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

MEETING DATE: November 8, 2023

Item: 5

Executive Officer's Report

Executive Officer's Report November 3, 2023

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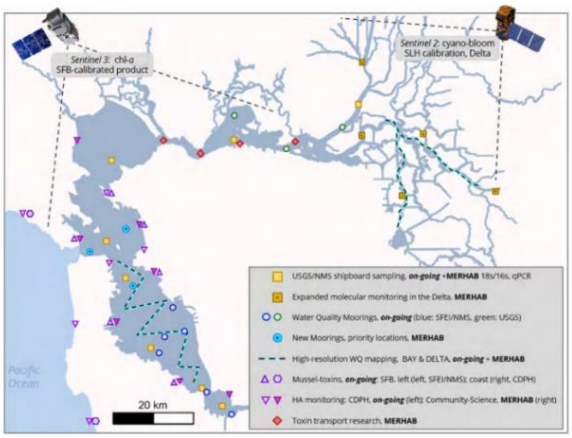
NOAA Grant to Develop San Francisco Bay Harmful Algal Bloom Monitoring Program (Richard Looker)

The National Oceanic and Atmospheric Administration (NOAA) announced last month that it is awarding a $3 million grant, through its Monitoring and Event Response Research Program (MERHAB) to support the development of a harmful algal bloom (HAB) monitoring program for the San Francisco Estuary. While there have been major expansions in HAB-related research and monitoring in the Bay and Delta over the last decade, there is currently no sustained, coordinated program for monitoring HABs throughout the San Francisco Estuary. The MERHAB project, led by scientists at the San Francisco Estuary Institute, US Geological Survey, and CA Department of Water Resources, will leverage on-going research and monitoring activities in the Bay and Delta to build a robust system-wide HAB monitoring program for the Estuary. Key collaborators include UC Santa Cruz, Bend Genetics, the San Francisco Bay and Central Valley Regional Water Quality Control Boards, San Francisco Baykeeper, Cal Maritime Academy, Restore the Delta, and NOAA-National Centers for Coastal Ocean Science.



HAB monitoring across the San Francisco Estuary: Overview of existing/on-going work and MERHAB-funded work.

Major project components include:

- Enhancing existing monitoring data sources with new technologies and tools, including: remote sensing, continuous water quality sensors, molecular deoxyribonucleic acid-based methods, and community science monitoring
- Building an online HAB dashboard to provide managers with a decision-support-tool for HAB mitigation
- Improved understanding of HAB transport dynamics through sampling of toxins/HAB cells using multiple methods such as water grab samples, passive samplers, shellfish, and molecular tools
- Convening a Management Transition Advisory Group composed of managers, regulators, and non-governmental organization stakeholders to generate information necessary for developing a coordinated HAB strategy

Sea Level Rise Requirements at Landfills (Alyx Karpowicz and Vic Pal)

In October 2022, the Board adopted a general amendment to waste discharge requirements requiring 16 closed and operating municipal solid waste Bayfront landfills (see blue circles on Figure 1) to start planning for sea level rise, groundwater rise, and other site-specific climate-related vulnerabilities. In July 2023, the landfills were required to submit Long-Term Flood Protection Plans with a climate change vulnerability assessment and adaptation plan identifying strategies for long-term protection. We have received 15 plans and expect to receive the remaining plan soon. We have completed the review of 11 of the plans received to date and have approved 4 of the plans. The content of the plans varies considerably and was expected since this is the first round of reports to be submitted. Updated plans are required to be submitted every five years.

In our response letters, we are encouraging collaboration with other entities in neighboring areas, specifically, the Operational Landscape Unit (OLU, as referenced in the Adaptation Atlas by the San Francisco Estuary Institute), to facilitate a geographically specific set of integrated adaptation strategies, at the appropriate scale, to address issues of both the natural and built environment. Any adaptation measures to address the anticipated effects of sea level rise and groundwater rise will impact neighboring sites and projects within the OLU. As such, collaborative efforts and strategies are needed to address ecosystem, flood risk management, water quality, land-use planning, and social equity goals. Science-based guidance documents such as the State of California Sea-Level Rise Guidance and Adaptation Atlas indicate that climate change adaptation strategies that cross jurisdictional boundaries can be more successful and cost-effective than those implemented on a parcel-by-parcel basis.

There are 15 additional Bayfront landfills (see red circles on Figure 1) that were not a part of the October 2022 general amendment to waste discharge requirements because those landfills were already required to submit Long-Term Flood Protection Plans with slightly different requirements. To promote consistency and incorporate the latest climate science, we have prepared a second draft general amendment to waste discharge requirements for these 15 additional Bayfront landfills that we plan to bring to the Board for consideration in February 2024.

We have also received Long-Term Flood Protection Plans from 4 of the 5 refineries and 3 chemical plants (Dow, Chevron, EcoServices).

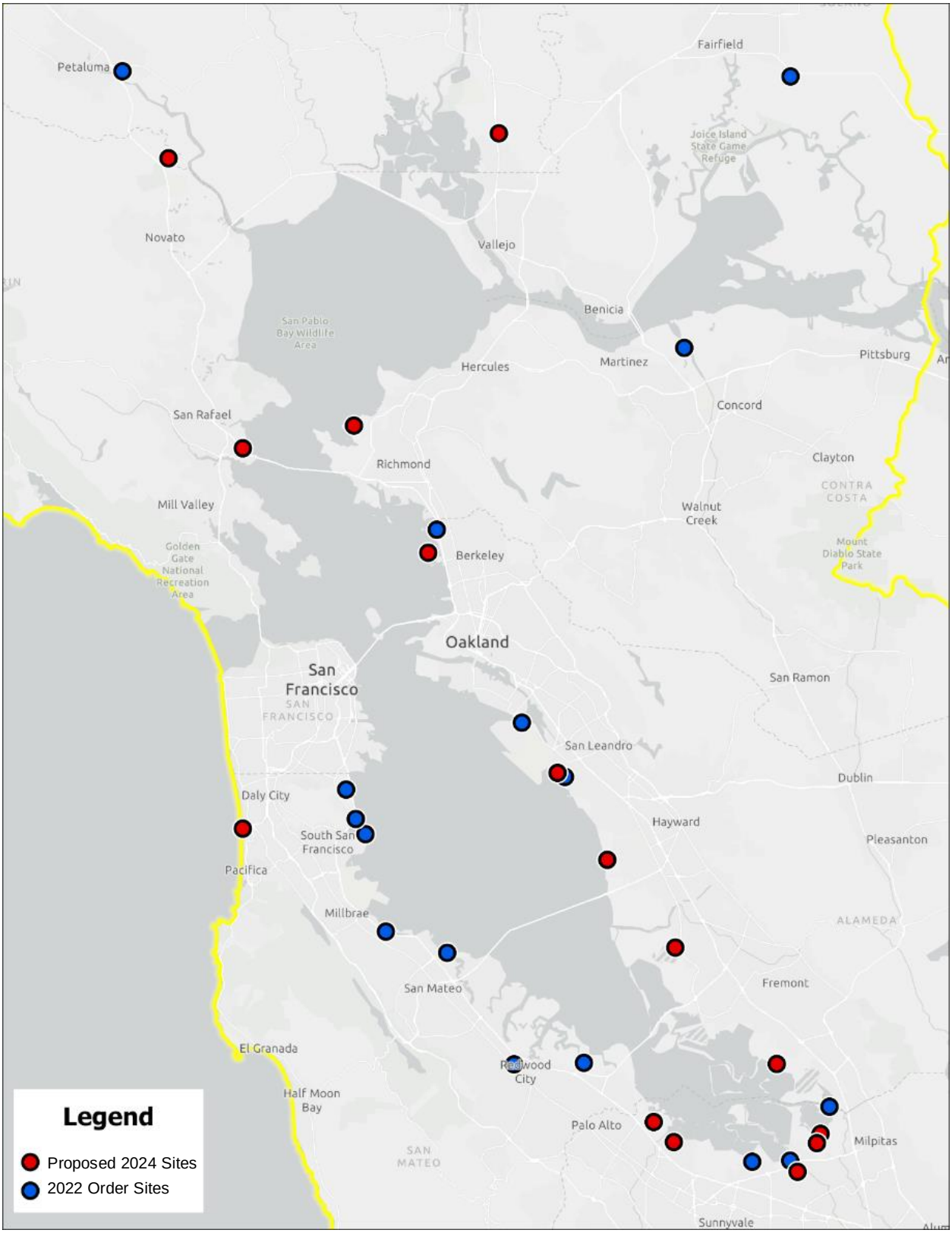


Figure 1. Bayfront Landfills (Credit: Kenneth Gen-kuong, 2023)

Case Closure Under Our Low-Threat Assessment Approach (Ron Goloubow)

Each year we close 20 to 30 cases in our Site Cleanup Program (SCP) using our *Low Threat Assessment Tool* (LTAT) developed in 2009. One example of a case in our Site Cleanup Program is the former Teltec Corporation site in San Jose. This case is typical of how we evaluate if closure is acceptable or if additional investigation, mitigation, and/or cleanup are needed. Under the LTAT, a case may be closed if the residual contamination, the contamination that remains after feasible cleanup actions are completed, meets two conditions:

1) The extent and magnitude of residual contamination does not pose a significant risk or threat to human health or the environment considering the current and future uses of the property.
2) The extent and magnitude of residual contamination does not adversely affect water quality and beneficial uses and it will attenuate to meet cleanup goals in a reasonable timeframe.

We often require a property deed restriction when we close a low-threat case to ensure that appropriate risk management actions are implemented if excavation, groundwater use, or redevelopment occurs. If necessary, we will reopen the case to review and oversee the redevelopment plans.

Location and History

The former Teltec site, is in a commercial and industrial area between Montague Expressway and East Brokaw Road, east of Highway 880. Homes are located about a quarter mile to the east. Teltec manufactured printed circuit boards at the site from 1971 to 2002. Gorilla Circuits purchased Teltec in 2002 and continues to manufacture printed circuit boards at the facility. Prior to Teltec, the Universal Paint Corporation conducted business at the site and stored waste solvents in an underground storage tank before it was removed in 1982.

Site Investigation

Environmental investigations were conducted at the site beginning in 1998. Investigations identified that volatile organic compounds had leaked into groundwater from the former underground storage tank and extended off the property about 200 feet to the west.

Cleanup Actions

In 2018, soil contamination was excavated from the area of the former underground storage tank that was removed in 1982. In 2004 and again in 2019, groundwater cleanup was conducted using enhanced biological treatment. This involved injecting a carbohydrate solution into the groundwater to stimulate naturally occurring bacteria that breakdown the contaminants. Post-remediation monitoring of soil vapor, groundwater, and indoor air confirmed that the cleanup had significantly reduced the contaminant concentrations, and that there was no vapor intrusion into indoor air.

Risk Management Measures

In 2005, a land use covenant with environmental restrictions was recorded on the deed for the property as follows:

- The property is restricted to commercial/industrial use and no residential or other sensitive use such as a hospital or daycare is allowed without Executive Officer approval.
- Groundwater use is prohibited without Executive Officer approval.
- The Executive Officer shall be notified prior to any excavation, construction, or redevelopment of the property and all such activity must follow a risk management plan approved by the Water Board.

In 2022, the Water Board approved a risk management plan for the site that specifies procedures for the safe handling of residual contamination in soil, soil vapor, or groundwater that might be encountered during excavation, construction, or other redevelopment.

Closure

Regional Water Board staff evaluated the site conditions against the LTAT and determined that the low-threat criteria were met. The case closure is protective of human health, beneficial uses, and the environment, considering the extent and magnitude of residual contamination, the current property use, and the risk management measures that are in place to address potential future site changes.

As is our practice, public notice of our intention to close the case was mailed to the neighboring property owners and occupants and other interested parties. No comments were received. Subsequently, Gorilla Circuits destroyed its monitoring wells, which is routinely required so they do not serve as a potential conduit for future surface spills to reach groundwater. On May 22, 2023, the Dischargers received "No Further Action" and the case was assigned "Case Closure" status in our GeoTracker database.

Hookston Station Cleanup Order Amendment (Carina Cornejo)

Last month the Site Cleanup Requirements Order R2-2023-0015 to amend a 2007 Order (Amended Order) that requires additional cleanup of trichloroethylene (TCE) at the Hookston Station site in Pleasant Hill was executed. While the parties have taken considerable action to remediate TCE and its degradation byproducts, concentrations have not decreased toward cleanup goals fast enough based on 15 years of monitoring data. The Amended Order requires additional cleanup to protect human health from vapor intrusion, restore beneficial use of groundwater, and achieve cleanup goals within a reasonable timeframe. The specific amendments to the 2007 Order include the following:

- **Requirement for an Alternative Cleanup Compliance Plan** – The cleanup plan must address human health risk and restore groundwater beneficial uses within a reasonable time. Controls currently in place to address vapor intrusion are not acceptable as long-term safety measures, and additional actions are required to reduce or eliminate risks to human health. The groundwater aquifer below Hookston Station (the Ygnacio Valley Basin) has potential beneficial uses for municipal and domestic water supply, and ten of the eleven private wells that were installed in the basin for domestic supply were decommissioned because of the groundwater contamination. The Amended Order requires an alternative cleanup compliance plan, its implementation, and monitoring to evaluate remedial effectiveness and progress in reaching cleanup goals.
- **Requirement for a Workplan for Indoor Air Monitoring** – Indoor air vapors need to be monitored to protect people in surrounding residences. Vapors from TCE and its degradation byproducts, while decreasing overall, exceed risk levels in some areas and may change over time. The Amended Order requires indoor air monitoring at residences potentially at risk while cleanup proceeds.
- **Updated Cleanup Levels** – The Amended Order has updated cleanup levels for soil, groundwater, soil vapor, and indoor air based on current standards for risk assessments.
- **Updated Naming of Responsible Parties –** Several of the individuals named in the 2007 Order are deceased and other individuals, through succession of ownership, are now named as owners and responsible parties.

Staff are currently providing feedback on a *Feasibility Study and Remedial Design and Implementation Plan* submitted by the responsible parties that will provide the basis for the required *Alternative Remedial Design and Implementation Plan*, which is due to the Board on December 28, 2023. The Amended Order requires implementation of the alternative plan 180 days after it is approved.

The Hookston Station site is complicated by a slower pace of cleanup due to a heterogenous subsurface environment and because there are multiple responsible parties including private citizens, a municipality, and a corporation. The amended order provides the necessary framework to keep the cleanup moving forward.

Anchor Outs Returning to the Oakland Estuary (Demir Worthington)

In recent years, the number of people living aboard unmoored vessels (anchor outs) on the Oakland Estuary has increased again. Sewage and waste from anchor outs threaten water quality, and anchor outs can also be associated with other problems, including theft at marinas. Anchor outs were problematic after the 2008-09 recession, and joint-agency collaboration and community involvement led to a $4.2 million cleanup of the Oakland Estuary in 2013 and 2014.

On October 6, 2023, Demir Worthington, Engineering Geologist, attended a similar community meeting in Alameda on behalf of the Water Board. The meeting was again aimed at addressing anchor outs and derelict vessels on the Oakland Estuary. Planned actions include the City of Oakland removing these vessels in accordance with a new ordinance it adopted in March 2023. The cities of Oakland and Alameda received State funding through a Surrendered and Abandoned Vessel Exchange (SAVE) program implemented by the California Division of Boating and Waterways. We will continue to support these efforts, particularly when water quality impacts are possible.

Staff Introductions (Eileen White)

Lisa Hunt joins the Planning Division as a Water Resource Control Engineer, focusing on sediment TMDLs and climate change policies to protect stream and riparian habitat. Lisa brings 25 years of experience working on water resources issues in California, primarily in San Francisco Bay and its watersheds. Her previous work in the nonprofit, consulting and government sectors has focused on habitat restoration, water quality protection and mitigation, ecological risk assessment, environmental flows, and water operations. Lisa holds a Ph.D. in Environmental Science, Policy and Management (aquatic ecology focus) from UC Berkeley, an M.S. in Environmental Engineering from UC Berkeley, and a B.S. in Agricultural and Environmental Systems Engineering from Cornell University, and she is licensed as a professional civil engineer in CA. She spends most of her free time tending to her large garden full of fruit trees, vegetables, and native and drought-tolerant plants, and is constantly fine-tuning her gray water and rainwater catchment and irrigation systems.

Please welcome Michelle Krakora. She joins the Groundwater Protection Division as a Scientific Aid. Michelle received a Bachelor of Science in Environmental Science and Conservation Biology from University of California, Los Angeles in 2022. Since graduating, Michelle has completed two Department of Energy internships at Brookhaven National Laboratory and Lawrence Berkeley National Laboratory relating to conservation biology and hydrology. After getting a sense of environmental science research, Michelle is motivated to understand environmental protection regulations and compliance as a Scientific Aid. She was born and raised in Riverside, California where her passion for Environmental Science started with an AP class in high school. During her free time, Michelle enjoys long hikes and runs outside, and cozy nights spent baking or reading.

This month we have the pleasure of introducing you to two of our Watershed Stewards Program (WSP) Corpsmembers. The program is funded by the California Conservation Corp and AmeriCorps. WSP places its Corpsmembers at various agencies and organizations throughout California to engage in improving watershed health. Each year the SF Water Board selects two Corpsmembers to join the Surface Water Ambient Monitoring Program (SWAMP) in the Planning Division for a ten-month term. Here they assist in field work and data analysis for a variety of water quality monitoring studies, as well as engaging in community outreach through watershed education in public schools and local watershed restoration projects.

Welcome Olivia Hockley-Rodes to the San Francisco Bay Water Board. Olivia (she/they) joins the Planning and TMDL Division as a Corps member with the California Conservation Corps (CCC) Watershed Stewards Program (WSP) in partnership with AmeriCorps. They will be working in the Surface Water Ambient Monitoring Program (SWAMP). Olivia received a B.S. in Engineering with an emphasis in environmental analysis from Harvey Mudd College. During their undergraduate studies, they designed, built, and

deployed a water quality assessment robot. Born and raised in Los Angeles, Olivia recently moved to the Bay Area and is excited to build a new community up north. In their free time, Olivia enjoys backpacking, skiing, learning to cook, reading nonfiction, and spending time outdoors.

Please also welcome Charlotte Diamant to the San Francisco Bay Water Board. Charlotte joins the Planning and TMDL Division through a placement with the Watershed Stewards Program (WSP), a project of the CCC in partnership with AmeriCorps. She is a recent graduate of Wellesley College, where she received a B.A. in Environmental Studies and a minor in Peace & Justice Studies. Charlotte focused predominantly on water policy and riparian conservation efforts, with particular emphasis on dam removal practices. Prior to joining the Water Board, she worked in an ecology lab, interned with community-focused environmental nonprofits, and spent three summers as a white-water rafting guide in California, Idaho, and Oregon. In her free time, she enjoys sewing, hiking, and playing with her two cats, Sachi and Smudge.

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 September 14 through October 11, 2023. 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
7126 Westmoorland Drive	Oakland	Alameda	
San Leandro Creek Haas Pedestrian Bridge Debris Removal Project	San Leandro	Alameda	
ACWD Vallecitos Channel Post-Storm Repair Work	Unincorporated	Alameda	
Wharf Maintenance Dredging Project-Large Object Relocations	Concord	Contra Costa	✓
East Bay Municipal Utility District Right-Of-Way 3363 Water Pipeline Replacement Project	Danville	Contra Costa	
Sites 12, 13, and 23 – Wildwood Creek In-fall Sediment Removal	El Cerrito	Contra Costa	
Long Wharf Deck Slab Removal	Richmond	Contra Costa	✓
Radiant Avenue Development Project	Richmond	Contra Costa	✓
Atria Park Lafayette	Unincorporated	Contra Costa	
Bernheim Pile Replacement	Belvedere	Marin	✓
90 Century Drive Stair Removal	Mill Valley	Marin	✓
Miller Vehicular Bridge Reinforcement	Mill Valley	Marin	
6401 Lucas Valley Rd	Nicasio	Marin	

Project Name	City/Location	County	May have BCDC Jurisdiction
18 Fleetwood Ct Retaining Wall	Novato	Marin	
1435 Butterfield Rd	San Anselmo	Marin	
Beach Force Main Rehabilitation Project	Sausalito	Marin	✓
2306 Mar East Emergency Seawall Repair Project	Tiburon	Marin	✓
Lucas Valley Road Gasoline Spill Infrastructure Removal Project	Unincorporated	Marin	
Strawberry Channel Navigation Marker Emergency Repair Project	Unincorporated	Marin	✓
Emergency Axios Winery Bridge Project 2	Calistoga	Napa	
Belmont Creek at Sem Lane Emergency Dredging	Belmont	San Mateo	✓
Seymour Outfall Emergency Project	Half Moon Bay	San Mateo	
Martini Marsh Restoration and Enhancement Project	Montara	San Mateo	
Willow Commons Residential Community	Portola Valley	San Mateo	
Redwood City Creek Maintenance Project	Redwood City	San Mateo	
250 and 260 Lindenbrook Emergency Creek Bank Stabilization Project	Woodside	San Mateo	
Hale Creek Adaptive Management Actions Project	Mountain View	Santa Clara	
Emergency High Pressure Gasline Project	Palo Alto	Santa Clara	

Project Name	City/Location	County	May have BCDC Jurisdiction
Pier Repair at 726 West H St, Benicia	Benecia	Solano	✓