

Harbor Safety Committee

of the San Francisco Bay Region

*Mandated by the California Oil Spill
Prevention and Response Act of 1990*

Harbor Safety Committee of the San Francisco Bay Region

Thursday, April 14, 2022

Remote Meeting Via Zoom

10 Commodore Drive, Emeryville, CA

Capt. Lynn Korwatch (M), Marine Exchange of the San Francisco Bay Region (Marine Exchange), Chair of the Harbor Safety Committee (HSC); called the meeting to order at 10:03.

Marcus Freeling (A), Marine Exchange, confirmed the presence of a quorum of the HSC.

Committee members (M) and alternates (A) in attendance with a vote: **Cody Aichele-Rothman** (A) Bay Conservation and Development Commission; **John Berge** (M), Pacific Merchant Shipping Association; **Jeff Ferguson** (M), NOAA; **David Fisch** (M), Port of Redwood City; **Kathi George** (A), The Marine Mammal Center; **Capt. Thomas Kirsch** (M), Blue and Gold Fleet; **Capt. Taylor Lam** (M), United States Coast Guard; **Dominic Moreno** (M), Port of San Francisco; **Julian Rose** (M), Marathon Petroleum; **Capt. Paul Ruff** (M), San Francisco Bar Pilots; **Jessica Vargas** (A), US Army Corps of Engineers; **Jeff Vine** (M), Port of Stockton; **Capt. Amanda Wallace** (M), Chevron Shipping Company.

The meetings are always open to the public.

Approval of the Minutes-

A motion to accept the minutes of the March 10, 2022, meeting was made and seconded. The minutes were approved without dissent.

Comments by Chair- Capt. Lynn Korwatch

Welcomed the committee members and audience. The HSC will return to in-person meetings on May 12th at the Port of Oakland.

Coast Guard Report- Capt. Taylor Lam

- Sail GP was held successfully in late March. An increased number of spectators attended the sailboat racing event this year and the focus was on maintaining safety and security.
- Planning for Fleet Week is underway. The annual event will be held in October. Additional SEAR events are scheduled in 2022 including Pride, Fourth of July, and New Year's Eve.
- The container vessel Wan Hai 176 recently lost propulsion while transiting offshore near Point Reyes. Emergency towing was deployed to rescue the adrift vessel in heavy weather and bring

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it to Anchorage 9. The collaborative response was successfully conducted under Unified Command.

- A fire was recently reported at the Port of Benicia. Three ships were moored in Benicia when the fire broke out and were able to get underway without damage. A multi-agency response was conducted.
- Destruction and removal of the grounded vessel America Challenger has been approved and preparations continue under Unified Command.
- Ben Eichenberg, SF Baykeeper, asked for details regarding the Benicia fire response and water quality protection measures. Capt. Lam advised that booming strategies were employed, and additional details can be provided offline.
- John Berge asked if an after-action report will be provided for the Wan Hai 176 incident. Capt. Lam advised that the USCG is reviewing the incident and will engage with stakeholders.
- LTJG Harris read from the March- 2022 Prevention/Response Report (attached).

Army Corps of Engineers Report- Jessica Vargas

- Jessica Vargas read from the US Army Corps of Engineers, San Francisco District Report (attached). FY 2022 USACE appropriations have been approved and planning is ongoing for regional dredging projects. Debris removal for March was below average. The debris removal vessel Raccoon has been out of service for repair but will be back soon. The Oakland Harbor Turning Basins Widening Study is ongoing. Surveys are posted and a channel condition report is included.

Clearinghouse Report- Marcus Freeling (report attached)

OSPR Report- Mike Caliguire

- A notice of HSC membership vacancies was previously distributed. Expiring members are encouraged to reapply. Contact: michael.caliguire@wildlife.ca.gov
- Capt. Cullen advised of the multi-agency response to the adrift vessel Wan Hai 176. Several local tugboats responded to the incident and were able to rescue the ship despite severe weather conditions. The successful response supports OSPR's SB 414 offshore vessel towing study findings.

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NOAA Report- Jeff Ferguson

- Read from the NOAA HSC Report for April 2022 (attached). The cancelation of NOAA raster charts in favor of ENC's is ongoing. Electronic charts can be printed using NOAA's Custom Chart Tool. The NWS has developed the Weather Ready Nation Ambassador Program for maritime stakeholders. The NWS predicts light rain over the next few days, but La Nina is still in effect and snowpack is well below normal. Most of the state is in severe drought condition with no improvement expected in the near term.

State Lands Commission Report- Robert Booker

- Read from the March 2022 State Lands Commission Report (attached). No spills were reported. The agency is training new employees and inspections are expected to increase.

Work Group Reports-

Tug Work Group- Nothing to report.

Navigation Work Group- Capt. Paul Ruff: The USCG PAC-PARS comment period ends on May 26th and input is welcome.

Ferry Operations Work Group- Capt. Tom Kirsch: Nothing to report.

Dredge Issues Work Group- Julian Rose: A Work Group meeting on Pinole Shoal Channel dredging issues will be held directly after today's HSC meeting on Zoom. Participation is welcome.

PORTS Work Group- Nothing to report.

Prevention through People Work Group- Nothing to report.

PORTS Report- Marcus Freeling

- The Southampton Shoal LB6, Oakland LB4, and Oakland LB3 buoy-mounted current meters are still offline due to shore station equipment issues. Additional equipment has been purchased and will be installed. A charging issue was detected at the Oakland Berth 34 Weather Station caused by a damaged solar panel. Temporary repairs were made, and the station is back online. Replacement of the solar panel and wiring is required. Routine PORTS maintenance is ongoing.
- PORTS data is publicly available through NOAA's Tides and Currents website:
<https://tidesandcurrents.noaa.gov/ports/index.html?port=sf>

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Public Comment-

- Stas Margaronis, Propeller Club, advised of upcoming events. A panel on exporter issues will be held on May 16th. A panel on inland waterways and the Jones Act will be held on May 18th. A talk on export challenges will be given on April 19th. Export delays are having a significant regional impact.
- Veronica Boe, Cal Maritime, advised that the 17th Annual Scholarship Fundraiser was held successfully. Job openings are available, and applications are welcome. Cal Maritime is seeking industrial painters to refurbish the marine firefighting prop at the MSSC. Capt. Korwatch advised of plans to hold the June HSC meeting in-person at the MSSC.
- Eusebio Fabia, State Lands, advised of issues with Tesoro Avon current monitoring data.
- Capt. Korwatch announced that a memorial service for Catharine Hooper will be held on May 4th.
- Richard James, Coastodian.org, commented on the Wan Hai 176 incident and asked to be included in the after-incident report discussions. Schedule details for the American Challenger removal would be appreciated. Capt. Lam advised that the USCG is conducting an internal review of the Wan Hai 176 incident. Upon completion, the USCG will engage in expanded dialog with public participation. Sector San Francisco will be hosting a Marine Environmental Response open house in May. No firm dates are available for the American Challenger removal. Preparation is ongoing but work is dependent on conditions.
- Rebekah Lane, Marine Mammal Center, advised that there have been several recent whale sightings in the bay.

Old Business- None

New Business-

- Cody Aichele-Rothman advised that the annual Harbor Safety Plan Update is underway. Work Group annual reports are needed. Voting on the HSP update will be held at the June HSC meeting.
- Capt. Korwatch advised that the HSC is planning to return to in-person meetings in May at the Port of Oakland. Zoom access will be available for those that cannot attend in-person.

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Next Meeting-

1000-1200, May 12, 2022
Port of Oakland, Exhibit Room
530 Water Street
Oakland, CA

Adjournment-

A motion to adjourn to meeting was made and seconded. The motion passed without dissent and the meeting adjourned at 10:56.

Respectfully submitted:



Capt. Lynn Korwatch

SIGNIFICANT PORT SAFETY AND SECURITY CASES (MARCH 2022)**MARINE CASUALTIES**

Loss of Propulsion (04MAR2022): A U.S. flagged passenger ferry was transiting in to Tiburon with passengers onboard when the engine overheated and shut-off. The cause was identified as a starboard gear box failure which caused the shut-off response. The vessel diverted to Sausalito and all passengers disembarked with no injuries reported. The vessel was then taken out of service to diagnose the cause of the equipment failure and assess needed repairs. Case pends.

Loss of Steering (12MAR2022): A foreign flagged bulk carrier experienced a loss of steering while getting underway from Redwood City. The pilot onboard reported the casualty, and the two tugs alongside immediately escorted the vessel back to berth. The cause was identified as the system relief/safety valve being stuck in a slightly open position, not allowing for enough pressure to build up to move the rudder. The safety/relief valve was inspected, cleaned and thoroughly flushed. The steering was then satisfactorily tested and approved by an attending class surveyor. Case closed.

Equipment Failure (19MAR2022): A U.S. flagged tankship reported that their emergency generator failed while underway and conducting a monthly test. Vessel was approximately 100nm from shore and returning to San Francisco when they experienced the failure. Vessel returned to berth and conducted repairs. Class attended the vessel and witnessed satisfactory operation of the emergency generator. Case closed.

Loss of Steering (21MAR2022): A U.S. flagged small passenger vessel was underway in Monterey Bay, CA with 38 passengers onboard when they experienced a loss of steering. The rudder failed to respond to steering helm commands. There was no obvious signs of damage to any part of the steering assembly and the steering control was regained after approximately 60 seconds. The vessel returned to berth and safely unloaded all passengers onboard before conducting repairs. Coast Guard attended the vessel and witnessed satisfactory operation of the steering gear. Case closed.

Collision (24MAR2022): A U.S. flagged small passenger vessel reported a collision with a moored small passenger vessel while underway in San Francisco, CA near Pier 39. The vessel reported being pushed by tides onto where the other vessel was moored. The crew accessed all spaces and did not report any damage. The vessel then returned to berth. Coast Guard attended the vessel for damage assessment and internal structural exam to ensure no damage occurred from the incident. Case closed.

Allision (27MAR2022): A U.S. flagged towing vessel reported an allision with the Orowood Railroad Bridge in Brentwood, CA while transiting to Stockton. The vessel reported that the allision was to the barge spud (port side) and that the barge is an uninspected inland barge. The vessel reported no damage. Class nor Coast Guard attended vessel due to no reported damage to vessel. Case closed.

Equipment Failure (27MAR2022): A foreign flagged bulk carrier reported an accidental anchor discharge while transiting outbound from San Francisco, CA in the main ship channel, approximately 1nm south of Point Bonita. The vessel reported that engines were functioning properly and the vessel was able to maintain position. A tug was dispatched to assist vessel with pulling up anchor. Vessel retrieved anchor with no other issues reported. Case closed.

Collision (27MAR2022): A U.S. flagged sailing vessel reported a collision with a recreational vessel while sailing in a congested area of the San Francisco Bay. The vessel reported that another vessel had not given right of way and was in a head on situation. The sailing vessel adjusted their course and collided with the recreational vessel, causing damage to the sails. No structural damage was reported and no passengers onboard were injured. The sailing vessel returned to Pier 39 and disembarked passengers. The vessel then dry-docked in Richmond, CA to conduct damage assessment. Case pends.

VESSEL SAFETY CONDITIONS

Operational Control (01MAR2022): A foreign flagged bulk carrier was inspected in Richmond, CA and issued 02 operational controls (code 17, prior to departure). Operational controls were issued for an active leak from fire and general service pump and valve from the lower sea chest suction, and a penetration/vent leading through an A-60 fire boundary that was not observed on the ship's fire control plan. Class attended vessel and attested to repairs, equipment is working properly. Case closed.

Operational Control (04MAR2022): A U.S. flagged passenger vessel reported a loss of propulsion and was issued an operational control (Code 701, prior to the carriage of passengers) for a starboard engine transmission failure. Repairs were conducted and verified by a Coast Guard inspector. Case closed.

Operational Control (11MAR2022): A foreign flagged tankship reported an inoperable emergency generator and was issued a Captain of the Port Order. Vessel was required to transit during daylight hours only to Anchorage 9 and conduct repairs. Vessel conducted repairs and provided a class survey report. Case pends.

Operational Control (12MAR2022): A U.S. flagged recreational vessel was issued an operational control for operating as an uninspected passenger vessel. The vessel is required to cease operating until a satisfactory uninspected passenger vessel exam is performed by a Coast Guard official. Case pends.

Operational Control (12MAR2022): A foreign flagged containership experienced a reduction in propulsion while underway in Oakland, CA and was issued a Captain of the Port Order. The vessel was required to remain at anchorage until causative factors were identified and a class report confirming that satisfactory repairs were made was issued. Vessel conducted repairs and provided a class survey report. Case closed.

Operational Control (12MAR2022): A foreign flagged bulk carrier experienced a loss of steering casualty while getting underway from Redwood City, CA and was issued an operational control (Code 60, prior to movement). The vessel investigated then confirmed the issued was a partially opened relief/safety valve for the steering gear. Class witnessed corrected deficiencies and the operational control was lifted. Case closed.

Operational Control (16MAR2022): A U.S. flagged towing vessel was inspected at Pier 17 in San Francisco, CA and was issued an operational control (code 60, prior to movement) due to vessels inability to test automatic shutdown during annual CO2 fixed firefighting inspection and missing semi-portable fire extinguisher. Case pends.

Operational Control (16MAR2022): A foreign flagged bulk carrier was inspected in Sacramento, CA and was issued an operational control (code 17, prior to departure) for not having appropriate number of approved two-way radios for each fire party. Vessel ordered new radios. Case closed.

Operational Control (19MAR2022): A U.S. flagged tankship was underway and returning to San Francisco Bay approximately 100nm from shore when they reported an emergency generator failure. The vessel was issued an operational control (code 60, prior to movement) that was then amended to a code 17 (prior to departure) which allowed vessel to shift berths and conduct repairs. Class and Coast Guard witnessed corrected deficiencies and the operational control was lifted. Case closed.

Operational Control (21MAR2022): A U.S. flagged small passenger vessel reported a loss of steering casualty while underway in the Santa Cruz Harbor and was issued an operational control (code 701, prior to the carriage of passengers/cargo). The vessel returned to dock and safely unloaded all passengers before conducting repairs. Coast Guard attended vessel and witnessed corrected deficiencies as well an operational test of the steering gear. The operational control was lifted. Case closed.

Operational Control (21MAR2022): A foreign flagged bulk carrier was inspected in Redwood City, CA and issued 03 operational controls (code 17, prior to departure). The operational controls were issued for; large amounts of fuel oil accumulation and oil soaked lagging, multiple leaks from flanges on both fresh water cooling systems and oil leaks from lube oil cooling system, and excessive accumulation of lubricating oil below the shaft seal. Class attended the vessel and witnessed corrected deficiencies and operational controls were lifted. Case closed.

Operational Control (26MAR2022): A foreign flagged containership was issued a Captain of the Port Order amendment to allow the vessel to conduct sea trials in order to test repairs. Vessel satisfactorily tested equipment and provided a class survey report attesting to vessel status. Case closed.

Operational Control (27MAR2022): A U.S. flagged sailing vessel was underway in the San Francisco Bay when it collided with a recreational vessel causing damage to the sails. The vessel was issued an operational control (code 17, prior to carriage of passengers). Coast Guard attended vessel to assess damage. Case pends.

Operational Control (30MAR2022): A U.S. flagged small passenger vessel was issued an operational control (code 17, prior to departure) for failing to schedule dry dock and internal structural examinations within required intervals as listed on the vessels certificate of inspection. Case pends.

Operational Control (31MAR2022): A U.S. flagged small passenger vessel was issued 02 operational controls (code 17, prior to departure) for completing a full re-power without approval of OCMI and failing to receive approval for alterations made to the vessel. Case pends.

NAVIGATIONAL SAFETY

Letter of Deviation (LOD), Inoperable S-Band Radar (02MAR2022): A foreign flagged containership was issued an outbound LOD for an inoperable S-Band radar. Case pends.

Letter of Deviation (LOD), Inoperable S-Band Radar (16MAR2022): A foreign flagged containership was issued an outbound LOD for an inoperable S-Band radar. Case pends.

Letter of Deviation (LOD), Inoperable S-Band Radar (18MAR2022): A foreign flagged containership was issued an inbound LOD for an inoperable S-Band radar. Case pends.

SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

Letter of Warning (05MAR2022): IMD received notification that a recreational vessel discharged approximately 1 gal of diesel in Alameda, CA. IMD personnel determined that the vessel was undergoing maintenance when the diesel was unintentionally discharged. The owner immediately deployed sorbents and boom. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (09MAR2022): IMD received notification that a recreational vessel discharged approximately 5 gal of diesel into Monterey Bay. IMD contacted the owner and harbormaster who stated that the vessel had a small leak in the fuel tank that dripped into the bilge. The bilge pump discharged the product into the waterway. The Harbormaster immediately placed boom and sorbents around the vessel and the owner emptied all of the tanks and cleaned the bilge. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (10MAR2022): IMD received notification that a recreational vessel ran aground in the Oakland Estuary, discharging approx. 1 gal of diesel. IMD determined that the vessel posed further risk of discharge and the owner was unable to conduct an adequate response. The case was Federalized and local contractors were hired to remove the pollution threat from the vessel. Contractors removed 725 gallons of oily water and 2 barrels of miscellaneous hazmat. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (14MAR2022): IMD received notification that a commercial fishing vessel discharged approx. 1 gal of hydraulic oil into the Santa Cruz Harbor. IMD contacted the harbormaster who stated that the leak was instantly stopped, scuppers were in-place, and sorbents and boom were placed around the vessel. The majority of the spill was contained and the hydraulic failure was fixed. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (17MAR2022): IMD received notification that a foreign vessel discharged approx. 8 gals of hydraulic oil into the San Joaquin River. IMD contacted the responsible party who stated that during a transfer of molasses, the booster pump had a hydraulic line failure. The pump was immediately secured and the crew began clean-up operations. Boom and sorbents were immediately placed around the spill and contractors were hired to conduct further clean-up operations. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (19MAR2022): IMD received notification that a recreational vessel discharged approx. 1 gal of diesel into the San Francisco Bay. IMD contacted the harbormaster and owner who stated that the diesel was discharged through the bilge pump. The harbormaster placed sorbents and boom around the vessel and used a skimmer to collect the product. The owner believed the source was the fuel tank, fuel tank was removed for repairs and the bilge was thoroughly cleaned. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (22MAR2022): IMD received notification that a recreational vessel sank at a pier and discharged approx. 1 gal of diesel into the San Francisco Bay, in Alameda, CA. IMD contacted owner who stated that they immediately placed boom and sorbents around the vessel. The owner was very responsive and hired local contractors to raise and remove the vessel from the waterway. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

Letter of Warning (22MAR2022): IMD received notification that a recreational vessel discharged approx. 1 gal of diesel into the San Francisco Bay, in Richmond, CA. IMD contacted the harbormaster and owner who stated that the owner had overflowed the tank when refueling. The harbormaster deployed boom and sorbents around the vessel. The source of pollution was secured with no further discharge. A NOFI and LOW were issued. Case Closed.

PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS			
March 2022			
PORT SAFETY CATEGORIES*	Mar-2022	Mar-2021	**3yr Avg
Total Number of Port State Control Detentions:	0	0	0.08
SOLAS (0), STCW (0), MARPOL (0), ISM (0), ISPS (0)			
Total Number of COTP Orders:	3	2	3.61
Navigation Safety (3), Port Safety & Security (0), ANOA (0)			
Marine Casualties (reportable CG 2692) within SF Bay:	10	5	7.44
Allision (1), Collision (2), Fire (0), Capsize (0), Grounding (0), Sinking (0)			
Steering (2), Propulsion (2), Personnel (0), Other (1), Power (2)			
Total Number of (routine) Navigation Safety issues/Letters of Deviation:	3	1	2.28
Radar (3), Gyro (0), Steering (0), Echo Sounder (0), AIS (0)			
ARPA (0), Speed Log (0), R.C. (0), Other (0)			
Reported or Verified "Rule 9" or other Navigational Rule Violations:	0	0	0.53
Significant Waterway events/Navigation related Cases:	0	0	0.06
Total Port Safety (PS) Cases opened	16	8	14.00
MARINE POLLUTION RESPONSE			
Pollution Discharge Sources (Vessels)	Mar-2022	Mar-2021	**3yr Avg
U.S. Commercial Vessels	0	1	0.69
Foreign Freight Vessels	1	0	0.19
Public Vessels	0	1	0.58
Commercial Fishing Vessels	1	1	0.75
Recreational Vessels	7	5	6.14
Pollution Discharge Sources (Facilities)	Mar-2022	Mar-2021	**3yr Avg
Regulated Waterfront Facilities	0	0	0.22
Regulated Waterfront Facilities - Fuel Transfer	0	0	0.03
Other Land Sources	1	1	2.53
Mystery Spills - Unknown Sources	6	4	4.78
Number of Pollution Incidents (By Spill Size)	Mar-2022	Mar-2021	**3yr Avg
Spills < 10 gallons	11	6	9.92
Spills 10 - 100 gallons	0	3	1.08
Spills 100 - 1000 gallons	0	1	0.36
Spills > 1000 gallons	0	0	0.00
Spills - Unknown Size	5	3	4.56
Total Pollution Incidents	16	13	15.92
Oil Discharge/Hazardous Materials Release Volumes by Spill Size	Mar-2022	Mar-2021	**3yr Avg
Estimated spill amount from U.S. Commercial Vessels	0.00	10.00	2.45
Estimated spill amount from Foreign Freight Vessels	8.00	0.00	0.50
Estimated spill amount from Public Vessels	0.00	1.00	6.94
Estimated spill amount from Commercial Fishing Vessels	1.00	5.00	29.69
Estimated spill amount from Recreational Vessels	11.00	754.00	86.46
Estimated spill amount from Regulated Waterfront Facilities	0.00	0.00	21.39
Estimated spill amount from Regulated Waterfront Facilities - Fuel Transfer	0.00	0.00	0.06
Estimated spill amount from Other Land Sources	1.00	77.00	28.53
Estimated spill amount from Unknown Sources (Mystery Sheens)	unk	unk	0.00
Total Oil Discharge and/or Hazardous Materials Release (Gallons)	21.00	847.00	176.02
Penalty Actions	Mar-2022	Mar-2021	**3yr Avg
Civil Penalty Cases	0	1	0.11
Notice of Violations	0	0	0.81
Letters of Warning	8	4	5.44
Total Penalty Actions	8	5	6.36
* NOTE: Values represent all cases within the HSC jurisdiction during the period. Significant cases are detailed in the narrative.			
** NOTE: Values represent an average month over a 36 month period for the specified category of information.			

**Harbor Safety Committee
Of the San Francisco Bay Region**

**Report of the
U.S. Army Corps of Engineers, San Francisco District
April 14, 2022**

1. CORPS O&M DREDGING PROGRAM

Planning for the FY22 dredging program is currently underway based on FY22 President's Budget amounts. The FY22 project schedules are included in this report. **The FY22 Consolidated Appropriations Act was signed into law on March 15th providing funds to the Corps to execute the dredging program. No changes to the schedules were needed. However, adjustments may still be made following publication of the Corps' Work Plan in the next few weeks.**

FY 2022 DREDGING

- a. Richmond Inner Harbor** – Planning for the FY22 dredging episode is currently underway with contract award tentatively scheduled for early June and dredging estimated to start mid-July.
- b. San Rafael Creek** – Planning for maintenance dredging of the San Rafael Creek is currently underway with a contract award tentatively scheduled for mid-June and dredging estimated to start late July. Dredging will be performed in both the Inner Canal and Across-the-Flats reaches of the project. The last time this project was dredged was back in 2011.
- c. San Joaquin River (Port of Stockton)** – Planning for the FY22 dredging episode is currently underway with contract award tentatively scheduled for mid-June and dredging estimated to start beginning of August.
- d. Sacramento River Deep Water Ship Channel** – Planning for the FY22 dredging episode is currently underway with contract award tentatively scheduled for late June and dredging estimated to start mid-August.
- e. Suisun Bay Channel (and New York Slough)** – Planning for the FY22 dredging episode is currently underway with contract award tentatively scheduled for early July and dredging estimated to start mid-August.
- f. Oakland Harbor** – Planning for the FY22 dredging episode is currently underway. Initially, contract award was scheduled for late August, and dredging for mid-October based on the Tier III sediment testing requirement for DMMO suitability determination. The recent Tier I extension allows re-examination of the timeline, in context with other SPN Nav project schedules. Contract award is now tentatively scheduled for mid-July and dredging estimated to start late August.
- g. Napa River** – Planning for maintenance dredging of the Napa River is currently underway with a contract award tentatively scheduled for early August and dredging estimated to start mid-September. Dredging will be performed in the upper reaches only. The project was previously dredged in 2016.

- h. SF Main Ship Channel** – The Government Hopper Dredge Essayons is scheduled to dredge the Main Ship Channel during the last half of May. The dredged material placement will return to the near-shore site as in previous years.
- i. Richmond Outer Harbor (and Richmond Long Wharf)** – Following completion of the Main Ship Channel, the Essayons will move to Richmond Outer Harbor in early June and complete maintenance dredging there. Upon completion of Richmond Outer Harbor, Essayons will depart the Bay Area.
- j. San Pablo Bay (Pinole Shoal)** – Dredging is deferred to FY23 to remain in compliance with the Water Quality Certification for SF Bay Area Dredging.
- k. Redwood City Harbor** – This project is currently on a 2-year cycle and dredging last occurred in FY21. An assessment was recently done comparing advance maintenance to annual dredging. The result of the analysis supports switching to annual dredging beginning in FY23.

2. EMERGENCY (URGENT & COMPELLING) DREDGING: None at this time.

3. DEBRIS REMOVAL –Debris removal for March was 23 tons. Dillard: 23 tons; Raccoon: 0 tons (out of service for repair). Average debris removal for March from 2012 to 2021 is 81 tons (Range: 11-112).

BASEYARD DEBRIS COLLECTION TOTALS:

MONTH	RACCOON	DILLARD	MISC	TOTAL
2022	TONS	TONS	TONS	TONS
JAN	0	374	0	374
FEB	0	37	3	40
MAR	0	23	0	23
APR				
MAY				
JUN				
JUL				
AUG				
SEP				
OCT				
NOV				
DEC				

YR TOTAL

437

4. UNDERWAY OR UPCOMING HARBOR IMPROVEMENTS

Oakland Harbor Turning Basins Widening Study: This study will investigate and determine if there is a technically feasible, economically justifiable, and environmentally acceptable recommendation for federal participation in a navigation improvement project to the existing - 50-foot Oakland Harbor Federal Navigation Project. The scope of the tentatively selected plan includes expansion of both inner and outer basins for a 1,310-foot design vessel. This expansion is expected to meet the needs of the future fleet. A NED waiver to continue with a Comprehensive Benefits Plan (CBP), which includes electric dredging, was submitted to the Assistant Secretary of the Army (ASA) by USACE Headquarters. The Final decision by the ASA to continue with the CBP is pending after their assessment of the public review comments. The Draft Integrated Feasibility Report (IFR) was released on 17 December 2021 for public comment. Public comment was extended to February 14, 2022, at the request of three stakeholders, Earth Justice, EPA, and BCDC. The Agency Technical Review (ATR) was launched on 20 December 2021, ATR comments were received and responded to on Monday February 7, 2022. The 3x3x3 feasibility study is on track and on budget. However, 3X3X3 compliance will need to be reassessed after public comments are received.

5. OTHER WORK

Regional Dredge Material Management Plan: Following public and stakeholders' outreach for the PMP, the project is now in phase 1 gap analysis to address the key issues as identified by the stakeholders from the virtual charrettes held in July 2020. SFEI has been contracted to perform this phase and is coordinating with the Interagency Working Group (IWG) to provide expert advice and review of work products associated with the RDMMP Gaps Analysis, including prioritizing the knowledge gaps identified by the project team and reviewing the scopes of work produced to address those knowledge gaps. Information on the RDMMP and draft final PMP can be found on our website:

<https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Regional-Dredge-Material-Management-Plan/>

USACE Work Plan Web Address: <http://www.usace.army.mil/Missions/Civil-Works/Budget/>

6. HYDROGRAPHIC SURVEY UPDATE

Address of Corps' web site for completed hydrographic surveys:

<http://www.spn.usace.army.mil/Missions/Surveys,StudiesStrategy/HydroSurvey.aspx>

The following surveys are posted:

Alameda Naval Navigation Channel: Condition survey of October 14, 2021.
Berkeley Marina (Entrance Channel): Condition survey of April 22, 2021.
Islais Creek Channel: Condition survey of August 26, 2021.
Larkspur Ferry Channel: Condition survey of April 8, 2020.
Mare Island Strait: Condition survey of September 29, 2021.
Marinship Channel (Richardson Bay): Condition survey of June 23, 2020 and April 20, 2021.
Napa River: Condition survey of February 2-10, 2022.
Northship Channel: Condition survey of September 20, 21, & 28, 2021.
Oakland Inner Harbor: Condition survey of March 1-3, 2022.
Oakland Inner Harbor (Brooklyn Basin): Condition survey of 15-20 January 2021.
Oakland Outer Harbor: Condition survey of March 1, 2022.
Petaluma River (Across-the-Flats): Post-dredge condition survey of December 15, 2020.
Petaluma River (Main Channel): Post-dredge survey of October 10, 12, and 16 2020.
Petaluma River (Extended Channel): Post-dredge survey of October 10, 12, and 16 2020.
Pinole Shoal Channel: Condition survey of January 12-18, 2022.
Redwood City Harbor: Condition survey of March 15-16, 2022.
Richmond Inner Harbor: Condition survey of March 30, 2022.
Richmond Inner Harbor (Santa Fe Channel): Condition survey of December 20, 2016.
Richmond Outer Harbor (Longwharf): Condition survey February 15, 2022.
Richmond Outer Harbor (Southampton Shoal): Condition survey of January 26, 2022.
Sacramento River Deep Water Ship Channel: Condition Survey of December 15-18, 2021.
San Bruno Shoal: Condition survey of February 26, 2021.
San Francisco Main Ship Channel: Condition survey of September 22-23, 2021.
San Leandro Marina (and Channel): Condition survey of March 30 and April 1, 2015.
San Rafael (Across-the-Flats): Condition survey of February 9, 2021.
San Rafael (Creek): Condition survey of February 9, 2021.
Stockton Ship Channel: Condition survey of December 10-14, 2021.
Suisun Bay Channel: Condition survey of February 15-17, 2022.
Suisun Bay Channel (Bullshead Reach): Condition survey of February 15-17, 2022.
Suisun Bay Channel (New York Slough): Condition survey of December 10-14, 2021.

Disposal Site Condition Surveys:

SF-08 (Main Ship Channel Disposal Site): Condition survey of Jul 27, 2021.
SF-09 (Carquinez): Condition survey of March 17, 2022.
SF-10 (San Pablo Bay): Condition survey of March 17, 2022.
SF-11 (Alcatraz Island): Condition survey of March 9, 2022.
SF-16 (Suisun Bay Disposal Site): Condition survey of October 20, 2021.
SF-17 (Ocean Beach Disposal Site): Condition survey of July 27, 2021.

Requested Surveys:

Pre/Post-dredge and condition surveys have been completed for all of San Francisco District's in-bay projects dredged in FY21.

Channel Condition Report (CCR):

Attached is the Channel Condition Report (CCR) for all Corps maintained channels dated **12 APR 2022**. The CCR is generated by the USACE eHydro database and is not a substitute for the controlling depths set by the SF Bar Pilots. Please see the respective bathymetric plots for locations (highlighted in red) of the shoaliest soundings reports in the CCR.

FY 2022 O&M DREDGING PLAN

Project	Bid Open	Award	FY2022					FY2023					Estimated CY	Dredge Type	Placement Site		
			FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV				DEC	JAN
CONTRACT CLAMSHELL OR CUTTERHEAD PIPELINE																	
Richmond Inner Harbor	20-May (S)	3-Jun (S)													410kcy	Contract Clam Shell	SF-DODS
San Rafael Creek	31-May (S)	14-Jun (S)													250kcy	Contract Clam Shell	SF-10 SF-DODS
San Joaquin River (Port of Stockton)	1-Jun (S)	16-Jun (S)													300kcy	Contract Pipeline	Various Upland
Sacramento River (30 Foot Project)	13-Jun (S)	27-Jun (S)													150kcy	Contract Pipeline	Various Upland
Suisun Bay Channel	24-Jun (S)	8-Jul (S)													125kcy	Contract Clam Shell	Upland
Oakland Harbor	23-Jun (S)	7-Jul (S)													450kcy 450kcy	Contract Clam Shell	SF-11 Upland
Napa River	18-Jul (S)	1-Aug (S)													55kcy	Contract Clam Shell	Coombs
WEST COAST HOPPER CONTRACT																	
Humboldt Bar & Entrance Channels	9-Mar (A)	28-Mar (A)													1100kcy	WCHC (Portland)	HOODS
GOVERNMENT HOPPER																	
Humboldt Interior Channels	N/A	N/A													150kcy	Govt Hopper	HOODS
SF Main Ship Channel	N/A	N/A													350kcy	Govt Hopper	OBDS/SF-8
Richmond Outer Harbor	N/A	N/A													250kcy	Govt Hopper	SF-11/SF-10
	Solicitation		WCH	West Coast Hopper Contract					Environmental Window								
	Bid Opening		YAQ	Gov't Dredge Yaquina					Mobilization								
	Contract Award		ESS	Gov't Dredge Essayons					Physical Dredging								
	Hopper Dredging																

* Program execution is based on the FY22 President's Budget.

Date of Last Update: 4/7/2022

REPORT OF CHANNEL CONDITIONS
400 FEET WIDE OR GREATER

To: Navigation Interests		From: US Army Corps of Engineers San Francisco District 450 Golden Gate Ave San Francisco, CA 94102						
RIVER/HARBOR NAME AND STATE SAN FRANCISCO CALIFORNIA					MINIMUM DEPTHS IN EACH 1/4 WIDTH OF CHANNEL ENTERING FROM SEAWARD			
NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)				
Brooklyn Basin Brooklyn Basin	01-15-2021	147 1501	0.94	35	6.2	8.0	17.3	7.2
Brooklyn Basin Brooklyn Basin	01-15-2021	250 1010	2.74	35	8.4	3.9	3.0	3.0
Oakland Harbor Oakland Inner Harbor	03-01-2022	544 1997	4.62	50	47.7	49.3	49.3	47.6
Oakland Harbor Oakland Outer Channel	03-01-2022	296 1761	2.52	50	48.6	49.3	49.2	48.8
Mare Island Strait Causeway to Asylum Slough	02-10-2022	75 245	3.19	15	3.8	9.1	9.0	6.4
Napa River Asylum Slough to Napa City	02-10-2022	102 183	9.92	10	0.8	2.2	1.9	1.6
Petaluma River Main Channel	03-29-2022	100 361	4.06	8	2.1	4.3	5.6	1.6
Petaluma River ATF Across the Flats	12-15-2020	200 206	5.68	8	6.3	8.8	8.3	8.2
Pinole Shoal Channel Pinole Shoal Channel	01-12-2022	600 1644	10.40	35	30.4	35.5	36.3	33.0
Redwood City Harbor Redwood City Harbor	09-16-2021	300 943	3.94	30	30.1	30.0	30.3	30.3
Richmond Inner Harbor Entrance Channel	03-30-2022	809 1021	0.96	38	35.3	36.2	36.6	36.0
Richmond Inner Harbor Approach Channel	03-30-2022	809 1201	3.09	38	33.6	35.1	36.0	34.8
Richmond Inner Harbor Santa Fe Channel	02-26-2019	195 509	0.37	38	33.7	35.4	36.4	36.0
Richmond Outer Harbor Richmond Outer Harbor	01-26-2022	600 1291	3.25	45	40.5	45.1	44.3	42.3
Richmond Outer Harbor Longwharf Turning Basin	02-15-2022	2188 5598	0.88	45	33.1	No Data	No Data	No Data
San Francisco Mainship San Francisco Mainship	09-22-2021	2000	4.96	55	52.0	54.2	54.4	53.8

REPORT OF CHANNEL CONDITIONS
400 FEET WIDE OR GREATER

To: Navigation Interests		From: US Army Corps of Engineers San Francisco District 450 Golden Gate Ave San Francisco, CA 94102						
RIVER/HARBOR NAME AND STATE SAN FRANCISCO CALIFORNIA					MINIMUM DEPTHS IN EACH 1/4 WIDTH OF CHANNEL ENTERING FROM SEAWARD			
NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)				
San Bruno Shoal San Bruno Shoal	10-28-2021	500	5.66	30	28.7	30.2	31.1	29.5
Richardson Bay/Marinship Richardson Bay/Marinship	06-23-2020	300 1069	2.11	20	4.6	6.0	6.4	6.4
Islais Creek Islais Creek	08-27-2021	500 1424	1.71	40	30.7	37.5	37.5	23.9
Alameda Naval Air Alameda Naval Air	10-14-2021	1000 4178	2.90	37	11.5	12.5	19.0	17.2
Mare Island Strait Mare Island Strait	09-29-2021	400 606	3.37	30	27.3	29.1	31.8	32.1
Larkspur Channel Larkspur Channel	07-11-2019	231 542	2.37	13	6.5	10.0	9.7	8.0
Northship Channel Northship Channel	09-20-2021	3576 4769	5.97	45	23.1	38.2	37.8	35.2
Berkeley Marina Berkeley Marina	04-22-2021	100 142	1.36	6	3.5	3.8	4.3	4.3
Bodega Bay Bodega Bay	09-24-2021	100 400	3.46	12	3.4	10.0	10.5	7.9
Moss Landing Moss Landing	03-31-2021	120 405	0.98	6	13.2	12.3	11.1	10.9
San Rafael ATF Across the Flats	02-09-2021	100	2.25	8	2.4	4.2	4.0	2.3
San Rafael River Inner Canal Channel	02-09-2021	60 160	1.55	6	0.7	1.6	0.9	1.4
Suisun Bay Channel Suisun Bay (0+00 to 150+00)	02-15-2022	300	2.84	35	35.9	35.5	35.3	34.8
Suisun Bay Channel Suisun Bay (150+00 to 733+45)	02-15-2022	300	11.06	35	34.0	33.6	34.3	30.7
Suisun Bay Channel Anchorage Suisun Bay Channel Anchorage	02-15-2022	400	0.90	35	34.3	No Data	No Data	No Data
New York Slough New York Slough (0+00 to 232+03)	12-10-2021	400 411	4.42	35	34.4	35.1	35.2	34.9



Harbor Safety Committee of the
San Francisco Bay Region Clearing House
c/o Marine Exchange of the San Francisco Bay Region
10 Commodore Drive
Emeryville, California 94608
415-441-6600 -- hsc@sfmtx.org

San Francisco Clearinghouse Report

April 14, 2022

- ✍ In March the clearinghouse did not contact OSPR regarding any possible escort violations.
- ✍ In March the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- ✍ The clearinghouse has not contacted OSPR in 2022 regarding possible escort violations. The clearinghouse did not contact OSPR in 2021 regarding possible escort violations. The clearinghouse contacted OSPR 1 time in 2020 regarding a possible escort violation. The clearinghouse did not contact OSPR in 2019 regarding possible escort violations. The clearinghouse contacted OSPR 1 time in 2018 about a possible escort violation. The clearinghouse did not contact OSPR in 2017 about possible escort violations. The clearinghouse contacted OSPR 1 time in 2016 about a possible escort violation. The clearinghouse contacted OSPR 3 times in 2015 about possible escort violations. The clearinghouse contacted OSPR 5 times regarding possible escort violations in 2014. The clearinghouse contacted OSPR 1 time in 2013. The clearinghouse contacted OSPR 3 times in 2012 regarding possible escort violations, 3 times in 2011, 6 times in 2010, 8 time 2009; 4 times 2008; 9 times in 2007; 9 times in 2006; 16 times in 2005; 24 times in 2004; twice in 2003; twice in 2002; 6 times in 2001; 5 times in 2000.
- ✍ In March there were 85 tank vessel arrivals; 13 ATBs, 4 Chemical Tankers, 13 Chemical/Oil Tankers, 25 Crude Oil Tankers, 2 LPGs, 19 Product Tankers, and 9 Tugs with Barges.
- ✍ In March there were 232 total vessel arrivals.

San Francisco Bay Clearinghouse Report For March 2022

San Francisco Bay Region Totals

	<u>2022</u>		<u>2021</u>	
Tanker arrivals to San Francisco Bay	63		49	
ATB arrivals	13		15	
Barge arrivals to San Francisco Bay	9		9	
Total Tanker and Barge Arrivals	85		73	
Tank ship movements & escorted barge movements	274		249	
Tank ship movements	159	58.03%	125	50.20%
Escorted tank ship movements	130	47.45%	95	38.15%
Unescorted tank ship movements	29	10.58%	30	12.05%
Tank barge movements	115	41.97%	124	49.80%
Escorted tank barge movements	14	5.11%	21	8.43%
Unescorted tank barge movements	101	36.86%	103	41.37%

Percentages above are percent of total tank ship movements & escorted barge movements for each item.

Escorts reported to OSPR 0 0

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	178		269		0		123		570	
Unescorted movements	81	45.51%	127	47.21%	0	0.00%	55	44.72%	263	46.14%
Tank ships	67	37.64%	98	36.43%	0	0.00%	50	40.65%	215	37.72%
Tank barges	14	7.87%	29	10.78%	0	0.00%	5	4.07%	48	8.42%
Escorted movements	97	54.49%	142	52.79%	0	0.00%	68	55.28%	307	53.86%
Tank ships	94	52.81%	129	47.96%	0	0.00%	62	50.41%	285	50.00%
Tank barges	3	1.69%	13	4.83%	0	0.00%	6	4.88%	22	3.86%

Notes:

1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.

San Francisco Bay Clearinghouse Report For 2022

San Francisco Bay Region Totals

	<u>2022</u>		<u>2021</u>	
Tanker arrivals to San Francisco Bay	171		694	
ATB arrivals	49		193	
Barge arrivals to San Francisco Bay	26		148	
Total Tanker and Barge Arrivals	246		1,035	
Tank ship movements & escorted barge movements	816		3,431	
Tank ship movements	441	54.04%	1,959	57.10%
Escorted tank ship movements	358	43.87%	1,513	44.10%
Unescorted tank ship movements	83	10.17%	446	13.00%
Tank barge movements	375	45.96%	1,472	42.90%
Escorted tank barge movements	49	6.00%	246	7.17%
Unescorted tank barge movements	326	39.95%	1,226	35.73%

Percentages above are percent of total tank ship movements & escorted barge movements for each item.

Escorts reported to OSPR 0 0

<u>Movements by Zone</u>	<u>Zone 1</u>	<u>%</u>	<u>Zone 2</u>	<u>%</u>	<u>Zone 4</u>	<u>%</u>	<u>Zone 6</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Total movements	500		802		0		336		1,638	
Unescorted movements	229	45.80%	404	50.37%	0	0.00%	153	45.54%	786	47.99%
Tank ships	194	38.80%	321	40.02%	0	0.00%	142	42.26%	657	40.11%
Tank barges	35	7.00%	83	10.35%	0	0.00%	11	3.27%	129	7.88%
Escorted movements	271	54.20%	398	49.63%	0	0.00%	183	54.46%	852	52.01%
Tank ships	253	50.60%	352	43.89%	0	0.00%	168	50.00%	773	47.19%
Tank barges	18	3.60%	46	5.74%	0	0.00%	15	4.46%	79	4.82%

Notes:

1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.

NOAA report to the San Francisco Bay Harbor Safety Committee

April 2022

Transitioning to Electronic Navigational Charts (ENC)

The phase out of raster nautical chart products continues. The Local Notice to Mariners will list all charts that have been added to the "LAST EDITION" status, meaning in 6 months, that chart product will disappear. Chart 18651 (Southern San Francisco Bay, including Redwood City) has just entered "LAST EDITION" status. The chart will be canceled on October 5, 2022.

Coast Survey continues to improve the tools that convert Electronic Navigational Chart (ENC) data to raster formats. The Custom Chart Tool can be found here:

<https://devgis.charttools.noaa.gov/pod/>

If you want to see what data has been applied to the ENC on a weekly basis, you can use our Weekly Chart Update web service here: https://distribution.charts.noaa.gov/weekly_updates/

National Weather Service - Weather Ready Nation Ambassador Initiative

The NWS has a [Weather-Ready Ambassador program](#), which partners with organizations to assure they are weather ready by providing them information about how they can prepare for bad weather. This information can be used by these organizations to help others prepare, i.e. they can be force multipliers. NWS has recently developed a marine layer of this program with tools, videos and information specifically for mariners.

To get more information, from the [main WRN Page](#), click on the Ambassador drop down and select "Marine".

<https://www.weather.gov/wrn/wrna-marine>

Organizations (like the Marine Exchange, a port authority, pilot group, tug company, etc.) can sign up. In the application form, under the organization that best applies, select "Maritime/Marine" to easily be added to the marine list. By signing up you will get a quarterly newsletter, and marine "hot news", along with access to tools, training videos and other information. All of this is free.

And your organization will have permission to add the Weather Ready Nation symbol to their website, social media posts, etc.



Promotional flier with more information is below.

National Weather Service

Light rain over the next few days is welcome. However, still in a La Nina condition and the Sierra snowpack is only 25% of normal in most areas.

93% of the state is currently in "Severe Drought" condition, meaning the fire season will likely be longer, with high burn intensity, dry fuels, and large fire spatial extents.

No expectation of improvement in the near term.

END OF REPORT

Submitted by

Jeffrey Ferguson

California Navigation Manager

NOAA's Office of Coast Survey

jeffrey.ferguson@noaa.gov

IT'S NOT ENOUGH TO KNOW THE WEATHER...
WE MUST PREPARE FOR IT!

Building a Weather-Ready Nation is a team effort!



A Weather-Ready Nation understands the dangers of extreme weather, water, and climate events, responds with wise decisions that save lives and prevent economic losses, and inspires others in the marine community to be better informed and prepared.

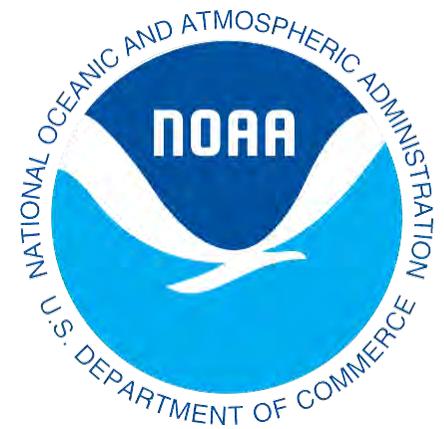
Your organization can help build
a Weather-Ready Nation
as an Ambassador!

Take the next step:

www.weather.gov/wrn/wrn-marine
wrn.feedback@noaa.gov
[@WRNAmbassadors](https://twitter.com/WRNAmbassadors)



READY
RESPONSIVE
RESILIENT



weather.gov/marine



Courtesy: Capt. Kip Louttit

Weather-Ready Nation (WRN) Marine Ambassadors inspire others to be a force of nature by being ready, responsive, and resilient to the dangerous impacts of maritime extreme weather by partnering with NOAA and other Ambassadors.



Courtesy: Vessel "Crocodile"

Influence Prevails Where Information Fails

The influence of peers is often more effective at motivating people to change behaviors than information alone. If you want others in the maritime community to be safe when dangerous weather arrives, the best way to influence them is by YOU making wise decisions, and helping to educate your peers on how to be safe. Once you become informed, it's time to influence!

4 Awesome Reasons to Become a Marine WRN Ambassador

1. Peer Influence –Your peers will follow your example during dangerous weather events, keeping them safe.
2. Knowledge at Your Fingertips –Useful safety information will keep you safe when dangerous weather strikes and help you educate your peers.
3. Platform to Speak Up –Your constructive feedback will lead to better forecast messages and weather safety information that will reach millions.
4. Organizational Pride –You can proudly display your organization's service to your community with the WRN Ambassador logo on your website, social media, or other products that people see.



Serve Your Marine Community Today!

Take the next step at weather.gov/wrn/wrna-marine

Thank you to our amazing Ambassadors!
Together, we are building a **WEATHER-READY NATION!**



Courtesy: MITAGS

weather.gov/marine



CALIFORNIA STATE LANDS COMMISSION

HARBOR SAFETY COMMITTEE MONTHLY REPORT - MARCH COMPARISON

VESSEL TRANSFERS

	<u>Total Transfers</u>	<u>Total Vessels Monitored</u>	<u>Total Transfers Percentage</u>
MARCH 1 - 31, 2021	160	28	17.50
MARCH 1 - 31, 2022	176	17	9.66

CRUDE OIL / PRODUCT TOTALS

	<u>Crude Oil (D)</u>	<u>Crude Oil (L)</u>	<u>Overall Product (D)</u>	<u>Overall Product (L)</u>	<u>GRAND TOTAL</u>
MARCH 1 - 31, 2021	10,562,752	0	15,220,872	5,746,905	20,967,777
MARCH 1 - 31, 2022	11,877,113	0	21,710,622	11,374,836	33,085,458

OIL SPILL REPORTED

	<u>TERMINAL</u>	<u>VESSEL</u>	<u>Total</u>	<u>Gallons Spilled</u>
MARCH 1 - 31, 2021	0	0	0	0
MARCH 1 - 31, 2022	0	0	0	0

MARINE INVASIVE SPECIES INSPECTIONS

<u>Percent</u>	<u>Qualified Voyages</u>	<u>Voyages Inspected</u>	<u>Goal</u>	<u>Shortfall</u>
12%	392	49	95	46

Disclaimer: Please understand that the data is provided to the California State Lands Commission from a variety of sources; the Commission cannot guarantee the validity of the data provided to it.

By: MRA