

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

MEETING DATE: May 14, 2025

ITEM: 4

Executive Officer's Report

Executive Officer's Report May 7, 2025

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San Francisco Bay In Lieu Fee Program (Elizabeth Morrison)

The San Francisco Bay In Lieu Fee Program (Program) has been approved. The Program sponsor is Ducks Unlimited. The purpose of the In Lieu Fee Program is to provide a watershed-scale compensatory mitigation option that contributes to established regional wetland conservation plans' goals and objectives. The Program will develop and implement regionally significant projects and advance the pace and scale of wetland conservation in the San Francisco Bay watershed. Objectives include the utilization of regional conservation plans to guide project development and implementation, providing economies of scale and sufficient funding for ecologically significant projects, engaging conservation partners in development and implementation of mitigation projects, and producing a net gain of wetland acres.

The In Lieu Fee Program will sell credits that can be used by permittees to compensate for impacts to waters of the State within the Service Area. Although the Service Area covers the majority of the San Francisco Bay watershed, it does exclude the Suisun Bay sub-watershed as it is protected by the Suisun Marsh Preservation Act. It will increase our 401 certification permitting efficiency as it provides another option for compensatory mitigation, with staff spending a significant amount of time trying to identify appropriate compensatory mitigation for unavoidable impacts to waters of the State.



Figure 1: San Francisco Bay In Lieu Fee Program Service Area

Valley of the Moon Water District Aquifer Storage and Recovery Pilot Test (Dana McCarthy and David Tanouye)

Last fall, Regional Water Board staff issued a Notice of Applicability allowing the Valley of the Moon Water District (Water District) to proceed with its *Aquifer Storage and Recovery (ASR) Feasibility Study and Pilot Test Work Plan* (Work Plan). Aquifer Storage and Recovery is a way to bank surface water in an aquifer when water is plentiful and withdraw it when needed. The purpose of the Work Plan is to investigate whether groundwater banking is feasible at two locations in Sonoma County. Aquifer Storage and Recovery projects are regulated under the State Water Board's general order, Water Quality Order 2012-0010-DWQ.

From November 2024 through March 2025, the Water District implemented an Aquifer Storage and Recovery pilot test at two existing production wells: Park Avenue and Verano Avenue sites in the Sonoma Valley (Figure 1 below).

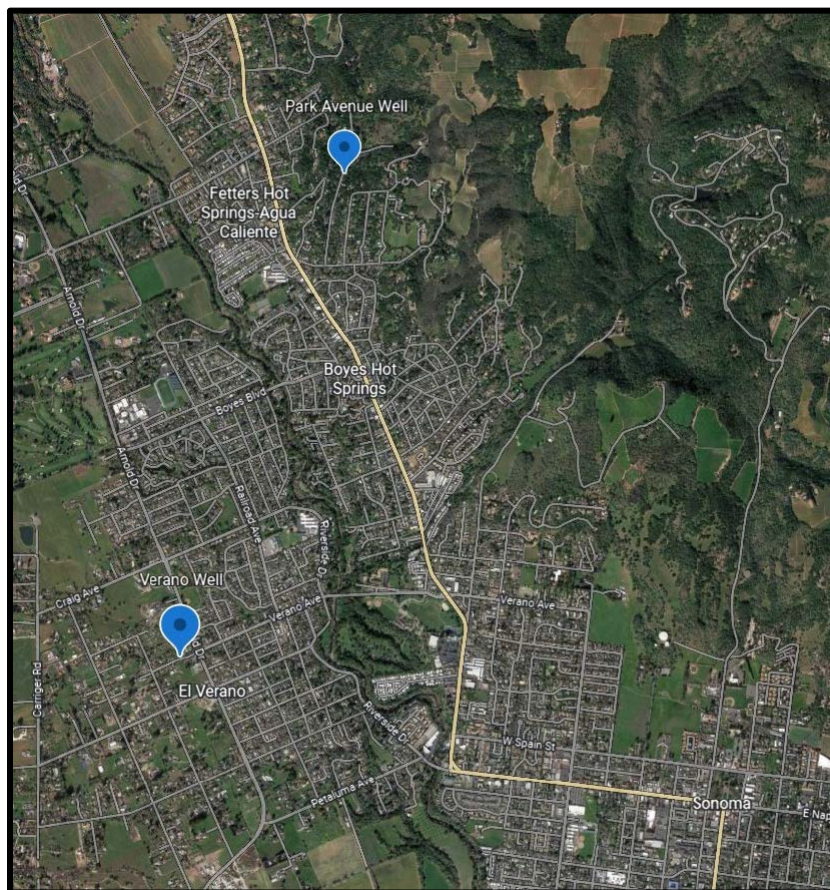


Figure 1: Location map showing the two Aquifer Storage and Recovery pilot study wells in the Sonoma Valley.

The Valley of the Moon Water District is a local water agency that serves 23,750 residents in a 12 square-mile area in the Sonoma Valley, near the City of Sonoma. As a member of the Sonoma Valley Groundwater Sustainability Agency, Valley of the Moon Water District is exploring various ways of managing water resources in the Sonoma Valley groundwater basin, which is a high-priority basin under the 2014 Sustainable

Groundwater Management Act (SGMA). The pilot test is a key component of the Sonoma Valley Groundwater Sustainability Agency's approved SGMA Groundwater Sustainability Plan, which seeks to optimize surface water use, adapt to changing climactic conditions, and help address/prevent groundwater depletion.

Currently, the Water District relies on Sonoma County Water Agency for approximately 80% of its potable water from the Russian River, with the remainder sourced from local groundwater wells. Groundwater banking through Aquifer Storage and Recovery could enhance water supply reliability by storing excess surface water during wet years for use in times of drought and emergency conditions. Under full implementation, Aquifer Storage and Recovery could allow storage of up to 141 acre-feet per year with the capacity to provide up to 453 acre-feet per year of local groundwater supply in dry years. An acre-foot is 326,000 gallons.

About 4 million gallons of potable Russian River water (recharge water) were injected in the aquifer and later extracted at each location to evaluate hydrogeologic and geochemical responses. During the pilot test, two full cycles of injection and withdrawal were completed per site and the injected water remained in the aquifer at each location from six to 45 days per cycle. The repeated injection-storage-withdrawal cycles helped illustrate aquifer response and water quality behavior to identify any potential risks of adverse impacts. Water recovered at both sites was discharged under the Water District's existing National Pollutant Discharge Elimination System permit to an unnamed tributary of Sonoma Creek at the Park Avenue Site and to a nearby storm drain at the Verano Avenue Site.

Preliminary Findings:

- Injection wells at both locations performed as expected, with monitoring wells showing rapid response times consistent with confined aquifer conditions
- Water level and flow-rate data aligned with the prior feasibility study models confirming the anticipated hydraulic parameters
- No major geochemical incompatibilities were observed, though minor increases in select metals at the Park Avenue well were noted below regulatory limits
- At the Verano Avenue well, water quality improvements were noted during the second cycle, though some laboratory analytical results are still pending
- Disinfectant byproduct concentrations remained within expected ranges

Results suggest Aquifer Storage and Recovery is likely to be a viable long-term strategy for the Water District at both locations. Final data analysis will inform California Environmental Quality Act documentation and help refine the potential design for permanent Aquifer Storage and Recovery systems. Next steps include Regional Water Board staff review of final pilot test findings and issuance of a Notice of Applicability for full-scale, permanent Aquifer Storage and Recovery systems. Permitting and construction activities are expected to begin this summer, with a target completion date by the end of 2025.

This effort aligns with the state's broader water resilience initiatives outlined in Governor Gavin Newsom's August 2022 "California's Water Supply Strategy: Adapting to a Hotter,

Drier Future” , which describes actions to prepare the state for the effects of a changing climate, including reduced water supply. The strategy focuses on diversifying water supplies by developing new water sources through recycling and desalination, improving water conservation efforts, and increasing water storage, both above and below ground, with a goal of storing more water by expanding existing reservoirs and developing new aquifer recharge projects.



Figure 2: Verano Aquifer Storage and Recovery wellhead, showing injection manifold



Figure 3: Park site MW-2A & B enclosure and temporary onsite water storage tanks



Figure 4: Verano Aquifer Storage and Recovery Well discharge dechlorinator and diffuser

Polychlorinated Biphenyls (PCBs) Source Referral Fact Sheet (Selina Louie and Helen Hild)

Regional Water Board staff have prepared a PCBs source referral fact sheet to support the implementation of our 2010 PCBs Total Maximum Daily Load (TMDL). The fact sheet provides information for property owners, local agencies, and other stakeholders about the referral process we use to prioritize potential PCBs source properties for investigation and possible abatement.

The TMDL was adopted in 2010 and set PCBs load allocation from sources, including stormwater runoff. The Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP) regulates stormwater discharges from municipal stormwater sewer systems in the San Francisco Bay Region, and is the key tool used to implement the TMDL load allocation requirement for stormwater runoff.

Staff from our Planning Division (Selina Louie and Setenay Bozkurt Frucht) and Toxics Cleanup Division (Helen Hild and Katie Kulha) – our *PCBs TMDL implementation team* – work collaboratively with local MRP agencies to reduce PCBs discharges from their municipal stormwater systems as required by the TMDL.

The MRP requires stormwater agencies to implement control measures to reduce discharges of PCBs from their municipal stormwater systems. To do this, stormwater agencies conduct investigations in older (pre-1980) industrial land use areas to identify properties that are more likely to be contributing PCBs to municipal stormwater. This work includes review of historical property uses, site inspections, and soil and sediment sampling for PCBs on the suspected source property and in the adjacent public right of way. The results are then referred to our PCBs team for prioritization and follow-up using our regulatory tools and Water Code authority.

If the sampling results indicate properties may be contributing PCBs to the municipal stormwater system, we require owners to further investigate the extent of the impact on the property and into the municipal stormwater system. PCBs in the municipal stormwater system can ultimately reach a creek or the Bay affecting water quality and beneficial uses. We currently oversee 10 cleanup sites that were referred to us through this process and the list is growing.

The PCBs source referral fact sheet is available on our website here:

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbay_pcb/PCBs_Referral_Fact_Sheet.pdf

Pier 39 to 43½ Sediment Remediation Project, San Francisco (Ciroos Liaghat)

In June 2025, Pacific Gas and Electric Company (PG&E) and the Port of San Francisco will begin the cleanup of legacy contaminated sediment between Piers 39 and 43½ in San Francisco. The cleanup will address legacy sediment impacts resulting from historic operations of the former Beach Street Manufactured Gas Plant. The Regional Water Board is overseeing and requiring cleanup at the Site. This is one of the largest sediment remediation projects to take place in the Bay Area. The sediment remediation will consist of dredging and capping between Pier 39 and Pier 43½ over a five-year period during in-water work periods limited to June 1 to November 30 each year.

Background

The Site consists of offshore sediment covering about 47 acres along the northern San Francisco waterfront from Pier 39 East Basin Marina on the east to Pier 43½ on the west (Figure 1 below). The northern boundary is about 1,000 feet offshore and the seawall along the Embarcadero is the southern boundary of the site. The adjacent, upland shoreline consists of retail stores, restaurants, parks, parking lots, and public rights of ways (roads and sidewalks). A substantial portion of the Site is permitted for operation and maintenance of piers and wharfs, maintenance dredging, and maritime vessel operations.

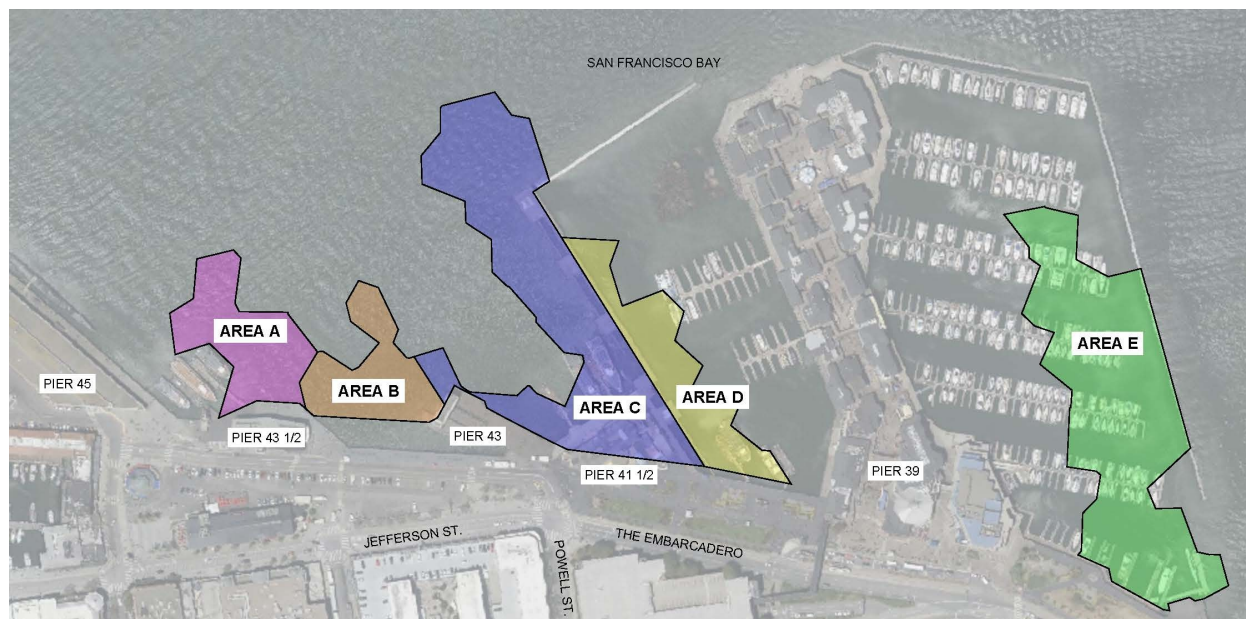


Figure 1: Site map showing remedial action areas

The adjacent upland areas were used for industrial activities since the mid-1800s with PG&E and its predecessors operating the former Beach Street Manufactured Gas Plant nearby, between 1900 and 1931. In the late 19th and early 20th Centuries, manufactured gas was produced using coal and oil mixtures and used for street lighting, heating and cooking. These facilities produced a slurry coal tar waste that was often buried or dumped near the plants. In the mid-1950s, the property was sold, and the gas holder and oil tanks were subsequently dismantled before the block was redeveloped for commercial use.

Environmental Investigations

Extensive investigations have been conducted to evaluate the distribution and extent of contamination related to the former Manufactured Gas Plant. The primary chemicals of concern are polycyclic aromatic hydrocarbons. Investigation results demonstrated that the high concentrations of polycyclic aromatic hydrocarbons are associated with byproduct waste formed from Manufactured Gas Plant operations. The areas of high polycyclic aromatic hydrocarbon impacts are illustrated in Figure 1 above.

The 2020 Remedial Investigation Report concluded there is a low risk of adverse effects to human and ecological receptors from direct exposure. The primary risk is from organisms that feed directly on sediment invertebrates that may bioaccumulate high concentrations of polycyclic aromatic hydrocarbons, or through the food web.

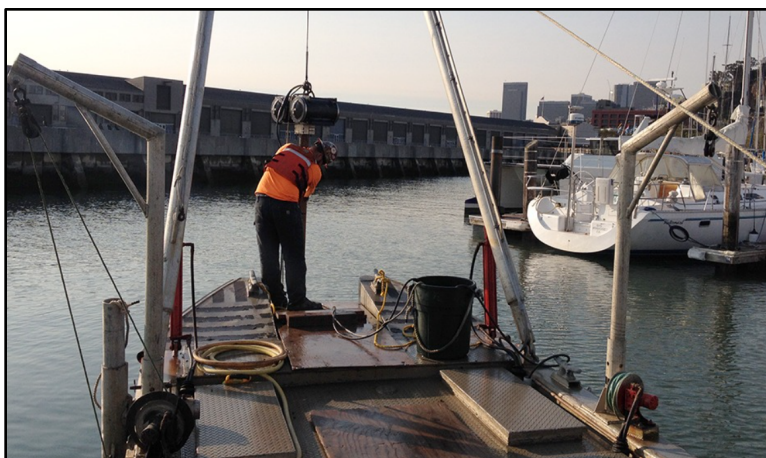


Figure 2: Sediment sampling

Cleanup Plan

A comprehensive evaluation of available remedial technologies and process options was performed and documented in the 2021 Feasibility Study/Remedial Action Plan (Cleanup Plan), which was circulated for public review and comment. The Cleanup Plan delineated five Remedial Action Areas (A through E; Figure 1 above) where cleanup is warranted. The Cleanup Plan called for focused dredging of contaminated sediment, offsite disposal of contaminated sediment at permitted landfill facilities, placement of an engineered cap and/or armor layer in dredged or shoreline areas to isolate remaining contaminated sediment and protect against propeller wash, and institutional controls to ensure the integrity of the caps.

In conjunction with the Cleanup Plan, the Regional Water Board conducted an environmental analysis of the proposed sediment remediation project in accordance with the California Environmental Quality Act and prepared an Initial Study and Mitigated Negative Declaration. In 2022, the Initial Study and Mitigated Negative Declaration was formally adopted by the Board via Resolution No. R2-2022-0007. Subsequently, the Board adopted Site Cleanup Requirements Order No. R2-2022-0008 (the "Order"). The Order approved the Cleanup Plan and proposed cleanup alternative and requires the responsible parties (PG&E and the Port of San Francisco) to implement the Cleanup Plan.

Cleanup Implementation

Since adoption of the Order, the parties have been developing the remedial design, collaborating with stakeholders (e.g., Red and White Fleet), permitting and working to identify a materials handling facility where dredged contaminated sediment can be transferred to land and dried sufficiently to allow transport to permitted landfills. PG&E has constructed a materials handling facility on the Montezuma Wetlands LLC property in Collinsville, Solano County. (Figure 3 below). This will serve as the primary materials handling facility where dredged material on barges will be transferred to land, dried, and transported offsite to licensed landfills. Water collected from the dredged sediments will be treated via an on-site water treatment system and reused for dust control or disposed offsite. The Waste Management, Inc. Duwamish Reload Facility in Seattle, Washington, will serve as a backup materials handling facility.

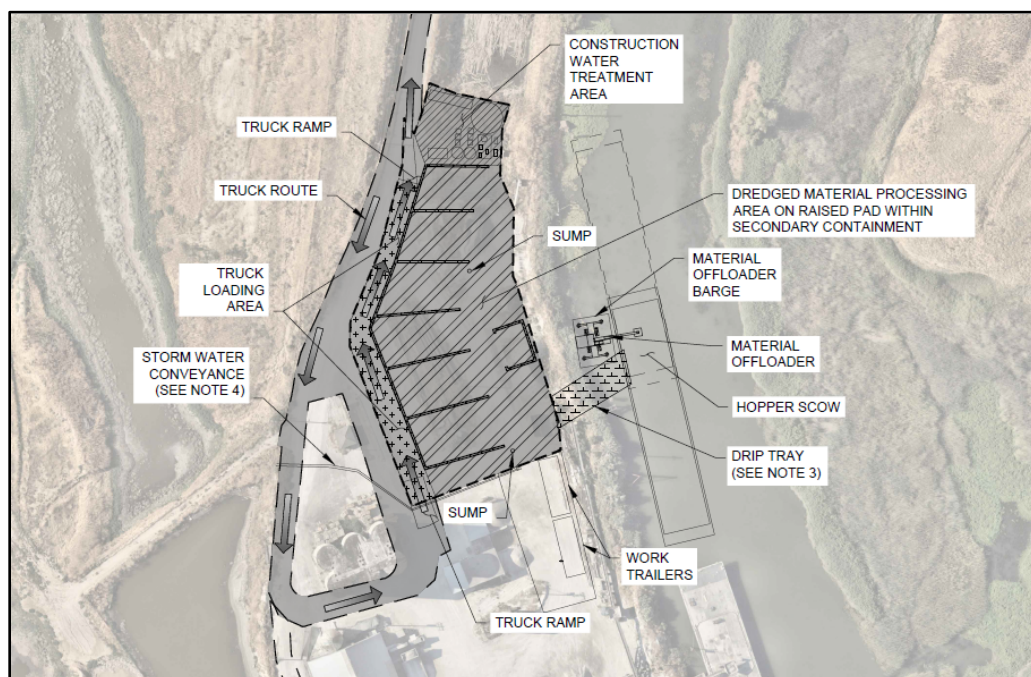


Figure 3: Montezuma Material Handling Facility – Operational Layout

All in-water remediation activities will take place during the approved seasonal work window from June 1 through November 30 each year (see project schedule in Figure 4 below). The remediation planned to be conducted at the Site during the 2025 in-water activity window includes the sediment removal and placement of cap and/or armor layer in Remedial Area A (Pier 43½) and Remedial Area B (Pier 43) (see Figure 5 below).

2025				2026				2027				2028				2029				2030			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pier 43 1/2 and Pier 43 Work				Pier 41 1/2 Work				West Marina Work				East Marina Work				East Marina Work							

Figure 4: Sediment remediation project schedule.



Figure 5: Detailed 2025 work area.

Regulatory Oversight

As the cleanup gets underway, staff will regularly inspect both the remediation Site and the Montezuma material handling facility to verify that all approved compliance plans are properly implemented. These include, but are not limited to, the Sediment Processing and Construction Water Management Plan, Waste Management and Transportation Plan, Community Air Monitoring Plan, Dust, Vapor, and Odor Control Plan, and the Stormwater Pollution Prevention Plan. Staff will also review progress reports and reports of completion for each Remedial Action Area. Following cleanup, monitoring will be performed in accordance with a Risk Management and Monitoring Plan to confirm that the remedial action was effective. The plan also will include a description of human activities that may affect the engineered caps or existing sediment, description of procedures for repair and maintenance of engineered caps or existing sediment cover, and outline notification and reporting requirements.

Staff Updates (Eileen M. White)



Please welcome Ethan Aquino to the Water Board. Ethan has joined the NPDES Wastewater Division as a Scientific Aid. Ethan is a junior majoring in Environmental Sciences at UC Berkeley. He will primarily be assisting with data analysis, inspections, and monitoring report reviews. Ethan is originally from Los Angeles. He served in the U.S. Air Force for four years as a software developer and moved to the Bay Area last fall. During his spare time, he enjoys bouldering, cooking, and reading.



Nick Regent joins the Northeast Bay section of the Watershed Management Division as an Environmental Scientist. He will be working on 401 water quality certifications. Nick recently received his Master of Science in Ecology Evolution and Marine Biology from UC Santa Barbara, and is excited to be back in the Bay Area where he grew up. Prior to joining the Water Board, he worked with a variety of non-profit and governmental agencies throughout California on projects involving ecosystem restoration, invasive species management and endangered wildlife monitoring. In his free time, he enjoys exercising, hiking and exploring new restaurants.



Please welcome back Judy Huang to the Water Board as a Water Resource Control Engineer in the Groundwater Protection and Waste Containment Division. Judy previously worked at the Water Board as a Water Resource Control Engineer for 13 years in the Groundwater Protection and NPDES divisions. For the last 19 years, she has been working at U.S. EPA on Superfund sites. Judy is a licensed engineer with a Bachelor of Science in Chemical Engineering from UC Berkeley.

As a staff member in U.S. EPA's Superfund program, Judy was the lead Remedial Project Manager for the following significant sites: Montrose Chemical Corporation Palos Verdes Shelf Superfund Site, the Southern California Deep Ocean Disposal Sites, the Marine Corps Base Camp Pendleton Superfund Site, Oahu Sugar, Del Monte Corporation Oahu Plantation, Edwards Air Force Base, Hunters Point Naval Shipyard, NASA Jet Propulsion Laboratory, Pearl Harbor Naval Complex, Fort Ord, and Moffett Field Naval Air Station. Judy's work also included leading State and Federal stakeholder workgroups, communicating with communities, and attending Congressional briefings. Judy is also the President of the Board of Directors for the Alameda County Water District where she has served for over twenty years. In this role, Judy sets policy guidance and direction, coordinates with legislative liaisons to promote water conservation and water system reliability, mentors staff on environmental issues, attends public meetings with elected officials and the community, and provides fiscal oversight of contracts and union labor negotiations.



Please welcome Jerry Xu to his new position at the Water Board. Jerry is rejoining the NPDES Wastewater Division as a Water Resource Control Engineer where he previously worked as an engineering intern while completing a Master of Science in Chemical Engineering from San Jose State University. For the past five years, Jerry has worked in the Watershed Division mainly evaluating permit applications, reviewing monitoring reports, and conducting stormwater field inspections. When he's not working, Jerry enjoys reading and finding new and interesting restaurants.



On June 30, 2025, Alec Naugle will retire after 26 years of service in our cleanup programs. He has been the Chief of our Toxics Cleanup Division since 2019. He joined the Water Board in 1999 as an engineering geologist in the Groundwater Protection Division after about a decade in consulting and as a regulator for San Diego and Solano Counties. He worked his way up to senior engineering geologist where he directed staff in the oversight of cases in the Department of Defense and Site Cleanup Programs.

Alec principally-authored the region's 2009 Low-Threat Assessment Tool for Chlorinated Solvent Sites, which continues to guide the investigation, cleanup, and closure of our cleanup sites. He contributed regulatory perspective to Interstate Technical and Regulatory Council guidance and training on contaminant mass flux, chlorinated solvent site characterization and remedial strategies, and enhanced attenuation of chlorinated organics. During the last decade, he has advanced our thoughts on regulatory strategies for cleanup as we negotiate new and evolving challenges such as vapor intrusion, per- and polyfluoroalkyl substances, and climate change.

Alec has been a great mentor and coach to numerous staff and managers over the past 26 years. Alec is relocating to Port Townsend, Washington with his wife Leah after 27 years in the Oakland Hills. He plans to take up some new hobbies including carpentry and sailing, and having more time for his passions canoeing, traveling, organic farming, and playing and coaching soccer. We thank him for his many years of significant contributions and wish him a long and happy retirement.

Enforcement Actions (Brian Thompson and James Parrish)

The following tables show the proposed and settled enforcement actions since last month's report. As the proposed settlements are pending and could come before the 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 alleged violation and proposed settlement.

Proposed Settlement

The following is noticed for a 30-day public comment period. If no significant comments are received by the deadline, the Executive Officer will sign the order implementing this settlement.

Discharger	Violation(s)	Proposed Penalty	Comment Deadline
DuPont Specialty Products USA, LLC and Corteva Remediation Group	Discharge limit violations	\$6,000	May 29, 2025

Settled Actions

On behalf of the Board, the Executive Officer approved the following settlements:

Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
City of Burlingame and North Bayside System Unit	Discharge limit violations	\$6,000	\$6,000 ¹
City of San Mateo and the City of Foster City Estero Municipal Improvement District	Discharge limit violations	\$6,000	-

- ¹ This amount of the penalty supplements Regional Monitoring Program studies. The Regional Monitoring Program is managed by the San Francisco Estuary Institute to collect water quality information in support of management decisions to restore and protect beneficial uses of the Region's waters.

401 Water Quality Certification Applications Received (Elizabeth Morrison)

The table below lists those applications received for Clean Water Act section 401 water quality certification from March 13 through April 9, 2025. A check mark in the right-hand column indicates a project with work that may be in the San Francisco Bay Conservation and Development Commission (BCDC) jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
Temescal Creek Soil Testing and Removal Project	Emeryville	Alameda	
Monarch Bay Shoreline Development Project	San Leandro	Alameda	
F05ca9 Dry Creek (Zone 5 Line L) Restoration 630 Feet Downstream of Railroad Ave	Union City	Alameda	
Line Section 72 Anomaly Inspections at Dig Sites 2024-6B-F and 2024-7	Martinez	Contra Costa	
Price Residence, 51 Peninsula Rd, Bulkhead and dock at Belvedere Lagoon	Belvedere	Marin	X
Reed Creek Floodway Vegetation and Sediment Management Project	Mill Valley	Marin	
Emergency Activities to Redirect Avulsed Channel Flow – Olema Campground	Olema	Marin	
Lagunitas Creek Bridge Replacement Project	Point Reyes Station	Marin	
322 San Rafael Waterfront Improvements Project	Tiburon	Marin	X
Wurr Road, Pescadero Creek Road, and Cloverdale Road Culvert Repair Project	Unincorporated	San Mateo	
Bachman Homeowners Association Bank Stabilization Project	Los Gatos	Santa Clara	
Archway Recovery Services	Fairfield	Solano	
Watmaugh Road Bridge (Bridge No. 20c-0017)	Sonoma	Sonoma	
East Railroad Ave Penngrove Intersection Improvements	Unincorporated	Sonoma	
Old Redwood Highway and Ely Road Intersection Project	Unincorporated	Sonoma	