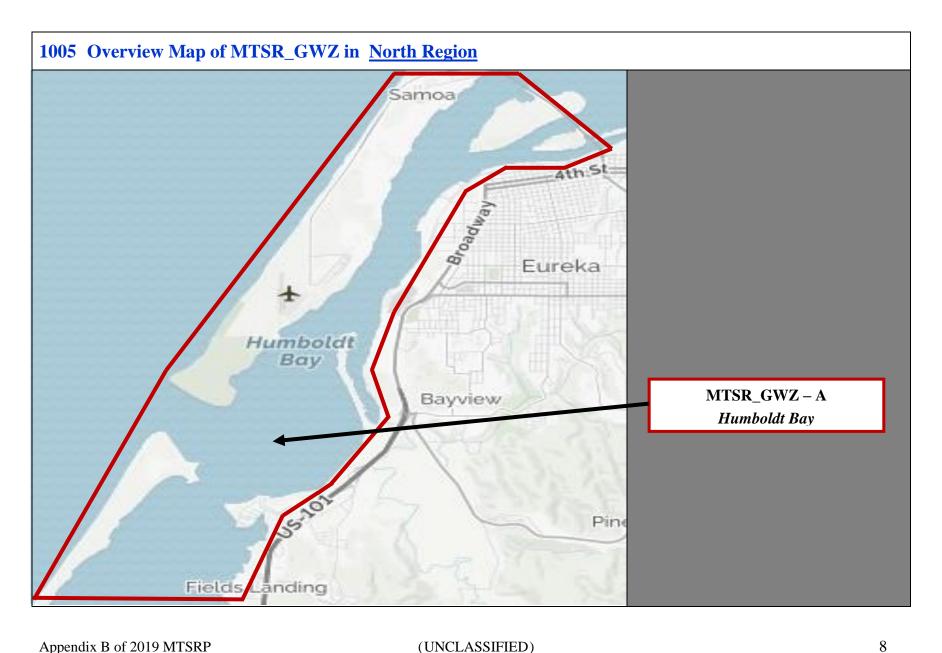
Category 01	DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON
Category 02	ANCHORAGES
Category 03	BRIDGES [Highway and Railroad] located over Deep-Draft Channels and AIR DRAFT
Category 04	PORTS and MARINE TERMINALS located on port property
Category 05	MARINE TERMINALS [Marine Terminals not associated with port authority complex]
Category 06	PETROLEUM TERMINALS [Petroleum Refineries and Petroleum Storage Terminals]
Category 07	GOVERNMENT FACILITIES [Federal Government]
Category 08	FISHING FLEET FACILITIES [Commercial Fishing Industry]
Category 09	CRUISE SHIP TERMINALS
Category 10	FERRY BOAT TERMINALS
Category 11	EXCURSION BOAT TERMINALS [Day Trip Tours]
Category 12	TUGBOAT COMPANIES
Category 13	MARINAS [Recreational Boating] { Note: Marina's are listed in each GWZ, but location is not identified on chart }

Note: When referencing information in Section 8000, users are encouraged to utilize the following referenced materials in collaboration with the information listed in the following Geographic Waterway Zone sections.

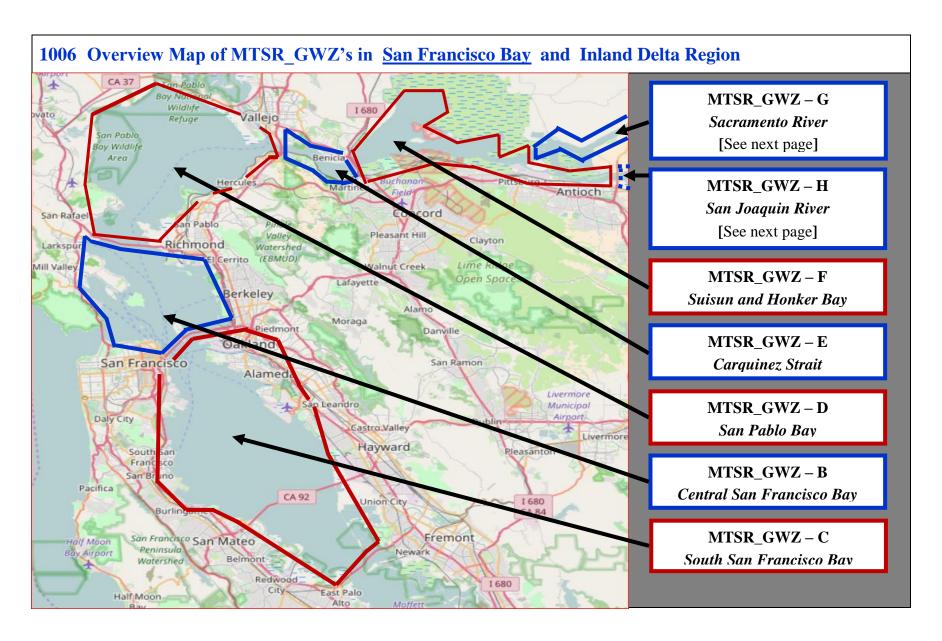
- 1. "2017 Golden Gate Ports Handbook" [Published by: San Francisco Marine Exchange (415) 441-6600)] https://www.sfmx.org/
- 2. "NOAA Charts for the San Francisco Bay Region" [Published by: NOAA (704) 332-5557)] http://mapshop.com/noaa-charts/pacificcoast7.html



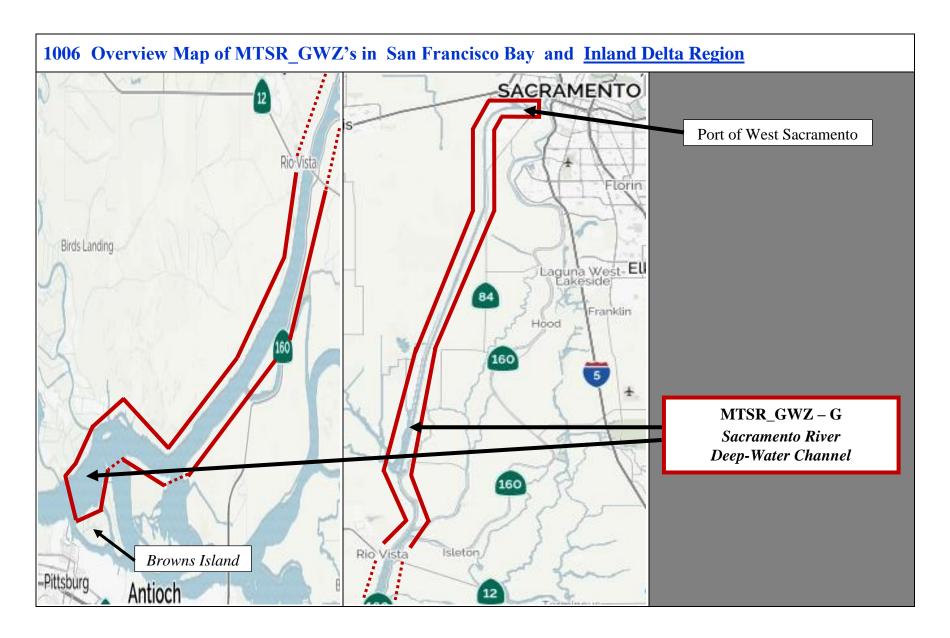
APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and **Maritime Cargo Identification Guide**



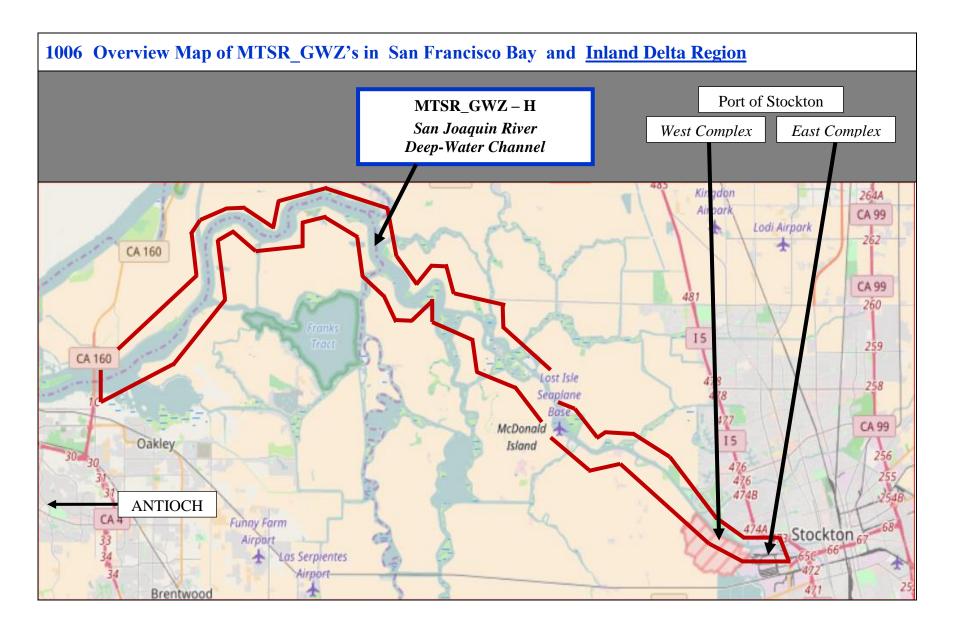
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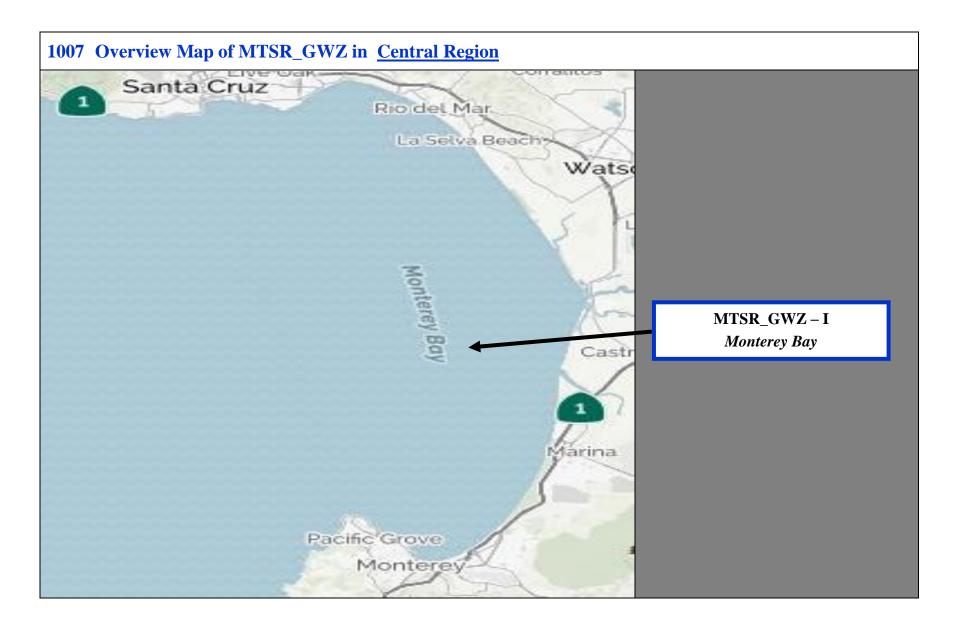
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APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide

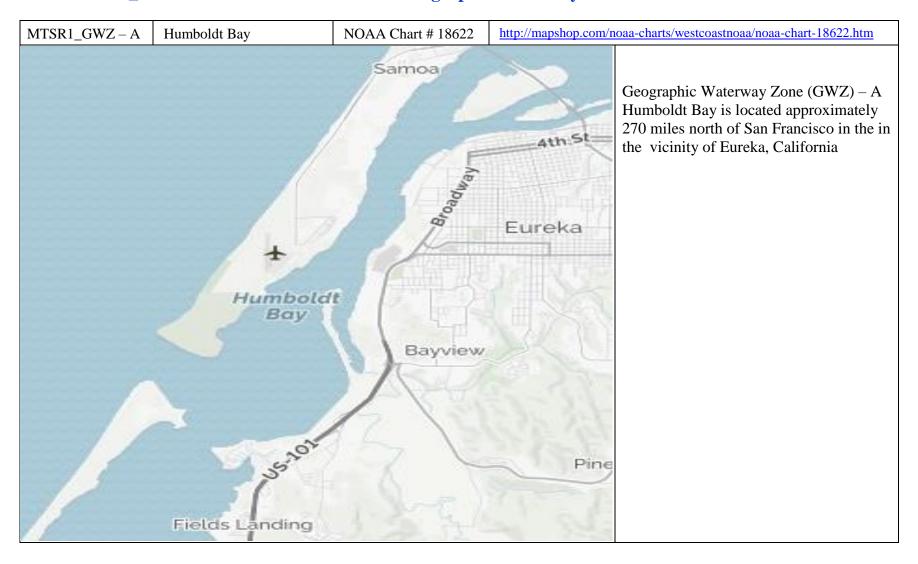


2000 (U) Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) - A [Humboldt Bay]

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-A	Humboldt Bay	[north of San Francisco] Humboldt Bay is located in Eureka, California.

Section	Waterway Zone	Topic	<u>Page</u>
2001	$MTSR_GWZ - A$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	14
2002	$MTSR_GWZ - A$	Deep-Draft Channels, Chart Depth, and Essential ATON	15
2003	$MTSR_GWZ-A$	Anchorages	15
2004	$MTSR_GWZ - A$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	15
2005	$MTSR_GWZ-A$	Ports and Marine Terminals located on port property	16
2006	$MTSR_GWZ-A$	Marine Terminals [Marine Terminals not associated with port authority]	18
2007	$MTSR_GWZ-A$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	20
2008	$MTSR_GWZ-A$	Government Facilities [Federal Government]	20
2009	$MTSR_GWZ-A$	Fishing Fleet Facilities [Commercial Fishing Industry]	21
2010	$MTSR_GWZ-A$	Cruise Ship Terminals	21
2011	$MTSR_GWZ-A$	Ferry Boat Terminals	22
2012	$MTSR_GWZ-A$	Excursion Boat Terminals [Day Trip Tours]	22
2013	$MTSR_GWZ-A$	Tugboat Companies	22
2014	$MTSR_GWZ-A$	Marinas [Recreational Boating]	23
2015	$MTSR_GWZ - A$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ - A	24
2016	MTSR_GWZ – A	Listing of Ports / Marine Terminals and Contact Information in GWZ – A	25

2001 MTSR_GWZ - A: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



2002 MTSR_GWZ - A: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON	ſ
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Location	Name of Deep Draft Channel	Chart Depth
Humboldt Bay	Main Entrance Bar Channel	36 ft.
Humboldt Bay	North Bay Channel	36 ft.
Humboldt Bay	Outer Reach Channel	33 ft.
Humboldt Bay	Eureka Channel Inner Reach (Leading into Eureka Harbor for tugboats and fishing fleet)	13 ft.
Humboldt Bay	Samoa Channel	24 ft.
Humboldt Bay	Fields Landing Channel	22 ft.

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits into and within Humboldt Bay:

• Entrance Light 3, and Light 19

2003 MTSR_GWZ - A: Anchorages

# Location Name of Anchorage		Name of Anchorage	Characteristics
2-1	Humboldt Bay	Anchorage # n/a	Samoa Turning Basin is periodically utilized as an Anchorage for large vessels

2004 MTSR_GWZ – A: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: **BRIDGES** [Highway and Railroad], and AIR DRAFT (AD)

• No Bridges located over Deep-Draft Channels in Humboldt Bay.

2005 MTSR_GWZ - A: Ports and Marine Terminals located on port property

Category 04: PORTS and MARINE TERMINALS located on port property							
Name of Port	Physical Location	Contact Information	County				
Port of Humboldt Bay	601 Startare Drive Eureka, CA 95502-1030	[707] 443-0801	Humboldt County				

General Description of Port Complex

The Port is managed by the Humboldt Bay Harbor, Recreation and Conservation District, a county-wide public local agency that focuses on three areas: the Harbor, recreation, and conservation. The District has the difficult task of balancing port activities with conservation, commercial fishing, recreation, and environmental protection requirements. Port revenue sources include Humboldt County property taxes, permits, fees, dredging surcharges, rents, and Tideland leases. Humboldt Bay imports more than 90% of the gasoline and diesel used in the County.

The Port of Humboldt Bay is a "Handymax / Panamax Port", and is the 7th busiest Bulk and Break-Bulk port in California. The port is California's northernmost deep-water shipping port and the only port between San Francisco (approximately 270 miles north of San Francisco) and Coos Bay, Oregon (180 miles north).

Intermodal Transportation Network

Highway System Servicing Port complex

• US 101, SR 299, and SR 255

Railroad System Servicing Port complex

• Port of Humboldt Bay has been without rail service for more than 15 years.

Vessel & Cargo Handling Attributes

- Harbor Entrance Channel Depth: 48 ft.
- Shipping Channel (inside harbor) Depth: 38 ft.
- Deepwater Births / Docks: 09
- Gantry Cranes: none
- Mobile Harbor Cranes: various for offloading bulk cargo
- Other: n/a

MARINE TERMINALS located on port property

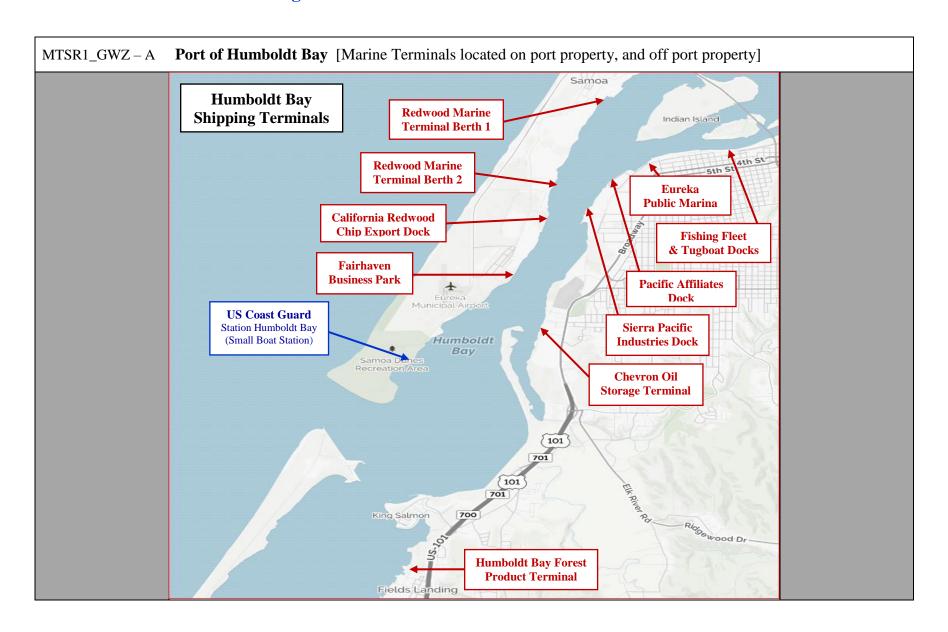
See next page

Category	Category 04: PORTS and MARINE TERMINALS located on port property									
Port of Humboldt Bay 601 Start			Physical Location 601 Startare Drive Eureka, CA 95502-1030			Contact Information [707] 443-0801 County Humboldt Con		ınty		
MARINI	E TERM	IINALS located or	port property							
UN Loc.	Dock #	Terminal / Co. Nam	ie	Type of Vessel(s)	Types of Cargo			Receives Cargo	Ships Cargo	
EKA	IR1	Woodley Island Mar	rina	various		Fireboat, Tugboats and Commercial Fishing Fleet, and Various Government Vessels				
EKA	SC3	Redwood Marine Te	erminal Berth 2	Dry Bulk	Facility is not active			X	X	
EKA	SC9	Redwood Marine To	erminal Berth 1	Dry Bulk	Facility is not active			X	X	
EKA	01	Redwood Marina Te (Located in town of		Dry Bulk, and Fishing Vessels	Multi Use Commercial Cargo, and Commercial Sea Food Products			X	X	
EKA	02	Redwood Marina To (Located in town of		Dry Bulk	Mu	ılti Use Commercial Carg		X		

2006 MTSR_GWZ - A: Marine Terminals [Marine Terminals not associated with port authority]

Category 05: MARINE TERMINALS	[Marine Terminals not associated with port authority]
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			* · · · · · ·					
#	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-1	Humboldt Bay (Town of Samoa)	California Redwood Chip Export	Dry Bulk	Wood Chips		X	IOR	NBC
5-2	Humboldt Bay (Town of Fairhaven)	Security National (Fairhaven Terminal)	Dry Bulk and Cruise Ship	Multi Use Commercial Cargo			EKA	NBC7
5-3	Humboldt Bay (City of Eureka)	Pacific Affiliates (Schneider Dock)	Dry Bulk, and Cruise Ship	Forest Products and Logs		X	EKA	NBC14
5-4	Humboldt Bay (City of Eureka)	Sierra Pacific Industries	Barge	Logs & Wood Chips		X	EKA	NBC
5-5	Humboldt Bay (City of Eureka)	Chevron Oil Terminal	Barge	Petroleum Products	X		EKA	
5-6	Humboldt Bay (Town of Fields Landing)	Humboldt Bay Forest Products Terminal	Dry Bulk, and Fishing Vessels	Logs, Multi Use Commercial Cargo, and Sea Food Products	X	X	EKA	FLC2



2007 MTSR_GWZ – A: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

Catego	Category 06: PETROLEUM TERMINALS [Petroleum Refineries and Petroleum Storage Terminals]										
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #			
6-1	Humboldt Bay	Chevron Oil Storage Terminal	Barge (Liquid)	Receive at Facility Gasoline, and Diesel Ship from facility n/a	X		US EKA				

2008 MTSR_GWZ – A: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]								
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #				
7-1	Humboldt Bay	U.S. Coast Guard – Secor Humboldt Bay	Small Boat Station located on Samoa Island south of the Town of Fairhaven	EKA	NBC1				

2009 MTSR_GWZ – A: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]							
Physical Location	Company Name	UN Loc.	Dock #	Notations			
Woodley Island Marina (Eureka)	Humboldt Bay Fishing Fleet	EKA		Fishing fleet located at marina			
Humboldt Bay (Eureka)	Caito Fisheries	EKA	IR18	Located at Caito Fisheries Dock			
Humboldt Bay (Eureka)	Coast Seafood's	EKA	IR8	Located at Coast Seafood's Dock			
Humboldt Bay (Eureka)	Pacific Choice Seafood	EKA		Located at Pac Choice Dock			
Humboldt Bay (Eureka)	Wild Planet	EKA		Located at Wild Planet Dock			
Humboldt Bay (Eureka)	Humboldt Bay Fishing Fleet (Located at Eureka Pub. Marina)	EKA		Fishing fleet located at marina			
Humboldt Bay (Fields Landing)	Humboldt Bay Fishing Fleet	EKA		Located at Humboldt Bay Forest – Fields Landing Marina (Fishing fleet dock)			
Humboldt Bay (Samoa)	Humboldt Bay Fishing Fleet	EKA		Located at Redwood Marine Term. – Birth (Fishing fleet dock)			

2010 MTSR_GWZ - A: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS						
Physical Location	Cruise Ship Terminal Name	UN Loc.	Dock #	Notations		
Humboldt Bay (Eureka)	Schneider Dock	EKA		Located at Schneider Dock		
Humboldt Bay	Fairhaven Terminal	EKA		N/A		

2011 MTSR_GWZ - A: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Service in Humboldt Bay

2012 MTSR_GWZ – A: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]						
Physical Location	Terminal Name	UN Loc.	Dock #	Notations		
Eureka (located at C Street)	Madaket	EKA		Humboldt Bay Tour Boats		
Eureka	Woodley Island Marina - Eureka	EKA		Charter Boats, and Kayak Rentals		

2013 MTSR_GWZ - A: Tugboat Companies

Category 12: TUGBOAT COMPANIES							
Physical Location	Tugboat Terminal Name	UN Loc.	Dock #	Notations			
Humboldt Bay (Eureka)	Zerlang & Zerlang	EKA		Eureka Public Marina			
Humboldt Bay (Woodley Island)	Knutson Towboat Company	EKA		Located at Woodley Island Marina			

2014 MTSR_GWZ – A: Marinas [Recreational Boating]

Category 13: MARINAS [Recreational Boating] { Note: Marina's are not identified on chart }							
Physical Location	Name of Marina	Physical Location	Name of Marina				
Humboldt Bay	E-Z Landing Marina	Humboldt Bay	Eureka Public Marina				
Humboldt Bay Woodley Island Marina Humboldt Bay Johnny's Marina & RV P							

2015 MTSR_GWZ – A: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 01 Sea Ports located within GWZ – A [Port of Humboldt Bay]
TERMINALS	Total of 04 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – A
CRUISE SHIPS	Total of 01 Cruise Ship Terminals located within GWZ – A
FERRIES	Total of 00 Ferry Passenger Terminals located within GWZ – A

Types of Maritime Cargo Received within GWZ-A

• Cruise Ship Industry [Occasional arrival of cruise ships at Port of Humboldt Bay supports tourism to the region]

- Commercial Fishing Industry
 [The catch harvested by the local fisherman supply the domestic
 and international markets with Dungeness Crab, Pink Shrimp, and
 Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and
 sablefish)]
- Petroleum Products
 - Diesel
 - Gasoline Components

Types of Maritime Cargo Shipped from GWZ-A

- Forest Products
- Logs
- Lumber
- Wood Chips

2016 MTSR_GWZ – A: Listing of Ports / Marine Terminals and Contact Information

CITY	PORT / TERMINAL NAME	PHONE NUMBER
Eureka	Chevron Oil Terminal	(707) 444 – 7851
Eureka	Humboldt Bay Harbor Master	(707) 443 – 0801
Eureka	Humboldt Bay Commercial Fishing Fleet (Contact Harbor Master)	(707) 443 – 0801
Eureka	Pacific Affiliates Dock (Schneider Dock)	(707) 000 – 0000
Eureka	Sierra Pacific Industry Dock	(800) 367 – 6465
Eureka	Zerlang & Zerlang Tugboat Service	(707) 443 – 5180
Fairhaven	Fairhaven Business Park	(707) 476 – 2702
Fairhaven	Humboldt Bay Cruise Ship Lines	(707) 443 – 0801
Fairhaven	US Coast Guard Station Humboldt Bay (Small Boat Station)	(707) 839 – 6113
Fields Landing	Humboldt Bay Forest Product Terminal (SSA Pacific)	(707) 496–2636
Samoa	California Redwood Chip	(707) 498 – 5246
Samoa	Redwood Terminal – Birth 1	(707) 834 – 4939
Samoa	Redwood Terminal – Birth 2	(707) 834 – 4939
Woodley Island	Knutson Tugboat Company	(707) 496 – 0749

3000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – B [Central San Francisco Bay]

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-B	Central San Francisco Bay	Waterways east of the Golden Gate Bridge, and north of the I-80 (Bay Bridge), north to the I-580 (Richmond / San Rafael Bridge).

Section	Waterway Zone	Topic	Page
3001	$MTSR_GWZ - B$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	27
3002	$MTSR_GWZ - B$	Deep-Draft Channels, Chart Depth, and Essential ATON	28
3003	$MTSR_GWZ - B$	Anchorages	28
3004	$MTSR_GWZ-B$	Bridges [Highway and Railroad] located over Deep-Draft Channels and Air Draft	29
3005	$MTSR_GWZ-B$	Ports and Marine Terminals located on port property	30
3006	$MTSR_GWZ-B$	Marine Terminals [Marine Terminals not associated with port authority]	37
3007	$MTSR_GWZ-B$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	42
3008	$MTSR_GWZ-B$	Government Facilities [Federal Government]	45
3009	$MTSR_GWZ-B$	Fishing Fleet Facilities [Commercial Fishing Industry]	45
3010	$MTSR_GWZ-B$	Cruise Ship Terminals	46
3011	$MTSR_GWZ-B$	Ferry Boat Terminals	46
3012	$MTSR_GWZ-B$	Excursion Boat Terminals [Day Trip Tours]	47
3013	$MTSR_GWZ-B$	Tugboat Companies	47
3014	$MTSR_GWZ-B$	Marinas [Recreational Boating]	48
3015	$MTSR_GWZ-B$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ - B	49
3016	$MTSR_GWZ-B$	Listing of Ports / Marine Terminals and Contact Information in $GWZ-B$	51

3001 MTSR_GWZ - B: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



3002 MTSR_GWZ - B: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON					
Location Name of Deep Draft Channel Chart					
Central San Francisco Bay	Golden Gate Straight	333 ft.			
Central San Francisco Bay	Eastbound San Francisco Traffic Lane Bar Channel	76 ft.			
Central San Francisco Bay	Westbound San Francisco Traffic Lane Bar Channel	76 ft.			
Central San Francisco Bay	Raccoon Strait Channel	96 ft.			
Central San Francisco Bay	North Channel	64 ft.			
Central San Francisco Bay	Southampton Shoal Channel	45 ft.			
Central San Francisco Bay	Richmond Harbor Entrance Channel	35 ft.			

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits into and within Central San Francisco Bay:

- Blossom Rock Lighted Bell Buoy BR
- Harding Rock Lighted Buoy HR
- Point Potrero: Reach Range Front Light, and Reach Range Rear Light
- Richmond Harbor: Channel Approach Range, Front Light, and Rear Light
- San Francisco Bay North Channel: Lighted Buoy 12, Lighted Buoy A, Lighted Buoy B, and Lighted Buoy C
- San Francisco Main Ship Channel: Lighted Bell Buoy 1, Lighted Bell Buoy 8, and Lighted Bell Buoy 7

3003 MTSR_GWZ – B: Anchorages

Catego	Category 02: ANCHORAGES				
No.	Location	Name of Anchorage	Characteristics		
2-1	Central San Francisco Bay	Anchorage # 4	Explosive Anchorage # 4 is located on the northwest side of the Central San Francisco Bay on the east side of Tiburon Peninsula		
2-2	Central San Francisco Bay	Anchorage # 6	General Anchorage # 6 is located on the east side of the Central San Francisco Bay northeast of Treasure Island		

3003 MTSR_GWZ - B: Anchorages Continued

Catego	Category 02: ANCHORAGES Continued					
2-3	2-3 Central San Francisco Bay Anchorage # 7 Secondary Anchorage 7 located in the Central San Francisco Bay					
2-4	Central San Francisco Bay	Anchorage # 10	Navel Anchorage # 10 is located on the west side of the Central San Francisco Bay near Sausalito			
2-5	Central San Francisco Bay	Anchorage # 13	Explosive Anchorage # 13 is located on the north side of the Central San Francisco Bay west of Tiburon			

3004 MTSR_GWZ – B: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: BRIDGES [Highway and Railroad] and AIR DRAFT (AD)						
Location Name of Bridge Type of Bridge Waterway Crossing and Characteristics						
Central San Francisco Bay	Hwy 1 Golden Gate Bridge	Suspension Bridge	Hwy 1 Bridge is located on west side of Central San Francisco Bay. The bridge is the separation point between Pacific Ocean and GWZ-B.	225 ft.		
Central San Francisco Bay	Interstate 80 San Francisco – Oakland Bay Bridge	Fixed Bridge	Interstate 80 Bridge is located on south-east side of Central San Francisco Bay over deep-draft channel leading to South San Francisco Bay. The bridge is the separation point between GWZ-B and GWZ-C.	220 ft.		
Central San Francisco Bay	Interstate 580 Richmond/San Rafael Bridge	Fixed Bridge	Interstate 580 Bridge is located on north side of Central San Francisco Bay over Southampton Shoal Channel. The bridge is the separation point between GWZ-B and GWZ-D.	169 ft.		

2005 MTSR_GWZ - B: Ports and Marine Terminals located on port property

Name of Port	Physical Location	Contact Information	County
Port of Richmond	1411 Harbour Way Richmond, CA 94804	[510] 215-4600	Contra Costa County

General Description of Port Complex

The Port of Richmond is a "Handymax / Panamax Port", and is the 8th busiest Bulk and Break-Bulk port in California. The port is located nine miles from the Golden Gate on the east shore of San Francisco Bay and is accessed via the Richmond Harbor Channel and is strategically located by land and sea. The channel was recently deepened to 35 feet, and currently ranks number one in liquid bulk and automobile tonnage among ports on San Francisco Bay. There are four city-owned terminals at the port. These tenant-operated terminals handle a wide range of liquid and dry bulk commodities, automobiles, and diversified cargo. The Port of Richmond also includes ten privately owned terminals that handle bulk liquid, dry bulk materials, metals, and break-bulk cargoes. In addition, with foundations in petroleum and liquid bulk cargos, Richmond has expanded its Dry Bulk, Break Bulk, and increased its automobile processing facilities.

Intermodal Transportation Network

Highway System Servicing Port complex

• Interstate 80, Interstate 580, and Interstate 101

Railroad System Servicing Port complex

- Union Pacific
- Burlington Northern Santa Fe

Vessel & Cargo Handling Attributes

• Harbor Channel Depth: 35 ft.

• Gantry Cranes: No

• Mobile Harbor Cranes: No

• Other: N/A

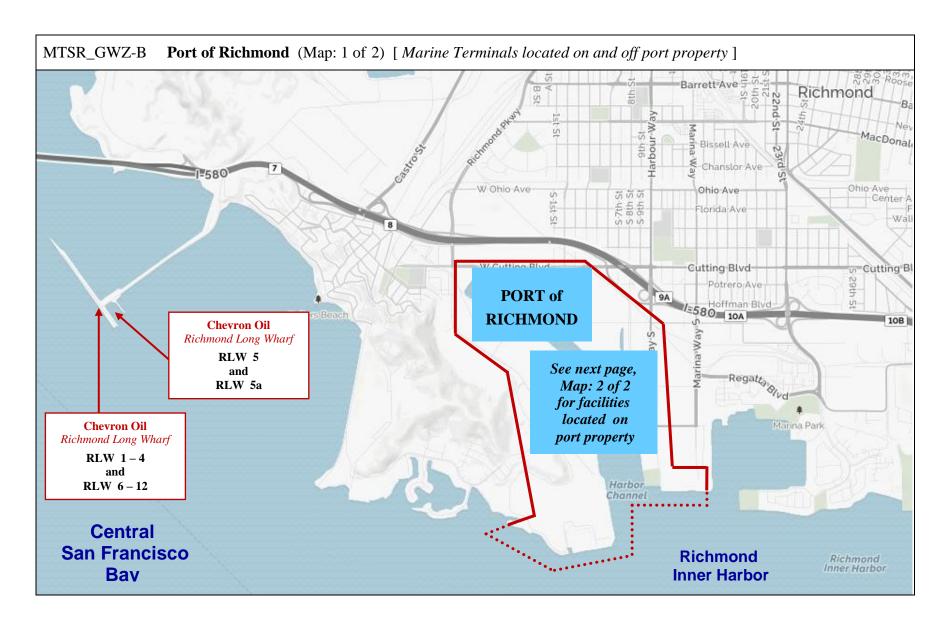
MARINI	MARINE TERMINALS located on port property					
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
RCH	1	FOSS Maritime	Tugs and Barges	n/a		
RCH	FP1	Marine Spill Response Corp.	Spill Response	Oil Spill Cleanup		

Category 04: MARINE TERMINALS located on port property

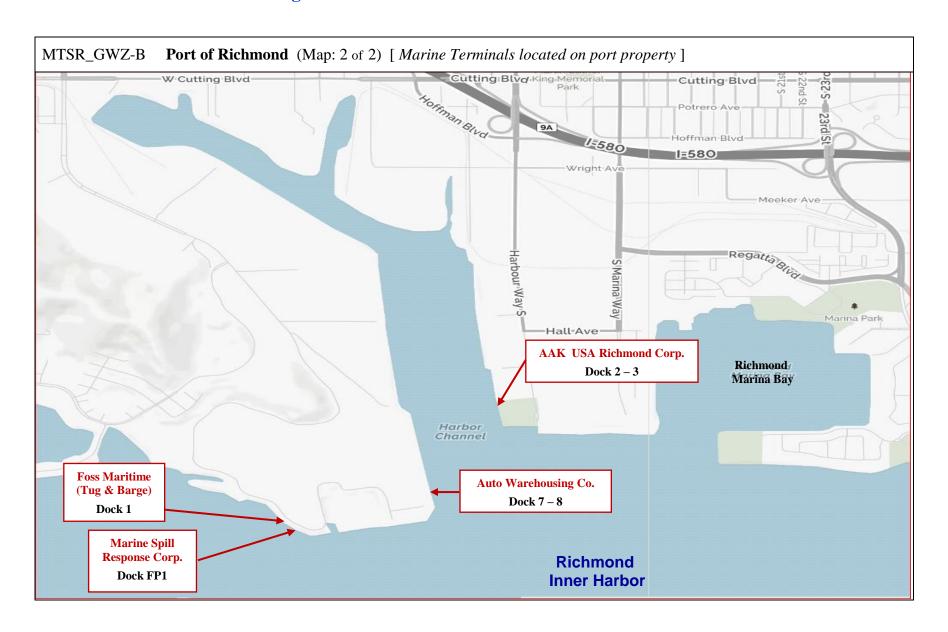
Port of Richmond Continued

MARINI	MARINE TERMINALS located on port property					
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
RCH	7 – 8	Auto Warehousing Company	Ro/Ro	Automobile	X	
RCH	2-3	AAK USA Richmond Corp.	Tanker	Coconut Oil, Corn Oil, Safflower Oil, and Vegetable Oil	X	X

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



Name of Port	Physical Location	Contact Information	County
Port of San Francisco (Northern Region)	Pier 1, The Embarcadero San Francisco, CA 94111	[415] 732-0400	San Francisco County
NOTE: The Port of San Francisco is divided into two sections, north and south. The northern part of the port is located in MTSR_GWZ-B, and the southern part of the port is located in MTSR_GWZ-C.			

General Description of Port Complex

The Port of San Francisco is a "Handymax / Panamax Port". Many of the City's leading tourist attractions are located on Port property, including the famous Fisherman's Wharf, Pier 39, and AT&T Ballpark. It is also the center of Northern California's commercial fishing industry. Pier 45 is one of the nation's most modern fish-processing centers. Cruise ships call at the Port year round with itineraries that span the world.

Intermodal Transportation Network

Highway System Servicing Port complex

- Interstate 1, Interstate 80, and Interstate 280
- Railroad System Servicing Port complex
- San Francisco Bay Railroad, and Union Pacific Railroad

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: 40 ft.
- Mobile Harbor Cranes: Yes
- Other: Harbor services with tug & barge service
- Warehousing: 550,000 square feet of covered dry storage space

NOTE: The numeric order of the docks in the following are in conjunction to the lay-out listed in the Port of San Francisco's port map. The lay-out order of the docks run from the northwest section of the port, south to the Interstate 80 (San Francisco – Oakland) Bay Bridge.

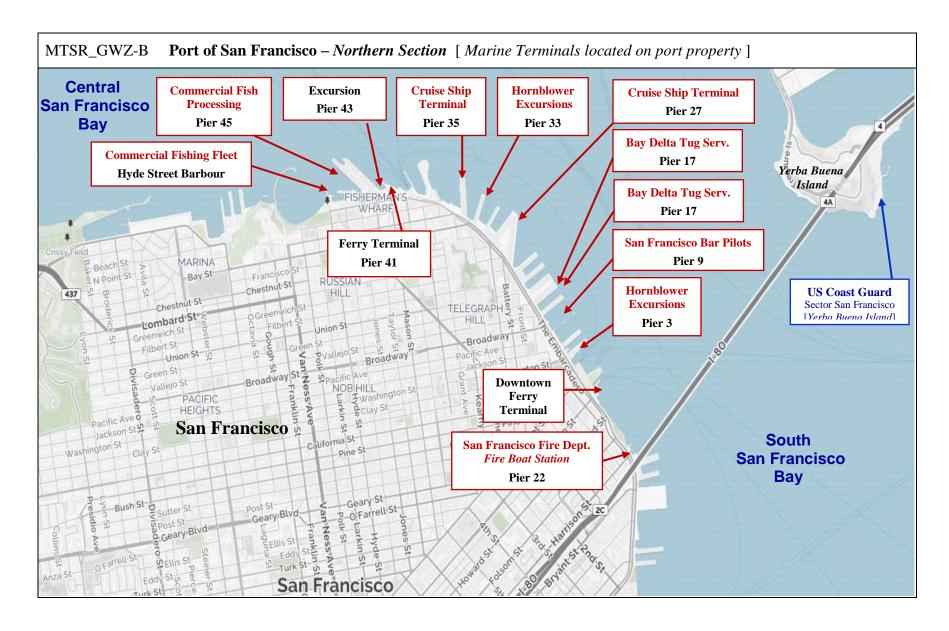
UN Loc.	Dock / Pier #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
SFO		Hyde Street Barbour (located west of Pier 45)	Commercial Fishing Vessels	Commercial Seafood	X	

Category 04: MARINE TERMINALS located on port property

Port of San Francisco (Northern Region) Continued

MARINE TERMINALS located on port property						
UN Loc.	Dock / Pier #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
SFO	45	Fish Processing Facilities	Processing	Commercial Seafood Buyer and Processing		
SFO	43	Red & White Fleet	Excursion Vessel	Passenger		
SFO	41	Blue & Gold	Excursion Vessel	Passenger		
SFO	41	Ferry Terminal	Ferry	Passenger		
SFO	35	Metro Cruise Service	Cruise Ship	Passenger	X	X
SFO	33	Alcatraz Cruise: Hornblower	Excursion	Passenger		
SFO	27	Metro Cruise Service	Cruise Ship	Passenger	X	X
SFO	17	Bay Delta Maritime, LLC	Tugboat	Tugboat Service		
SFO	17	Crowley Tug & Barge	Tugboat / Barge	Tugboat and Barge Service		
SFO	9	San Francisco Bar Pilots	Small Vessels	Bar Pilots		
SFO	3	Bay Cruise: Hornblower Excursions	Excursion	Passenger		
SFO	1	Downtown Ferry Terminal	Ferry	Passenger		
SFO	22 ½	San Francisco Fire Dept.	Fireboats	Marine Firefighting		

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



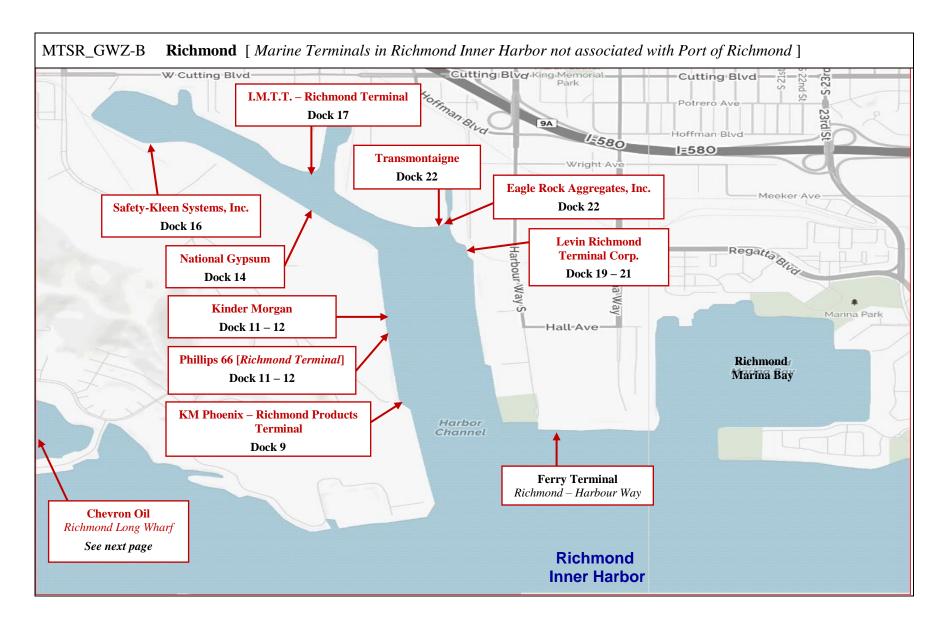
3006 MTSR_GWZ – B: Marine Terminals [Marine Terminals not associated with port authority]

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-1	Richmond	Chevron USA – Marine Terminal	Tanker	Petroleum Products	X	X	RCH	RLW 1 & 4
5-2	Richmond	Chevron USA – Marine Terminal	Tanker / Barge	Petroleum Products	X	X	RCH	RLW 2 & 3
5-3	Richmond	Chevron USA – Marine Terminal	Tugboat Birth	n/a			RCH	RLW 5 & a/b
5-4	Richmond	Chevron USA – Marine Terminal	Barge	Petroleum Products	X	X	RCH	RLW 9 & 11
5-5	Richmond	Eagle Rock Aggregates, Inc.	Bulk	Sand and Gravel	X		RCH	22
5-6	Richmond	I.M.T.T. – Richmond Terminal	Tanker / Barge	Petroleum Products (Storage / Distribution)	X	X	RCH	17
5-7	Richmond	Kinder Morgan	Tanker	Petroleum Products (Storage / Distribution)	X		RCH	11 – 12
5-8	Richmond	KM Phoenix – Richmond Products Terminal	Tanker / Barge	Petroleum Products (Storage / Distribution)	X		RCH	9
5-9	Richmond	Levin Richmond Terminal Corp.	Bulk	Coal, Petroleum Coke, and Scrap Metal	X	X	RCH	19 – 21

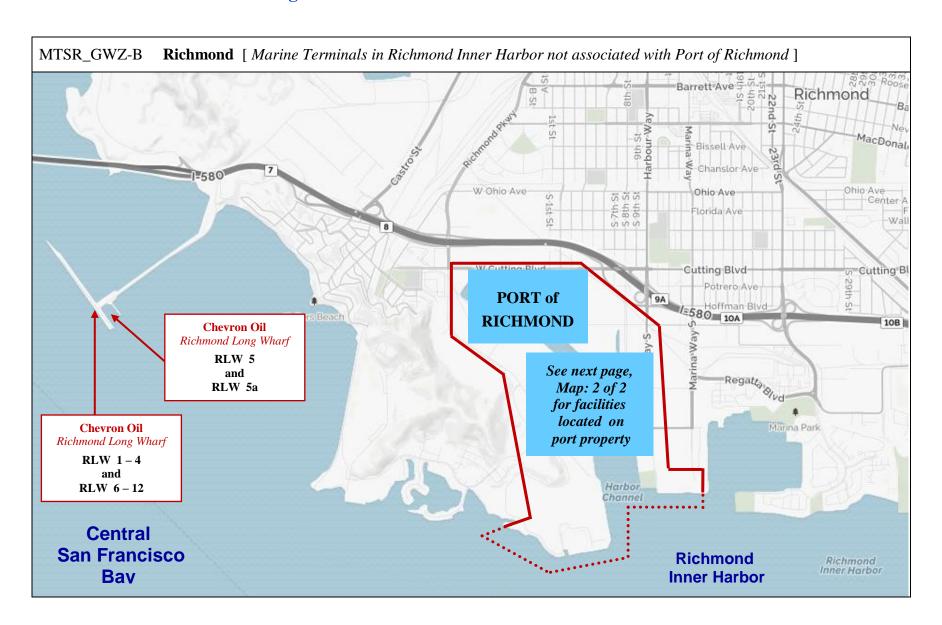
Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-10	Richmond	National Gypsum	Bulk	Crude Gypsum (Used for Drywall)	X		RCH	14
5-11	Richmond	Phillips 66 Richmond Terminal	Tanker / Barge	Petroleum Products (Storage / Distribution)	X	X	RCH	11 – 12
5-12	Richmond	Safety-Kleen Systems, Inc.	Barge	Petroleum Lube Oils (Blending & Packaging)	X		RCH	16
5-13	Richmond	Transmontaigne	Tanker / Barge	Petroleum Products (Storage / Distribution)	X	X	RCH	22
5-14	Sausalito	U.S. Army Corps of Engineers (USACE)	Hydrographic Surveys, and Debris/Salvage	n/a			JMC	SS
5-15	Sausalito	U.S. Coast Guard – Sector San Francisco	Small Boat Station	n/a			JMC	n/a

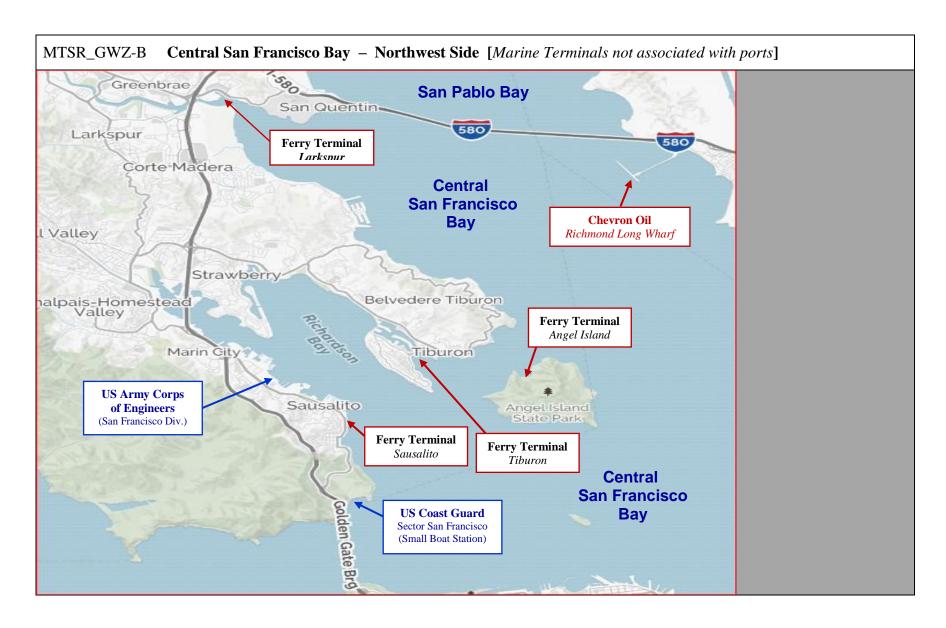
APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



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APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



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3007 MTSR_GWZ – B: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

(Category 06: PETROLEUM TERMINALS [Petroleum Refineries and Petroleum Storage Terminals]								
	No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Storage Terminals] Continued

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
6-3	Richmond	Kinder Morgan (Storage / Distribution)	Tanker	Receive at Facility Kosher Products (Petroleum Additives, Specialty Chemicals, Vegetable Oils, and Waxes) Ship from facility n/a	X		RCH	11 – 12
6-4	Richmond	KM Phoenix – Richmond Products Terminal (Storage / Distribution)	Tanker and Barge	Receive at Facility Refined Gasoline Products Ship from facility n/a	X		RCH	09
6-5	Richmond	Phillips 66 – Richmond Terminal (Storage / Distribution)	Tanker & Barge	Receive at Facility Marine Diesel, and Black Oil (bunker fuel) Ship from facility Marine Diesel, and Black Oil (bunker fuel)	X	X	RCH	11 - 12

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Stage Terminals] Continued

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
6-6	Richmond	Safety-Kleen Systems, Inc. (Blending & Packaging)	Barge	Receive at Facility Lube Oils (Medium Grade Base Oil) Ship from facility n/a	X		RCH	16
6-7	Richmond	Transmontaigne (Storage / Distribution)	Tanker & Barge	Receive at Facility Carb. Diesel Fuel, Fuel Oil, and Renewable Diesel Ship from facility Same Products Shipped as Received	X	X	RCH	22

3008 MTSR_GWZ – B: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]								
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #				
7-1	Sausalito	U.S. Army Corps of Engineers (USACE)	USACE – San Francisco Division coordinated Hydrographic Surveys, Dredging, and Debris/Salvage OP's	JMC	SS				
7-2	Sausalito	U.S. Coast Guard – Sector San Francisco	Small Boat Station located in Sausalito near the northeast side of the Golden Gate Bridge	JMC					

3009 MTSR_GWZ – B: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]						
Physical Location Company Name UN Loc. Dock # Notations						
Port of San Francisco (northern region)	Hyde Street Harbour (located west of Pier 45)	SFO		Commercial Fishing Vessels		
Port of San Francisco (northern region)	Fish Processing Facilities	SFO	45	Commercial Seafood Buyer and Processing		

3010 MTSR_GWZ – B: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS					
Physical Location Cruise Ship Terminal Name UN Loc. Dock # Notations					
Central San Francisco Bay	Port of San Francisco	SFO	27		
Central San Francisco Bay Port of San Francisco SFO 35					

3011 MTSR_GWZ – B: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS					
Physical Location	Ferry Terminal Name	UN Loc.	Dock #	Notations	
Central San Francisco Bay	Angel Island	SFO	AI	Ferry Landing (Hospital Cove)	
Central San Francisco Bay	Alcatraz Island	SFO	AZ	Ferry Landing (Alcatraz Island)	
Central San Francisco Bay	Larkspur	LK	LK	Ferry Terminal	
Central San Francisco Bay	Port of San Francisco	SFO	1 (FB)	Ferry "Plaza" Terminal (Down Town)	
Central San Francisco Bay	Port of San Francisco	SFO	41 & 43	Ferry Terminal	
Central San Francisco Bay	Port of Richmond	RCH	RCH	Ferry Terminal	
Central San Francisco Bay	Sausalito	JMC	SS	Ferry Terminal (Golden Gate Ferry)	
Central San Francisco Bay	Tiburon	XTN	TB	Ferry Terminal (Tiburon Dock)	

3012 MTSR_GWZ – B: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]						
Physical Location Ferry Terminal Name UN Loc. Dock # Notations						
Central San Francisco Bay	Port of San Francisco	SFO	3	Bay Cruise Terminal (Hornblower)		
Central San Francisco Bay	Port of San Francisco	SFO	33	Bay Cruise Terminal (Hornblower)		
Central San Francisco Bay	Port of San Francisco	SFO	41	Blue & Gold Fleet (Excursion / Tourism)		
Central San Francisco Bay	Port of San Francisco	SFO	43	Red & White Fleet (Excursion / Tourism)		

3013 MTSR_GWZ - B: Tugboat Companies

Category 12: TUGBOAT COMPANIES						
Physical Location	Tugboat Terminal Name	UN Loc.	Dock #	Notations		
Richmond	Foss Maritime Company	RCH	RCH 2	Port of Richmond – Terminal # 5, Pier 2		
Richmond	Oscar Niemeth Towing	RCH	RCH	Sugar Dock at the foot Wharf Street		
San Francisco	Bay Delta Maritime, LLC	SFO	17	Port of San Francisco (Northern Region)		
San Francisco	Crowley Tug & Barge	SFO	17	Port of San Francisco (Northern Region)		

3014 MTSR_GWZ – B: Marinas [Recreational Boating]

<i>C</i> 3	- 0- (,	
Physical Location	Name of Marina	Physical Location	Name of Marina
Berkley	Berkeley Marina	San Francisco	Gashouse Cove Marina
Berkley	Berkeley Marine Center	San Francisco	Pier 39 Marina
Emeryville	Emery Cove Marina	San Francisco	Port of San Francisco
Emeryville	Emeryville Marina	San Francisco	San Francisco Marina
Napa	Napa Valley Marina	San Francisco	South Beach Harbor
Richmond	Brickyard Cove Marina	San Francisco	Treasure Island Marina
Richmond	Channel Marina	Sausalito	Cass Marina
Richmond	Marina Bay Yacht Harbor	Sausalito	Clipper Yacht Harbor
Richmond	Point San Pablo Yacht Harbor	Sausalito	Kappas Marina
Richmond	Richmond Yacht Harbor	Sausalito	Marina Plaza Harbor Master
		Sausalito	Pelican Harbour
		Sausalito	Sausalito Yacht Harbor
		Sausalito	Schoonmaker Point Marina
		Tiburon	Paradise Cay Marina

3015 MTSR_GWZ – B: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 02 Sea Ports located within GWZ – B [Port of Richmond and north part of Port of San Francisco]
TERMINALS	Total of 12 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – B
CRUISE SHIPS	Total of 02 Cruise Ship Terminals located within GWZ – B
FERRIES	Total of 08 Ferry Passenger Terminals located within GWZ – B

Types of Maritime Cargo Received within GWZ-B

- Automobiles
- Caustic Soda
- Coconut Oil and Vegetable Oil [both products are food grade]
- Cruise Ship Industry
 [Frequent arrivals of cruise ships at Port of San Francisco is critical to supporting the tourism industry to the region]
- Commercial Fishing Industry [The catch harvested by the local fisherman supply the domestic and international markets with Dungeness Crab, Salmon, Herring, and Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and sablefish)]
- Gypsum, Sand, and Gravel
- Metal (Scrap)
- Petroleum Products
 - Aviation Fuels
 - Black Oil (bunker fuel)
 - Coke (Petro Coke)

Types of Maritime Cargo Shipped from GWZ - B

- Logs
- Metal (Scrap)
- Petroleum Products
 - Aviation Fuels
 - Black Oil (bunker fuel)
 - Coke (Petro Coke)
 - Crude Oil
 - Cutter Stock (Blend Mixture of Jet Fuel and Diesel)
 - Diesel and Renewable Diesel
 - Gasoline Components
 - Lube Oils
 - Marine Diesel
- Wax (Food Grade)

Types of Maritime Cargo Received within GWZ - B

- Petroleum Products (Continued)
 - Crude Oil
 - Cutter Stock (Blend Mixture of Jet Fuel and Diesel)
 - Diesel and Renewable Diesel
 - Gasoline Components
 - Lube Oils
 - Marine Diesel
- Wax (Food Grade)

3016 MTSR_GWZ – B: Listing of Ports / Marine Terminals and Contact Information

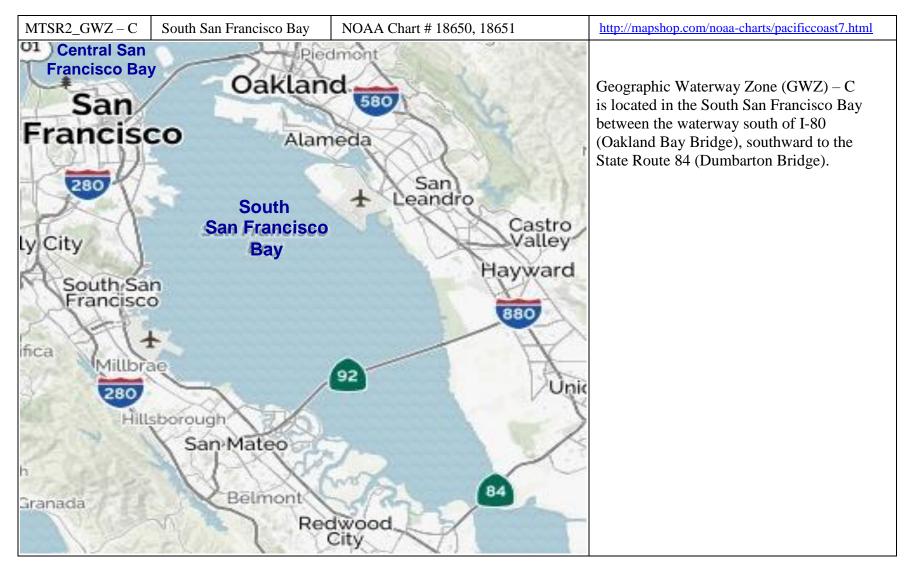
CITY	PORT / TERMINAL NAME	PHONE NUMBER
Richmond	AAK USA Richmond Corp.	(510) 206 – 5121
Richmond	Auto Warehousing Company	(510) 234 – 1817
Richmond	Chevron Oil Refinery – Marine Terminal	(510) 242 – 4388
Richmond	Eagle Rock Aggregates, Inc.	(510) 367 – 7106
Richmond	IMTT – Richmond California	(510) 412 – 5700
Richmond	Kinder Morgan	(510) 412 – 8810
Richmond	KM Phoenix – Richmond Products Terminal	(510) 231 – 4706
Richmond	Levin Richmond Terminal Corp.	(510) 307 – 4015
Richmond	National Gypsum	(510) 234 – 6745
Richmond	Phillips 66 – Richmond Terminal	(510) 412 – 7606
Richmond	Port of Richmond – Administration	(510) 215 – 4600
Richmond	Safety Kleen Systems, Inc.	(510) 335 – 5478
Richmond	Transmontaigne	(510) 235 – 3415
Richmond	Tug and Barge – FOSS Maritime Company	(510) 307 – 3444
Richmond	Tug and Barge - Oscar Niemeth Towing, Inc.	(510) 234 – 3200
San Francisco (northern part)	Port of San Francisco – Administration	(415) 274 – 0400
San Francisco (northern part)	Port of San Francisco – Commercial Fishing Fleet	(415) 274 – 0400
San Francisco (northern part)	Port of San Francisco – Cruise Ship facilities	(415) 274 – 0400
San Francisco (northern part)	Tug and Barge – BAYDELTA Maritime	(415) 693 – 5816
WETA (Passenger Ferry Operations)	All Passenger Ferry and Ferry Maintenance Facility Operations	(415) 364 – 3188

4000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) - C [South San Francisco Bay]

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-C	South San Francisco Bay	Waterways south of I-80 (Oakland Bay Bridge), south to the SR-84 (Dumbarton Bridge).

Section	Waterway Zone	Topic	Page
4001	$MTSR_GWZ - C$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	53
4002	$MTSR_GWZ-C$	Deep-Draft Channels , Chart Depth, and Essential ATON	54
4003	$MTSR_GWZ-C$	Anchorages	55
4004	$MTSR_GWZ-C$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	55
4005	$MTSR_GWZ - C$	Ports and Marine Terminals located on port property	56
4006	$MTSR_GWZ-C$	Marine Terminals [Marine Terminals not associated with port authority]	66
4007	$MTSR_GWZ-C$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	69
4008	$MTSR_GWZ - C$	Government Facilities [Federal Government]	69
4009	$MTSR_GWZ - C$	Fishing Fleet Facilities [Commercial Fishing Industry]	69
4010	$MTSR_GWZ - C$	Cruise Ship Terminals	70
4011	$MTSR_GWZ - C$	Ferry Boat Terminals	70
4012	$MTSR_GWZ - C$	Excursion Boat Terminals [Day Trip Tours]	70
4013	$MTSR_GWZ - C$	Tugboat Companies	71
4014	$MTSR_GWZ - C$	Marinas [Recreational Boating]	72
4015	$MTSR_GWZ - C$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ - C	73
4016	$MTSR_GWZ - C$	Listing of Ports / Marine Terminals and Contact Information in GWZ - C	74

4001 MTSR_GWZ - C: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



4002 MTSR_GWZ - C: Deep-Draft Channels

Category 01:	DEEP-DRAFT	CHANNELS,	CHART DEPTH,	and	ESSENTIAL ATON

Location	Name of Deep Draft Channel	Chart Depth
South San Francisco Bay	Oakland Bar Channel	42 ft.
South San Francisco Bay	Oakland Outer Harbor Channel	42 ft.
South San Francisco Bay	Oakland Inner Harbor Channel	42 ft.
South San Francisco Bay	Brooklyn Basin Channel	28 ft.
South San Francisco Bay	Alameda Point Bar Harbor Channel	22 ft.
South San Francisco Bay	South Bay Bar Channel and San Bruno Shoal Channel	29 ft.
South San Francisco Bay	Redwood Creek Channel	25 ft.

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within South San Francisco Bay:

- Oakland Harbor Bar Channel: Lighted Bell Buoy 1, and Lighted Buoy 2A
- Oakland Inner Harbor: Lighted Buoy 4
- Oakland Outer Harbor: Centerline Range Front Light, Centerline Range Rear Light, and Lighted Buoy 3
- Redwood Creek Channel: Entrance Light 2, Light 6, Light 7, and Light 13

4003 MTSR_GWZ - C: Anchorages

Catego	Category 02: ANCHORAGES				
No.	Location	Name of Anchorage	Characteristics		
2-1	South San Francisco Bay	Anchorage # 8	General Anchorage # 8 is located in the northwest region of the South San Francisco south of the Oakland Bar Channel		
2-2	South San Francisco Bay	Anchorage # 9	Primary Anchorage # 9 is located in the northern part of South San Francisco Bay		
2-3	South San Francisco Bay	Anchorage # 12	Explosive Anchorage # 12 is located in the South San Francisco Bay inside of Anchorage 9		
2-4	South San Francisco Bay	Anchorage # 14	Explosive Anchorage # 12 is located in the South San Francisco Bay inside of Anchorage 9		

4004 MTSR_GWZ – C: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: BRIDGES [Highway and Railroad] and AIR DRAFT (AD)					
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD	
South San Francisco Bay	Interstate 80 San Francisco – Oakland Bay Bridge	Fixed Bridge	Interstate 80 Bridge is located on south-east side of Central San Francisco Bay over deep-draft channel leading to South San Francisco Bay. The bridge is the separation point between GWZ-B and GWZ-C.	220 ft.	
South San Francisco Bay	Hwy 92 Hayward – San Mateo Bridge	Fixed Bridge	Highway 92 Bridge is located in the southern region of the South San Francisco Bay, and crosses over the deep-draft channel leading to the Port of Redwood City. The bridge is located in the south part of GWZ-C.	135 ft.	

4005 MTSR_GWZ - C: Ports and Marine Terminals located on port property

Category 04: PORTS and MARINE TERMINALS located on port property				
Name of Port	Physical Location	Contact Information	County	
Port of San Francisco (Southern Region)	Pier 1, The Embarcadero San Francisco, CA 94111	[415] 732-0400	San Francisco County	
NOTE: The Port of San Francisco is divided into two sections, north and south. The northern part of the port is located in MTSR_GWZ-B, and the southern part of the port is located in MTSR_GWZ-C.				

General Description of Port Complex

The Port of San Francisco is a "Handymax / Panamax Port". Many of the City's leading tourist attractions are located on Port property, including the famous Fisherman's Wharf, Pier 39, and AT&T Ballpark. It is also the center of Northern California's commercial fishing industry. Pier 45 is one of the nation's most modern fish-processing centers. Cruise ships call at the Port year round with itineraries that span the world.

Intermodal Transportation Network

Highway System Servicing Port complex

• Interstate 1, Interstate 80, and Interstate 280

Railroad System Servicing Port complex

• San Francisco Bay Railroad, and Union Pacific Railroad

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: 40 ft.
- Mobile Harbor Cranes: Yes
- Other: Harbor services with tug & barge service
- Warehousing: 550,000 square feet of covered dry storage space

Category 04: PORTS and MARINE TERMINALS located on port property

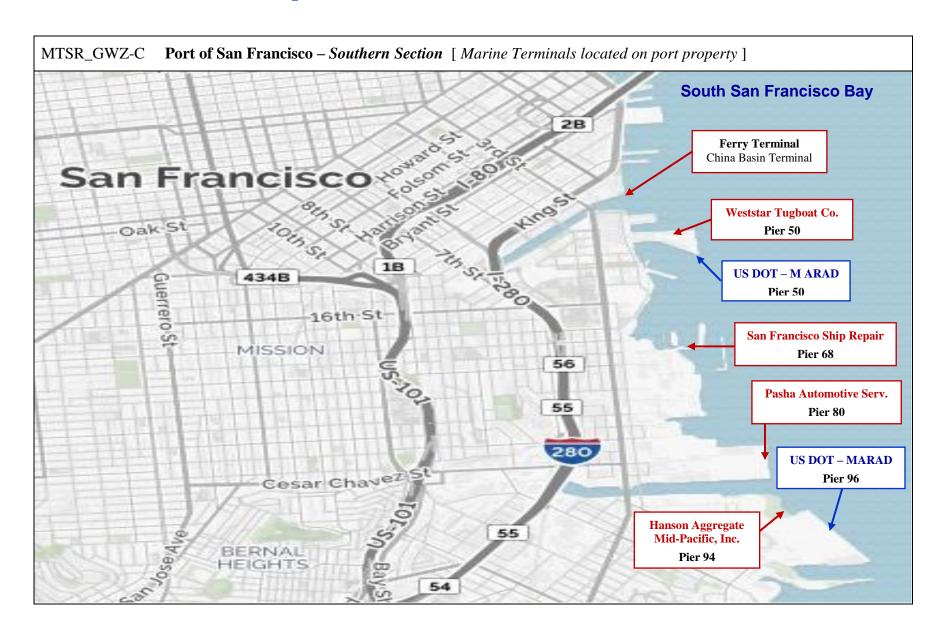
Port of San Francisco (Southern Region) Continued

MARINE TERMINALS located on port property

NOTE: The numeric order of the dock's in the following are in conjunction to the lay-out listed in the Port of San Francisco's port map. The lay-out order of the dock's run from the southern section of the port from the Interstate 80 (San Francisco – Oakland) Bay Bridge, south to Hunters Point.

UN Loc.	Dock / Pier #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
SFO		China Basin Ferry Terminal	Ferry	Passenger		
SFO	50	U.S. DOT – MARAD	MARAD	Military Sealift vessels		
SFO	50	Westar Tug Company	Tugboat / Barges	Tugboat and Barge Service		
SFO	68	San Francisco Ship Repair	Ship Yard	Vessel Dry Dock and Maintenance		
SFO	80	Pasha Automotive Services	Ro/Ro	Automobiles	X	X
SFO	94	Hanson Aggregates Mid-Pacific, Inc.	Bulk	Aggregate (Sand & Rock)	X	
SFO	96	U.S. DOT – MARAD	MARAD	Military Sealift vessels		

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



Category 04: PORTS and MARINE TERMINALS located on port property						
Name of Port Port of Oakland	Physical Location 530 Water Street Oakland, CA 94607	<u>Contact Information</u> [510] 627-1100	County Alameda County			

General Description of Port Complex

The Port of Oakland is a "Handymax / Panamax Port / Post Panamax", and is the 3rd largest *Container* port on the West Coast, and 5th busiest in the United States. The port occupies nearly 1,100 acres of the waterfront on the inland side of San Francisco Bay, , and has 1,040 acres of adjacent commercial real estate with seven container terminals occupy 818 acres and include 24 berths and 36 cranes, including 30 post-Panamax cranes, 22 of which are super post-Panamax cranes capable of loading and unloading the latest-generation containerships. The port is effective because of the central location, abundant industrial acreage for container handling and logistics services, and its proximity to interstate highways and continental rail services.

Special Note

In the event of a Catastrophic Earthquake striking the San Francisco Bay region (Stafford Act Declaration), the Port of Oakland will serve as one of FEMA / Cal OES's primary designated sea ports to be utilized as a staging area hub for maritime vessels arriving from the Port of Benicia, Port of Stockton, and other sea ports in the western region transporting emergency relief commodities to be distributed to affected areas of the San Francisco Bay via maritime transportation.

Intermodal Transportation Network

Highway System Servicing Port complex

• Interstate 880, Interstate 980, Interstate 580, and Interstate 80

Railroad System Servicing Port complex

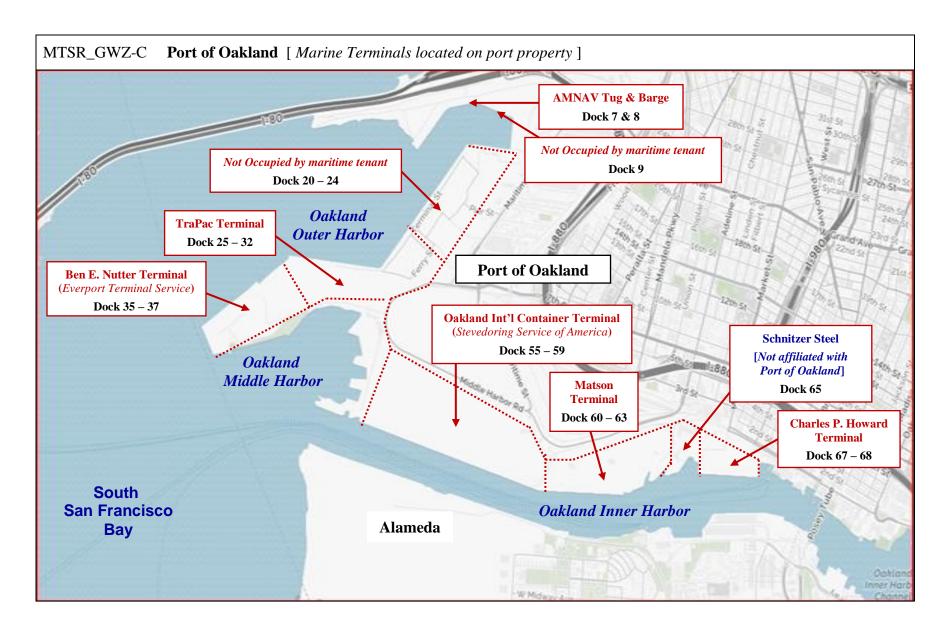
• Union Pacific, and Burlington Northern Santa Fe

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: varies from 42 ft. to 50 ft.
- 36 Gantry Cranes
- No Mobile Harbor Cranes
- Other: n/a

Category	04: POI	RTS and MARINE TERMINAL	LS located on por	t property		
Port of O	akland C	Continued				
MARIN	E TERM	IINAL located on port property				
* Port of	[°] Oakland	– Terminal Docks located along th	ne "Oakland <u>Outer</u>	Harbor Deep-Draft Channel"		
UN Loc.	Dock / Birth #	Terminals / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
OAK	7	AMNAV Tugboat Service	Tugboat	Tugboat and Barge Service		
OAK	8	AMNAV Tugboat Service	Tugboat	Tugboat and Barge Service		
OAK	9	Not Occupied by maritime tenant	n/a	n/a		
OAK	20 - 24	Not Occupied by maritime tenant	n/a	n/a		
OAK	25 - 32	TraPac Terminal	Container	Various cargo/commodities	X	X
OAK	35 – 37	Ben E. Nutter Terminal (Everport Terminal Services)	Container	Various cargo/commodities	X	X
* Port of UN Loc.	Oakland Dock #	– Terminal Docks located along th	ne "Oakland <u>Inner</u> Type of Vessel(s)	Harbor Deep-Draft Channel" Types of Cargo	Receives Cargo	Ships Cargo
OAK	55 – 59	Oakland Int'l Container Terminal (also known as OICT) (Stevedoring Services of America)	Container	Various cargo/commodities	X	X
OAK	60 – 63	Matson Terminal (Stevedoring Services of America)	Container	Various cargo/commodities	X	X
OAK	67 – 68	Charles P. Howard Terminal	Container / Bulk / Ro/Ro	Not Occupied by maritime tenant		

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



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	l	Category 04:	PORTS	and	MARINE	TERMINALS	located on	port pr	operty	V
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Name of Port	Physical Location	Contact Information	County
Port of Redwood City	675 Seaport Blvd. Redwood City, CA 94063	[650] 306-4150	San Mateo County

General Description of Port Complex

The Port of Redwood City is a "Handymax / Panamax Port", and is located 18 nautical miles south of San Francisco, is the only deep-water port in south San Francisco Bay located approximately 25 miles southeast of San Francisco. The Port handles mostly dry-bulk, neo-bulk, and liquid bulk cargoes such as imported construction materials, scrap metal exports, construction debris for recycling, and chemicals.

Special Note

In the event of a Catastrophic Earthquake striking the San Francisco Bay region (Stafford Act Declaration), the Port of Redwood City located in the southern region of the South San Francisco Bay will serve as one of FEMA / Cal OES's designated sea ports to be utilized as a maritime receiving and staging area for emergency relief commodities to be distributed back into the affected areas of the San Francisco Bay.

Intermodal Transportation Network

Highway System Servicing Port complex

• US 101, Interstate 880, State Route 84 and 92

Railroad System Servicing Port complex

• Union Pacific Railroad

Vessel & Cargo Handling Attributes

• Harbor Channel Depth: 30 ft.

• Gantry Cranes: No

Mobile Harbor Cranes: NoOther: Hoppers and Conveyors

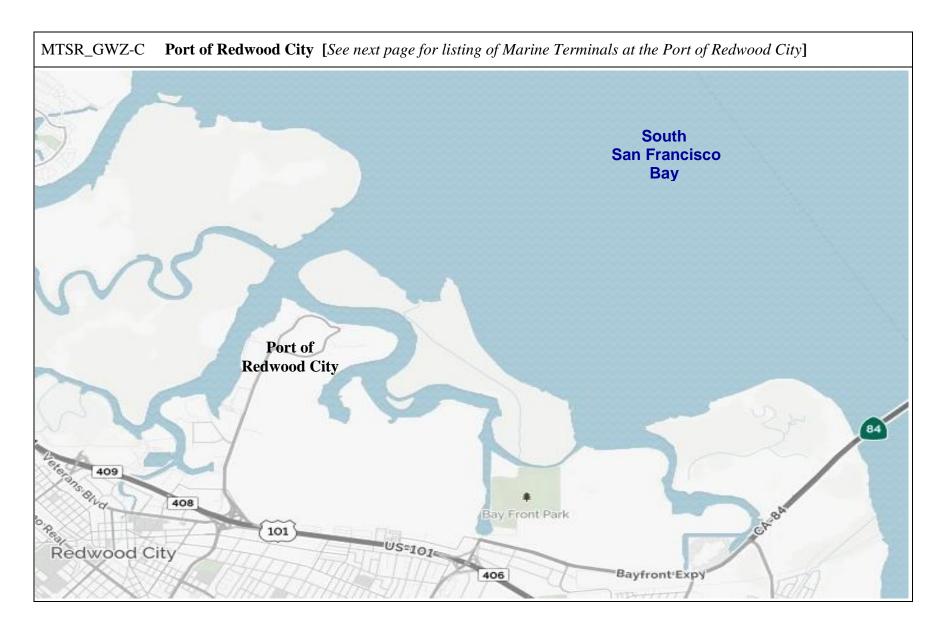
MARINE TERMINALS located on port property						
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
RWC	1A	CEMEX Aggregates	Barge	Barge Dock used to receive dredged Sand	X	
RWC	1 & 2	CEMEX Cement	Bulk	Powdered Cement	X	

Category 04: PORTS and MARINE TERMINALS located on port property

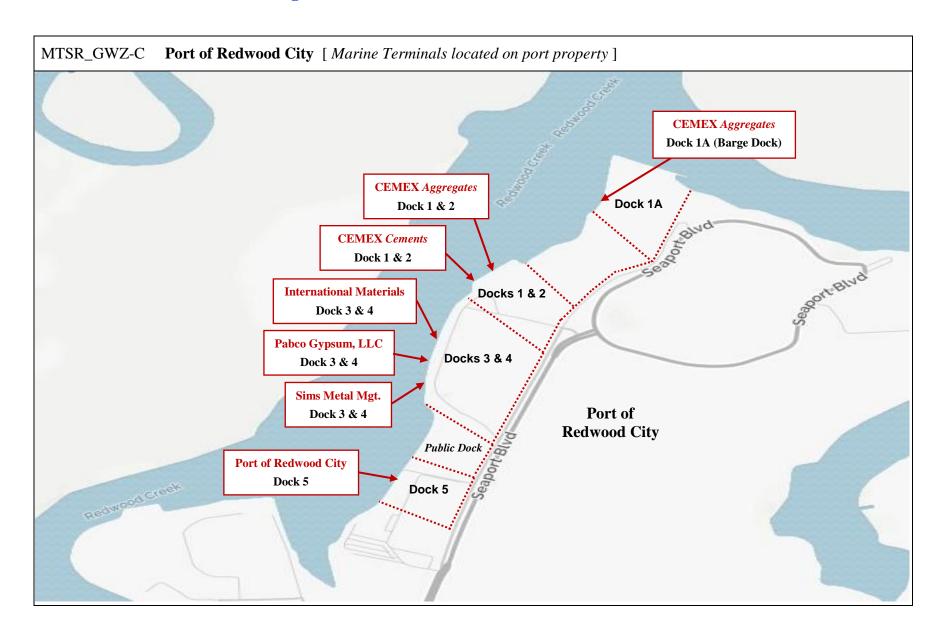
Port of Redwood City Continued

MARINE TERMINAL located on port property						
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
RWC	1 & 2	CEMEX Aggregates	Bulk	Sand and Gravel	X	
RWC	3 & 4	International Materials, Inc.	Bulk	Bauxite Ore	X	
RWC	3 & 4	Pabco Gypsum, LLC	Bulk	Raw Gypsum Rock	X	
RWC	3 & 4	Sims Metal Management	Bulk	Shredded Scrap Metal		X
RWC	5	Port of Redwood City	Bulk / Breakbulk	Used for Project Materials	X	X

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



4006 MTSR_GWZ - C: Marine Terminals [Marine Terminals not associated with port authority]

vessels

Bulk and Barge

Scrap Metal

Schnitzer Steel

Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]									
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #	
5-1	Alameda	Bay Ship & Yacht	Various	Dry Dock / Repair			NGZ	2	
5-2	Alameda	Marine Express	Various	Dry Dock / Repair			NGZ	3	
5-3	Alameda	NRC Environmental	Oil Spill Resp.	Oil Skimmers Boats			NGZ	1	
5-4	Alameda	USCG – D11 / PACAREA	Small Boat Cutters	n/a			NGZ	n/a	
5-5	Alameda	US DOT - MARAD	Military Sealift	n/a			NGZ	AP 1-3	

X

X

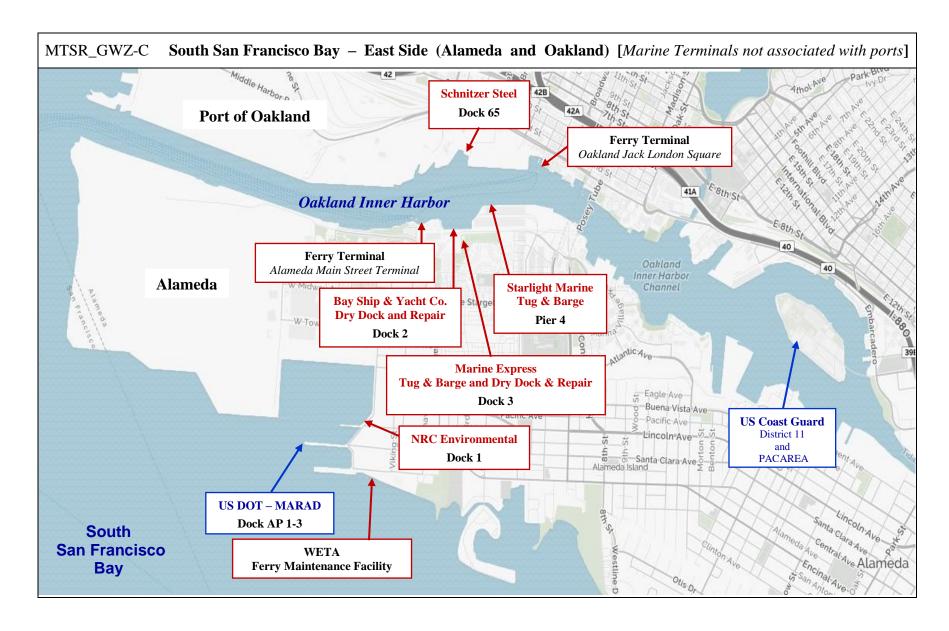
OAK

56

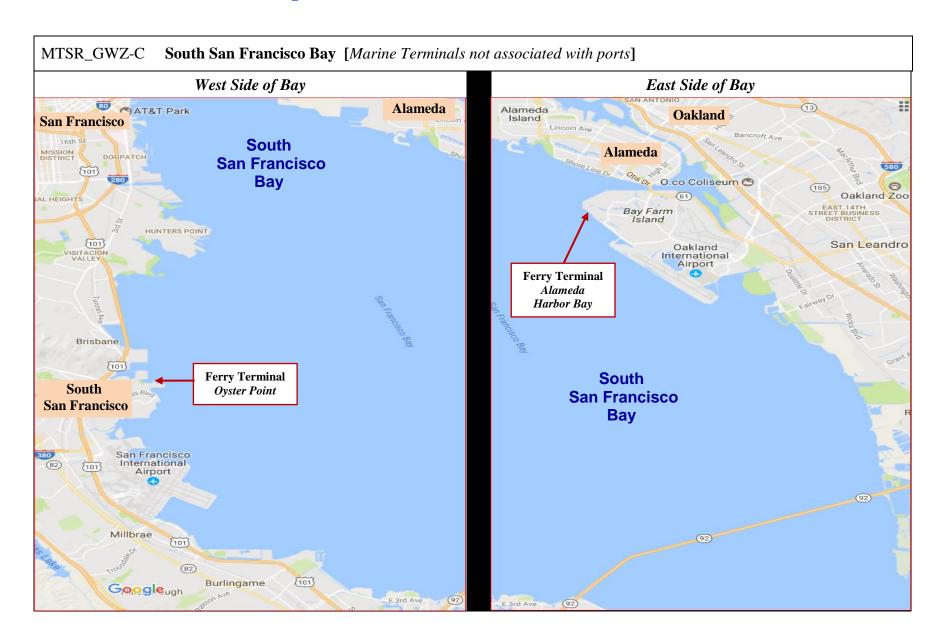
Oakland

5-6

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



4007 MTSR_GWZ - C: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Storage Terminals]

• No Petroleum Terminals located in South San Francisco Bay.

4008 MTSR_GWZ - C: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]								
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #				
7-1	Alameda	U.S. Dept. of Transportation – MARAD	Military Sealift vessels located at Alameda Point.	NGZ	AP 1-3				
7-2	Alameda	U.S. Coast Guard – District 11 / PACAREA	Small Boats and National Security Cutters located at Coast Guard Island	NGZ	n/a				
7-3	San Francisco (Yerba Buena Island)	U.S. Coast Guard – Sector San Francisco	Small Boats and Buoy Tender vessel located at Yerba Buena Island	SFO	n/a				
7-4	San Francisco	U.S. Dept. of Transportation – MARAD	Military Sealift vessels located at southern part of Port of San Francisco	SFO	50				
7-5	San Francisco	U.S. Dept. of Transportation – MARAD	Military Sealift vessels located at southern part of Port of San Francisco	SFO	96				

4009 MTSR_GWZ - C: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located in South San Francisco Bay.

4010 MTSR_GWZ - C: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located in South San Francisco Bay.

4011 MTSR_GWZ - C: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS							
Physical Location	Ferry Terminal Name	UN Loc.	Dock #	Notations			
Alameda	Harbor Bay Ferry Terminal	NGZ	НВ	Bay Farm Island (Harbor Bay Parkway)			
Alameda	Alameda Bay Ferry Terminal	NGZ	GW	Ferry Terminal (Alameda / Main Street)			
Alameda	Ferry Maintenance Facility	NGZ	NGZ	WETA's Ferry Maintenance Facility			
Oakland	Clay Street Ferry	OAK	CS	Ferry Landing (Jack London Square)			
an Francisco (South of I-80 Bridge)	China Basin Ferry Terminal	SFO	BP	AT&T Park			
South San Francisco	Oyster Point Ferry Terminal	SFO		Ferry Terminal (Oyster Point)			

4012 MTSR_GWZ - C: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]

• No Excursion Boat Terminals in South San Francisco Bay.

4013 MTSR_GWZ - C: Tugboat Companies

Category 12: TUGBOAT COMPANIES						
Physical Location	Tugboat Terminal Name	UN Loc.	Dock #	Notations		
Alameda	Starlight Marine Services	NGZ	4	Tug & Barge		
Alameda	Marine Express, Inc.	NGZ	3	Tug & Barge		
Oakland	AMNAV Maritime Corporation	OAK	7 & 8	Tug & Barge		
Oakland	Crowley Marine Services, Inc.	OAK	9	Tug & Barge		
San Francisco	Westar Marine Services	SFO	50	Port of San Francisco (Southern Region)		

4014 MTSR_GWZ - C: Marinas [Recreational Boating]

- ·	Elicerenic Zeemig 1 (11000 1200)	,	
Physical Location	Name of Marina	Physical Location	Name of Marina
Alameda	Alameda Marina	Redwood City	Redwood City Yacht Harbor
Alameda	Ballena Isle Marina	Redwood City	Bair Island Marina
Alameda	Fortman Marina	Redwood City	Docktown Marina
Alameda	Grand Marina	Redwood City	Peninsula Marina
Alameda	Marina Village Yacht Harbor	Redwood City	Pete's Harbor
Alameda	Mariner Square	Redwood City	Port of Redwood City
Alameda	Pacific Marina	San Leandro	San Leandro Marina Office
Oakland	Embarcadero Cove Marina	San Mateo	Coyote Point Marina
Oakland	Fifth Avenue Marina	San Francisco (South of I-80 Bridge)	Brisbane Marina
Oakland	Jack London Square	San Francisco (South of I-80 Bridge)	Oyster Cove Marina
Oakland	Port of Oakland Marinas	San Francisco (South of I-80 Bridge)	Oyster Point Marina
Oakland	Portobello Marina		

4015 MTSR_GWZ - C: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 03 Sea Ports located within GWZ – C [Port of Oakland, Port of Redwood City, and south part of Port of San Francisco]
TERMINALS	Total of 14 Marine Terminals shipping and/or receiving maritime cargo located within GWZ - C
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – C
FERRIES	Total of 06 Ferry Passenger Terminals located within GWZ – C

Tynes	of Maritime	Caron	Received	within	GWZ -	\boldsymbol{C}
1 ypes	oj muinie	Cargo	Neceiveu	wuiiiii	UWL -	C

- Aggregate (Sand & Stone)
- Automobiles
- Bauxite
- Cement
- Containers (Mixed Cargo)
- Gravel
- Metal (Scrap Metal)
- Military Cargo
- Project Cargo
- Sand

Types of Maritime Cargo Shipped from GWZ - C

- Automobiles
- Containers (Mixed Cargo)
- Metal (Scrap Metal)
- Military Cargo
- Project Cargo

4016 MTSR_GWZ - C: Listing of Ports / Marine Terminals and Contact Information

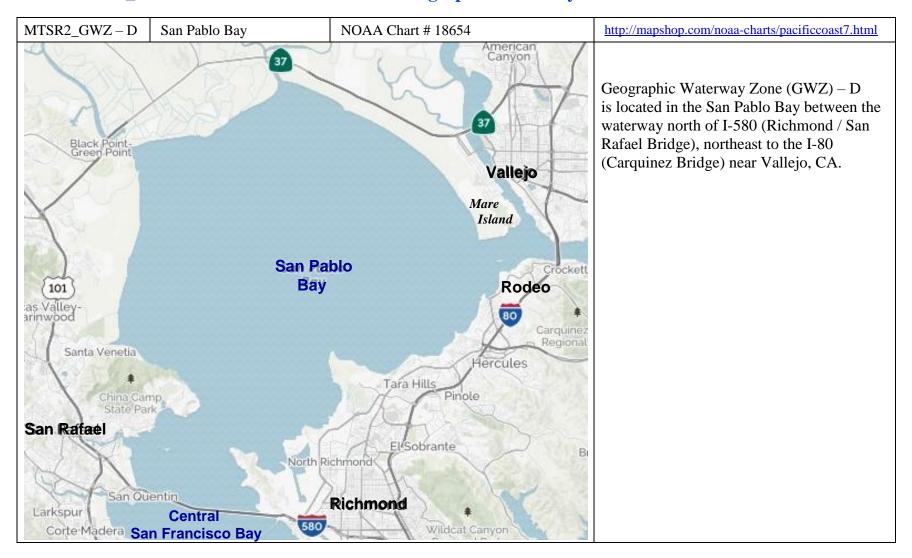
CITY	PORT / TERMINAL NAME	
Alameda	U.S. DoT – MARAD	(510) 337 – 5154
Alameda	Tug and Barge - STARLIGHT Marine Services	(510) 769 – 7700
Oakland	Ben E. Nutter Terminal	(510) 541 – 5566
Oakland	Matson Terminal (operated by SSA Terminals)	(510) 446 – 2403
Oakland	Oakland Int'l Container Terminal (operated by SSA Terminals)	(510) 433 – 1627
Oakland	Port of Oakland	(510) 627 – 1469
Oakland	Schnitzel Steel Industries, Inc.	(510) 286 – 8670
Oakland	TraPac, LLC	(510) 286 – 8602
Oakland	Tug and Barge – AMNAV Tug & Barge	(510) 834 – 8847
Oakland	Schnitzel Steel Industries, Inc.	(510) 444 – 3919
Redwood City	CEMEX [Aggregate]	(831) 419 – 3647
Redwood City	CEMEX [Cement]	
Redwood City	International Materials, Inc.	(925) 286 – 7739
Redwood City	Pabco Gypsum, LLC	(510) 377 – 6645
Redwood City	Port of Redwood City	(650) 306 – 4150
Redwood City	Sims Metal Management	(818) 223 – 8408
San Francisco (southern part)	Hanson Aggregate Mid-Pacific, Inc.	(415) 702 – 3022
San Francisco (southern part)	Pasha Automotive Service	(415) 477 – 7724
San Francisco (southern part)		
San Francisco (southern part)		
San Francisco (southern part) U.S. DoT – MARAD		(510) 457 – 2572
WETA (Passenger Ferry Operations)	All Passenger Ferry and Ferry Maintenance Facility Operations	(415) 364 – 3188

5000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – D [San Pablo Bay]

Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-D	San Pablo Bay	Waterway north of I-580 (Richmond / San Rafael Bridge), northeast to I-80 (Carquinez Bridge).

Section	Waterway Zone	Topic	Page
5001	$MTSR_GWZ - D$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	76
5002	$MTSR_GWZ-D$	Deep-Draft Channels, Chart Depth, and Essential ATON	77
5003	$MTSR_GWZ-D$	Anchorages	77
5004	$MTSR_GWZ-D$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	78
5005	$MTSR_GWZ-D$	Ports and Marine Terminals located on port property	78
5006	$MTSR_GWZ-D$	Marine Terminals [Marine Terminals not associated with port authority]	79
5007	$MTSR_GWZ-D$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	80
5008	$MTSR_GWZ-D$	Government Facilities [Federal Government]	83
5009	$MTSR_GWZ-D$	Fishing Fleet Facilities [Commercial Fishing Industry]	83
5010	$MTSR_GWZ-D$	Cruise Ship Terminals	83
5011	$MTSR_GWZ-D$	Ferry Boat Terminals	84
5012	$MTSR_GWZ-D$	Excursion Boat Terminals [Day Trip Tours]	84
5013	$MTSR_GWZ-D$	Tugboat Companies	84
5014	$MTSR_GWZ-D$	Marinas [Recreational Boating]	85
5015	$MTSR_GWZ-D$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in $\ GWZ-D$	86
5016	MTSR_GWZ – D	Listing of Ports / Marine Terminals and Contact Information in GWZ – D	87

5001 MTSR_GWZ - D: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



5002 MTSR_GWZ - D: Deep-Draft Channels

Category 01: DEEP –	Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON			
Location	Name of Deep Draft Channel	Chart Depth		
San Pablo Bay San Pablo Strait Channel San Pablo Bay Pinole Shoal Channel		79 ft.		
		35 ft.		
San Pablo Bay Carquinez Strait Channel				

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within San Pablo Bay:

- Pinole Shoal: Range Front Light, and Range Rear Light
- San Pablo Bay Channel: Lighted Buoy 7, Lighted Buoy 8, and Lighted Buoy E

5003 MTSR_GWZ - D: Anchorages

Catego	ory 02: ANCHORAGES		
#	Location	Name of Anchorage	Characteristics
2-1	San Pablo Bay	Anchorage # 19	General Anchorage # 19 is located on the northwest side of San Pablo Bay west of Pinole Point on the west side of the San Francisco Traffic Service Area
2-2	San Pablo Bay	Anchorage # 20	General Anchorage # 20 is located on the northeast side of San Pablo Bay west of Lone Tree Point

5004 MTSR_GWZ – D: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: 1	BRIDGES [Highway an	nd Railroad] and	AIR DRAFT (AD)	
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD
San Pablo Bay	Interstate 580 Richmond/San Rafael Bridge	Fixed Bridge Interstate 580 Bridge is located on north side of Central San France Bay over Southampton Shoal Channel. The bridge is the separation point between GWZ-B and GWZ-D.		169 ft.
San Pablo Bay	Interstate 80 Carquinez Bridge	Fixed Bridge	Interstate 80 Bridge is located at the north side of San Pablo Bay, and crosses over the west side of the Carquinez Strait Deep-Draft Channel at the west end near Vallejo, CA. The bridge is the separation point between GWZ-D and GWZ-E.	134 ft.

5005 MTSR_GWZ - D: Ports and Marine Terminals located on port property

Category 04: PORTS and PRIVATE INDUSTRY MARINE TERMINALS located on port property

• No Ports located in San Pablo Bay.

5006 MTSR_GWZ – D: Marine Terminals [Marine Terminals not associated with port authority]

Dock #

8

3,4 & 5

VJ

2 & 3

ROD

VLO

VLO

VLO

Catego	Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]						
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.
5-1	Crockett	NuStar Terminal,	Tanker	Petroleum Products	X	X	ROD

Tankers

Ferry

Training Ship

Large Vessels

Petroleum Products

Maritime Cadets

General Public

General Vessel

Repair

X

n/a

n/a

X

n/a

n/a

(Selby Terminal)

Phillips 66 Refinery

CA Maritime Acad.

Mare Island Dry

Terminal

Dock

Vallejo Baylink Ferry

Rodeo

Vallejo

Vallejo / Mare Island

Vallejo / Mare Island

5-2

5-4

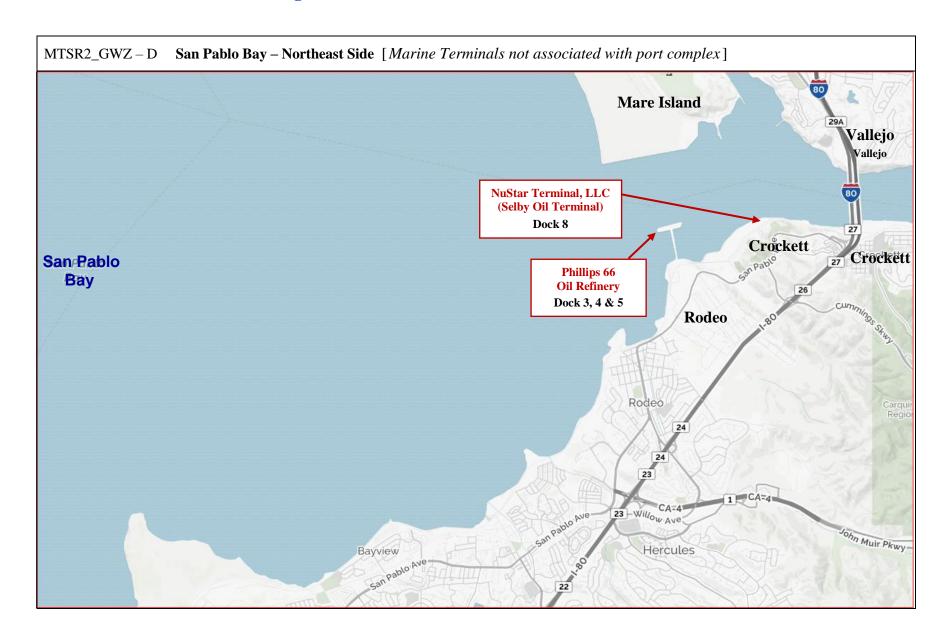
5-5

5-6

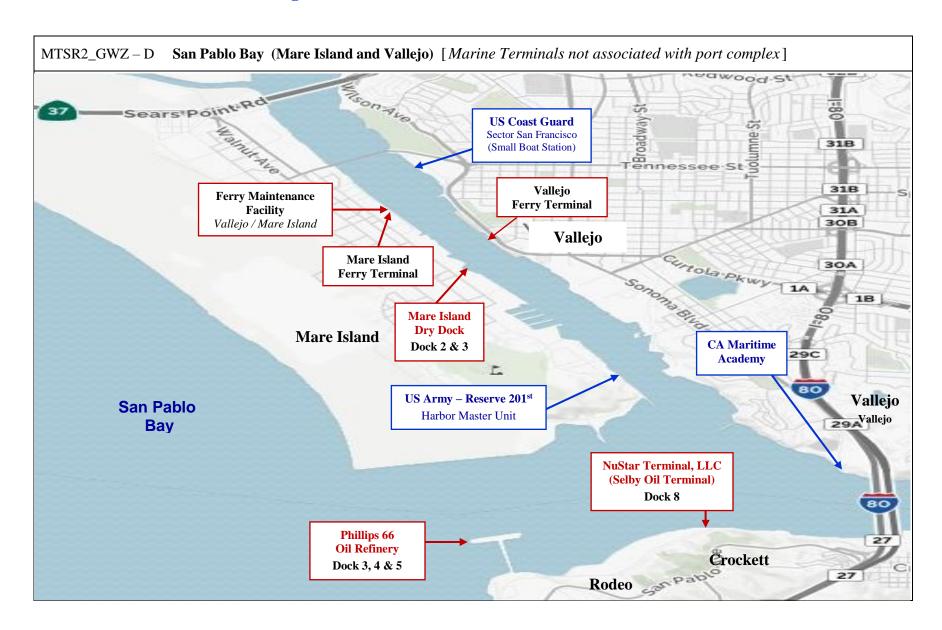
5007 MTSR_GWZ – D: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
6-1	Crockett	NuStar Terminal, LLC (Selby Terminal) Bulk Storage and Distribution Facility	Tanker & Barges	Receive at Facility Gasoline, Gasoline blend stocks, Diesel, Jet Fuel (JP-5, JP-8, Commercial Jet), and Ethanol, Ship from facility Gasoline, Gasoline blend stocks, Diesel, Jet Fuel (JP-5, JP-8, Commercial Jet), and Ethanol	X	X	CRM	8
6-2	Rodeo	Phillips 66 Refinery	Tanker & Barge	Receive at Facility Raw Crude Oil, Gas Oils, Diesel Fuels, and Gasoline Blend Stock Ship from facility Finished Gasoline and Finished Diesel, and Fuel Oils	X	X	ROD	3, 4 & 5

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



5008 MTSR_GWZ - D: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]					
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #	
7-1	Vallejo / Mare Island	U.S. Army Reserve 201st Harbor Master Unit	Specializes in Hydrographic Surveys and Vessel Traffic Service field unit	VLO	1	
7-2	Vallejo / Mare Island	U.S. Coast Guard – Sector San Francisco	Small Boat Station	VLO	n/a	

5009 MTSR_GWZ – D: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located in San Pablo Bay.

5010 MTSR_GWZ - D: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located in San Pablo Bay.

5011 MTSR_GWZ - D: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS						
Physical Location Ferry Terminal Name UN Loc. Dock # Notations						
Mare Island (Vallejo / Mare Island)	Mare Island Ferry Terminal	VLO	VLO	Next to WETA's Ferry Maintenance Facility		
Mare Island (Vallejo / Mare Island)	Ferry Maintenance Facility	VLO	VLO	WETA's Ferry Maintenance Facility		
Vallejo	Vallejo Ferry Terminal	VLO	HB	Bay Farm Island (Harbor Bay Parkway)		

5012 MTSR_GWZ - D: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]

• No Excursion Boat Terminals located in San Pablo Bay

5013 MTSR_GWZ - D: Tugboat Companies

Category 12: TUGBOAT COMPANIES

• No Tugboat Facilities located in San Pablo Bay.

5014 MTSR_GWZ – D: Marinas [Recreational Boating]

Category 13: MARINAS [Recreational Boating] { Note: Marina's are not identified on chart }						
Physical Location Name of Marina Physical Location Name of Marina						
San Rafael	Loch Lomond Marina	Vallejo	Glen Cove Marina			
San Rafael	Lowrie Yacht Harbor	Vallejo	Vallejo Launch Ramp			
San Rafael San Rafael Yacht Harbor Vallejo Vallejo Municipal Marina						

5015 MTSR_GWZ – D: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 00 Sea Ports located within GWZ – D
TERMINALS Total of 02 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – D	
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – D
FERRIES	Total of 03 Ferry Passenger Terminals located within GWZ – D

Types of Maritime Cargo Received within GWZ-D

- Petroleum Products
 - Aviation Fuels
 - Coke (Petro Coke)
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Lube Oils

Types of Maritime Cargo Shipped from GWZ - D

- Petroleum Products
 - Aviation Fuels
 - Coke (Petro Coke)
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Lube Oils

5016 MTSR_GWZ – D: Listing of Ports / Marine Terminals and Contact Information

CITY	PORT / TERMINAL NAME	PHONE NUMBER
Crocket	NuStar - Petroleum Terminal	(510) 787 – 9785
Rodeo	Phillips 66 Oil Refinery	(510) 245 – 4475
Vallejo	Cal Maritime Academy	(707) 654 – 1156
Vallejo	Mare Island Dry Dock	(707) 652 – 7356
WETA (Passenger Ferry Operations)	All Passenger Ferry and Ferry Maintenance Facility Operations	(415) 364 – 3188

6000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – E [Carquinez Strait]

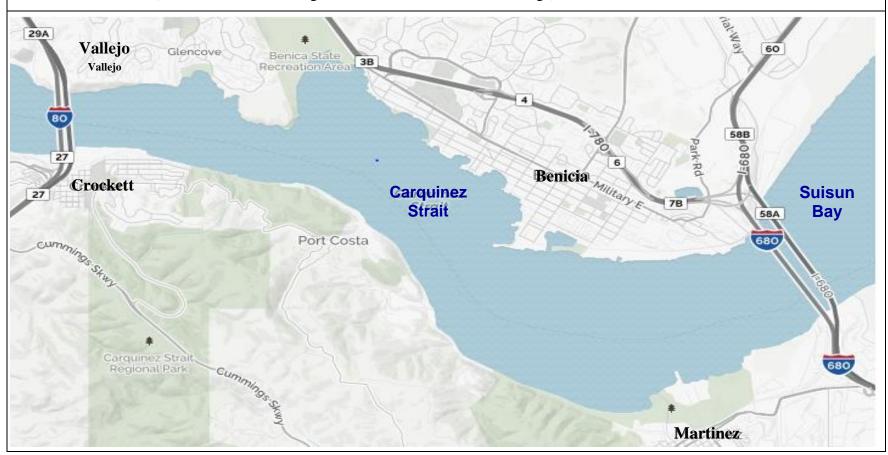
Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-E	Carquinez Strait	Waterway east of the I-80 (Carquinez Bridge), east to the I-680 (Martinez / Benicia Bridge).

Section	Waterway Zone	<u>Topic</u>	Page
6001	$MTSR_GWZ - E$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	89
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6003	$MTSR_GWZ-E$	Anchorages	90
6004	$MTSR_GWZ-E$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	91
6005	$MTSR_GWZ-E$	Ports and Marine Terminals located on port property	92
6006	$MTSR_GWZ-E$	Marine Terminals [Marine Terminals not associated with port authority]	95
6007	$MTSR_GWZ-E$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	97
6008	$MTSR_GWZ-E$	Government Facilities [Federal Government]	98
6009	$MTSR_GWZ-E$	Fishing Fleet Facilities [Commercial Fishing Industry]	98
6010	$MTSR_GWZ-E$	Cruise Ship Terminals	98
6011	$MTSR_GWZ-E$	Ferry Boat Terminals	98
6012	$MTSR_GWZ-E$	Excursion Boat Terminals [Day Trip Tours]	99
6013	$MTSR_GWZ-E$	Tugboat Companies	99
6014	$MTSR_GWZ-E$	Marinas [Recreational Boating]	99
6015	$MTSR_GWZ-E$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in $GWZ-E$	100
6016	MTSR_GWZ – E	Listing of Ports / Marine Terminals and Contact Information in GWZ – E	101

6001 MTSR_GWZ - E: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure

MTSR2_GWZ - E Carquinez Strait NOAA Chart # 18654, and 18657 http://mapshop.com/noaa-charts/pacificcoast7.html

Geographic Waterway Zone (GWZ) – E is located in the Carquinez Strait between the waterway east of the I-80 (Carquinez Bridge), eastward to the I-680 (Martinez / Benicia Bridge and Union Pacific Railroad Bridge).



6002 MTSR_GWZ - E: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON						
Location	Name of Deep Draft Channel	Chart Depth				
Vallejo -to- Martinez Carquinez Strait Deep-Draft Channel						
Vallejo -to- Martinez Carquinez Strait Deep-Draft Channel 55 ft. Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within Carquinez Strait Deep-Draft Channel: • Carquinez Strait: Light 21, and Lighted Buoy 25						

6003 MTSR_GWZ - E: Anchorages

Catego	ory 02: ANCHORAGES		
#	Location	Name of Anchorage	Characteristics
2-1	Carquinez Strait	Anchorage # 22	General Anchorage # 22 is located on the north side of Carquinez Strait Deep-Draft Channel south of the Port of Benicia
2-2	Carquinez Strait	Anchorage # 23	General Anchorage # 23 is located on the north side of Carquinez Strait Deep-Draft Channel east of Anchorage 22 southeast of the Port of Benicia
2-3	Carquinez Strait	Anchorage # 24	General Anchorage # 22 is located on the north side of Carquinez Strait Deep-Draft Channel west of Port of Benicia

6004 MTSR_GWZ – E: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03:	BRIDGES [Highway o	and Railroad] and	AIR DRAFT (AD)	
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD
Carquinez Strait	Interstate 80 Carquinez Bridge	Fixed Bridge	Interstate 80 Bridge is located at the north side of San Pablo Bay, and crosses over the west side of the Carquinez Strait Deep-Draft Channel at the west end near Vallejo, CA. The bridge is the separation point between GWZ-D and GWZ-E.	134 ft.
Carquinez Strait	Interstate 680 Benicia – Martinez Bridge	Fixed Bridge	Interstate 680 Bridge is located at the east side of Carquinez Strait. The City of Martinez is located on the south side of the bridge, and the City of Benicia and Port of Benicia is located on the north side of the bridge. The bridge is the separation point between GWZ-E and GWZ-F.	135 ft.
Carquinez Strait	Railroad Union Pacific Bridge	Lift-Span Bridge	Union Pacific Railroad Bridge is located at the east side of Carquinez Strait next to the Interstate 680 Bridge. The City of Martinez is located on the south side of the bridge, and the City of Benicia and Port of Benicia is located on the north side of the bridge.	135 ft.

6005 MTSR_GWZ - E: Ports and Marine Terminals located on port property

Category 04	PORTS	and	MARINE	TERMINALS	located on	nort pror	arts
Category 04	. IUNIS	anu	MANIME	ILMMINALS	iocateu on	հու սեւ ու	JEI LY

Name of Port	Physical Location	Contact Information	County
Port of Benicia	1997 Elm Road Benicia, CA 94510	[707] 745-2394	Solano County

General Description of Port Complex

The deep water Port of Benicia is operated by AMPORTS Company. The port is located in Benicia, approximately 19 miles northeast of the Port of Oakland and 25 miles northeast of the Port of San Francisco, and can accommodate both "Handymax" and "Panamax" size vessels.

Special Note

In the event of a Catastrophic Earthquake striking the San Francisco Bay region (Stafford Act Declaration), the Port of Benicia with its easy accessibility to major highways, railroads, and airport (Travis AFB) will serve as FEMA / Cal OES's primary designated sea ports to be utilized as a staging area / load-out area to transport emergency relief commodities via maritime back into the affected areas of the San Francisco Bay.

Intermodal Transportation Network

Highway System Servicing Port complex

• Interstate 780, Interstate 680, and Interstate 80

Railroad System Servicing Port complex

• Union Pacific Railroad (capable of 170 railcars simultaneously.

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: 36 ft.
- Gantry Cranes: none
- Mobile Harbor Cranes: none
- Other: 2401 ft. long pier capability is utilized for handling of vehicles (Ro/Ro vessels), Petroleum Coke and Rice (Break Bulk vessels).

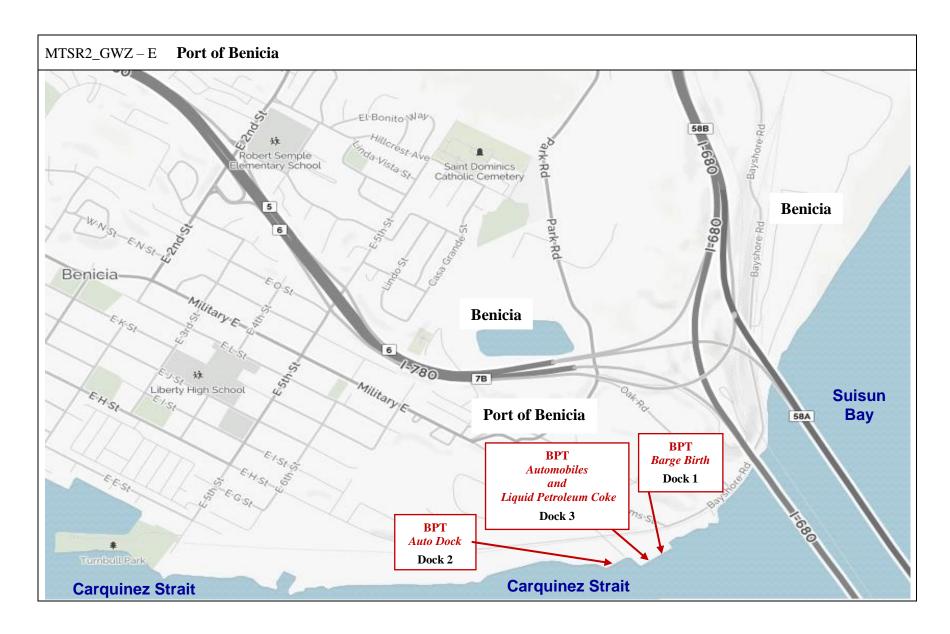
MARINE TERMINALS located on port property Types of Cargo Ships Dock / Terminal / Co. Name Type of Vessel(s) Receives UN Loc. Pier# Cargo Cargo **BNC** Benicia Port Terminal Co. (BPT) Barge Birth 1 Barge

Category 04: PORTS and MARINE TERMINALS located on port property

Port of Benicia (Western Region) Continued

MARINE TERMINAL located on port property						
UN Loc.	Dock / Pier #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
BNC	2	Benicia Port Terminal Co. (BPT)	Ro/Ro	Auto Car Dock	X	X
BNC	3	Benicia Port Terminal Co. (BPT)	Ro/Ro	Automobiles	X	X
BNC	3	Benicia Port Terminal Co. (BPT)	Tanker	Liquid Petroleum Coke		X

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide

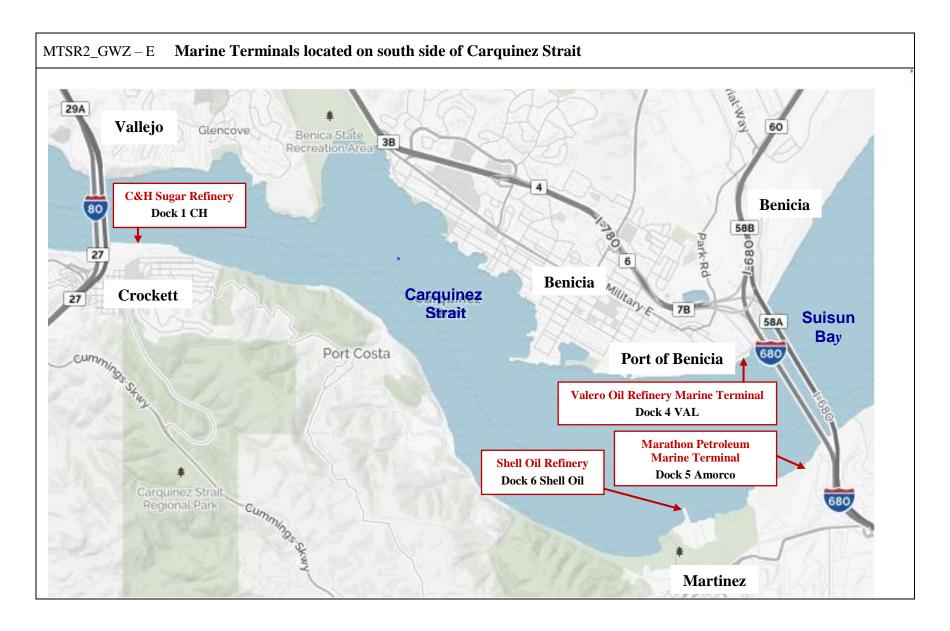


6006 MTSR_GWZ – E: Marine Terminals [Marine Terminals not associated with port authority]

Categor	ry 05:	MARINE	TERMINALS	[Marine Te	rminals not	associat	ed with port au	thorit	y]

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-1	Crockett	C&H Sugar Refinery	Bulk	Bulk Raw Sugar	X		CRM	1 CH
5-2	Benicia	Valero Oil Refinery Marine Terminal	Tanker	Petroleum Products	X	X	BNC	4 VAL
5-3	Martinez (west side of I- 680 Bridge)	Shell Oil Refinery	Tanker & Barge	Petroleum Products	X	X	MRZ	6 Shell Oil
5-4	Martinez (west side of I- 680 Bridge)	Marathon Petroleum Marine Terminal (Amorco) [Previous name: Tesoro] Bulk Storage and Distribution Facility	Tanker	Petroleum Products	X		MRZ	5 Amorco

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



6007 MTSR_GWZ – E: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

			_	_			
L Category 06: P	PETROLEUM	TERMINALS	[Petroleum	Refineries at	nd Petroleum	i Storage'	Terminals 1

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
6-1	Benicia	Valero Oil Refinery Terminal (the facility is located at the Port of Benicia)	Tanker	Receive at Facility Crude Oil, Refined Petro-chemical products,(Gasoline, Diesel, and Naphtha) Ship from facility Gasoline, Diesel, Fuel Oil, and Lube Oil	X	Х	BNC	4 VAL
6-2	Martinez (west side of I- 680 Bridge)	Shell Oil Refinery	Tanker & Barge	Receive at Facility Raw Crude Oil, Light Cycle Oil, Vacuum Gas Oil, and Marine Gas Oil Ship from facility Refined Gasoline Products, Diesel, Fuel Oil, and Aviation Fuel / Jet Fuel	X	Х	MRZ	6 Shell Oil
6-3	Martinez (west side of I- 680 Bridge)	Marathon Petroleum Marine Terminal (Amorco) [Previous name: Tesoro] Bulk Storage and Distribution Facility	Tanker	Receive at Facility Raw Crude Oil Ship from facility n/a	X		MRZ	5 Amorco

6008 MTSR_GWZ – E: Government Facilities [Federal Government]

Category 07: **GOVERNMENT FACILITIES** [Federal Government]

• No Government Facilities located in Carquinez Straits.

6009 MTSR_GWZ - E: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located in Carquinez Straits.

6010 MTSR_GWZ - E: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located in Carquinez Straits.

6011 MTSR_GWZ - E: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Terminals located in Carquinez Straits.

6012 MTSR_GWZ – E: Excursion Boat Terminals [Day Trip Tours]

Category 11: **EXCURSION BOAT TERMINALS** [Day Trip Tours]

• No Excursion Boat Terminals located in Carquinez Straits

6013 MTSR_GWZ - E: Tugboat Companies

Category 12: TUGBOAT COMPANIES

• No Tugboat Facilities located in Carquinez Straits.

6014 MTSR_GWZ – E: Marinas [Recreational Boating]

Category 13: MARINAS [Recreational Boating] { Note: Marina's are not identified on chart }						
Physical Location	Name of Marina	Physical Location	Name of Marina			
Benicia	Benicia Marina					
Crockett	Crockett Marine Services					
Martinez	Martinez Marina					

6015 MTSR_GWZ – E: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 01 Sea Ports located within GWZ – E [Port of Benicia]
TERMINALS	Total of 06 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – E
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – E
FERRIES	Total of 00 Ferry Passenger Terminals located within GWZ – E

Types of Maritime Cargo Received within GWZ-E

- Automobiles
- Petroleum Products
 - Aviation Fuels
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Light Cycle Oil
 - Lube Oils
 - Naphtha
- Sugar (Bulk Raw Sugar)

Types of Maritime Cargo Shipped from GWZ - E

- Automobiles
- Petroleum Products
 - Aviation Fuels
 - Coke (Liquid Petro Coke)
 - Coke (Petro Coke)
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Light Cycle Oil
 - Lube Oils
 - Naphtha

6016 MTSR_GWZ – E: Listing of Ports / Marine Terminals and Contact Information

CITY	PORT / TERMINAL NAME	PHONE NUMBER
Benicia	Port of Benicia (operated by Benicia Port Terminal Company)	(707) 486 – 1761
Benicia	VALERO Oil Refinery – Benicia Terminal	(707) 745 – 7205
Crockett	C&H Sugar Company, Inc.	(510) 787 – 4352
Martinez (West Martinez)	Marathon Petroleum Oil Terminal (formally known as TESORO)	(925) 372 – 3106
Martinez (West Martinez)	Shell Oil Refinery	(925) 313 – 5204

7000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – F [Suisun Bay]

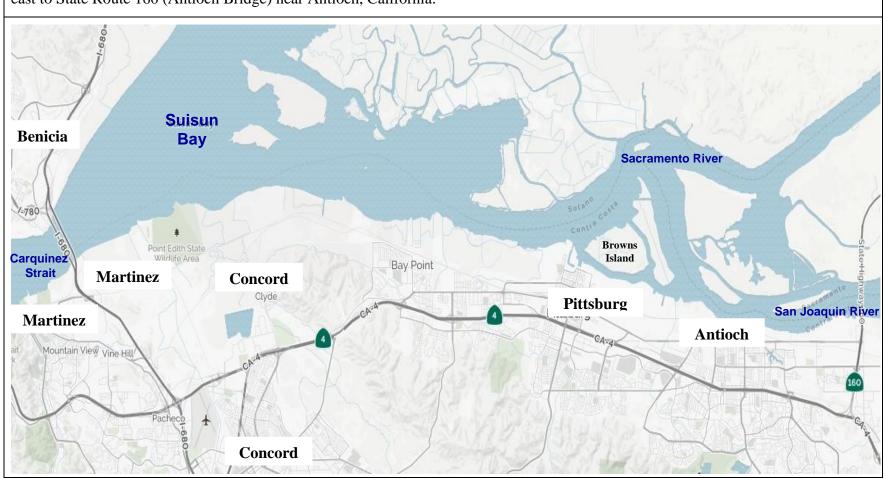
Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-F	Suisun Bay	Waterways east of I-680 (Martinez / Benicia Bridge), east to State Route 160 (Antioch Bridge) near Antioch, California.

Section	Waterway Zone	<u>Topic</u>	<u>Page</u>
7001	$MTSR_GWZ - F$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	103
7002	$MTSR_GWZ - F$	Deep-Draft Channels, Chart Depth, and Essential ATON	104
7003	$MTSR_GWZ - F$	Anchorages	104
7004	$MTSR_GWZ-F$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	105
7005	$MTSR_GWZ-F$	Ports and Marine Terminals located on port property	105
7006	$MTSR_GWZ-F$	Marine Terminals [Marine Terminals not associated with port authority]	106
7007	$MTSR_GWZ-F$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	108
7008	$MTSR_GWZ-F$	Government Facilities [Federal Government]	109
7009	$MTSR_GWZ-F$	Fishing Fleet Facilities [Commercial Fishing Industry]	109
7010	$MTSR_GWZ - F$	Cruise Ship Terminals	109
7011	$MTSR_GWZ - F$	Ferry Boat Terminals	109
7012	$MTSR_GWZ-F$	Excursion Boat Terminals [Day Trip Tours]	110
7013	$MTSR_GWZ - F$	Tugboat Companies	110
7014	$MTSR_GWZ-F$	Marinas [Recreational Boating]	110
7015	$MTSR_GWZ - F$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in $GWZ-F$	111
7016	MTSR_GWZ - F	Listing of Ports / Marine Terminals and Contact Information in GWZ – F	112

7001 MTSR_GWZ - F: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure

MTSR2_GWZ - F Suisun Bay NOAA Chart # 18656 http://mapshop.com/noaa-charts/pacificcoast7.html

Geographic Waterway Zone (GWZ) – F is located in the Suisun Bay in the waterways east of the I-680 (Martinez / Benicia Bridge), east to State Route 160 (Antioch Bridge) near Antioch, California.



7002 MTSR_GWZ - F: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON

Location	Name of Deep Draft Channel	
Suisun Bay	Suisun Bay Deep-Water Channel	49 ft.

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within Suisun Bay:

- Point Edith Crossing South Range Front Light
- Point Edith Crossing South Range Light
- Channel Light Buoy 9
- Point Edith Crossing Range Front Light
- Point Edith Crossing Range Rear Light
- Roe Island Channel Range Front Light
- Roe Island Channel Range Rear Light
- Suisun Bay Light 34

7003 MTSR_GWZ - F: Anchorages

Category 02: ANCHORAGES

No.	Location	Name of Anchorage	c Characteristics		
2-1	Suisun Bay	Anchorage # 26	General Anchorage # 26 is located on the west side of Suisun Bay northeast of the Port of Benicia near Army Point		
2-2	Suisun Bay	Anchorage # 27	General Anchorage # 27 is located northeast part of the Suisun Bay west of Ryer Island		

7004 MTSR_GWZ - F: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03:	BRIDGES [Highway and Railroad] and AIR DRAFT (AD)					
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD		
Suisun Bay	Interstate 680 Benicia – Martinez Bridge	Fixed Bridge	Interstate 680 Bridge is located at the east side of Carquinez Strait. The City of Martinez is located on the south side of the bridge, and the City of Benicia and Port of Benicia is located on the north side of the bridge. The bridge is the separation point between GWZ-E and GWZ-F.	135 ft.		
Suisun Bay	State Route 160 Antioch Bridge	Fixed Bridge	State Route 160 Bridge crosses over the San Joaquin River (Deep-Water Channel) east of Antioch, CA.	138 ft.		

7005 MTSR_GWZ - F: Ports and Marine Terminals located on port property

Category 04: MARINE TERMINALS located on port property

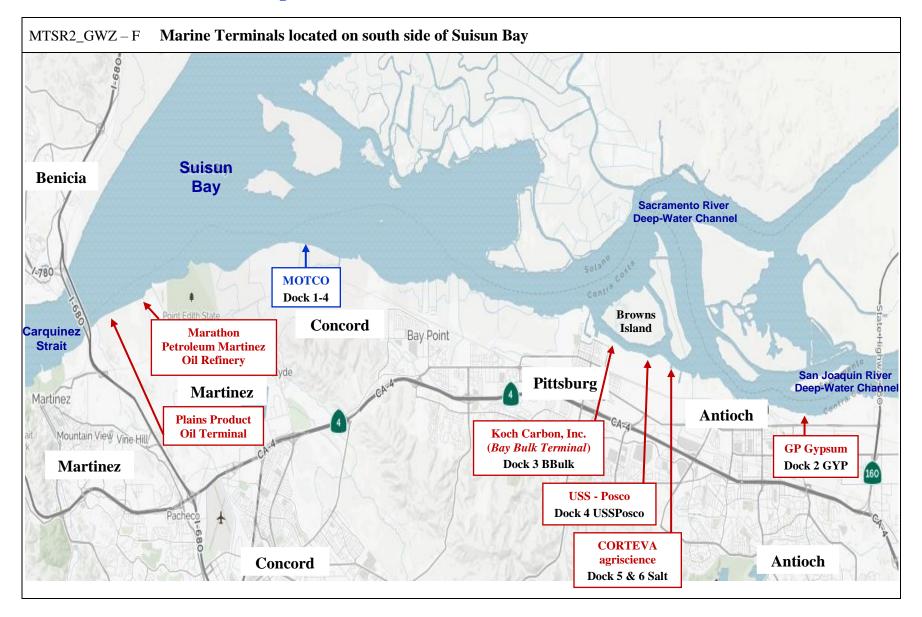
• No Ports located in Suisun Bay.

7006 MTSR_GWZ – F: Marine Terminals [Marine Terminals not associated with port authority]

Category 05: MARINE TERMINALS	<i>Facilities are not associated with port authority</i>]
Category 05. White I british with the	I detities are not associated with port dufforting

category con martin and a remove and not associated man port aumonally									
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #	
5-1	Martinez	Plains Product Terminals. LLC Bulk Storage and Distribution Facility	Tanker	Petroleum Products	X	X	MRZ	6	
5-2	Martinez	Marathon Petroleum Martinez Oil Refinery (Avon Wharf) [Previous name: Andeavor]	Tanker & Barge	Petroleum Products	X	X	MRZ	8 Avon	
5-3	Concord	MOTCO	Bulk and Ro/Ro	Containers	X	X	CCR	1 – 4	
5-4	Pittsburg	Koch Carbon, Inc. (Bay Bulk Terminal)	Bulk	Petroleum Coke		X	PBG	3 BBulk	
5-5	Pittsburg	USS - Posco	Bulk	Steel Coils	X		PBG	4 USSPossco	
5-6	Pittsburg	CORTEVA agriscience	Bulk	Salt (Brine Salt)	X		PBG	5 & 6 Salt	
5-7	Antioch	GP Gypsum Terminal	Bulk	Raw Gypsum	X		ANZ	2 GYP	

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



2007 MTSR_GWZ – F: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
6-1	Martinez (East of I-680 Bridge)	Plains Product Terminals. LLC Bulk Storage and Distribution Facility	Tanker & Barge	Receive at Facility Crude Oil, and Refined Products (Diesel, Gasoline, and Gasoline Components), and Aviation Fuels Ship from facility Crude Oil, and Refined Products (Diesel, Gasoline, and Gasoline Components), and Aviation Fuels	X	Х	MRZ	6
6-2	Martinez (East of I-680 Bridge)	Marathon Petroleum Martinez Oil Refinery (Avon Wharf) [Previous name: Andeavor]	Tanker & Barge	Receive at Facility Gasoline, Diesel, and Fuel Oils Ship from facility Refined Products (Gasoline, Diesel, and Fuel Oil)	X	X	MRZ	8 Avon
6-3	Pittsburg	Koch Carbon, Inc.	Bulk	Receive at Facility n/a Ship from facility		X	PBG	3 BBulk

Petroleum Coke

7008 MTSR_GWZ - F: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]							
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #			
7-1	Concord	U.S. Army 834 Transportation Battalion	Military Outload Facility (MOTCO)	CCR	1-4			

7009 MTSR_GWZ - F: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located in Suisun Bay.

7010 MTSR_GWZ – F: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located in Suisun Bay.

7011 MTSR_GWZ - F: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Terminals located in Suisun Bay.

7012 MTSR_GWZ – F: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]

• No Excursion Boat Terminals located in Suisun Bay.

7013 MTSR_GWZ - F: Tugboat Companies

Category 12: TUGBOAT COMPANIES

• No Tugboat Facilities located in Suisun Bay.

7014 MTSR_GWZ – F: Marinas [Recreational Boating]

Category 13: MARINAS	[Recreational Boating	{ Note: Marina	's are not identified on chart }
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Physical Location	Name of Marina	Physical Location	Name of Marina
Antioch	Antioch Marina	Pittsburg	McAvoy Yacht Harbor
Antioch	Driftwood Marina	Pittsburg	Pittsburg Marina
Antioch	Llyod's Holiday Harbor		
Antioch	New Bridge Marina		
Antioch	San Joaquin Yacht Harbor		

7015 MTSR_GWZ – F: Summary of Ports / Maritime Terminals and Cargo (received / shipped)

PORTS Total of 00 Sea Ports located within GWZ – F	
TERMINALS Total of 06 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – F	
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – F
FERRIES	Total of 00 Ferry Passenger Terminals located within GWZ – F

Types of Maritime Cargo Received within GWZ-F

- Gypsum
- Military Cargo
- Petroleum Products
 - Aviation Fuels
 - Coke (Petro Coke)
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Lube Oils
- Salt
- Steel Coils

Types of Maritime Cargo Shipped from GWZ - F

- Military Cargo
- Petroleum Products
 - Aviation Fuels
 - Coke (Petro Coke)
 - Crude Oil
 - Diesel
 - Ethanol
 - Fuel Oils
 - Gasoline Components
 - Lube Oils

7016 MTSR_GWZ – F: Listing of Ports / Marine Terminals and Contact Information

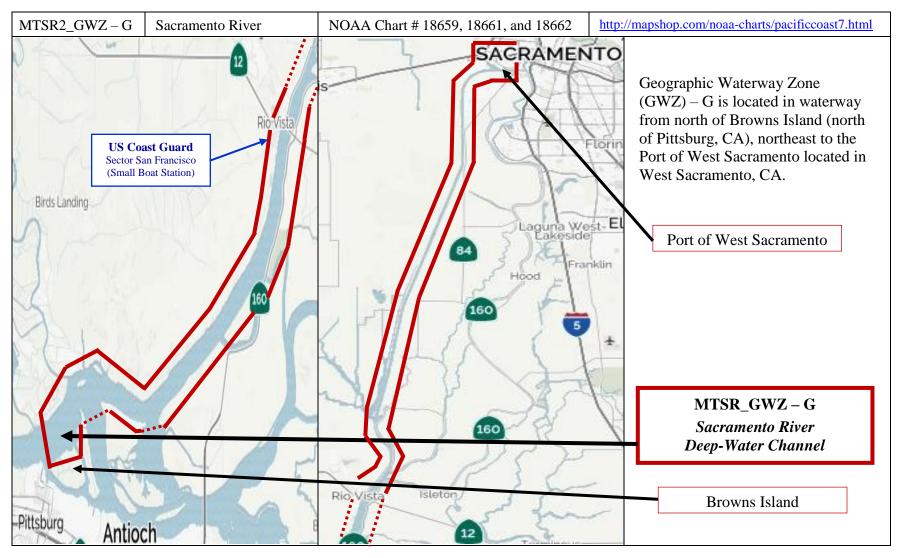
CITY	PORT / TERMINAL NAME	PHONE NUMBER
Antioch	Georgia-Pacific Gypsum	(925) 732 – 4524
Concord	MOTCO (834 th Transportation Battalion)	(925) 246 – 4109
Martinez (East Martinez)	Marathon Petroleum Oil Refinery (formally known as TESORO)	(925) 327 – 3106
Martinez (East Martinez)	Plains All American	(925) 372 – 5219
Pittsburg	CORTEVA agriscience	(925) 432 – 5278
Pittsburg	KOCH Carbon, LLC	(925) 963 – 3834
Pittsburg	USS Possco	(925) 439 – 6180

8000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – G [Sacramento River Deep Water Channel]

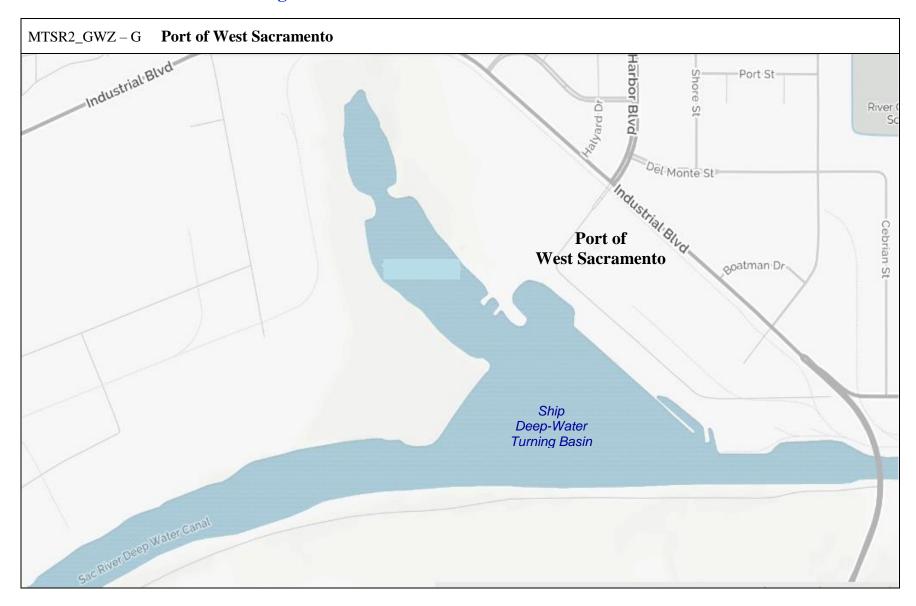
Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-G	Sacramento River	Waterway from north of Browns Island (north of Pittsburg, CA), northeast to the Port of West Sacramento located in West Sacramento, California.

Section	Waterway Zone	Topic	Page
8701	$MTSR_GWZ - G$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	114
8002	$MTSR_GWZ-G$	Deep-Draft Channels, Chart Depth, and Essential ATON	116
8003	$MTSR_GWZ - G$	Anchorages	116
8004	$MTSR_GWZ-G$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	116
8005	$MTSR_GWZ-G$	Ports and Marine Terminals located on port property	117
8006	$MTSR_GWZ-G$	Marine Terminals [Marine Terminals not associated with port authority]	120
8007	$MTSR_GWZ-G$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	121
8008	$MTSR_GWZ-G$	Government Facilities [Federal Government]	121
8009	$MTSR_GWZ-G$	Fishing Fleet Facilities [Commercial Fishing Industry]	121
8010	$MTSR_GWZ-G$	Cruise Ship Terminals	121
8011	$MTSR_GWZ-G$	Ferry Boat Terminals	122
8012	$MTSR_GWZ-G$	Excursion Boat Terminals [Day Trip Tours]	122
8013	$MTSR_GWZ-G$	Tugboat Companies	122
8014	$MTSR_GWZ-G$	Marinas [Recreational Boating]	123
8015	$MTSR_GWZ-G$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ-G	125
8016	$MTSR_GWZ-G$	Listing of Ports / Marine Terminals and Contact Information in GWZ - G	126

8001 MTSR_GWZ - G: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



8002 MTSR_GWZ - G: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON						
Location	Name of Deep Draft Channel	Chart Depth				

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within Sacramento River Deep-Draft Channel:

Sacramento River Deep-Draft Channel

• Sacramento River Deep Water Ship Channel: Light 1, Light 2, Light 3, Light 6, Light 9, Light 12, Light 17, Light 22, Light 29, and Light 49A

8003 MTSR_GWZ - G: Anchorages

Inland Delta Region

Catego	ory 02: ANCHORAGES		
No.	Location	Name of Anchorage	Characteristics
2-1	Inland Delta Region	Anchorage # 28	General Anchorage # 28 is located at the west end of Sherman Island (Point Sacramento) next to the Sacramento River Deep-Draft Channel.

8004 MTSR_GWZ – G: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03:	Category 03: BRIDGES [Highway and Railroad] and AIR DRAFT (AD)						
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD			
Sacramento River	Hwy 12 Rio Vista Bridge	Lift Bridge	Hwy 12 Bridge crosses over the Sacramento Deep-Draft Channel at Rio Vista, CA.	141 ft.			

28 ft.

8005 MTSR_GWZ - G: Ports and Marine Terminals located on port property

Category 04:	PORTS	and	MARINE	TERMINALS	located on	port property
Cutogory or.	IOILI	unu	TATE FIRST ATT		iocatea on	port property

Name of Port	Physical Location	Contact Information	County
Port of West Sacramento	2895 Industrial Way West Sacramento, CA 95691	[916] 374-1866	Yolo County

General Description of Port Complex

The Port of West Sacramento is operated by SSA Pacific. The port is a "Handymax / Non – Panamax Port", and is the 6th busiest Bulk and Break-Bulk port in California. The port is 79 nautical miles northeast of San Francisco, and is a deep-water gateway for Northern California agriculture and industrial bulk industries serving one of the world's richest agricultural regions, providing easy access for Northern California farmers. The port's entry from the San Francisco Bay area is via the Sacramento River, and the port is located on the Sacramento deep-water channel at West Sacramento. In addition, the port sits on 75 acres of land and has plenty of open area for lay-down cargo.

Intermodal Transportation Network

Highway System Servicing Port complex

- Interstate 5, Interstate 80, Hwy 50, and Hwy 99
- Railroad System Servicing Port complex
- Union Pacific, and Sierra Northern Railroad

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: 30 ft.
- Gantry Cranes: No
- Mobile Harbor Crane: Yes
- Other: 22,000 ton storage elevator / storage silo, bulk shiploader / off-load / load conveyer belt system, Grain Storage Silos, Large lay-down area, and covered warehouses capable of storing up to 40,000 tons.

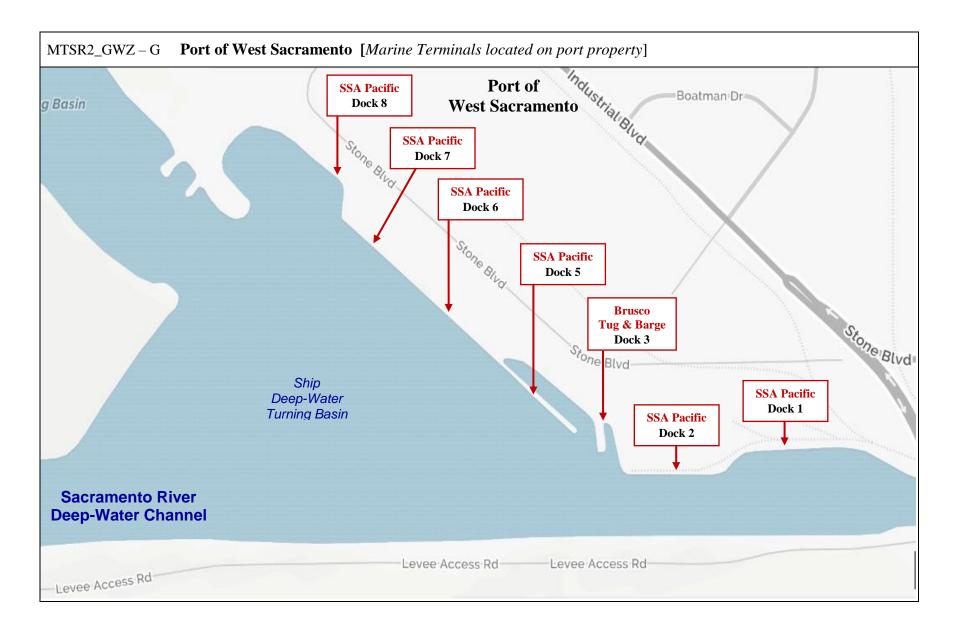
MARINE TERMINALS located on port property Types of Cargo UN Loc. Dock # Terminal / Co. Name Type of Vessel(s) Receives Ships Cargo Cargo SAC SSA Pacific Dry Bulk X 1 Rice and other grains Dry Bulk Bagged Rice, Break Bulk Cargo, Cement, SAC 2 SSA Pacific X X and General Cargo Break Bulk

Category 04: PORTS and MARINE TERMINALS located on port property

Port of West Sacramento Continued

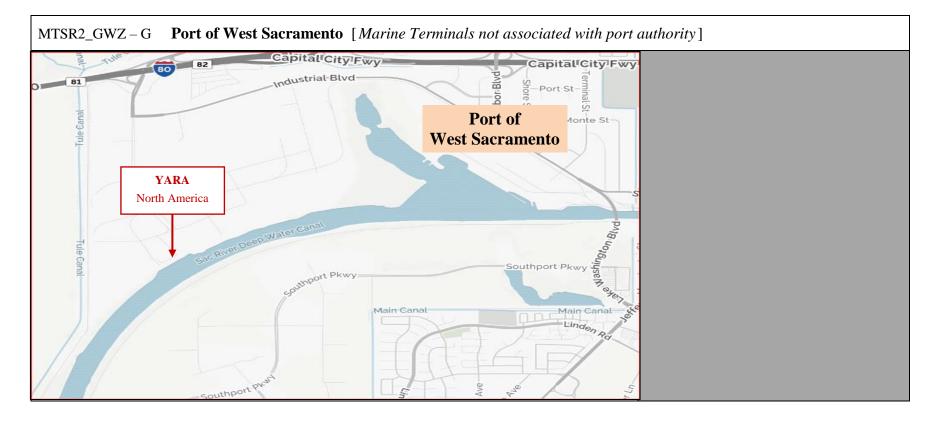
MARINE TERMINALS located on port property						
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo
SAC	3	Brusco Tug & Barge		Tug & Barge Service		
SAC	5	SSA Pacific	Dry Bulk	Bulk Mineral, and Bulk Grain		X
SAC	6	SSA Pacific	Dry Bulk Break Bulk	General Cargo, Sling Bagged Rice, Heavy Lift Materials, and Bulk Cement (Open dock and available for project cargo)	X	X
SAC	7	SSA Pacific	Dry Bulk Break Bulk	General Cargo, Bagged Rice, News Print, and Fertilizer	X	X
SAC	8	SSA Pacific	Dry Bulk	Dock is utilized for various Dry Bulk cargos		X

APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



8006 MTSR_GWZ - G: Marine Terminals [Marine Terminals not associated with port authority]

Catego	Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]							
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-1	West Sacramento	YARA North America	Liquid Bulk Dry Bulk	UAN 32 (Fertilizer) Dry Urea	X		SAC	1



8007 MTSR_GWZ – G: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Storage Terminals]

• No Petroleum Terminals located on Sacramento River Deep-Water Channel.

8008 MTSR_GWZ - G: Government Facilities [Federal Government]

Catego	Category 07: GOVERNMENT FACILITIES [Federal Government]					
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #	
7-1	Rio Visa	U.S. Coast Guard – Sector San Francisco	Small Boat Station	RVA	n/a	

8009 MTSR_GWZ - G: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located on Sacramento River Deep-Water Channel.

8010 MTSR_GWZ - G: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located on Sacramento River Deep-Water Channel.

8011 MTSR_GWZ - G: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Terminals located on Sacramento River Deep-Water Channel.

8012 MTSR_GWZ - G: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]

• No Excursion Boat Terminals located on Sacramento River Deep-Water Channel.

8013 MTSR_GWZ - G: Tugboat Companies

Category 12: TUGBOAT COMPANIES				
Physical Location	Tugboat Terminal Name	UN Loc.	Dock #	Notations
West Sacramento	Brusco Tug & Barge, Inc.	SAC	3	Located at the Port of West Sacrament

8014 MTSR_GWZ – G: Marinas [Recreational Boating]

- ·		,	
Physical Location	Name of Marina	Physical Location	Name of Marina
Clarksburg	Arrowhead Harbor	Rio Vista	Brannan Island State Rec. Area
Clarksburg	Clarksburg Marina	Rio Vista	Delta Marina Yacht Harbor
Courtland	Rockin Docks	Rio Vista	Eddo's Harbor & RV Park
Courtland	Rosie's Rockin' Docks	Rio Vista	Sherman Lake Resort
Delta Loop	Riverboat Marina	Sacramento	Alamar Marina
Isleton	Andreas Cove	Sacramento	Cliff's Marina
Isleton	B & W Resort Marina	Sacramento	Freeport Marina and Bait
Isleton	Bruno's Island Yacht Harbor	Sacramento	Metro Marina Del Rio
Isleton	Delta Bay Marina	Sacramento	Old Sacramento Docks
Isleton	Happy Harbor Marina	Sacramento	Rio Ramaza Marina
Isleton	Ko-Ket Resort	Sacramento	River View Marina
Isleton	Korth's Pirates Lair Marina	Sacramento	Riverbank Marina
Isleton	Martin's Rainbow Resort	Sacramento	Sacramento Marina
Isleton	Owl Harbor Marina	Sacramento	Virgin Sturgeon
Isleton	Outrigger Marina	West Sacramento	Sherwood Harbor Marina
Isleton	Oxbow Marina	Thornton	New Hope Landing & Trailer
Isleton	Perry's Boat Harbor	Walnut Grove	Boon Dox
Isleton	Rancho Marina	Walnut Grove	Dagmar's Landing
Isleton	Spindrift Marina	Walnut Grove	Deckhands Marine

Category 13: MARINAS [Recreational Boating] { Note: Marina's are not identified on chart } Continued				
Physical Location	Name of Marina	Physical Location	Name of Marina	
Isleton	Vieira's Resort, Inc	Walnut Grove	Hidden Harbor Marina	
Isleton	Willow Berm Marina	Walnut Grove	Landing 63	
Locke	Boathouse Marina	Walnut Grove	Snug Harbor	
		Walnut Grove	Walnut Grove Marina	
		Walnut Grove	Wimpy's Marina	

8015 MTSR_GWZ - G: Summary Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 01 Sea Ports located within GWZ – G [Port of West Sacramento]
TERMINALS	Total of 07 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – G
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – G
FERRIES	Total of 00 Ferry Passenger Terminals located within GWZ – G

Types of Maritime Cargo <u>Received</u> within GWZ – G	Types of Maritime Cargo Shipped from GWZ - G
Cement	Cement
Project Cargo	Rice and Grains
UAN 32 (Liquid Fertilizer)	Minerals
Urea (Dry Fertilizer)	

8016 MTSR_GWZ – G: Listing of Ports / Marine Terminals and Contact Information

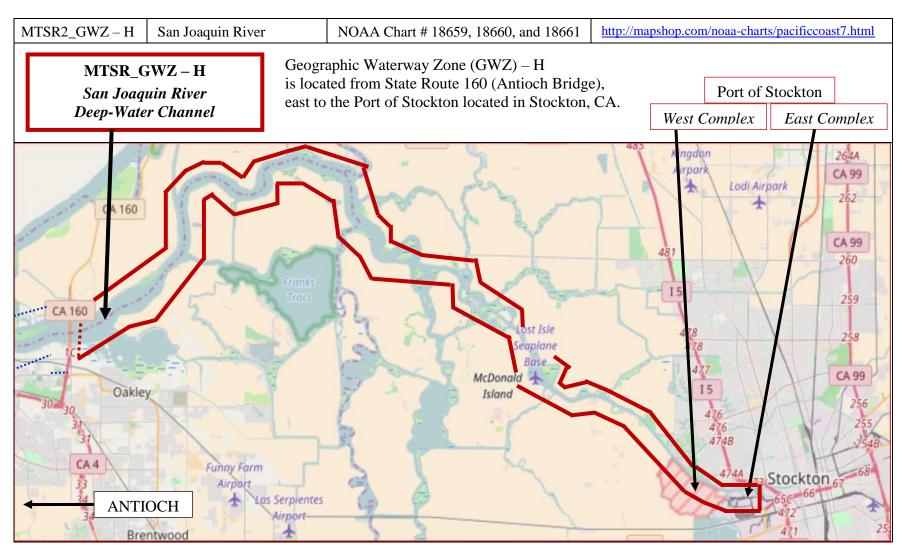
CITY	PORT / TERMINAL NAME	PHONE NUMBER
West Sacramento	Port of West Sacramento (Operated by SSA Marine)	(916) 374 – 8943
West Sacramento	Tug and Barge – Brusco Tug & Barge	(916) 372 – 0986
West Sacramento	YARA North America	(916) 375 – 6180

9000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) – H [San Joaquin River Deep Water Channel]

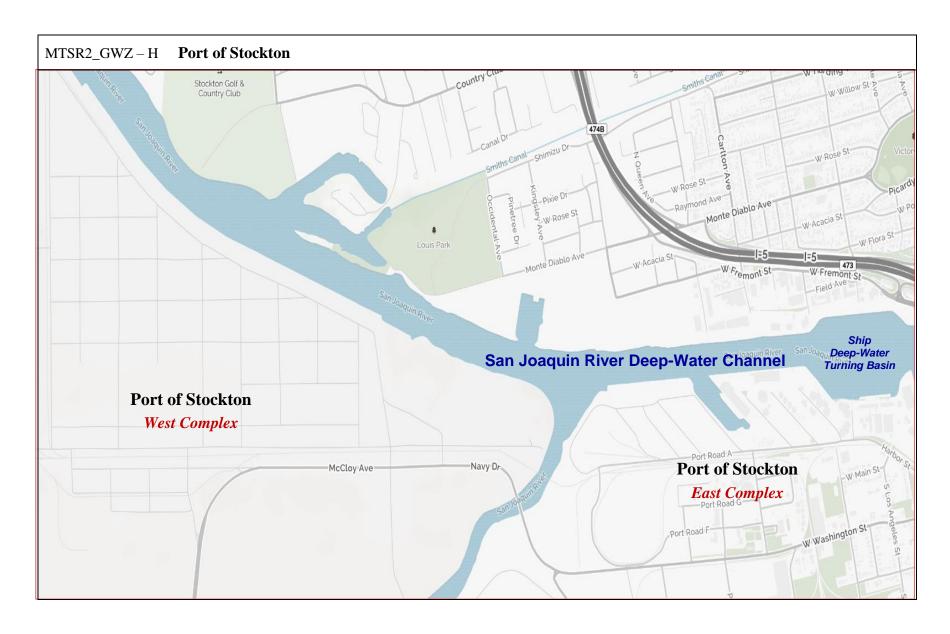
Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-H	San Joaquin River	Waterway from State Route 160 (Antioch Bridge), east to the Port of Stockton located in Stockton, California.

Section	Waterway Zone	Topic	Page
9001	$MTSR_GWZ - H$	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	128
9002	$MTSR_GWZ - H$	Deep-Draft Channels, Chart Depth, and Essential ATON	130
9003	$MTSR_GWZ - H$	Anchorages	130
9004	$MTSR_GWZ - H$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	130
9005	$MTSR_GWZ - H$	Ports and Marine Terminals located on port property	131
9006	$MTSR_GWZ - H$	Marine Terminals [Marine Terminals not associated with port authority]	136
9007	$MTSR_GWZ - H$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	137
9008	$MTSR_GWZ-H$	Government Facilities [Federal Government]	137
9009	$MTSR_GWZ-H$	Fishing Fleet Facilities [Commercial Fishing Industry]	137
9010	$MTSR_GWZ-H$	Cruise Ship Terminals	137
9011	$MTSR_GWZ - H$	Ferry Boat Terminals	138
9012	$MTSR_GWZ-H$	Excursion Boat Terminals [Day Trip Tours]	138
9013	$MTSR_GWZ - H$	Tugboat Companies	138
9014	$MTSR_GWZ-H$	Marinas [Recreational Boating]	139
9015	$MTSR_GWZ-H$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ - H	141
9016	$MTSR_GWZ-H$	Listing of Ports / Marine Terminals and Contact Information in GWZ - H	142

9001 MTSR_GWZ - H: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



9002 MTSR_GWZ - H: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON					
Location	Location Name of Deep Draft Channel Chart Depth				
Inland Delta Region to include east end of Suisun Bay at Browns Island.	San Joaquin River Deep-Draft Channel	39 ft.			

Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within San Joaquin River Deep-Draft Channel:

• San Joaquin River Deep Water Ship Channel (*beginning at New York Point*): Light 8 – West End of West Island, Light 11 – Eastern End of West Island, Light 18 – After passing through Antioch Bridge, Light 19 – After Blind Point, Light 25 – False River, Light 30, Light 39 – After Oulton Point, Light 43, Light 40 – Seven mile Slough, Light 47 – At Webb Point, and Light 54 – At Potato Point.

9003 MTSR_GWZ - H: Anchorages

Catego	Category 02: ANCHORAGES					
No.	Location	Name of Anchorage	Characteristics			
2-1	Inland Delta Region	Anchorage # 30	Explosive Anchorage # 30 is located on the east side of Mandeville Point of which is located on the south side of Venice Island on the San Joaquin River Deep-Draft Channel.			

9004 MTSR_GWZ – H: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: BRIDGES [Highway and Railroad] and AIR DRAFT (AD)					
Location	Name of Bridge	Type of Bridge	Waterway Crossing and Characteristics	AD	
San Joaquin River	State Route 160 Antioch Bridge	Fixed Bridge	State Route 160 Bridge crosses over the San Joaquin River (Deep-Water Channel) east of Antioch, CA.	141 ft.	

9005 MTSR_GWZ - H: Ports and Marine Terminals located on port property

Category 04: PORTS and MARINE TERMINALS located on port property						
Name of Port Port of Stockton	Physical Location 2201 West Washington Street Stockton, CA 95203	Contact Information [209] 946-0246	County San Joaquin County			

General Description of Port Complex

The Port of Stockton is a "Handymax / Panamax Port", and is the 2nd busiest Bulk and Break-Bulk port in California. The port is an inland sea port located in the northern part of California's Central Valley and is approximately 70 nautical miles east of the Golden Gate Bridge in San Francisco, and is in a strategic location within one of the world's most productive agricultural regions has made it an important distribution point for crop nutrients on the West Coast. In addition, the port's complexity giving it the capability of handling specialized cargo enables it to be a vital to serving various other industries within the San Joaquin Valley.

Special Note

In the event of a Catastrophic Earthquake striking the San Francisco Bay region (Stafford Act Declaration), the Port of Stockton with its easy accessibility to major highways, railroads, and airports will serve as one of FEMA / Cal OES's designated sea ports to be utilized as a staging area / load-out area to transport emergency relief commodities via maritime back into the affected areas of the San Francisco Bay.

Intermodal Transportation Network

Highway System Servicing Port complex

- Interstate 5, Hwy 4, and Hwy 99
- Railroad System Servicing Port complex
- Central California Traction Company (Internal port rail system), Union Pacific, and BNSF Burlington Northern Santa Fe

Vessel & Cargo Handling Attributes

- Harbor Channel Depth: 35 ft.
- 1 Mobile Gantry Crane
- 1 Rail Mounted Gantry Crane
- 2 Mobile Harbor Cranes
- Conveyer Belt systems for off-loading dry bulk materials
- Transit Storage Sheds
- Large lay-down yards for cargo

Category 04: PORTS and MARINE TERMINALS located on port property

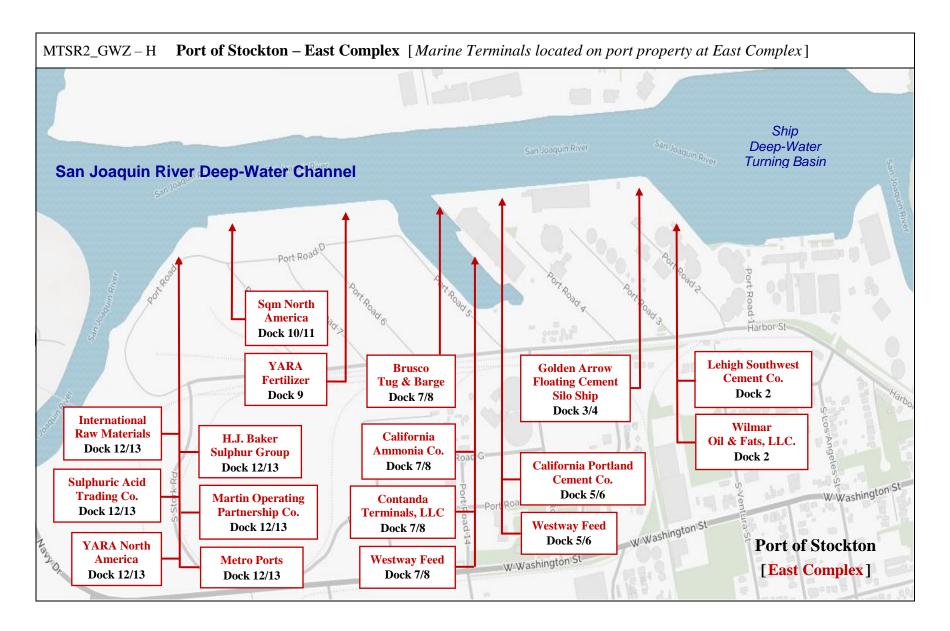
Port of Stockton Continued

MARINE TERMINALS located on port property

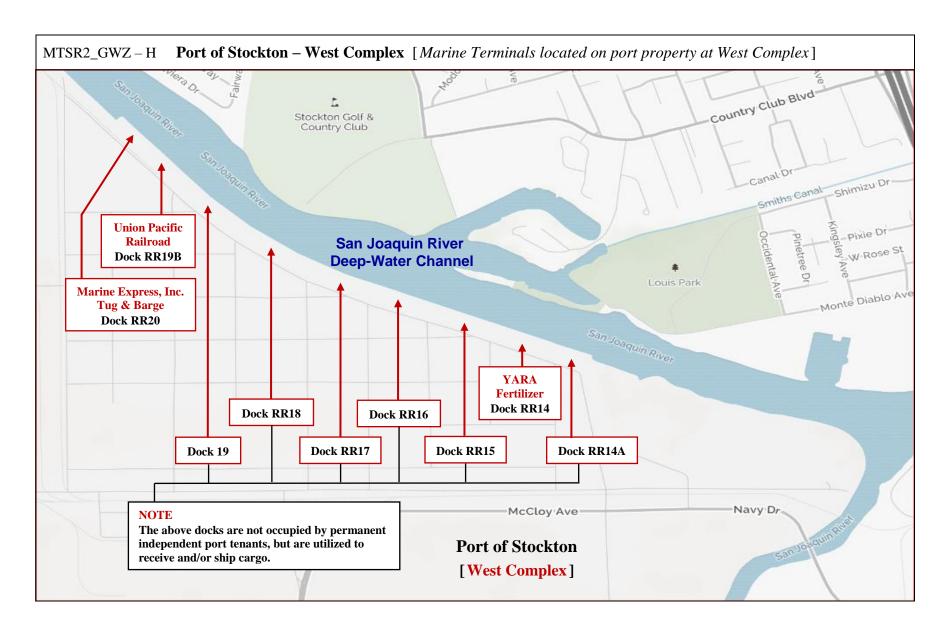
PORT OF STOCKTON – "EAST COMPLEX"

UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	el(s) Types of Cargo		Ships Cargo
SCK	2	Lehigh Southwest Cement Co.	Dry Bulk	Cement, and Slag	X	
SCK	2	Wilmar Oil & Fats, LLC	Liquid Bulk	Food Oils (Palm Oil)	X	
SCK	3/4	Golden Arrow Floating Cement Silo Ship	Dry Bulk	Ship is stationary and utilized for storing cement		
SCK	5/6	California Portland Cement Co.	Dry Bulk	Cement	X	
SCK	5/6	Westway Feed	Liquid Bulk	Molasses	X	
SCK	7/8	Westway Feed	Liquid Bulk	Molasses	X	
SCK	7/8	California Ammonia Co.	Liquid Bulk	Anhydrous Ammonia, and Liquid Fertilizer	X	
SCK	7/8	Contanda Terminals, LLC	Liquid Bulk	UAN 32 [Diesel Exhaust Fluid] (also known as Air-I)	X	
SCK	7/8	Brusco Tug & Barge Service	Tugboats	Tug & Barge Service		
SCK	9	YARA North America	Liquid Bulk	Fertilizer	X	
SCK	9	Various other uses for Dock 9	Dry Bulk Liquid Bulk	Liquid Fertilizers, Miscellaneous Bulk, Project Cargo, Rice, and Steel	X	X
SCK	10/11	Sqm North America (Operated by the Port of Stockton)	Dry Bulk	Bulk Fertilizer	X	
SCK	10/11	Various other uses for Dock 10/11 (Operated by the Port of Stockton)	Dry Bulk	Bauxite, Gypsum, Project Cargo, Steel Products, Tire chips (rubber) and Ro/Ro	X	X

Category 04: PORTS and MARINE TERMINALS located on port property								
Port of Stockton Continued								
MARIN	E TERM	IINALS located on port property						
PORT (OF STOC	CKTON – "EAST COMPLEX"						
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo		
SCK	12/13	H.J. Baker Sulphur Group	Dry Bulk	Sulphur		X		
CK	12/13	International Raw Materials, Ltd.	Liquid Bulk	Liquid Fertilizer	X			
SCH	12/13	Martin Operating Partnership Co.	Dry Bulk	Sulphur		X		
SCK	12/13	Metro Ports	Dry Bulk	Coal, Coke (Petroleum Coke), and Iron Ore		X		
SCK	12/13	Sulphuric Acid Trading Company	Liquid Bulk	Sulphuric Acid	X			
SCK	12/13	YARA North America	Liquid Bulk	Liquid Fertilizer	X			
PORT	OF STOC	CKTON – "WEST COMPLEX"						
UN Loc.	Dock #	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo		
SCK	RR14	YARA	Dry Bulk	Fertilizer	X			
SCK	RR19B	Union Pacific Railroad	Break-Bulk	Steel Rail (Railroad Tracks)	X	X		
SCK	RR14A RR15, RR16, RR17, RR18, RR19, RR20	These docks are not occupied by permanent independent port tenants, but are utilized to receive and/or ship cargo.	Various	Containers, Corn, Dry Fertilizer, Miscellaneous Bulk materials, Project Cargo, Rice, Steel, and Windmills for generating electricity.	X	X		

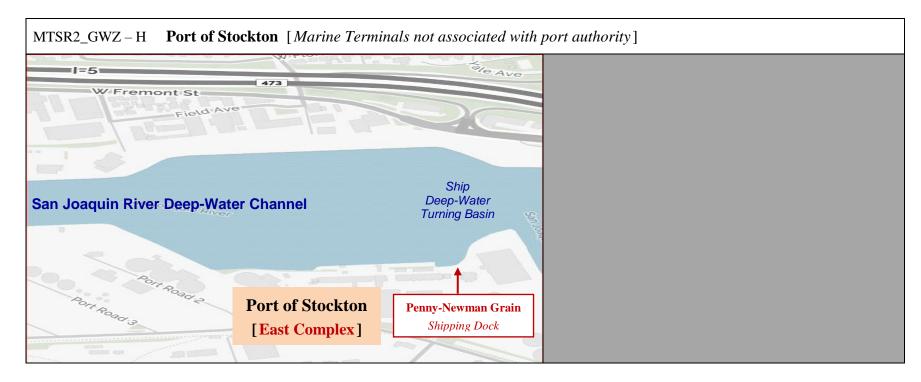


APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



9006 MTSR_GWZ – H: Marine Terminals [Marine Terminals not associated with port authority]

Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]								
No.	Physical Location	Terminal / Co. Name	Type of Vessel(s)	Types of Cargo	Receives Cargo	Ships Cargo	UN Loc.	Dock #
5-1	Stockton	Penny-Newman Grain	Dry Bulk Liquid Bulk	Barley, Beans, Corn, Cotton Seed, Molasses, Oats, Peas, Rice, Safflower, Soy Beans, and Wheat	X	X	SCK	1



2007 MTSR_GWZ – H: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Storage Terminals]

• No Petroleum Terminals located on San Joaquin River Deep-Water Channel.

9008 MTSR_GWZ - H: Government Facilities [Federal Government]

Category 07: GOVERNMENT FACILITIES [Federal Government]

• No Government Facilities [Federal Government] located on San Joaquin River Deep-Water Channel.

9009 MTSR_GWZ – H: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]

• No Fishing Fleet Facilities located on San Joaquin River Deep-Water Channel.

9010 MTSR_GWZ - H: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS

• No Cruise Ship Terminals located on San Joaquin River Deep-Water Channel.

9011 MTSR_GWZ - H: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Terminals located on San Joaquin River Deep-Water Channel.

9012 MTSR_GWZ - H: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]				
Physical Location Ferry Terminal Name UN Loc. Dock # Notations				Notations
Stockton	Opportunity Cruises	SCK	n/a	City of Stockton Marina

9013 MTSR_GWZ - H: Tugboat Companies

Category 12: TUGBOAT COMPANIES					
Physical Location	Tugboat Terminal Name	UN Loc.	Dock #	Notations	
Port of Stockton	Brusco Tug & Barge	SCK	7/8	Tug & Barge Service	
Port of Stockton	Marine Express, Inc.	SCK	RR20	Tug & Barge Service	

9014 MTSR_GWZ - H: Marinas [Recreational Boating]

Category 13:	MARINAS	[Recreational Boating]	{ Note: Marina's are not identified on chart }
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emegory 13: 1322221 (125 [recreamonal Bounds] (1766: 1766 of the first the f							
Physical Location	Name of Marina	Physical Location	Name of Marina				
Bethel Island	Anchor Marina	Lathrop	Haven Acres				
Bethel Island	Ann & Chuck's Harbor	Lodi	Tower Park Resort				
Bethel Island	Bay Point Marina	Oakley	Bartons Edgewater Harbor				
Bethel Island	Beacon Harbor	Oakley	Big Break Marina				
Bethel Island	Bethel Harbor	Oakley	Carol's Harbor				
Bethel Island	Bethel Island Marina/ Resort	Oakley	Lauritzen Yacht Harbor				
Bethel Island	Boyd's Harbor	Oakley	Park Marina				
Bethel Island	D'anna's B.I. Marina Resort	Oakley	Sam's Harbor				
Bethel Island	Doc's Marina	Oakley	Seahorse Marina				
Bethel Island	Frank's Marina	Oakley	Sunset Harbor				
Bethel Island	Harris Marina	Stockton	Bullfrog Landing				
Bethel Island	Hennis Marina	Stockton	Herman & Helen's Marina				
Bethel Island	Leisure Landing	Stockton	Honker Cut Marine				
Bethel Island	Lundborg Landing	Stockton	King Island Resort				
Bethel Island	Marine Emporium	Stockton	Ladd's Stockton Marina				
Bethel Island	Mazikeen's Landing	Stockton	Lost Isle				
Bethel Island	New Anchor Marina	Stockton	Paradise Point Marina				
Bethel Island	Russo's Marina	Stockton	River Point Landing				
Bethel Island	Sugar Barge Resort/Marina	Stockton	Stockton Sailing Club				

Category 13: MARINAS [Recreational Boating]	{ Note: Marina's are not identified on chart }	Continued
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			_
Physical Location	Name of Marina	Physical Location	Name of Marina
Bethel Island	Willowest Harbor	Stockton	Tiki Lagoon Resort and Marina
Bethel Island	Wood's Yacht Harbor	Stockton	Turner Cut Resort
Brentwood	Holland Riverside Marina	Stockton	Union Point Marina
Brentwood	Orwood Resort	Stockton	Village West Marina
Byron	Discovery Bay Yacht Harbor	Stockton	Waterfront Yacht Harbor
Byron	Lazy M Marina	Stockton	Windmill Cove Marina
Byron	Rivers End Marina	Tracy	Tracy Oasis Marina Resort
Holt	Whiskey Slough		
Knightsen	Cruiser Haven Marina		
Knightsen	Lindquist Landing Marina		

9015 MTSR_GWZ - H: Summary Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 01 Sea Ports located within GWZ – H [Port of Stockton]
TERMINALS	Total of 18 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – H
CRUISE SHIPS	Total of 00 Cruise Ship Terminals located within GWZ – H
FERRIES	Total of 00 Ferry Passenger Terminals located within GWZ – H

Types of Maritime Cargo Received within GWZ-H

- Anhydrous Ammonia (Fertilizer and Industrial Refrigeration uses)
- Bauxite
- Barley and Wheat
- Corn Beans
- Cement and Slag (Slag is added to cement for reinforcement)
- Corn, Cotton Seed, Rice, and Safflower
- Palm Oil (Food Grade Oils)
- Molasses (Agricultural Uses)
- Project Cargo, Projects Steel, and Windmills for power generation
- Railroad Tracks (Steels Rail)
- Soy Beans
- Sulphuric Acid
- UAN 32 (Air-1 / Diesel Exhaust Fluid)
- UAN 32 (Liquid Fertilizer) and Urea (Dry Fertilizer)

Types of Maritime Cargo Shipped from GWZ - H

- Bauxite
- Barley and Wheat
- Beans / Soy Beans and Peas
- Cement
- Corn, Cotton Seed, Rice, and Safflower
- Iron Ore
- Molasses (Agricultural Uses)
- Petroleum Coke
- Project Cargo, Projects Steel, and Windmills for power generation
- Railroad Tracks (Steels Rail)
- Sulphur
- Tire chips (rubber)
- UAN 32 (Liquid Fertilizer) and Urea (Dry Fertilizer)

9016 MTSR_GWZ – H: Listing of Ports / Marine Terminals and Contact Information

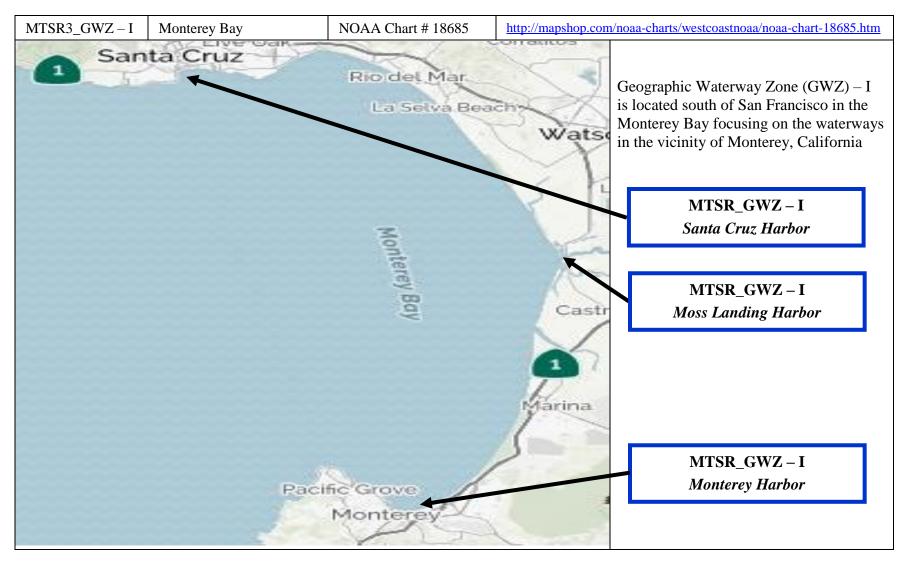
CITY	PORT / TERMINAL NAME	PHONE NUMBER
Stockton	CALAMCO (California Ammonia Company)	(209) 982 – 1000
Stockton	Cal Portland Company	(209) 469 – 0109
Stockton	Contanda	(209) 547 – 0575
Stockton	H.J. Baker	(209) 943 – 0478
Stockton	International Raw Materials, Ltd.	(800) 453 – 8680
Stockton	LEHIGH (Heidelberg Cement Group)	(209) 465 – 1921
Stockton	MARTIN Operating Partnership	(209) 483 – 1185
Stockton	Metro Ports	(209) 943 – 7252
Stockton	Penny Newman Grain, Inc.	(209) 466 – 5446
Stockton	Port of Stockton	(209) 946 – 0246
Stockton	SQM North America (Operated by the Port of Stockton)	(209) 946 – 0246
Stockton	SSA Pacific	(209) 547 – 9100
Stockton	Sulphuric Acid Trading Company	(209) 561 – 4522
Stockton	Tug & Barge – Brusco Tug & Barge	(916) 372 – 0986
Stockton	Tug & Barge – Marine Express, Inc.	(510) 523 – 8900
Stockton	Union Pacific Railroad	(209) 986 – 6363
Stockton	Westway Feed Products, LLC	(209) 946 – 0914
Stockton	Wilmar Oleo North America, LLC	(209) 507 – 7501
Stockton	YARA North America (East Complex)	(209) 604 – 6693
Stockton	YARA North America (West Complex)	(209) 244 – 0096

10000 Marine Transportation System Recovery (MTSR) _ Geographic Waterway Zone (GWZ) - I [Monterey Bay]

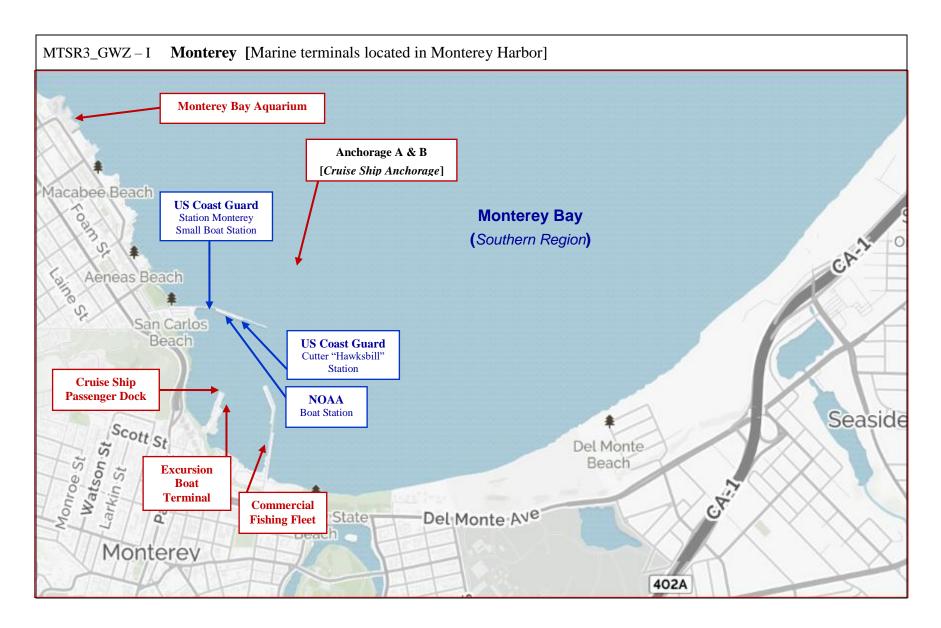
Facility / Port Waterway Zone	Geographic Waterway Zone (GWZ)	Waterway identification boundaries within the GWZ
MTSR_GWZ-I	Monterey Bay	[south of San Francisco] Monterey Bay is located in Monterey, California.

Section	Waterway Zone	Topic	Page
10001	MTSR_GWZ - I	Chart Illustration of Geographic Waterway Zone and MTS Infrastructure	144
10002	$MTSR_GWZ - I$	Deep-Draft Channels, Chart Depth, and Essential ATON	147
10003	$MTSR_GWZ - I$	Anchorages	147
10004	$MTSR_GWZ-I$	Bridges [Highway and Railroad] located over Deep-Draft Channels, and Air Draft	147
10005	$MTSR_GWZ-I$	Ports and Marine Terminals located on port property	147
10006	$MTSR_GWZ-I$	Marine Terminals [Marine Terminals not associated with port authority]	148
10007	$MTSR_GWZ-I$	Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]	148
10008	$MTSR_GWZ-I$	Government Facilities [Federal Government]	148
10009	$MTSR_GWZ-I$	Fishing Fleet Facilities [Commercial Fishing Industry]	149
10010	$MTSR_GWZ-I$	Cruise Ship Terminals	149
10011	$MTSR_GWZ-I$	Ferry Boat Terminals	149
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10015	$MTSR_GWZ-I$	Summary of Ports / Marine Terminals and Cargo (received/shipped) in GWZ - I	152
10016	$MTSR_GWZ-I$	Listing of Ports / Marine Terminals and Contact Information in GWZ - I	153

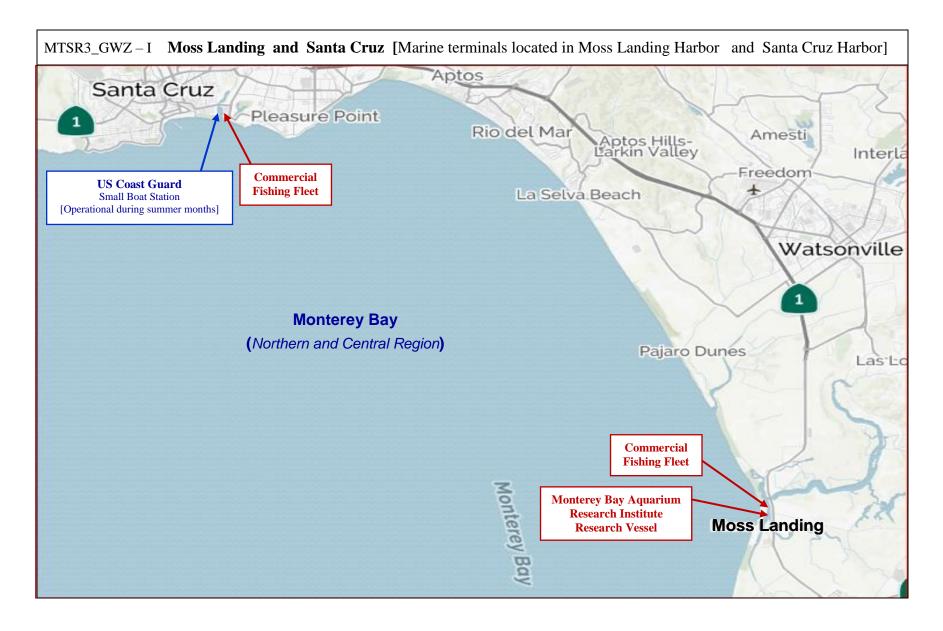
10001 MTSR_GWZ – I: Chart Illustration of Geographic Waterway Zone and MTS Infrastructure



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



APPENDIX B: NorCal – Geographic Waterway Zones, Port Stakeholders, Maritime Cargo, and Maritime Cargo Identification Guide



10002 MTSR_GWZ - I: Deep-Draft Channels

Category 01: DEEP-DRAFT CHANNELS, CHART DEPTH, and ESSENTIAL ATON						
Location	Name of Deep Draft Channel	Chart Depth				
Monterey Bay Monterey Bay Harbor 28 ft.						
	Essential Aids to Navigation (ATON) considered "Critical" for vessel transits within Monterey Bay:					

10003 MTSR_GWZ-I: Anchorages

Catego	Category 02: ANCHORAGES				
No.	Location	Name of Anchorage	Characteristics		
2-1	Monterey Bay	Anchorage # A & B	Periodically utilized for Cruise Ship Anchorages (Primary Anchorage)		

10004 MTSR_GWZ - I: Bridges [Highway and Railroad] located over Deep-Draft Channels

Category 03: BRIDGES [Highway and Railroad], and AIR DRAFT (AD)

• No Bridges [Highway and Railroad] located over deep-draft channels in Monterey Bay.

10005 MTSR_GWZ – I: Ports and Marine Terminals located on port property

Category 04: PORTS and MARINE TERMINALS located on port property

• No Ports located in Monterey Bay.

10006 MTSR_GWZ - I: Marine Terminals [Marine Terminals not associated with port authority]

Category 05: MARINE TERMINALS [Marine Terminals not associated with port authority]

• No Marine Terminals located in Monterey Bay.

10007 MTSR_GWZ - I: Petroleum Terminals [Petroleum Refineries and Petroleum Storage Terminals]

Category 06: **PETROLEUM TERMINALS** [Petroleum Refineries and Petroleum Storage Terminals]

• No Petroleum Terminals located in Monterey Bay.

10008 MTSR_GWZ-I: Government Facilities [Federal Government]

Category 07: GOVERNMENT FACILITIES [Federal Government]						
No.	Physical Location	Agency Name	Notation	UN Loc.	Dock #	
7-1	Monterey Bay	U.S. Coast Guard – Station Monterey	Small Boat Station	MRY	Harbor	
7-2	Monterey Bay	U.S. Coast Guard – Cutter Hawksbill	87 ft. Patrol Boat	MRY	Harbor	
7-3	Monterey Bay	NOAA	Oceanographic Research Vessel	MRY	Harbor	
7-4	Santa Cruz	U.S. Coast Guard – Small Boat Station	Only active during summer months	SRU	Harbor	

10009 MTSR_GWZ – I: Fishing Fleet Facilities [Commercial Fishing Industry]

Category 08: FISHING FLEET FACILITIES [Commercial Fishing Industry]							
Physical Location Company Name UN Loc. Dock # Notations							
Monterey	Monterey Commercial Fishing Fleet	MRY	Harbor	Fishing fleet located in boat harbor			
Moss Landing	Moss Landing Commercial Fishing Fleet	MLG	Harbor	Fishing fleet located in boat harbor			
Santa Cruz	Santa Cruz Commercial Fishing Fleet	SRU	Harbor	Fishing fleet located in boat harbor			

10010 MTSR_GWZ - I: Cruise Ship Terminals

Category 09: CRUISE SHIP TERMINALS						
Physical Location Cruise Ship Terminal Name UN Loc. Dock # Notations						
Monterey Bay	Anchorage A & B	MRY	n/a	Cruise Ship Anchorages (Primary)		
Monterey Bay	Anchorage E & F	MRY	n/a	Cruise Ship Anchorage		

10011 MTSR_GWZ - I: Ferry Boat Terminals

Category 10: FERRY BOAT TERMINALS

• No Ferry Boat Terminals located in Monterey Bay..

10012 MTSR_GWZ – I: Excursion Boat Terminals [Day Trip Tours]

Category 11: EXCURSION BOAT TERMINALS [Day Trip Tours]					
Physical Location Ferry Terminal Name UN Loc. Dock # Notations					
Monterey	Monterey Harbor	MRY	Harbor	Located at Fisherman's Wharf	
Moss Landing	Moss Landing Harbor	MLG	Harbor	Located in Moss Landing Harbor	
Santa Cruz	Santa Cruz Harbor	SRU	Harbor	Located in Santa Cruz Harbor	

10013 MTSR_GWZ - I: Tugboat Companies

Category 12: TUGBOAT COMPANIES					
Physical Location Tugboat Terminal Name UN Loc. Dock # Notations					
Moss Landing	Vessel Assist Santa Cruz	MLG	Harbor	Located in Moss Landing Harbor	
Santa Cruz Vessel Assist Santa Cruz SRU Harbor Located in Santa Cruz Harbor					

10014MTSR_GWZ - I: Marinas [Recreational Boating]

Category 13: MARINAS [Recreational Boating] { Note: Marina's are not identified on chart }					
Physical Location	Name of Marina	Physical Location	Name of Marina		
Monterey Bay	Breakwater Cove Marina				
Monterey Bay	Monterey Harbormaster-Marina				
Moss Landing	Moss Landing Marina				
Moss Landing	Moss Landing Marina North				
Santa Cruz	Santa Cruz Marina				

10015 MTSR_GWZ – I: Summary of Ports / Marine Terminals and Cargo (received / shipped)

PORTS	Total of 00 Sea Ports located within GWZ – I				
TERMINALS Total of 00 Marine Terminals shipping and/or receiving maritime cargo located within GWZ – I					
CRUISE SHIPS Total of 01 Cruise Ship Terminals located within GWZ – I					
FERRIES Total of 00 Ferry Passenger Terminals located within GWZ – I					

Types of Maritime Cargo Received within GWZ-I

• Commercial Fishing Fleet [The catch harvested by the local fisherman supply the domestic and international markets with Monterey Squid, Anchovy, Sardines, and Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and sablefish)]

- Cruise Ship Industry
 [Occasional arrival of cruise ships at Monterey Harbor supports
 tourism to the region]
- No maritime cargo received in Monterey Bay

Types of Maritime Cargo Shipped from GWZ-I

No maritime cargo shipped from Monterey Bay

10016 MTSR_GWZ – I: Listing of Ports / Marine Terminals and Contact Information

CITY	PORT / TERMINAL NAME	PHONE NUMBER
Monterey	Monterey Harbor Master	(831) 646 – 3950
Monterey	Monterey Bay Aquarium	(831) 648 – 4800
Monterey	Monterey Commercial Fishing Fleet (Contact Harbor Master)	(831) 646 – 3950
Monterey	Monterey Cruise Ship scheduling	(831) 646 – 3950
Monterey	NOAA	(831) 236 – 6797
Monterey	U.S. Coast Guard – Station Monterey	(831) 647 – 7300
Moss Landing	Moss Landing Harbor Master	(831) 633 – 5417
Moss Landing	Moss Landing Commercial Fishing Fleet (Contact Harbor Master)	(831) 633 – 5417
Moss Landing	Monterey Bay Aquarium Research Institute – Research Vessel	(831) 775 – 1700
Moss Landing	Vessel Assist Santa Cruz – Tugboat company	(831) 359 – 0702
Santa Cruz	Santa Cruz Harbor Master	(831) 475 – 6161
Santa Cruz	Santa Cruz Commercial Fishing Fleet (Contact Harbor Master)	(831) 475 – 6161
Santa Cruz	Vessel Assist Santa Cruz – Tugboat Company	(831) 359 – 0702

11000 Alphabetical Listing of Maritime Cargo, and Overview of Cargo Usage in the Supply Chain

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11001 COPT's AOR: North Coast – Geographic Waterway Zone

Geographic Waterway Zone	Waterway	,			
GWZ – A	Humboldt Bay				
Type of Cargo	Inbound	Outbound	Overview		
Fishing (Commercial Fishing)	X		The catch harvested by the local fisherman supply the domestic and international markets with Dungeness Crab, Pink Shrimp, and Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and sablefish).		
Logs (Timber)		X	Logs are shipped to foreign countries and used to manufacture finished lumber products.		
Lumber (Various Products)	X		Lumber is shipped to foreign countries and used for construction projects and furniture manufacturing.		
Petroleum Products					
Refined Products (Diesel and Gasoline)	X		The refined products received supports various counties in Northern California.		
Tourism (Cruise Ship Industry)	X	X	Occasional arrival of cruise ships at Port of Humboldt Bay supports tourism to the region.		
Wood Chips		X	Wood Chips are shipped to foreign countries and used to manufacture plywood.		

11002 COPT's AOR: San Francisco Bay and Inland Delta – Geographic Waterway Zone's

Geographic Waterway Zone	Waterway			
GWZ – B	Central San Francisco Bay			
GWZ – C	South San	South San Francisco Bay		
GWZ – D	San Pablo Bay			
GWZ – E	Carquinez Strait			
GWZ – F	Suisun Bay			
GWZ – G	Sacramento River (Deep-Water Channel)			
GWZ – H	San Joaquin River (Deep-Water Channel)			
Type of Cargo	Inbound	Outbound	Overview	
Air 1 (Diesel Emissions Fluid)	X		Air 1 (UAN 32) is used as an additive in diesel to meet the emissions requirements in California.	
Ammonia (Anhydrous)	X		Anhydrous Ammonia (NH3) is used as a crop fertilizer and is critical to the survival of California's agricultural industry. In addition, NH3 is utilized as a refrigerant and is critical to most all of the industrial refrigeration industries in California. Note: The facility in Northern California is the only location in California capable of off-loading NH3 from a ship.	
Automobiles	X	X	Automobiles received in the bay area support local foreign auto car dealerships in California, and automobiles manufactured locally in the bay area are shipped overseas.	
Aggregate (Sand & Rock)	X		Aggregate products are used in the manufacturing of cement and various other construction projects.	
Bauxite	X		Bauxite is shipped to various Aluminum manufacturers in the U.S., and is the principal ore in manufacturing Aluminum.	

Type of Cargo	Inbound	Outbound	Overview
Cement (Powdered)	X		The majority of the cement is used to support California's priority construction projects such as transportation infrastructure, dams, etc.
Coal		X	The coal received is shipped to companies within the U.S, and used as a fuel by power plants and in the steel manufacturing process.
			The coal shipped goes to foreign countries and is used as a fuel source by power generation plants.
Coke (Petro Coke)		X	Petro Coke (liquid and solid) is a bi product from the refining of petro-chemicals. The product is shipped and storage, and then shipped via maritime to global destinations.
Containers	X	X	Various cargo/commodities.
Fertilizer(s) for AG Industry			
Anhydrous Ammonia UAN 32 (Liquid) Urea (Dry)	X		Industrial grade fertilizers are utilized for crop growth and is critical to supporting California's agricultural industry.
Fishing (Commercial Fishing)	X		The catch harvested by the local fisherman supply the domestic and international markets with Dungeness Crab, Salmon, Herring, and Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and sablefish).
Food (Agricultural Goods)		'	
Corn and Soy Beans	X		Corn and Soy Beans are imported to meet agricultural industry supply and demands for planting seeds that have not been genetically altered.
Barley Beans and Peas Beet Pulp Pellets Corn Cotton Seed Rice Safflower (bulk) Soy Beans and Wheat		X	The majority of the agricultural products are shipped to foreign countries and fall into the classification as a National Trade Deficit. In addition, 3 rd world countries are very dependent on receiving the products and a disruption of shipping has a very high probability of causing a food supply chain shortage.

Type of Cargo	Inbound	Outbound	Overview
Gypsum (Rock)	X		Used for manufacturing drywall products.
Iron Ore		X	Iron Ore is shipped to foreign countries and used in the steel manufacturing process.
Metal (Scrap)		X	Scrap Metal is shipped to foreign countries and used in the steel manufacturing process.
Military Cargo	X	X	Utilized for National Defense / Security needs.
Molasses (Liquid)	X		Used as a vitamin supplement in feed for dairy cattle and beef cattle in California.
Oils (Food Grade)			
Coconut Oil Corn Oil Palm Oil Safflower Oil Vegetable Oil	X	X	The variety of oils are refined into edible food products for usage in various food applications, and is critical in supporting the food manufacturing industry on the west coast and overseas markets.
Petroleum Products			
Stock Crude Oil	X		Stock is used by the oil refineries to refine into finished petro-chemical products.
Refined Products Aviation Fuels Black Oil (Bunker Fuels) Diesel (Auto & Marine) Ethanol Gasoline Light Cycle Oil Lube Oils Naphtha		X	The five water-side oil refineries in Northern California are major producers of various refined petro-chemical products that are shipped to storage facilities via maritime. The products are critical in meeting the majority of petro-chemical supply and demands in California and neighboring state's.

Type of Cargo	Inbound	Outbound	Overview
Project Cargo			
Heavy Equipment Project Steel Windmills (Elect. Power)	X		The majority of the project cargo is specialized, and supports projects throughout California.
Railroad Tracks (Steel Rail)	X		Specialized long-length rails are used for railroad construction throughout California.
Salt (Brine Salt)	X		Product is used for manufacturing chlorine of which in return is utilized in the production of various fertilizers and fumigants such as SF (Herbicide) used by the agricultural industry as a critical to crop growth, and HCL (Hydrochloric Acid) used for food manufacturing and oil refining.
			Note: The facility Northern California is the only location in the United States that manufactures SF products.
Slag (Slag Cement)	X		Used to reinforce / strengthen cement products
Steel Coils	X		Steel Coils are used to manufacture tin plates used to make tin cans for the food processing industry.
			Note: The facility in Northern California is the only domestic supplier of tin plates west of the Mississippi River in the western United States.
Sugar (Raw Sugar)	X		Raw sugar is processed into refined granular and liquid sweeteners for food consumption. The refined products are used by the private consumer market, and is very important in supporting the food manufacturing industries.
			Note: The facility in Northern California is the only location on the west coast that refines raw (unprocessed) sugar.
Sulphur (Solid)		X	Sulphur (molten liquid Sulphur) is a bi product from the refining of petro-chemicals. The product is shipped, storage and manufactured into solid pellets, and then shipped via maritime to global destinations.

Type of Cargo	Inbound	Outbound	Overview
Sulphuric Acid (Liquid)	X		98 % grade Sulphuric Acid is used to dilute down to 93 % grade Sulphuric Acid, and then utilized by various industries manufacturers to include: agriculture fertilizers, batteries, food processing, mining – ore processing, petro-chemical refining, water treatment, and various other types of manufacturing processes.
Tire chips		X	Tire chips (rubber) is exported to Asia where it is used for various applications such as tire-derived fuel, ground rubber applications/rubberized asphalt, civil engineering projects, etc.
Tourism (Cruise Ship Industry)	X	X	Frequent arrivals of cruise ships at Port of San Francisco is critical to supporting the tourism industry to the region.
Wax (Food Grade)		X	Wax is refined into food grade wax and used to coat food containers and packaging items.

11003 COPT's AOR: Central Coast – Geographic Waterway Zone

Geographic Waterway Zone	Waterway		
GWZ – I	Monterey Bay		
Type of Cargo	Inbound	Outbound	Overview
Fishing (Commercial Fishing)	X		The catch harvested by the local fisherman supply the domestic and international markets with Monterey Squid, Anchovy, Sardines, and Groundfish (rockfish, black cod, cod, hagfish, halibut, sole, and sablefish).
Tourism (Cruise Ship Industry)	X	X	Occasional arrival of cruise ships at Monterey Harbor supports tourism to the region.

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