STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

DATE: January 12, 2022

Executive Officer's Report

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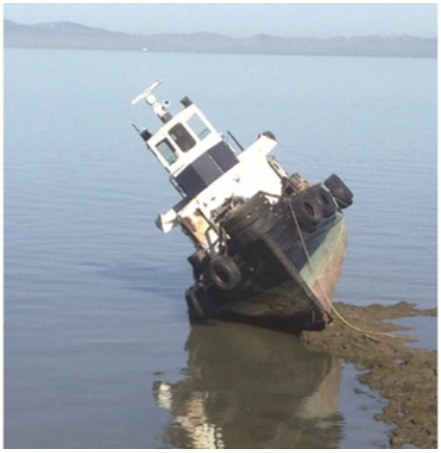
How Agencies Collaborate to Remove Abandoned and Derelict Vessels (Brian Thompson)

We are partnering with several agencies to secure the removal of two abandoned and derelict vessels: the American Challenger, grounded on rocks in the Greater Farallones National Marine Sanctuary near Dhillon Beach (Marin County); and the Polaris, stuck in bay mud off Rodeo (Contra Costa County). When it comes to removing these types of vessels, many agencies have some jurisdiction or funding for abandoned and derelict vessels, but no agency has all the authority or resources needed to respond to such problems. Responses are collaborative.

American Challenger

Polaris



The federal government responds to abandoned and derelict vessels through a National Response Team, led by U.S. EPA and the U.S. Coast Guard, that produced guidance on Abandoned Vessels Authorities and Best Practices. The U.S. Army Corps of Engineers may also remove abandoned and derelict vessels that pose a navigation hazard, and the National Oceanic and Atmospheric Administration provides centralized resources on Abandoned and Derelict Vessels and grants for vessel removal through its Marine Debris Program.

In California, the State Lands Commission has statewide authority, granted in 2011, to expedite the removal of abandoned and derelict vessels. In 2015, the State Legislature passed on some authorities to other state, county, city, and other public agencies (Harbors and Navigation Code sections 550-551). Through the Department of Boating and Waterways' Surrendered and Abandoned Vessel Exchange, people can turn in vessels that may otherwise be abandoned, and agencies can apply for grants to fund abandoned and derelict vessel removal. The Department of Fish and Wildlife Office of Spill Prevention and Response responds to oil spills including leaking oil or fuel from abandoned, derelict, and sunken vessels.

Within the San Francisco Bay Region, the Bay Conservation and Development Commission has authority through the McAteer-Petris Act and the Commission's San

Francisco Bay Plan over vessels moored for extended periods of time (as fill) and live-aboard boats not moored within a marina. The Commission used its authority to address vessel sewage in Richardson Bay through a Richardson Bay Specific Area Plan and a 2021 Agreement with the City of Sausalito and the Richardson's Bay Regional Authority to remove "anchor-outs" (live-aboard vessels illegally moored offshore) from Richardson Bay by October 15, 2026. Anchor-outs in other parts of the Bay are generally removed through local jurisdiction (municipal ordinance, port authority, marina regulation, etc.) and the assistance of marine units of local law enforcement.

- Board staff participates in vessel removals by providing input on management practices and cleanup activities to minimize or prevent water pollution. We may also request funding for activities that protect water quality. As an example of the role we play, you may recall our participation in a task force to cleanup up the Oakland Estuary in 2013 and 2014, which removed 59 problem vessels and over 700 tons of marine debris (concrete, creosote wood, and miscellaneous solid waste) at a cost of around $5 million. The cleanup was triggered to a large extent by the last economic downturn, and with the pandemic, we are seeing more abandoned and derelict vessel problems again (e.g., Rising Tide of Abandoned Boats in the Bay). The passage of AB 1539 in 2021 will help pay for the removal of commercial vessels in the future because it requires commercial vessels in California to have at least $1 million of protection and indemnity insurance to cover wrecks. More recently, we have been involved with the removal of the American Challenger and the Polaris.
- **American Challenger** - We participated in early joint-agency calls to ensure that oils, fuels, and other deleterious materials will be removed from the American Challenger before it is dismantled and removed (planned for spring). Removal of this vessel has been challenging and costly.
- **Polaris** - Removal of the Polaris is pending grant funding through the NOAA Marine Debris Program. The Bay Conservation and Development Commission grant application includes partial funding from the State Water Board Cleanup and Abatement Account for the assessment and removal of hazardous or deleterious substances before removal and for management practices to minimize or prevent the dispersion of sediment, debris, and other pollutants during removal.

For more information on how abandoned and derelict vessels are being addressed across the Pacific Northwest, an Abandoned and Derelict Vessels Workgroup studied the scope and scale of the problem in The Current State of Abandoned and Derelict Vessels on the West Coast - White Paper in 2018, and it made recommendations for comprehensive response in an Abandoned and Derelict Vessel Blue-Ribbon Program for Western U.S. States in 2020.

The 2024 Integrated Report (Richard Looker)

We are currently assessing water quality data as part of preparing the 2024 Integrated Report. The Integrated Report combines the requirements under Clean Water Act Sections 303(d) and 305(b) into a single report. Section 303(d) requires states to identify water bodies that do not meet water quality standards (commonly referred to as the 303(d) list or List of Impaired Waters), and Section 305(d) requires states to report on the water quality conditions of their surface waters. The San Francisco Bay Regional Water Board developed and adopted its last full integrated report on the region's 303(d) list and water quality in 2016 and prepared a limited number of high priority changes to the 303(d) list in the 2018 integrated report.

Waterbodies placed on the 303(d) list must be addressed either through the development of Total Maximum Daily Loads or an existing regulatory program that is reasonably expected to result in the attainment of the water quality standard within a specified timeframe.

To create the 303(d) list for the 2024 Integrated Report, we are assessing water quality data collected in San Francisco Bay Region surface waters between 2010 and 2020. These data have been organized into about 20,000 individual lines of evidence (LOEs), which are data summaries for each measured pollutant within a given waterbody. These LOEs will, in turn, be used as the evidentiary basis of about 4,000 unique decisions (e.g., listing, delisting) for waterbody-pollutant combinations in our region. Staff will begin working on these decisions starting in March of 2022.

Due to schedule constraints, there will be a combined Regional Water Board and State Water Board public process that is scheduled to begin near the end of 2022. However, Staff intend to brief the Regional Water Board on significant changes to the 303(d) list prior to the initiation of the public process. The State Water Board must submit the 2024 Integrated Report to U.S. EPA by February 2024.

Update on Sewage Spills Caused by October 24 and 25 Atmospheric River (Mike Chee)

In November, we reported preliminary information about the sewage spills resulting from the October 24 and 25 atmospheric river. This report updates that information based on the subsequent reports dischargers submitted. The primary concern with sewage spills is the potential human health risk posed by pathogens in the wastewater. The high runoff helps dilute and wash away pathogen-laden waters.

The October 24 and 25 atmospheric river caused record-setting rainfall throughout the Bay Area. The City of Pacifica reported more than 6 inches of rain fell during a 24-hour period, which equates to a 100-year storm. The City of Richmond also reported more than 6 inches of rain. The Sonoma Valley County Sanitation District reported 8.5 inches of rain. The Ross Valley Sanitary District reported 12 inches of rain in Kentfield during a 12-hour period, which the District says it equates to a 200-year storm.

The record-setting deluge resulted in 5 treatment plant spills, 56 sanitary sewer overflows (SSOs), and 1 unauthorized discharge from San Francisco's combined sewer system that reached surface waters. Together, the SSOs alone discharged approximately 6.9 million gallons to surface waters. Of these SSOs, 17 exceeded 10,000 gallons and 14 exceeded 100,000 gallons. Here is the most up-to-date information on the largest spills:

Treatment Plant Spills

- The **East Bay Municipal Utility District** (EBMUD) discharged about 12.2 million gallons of chlorinated wastewater and 4.3 million gallons of primary-treated, undisinfected wastewater from its Pt. Isabel Wet Weather Facility. Pursuant to an NPDES permit and a consent decree, EBMUD discharges disinfected wastewater from three wet weather facilities when its collection system and treatment plant cannot keep up with wet weather demands. Over the rainy weekend, flows from the three wet weather facilities and EBMUD's Main Wastewater Treatment Plant peaked at over 500 million gallons per day, ten times the normal treatment plant flow of 50 million gallons per day. The problem at the Pt. Isabel Wet Weather Facility was that EBMUD ran out of sodium bisulfite to neutralize the chlorine it uses for disinfection due to a faulty chemical level indicator on a sodium bisulfite tank and too much sodium bisulfite use. When EBMUD realized it ran out of sodium bisulfite, it reduced its chlorine dosing with the goal of providing some disinfection while discharging no residual chlorine. Unfortunately, it was unable to avoid discharging chlorine, so it ceased disinfecting the remainder of the Pt. Isabel facility flows. The chlorinated wastewater discharged to San Francisco Bay may have been toxic to aquatic life, and the undisinfected primary-treated wastewater contained pathogens. In response to this incident, EBMUD revised its operating procedures, operator training, and automatic dosing control logic to prevent this type of event from recurring. Additionally, EBMUD repaired the instrumentation that did not

accurately measure sodium bisulfite levels in its chemical tank and plans to install redundant mechanical level monitoring to ensure that its chemical inventory can be accurately monitored in the field in addition to the readout in the control room.

- The **South San Francisco/San Bruno** Water Quality Control Plant discharged roughly 4.5 million gallons of secondary-treated and disinfected wastewater to Colma Creek because the North Bayside System Unit pipeline and deep-water outfall reached capacity. South San Francisco and San Bruno share the North Bayside System Unit pipeline and outfall with the cities of Millbrae and Burlingame and San Francisco International Airport. Because the dechlorination system serving the alternative pipeline to the creek was offline for about 50 minutes, some of the creek discharge contained chlorine. Colma Creek flows were high, and plant staff observed no adverse effects on fish or wildlife.
- The **City of Burlingame** Wastewater Treatment Facility discharged roughly 865,000 gallons of fully treated wastewater through an emergency outfall to San Francisco Bay. Because this discharge was fully treated, it likely posed little water quality harm. Like South San Francisco/San Bruno, Burlingame was unable to discharge more through the North Bayside System Unit pipeline and deep-water outfall. There were also power failures onsite and at Burlingame's lift station. Burlingame's stormwater pumping systems failed during the power outages, resulting in stormwater inundating the sanitary sewer collection system.
- The **North San Mateo County Sanitation District** discharged 850,000 gallons of primary-treated wastewater and 1.6 million gallons of biologically-treated (but not clarified) wastewater to the Pacific Ocean through its deep-water outfall. These discharges, which were not disinfected, were necessary to avoid inundating the treatment plant.
- The **Las Gallinas Valley Sanitation District** Sewage Treatment Plant discharged about 1.47 million gallons of untreated and primary-treated, undisinfected wastewater due to an overflow of the headworks and primary clarifier, which flooded the adjoining area of the treatment plant and eventually overflowed the perimeter roadway and discharged into Miller Creek. For several hours, the plant bypassed secondary treatment while providing filtration and disinfection as authorized in its permit during high flows. However, as influent flow continued to rise, the system backed up and overtopped the weir of the primary clarifier and headworks. Unusually limited hydraulic capacity caused the backup. Under normal conditions, the plant's wet weather hydraulic capacity is 25 million gallons per day; however, two primary clarifiers were out of service due to the construction of two new secondary clarifiers.

Sanitary Sewer Overflows

- The **City of Pacifica** reported a 2.94-million-gallon SSO from three manholes and (mainly) the Linda Mar pump station, where Pacifica staff opened the valve

connecting the Linda Mar sewage wet well to the Linda Mar stormwater wet well, bypassing treatment and discharging directly onto Pacifica State Beach. Pacifica's recently completed 2.1-million-gallon equalization basin had reached capacity, and sewage started to backup into the collection system. Opening the valve minimized SSO-related flooding at adjacent properties. The beach was closed, and public warning signs were posted on October 24, 2021; the beach reopened on October 29, 2021. Pacifica's flow study and capacity master plan identifies three capacity upgrade projects for the Linda Mar Basin, which will be included in its next 5-year Capital Improvement Plan.

- The **City of Richmond** reported SSOs totaling 1.06 million gallons from manholes that discharged to Meeker Slough (two SSOs), Baxter Creek (one SSO), and Parr Canal (one SSO) via its storm drain system. Because of a Settlement Agreement with San Francisco Baykeeper, Richmond plans to upsize the collection system in one of the SSO locations and relocate a force main in another. Richmond is still investigating and determining corrective measures for the other two SSOs.
- The **City of Oakland** reported four SSOs totaling 960,000 gallons from manholes that discharged to Lake Merritt, Courtland Creek, San Leandro Bay/Oakland Estuary, and Lyon Creek. Oakland is in the 8th year of a 21-year consent decree with the goal of eliminating SSOs. Oakland is continuing to complete mandated repair, rehabilitation, remedial maintenance, and condition assessment of its collection system.
- The **Sonoma Valley County Sanitation District** reported three SSOs totaling 326,000 gallons. Two discharged to Agua Caliente Creek and the other discharged to Sonoma Creek via storm drain systems. Pursuant to Cease and Desist Order R2-2015-0032, the District will address hydraulic capacity issues by completing two upsizing projects scheduled for 2022 and 2029.
- The **City of San Mateo** reported a 322,000-gallon SSO from three manholes to a storm drain leading to Borel Creek. Pursuant to Cease and Desist Order R2-2009-0020, San Mateo is completing several collection system improvement projects. A project addressing this SSO location consists of lift station upgrades, pump station upgrades, new and rehabilitated force mains, new and upsized conveyance relief sewers, and a new 5.3-million-gallon equalization basin. The equalization basin is scheduled for completion in 2023.
- The **City of Millbrae** Water Pollution Control Plant relies on the North Bayside System Unit pipeline and outfall. When the pipeline backed up, Millbrae discharged untreated wastewater from three locations upstream of the treatment plant to prevent inundating the plant. Together, these three SSOs discharged roughly 284,000 gallons of untreated wastewater to storm drains that discharged to San Francisco Bay.
- The **West County Wastewater District** reported a 111,000-gallon SSO in Richmond to a storm drain leading to Wildcat Creek. To prevent future SSOs at

this location, the District added the affected sewer line segments to an existing sewer replacement project currently in design. The downstream segments will be upgraded from 10-inch to 15-inch pipelines. This project is expected to be completed by the end of February 2022.

Unauthorized Discharge from Combined Sewer System

- The **San Francisco Public Utilities Commission** reported an estimated 1.4 million gallons of wastewater discharged from its bayside combined sewer system to San Francisco Bay through storm drains in the Marina Green parking lot. Unlike the other spills summarized above, this wastewater was combined sewage and stormwater, meaning it contained all the stormwater from the area, not just stormwater from infiltration and inflow. Based on the amount of rain, it contained much more stormwater than sewage. San Francisco used a computer model to simulate the storm event and showed that approximately 4.5 million gallons of combined sewage and stormwater overflowed its collection system and flooded an area along Marina Boulevard. San Francisco assumed that all modeled flows on the Marina Green parking lot discharged to San Francisco Bay and about 3.1 million gallons of combined sewage and stormwater was returned to the collection system for discharge through authorized wet weather outfalls.

When atmospheric river storm events do not produce record-setting rainfall, our infrastructure performs reasonably well, without record-setting sewage spills. For example, the recent December storms resulted in far fewer spills than the October storm did. With climate change, however, the San Francisco Bay Region could experience more frequent or more extreme storms, or both. The impact of the December storm on our wastewater infrastructure validates the importance of our ongoing efforts to ensure that this critical infrastructure is adequately upgraded and maintained to minimize stormwater inflow and infiltration.

To illustrate the success of our efforts, we need look no further than the Ross Valley Sanitary District as an example. Pursuant to Cease and Desist Order R2-2013-0020, the District has made over 2,000 point repairs in the past few years to correct pipe defects. As a result, despite the over 12 inches of rain that fell in Kentfield, the District reported only two SSOs: a 91,000-gallon SSO and a 51,000-gallon SSO. These SSOs were not directly caused by insufficient collection system capacity but by two failed point repairs resulting from the unusually high-pressure conditions created within the collection system due to the high stormwater infiltration and inflow during this historic storm event. Without the cease and desist order, the District would likely have had many more SSOs.

Participation in Sea Level Rise and Shoreline Contamination Regional Workshop (Lisa Horowitz McCann and Alyx Karpowicz)

Assistant Executive Officer (AEO) Lisa Horowitz McCann and Staff Engineering Geologist (EG) Alyx Karpowicz participated on the planning committee for a two-day workshop organized by Greenaction for Health and Environmental Justice and held in December 2021. Greenaction's mission is to "mobilize community power to win victories that change government and industry policies and practices to protect health and promote environmental, social, economic, racial, and climate justice." The purpose of the workshop was to highlight the threats of sea level and groundwater rise to contaminated sites around the San Francisco Bay and actions organizations are taking to address those threats. AEO Horowitz McCann represented the Regional Water Board as a panel member with other environmental justice and government agencies advocating for and/or working on shoreline contamination cleanup. Staff EG Karpowicz was on the data and mapping team with other consultants and state agency representatives. This team created and presented data and information on the latest sea level rise projections and groundwater rise impacts to contaminated sites. AEO Horowitz McCann explained our authority to require investigations and remediation activities at contaminated sites. She also shared that we are reprioritizing contamination sites based on sea level and groundwater rise science and environmental justice needs, requiring vulnerability assessments from shoreline facilities, considering expanding our enforcement authorities and accelerating cleanup schedules, developing improved community engagement, collaborating on regional studies to fill data gaps for predicting vulnerable areas and cleanup sites at risk from groundwater rise to inform our decisions. The workshop was organized in collaboration with us, BCDC, Bayview Hunter Point Mothers & Fathers Committee, Breathe, CalRecycle, Climate Reality Project Bay Area, DTSC, Marin City Climate Resiliency & Health Justice, Ocean Protection Council, Richmond Shoreline Alliance, Sunflower Alliance, San Francisco Baykeeper, San Francisco Bay Shoreline Contamination Cleanup Coalition, San Francisco Estuary Institute, San Francisco Estuary Partnership, Sierra Club Bay Area, UC Berkeley, and West Oakland Environmental Indicators Project. The Workshop was attended by approximately 200 people representing environmental advocates, environmental justice advocates, and community members. Greenaction has already requested a subsequent meeting with AEO Horowitz McCann and Regional Water Board staff and other environmental justice advocates to learn more about our actions. We have initiated improved coordination with the other State Agencies to jointly address environmental justice needs.

Enforcement Actions (Brian Thompson and Jessica Watkins)

The following table shows the newly issued complaint since December's report. As the complaint is pending and could come before the Regional Water Board, ex parte communications are not allowed. Please refer to the Pending Enforcement Liabilities and Penalties webpage for more information on the details of the complaint.

Complaint

The following was recently noticed for public comment:

Discharger	Violation(s)	Proposed Penalty	Comment Deadline
City of San Mateo	Unauthorized discharge of potable water and construction pollutants to San Mateo Creek.	$73,700	January 14, 2022

401 Water Quality Certification Applications Received (Abigail Smith)

The table below lists those applications received for Clean Water Act section 401 water quality certification from November 10 through December 22, 2021. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
Robert W Crown Memorial State Beach	Alameda	Alameda	Yes
Subtidal Oyster Shell Mining in South San Francisco Bay	San Francisco Bay	Alameda	Yes
Galindo Creek Restoration	Concord	Contra Costa	
2021 Bay Waters Pittsburg Tidewater Boardwalk	Pittsburg	Contra Costa	Yes
Sir Francis Drake Blvd MP 1pt6 Slope Rehabilitation	Lagunitas-Forest Knolls	Marin	
Larkspur Ferry Terminal Maintenance Dredging	Larkspur	Marin	Yes
Deck Improvements at Glasgow Residence	Mill Valley	Marin	Yes
Bank Stabilization from Landslide at 26 Woodside Way in Ross	Ross	Marin	
Clipper Yacht Co Emergency Pile Repair	Sausalito	Marin	Yes
Rds 21-35 Silverado Trail Mpm 17pt6 Storm Damage	Deer Park	Napa	
Emergency Pile repair Pier 39	San Francisco	San Francisco	Yes
El Portal Trousdale Channel Emergency Repair	Burlingame	San Mateo	Yes
Emergency Slip Out Repair on Higgins Canyon Road	Half Moon Bay	San Mateo	
Emergency slip-out repair on Alpine Road	La Honda	San Mateo	
EA 4J850 SM 280 Bridge Seismic Retrofit	Stanford	San Mateo	

Project Name	City/Location	County	May have BCDC Jurisdiction
T1533 GCUST5783 MP 000-010 Hydrostatic TEST 572	Mountain View	Santa Clara	Yes
Palo Alto Flood Basin Tide Gate Replacement	Palo Alto	Santa Clara	Yes
San Francisquito Creek Pump Station Riparian Enhancement Mitigation	Palo Alto	Santa Clara	
EA 3G630 SCL 9 Saratoga Bridge Upgrade	Saratoga	Santa Clara	
Ignacio Mare Island Electric Transmission Line Tower Foundation Repairs Tower 9-69	San Pablo Bay	Solano	Yes
Sid Commons Apartment	Petaluma	Sonoma	