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

MEETING DATE: February 8, 2023

Item: 5

Executive Officer's Report

Executive Officer's Report February 3, 2023

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Raining in the New Year: The New Normal (Bill Johnson and James Parrish)

Last month, the Bay Area rang in — or perhaps more appropriately rained in — the new year with a barrage of storms. It started with an atmospheric river on New Year's Eve that resulted in record-breaking rainfall. Oakland recorded its wettest day, with 4.8 inches of rain in 24 hours. San Francisco recorded its second-wettest day in almost two centuries, with 5.5 inches of rainfall. What followed was over two consecutive weeks of persistent, and sometimes intense, rain. While the New Year's Eve storm set several records, this achievement was not particularly new. October 24, 2021 was the wettest day on record for many Bay Area cities. It may be time to change our perspective, these "unprecedented" events may not be so unprecedented. Instead, climate change forecasts suggest that with the "new normal" there will be extended periods of drought, punctuated by very intense storms that stress our critical and aging water infrastructure.

From December 31 through January 19, we received 145 California Office of Emergency Services (Cal-OES) incident reports, involving over 60 million gallons of unauthorized wastewater and stormwater discharges. During the same period, roughly 10 billion gallons of authorized discharges took place, so the spills represented much less than 1 percent of all wastewater discharges. Reported spill volumes are preliminary estimates and could increase as reports are updated. For many incidents, volumes have not yet been estimated. We will describe the most significant spills in a future report when complete and detailed information is available.

Untreated or partially treated sewage spills contain solids, biochemical oxygen demand nutrients, and pathogens. These pollutants affect water quality; however, the rain and related runoff from the recent storms greatly diluted these pollutants. We received no reports of dead fish. For context, last summer's nutrients-fueled toxic algae bloom (a warm weather phenomenon) killed countless fish. Storm runoff likely mobilized larger sediment loads than the solids in the reported wastewater spills.

We have strong reporting requirements for wastewater spills; however, focusing solely on wastewater misses the most significant impacts of the recent storms. There was significant property damage, and more than a dozen people died. The weather caused tidal surges, high winds, downed trees, power outages, saturated soils, sink holes, and mud slides. Significant flooding blocked roadways, inundated homes and businesses, and threatened, and in some cases damaged, critical infrastructure. Flooding occurred in San Francisco, San Mateo, Alameda, Pleasanton, and coastal areas, to name just some examples. Urban floodwaters nearly always come into contact with sanitary sewer systems, so people were exposed to pathogens in sewage and urban stormwater.

Our programs include actions to prepare for and mitigate the impacts of intense storms. For wastewater collection systems, for example, new Waste Discharge Requirements that become effective in June will strengthen asset management requirements. Existing enforcement orders, including an East Bay Communities consent decree, San Francisco cleanup and abatement order, and several cease and desist orders, aim to better manage wet weather flows. More broadly, we continue to engage stakeholders to promote infrastructure improvements, including nature-based solutions that provide resiliency in the face of climate change. We will continue to assess what happened during the recent storms, determine what we can learn from them, and use what we learn to inform future actions.

Montezuma Wetlands Technical Review Team Activities (Christina Toms)

In the Montezuma Wetlands area, we are engaged in a 2,400-acre tidal wetland restoration project. The Montezuma Wetlands are located in the southwestern corner of Suisun Marsh near the town of Collinsville in Solano County. Ground surface elevations at the Project site have subsided up to 10 feet since its historic tidal marshes were diked and drained for agricultural use more than 100 years ago. To help the site recover surface elevations that are suitable to support tidal wetland vegetation, the Project is beneficially reusing dredged sediment from a variety of locations (e.g., Port of Oakland, Chevron pier). Beneficially reused dredged sediment falls under two classifications; cover sediment is suitable for the surface layer (i.e., top three (3) feet of the marsh) where ecological receptors are likely to come in contact with it, non-cover sediment is suitable for the foundation layer (i.e., three (3) feet below the marsh surface) where ecological receptors are not likely to come in contact with it.

Non-cover material has greater concentrations of chemicals than cover material and is often disposed of in the deep ocean. Consistent with the goal of the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay to maximize beneficial reuse of dredged material as a resource, the Project is our Region's first attempt to incorporate the beneficial reuse of non-cover material in a tidal wetland restoration project. The Project ultimately anticipates placing more than 17 million cubic yards of dredged material at the site.

The Water Board has permitted the Project through multiple sequential orders that reflect the evolving nature of tidal wetland restoration and beneficial reuse science, and how this science influences Project engineering design and adaptive management. The most recent Water Board order, No. R2-2012-0087, requires Montezuma Wetlands, LLC to develop a Technical Review Team (TRT) to provide expert and objective analysis and recommendations on subjects associated with the construction, monitoring, and performance of the Project. The TRT reviews and comments on matters pertaining to the Project's Adaptive Management Restoration Plan and Mitigation, Monitoring, and Reporting Plan, including, but not limited to:

- Quality of the monitoring data, analyses, results, and conclusions
- Assessment of the monitoring results relative to Project goals and requirements
- Compliance with performance standards
- Initiation of new Project phases
- Determination of when a completed Project phase may be breached
- Establishment of appropriate reference sites for monitoring purposes
- Optimum contingency measures to be implemented if needed and
- Adaptive management changes to retrieve better monitoring information and to enhance habitat establishment and Project performance

The TRT is not a decision-making body, but advises the Project proponents, regulators, and other partners. The TRT is managed by the San Francisco Estuary Institute

(www.sfei.org) and includes technical experts from a variety of fields, including, but not limited to, tidal wetland restoration engineering design, hydrology, geomorphology, vegetation, fisheries, birds, and mammals.

To restore a diked marsh, the existing levee must be breached. Prior to completing the breach for the Montezuma Wetlands project, TRT activities focused on assessing surface elevations within dredged material placement cells, the potential future (post-breach) hydraulic geometry of tidal channels within these cells, and the potential for these channels to incise into non-cover sediment. In September 2020, the TRT concluded that breaching of the Project's first phase was warranted. In October 2020, the first phase of the Project implementation restored roughly 500 acres to tidal action; approximately 370 acres are scheduled to be restored to tidal action in 2023.

Due to COVID restrictions, recent Water Board staff visits to the Project site have been limited to two TRT field visits, one in November 2021 and another in December 2022. Prior to both field visits, the TRT met online to discuss monitoring reports that were submitted to the Water Board and its permitting partners consistent with the conditions of Order No. R2-2012-0087 and related permits. In general, the monitoring reports and field visits have indicated that tidal wetland recovery at the site is proceeding consistent with TRT expectations:

> *The sediment cells and constructed channels are stable and new small tidal channels are developing as expected with no incision into Foundation sediment. Water quality in the restored tidal marsh is similar to Montezuma Slough, with all waste discharge requirements met continuously since day one of breaching. Marsh vegetation has been establishing as expected, with approximately 30% of Phase I vegetated with many marsh and wetland plants within one year of breach. Lastly, there has been a positive response of special-status species, with salt marsh harvest mouse, western pond turtles, California least terns, and western snowy plovers all observed within the Phase I area. Regular monitoring has shown a strong fish and bird response starting immediately after Phase I was restored to tidal action.* [Phase 1 Post Breach Monitoring Report, Fall 2020 – Summer 2022]

The following photographs are from the December 2022 TRT site visit:

Figure 1. Shorebirds foraging in tidal mudflats and shallows within Phase 1 of the Montezuma Wetlands.

Figure 2. Tidal wetlands, mudflats, and shallows within portions of Phase 1 of the Montezuma Wetlands.

Enforcement Actions (Brian Thompson and James Parrish)

The following tables show the proposed and settled enforcement actions since the January 2023 report. Because the proposed settlements are 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 alleged violations and proposed settlements.

Proposed Settlement

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

Discharger	Violations	Proposed Penalty	Comment Deadline
City and County of San Francisco	Effluent Limitation Violations	$238,300[1]	February 17, 2023
Alameda Housing Associates, LP	Effluent Limitation Violations	$9,000	February 24, 2023

[1] Includes $118,250 for a Supplemental Environmental Project for the Regional Monitoring Program to study temporal variability in sediment delivery to a North and Central San Francisco Bay salt marsh.

Settled Action

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

Discharger	Violations	Imposed Penalty	Supplemental Environmental Project
Vista Corporation and Clover Flat Landfill, Inc.	Discharge of acidic and leachate-laden stormwater, failure to observe or respond to leaks, and ineffective slope stabilization	$619,400	none

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 December 15, 2022, through January 24, 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
Mari Lake-Schaal Pier Repair/Modification	Alameda	Alameda	✓
Washington Creek (Zone 6 Line K-1) Restoration	Fremont	Alameda	
Installation of Two 12 ft. Wide by 8 ft. High Culverts at Zone 6, Line L, Lemos Lane Crossing	Fremont	Alameda	
San Francisco Bay Strategic Shallow Water Placement Pilot	SF Bay	Alameda	✓
Oakland Zoo Entrance Arroyo Viejo Creek Sink Hole Repair	Oakland	Alameda	
Bel Marin Keys Community Services District: 2022 Maintenance Dredge	Novato	Marin	✓
Dredging in the Marina Vista Canal	San Rafael	Marin	✓
Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation (BRRIT)	San Rafael	Marin	✓
West Marin Drainage Rehabilitation	Pt. Reyes Station	Marin	
San Francisco East Harbor Fuel Dock	San Francisco	San Francisco	✓
St. Francis Yacht Club Emergency Dock and Pier Repairs 2023	San Francisco	San Francisco	✓
Belmont Creek Maintenance, 642 Quarry Road	San Carlos	San Mateo	✓
Oyster Point Marina -East Basin Maintenance Dredging	South San Francisco	San Mateo	✓
Surfers Beach Pilot Restoration at Pillar Point Harbor	Unincorporated	San Mateo	
MROSD Bear Creek Redwoods Phase II Trails	Los Gatos	Santa Clara	
VA Hospital Matadero Creek Outfall Restoration	Palo Alto	Santa Clara	

Project Name	City/Location	County	May have BCDC Jurisdiction
Emergency Sediment Removal at Piedmont Basin on Berryessa Creek	San Jose	Santa Clara	
Emergency Sediment Removal on Ross Creek at Cherry Avenue	San Jose	Santa Clara	
3343 Alpine Road Portola Valley	Unincorporated	Santa Clara	
Benicia Marina Breakwater Rehabilitation	Benicia	Solano	✓
Maritime Administration Suisun Bay Reserve Fleet Pier and Pass Channel Dredging	Benicia	Solano	✓
Pacific Flyway Center	Fairfield	Solano	✓
Middle Green Valley Development	Unincorporated	Solano	
Lakeville Creek Restoration	Unincorporated	Sonoma	