

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

MEETING DATE: August 12, 2026

ITEM: 4

Executive Officer's Report

Executive Officer's Report August 7, 2026

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When Fireworks Meet Water (James Parrish, Marcos De la Cruz, and D'Andre Alejandro)

On July 4, 2026, Regional Water Board staff Marcos De la Cruz, D'Andre Alejandro, and James Parrish inspected the Independence Day fireworks show on San Francisco Bay. The inspection was part of our implementation of the [Fireworks General Permit](#), a National Pollutant Discharge Elimination System (NPDES) permit that the Board originally adopted in 2020 and recently reissued on April 8, 2026. The permit regulates firework shows celebrating events such as New Year's Eve, sporting events, and Independence Day that could discharge pollutants into waters of the United States. In the San Francisco Bay Area, many public fireworks events occur on surface waters or adjacent shorelines using barges or piers, this NPDES permit was crafted to cover those firework shows.

Firework shows and NPDES permits together may not seem like an obvious pair. It was a little more obvious a decade ago when the San Francisco Bay Area hosted Super Bowl 50 in 2016. Macy's put on a pre-game fireworks show that, while spectacular, riddled the Aquatic Park shoreline with firework debris, including almost 1,000 pieces of plastic and spent firecracker fuses and almost 30 pounds of cardboard. A week earlier, another Macy's fireworks show resulted in National Park Service employees collecting around 200 gallons of plastic fireworks casings from Aquatic Park. Fortunately, we have a program for regulating point source discharges of pollutants to waters of the United States — the federal NPDES program. We implement this program by issuing NPDES permits to dischargers.

Each firework that explodes in the air is a point source discharge in the sky, where the discharge can ultimately land, or discharge, into waters of the United States. Thus, in part due to the pollution from Super Bowl 50, the Regional Water Board adopted the Fireworks General Permit. Dischargers, such as port authorities, cities, and fireworks display operators must obtain coverage under this permit if they want to host a fireworks show that could result in a discharge of firework pollution in surface waters. The permit requires that these dischargers implement best management practices to prevent or minimize firework pollution. Examples of best management practices include reducing pollutant loads by choosing more environmentally friendly fireworks (e.g., perchlorate-free fireworks and fireworks that entirely self-consume upon ignition) and cleaning up firework debris after firework shows. Boats and nets can be used to collect firework debris from surface waters, and brushes and brooms can be used to clean up barges and piers to ensure firework debris don't fall into surface waters. Additionally, the permit requires dischargers to notify us in advance of any firework shows and report on cleanup operations afterwards.

The Fireworks General Permit has proven effective. Last year, the most prominent fireworks operator in the Bay Area, Pyro Spectaculars, cleaned up over 700 pounds of fireworks debris from San Francisco Bay after its shows. The permit has also given us reason to inspect fireworks shows and evaluate whether permit enrollment is needed or adequate best management practices are being implemented. Last year on Independence Day (July 4, 2025), we inspected an unpermitted fireworks show and observed ignited debris falling into San Tomas Aquino Creek, a violation of the Clean

Water Act, which also set the adjacent banks on fire (see Figure 1 below). We enforced against the operator for discharging without a permit, which resulted in enrollment under the Fireworks General Permit and subsequent development of best management practices to prevent such discharges in the future. This year, on Independence Day, we observed the implementation of several best management practices, including the use of environmentally friendly alternatives (e.g., the fireworks used on the Golden Gate Bridge were entirely self-consuming), safety measures (e.g., fireworks displays were secured and inaccessible to the public; see Figure 2 below), and post-event cleanup efforts (e.g., vessels were deployed after the show to remove fireworks debris from the Bay). These inspections continue to be an effective and informative means of verifying that fireworks dischargers are implementing best management practices and complying with the Clean Water Act.



Figure 1: The San Tomas Aquino Creek banks were set ablaze from an unpermitted fireworks show on July 4, 2025.

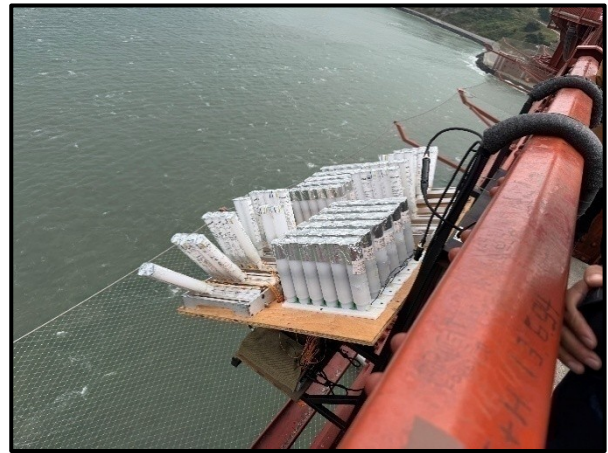


Figure 2: These self-consuming fireworks were secured on the railing of the Golden Gate Bridge on a path closed to the public for the fireworks show on July 4, 2026.

Subsurface Oxidation Event at Keller Canyon Landfill (Amita Muralidharan)

On May 18, 2026, a subsurface oxidation event was discovered at Keller Canyon Landfill, a Class II solid waste disposal facility located immediately south of the City of Pittsburg in Contra Costa County. Subsurface oxidation events, or subsurface fires, occur when oxygen infiltrates the waste mass fueling slow-burning smoldering or chemical reactions. The Landfill operator notified Contra Costa Health's Environmental Health Program, the Local Enforcement Agency, of smoke emissions from a cell that has not received waste for more than 10 years (see Figure 1 below). This is the first subsurface oxidation event encountered by the Regional Water Board and the Local Enforcement Agency.

As a Class II waste disposal facility, the Landfill accepts nonhazardous solid waste and inert waste from residential, commercial, and industrial sources. All cells at the Landfill are considered suitable for the disposal of waste material such as treated wood waste, dewatered sewage sludge, dewatered water treatment sludge, sterilized infectious waste, treated biosolids, and other designated wastes. No compliance issues were noted during previous site inspections by the Local Enforcement Agency or Regional Water Board staff.

Landfill gas temperature measurements and composition were recorded at wells within a 300-foot radius around the subsurface oxidation event (see Figure 2 below). Typically, temperatures above approximately 140 degrees Fahrenheit (F) measured at depth indicate that a heat-generating reaction such as a subsurface oxidation event may be occurring. Temperatures ranged from 79 to 126 degrees Fahrenheit, although the depths at which the measurements were taken are not clear.

Under normal conditions, carbon monoxide levels typically remain below 100 parts per million (ppm). Elevated carbon monoxide levels in landfill gas can indicate an ongoing subsurface oxidation event, as carbon monoxide is a byproduct of incomplete combustion. Carbon monoxide levels for all wells in the 300-foot radius around the subsurface oxidation event were 10 ppm or less, except for the closest well to the subsurface oxidation event (i.e., well 2518). The carbon monoxide level for well 2518 exceeded 300 ppm while the temperature remained at only 75 degrees Fahrenheit. Carbon monoxide concentrations at well 2518 have since fluctuated between 0 and over 3,000 ppm. Following each elevated carbon monoxide reading, soil was placed and compacted over the affected area resulting in a temporary reduction in carbon monoxide concentrations to approximately 0 to 20 ppm.

According to the Local Enforcement Agency, no surface fires or significant settlement were observed at any time. After the smoke emissions were addressed, no odors were detected. Based on the available information, the subsurface oxidation event appears to be limited to an extent. However, the rapid fluctuations in carbon monoxide concentrations at well 2518 necessitate continued monitoring.

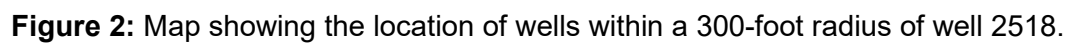
The Local Enforcement Agency has requested that the Landfill operator conduct daily landfill gas monitoring and has been conducting regular site inspections. The Landfill operator continues to investigate the cause and suspects that an unidentified vacuum source may be contributing to the subsurface oxidation conditions.

The Regional Water Board is coordinating with the Local Enforcement Agency to ensure the Landfill takes appropriate measures to mitigate risks associated with subsurface oxidation. The Regional Water Board's primary objective is to ensure that the subsurface oxidation event does not adversely impact water quality. The Landfill is currently regulated by Waste Discharge Requirements prescribed in Regional Water Board orders [R2-2017-0003](#) and [R2-2020-0023](#), which establish requirements for landfill maintenance, operation, and closure. Among these requirements, Provision C.21 of Order R2-2017-0003 requires the Landfill to immediately notify the Regional Water Board of any change in site conditions that could impair the integrity of the containment or control features or structures, and to promptly correct any such failure after the Executive Officer approves the corrective method and schedule.

On July 29, 2026, the Regional Water Board issued a letter requiring a Corrective Action and Monitoring Work Plan to be submitted by August 28, 2026. The letter requires the Landfill operator to provide additional site characterization information, including the known extent of the affected area and temperature profiles for affected landfill gas extraction wells; conduct leachate and groundwater monitoring to verify that the landfill liner remains intact and has not been compromised; and submit an updated slope stability analysis to evaluate whether the elevated landfill gas and leachate pressures could affect slope stability. If the ongoing investigation determines that additional corrective actions are necessary, the Regional Water Board will require the Landfill operator to implement those measures as appropriate.



Figure 1: Map of the landfill (rotated to match the orientation of Figure 2) showing the location of the affected landfill cell (Cell 2A) with a red circle.



Transforming Shorelines Collaborative Meeting: Groundwater Rise (Alyx Karpowicz, Keith Lichten, Rachelle De Sola, and Ross Steenson)

On May 29, 2026, Regional Water Board staff participated in the [Transforming Shorelines Collaborative](#) (Collaborative) meeting hosted by the [San Francisco Estuary Partnership](#) (Partnership). The Collaborative seeks to bring together practitioners, decisionmakers, and community members working at the intersection of nature-based shoreline adaptation and urban water management to advance shoreline resilience projects that provide multiple benefits for people and the environment. The Partnership is part of the National Estuary Program, which is a non-regulatory U.S. EPA program created through the Clean Water Act. The Partnership collaborates regionally to protect and restore the water quality and ecological integrity of the San Francisco Bay Estuary from the Golden Gate to the Sacramento-San Joaquin River Delta.

During the May meeting, staff presented an overview of our site cleanup program, including how we evaluate contaminated sites and potential impacts from sea level and groundwater rise and other agencies that also oversee site cleanup (e.g., Department of Toxics Substances Control, U.S. EPA). They described the site evaluation process, which considers the location of contamination sources, exposure pathways potentially impacting human and environmental health, and the need for cleanup actions, such as remediation or mitigating the effects of the contamination. Similar to our [October 2024 informational item for the Board](#), staff described the components for climate change vulnerability assessments of contaminated sites. This includes evaluation of:

- Site location (e.g., elevation, distance from the Bay or ocean)
- Site contamination (e.g., contaminants, amount, mobility)
- Remedy selection and verification monitoring
- Potential adverse effects from sea level and groundwater rise (e.g., erosion, groundwater emergence, changed groundwater flow direction)

Staff indicated that we are requiring vulnerability assessments at different stages of a cleanup case, such as remedial investigation, remedy selection, performance monitoring, five-year reviews, and again at the time of site closure. Staff added that, because our site cleanup process results in a high degree of source remediation, we typically do not expect significant issues for closed sites.

Other presenters included Dr. Kristina Hill (University of California Berkeley), Dr. Kevin Befus (University of Arkansas, United States Geological Survey), and Ellen Plane (San Francisco Estuary Institute). These presenters described potential impacts of climate change on contaminated sites, such as the potential for site contamination to be redistributed via preferential pathways like sewer or storm drain lines, noted community concerns, and shared the latest groundwater data modeling used to forecast long-term groundwater response to sea-level rise.

Representatives from consulting and architectural firms, community groups, and non-profit organizations led panel discussions on site-specific approaches to addressing groundwater rise at sites located in Richmond and East Palo Alto. Panelists presented the background of each site, including obstacles the communities have faced in

attempts to clean up the sites, current issues at the sites, including how sea level and groundwater rise are expected to impact vulnerable infrastructure, subsurface contamination, implementation of remedial technologies and mitigation measures, and the need for and benefit of communication and coordination with affected communities. Our staff participated in breakout groups, which focused on identifying next steps for considering groundwater rise at the Richmond and East Palo Alto sites, and programmatically across the region. Participants identified and discussed the immediate needs of potential priority sites, including design challenges, community outreach, and feasibility of remedial technologies, and next steps to address research gaps and data needs.

While staff consider that we have adequately incorporated the consideration of climate vulnerability into our site cleanup program, we anticipate there will be further adjustments as the science is refined and regional adaptation progresses. We believe that it is extremely important to continue to engage affected communities to understand and address their concerns.

Per- and Polyfluoroalkyl Substances Presentation at the Alameda County Board of Supervisors' Health Committee Meeting (Kimberlee West, Katie Kulha, Ross Steenson)

On June 8, 2026, speakers from several different agencies provided an informational update regarding per- and polyfluoroalkyl substances (PFAS) in Alameda County at the Alameda County Board of Supervisors' Health Committee public meeting. Stefan Cajina from the Division of Drinking Water and Kimberlee West from the Regional Water Board presented the Water Board's update. Supervisor Lena Tam and Supervisor Nate Miley also heard presentations from the Alameda County Health Officer, the State's Office of Environmental Health Hazard Assessment, Zone 7 Water Agency, Alameda County Water District, and the Go Green Initiative.

The Division of Drinking Water provided updates on the Water Board's approach to regulating PFAS and our strategy to develop state regulations in parallel with federal regulations. We presented results of the Division of Drinking Water's required PFAS monitoring of drinking water supplies and explained our strategy for required investigation and cleanup of PFAS source sites through our Site Cleanup Program. We highlighted the need for a broad approach to PFAS regulation and treatment as a class of compounds, rather than focusing on a few individual PFAS compounds.

There are about 35 sites in Alameda County that have conducted initial PFAS investigations. Based on the initial PFAS data, further investigations and cleanup actions are progressing at many of these sites. We are requesting PFAS sampling in soil, groundwater, stormwater, and surface water at a growing number of sites. Our mitigation and cleanup strategies focus on stopping discharges.

The Health Committee meeting archived video can be found at:
https://alamedacounty.granicus.com/player/clip/10348?view_id=2&redirect=true.

Vapor Intrusion Mitigation Guidance Training Provided to Santa Ana Regional Water Board Staff (Nicole Fry and Angus Chan)

On June 25, 2026, Regional Water Board staff Nicole Fry, Research Scientist in the Toxics Cleanup Division, and Angus Chan, Senior Water Resource Control Engineer in the Groundwater Protection and Waste Containment Division, provided training to staff at the Santa Ana Regional Water Board on our 2022 Vapor Intrusion Mitigation Guidance. The guidance was developed by our staff to supersede previous recommendations regarding vapor intrusion mitigation, which did not address verification monitoring. Importantly, the guidance clarifies that mitigation measures are not a substitute for remediation and that long-term monitoring of vapor intrusion mitigation measures may be necessary. The Vapor Intrusion Mitigation Guidance is the only document of its type with detailed considerations for long-term monitoring plans to ensure that these mitigation systems or measures continue to operate properly and successfully.

Roughly 15 staff and supervisors from the Santa Ana Regional Water Board attended the training. Our staff answered many questions regarding vapor intrusion risk assessment, engineering system design, and monitoring recommendations. The training was well-received and highlights the continued collaboration between the regional water boards.

Grazing Regulatory Program Enrollment Outreach and Compliance Assistance (René Leclerc)

In July 2025, the Regional Water Board adopted the Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the North San Francisco Bay Region (Conditional Waiver). The Conditional Waiver expanded the geographic coverage of the Grazing Regulatory Program to include the Petaluma River watershed and the west side of Point Reyes National Seashore. Over the past year, we have focused on outreach to facilitate enrollment and educate new permittees on conditional waiver requirements. A summary of this work is provided below.

Enrollment Outreach

To support implementation of the expanded program, Regional Water Board staff conducted outreach to prospective permittees through enrollment letters, updates to the Grazing Program website, and the development and distribution of informational fact sheets. Staff also coordinated extensively with agricultural support organizations, including Resource Conservation Districts (RCDs), the Natural Resources Conservation Service (NRCS), University of California Cooperative Extension (UCCE), and county Farm Bureaus to disseminate program information and notify prospective permittees of permit requirements. Thanks to outreach efforts, 37 new permittees joined the Grazing Regulatory Program, covering about 85 percent of identified grazing operations within the new watersheds. Staff will soon review available data to determine if additional outreach is needed to ensure proper enrollment.

On January 9, 2026, our staff also hosted an in-person informational meeting at the NRCS field office in Petaluma. The session was well attended with approximately 30 attendees and included an overview of the Grazing Program and permit requirements, followed by an opportunity for prospective permittees to ask questions and discuss the permit directly with staff.

Staff also coordinated with the National Park Service to facilitate enrollment of grazing operations at Point Reyes National Seashore. Individual ranchers operating within the seashore, as well as The Nature Conservancy, have enrolled under the Conditional Waiver. Staff continue to meet periodically with the National Park Service and The Nature Conservancy to discuss permit requirements, discuss planned grazing activities and schedule, and address implementation questions. In addition, staff responded to inquiries and met with representatives of non-governmental organizations, including the Resource Renewal Institute, Tomales Bay Foundation, and the West Marin Environmental Action Committee, regarding the status of water quality permitting for grazing operations at Point Reyes National Seashore.

New Permittee Education

Since adoption of the Conditional Waiver, staff have partnered with agricultural support organizations to provide education and resources to new permittees through workshops, newsletters, fact sheets, and both telephone and in-person technical assistance.

On June 3, 2026, our staff, together with representatives from Sonoma RCD, NRCS, and UCCE, conducted a workshop for new permittees focused on ranch water quality planning. The workshop was well attended with approximately 35 participants (see Figure 1). Because the Conditional Waiver requires each permittee to prepare a Ranch Water Quality Plan, the workshop was designed to provide participants with the knowledge and tools needed to develop their own plans. Topics included common water quality concerns associated with grazing operations, best management practices to protect and improve water quality, and available resources to assist with plan development, including grant funding opportunities and future office hours hosted by UCCE.



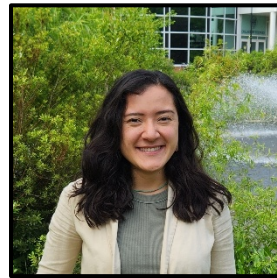
Figure 1: Ranch Water Quality Planning workshop in Petaluma

As part of ongoing implementation efforts, staff are planning a second educational workshop for fall 2026. The workshop will focus on the Conditional Waiver's annual monitoring requirements and provide guidance on completing the Annual Certification form, which permittees are required to submit each year. The workshop is currently in the planning stages and is tentatively scheduled for September or early October.

Staff Updates (Eileen M. White)



Aydin Eskafi was hired as a Water Resource Control Engineer in the Planning Division. Originally from the Bay Area, he recently graduated from the University of California, Berkeley with a Master of Science and Ph.D. in environmental engineering. He also holds a Bachelor of Science in chemical engineering from the University of Michigan. During his graduate research, he worked on designing materials and methods for sustainable desalination and resource recovery from brines. Before graduate school, he worked at a pharmaceutical company in cell culture process development. Outside of work, Aydin enjoys hiking, cooking, board games and playing with his two cats, Muffin and Babri.



Alyssa Bucci is joining the Watershed Management Division as an Environmental Scientist. She will be working in the North Bay section of the 401-program covering Sonoma County. She recently received her Master of Science degree in Ocean and Earth Sciences from Old Dominion University where she studied nutrient and fecal bacteria loading associated with tidal flooding in the Chesapeake Bay. She has a Bachelor of Science degree in Environmental Science from the University of Connecticut. She has previous Water Board experience working in the Cannabis Regulatory Program at Region 3 in the Central Coast. Outside of work, Alyssa enjoys outdoor activities like rock climbing and hiking, playing music, and dancing. She is new to the Bay Area and is excited to explore all it has to offer!



Agnes Farres was recently promoted as the Section Leader of the Watershed Management Division's North Bay and Enforcement Wetland Protection section. Agnes has 20 years of experience working in several programs at the Water Board, with 12 years of experience implementing the 401 Certification program. For the past 6 years, she has served as the Water Board representative on the Bay Restoration Regulatory Integration Team. She has played key individual and coordinating roles on projects as diverse as the Heron's Head and India Basin restoration and cleanup projects on San Francisco's southern waterfront, the East Bay Dischargers Authority First Mile horizontal/wastewater levee project in the East Bay, the SAFER Bay project to protect the Dumbarton Bridge touchdown area from rising tides, and the planned reuse of millions of cubic yards of tunnel muck from BART's planned South Bay extension to support restoring South Bay tidal marsh. She holds a Bachelor of Arts in Environmental Studies/Biology from the New College of Florida and a Master of Science in Plant Biology from the University of Massachusetts, Amherst. Agnes likes to spend time traveling, baking, and gardening.

Enforcement Actions (Brian Thompson)

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

Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
California Pacific Bank (Formerly Echo Sales), 6161 Coliseum Way, Oakland	Failure to comply with Self- Monitoring Program-	\$83,880	none

401 Water Quality Certification Applications Received (Joseph Martinez)

The table below lists those applications received for Clean Water Act section 401 water quality certification from June 11 through July 8, 2026. 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
All Cities Landfill Site Final Grading for Closure – 18" Lateral Pipe Outlet Structure	Hayward	Alameda	
Cary-Haas Pedestrian Bridge Replacement Project 2024.1010	San Leandro	Alameda	
EBRPD Pleasanton Ridge Pond PRPND020 Restoration	Unincorporated	Alameda	
Copper Moon Back Pond Restoration	Unincorporated	Alameda	
Wharf 3.5 Project- Geotechnical Investigation	Concord	Contra Costa	X
The San Catanio Creek Stabilization Toda Property Reach	San Ramon	Contra Costa	
Baby Bottle Invasive Species Eradication Project	Unincorporated	Contra Costa	
1 Bellevue Avenue Pier Deck Removal	Belvedere	Marin	X
Bank Erosion Protection and Habitat Enhancement	San Geronimo	Marin	
Lagunitas Creek Watershed Enhancement Project, Phase 2	Unincorporated	Marin	
Alviso Marina County Park Dock and Infrastructure Maintenance Project	San Jose	Santa Clara	X