

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

June 13, 2024

The Marine Mammal Center

2000 Bunker Road, Sausalito, California

Scott Humphrey (M), Marine Exchange of the San Francisco Bay Region (Marine Exchange), Chair of the Harbor Safety Committee (HSC); called the meeting to order at 10:05.

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** (M) Bay Conservation and Development Commission; **Katie Baracosa** (A), Port of Benicia; **Christie Coats** (M), Port of Redwood City; **Capt. David Corbett** (M), San Francisco Bar Pilots; **John Fadeeff** (M), Chevron Shipping Co.; **Jeff Ferguson** (M), NOAA; **Patrick Forrester** (M), Port of San Francisco; **Melissa France** (A), US Army Corps of Engineers; **Kathi George** (A), The Marine Mammal Center; **Scott Grindy** (M), San Francisco Small Craft Harbor; **Capt. Tony Heeter** (M), Blue and Gold Fleet; **Paul Hendriks** (A), Baydelta Maritime; **Tammie Lasiter** (A), SSA Terminals; **Erin Pierson** (M), Crowley; **Jeff Qualman** (M), Norvic Shipping; **John Schneider** (M), Marathon Petroleum; **Capt. Danielle Shupe** (A), United States Coast Guard; **Justin Taschek** (A), Port of Oakland; **Jeff Vine** (M), Port of Stockton.

The meetings are always open to the public.

Approval of the Minutes-

A motion to accept the minutes of the May 9, 2024, meeting was made and seconded. The minutes were approved without dissent.

Comments by the Chair- Scott Humphrey

Welcomed the committee members and audience. The Marine Mammal Center is hosting today's meeting. Presentations will be given on CeNCOOS and SailGP. A vote is scheduled to approve petitioning for the addition of a new at-large HSC member. A second vote is scheduled to approve the 2024 Harbor Safety Plan Update. Ferry routing protocol updates are still being finalized. An NTSB report was released on May 14th regarding the Baltimore bridge collapse incident. Findings in the report have prompted USCG to consider conducting in-depth regional risk assessments which may include the San Francisco Bay region.

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Coast Guard Report- Capt. Danielle Shupe

- USCG Sector San Francisco Change of Command took place on May 24th. Capt. Jordan Balduenza replaced Capt. Taylor Lam as Sector SF Commander and COTP.
- A USCG MTS recovery exercise was held on May 16th. The tabletop exercise focused on port re-opening following a disaster.
- A pollution case was reported in the delta involving the derelict vessel Aroura with one thousand gallons of oil on board. The Oil Spill Liability Trust Fund was activated, and a response plan is being developed to raise and pump oil out of the vessel before removal. A Safety Zone has been established.
- A USCG vessel that services ATONs experienced a mechanical failure on June 4th which has reduced response capability for ATON issues.
- The Fourth of July fireworks SEAR event in San Francisco is upcoming. The SailGP race event will be held in July as well.
- Continued protest activity is planned for July 1st and port facilities should remain vigilant. The USCG is working with local agencies to maintain maritime security and navigational safety while ensuring First Amendment rights.
- LT Abby Hammon read from the May- 2024 Prevention/Response Report (attached).

Army Corps of Engineers Report- Melissa France

- Read from the US Army Corps of Engineers, San Francisco District Report (attached). FY23 dredging at Redwood City Harbor is complete. Bid solicitation and planning are underway for FY24 dredge contracts. The hopper dredge Essayons is currently dredging the Main Ship Channel and then Richmond Outer Harbor. Pinole Shoal Channel dredging is deferred until 2025. Debris removal tonnage for May was below average and the Dillard is in drydock for repairs. Surveys are posted and a channel condition report is included.
- Justin Taschek advised that the Chief's Report has been completed and signed for the Oakland Harbor Turning Basins Widening Study.

Clearinghouse Report- Marcus Freeling (report attached)

OSPR Report- Mike Melin

- An HSC membership vacancy announcement was previously distributed. Applications are welcome. Contact: michael.zamora@wildlife.ca.gov

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NOAA Report- Jeff Ferguson

- Read from the NOAA HSC Report for June 2024 (attached). All raster charts are scheduled for cancelation by the end of 2024. The NOAA San Francisco Tide Station is experiencing silting issues causing inaccurate measurements during low tides. The NOAA Marine Debris Program, in partnership with the BoatUS Foundation, is offering grant funding opportunities for removal of derelict vessels. Applications are due by August 12th. The NWS reports updates to the Coastal Waters Forecast. The new forecast includes wave data such as height, direction, and period. King tides are predicted in early July. The El Nino Advisory has been canceled and La Nina conditions are predicted to develop. El Nino is associated with higher water temperature and increased tides.

State Lands Commission Report- Robert Booker (report attached)

PORTS Report- Marcus Freeling

- PORTS buoy-mounted current meters are operating normally and will be serviced in late summer. Issues with PORTS visibility sensor data are being addressed. A calibration procedure was performed on the Oakland Berth 38 visibility sensor. Calibrations will also be done on the Pier 17 and Amorco visibility sensors. New temperature/humidity sensors are being acquired. 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>

Report on CeNCOOS- Henry Ruhl, CeNCOOS

- Henry Ruhl, Central and Northern California Ocean Observing System (CeNCOOS), gave a presentation to the committee (slides attached). CeNCOOS is focused on ocean observation and engaging with maritime stakeholders. CeNCOOS maintains an HF radar network measuring ocean surface currents which can be used to aid Search and Rescue operations. Gliders are used to measure temperature. Water quality stations are useful for harmful algae risk mapping. Data collected by CeNCOOS is used for a variety of modeling applications. The SF Bay Currents mobile app is available and provides access to high-resolution ocean surface current speed and direction data. CeNCOOS also collects visual data on marine life and pollution. The Ship of Opportunity Program was developed for partner vessels willing to host data collecting sensors. Other projects include LUMA360 integrating radar, AIS, and camera data with AI. Feedback is welcome. The CeNCOOS data portal: <https://data.cencoos.org>.

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- Scott Humphrey asked about the integration of PORTS data with CeNCOOS. Henry Ruhl advised that NOAA certified PORTS data is used in addition to a wide variety of less regulated data sources. Forecast modeling incorporates all useful data available. Jim Haussener encouraged continued HSC support for maintaining CeNCOOS funding.

Report on Sail Grand Prix 2024- Melanie Roberts, SailGP

- Melanie Roberts, SailGP, gave a presentation to the committee on the upcoming Sail Grand Prix Season 4 Grand Final racing event (slides attached). The sailing race will be held on July 13-14 off the San Francisco City Front. Race rehearsal will be held on July 12th. An exclusion zone will be in place for rehearsal and race days. Free sailing will take place on July 8-11 without an exclusion zone. Exclusion zone and racecourse maps are provided. Plans are similar to last year's SailGP event. Course marshal boats will be used to enforce the exclusion zone in addition to USCG vessels. Ferry terminals will not be impeded by the exclusion zone, but transit will not be permitted along the city front. Phone and radio contact will be maintained during the event. Website: <https://sailgp.com>
- Capt. Heeter advised that ferries are not used to being overtaken by sailboats and requested increased communication during free sailing in the bay.

HSC Vote – New At-Large HSC Member (Maritime Navigation Safety Cybersecurity)

- Scott Humphrey advised that petitioning for a new HSC member position focused on cybersecurity has been proposed (attached). A motion was made and seconded to approve the proposal. The motion passed without dissent.

HSC Vote – 2024 Harbor Safety Plan Update

- Cody Aichele-Rothman advised that the 2024 San Francisco Harbor Safety Plan (HSP) Update has been compiled. The HSP Update Transmittal Memo and the 2023/2024 SF HSC Executive Summary were distributed (attached). This year's HSP Update includes revised Dead Ship Tow Guidelines and new NOAA Marine Mammal Guidelines approved by the committee in May. A motion was made and seconded to approve the 2024 HSP Update. The motion passed without dissent.

Work Group Reports-

Tug Work Group- Erin Pierson: The Work Group has no issues with the ferry routing protocol updates proposed by the Ferry Operations Work Group.

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Navigation Work Group- Capt. David Corbett: Nothing to report.

Ferry Operations Work Group- Capt. Tony Heeter: The hydrogen fuel cell powered Sea Change ferry was certified on May 13th and a christening will be held. The ferry will be in service from Pier 41 to the Ferry Building in San Francisco. Bunkering via truck will take place at Pier 60. The Sea Change is the first hydrogen ferry in the United States. Crew safety training is ongoing. The Ferry Ops Work Group has drafted updates to the HSC Ferry Routing Protocol including a new downbound traffic lane. An HSC vote will be scheduled to approve the updates after stakeholder input.

Dredge Issues Work Group- Jim Haussener (A), CMANC: Expanding the designation of CATZOC A1 ratings to more regional channels is a priority. Contract issues have been reported with Redwood City dredging. A lack of bidders for Stockton dredging is a concern. USACE dredges Pinole Shoal Channel and Richmond Outer Harbor every other year due to deferred dredging. Annual dredging of these channels is recommended to improve navigation. A Work Group meeting will be held after the July HSC meeting.

PORTS Work Group- Justin Taschek: Nothing to report.

Prevention through People Work Group- Scott Grindy: The SailGP race will be held July 12-14. The San Francisco Marina's 100-year anniversary is in December. A BAMO meeting was held on June 6th.

Marine Mammal Work Group- Kathi George: Several whale sightings have been reported. Three dead whales were recently found offshore with one showing signs of blunt force trauma. A Work Group meeting will be held after today's HSC meeting. Tours of The Marine Mammal Center facility will be given. Scott Humphrey advised that the Marine Exchange is installing AIS transceivers which will have AIS broadcast capability for whale protection notifications.

Public Comment-

- Justin Taschek advised of the Port of Oakland's summer intern program. The Marine Mammal Center also employs several interns. Scott Humphrey advised that a summer intern has been hired to research Marine Exchange history from its founding in 1849.
- Justin Taschek advised that Cal Maritime is considering a merger with Cal Poly due to enrollment and financial issues. Erin Pierson advised of information about the potential merger and that public comment is welcome: <https://www.calstate.edu/csu-system/news/Pages/cal-poly-maritime-integration.aspx>
- Richard James, Coastodian, advised of two Resolutions of the Greater Farallones National Marine Sanctuary Advisory Council which have been distributed to the HSC (Resolution No. SAC-

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179-2022 and Resolution No. SAC-182-2023). The resolutions provide recommendations for removal of abandoned and derelict vessels. Response to the resolutions from the Greater Farallones National Marine Sanctuary is sought, and support is welcome. Removal of derelict vessels is a priority to reduce marine and coastal pollution.

- Brandon Chapman, Golden Gate Bridge Highway & Transportation District, advised that a Fleet Week emergency preparedness exercise is being planned for October 7th. The exercise will focus on earthquake response and transportation of first responders. Participation is welcome.

Old Business-

- Scott Humphrey advised that the HSC voted in May to approve the writing of support letters for repairing the Oakland Outer Harbor ranges, retaining the sea buoy racon, and installing a harmonic tide station in Stockton. The USCG has indicated plans to repair the ranges and keep the sea buoy racon. NOAA is unwilling to fund tide station installation and alternative funding will be needed.
- In response to the Baltimore bridge collapse incident, the HSC was considering support for the Marine Exchange to conduct a Simplified IALA Risk Assessment (SIRA) of the SF Bay region. The USCG is now considering their own regional risk assessment and the SIRA is on hold until further notice.

New Business- None

Next Meeting-

1000-1200, July 11, 2024
Richmond Maritime Safety & Security Center
756 West Gertrude Street, Richmond, California

Adjournment-

A motion to adjourn the meeting was made and seconded. The motion passed without dissent and the meeting adjourned at 11:51.

Respectfully submitted: Marine Exchange of the San Francisco Bay Region

SIGNIFICANT PORT SAFETY AND SECURITY CASES (MAY 2024)
MARINE CASUALTIES
Equipment Failure (07MAY2024): A U.S. flag inspected towing vessel experienced a generator failure while transiting from Los Angeles to Richmond. The vessel was unable to restart the generator while attempting to troubleshoot. Crew identified the problem as the port generator display/CPU and the replacement was made. The issue was corrected, and Class attended the vessel to witness satisfactory operation of the port generator. Case closed.
Equipment Failure (15MAY2024): A U.S. flag container vessel experienced a failure of the vessel's emergency fire pump while transiting within the Sector San Francisco Captain of the Port Zone. The pump impeller was found to be in a worn condition, causing the fire pump to not operate properly. The vessel replaced the impeller and shaft, and Class attended the vessel and witnessed satisfactory operation of the emergency fire pump. Case closed.
Loss of Propulsion (26MAY2024): A U.S. flag small passenger vessel experienced a Loss of Propulsion while the vessel was transiting to San Francisco. The vessel's loss of propulsion was caused by worn fuel piping. The vessel operator replaced the worn fuel piping and Coast Guard witnessed the satisfactory operation of the vessel. Case closed.
VESSEL SAFETY CONDITIONS
Operational Control (01MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to faulty lifefloat installation. The vessel provided satisfactory evidence of proper lifefloat installation. Coast Guard witnessed corrected deficiencies and the operational control was cleared. Case closed.
Operational Control (07MAY2024): A U.S. flag inspected towing vessel was issued an operational control (Code 17, prior to departure) due to the failure of the vessel's port generator. The vessel's main CPU and control screen were replaced, and class witnessed satisfactory operation of the port generator. Case closed.
Operational Control (09MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to failing to schedule an annual inspection. Case pends.
Operational Control (15MAY2024): A U.S. flag container vessel was issued an operational control (Code 17, prior to departure) due to a faulty emergency fire pump. The vessel replaced the impeller and shaft causing the leak in the emergency fire pump. Class witnessed satisfactory repairs attesting to the satisfactory operation of the emergency fire pump. Case closed.
Operational Control (17MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due the vessel's rudder posts heavily leaking water. The vessel repaired the rudder posts and Coast Guard witnessed the corrected deficiencies. Case closed.
Operational Control (22MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 60, prior to movement) due to a cracked hydraulic oil line on the vessel's jet drive unit. The vessel replaced the hydraulic oil line and Coast Guard witnessed the corrected deficiencies. Case closed.
Operational Control (22MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to an inoperable bilge pump. The vessel replaced the inoperable bilge suction and Coast Guard witnessed successful bilge suction out of the space. Case closed.
Operational Control (23MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to multiple emergency lights that were inoperable. The vessel replaced all inoperable emergency lighting and the Coast Guard witnessed corrected deficiency. Case closed.
Operational Control (26MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to loss of propulsion on the vessel's port main engine. The vessel replaced the cracked fuel piping causing the loss of fuel pressure. Coast Guard witnessed the repairs and cleared the operational control. Case closed.
Operational Control (28MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 60, prior to movement) due to leaking wet exhaust in the vessel's starboard engine room. Case pends.
Operational Control (29MAY2024): A U.S. flag small passenger vessel was issued an operational control (Code 701, prior to carriage of passengers) due to excessive rot discovered on the salon roof. Case pends.
NAVIGATIONAL SAFETY
Letter of Deviation (LOD), Inoperable S-Band Radar (04MAY2024): A foreign flag chemical tanker was issued an inbound LOD for faulty S-band Radar. Proper repairs were conducted, and the equipment is working properly. Case closed.
Letter of Deviation (LOD), Inoperable X-Band Radar (15MAY2024): A foreign flag tank vessel was issued an outbound LOD for faulty X-band radar. Case pends.
Letter of Deviation (LOD), Inoperable Anchor (25MAY2024): A foreign flag container vessel was issued an inbound LOD for inoperable anchor. Repairs were conducted and equipment is working properly. Case closed.
SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES
Federal Case (22MAY2024): IMD received a report of a decommissioned cruise ship that sunk while docked in Little Potato Slough, Stockton, CA, discharging approx. 800 gals of diesel and oil near the city of Stockton's water intake and farmer's water siphon. USCG assumed responsibility for pollution removal operations and established a Unified Command CAF&W, City of Stockton, and San Joaquin Sheriffs. USCG hired contractors to deploy a hard boom and to remove pollution from the waterway. IMD issued the suspected RP a NOFI and NOFA. Case PENDS.

PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS			
May 2024			
PORT SAFETY CATEGORIES*	May-2024	May-2023	**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:	1	1	3.28
Navigation Safety (1), Port Safety & Security (0), ANOA (0)			
Marine Casualties (reportable CG 2692) within SF Bay:	14	7	6.44
Allision (0), Collision (0), Fire (1), Capsize (0), Grounding (0), Sinking (0)			
Steering (0), Propulsion (6), Personnel (5), Other (2), Power (0)			
Total Number of (routine) Navigation Safety issues/Letters of Deviation:	3	2	2.08
Radar (2), Gyro (0), Steering (0), Echo Sounder (0), AIS (0)			
ARPA (0), Speed Log (0), R.C. (0), Other (1)			
Reported or Verified "Rule 9" or other Navigational Rule Violations:	0	0	0.11
Significant Waterway events/Navigation related Cases:	0	0	0.00
Total Port Safety (PS) Cases opened	18	10	12.00
MARINE POLLUTION RESPONSE			
Pollution Discharge Sources (Vessels)	May-2024	May-2023	**3yr Avg
U.S. Commercial Vessels	2	2	0.61
Foreign Freight Vessels	0	0	0.17
Public Vessels	1	3	1.00
Commercial Fishing Vessels	0	1	0.78
Recreational Vessels	5	6	7.61
Pollution Discharge Sources (Facilities)	May-2024	May-2023	**3yr Avg
Regulated Waterfront Facilities	0	0	0.22
Regulated Waterfront Facilities - Fuel Transfer	0	0	0.08
Other Land Sources	3	6	4.31
Mystery Spills - Unknown Sources	8	2	6.00
Number of Pollution Incidents (By Spill Size)	May-2024	May-2023	**3yr Avg
Spills < 10 gallons	8	5	10.58
Spills 10 - 100 gallons	0	6	1.92
Spills 100 - 1000 gallons	0	0	0.33
Spills > 1000 gallons	0	0	0.00
Spills - Unknown Size	11	9	7.47
Total Pollution Incidents	19	20	20.31
Oil Discharge/Hazardous Materials Release Volumes by Spill Size	May-2024	May-2023	**3yr Avg
Estimated spill amount from U.S. Commercial Vessels	1.00	21.00	6.15
Estimated spill amount from Foreign Freight Vessels	0.00	0.00	0.31
Estimated spill amount from Public Vessels	0.00	5.00	18.00
Estimated spill amount from Commercial Fishing Vessels	1.00	23.00	10.96
Estimated spill amount from Recreational Vessels	1.50	25.00	52.34
Estimated spill amount from Regulated Waterfront Facilities	0.00	0.00	1.70
Estimated spill amount from Regulated Waterfront Facilities - Fuel Transfer	0.00	0.00	0.18
Estimated spill amount from Other Land Sources	5.50	64.00	59.92
Estimated spill amount from Unknown Sources (Mystery Sheens)	7.00	2.00	5.94
Total Oil Discharge and/or Hazardous Materials Release (Gallons)	16.00	140.00	155.51
Penalty Actions	May-2024	May-2023	**3yr Avg
Civil Penalty Cases	0	0	0.03
Notice of Violations	0	0	0.28
Letters of Warning	0	5	4.50
Total Penalty Actions	0	5	4.81
* 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.			

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**Report of the
U.S. Army Corps of Engineers, San Francisco District
June 13, 2024**

1. CORPS O&M DREDGING PROGRAM

Planning and design work continues for the FY24 dredging program and is based on amounts provided in the FY 2024 Consolidated Appropriations Act, Public Law 118-42, signed into law on March 9, 2024. The FY24 project schedules are included at the end of this report. Adjustments may be made to these schedules as circumstances warrant.

FY 2023 DREDGING PROGRAM

- a. **Redwood City Harbor** – Second bid opening was held on October 16 with contract award to HME Construction on October 27. Dredging started on December 6; however, the contractor demobilized at the end of December to work a project in the Los Angeles District. **Dredging resumed on March 3 and completed in mid-May. Post-dredge condition survey was completed on May 21, 2024.**

FY 2024 CONTRACT DREDGING PROGRAM

- b. **Oakland Harbor** – A dredging contract solicitation was posted on sam.gov on April 2 with bid opening moved to May 16 due to amendments. Contract award is tentatively scheduled for late May and dredging estimated to start early July.
- c. **San Joaquin River (Port of Stockton)** – A dredging contract solicitation was posted on sam.gov on April 9 with bid opening scheduled for May 20. Contract award is tentatively scheduled for early June with dredging estimated to start early July.
- d. **Sacramento River Deep Water Ship Channel** – A dredging contract solicitation was posted on sam.gov on April 25 with bid opening scheduled for May 28. Contract award is tentatively scheduled for mid-June with dredging estimated to start mid-July.
- e. **Suisun Bay Channel (and New York Slough)** – A dredging contract solicitation was posted on sam.gov on April 29 with bid opening scheduled for May 30. Contract award is tentatively scheduled for mid-June with dredging estimated to start mid-July.
- a. **Petaluma River** – Planning and design for the FY24 dredging cycle is currently underway with contract award tentatively scheduled for early September and dredging estimated to start mid-October.
- b. **Redwood City Harbor** – Planning and design for the FY24 dredging cycle is currently underway with contract award tentatively scheduled for mid-August and dredging estimated to start in late September.

- c. **Richmond Inner Harbor** – Planning for the FY24 dredging cycle is currently underway with contract award tentatively scheduled for mid-October and dredging estimated to start early December.

FY 2024 GOVERNMENT HOPPER DREDGING PROGRAM

- a. **San Francisco Main Ship Channel** – **The Government Hopper Dredge Essayons is currently dredging the San Francisco Main Ship Channel and should be complete at the end of June. The dredged material placement will be at the near-shore Ocean Beach Demonstration Site (OBDS), as in previous years.**
- b. **Richmond Outer Harbor** – Following completion of the Main Ship Channel, the Essayons will move to Richmond Outer Harbor at the end of June and perform maintenance dredging there until mid-July. Upon completion of Richmond Outer Harbor, Essayons will depart the Bay Area.
- c. **San Pablo Bay (Pinole Shoal)** – Dredging is deferred to FY25 to remain in compliance with the Water Quality Certification for SF Bay Area Dredging.

2. EMERGENCY (URGENT & COMPELLING) DREDGING: There are currently no emergency dredging events happening in the Bay Area.

3. DEBRIS REMOVAL –Debris removal for May was 6 tons. Dillard: 0 tons; Raccoon: 6 tons. Average debris removal for May from 2014 to 2023 is 80 tons (Range: 7 – 114.5). Dillard is in dry dock for repairs. No ETA provided for return.

BASEYARD DEBRIS COLLECTION TOTALS:

MONTH	RACCOON	DILLARD	MISC	TOTAL
2024	TONS	TONS	TONS	TONS
JAN	17.5	45	0	62.5
FEB	27	31	0	58
MAR	10.5	11.5	0	22
APR	5.3	26.5	0	31.8
MAY	6	0	0	6
JUN				
JUL				
AUG				
SEP				
OCT				
NOV				
DEC				

YR TOTAL
180.3

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 Draft Integrated Feasibility Report (IFR) was released on 17 December 2021 for public comment. A Draft IFR/EA and a 404(b)(1) analysis is now included as appendix A-3 of the Feasibility Study. A complete list of updates from the initial Draft IFR/EA is in the executive summary of the 2nd Draft IFR/EA. The Study is scheduled to be completed in Jan 2024 and the Chief's Report is scheduled to be completed end of May 2024.

The 2023 Revised Draft IFR/EA can be found on our website:

<https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Current-Projects/Oakland-Harbor-Turning-Basins-Widening/>

5. OTHER WORK

Regional Dredge Material Management Plan: A targeted District Quality Control (DQC) review of the draft array of alternatives has begun, but minor revisions due to updated cost information are delaying full start and completion of the targeted review. The draft recommended plan will receive final reviews (DQC and ATR) in spring 2024. NEPA/CEQA prep has been contracted and Agency coordination will follow, with a target to be ready for the FY25+ dredging program. Public outreach including tribal consultation are in progress. Study scopes to address data gaps identified by the Interagency Working Group (IWG) remain in progress - Sediment Transport Modeling (ERDC), Ecological Modeling, and Benefits Analysis/Decision Support Tools. Some results will not be available until after the FY25 target completion for the RDMMP, but the data can be applied to future DMMP revisions.

Information on the RDMMP and latest outreach meetings and notes can be found on our website here:

<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 November 30 and December 8, 2023.
Berkeley Marina (Entrance Channel): Condition survey of April 30, 2024.
Islais Creek Channel: Condition survey of July 21, 2023.
Larkspur Ferry Channel: Condition survey of December 12, 2023.
Mare Island Strait: Condition survey of May 2, 2024.
Marinship Channel (Richardson Bay): Condition survey of November 7, 2022.
Napa River: Condition survey of January 30-31, 2024.
Northship Channel: Condition survey of September 25 - October 18, 2023.
Oakland Inner Harbor: Condition survey of May 22-23, 2024.
Oakland Inner Harbor (Brooklyn Basin): Condition survey of 15-20 January 2021.
Oakland Outer Harbor: Condition survey of May 22-23, 2024.
Petaluma River (Across-the-Flats): Condition survey of March 12-14, 2024.
Petaluma River (Main Channel): Condition survey of March 12-14, 2024.
Petaluma River (Extended Channel): Condition survey of November 2-4, 2022.
Pinole Shoal Channel: Condition survey of April 4, 2024.
Redwood City Harbor: Condition survey of May 21, 2024.
Richmond Inner Harbor: Condition survey of June 4, 2024.
Richmond Inner Harbor (Santa Fe Channel): Condition survey of November 28, 2022.
Richmond Outer Harbor (Longwharf): Condition survey of May 1, 2024.
Richmond Outer Harbor (Southampton Shoal): Condition survey of April 30, 2024.
Sacramento River Deep Water Ship Channel: Condition survey of March 25-26, 2024.
San Bruno Shoal: Condition survey of May 30, 2024.
San Francisco Main Ship Channel: Condition survey of February 13-27, 2024.
San Leandro Marina (and Channel): Condition survey of March 30 and April 1, 2015.
San Rafael (Across-the-Flats): Condition survey of August 17, 2023.
San Rafael (Creek): Condition survey of August 17, 2023.
Stockton Ship Channel: Condition survey of March 21-24 and April 2, 2024.
Suisun Bay Channel: Condition survey of April 24-29, 2024.
Suisun Bay Channel (Bullshead Reach): Condition survey of April 24-29, 2024.
Suisun Bay Channel (New York Slough): Condition survey of April 24-25, 2024.
Suisun Slough: Condition survey of November 30 and December 1, 2022.

Disposal Site Condition Surveys:

SF-08 (Main Ship Channel Disposal Site): Condition survey of April 18, 2024.
SF-09 (Carquinez): Condition survey of April 2, 2024.
SF-10 (San Pablo Bay): Condition survey of April 2, 2024.
SF-11 (Alcatraz Island): Condition survey of May 13, 2024.
SF-16 (Suisun Bay Disposal Site): Condition survey of February 9, 2024.
SF-17 (Ocean Beach Disposal Site): Condition survey of April 18 and May 10, 2024.

Requested Surveys:

Pre/Post-dredge and condition surveys have been completed for all of San Francisco District's in-bay projects dredged in FY23.

Channel Condition Report (CCR):

Attached is the Channel Condition Report (CCR) for all Corps maintained channels dated **11 JUNE 2024**. 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 2024 O&M DREDGING PLAN

Project	Target Solicitation	Target Bid Open	Target Award	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Estimated CY	Dredge Type	Placement Site								
				FY2024						FY2025																
CONTRACT CLAMSHELL OR CUTTERHEAD PIPELINE																										
Oakland Harbor	2-Apr	16-May	7-Jun		→	◆	◆	→	→										700kcy	Clam Shell	BU					
Sacramento River (30 Foot Project)	25-Apr	11-Jun	24-Jun		→	◆	◆	→	→										75kcy	Cutterhead	Various Upland					
Suisun Bay Channel	29-Apr	6-Jun	19-Jun		→	◆	◆	→	→										100kcy	Clam Shell	SF-16					
MOTCO Debris Relocation	6-May	19-Jun	3-Jul		→	◆	◆	→	→										# tons	Excavator	N/A					
San Joaquin River (Port of Stockton)	12-Jun	12-Jul	26-Jul	→		→	◆	◆	→	→										150kcy	Cutterhead	Various Upland				
Redwood City Harbor	1-Jul	31-Jul	14-Aug	→			→	◆	◆	→	→										400kcy	Clam Shell	BU/SF-11/ SF-DODS			
Crescent City Harbor (Tier III)	10-Jul	9-Aug	23-Aug				→	◆	◆	→	→										75kcy	Clam Shell	HOODS			
Petaluma River (Tier III)	17-Jul	16-Aug	30-Aug				→	◆	◆	→	→										200kcy	Clamshell	BU			
Moss Landing Harbor (Tier III)	29-Jul	28-Aug	11-Sep					→	◆	◆	→	→										85kcy	Cutterhead	BU		
Richmond Inner Harbor (Tier III)	3-Sep	3-Oct	17-Oct	→						→	◆	◆	→	→										350kcy	Clam Shell	SF-DODS
WEST COAST HOPPER CONTRACT																										
Humboldt Bar & Entrance Channels	30-Jan	29-Feb	8-Mar					→	WCH												300kcy	WCHC (Portland)	HOODS			
GOVERNMENT HOPPER																										
		Start Work	Stop Work																							
Humboldt B&E & Interior	N/A	26-Apr	5-May		→	YAQ															150kcy	Govt Hopper	HOODS			
Humboldt Bar & Entrance Channels	N/A	Oct	Oct									→	ESS									900kcy	Govt Hopper	HOODS		
SF Main Ship Channel	N/A	26-May	Jun				→	ESS													350kcy	Govt Hopper	OBDS SF-8			
Richmond Outer Harbor (Tier III)	N/A	Jun	Jul				→	ESS													250kcy	Govt Hopper	SF-10 SF-11			
Pinole Shoal	N/A	N/A	N/A		D	E	F	E	R	R	E	D							250kcy	Govt Hopper	SF-10 SF-11					

 	Solicitation Bid Opening Contract Award Work Stoppage	West Coast Hopper Contract Gov't Dredge Yaquina Gov't Dredge Essayons	Env Window Mobilization Physical Dredging Hopper Dredging

**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 SUISUN SLOUGH CHANNEL 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 Francisco Mainship San Francisco Mainship	02-13-2024	2000	4.96	55	50.0	55.0	55.1	53.7
Redwood City Harbor Redwood City Harbor	05-21-2024	300 943	3.94	30	20.5	29.1	28.2	27.2
Richmond Inner Harbor Entrance Channel	04-15-2024	809 1021	0.96	38	36.0	36.5	37.3	36.4
Richmond Inner Harbor Approach Channel	04-15-2024	809 1201	3.09	38	33.6	35.0	36.4	34.1
Richmond Inner Harbor Santa Fe Channel	11-28-2022	195 509	0.37	38	25.6	27.4	27.1	21.2
Richmond Outer Harbor Richmond Outer Harbor	04-30-2024	600 1291	3.25	45	39.8	44.0	44.6	42.1
Richmond Outer Harbor Longwharf Turning Basin	05-01-2024	2188 5598	0.88	45	24.7	No Data	No Data	No Data
San Rafael ATF Across the Flats	08-17-2023	100	2.25	8	6.0	6.1	6.6	5.5
San Rafael River Inner Canal Channel	08-17-2023	60 160	1.55	6	4.4	4.9	4.7	5.0
Petaluma River Main Channel	03-14-2024	100 361	4.06	8	3.6	4.3	3.0	3.0
Petaluma River ATF Across the Flats	12-15-2020	200 206	5.68	8	6.3	8.8	8.3	8.2
Mare Island Strait Causeway to Asylum Slough	01-30-2024	75 245	3.19	15	0.6	9.0	9.0	6.9
Napa River Asylum Slough to Napa City	01-30-2024	102 183	9.92	10	1.9	5.4	5.3	0.9
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	05-23-2024	544 1997	4.62	50	45.4	48.1	49.0	47.8

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 SUISUN SLOUGH CHANNEL 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)				
Oakland Harbor Oakland Outer Channel	05-22-2024	296 1761	2.52	50	46.0	48.3	48.9	47.4
Humboldt Bay Bar and Entrance Channel	05-25-2024	500 2113	2.60	48	14.7	33.8	35.4	31.6
Humboldt Bay Eureka Channel	04-04-2024	400 416	1.69	26	2.0	3.8	11.4	7.0
Humboldt Bay Fields Landing Channel	04-04-2024	300 770	2.35	26	12.5	26.9	25.5	20.5
Humboldt Bay North Bay Channel	05-25-2024	400 657	3.04	38	31.2	38.6	38.0	29.3
Humboldt Bay Samoa Channel	04-04-2024	400 1000	1.83	38	33.2	35.1	34.5	17.6
Pinole Shoal Channel Pinole Shoal Channel	04-04-2024	600 1644	10.40	35	26.5	36.4	35.0	31.8
Suisun Bay Channel Suisun Bay (0+00 to 150+00)	04-24-2024	300	2.84	35	33.8	34.3	33.3	29.3
Suisun Bay Channel Suisun Bay (150+00 to 733+45)	10-11-2023	300	11.10	35	34.1	35.0	35.0	35.0
Suisun Bay Channel Anchorage Suisun Bay Channel Anchorage	01-17-2023	400	0.90	35	34.4	No Data	No Data	No Data
New York Slough New York Slough (0+00 to 232+03)	04-23-2024	400 411	4.42	35	33.5	33.7	35.3	34.0
Suisun Slough Channel Suisun Slough Channel	11-30-2022	200 250	15.85	8	5.9	5.9	5.9	6.1

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 LEANDRO 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	09-28-2023	500	5.66	30	28.9	31.0	31.3	30.1
Richardson Bay/Marinship Richardson Bay/Marinship	11-07-2022	300 1069	2.11	20	4.7	5.2	5.3	4.8
Islais Creek Islais Creek	07-21-2023	500 1424	1.71	40	30.9	36.8	37.1	23.9
Alameda Naval Air Alameda Naval Air	12-08-2023	1000 4178	2.90	37	10.4	11.1	17.2	16.2
Mare Island Strait Mare Island Strait	05-02-2024	400 606	3.37	30	28.0	29.8	32.7	32.9
Larkspur Channel Larkspur Channel	02-24-2023	231 542	2.37	13	11.9	12.5	12.7	12.0
Northship Channel Northship Channel	09-25-2023	3576 4769	5.97	45	23.5	37.3	36.7	34.8
Berkeley Marina Berkeley Marina	04-30-2024	100 142	1.36	15	5.7	5.9	6.4	6.3
Bodega Bay Bodega Bay	10-20-2023	100 400	3.46	12	3.2	9.4	9.3	5.4
Moss Landing Moss Landing	01-03-2024	120 405	0.98	15	6.4	5.7	6.1	8.8
Noyo River Entrance Channel	05-08-2024	97 150	0.67	10	6.5	9.5	9.7	8.1
Noyo River Channel	05-08-2024	97 150	0.67	10	6.9	7.6	7.2	5.0
Crescent City Entrance Channel	04-10-2024	200 320	0.42	20	16.4	17.0	15.6	15.1
Crescent City Inner Harbor Basin Channel	04-10-2024	200 300	0.39	15	14.3	14.7	14.4	12.7
Crescent City Marina Access Channel	04-10-2024	228 170	0.22	15	10.1	11.7	11.0	9.1
SAN LEANDRO MARINA Approach Channel	03-30-2015	200	3.50	7	2.8	3.6	3.4	3.2

**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 LEANDRO 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 LEANDRO MARINA North Arm	03-15-2010	170	0.30	7	2.7	3.6	3.8	3.9
SAN LEANDRO MARINA South Arm	03-15-2010	150	0.30	7	3.3	4.7	4.6	4.8



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

June 13, 2024

- ✎ In May the clearinghouse did not contact OSPR regarding any possible escort violations.
- ✎ In May the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- ✎ The clearinghouse has not contacted OSPR so far in 2024 regarding possible escort violations. The clearinghouse did not contact OSPR in 2023, 2022, or 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 times 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 May there were 102 tank vessel arrivals: 17 ATBs, 11 Chemical Tankers, 16 Chemical/Oil Tankers, 25 Crude Oil Tankers, 1 LPG, 22 Product Tankers, and 10 Tugs with Barges.
- ✎ In May there were 243 total vessel arrivals.

San Francisco Bay Clearinghouse Report For May 2024

San Francisco Bay Region Totals

	<u>2024</u>		<u>2023</u>	
Tanker arrivals to San Francisco Bay	75		69	
ATB arrivals	17		15	
Barge arrivals to San Francisco Bay	10		12	
Total Tanker and Barge Arrivals	102		96	
Tank ship movements & escorted barge movements	333		333	
Tank ship movements	184	55.26%	203	60.96%
Escorted tank ship movements	151	45.35%	154	46.25%
Unescorted tank ship movements	33	9.91%	49	14.71%
Tank barge movements	149	44.74%	130	39.04%
Escorted tank barge movements	16	4.80%	13	3.90%
Unescorted tank barge movements	133	39.94%	117	35.14%

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	202		321		0		148		671	
Unescorted movements	89	44.06%	156	48.60%	0	0.00%	75	50.68%	320	47.69%
Tank ships	75	37.13%	123	38.32%	0	0.00%	68	45.95%	266	39.64%
Tank barges	14	6.93%	33	10.28%	0	0.00%	7	4.73%	54	8.05%
Escorted movements	113	55.94%	165	51.40%	0	0.00%	73	49.32%	351	52.31%
Tank ships	107	52.97%	149	46.42%	0	0.00%	64	43.24%	320	47.69%
Tank barges	6	2.97%	16	4.98%	0	0.00%	9	6.08%	31	4.62%

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 2024

San Francisco Bay Region Totals

	<u>2024</u>		<u>2023</u>	
Tanker arrivals to San Francisco Bay	356		830	
ATB arrivals	86		172	
Barge arrivals to San Francisco Bay	60		153	
Total Tanker and Barge Arrivals	502		1,155	
Tank ship movements & escorted barge movements	1,711		4,040	
Tank ship movements	927	54.18%	2,327	57.60%
Escorted tank ship movements	733	42.84%	1,859	46.01%
Unescorted tank ship movements	194	11.34%	468	11.58%
Tank barge movements	784	45.82%	1,713	42.40%
Escorted tank barge movements	97	5.67%	228	5.64%
Unescorted tank barge movements	687	40.15%	1,485	36.76%

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	1,001		1,672		0		722		3,395	
Unescorted movements	472	47.15%	859	51.38%	0	0.00%	382	52.91%	1,713	50.46%
Tank ships	383	38.26%	667	39.89%	0	0.00%	336	46.54%	1,386	40.82%
Tank barges	89	8.89%	192	11.48%	0	0.00%	46	6.37%	327	9.63%
Escorted movements	529	52.85%	813	48.62%	0	0.00%	340	47.09%	1,682	49.54%
Tank ships	498	49.75%	722	43.18%	0	0.00%	296	41.00%	1,516	44.65%
Tank barges	31	3.10%	91	5.44%	0	0.00%	44	6.09%	166	4.89%

Notes:

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

NOAA Report to the San Francisco Bay Harbor Safety Committee June 2024

Production of Raster Charts is Ending

Monthly reminder that NOAA is in the process of ending production of the raster chart products, including the traditional paper chart. The final charts will be canceled in December, 2024. The remaining raster charts in and around San Francisco Bay are now in "LAST EDITION" status. These charts will be officially canceled on July 31, 2024.

For real time navigation, mariners should be using the NOAA Electronic Navigational Chart (ENC) in an appropriate navigation system.

Faulty Data at San Francisco Tide Gage

San Francisco Tide Gage is still having problems and NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) continues to display a disclaimer to the San Francisco National Water Level Observation Network (NWLON) station pages.

The disclaimer says, "Notice: Due to storm activity during the winter months, significant sediment deposits have been observed near the San Francisco water level station. This is impacting real-time water level observations, especially during low tide where observed water levels have generally been higher than astronomical tide predictions. The exact spatial extent of these sediment deposits and their influence on water levels away from the station is unclear. Please use caution when utilizing these water level data for marine navigation in this region."

CO-OPS has plans in place to install a temporary gauge on the nearby Torpedo Wharf pier. CO-OPS' Pacific Operations Branch (POB) has a design and the replacement gauge is currently being fabricated. They also have the necessary permissions from the National Park Service. POB is scheduled to be on site the week of July 22 to install the gauge.

Abandoned and Derelict Vessel Removal Grant Program

The [BoatUS Foundation](#), in partnership with the [National Oceanic and Atmospheric Administration \(NOAA\) Marine Debris Program](#), is soliciting applications under their Abandoned and Derelict Vessel Removal Grant Program.

Using funding from NOAA Marine Debris Program provided by the Bipartisan Infrastructure Law, the BoatUS Foundation will award up to \$7.5 million in grants to remove abandoned and derelict

vessels (ADVs) across coastal and marine areas of the United States. Projects may range from \$50,000 to \$1 million. Through a streamlined application process, this competition aims to lower the administrative burden on applicants and allow more organizations to access funds for ADV removal.

Priority will be given to projects that include input from and benefit underserved, low-income, or tribal communities; demonstrate strong community support; benefit marine animals and their habitats, local coastal communities, or local economies; and include local outreach and education activities directed toward the boating community and general public to prevent abandoned and derelict vessels. Projects throughout the coastal United States, Great Lakes, United States territories, and Freely Associated States are eligible for consideration.

Letters of intent are due on August 12, 2024 11:59 PM EDT. To apply, please visit the BoatUS Foundation [website](#) for eligibility and submission information.

END OF REPORT

Submitted by,
Jeffrey Ferguson
California Navigation Manager
NOAA's Office of Coast Survey
jeffrey.ferguson@noaa.gov



CALIFORNIA STATE LANDS COMMISSION - NORTHERN FIELD OFFICE
MAY COMPARISON REPORT for HARBOR SAFETY COMMITTEE

VESSEL TRANSFERS

	<u>Vessel Arrivals</u>	<u>Vessels Monitored</u>	<u>Percentage of Vessel Monitored</u>
MAY 1 - 31, 2023	179	54	30.17
MAY 1 - 31, 2024	164	35	21.34

CRUDE OIL / PRODUCT TOTALS (BBLs)

	<u>Crude Oil (D)</u>	<u>Crude Oil (L)</u>	<u>Other Products (D)</u>	<u>Other Products (L)</u>	<u>GRAND TOTAL (D) / (L)</u>
MAY 1 - 31, 2023	13,442,421	0	18,838,223	6,594,862	25,433,085
MAY 1 - 31, 2024	11,948,191	0	19,387,821	4,780,863	24,168,684

OIL SPILL REPORTED

	<u>TERMINAL</u>	<u>VESSEL</u>	<u>Total</u>	<u>Gallons Spilled</u>
MAY 1 - 31, 2023	0	0	0	0
MAY 1 - 31, 2024	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>
13%	418	54	101	47

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



The Central and Northern California Ocean Observing System

Henry Ruhl & Marine Lebrec

Harbor Safety Committee, June 13 2024



Vision, Mission & Strategy

CENCOOS STRATEGIC PLAN 2025-28
ADVANCING OCEAN OBSERVING IN CENTRAL & NORTHERN CALIFORNIA



Vision
A healthy and prosperous California coastal ocean powered by information solutions.

Mission
Translating data into action through the production, curation, and delivery of high-quality ocean information.

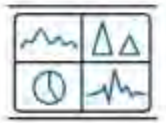
Ocean observation and disseminated information are at the intersection of healthy ocean and coastal ecosystems and a thriving "Blue Economy"



★ **Strategy 1:** Engage marine stakeholders to drive the creation of integrated information products that are valuable for decision-making.



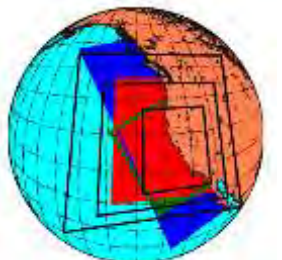
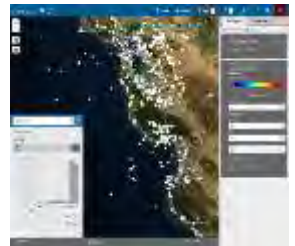
★ **Strategy 2:** Observe coastal and ocean physical, biogeochemical, biology, and ecosystem variables to meet regional stakeholder needs.



★ **Strategy 3:** Streamline access to information, including through a publicly accessible Data Portal.



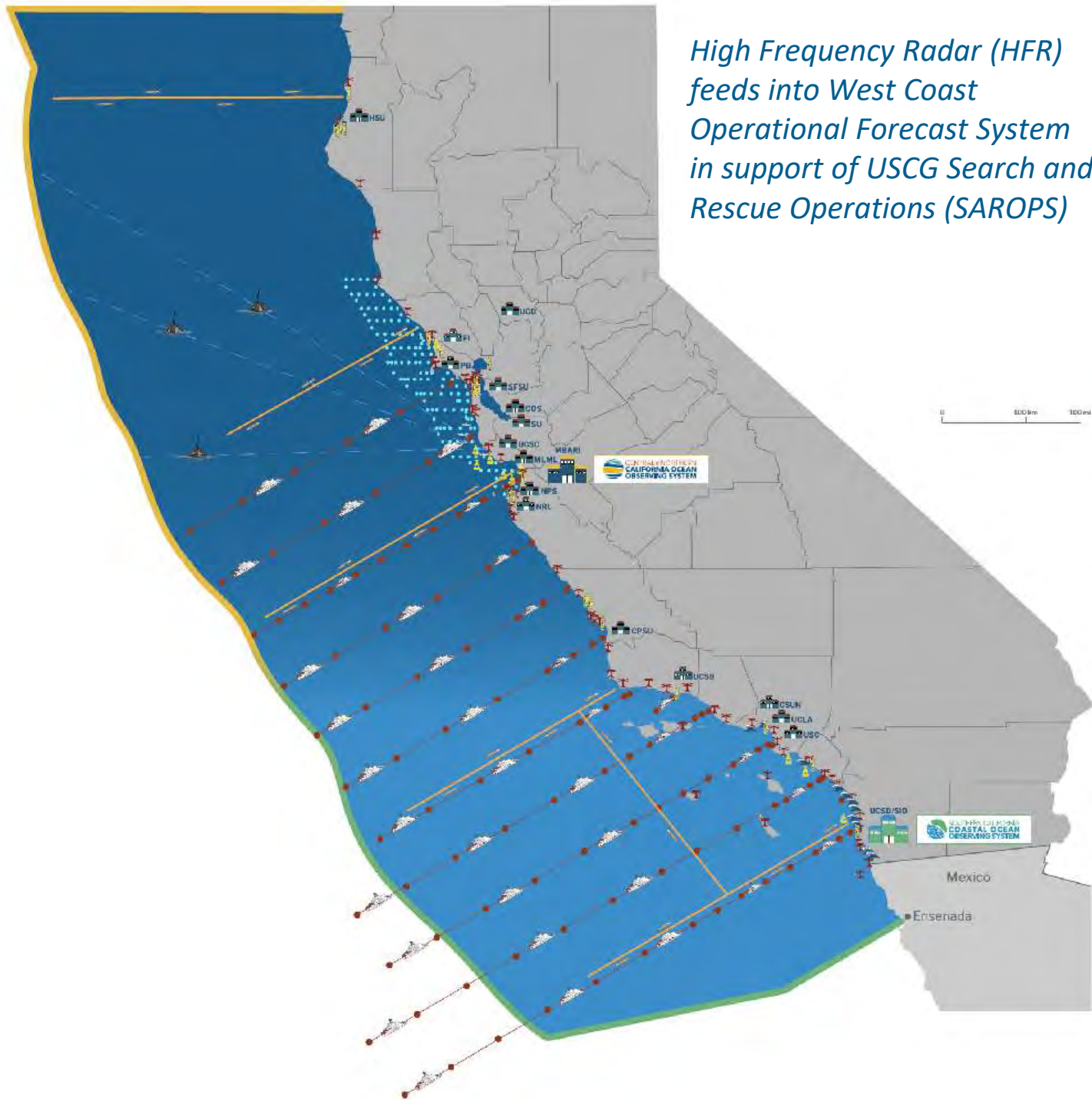
★ **Strategy 4:** Provide access to improved ocean models and other tools to scale information from individual observations and to make data relevant for policy and management.



<https://www.cencoos.org/strategic-plan/>

<https://data.caloos.org/>

*High Frequency Radar (HFR)
feeds into West Coast
Operational Forecast System
in support of USCG Search and
Rescue Operations (SAROPS)*



CeNCOOS & SCCOOS by the Numbers:



California High Frequency Radar Network

62 HF Radars



California Underwater Glider Network

6 Glider Lines



California Coastal Observing Network

21 Shore Stations



10 Moorings and Buoys



California Coastal Flood Network

6 Sites



Animal Telemetry Network

13 Tagged Northern Elephant Seals



42 Tagged White Sharks



Marine Mammal, Seabird, and Sea Turtle Observations

CalCOFI Cruises

ACCESS Cruises

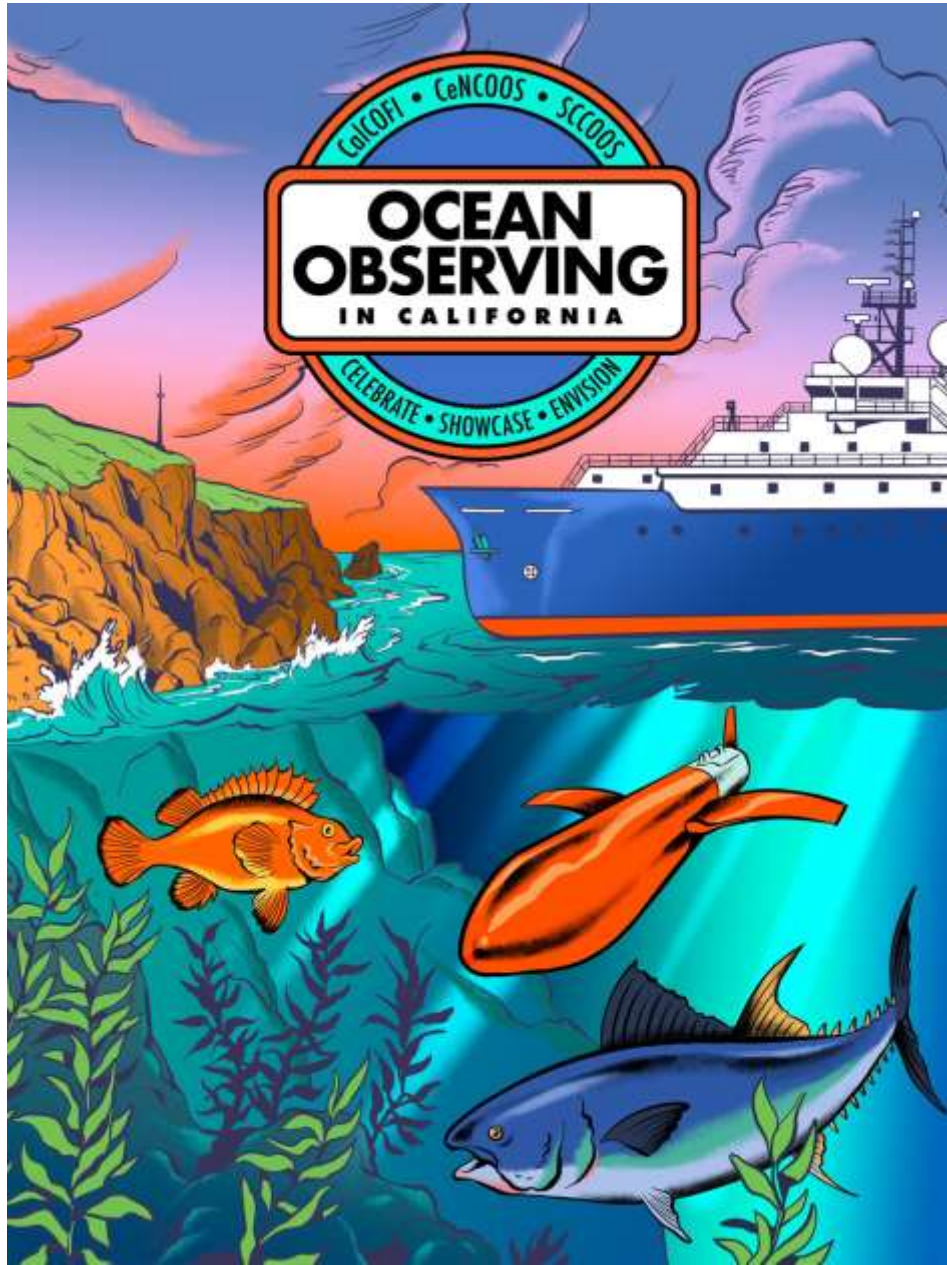


6 Predictive Models



18 Funded Partner Institutions and

44 Principal Investigators

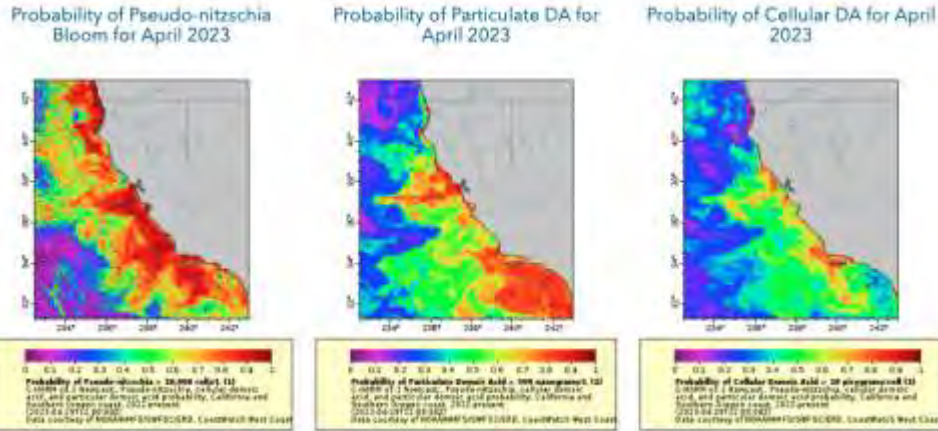


- CeNCOOS and SCCOOS @ 20yrs!
- California Cooperative Fisheries Investigations at 75 years (CalCOFI)!!

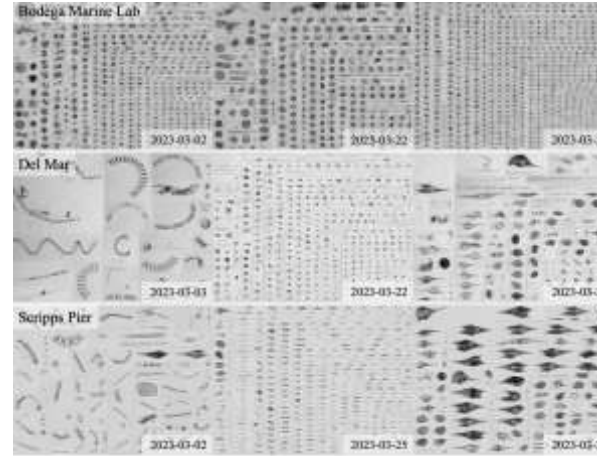


Synthesize State, Mammal, and CalOOS data + C-HARM output sccoos.org/california-hab-bulletin

California Harmful Algae Risk Mapping (C-HARM)



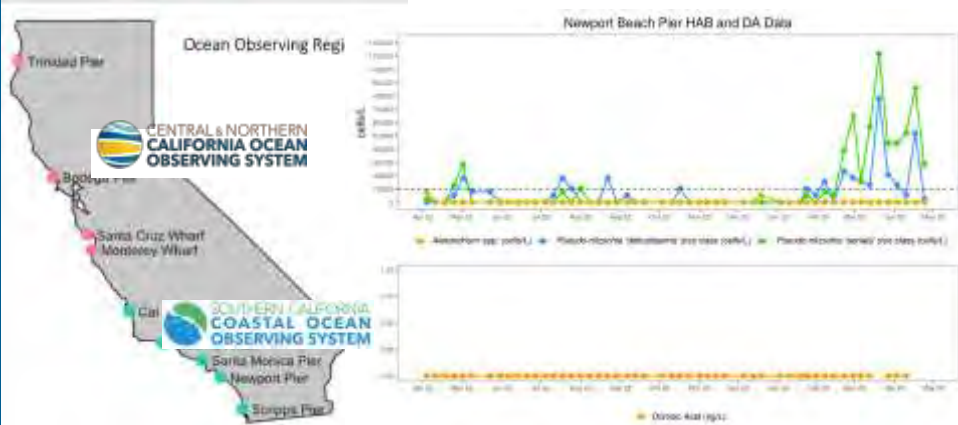
CA IFCB Network Water Sample Imagery



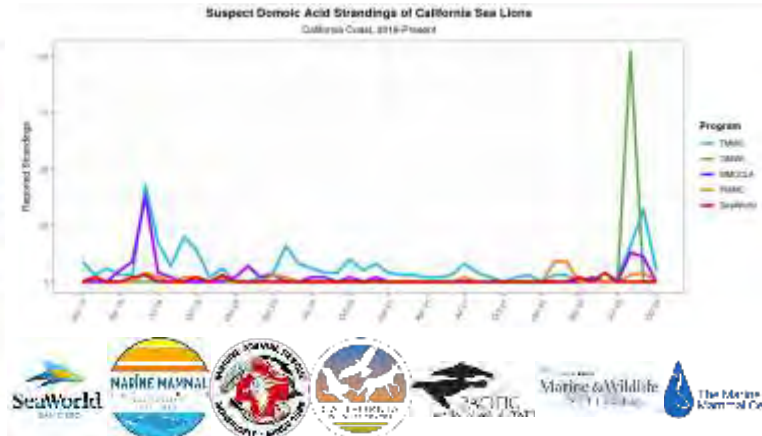
California Department of Public Health (CDPH) Phytoplankton Obs.



CA Harmful Algal Bloom Monitoring Alert Program (HABMAP) Plankton tows



Suspected DA Toxicosis Marine Mammal Strandings



CDPH & Office of Env. Health Hazard Ass. (OEHHA) Advisories



- Refresh of app in use several years ago
- Mobile and tablet versions
- Leverages PORTS/SFBOFS
- SST, waves, wind, and visibility under development this spring/summer
- West Coast app planned in coming years built w/WCOFS and select additional data



Apple

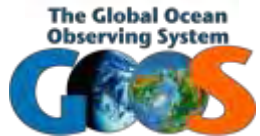


Google Play



<https://apps.apple.com/us/app/baycurrents/id1591997070>

https://play.google.com/store/apps/details?id=org.cenoos.baycurrentsandroid&hl=en_US&gl=US



- Operations and maintenance of kit on vessels transiting through SF Bay can be managed by regional CeNCOOS partners, e.g. Cal Maritime
- This can be tied to Science Technology Engineering and Math (STEM) education objectives that build workforces
- Address issues of diversity, equity and inclusion
- Regional effort contributing to GOOS and UN Sustainability outcomes
- Alex Parker, Fred Meitz will help build example cases:
- Potential examples relate to:
 - <https://www.cprsurvey.org/>
 - <https://www.aoml.noaa.gov/phod/soop/index.php>
 - <https://www.ferrybox.com/>
 - <https://berringdatacollective.com/>
 - <https://seabed2030.org/>





Synchro

A co-designed testbed to synchronize and evolve technology for industry, ocean science, and conservation

WHAT WE DO?



1. Access to no-cost facilities to test ocean technologies



1. Advance uptake of low-cost technologies



1. Evaluate technologies for monitoring offshore wind



www.oceansynchro.io



Synchro aims to bridge the gap between R&D innovation and widespread adoption of ocean tech.

ACCESS



Access to no-cost facilities to test ocean tech

Multiple applicants

Testing tech with partners

Provides access to facilities

Tech evaluation under various environmental conditions

Example:



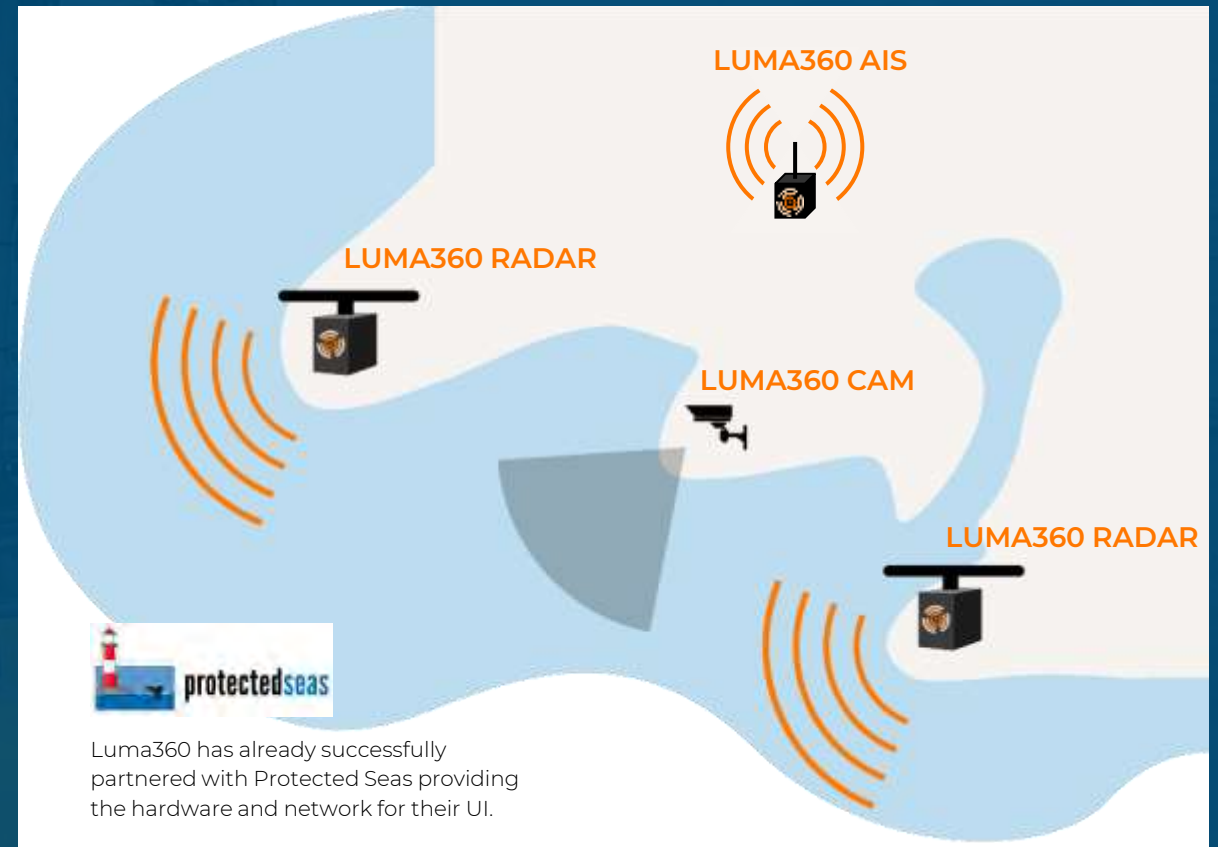
**Suburban
Marine**



LUMA360
MARITIME DOMAIN AWARENESS



www.oceansynchro.io



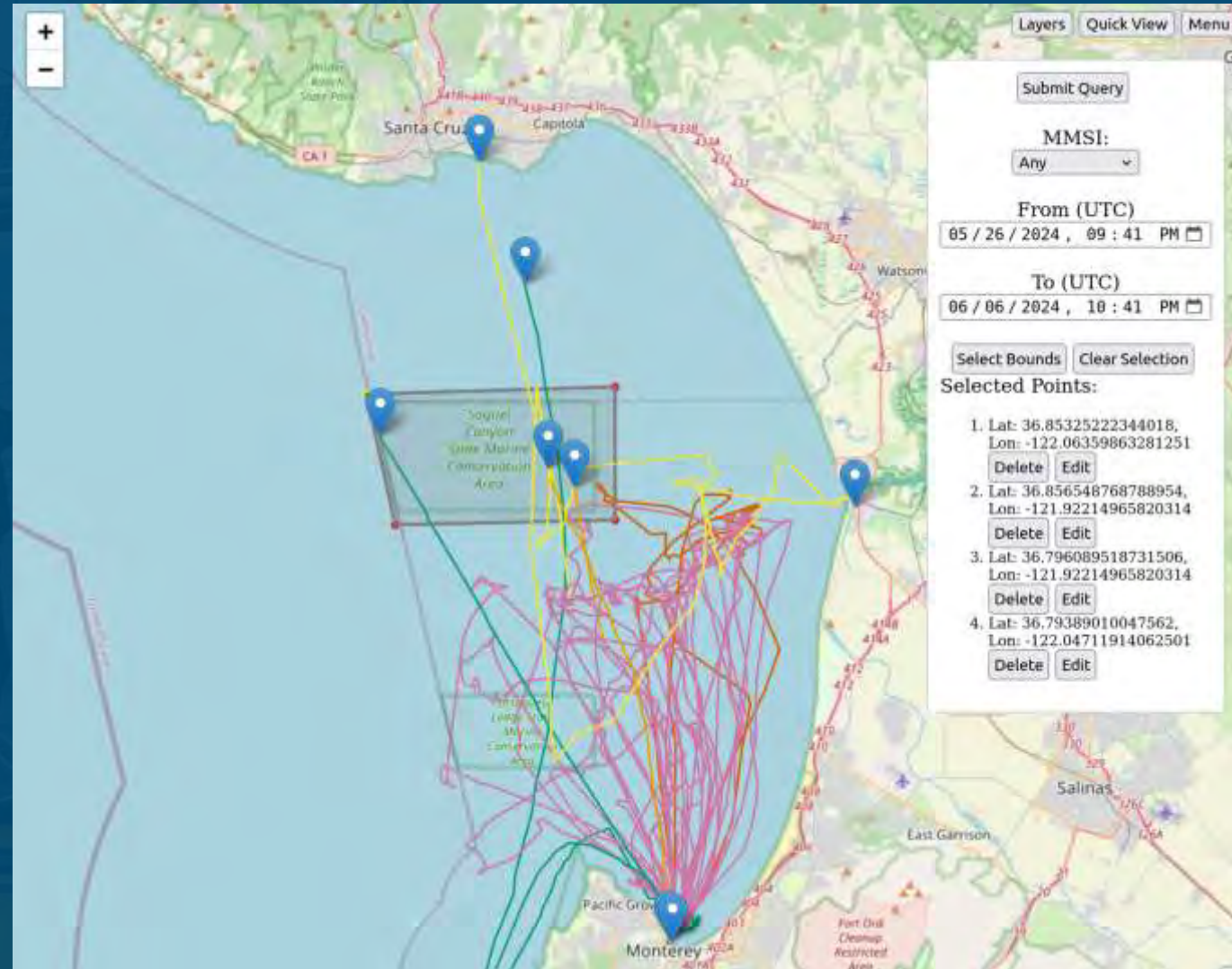
Luma360 has already successfully partnered with Protected Seas providing the hardware and network for their UI.

Vessels in managed spaces
such as NMS and other MPAs

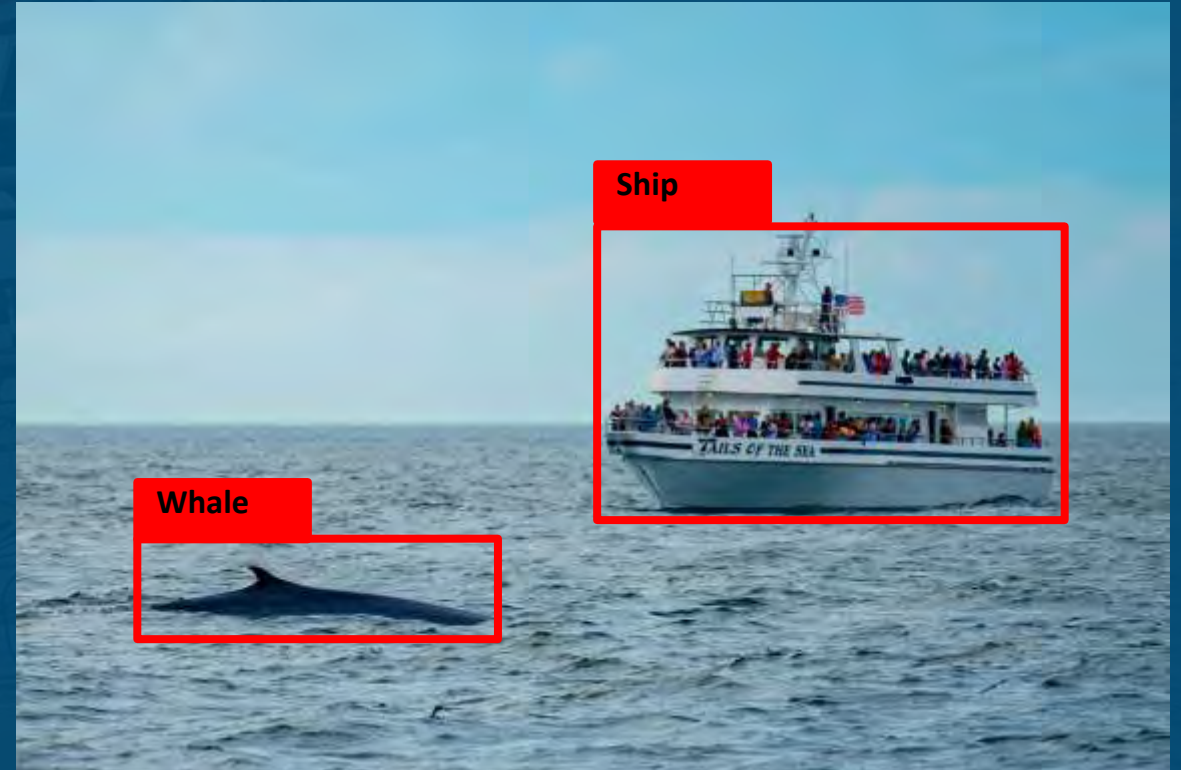
Time and speed in specific
areas

Novel combination of AIS with
Radar and cameras

Locates smaller vessels and
those seeking to evade AIS



- Radar integration
 - Single web interface for multiple radar & AIS sites
- Radar / AIS correlation
 - Determine if vessel turns off AIS
- Camera integration
 - Flir M300 / M400 (EO & LWIR)
 - Pictures of tracks
 - Scan area for vessels / marine mammals
- AI Model integration
 - Vessel classification
 - Whale detection



California statewide data portal: data.caloos.org



California Ocean Observing Systems Data Portal

Home Catalog Map 2 Dashboards Data views 4 Settings Share Help

California Ocean Observing Systems Data Portal

Integrated Ocean Observing for a Changing California Coastline

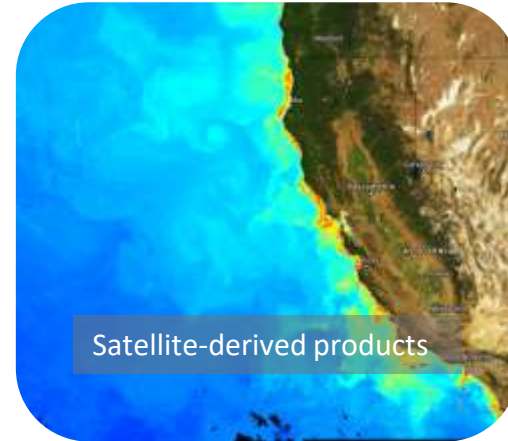
SEARCH 1100+ DATASETS



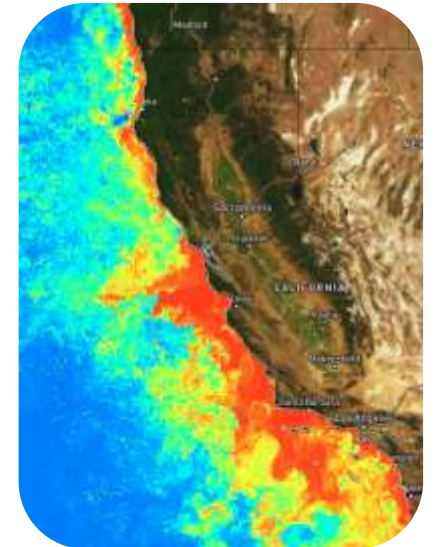
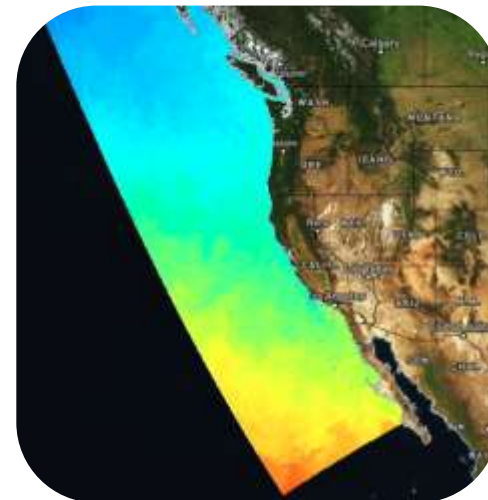
In-situ observations



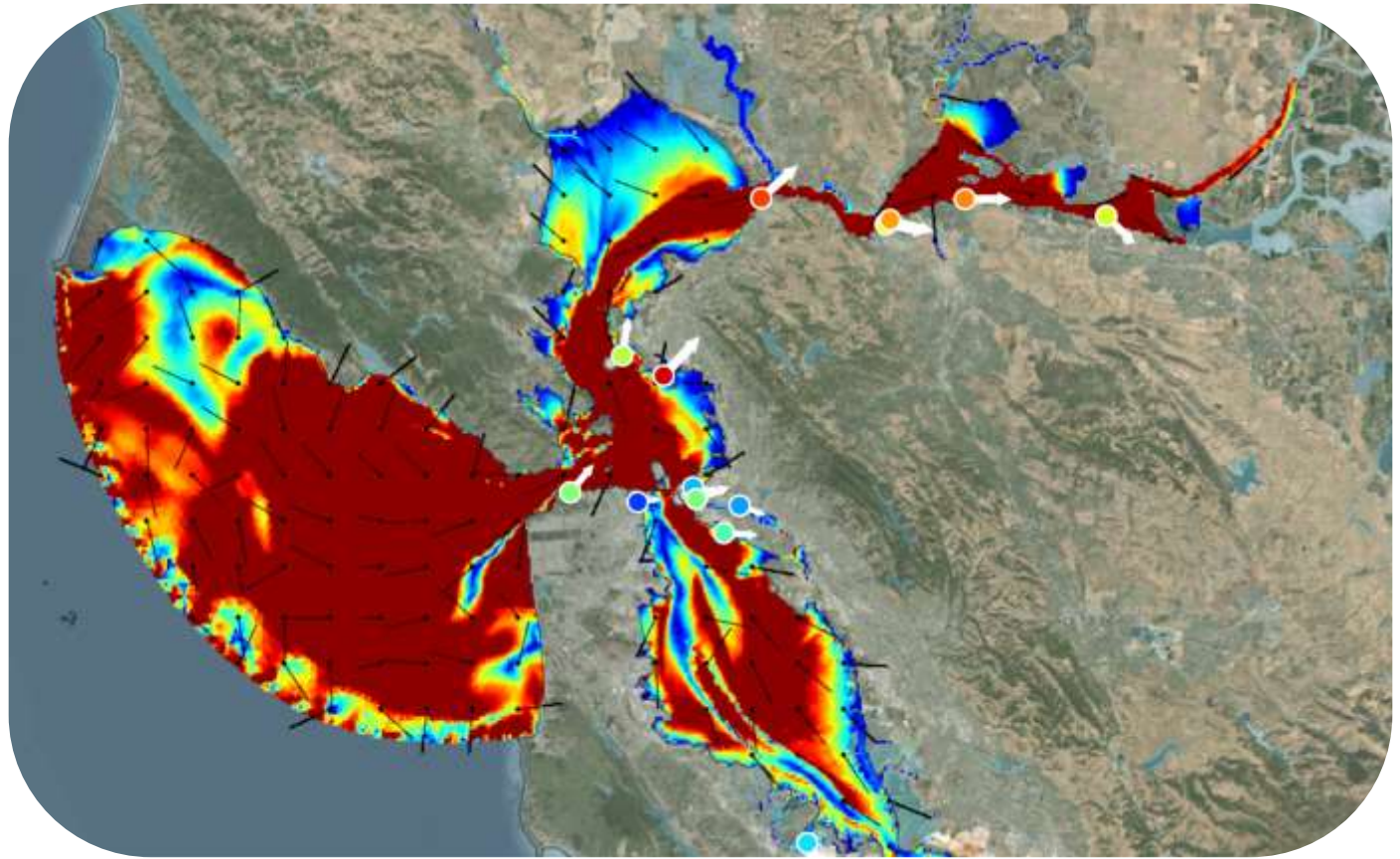
Remote sensing



Models and forecasts



[Demo link](#)



California Ocean Observing Systems Data Portal

Home Catalog Map 2 Dashboards Data views 4 Settings Share Help

California Ocean Observing Systems Data Portal

Integrated Ocean Observing for a Changing California Coastline

SEARCH 1100+ DATASETS

Feedback button

Submit feedback

Comment or suggestion (required)

Your name

Your e-mail address

I'm not a robot

Submit



Contact: mlebrec@mbari.org







Henry Ruhl
CeNCOOS Director



Alex Harper
Program Manager



Marine Lebrec
Data Specialist



Fred Bahr
Data & Information Manager



Patrick Daniel
Summer Staff



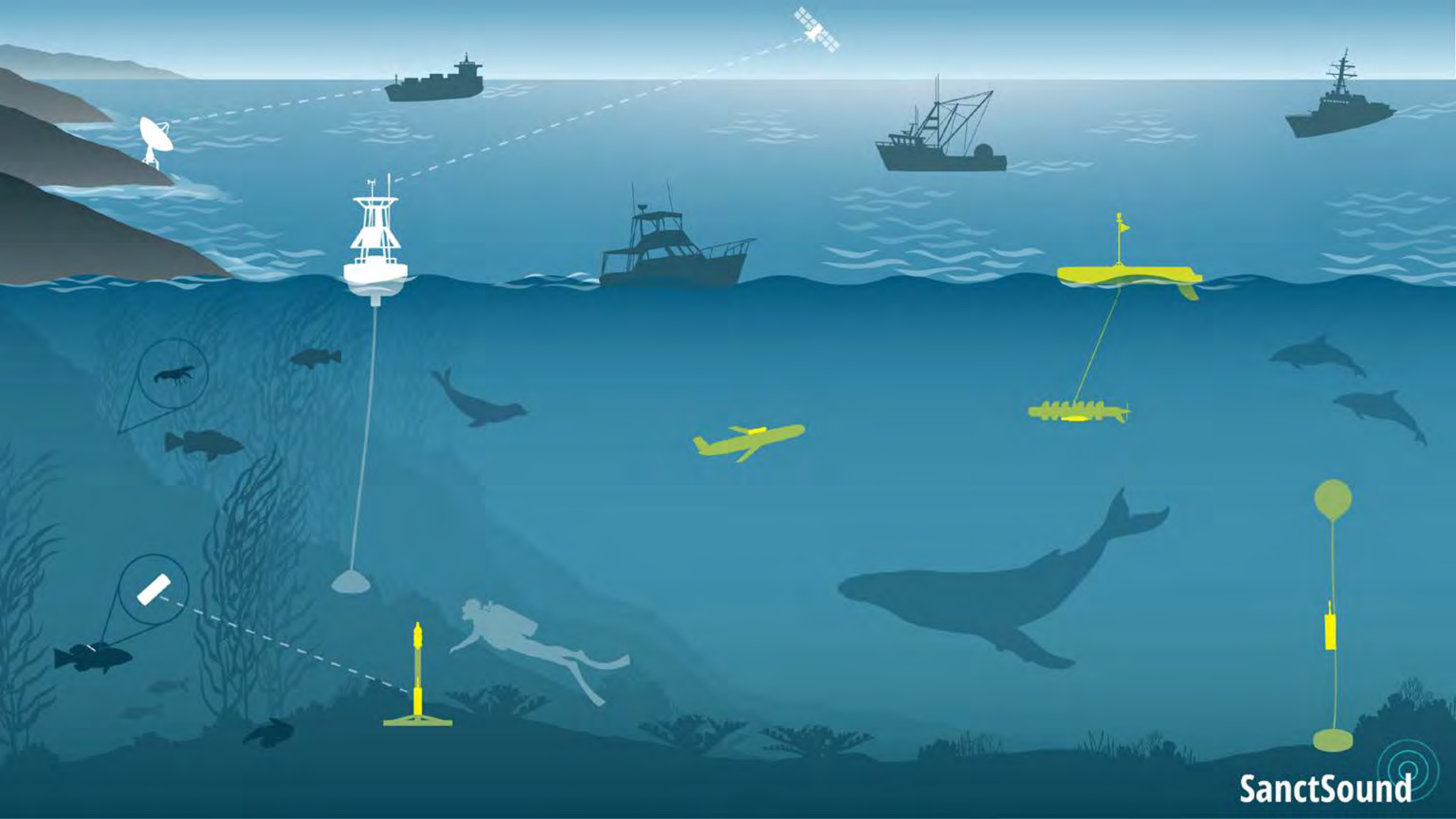
Megan McKinzie



Amy West
Synchro Program Manager



Jason Adelaars
Synchro Technical Manager



IRA Ecosystem Change Systems Approach



Engagement drives our systems

Overburdened, frontline, and underserved community need

- Indigenous Communities
- Resource-linked Communities (fishers, growers, rural)
- Under-resourced Communities (low-income, etc.)

Issue areas

- Climate variation & change
 - Marine heatwaves
 - Ocean acidification & hypoxia
- Harmful Algal Blooms
- Fisheries / Aquaculture
- Offshore wind development

Mandates

- Magnuson-Stevens Act
- Endangered Species Act
- Marine Mammal Protection Act
- National Marine Sanctuaries Act
- Coord. Ocean Obs. & Res. Act
- National Environmental Policy Act
- Tribal government
- State/Local government
- Social license to operate - NGOs

Societal context

Under-represented Community Networks

- SACNAS,
- BIMS
- NOAA Cooperative Science Centers
- MTS,
- AGU
- Regional groups

Supporting Networks

- Coastal Acidification Networks
- Marine Biodiversity Observation Network
- Animal Telemetry Network / Acoustic tag nodes
- National HAB Observing Network
- Ocean Sound Observing Network / SanctSound
- Ocean Vision AI

Requirements, tools, best practices

In situ systems

- Ecosystem mooring
- Imaging, e.g. IFCB
- Glider ADCP Zooplankton
- Glider & station PAM
- [...]
- In kind contributed

Operational context, tools, best practices

DMAC

- RA Systems / services
- Specialist processing / portals / nodes

DMAC context, tools, best practices

Machine readable IOOS Variable data

Physics

- Bathymetry
- Bottom character
- Currents
- Heat flux
- Ice distribution
- Salinity
- Sea level
- Surface waves
- Stream flow
- Temperature
- Wind speed & direction

Biogeochemistry

- Acidity
- Colored dissolved organic matter
- Contaminants
- Dissolved nutrients
- Dissolved oxygen
- Ocean color
- Optical properties
- Pathogens
- Partial pressures of CO2
- Total suspended matter

Biology & Ecosystems

- Hard coral cover & composition
- Macroalgal canopy cover & comp.
- Mangrove cover & composition
- Seagrass cover & composition
- Microbe biomass & diversity
- Phytoplankton biomass & diversity
- Zooplankton biomass & diversity
- Invertebrate abundance & distribution
- Fish abundance & diversity
- Sea bird abundance & distribution
- Sea turtle abundance & distribution
- Marine mammal abund. & dist.
- Ocean sound
- Ocean color

Supporting input data services

Place-based management products

- NOAA LME – IEA indicators supporting fisheries councils
- NOAA Sanctuary Watch - Condition Report indicators
- NOAA CEFI
- BOEM Offshore wind – Baseline & impact assessment
- BOEM Offshore wind – Operational support
- NCCOOS – HAB, Aquaculture information
- Tribe resource information
- State / regional regulators

Synthesized infographics, indicators & reports

Equitable Service Delivery

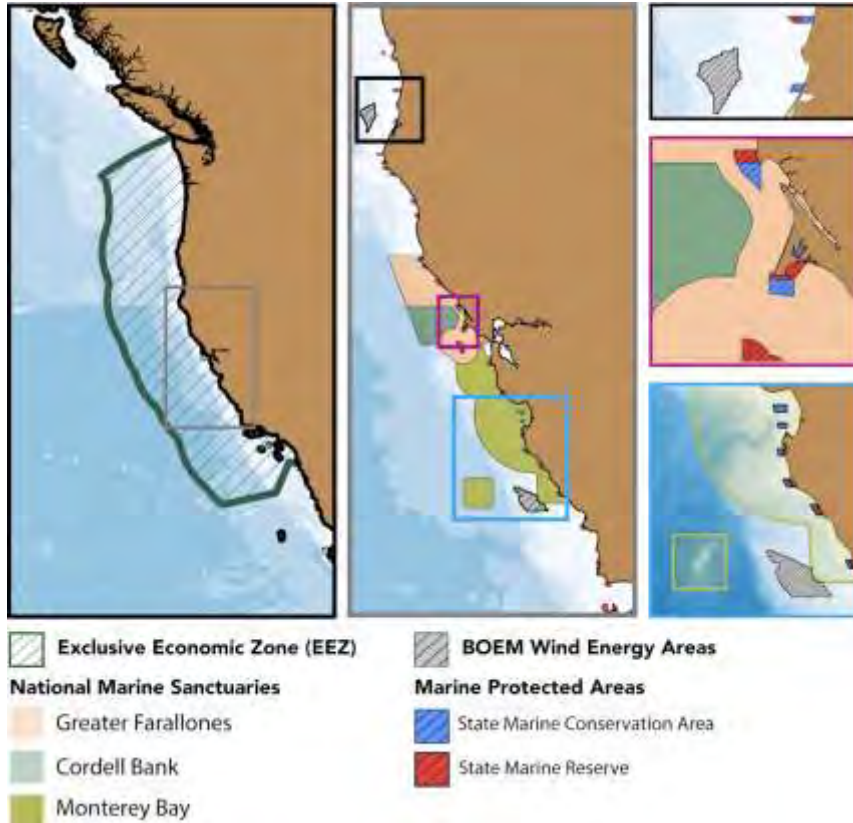
- Observing O&M training
- DMAC training
- Data & information user training
- Accessible apps
- Observing co-design
- CoP
- Certificates program

RA/area	BGC on fixed platforms	BGC on mobile (gliders/AUV/ASV)	OTN/ATN	PAM	Imaging	HABs	eDNA
AOOS	IRA (6)	core, BIL	IRA	core, BIL	core	core	core
CARICOOS	IRA, core, T1	IRA, T1 (1)		IRA, T1		IRA, core (11)	IRA
CeNCOOS	IRA, ODF (8)	IRA, core, BIL (3)	IRA	IRA, BIL, ODF	core, ODF	core, T1	core, T1, MBON
GLOS	core, BIL, T1, ODF	core, BIL	core	BIL	core	IRA, core (10)	core
GCOOS	IRA, core, BIL, T1 (2)	IRA (1)	IRA	BIL	core	core	
MARACOOS	IRA, ODF	IRA, core, ODF	ODF	core	ODF	ODF	
NANOOS	core, BIL, T1	IRA, core, BIL (5)	IRA		IRA	IRA, core, T1 (12)	
NERACOOS	IRA, core, BIL, OTT (9)	IRA, core, (9)		IRA, core, OTT, ODF (ONR) (17)	IRA (16)	IRA, core, OTT (11, 15)	IRA, MBON (14)
Pacific Islands	IRA, core, BIL, T1 (7)	IRA, BIL (7)	core			core (ciguatera)	
SCCOOS	T1	IRA (3), core, BIL, T1 (4)	IRA, BIL	IRA	IRA, noncore, BIL, T1	IRA, core, non-core, BIL, T1	IRA (13), T1
SECOORA	core, BIL	core, T1	core pass thru	IRA, core	Pass thru (HAB ear mark)	Pass thru (HAB ear mark)	

- IRA = Inflation Reduction act; BIL = Bipartisan Infrastructure Act; T1 = Topic 1 IRA (individual RA bids) ; OTT = Ocean Technology Transition program; ODF = Other Direct Funding (e.g. NSF or philanthropy); (#s) Are details noted on next slide

- Maintain CeNCOOS Program Office;
- Operations and maintenance of:
 - **31** high-frequency radars (HFR), with recapitalization of 7% of our infrastructure;
 - **3** glider lines;
 - **15(+)** Coastal Observing Network stations;
 - **4** HAB sampling sites;
 - Zooplankton, bird and ship sampling;
 - 2 stations of eDNA sampling
 - Elephant seal and shark tagging.
- **DMAC** & regional data assembly center;
- Hindcast, nowcast and forecast models with new **biogeochemistry and biology** outputs;
- New **high-resolution coastal nowcasts** in Monterey Bay with ~160 m grid cells;
- **>250** data products - new support for kelp cover, climate, fisheries, marine protected areas & aquaculture indicators;
- Engagement and planning activities towards realizing equitable service delivery





- *Coastal and Climate Resilience Manager*
- *Place-Based Management Data Specialist*

Water level & Waves

- Backyard Buoys – Community led obs.
- Water level sensing and modeling
- WebCOOS – Webcams for waves, water level and flooding

Ecosystem Change

- BGC nitrate and pH sensing on our full glider fleet
 - Trinidad, Pt. Arena, Monterey Bay
- Ocean Sound PAM on Gliders O&M. – Evolves SanctSound
 - Gliders Pt. Arena and Monterey
 - Fixed stations including Humboldt, Morro Bay
- ATN tagging + NE Pacific ACOUSTIC Telemetry (N-PACT) node
- Ocean Vision AI – Engagement and Processing
- Model improvements for West Coast ROMS and WCOFS
 - Ecosystem model nowcast and seasonal forecasts
 - Drop-a-drifter refresh

Common activity

- Next Gen Data Management and Cyberinfrastructure
- Equitable Service Delivery
 - Ocean Obs. practitioner training
 - Information user training
 - Ambassadors in cooperation with NMS

- BIL Y1-2: \$1,169,000
 - 3 Gliders
 - 2 Spray 2 w/ BGC
 - 1 Seaglider shared with NANOOS
 - High Frequency Radar (HFR) recap
 - 6 Coastal Obs. Net. systems
 - Tags - Animal Telemetry Network (ATN)
- BIL Y3-5: \$1,951,635
 - ~3 Gliders w/ BGC + Ocean Sound
 - High Frequency Radar (HFR) recap
 - 10 Coastal Obs. Net. systems
 - Tags - Animal Telemetry Network (ATN)
 - [...]



SAIL GRAND PRIX SEASON 4 GRAND FINAL | SAN FRANCISCO

SAIL GP

POWERED BY NATURE.™

**UPDATE FOR HARBOR SAFETY COMMITTEE
JUNE 13, 2024**

SCHEDULE

BASED ON 14:30 BROADCAST START

FREE SAILING	REHEARSAL	RACING
MONDAY, JULY 8 – THURSDAY, JULY 11	FRIDAY, JULY 12	SATURDAY, JULY 13 + SUNDAY, JULY 14
NO EXCLUSION ZONE	12:30 EXCLUSION ZONE ACTIVE	12:30 EXCLUSION ZONE ACTIVE
UP TO 10 BOATS SAILING	14:30-16:00 RACING REHEARSAL	14:30-16:00 RACING
TRAINING AREA: CITY FRONT OR SOUTH BAY DEPENDING ON CONDITIONS	17:00 EXCLUSION ZONE ENDS	17:30 EXCLUSION ZONE ENDS

RACING REHEARSAL

FRIDAY, JULY 12

EXCLUSION ZONE

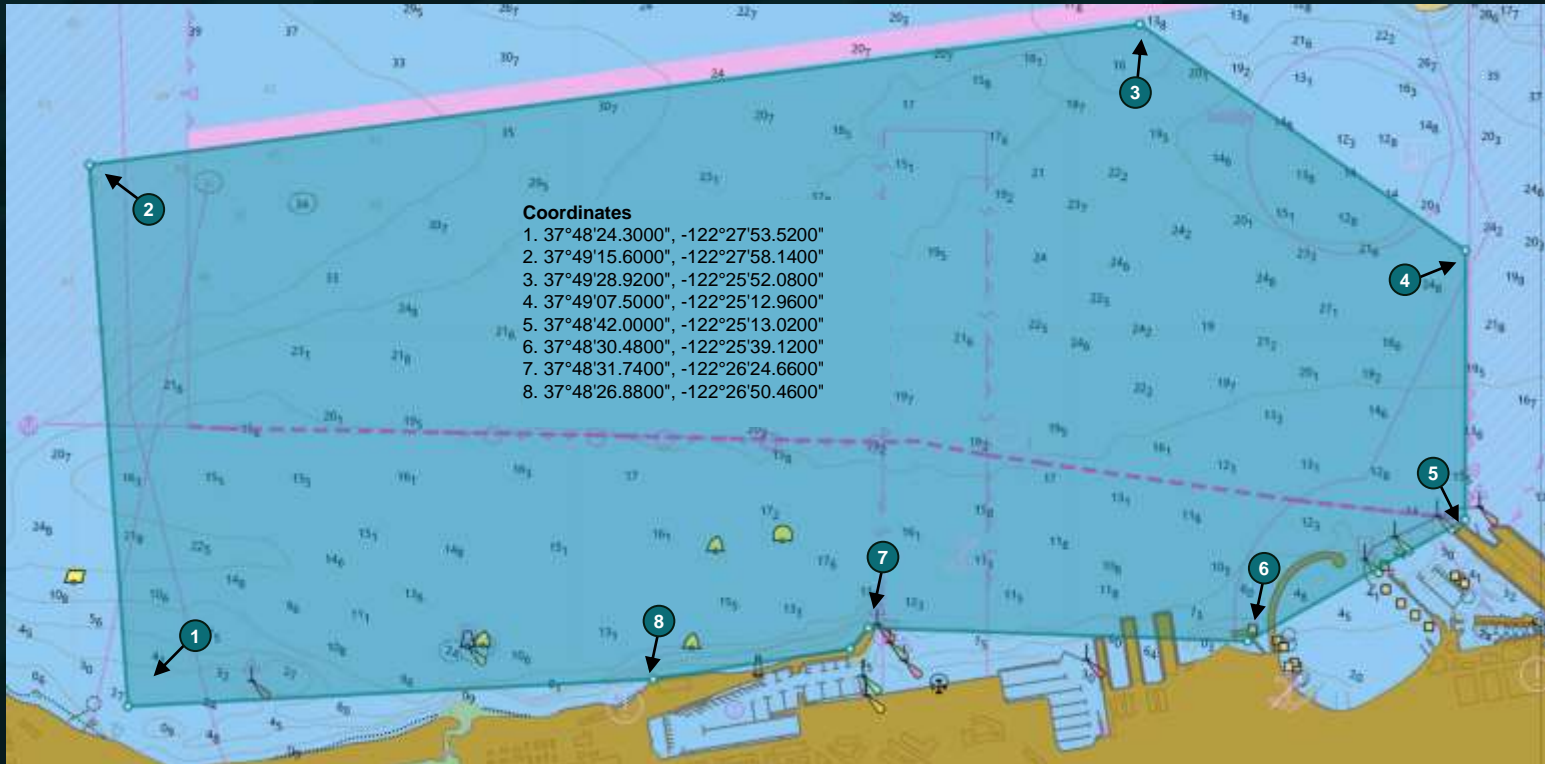
(SAME FOOTPRINT AS PREVIOUS YEARS)



RACING

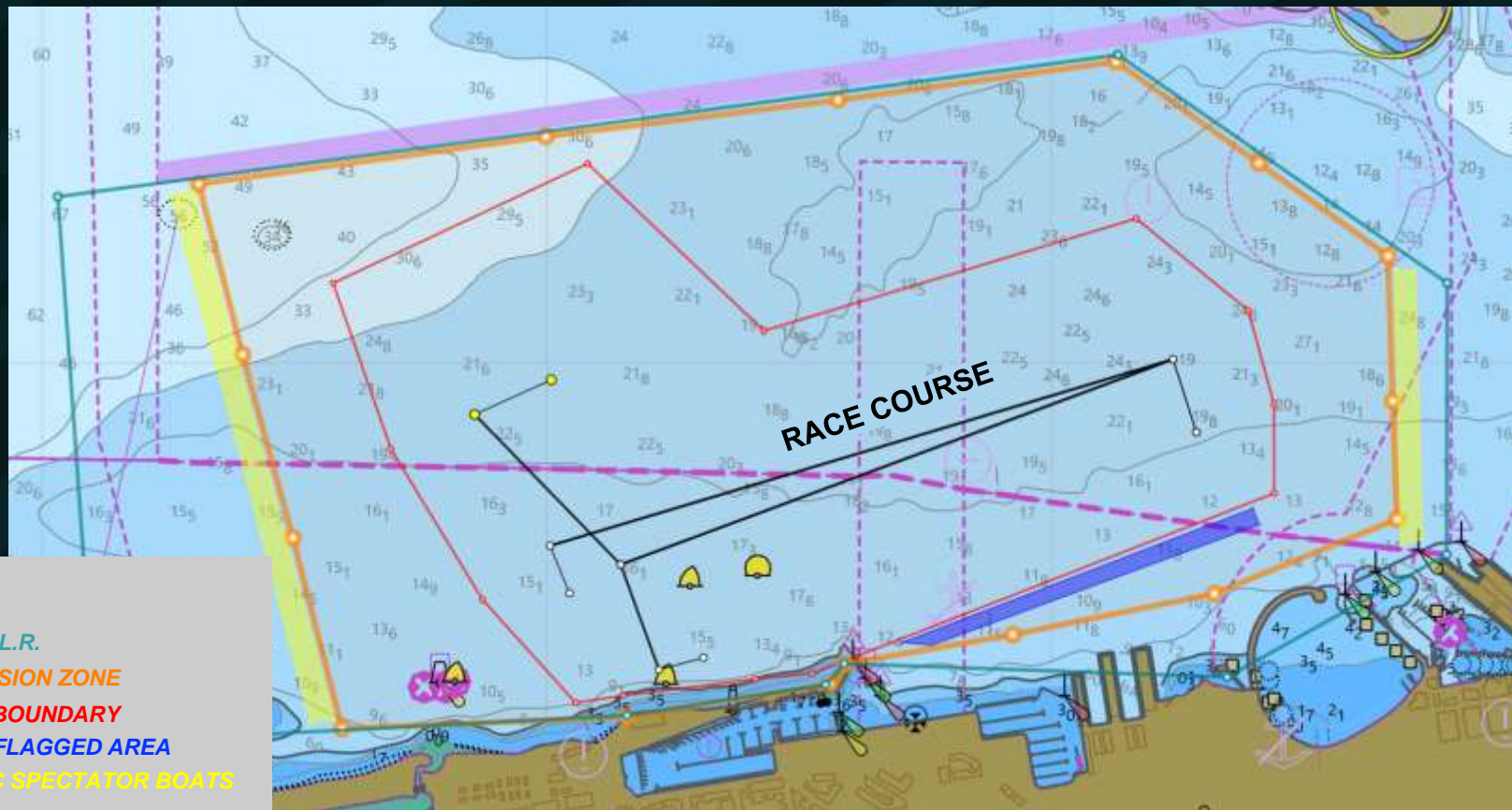
SATURDAY, JULY 13 + SUNDAY, JULY 14

MAXIMUM SPECIAL LOCAL REGULATION (SAME FOOTPRINT AS PREVIOUS YEARS)



EXAMPLE RACE COURSE

WITHIN PROPOSED S.L.R.



Proposal: Petitioning for New At-Large Harbor Safety Committee Member Maritime Navigation Safety Cybersecurity

Request

The Harbor Safety Committee (HSC) of the San Francisco Bay Region is voting to petition the OSPR Administrator to appointment one additional at-large member to the Harbor Safety Committee focusing on Maritime Navigation Safety Cybersecurity.

Situation

Astute cybersecurity and resiliency are vital to maritime safety and efficiency. Vessels, terminals, and operators are digitally interconnected like never before. The new International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) guidelines provide standards and procedures for exchanging maritime data, ranging from real-time navigation information to high-fidelity details critical for vessel transit planning and port operations. This connectivity necessitates empowering the Harbor Safety Committee to advise the regional maritime industry and draft best practices specifically related to maritime and navigation safety components associated with cyber risk, cybersecurity, and cyber resiliency.

Ideal Candidates

The ideal candidate for this new committee position will have career expertise in cybersecurity. The new member must have access to resources to help educate HSC members on cyber risks and resiliency. The member must operate in professional circles that keep them up to date on the maritime cyber climate and be willing to learn about maritime data systems and their special cyber vulnerabilities.

Subcommittee or Working Group

If OSPR authorizes the new position, the HSC Chairman will consider establishing an HSC Maritime Safety Cybersecurity Subcommittee or Working Group. If a subcommittee is established, it will be led by the HSC Maritime Safety Cybersecurity member and will consist of HSC members from at least four categories, which must include one Port Authority member, one tank ship member, one tugboat member, and one ferry member. If a working group is established, it will be led by the HSC Maritime Safety Cybersecurity member and will consist of a combination of HSC members and other maritime experts.

This proposal will be voted on at the June Harbor Safety Committee meeting.

Frederick Scott Humphrey
Chairman, Harbor Safety Committee
San Francisco Bay Region

To: Harbor Safety Committee of the San Francisco Bay Region

Date: 1 June 2024

Subject: Annual Update of Harbor Safety Plan

From: Cody Aichele-Rothman, Bay Conservation and Development Commission

The State's Harbor Safety Committees are required to periodically update their plans for submittal to the OSPR Administrator. The Administrator subsequently determines whether to accept the revised Safety Plans. The Committee will vote at the next Harbor Safety Committee meeting whether to adopt an updated Executive Summary (enclosed with this memo), which highlights Committee activities since June 2023.

In addition to appendices updated by SFMX, appendices were revised by their responsible agencies and will be included in the plan approved by the Administrator.

In an effort to increase the plan's functionality, SFMX will make available substantive changes, such as NOAA Marine Mammal Guidelines, as they are approved by the Committee. Work Group activity reports will continue to be added to the plan on an annual schedule.

Executive Summary 2023-2024

The Harbor Safety Committee (HSC) continued its collaborative process to engage the maritime community in supporting navigation safety in the San Francisco Bay.

During 2023-2024:

- The HSC has continued to hold hybrid meetings, with options available online, as well as rotating physical locations around the bay. Meetings are always open to the public.
- In 2023, Scott Humphrey became the Executive Director of the Marine Exchange and was appointed as Chair of the HSC. Captain Tony Heeter, Blue and Gold Fleet, was appointed as HSC Vice-Chair. Membership positions and work groups also saw various personnel changes, such as the new addition of Erin Pierson, Crowley, as Chair of the Tug Work Group. A new work group was established with the introduction of the Marine Mammals Work Group, chaired by Kathi George of the Marine Mammal Center out of Sausalito.
- The creation of a new cybersecurity HSC membership position is being considered in addition to a new cybersecurity subcommittee potentially led by Cal OES. Cybersecurity training and incident response are Cal OES priorities. A formal proposal to OSPR is being developed and will be submitted upon HSC approval.
- In response to the Baltimore bridge collapse incident, it was proposed that the HSC, working with the Marine Exchange, conduct a Simplified IALA Risk Assessment (SIRA) of the SF Bay region. The eight-week SIRA process analyzes navigation risks including bridges and underwater obstructions. A formal proposal is being developed for HSC consideration.
- The Tug Work Group, with input from the Navigation Work Group, is reviewing ship assist best practices.
- The Navigation Work Group partnered with the Marine Mammal Work Group on Vessel Speed Reduction (VSR) issues. In May 2024 the HSC voted to support a letter drafted by the Bar Pilots requesting repair of the Oakland Outer Harbor ranges. In May 2024 the HSC voted to support a letter drafted by the Bar Pilots requesting the SF Sea Buoy racon be retained. In May 2024 the HSC voted to support a letter drafted by the Bar Pilots requesting NOAA installation of harmonic tide stations in Stockton and Sacramento.
- The Ferry Operations Work Group is updating HSC ferry routing protocol and proposing an additional downbound traffic lane. The updates will be voted on by the HSC after stakeholder input. The Ferry Operations Work Group, with assistance from the Navigation Work Group, drafted updates to HSC Dead Ship Tow Guidelines which allow the use of Class D tugs for small passenger vessel towing. The HSC voted to approve the update to the Harbor Safety Plan in May 2024.
- The Ferry Operations Work Group reported on the Bay Ferry VI maritime security exercise which was held successfully in September 2023. The exercise brought law enforcement and ferry crews together for active threat training. The ferry industry is planning for fleet electrification in the coming years. The hydrogen fuel cell powered Sea Change ferry is undergoing certification before operation in the bay.
- The Dredge Issues Work Group held meetings focused on regional dredging priorities. Pinole Shoal Channel shoaling continues to be a concern. The channel is not scheduled to be dredged

in 2024 due to USACE deferred dredging. Ship pilots require sufficient under keel clearance in Pinole Shoal Channel and may delay transits during low tide if channel depth is reduced.

- The PORTS Work Group held a meeting to consider potential upriver expansion of SF PORTS to Stockton and Sacramento. The delta region is severely lacking in tide and current meters to aid navigation. The SF Bar Pilots support adding several new tide gauges and current meters along the Stockton and Sacramento Channels. Tide and current data allow for more accurate planning and greater navigational safety in addition to increased cargo transport and more efficient shipping to upriver ports. Funding for the proposed new PORTS stations is an issue.
- The Prevention Through People Work Group reported that the lack of recreational fuel docks in the region is a concern. Restricted fuel dock access is a safety issue for smaller vessels including fireboats and is a challenge for regional emergency planning.
- The Marine Mammals Work Group held regular meetings to consider VSR issues and proposals for marine mammal protection. The VSR program in the SF Bay region runs from May 1st to December 31st. Ships are asked to reduce speed offshore for whale safety. Kathi George presented at the 2024 National Harbor Safety Committee Conference. A new section of the Harbor Safety Plan titled NOAA Marine Mammal Guidelines was drafted and approved by a May 2024 vote of the HSC.
- Significant maritime events reported on by the USCG included San Francisco Fleet Week which was held in October 2023; the Asia-Pacific Economic Cooperation (APEC) Summit which was held in San Francisco in November 2023; and the San Francisco New Year's Eve fireworks display.

The Committee also received a number of presentations related to diverse topics including:

- Sam Seder gave a presentation to the committee on Navier electric hydrofoil boats. Navier produces fully electric hydrofoil boats for recreational and commercial small passenger vessel/water taxi use. The prototype vessels were first built in the state of Maine and are now being manufactured in Alameda. The N30 vessel is 30 feet long and uses hydrofoil technology to ride over the water providing a smooth and quiet transit. Hydrofoil technology provides significant drag reduction leading to greater efficiency. Hydrofoil technology can also be applied to different types of vessels including tugboats.
- Sam Levens gave a presentation to the committee on the International Transport Workers Federation (ITF). ITF is a global federation of 696 trade unions and is responsible for maritime labor inspections worldwide. Vessel inspections are conducted to ensure safe and humane conditions for mariners. Vessels flying Flags of Convenience are of particular concern. Labor issues including time onboard, shore leave, wages, age, food access, injuries, harassment, and living conditions are assessed and reported. Covid-19 was particularly difficult for many mariners due to repatriation issues, lack of shore leave, high cost of food, overtime wage theft, and associated mental health problems. ITF has limited staff and relies on tips from the public to determine which vessels to inspect.
- Mallika Mukundan, Chevron New Energies, gave a presentation to the committee on hydrogen fuel. Chevron is committed to bringing new sources of cleaner energy to the market including renewable natural gas/diesel, hydrogen, and advanced geothermal. Carbon capture and storage technology is also a priority. A mix of solutions will be needed to meet clean energy goals with hydrogen predicted to be about six percent of the total by 2050. Hydrogen production will need to increase significantly to meet demand. The trucking and maritime industries are particularly suited to adopting hydrogen energy. Port areas are susceptible to air pollution and are good candidates for adoption of hydrogen fuel. Industry partnerships are encouraged.

- Stas Margaronis, The Propeller Club, gave a presentation to the committee on a proposed flooding, sea-level rise, and climate change resilience information clearinghouse to be run by the Marine Exchange. The Propeller Club in partnership with the Society of American Military Engineers (SAME) hosted the annual Storms, Flooding and Sea Level Defense Conference in November 2023 which highlighted the scope and impact of climate change. It was reported that sea level rise and flooding defense could cost over 100 billion dollars regionally. Major concerns include liquefaction in San Francisco, Oakland Airport flooding, and Redwood City Harbor dredging. Beneficial reuse of dredge material and wetland restoration are possible mitigations, but funding is an issue. It was reported by the NWS that melting of Antarctic ice could cause substantial sea level rise in coming decades. Potential earthquake subsidence increases flooding risk. Preparation and long-term planning are of primary importance. Monitoring systems such as SF PORTS are essential. It is proposed that the Marine Exchange collect and distribute flooding and sea level defense information to facilitate regional cooperation and increase extreme climate resiliency. A grant is being sought to fund the project.
- Jim Behrens, UC San Diego, gave a presentation to the committee on the Coastal Data Information Program (CDIP). The program began in 1975 and now operates twenty-five Waverider buoys offshore California collecting wave data. Funding for the program is provided by USACE, the State of California, and the US Navy. A CDIP buoy is located in the San Francisco Bar Channel. Wave data from the buoy is transmitted every thirty minutes and disseminated through NOAA SF PORTS. CDIP buoys measure wave energy, direction, and height. Ocean current and temperature data are also collected. Several record high waves were recorded in 2023. The data is used for wave model forecasting, coastal erosion research, and real time marine safety alerts to inform ship navigation. Maintaining funding for CDIP is critical.
- Pia Franzese and Romario James, Port of Oakland, gave a presentation to the committee on the new Oakland Portal website. The Oakland Portal includes trucking data from the grant funded Freight Intelligent Transport System (FITS) in use at the port. Fiberoptic cables, smart cameras, changeable message signs, and RFID equipment were installed. An Emergency Operations Center was also built. Using all of the new data available, including shipping data from a partnership with the Marine Exchange, the Oakland Portal is able to calculate truck wait times upon their arrival to the port. This resource is intended to increase trucking efficiency. Trucking turn time data can be beneficial to maritime port stakeholders for vessel schedule planning and to increase shipping efficiency. The reduction of truck idle time can also reduce emissions.
- Ernest Batty, IMIS Global Limited, gave a presentation to the committee on International Maritime Organization (IMO) data standards. S-100 IMO standards apply to hydrographic and maritime environment overlays. The standards are international and ensure consistency between maritime organizations worldwide. S-200 and S-400 standards apply to Aids to Navigation (ATONs), VTS and Marine Exchange organizations, and vessel port calls. For port calls, critical timestamps are collected at certain points along a vessel's transit including arrival, first line, last line, and departure, among others. IMIS developed the Marine Exchange's MIMS vessel tracking and information system to adhere to these standards which facilitate data sharing. Automation of data collection can be incorporated.

See Appendix C, Annual Work Group reports, for activities conducted over the previous year.