

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

STAFF SUMMARY REPORT (Michael Montgomery)
MEETING DATE: November 13, 2019

ITEM: 5A

SUBJECT: **Discussion of Work Plans and Priorities for the 2019-2020 Fiscal Year–**
Hearing to Consider Adoption of Proposed Basin Plan Amendment and Substitute
Environmental Document

DISCUSSION: **Background**

The Water Board staff periodically provide written overview and informational presentations to inform the Board of the work plans and priorities. This year we are including information on cross-cutting strategic priorities and presenting less detailed program descriptions. We welcome your feedback on this change.

Cross-Cutting Strategic Priorities

Climate Change/Water Resilience

To best address climate change and facilitate water resilience with our limited resources, we are strategically working on a range of projects coordinated through existing and newly established partnerships. Our cornerstone project is to accelerate adaptation to sea level rise through an amendment to our Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan Amendment or BPA). This amendment will address a suite of regulatory opportunities and challenges. These are described in the *Wetland Fill Policy Challenges and Future Regulatory Options: Findings and Recommendations* now online at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/R2%20Climate%20Change-Wetlands%20Policy_2019-1016.pdf. The purpose of this Report is to provide background information on these challenges and opportunities and inform the development of a related Basin Plan Amendment. Next, we will identify a preliminary set of goals and key opportunities to improve the regulatory framework for wetland restoration and shoreline resiliency. We will develop and recommend to the Board an updated regulatory framework to accelerate wetland protection and shoreline resilience. We are “flying the plane as we build it” through our collaboration with project sponsors and review of specific SF Bay margin adaptation projects which are currently or expected to be under review, supporting a multi-agency Bay margin wetland restoration review team (Bay Restoration Regulatory Integration Team), intended to speed the design and regulatory review of sea level rise adaptation restoration projects.

In support of climate adaptation projects, we are encouraging the U.S. Army Corps of Engineers (ACOE) and other dredgers to deliver sediment from navigation dredging projects to wetland restoration and other shoreline adaptation projects through our permits consistent with the Long-term Management Strategy.

In addition to these efforts, we are providing leadership to a number of new climate change partnerships. We have joined the Bay Area Regional Collaborative (BARC) as a non-voting member of the Governing Board. The BARC (<https://barc.ca.gov>) works to collaborate and problem-solve for 21st century challenges that impact the Bay Area, including climate change and social and economic injustice. Member agencies include [ABAG - Association of Bay Area Governments](#), [BAAQMD - Bay Area Air Quality Management District](#), [BCDC – The San Francisco Bay Conservation & Development Commission](#) and [MTC - Metropolitan Transportation Commission](#). Assistant Executive Officer Lisa Horowitz-McCann has joined the Steering Committee for [CHARG, the Coastal Hazards Adaptation Resiliency Group, an initiative of the Bay Area Flood Protection Agencies Association](#). We have also joined the Bay Conservation and Development Commission’s Advisory Group for the Regional Shoreline Adaptation Plan and are actively participating in their Financing the Future workgroup. These groups are working to develop approaches to regional planning and funding/financing for sea level rise adaptation.

We are reviewing proposals for increased water recycling pursuant to the Board’s and the State Board’s general water recycling requirements, including office campus-based recycling projects at Microsoft, Apple, Google, and Facebook, and a recently-approved use at the 1,600-acre Bel Marin Keys wetland restoration project. We are an active and engaged partner in addressing challenges in building out large scale water recycling through the Water Recycling Workgroup facilitated by the Bay Area Clean Water Agencies.

We are directing and encouraging Bay Area municipalities and transportation planning agencies on implementation of green infrastructure. Through our permitting we are shifting municipalities from traditional gray storm drain infrastructure to green, which is more resilient to climatic changes in rainfall patterns and intensity, can reduce nearshore flooding when storms coincide with king tides, and has significant co-benefits including pedestrian and bicyclist safety, carbon capture, reducing urban heat island effects, and community cohesion.

We are requiring municipal wastewater facilities to evaluate natural systems, such as wetlands and horizontal levees, as multi-benefit systems to reduce nutrient loading to the Bay while creating shoreline resilience.

As we update requirements on landfills and waste management units under State regulation, we are including new provisions that require Dischargers to regularly review and update their long-term flood protection plans to ensure that climate change impacts are considered when designing and maintaining disposal areas for long-term waste containment.

Taking on Stormwater Challenges

Our stormwater efforts address a wide variety of pollutants from a variety of sources. The recently published “Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region” from the San Francisco Estuary Institute estimated that microplastic load transported via stormwater is approximately 300 times greater than the estimated annual discharge (of plastics) from all wastewater treatment plants discharging

into San Francisco Bay. This reinforces the importance of our regulatory efforts to reduce trash reaching the bay via stormwater.

Next month we will have an information item before the Board regarding our progress in reducing pollution from stormwater. A central component of this will be to summarize our ongoing review of the MRP permittees' progress towards a required 80 percent trash reduction from their 2009 baseline as well the Cease and Desist Orders we have issued to select municipalities and Caltrans. We will continue to work with MRP Permittees to control discharges of PCBs, mercury, and trash.

We are also working with the Bay Area Stormwater Management Agencies Association (BASMAA), environmental organizations, and other interested stakeholders to frame the MRP's planned FY 2020-21 reissuance, which will focus on: updating MRP language for the control of PCBs, mercury, and trash; framing next steps on the MRP permittees' implementation of green infrastructure plans; and controlling illicit discharges of sanitary waste associated with homelessness. In addition to the MRP, Caltrans is covered under a statewide stormwater permit.

We are continuing to implement the trash reduction requirements in Caltrans' permit and the associated Cease and Desist Order issued by the Board in February 2019, which requires Caltrans to control trash discharges from at least 2,000 acres of its right-of-way by June 30, 2020. We are working to ensure that Caltrans is coordinating with Bay Area municipalities on these and related TMDL requirements. We have used the CDO to leverage increased coordination between these parties, which has come at the cost of much staff time, but should greatly increase the number of projects which get built.

Addressing Contaminated Sites in a Dynamic Real Estate Environment

The growing Bay Area commercial and residential real estate market is driving demand for assistance from our staff. We face this challenge at closed landfills, military bases, and at industrial and petroleum contaminated sites. When land use changes are proposed it requires significant staff resources to evaluate new cleanup methods; address community concerns; and issue cleanup and abatement orders that may require long term oversight of required land use controls, operation and maintenance plans, and financial assurances.

Development overlying contaminated soil and groundwater in most cases requires greater scrutiny due to recent increases in toxicity for common contaminants such as trichloroethylene. In addition, developments on landfills, is requiring additional staff analysis in evaluating the criteria for appropriate building foundations. For projects with a vapor intrusion concern, we are prioritizing developing guidance and improving communication which will provide developers, cities, homeowners, and the public, clarity regarding our expectations. We developed a Fact Sheet in July 2019 (https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/vims_fact_sheet.pdf)

We will continue to evaluate how this additional workload demand is distributed with local government and the Department of Toxic Substances Control.

Division Summaries

Planning Division

The Planning and TMDL Division, under Division Chief Xavier Fernandez, is responsible for updating our Basin Plan, developing and implementing TMDLs, monitoring the region's waters, providing regulatory oversight for dredging and dredged material reuse projects, and administering the Non-point Source Program and the Cannabis Program.

Basin Planning Program

The Water Board is required to develop, adopt (after public hearing), and implement a Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region. The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San Francisco Bay Region. The plan must include: a statement of beneficial water uses that the Water Board will protect; the water quality objectives needed to protect the designated beneficial water uses; and the implementation plans for achieving the water quality objectives through its regulatory programs.

Total Maximum Daily Loads (TMDLs) Program

TMDLs are actions to restore clean water. Section 303(d) of the federal Clean Water Act requires that states identify water bodies that do not meet water quality standards. TMDLs examine these water quality problems, identify sources of pollutants, and specify actions that create solutions.

Priority activities:

- Bring the Petaluma River pathogens TMDL to the Board for consideration;
- Continue development of TMDLs according to the schedule submitted to the State Water Board and U.S. EPA; and
- Support implementation of all 17 approved TMDLs and one water quality improvement plan, including negotiating Municipal Regional Stormwater Permit conditions to implement sediment, bacteria, PCB/Hg, and pesticide TMDLs.

Surface Water Ambient Monitoring Program (SWAMP)

Since 2000, SWAMP has collected stream water quality data from over 500 locations throughout the Bay Area. These SWAMP data have supported many Regional and State Board activities including: providing data used for 303(d) listing and 305(b) assessments, determining regional reference conditions, supporting TMDL developments, and providing background information for 401 certifications, NPDES permits, and conditional waivers of waste discharge requirements. SWAMP has also monitored water quality in Bay Area watersheds and contaminants in fish from lakes to support fish consumption advisories issued by the Office of Environmental Health Hazard Assessment (OEHHA). SWAMP recently conducted watershed studies in Pescadero Creek, San Gregorio Creek, Petaluma River, Lagunitas Creek, Walker Creek, and the Livermore area.

Priority activities:

- Implement our regional ambient water quality monitoring program focusing on conditions in creeks and streams; and
- Provide technical support to the San Francisco Bay Regional Monitoring Program.

Dredging and Disposal Program: LTMS

Any dredging and disposal activity in the San Francisco Bay requires Water Board approval, usually via a water quality certification. The navigational dredging program is included in the Basin Plan's Implementation Program. The Water Board works with its federal, State, and local partners in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) to manage navigational dredging and disposal activities in the Bay.

Priority activity:

- Reissuance of the permit covering the ACOE Dredging Program for the years 2020 through 2024.

Non-Point Source (NPS) Program

Water quality impairment in the region is often caused by activities associated with agriculture, hydromodification and urbanization. We have identified the highest priority areas of focus for NPS management measures to be: 1) runoff from confined animal facilities, 2) runoff from grazing operations, and 3) hydromodification from agriculture. These priority areas are an outgrowth of the TMDL Program. The Division also currently manages over 15 federal NPS grants, which are targeted to address NPS pollution and implement TMDLs. Past and present grants include equestrian facility improvements, dairy and rangeland water management practices, creek restoration, and citizen monitoring projects.

Priority activities:

- Oversee State and federal grants consistent with TMDL implementation and the nonpoint source policy;
- Continue implementation of Grazing Conditional Waivers for the Tomales Bay, Sonoma Creek, and Napa River watersheds; and
- For dairies enrolled in the expiring Conditional Waivers for Dairies, facilitate their enrollment in the Combined Animal Facility Waste Discharge Requirements.

Irrigated Lands Regulatory Program and Cannabis Programs

Runoff from irrigated lands, such as pesticides, fertilizers, salts, pathogens, and sediment, are a significant non-point source of pollutants and at high enough concentrations, can harm aquatic life or make water unusable for drinking water or agricultural uses. The Vineyard Program, which implements the Napa River and Sonoma Creek sediment TMDLs, employs Waste Discharge Requirements (also known as "WDRs" or "Orders")

to require BMPs which reduce pollutant loads and monitoring to evaluate progress towards the restoration of beneficial uses.

The State Water Board adopted a Cannabis Policy and related statewide WDRs to ensure That the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs. Threats of waste discharge from cannabis cultivation may be from irrigation runoff, over fertilization, pond failure, road construction, grading activities, domestic and cultivation related waste, etc.

Priority activities:

- Continue rollout of the Region 2 Vineyard General Permit and State Water Board’s Cannabis General Permit through outreach, enrollment, fee collection, facility inspections, and enforcement; and
- Oversee large landscape scale restoration, flood control, development/redevelopment, and public infrastructure projects, such as the Napa River/Napa Creek Flood Protection Project.

Watershed Management Division

The Watershed Management Division, under Division Chief Keith Lichten, oversees stormwater runoff control, which includes developing and overseeing large municipal and Caltrans stormwater permits and implementing the statewide permits for industrial stormwater, construction stormwater, and small- and non-traditional-municipality stormwater. In addition, the Division oversees the stream and wetland protection, recycled water, and on-site wastewater treatment programs.

Municipal Stormwater Program

Under the federal Clean Water Act, the “Phase I” program for Municipal Separate Storm Sewer Systems (MS4s) requires municipalities that serve populations of 100,000 or greater to implement a stormwater management program as a means to control polluted stormwater discharges from the MS4s. In 2009, the Board consolidated the Region’s Phase I programs into one permit by issuing the [Municipal Regional Stormwater Permit](#) (MRP) to regulate stormwater discharges from 76 municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo. In 2015, the Board reissued the MRP, and, in 2018, in coordination with the Central Valley Regional Water Board and at that Water Board’s request, the Board amended the MRP to include East Contra Costa County Permittees immediately adjacent to our region.

The Clean Water Act’s “Phase II” program for MS4s requires municipalities that serve populations of 100,000 or less and non-traditional permittees, such as BART, UC Berkeley, and ports, to implement a stormwater management program as a means to control stormwater discharges from their MS4s. In 2013, the State Board issued a statewide general permit for the discharge of stormwater from these “small” MS4s. The following municipalities in our region are covered under this statewide general permit: Marin County and its cities, Napa County and its cities, the City and County of San

Francisco (in selected areas of the City), Solano County and the City of Benicia, and Sonoma County and the cities of Petaluma and Sonoma. The permit also covers 21 non-traditional permittees. Finally, we are coordinating with State Board staff on potential changes for the general permit's reissuance, including the addition of school districts and associated requirements.

During this FY, we will continue to leverage existing permit language and the State Board's Trash Amendments to the Inland Surface Waters and Ocean Plans to ensure that municipal permittees and Caltrans are moving expeditiously to reduce discharges of trash from MS4s to receiving waters. This includes working with non-traditional permittees and Caltrans to identify areas where they can effectively coordinate with MRP permittees on trash reduction actions (e.g., highway on- and off-ramps, State Highways that are also arterial roads, and commuter corridors around BART stations), and working with Caltrans to support its implementation of cooperative agreements between Caltrans and municipalities, which are more-quickly able to implement capital improvements for trash control (e.g., hydrodynamic separators in storm drains to capture trash). Finally, we will continue to work with municipalities to understand steps they are taking to address the impacts of homelessness, including direct discharge of trash to receiving waters and discharges of sanitary waste to MS4s and directly to receiving waters.

In February 2019, the Board adopted a CDO requiring Caltrans to increase its rate of implementation of trash control measures. We are working closely with Caltrans and Bay Area municipalities to push Caltrans to effectively implement the CDO's requirements, which include controlling trash from at least 2,000 acres of its Bay Area right-of-way by June 30, 2020.

Priority activities:

- Work with Caltrans on its implementation of Cease and Desist Order No. R2-2019-0007 to control trash and its coordination with municipalities on trash and PCBs and mercury TMDL control measures;
- Continue MRP reissuance process; and
- Coordinate with State Board staff on the reissuance of the following statewide NPDES stormwater permits:
 - Small and Non-Traditional Municipalities; and
 - Caltrans.

Statewide Industrial and Construction Stormwater Program

Facilities that involve a variety of industrial activities must be covered under the [statewide industrial stormwater general permit](#). Facilities covered under this permit include manufacturing operations, transportation facilities where vehicles are maintained, landfills, and hazardous waste sites. Approximately 1,700 facilities in our region are covered under this permit.

Construction activities that disturb one acre or more of land, including construction activities on smaller sites that are part of a larger project, must comply with the [statewide](#)

[construction stormwater general permit](#), which regulates stormwater runoff leaving construction sites. Approximately 1,400 facilities in our region are covered under this permit.

Division staff inspect facilities to ensure they are appropriately protecting water quality, review permittee submittals, coordinate with municipal stormwater staff inspecting the facilities, and manage facility coverage under the permits, reviewing and processing approximately 650 Notices of Termination and 450 Changes of Information, and completing more than 300 inspections annually.

Priority activities:

- Coordinate with State Board staff on the reissuance of the statewide NPDES construction stormwater general permit; and
- Complete a non-filer project that will outreach to more than 500 industrial facilities regionwide, including proposing appropriate enforcement for facilities that do not timely obtain permit coverage.

Stream and Wetland Protection Program

The Division oversees the regulation of discharges of fill and dredged material under federal [Clean Water Act section 401](#) and the [Porter-Cologne Water Quality Control Act](#). Our implementation of the Program gets us involved with the protection and restoration of creeks and wetlands, the protection of special-status species, and the regulation of runoff impacts, including hydromodification. During permitting and through our programmatic approach with flood control districts, we encourage watershed-level analyses where that will result in a more robust understanding and protection of water body natural processes, functions, and values.

Program implementation focuses on the issuance and oversight of water quality certifications under Clean Water Act section 401 and of WDRs under the Water Code. The Division issues approximately 300 certifications annually.

Priority activities:

- Coordinate with State Board staff on outreach for the State’s new dredge and fill policy and expand implementation of program management tools that will allow us to better track mitigation requirements;
- Coordinate internally and with other agencies to address project and policy issues related to anticipated sea level rise; and establishing a position, funded by external sources, to help permit Bay margin restoration projects (primarily those funded by regional Measure AA);
- Continue to issue “programmatic” permits that streamline project authorizations while ensuring resources are appropriately protected. These include WDRs for stream maintenance programs, including flood management work;
- Reissue programmatic WDRs for the Santa Clara Valley Water District’s stream maintenance program and develop WDRs and Certification for a key District reservoir reconstruction project;

- Coordinate with the Planning Division and external stakeholders on development of a regional wetlands monitoring program that may be focused, at least initially, on Measure AA projects; to allow efficient use of resources to achieve restoration goals while ensuring necessary project performance information is collected;
- Water Quality Certification for the Lower Walnut Creek restoration project;
- Implement existing stream maintenance program authorizations for the City of Livermore, Marin County, Napa County, the Santa Clara Valley Water District, and the Sonoma County Water Agency;
- Implement existing programmatic maintenance authorizations for the East Bay Regional Park District and the Port of San Francisco. Issue and oversee a new authorization for the Port of Oakland; and
- Implement our General WDRs for in-Bay overwater structures (e.g., pile placement/replacement activities).

On-site Wastewater Treatment Program

The Division oversees the Board's program for regulating discharges of treated wastewater to land via WDRs. On-site wastewater treatment systems (OWTS) are useful and necessary systems that allow habitation at locations that are removed from centralized wastewater treatment systems. The Board has delegated oversight of most OWTS to counties under memoranda of understanding, but must update these delegations consistent with the State Board's OWTS Policy. The mechanism laid out in the OWTS Policy for this delegation is the development, by each county, and approval, by each Regional Water Board, of a Local Agency Management Program (LAMP). We have approved LAMPs for Alameda and Santa Clara counties and anticipate approving Marin County's LAMP this year. We coordinated with the Central Valley Region on its review and approval of Solano County's LAMP. We are continuing to work with Contra Costa, Napa, and San Mateo county staff, and are coordinating with the North Coast Regional Board, which has responsibility for approval of Sonoma County's LAMP.

The Board also considers for adoption WDRs prepared by Division staff for facilities such as wineries, camps, or agricultural facilities that are not connected to centralized wastewater treatment systems. We issue WDRs for systems with design flows over 10,000 gallons per day or that contain high strength waste (per requirement by the OWTS Policy) and for any other systems that require direct oversight. Existing WDRs are reviewed by Division staff on a periodic basis.

Priority Activities:

- Review, coordinate with the North Coast Regional Board, and approve county-based LAMPs per State Board policy. Complete review and approval of Marin County's LAMP; and
- Coordinate with State Water Board staff and stakeholders on the issuance of statewide general WDRs for wineries, including more than 800 wineries in our region.

Recycled Water Program

The purpose of the State Board's Recycled Water Policy is to increase the use of recycled water from municipal wastewater sources that meets Water Code requirements in a manner that implements State and federal water quality laws. When used in compliance with the Recycled Water Policy and all applicable State and federal water quality laws and regulations, our Board has found that recycled water is safe for the approved uses. The Division oversees recycled water projects largely through the Board's 1996 general WDRs for water recycling. The 1996 general WDRs served as the model for [statewide general Water Reclamation Requirements](#) (WRRs) adopted by the State Board in 2016. In February 2019, State Board adopted amendments to the [Recycled Water Policy](#) that informed monitoring and other requirements in the statewide WRRs.

Priority Activities:

- Transition permittees under our 1996 order to the statewide WRRs; and
- Work with stakeholder to address technical barriers and regulatory challenges with large scale projects.

NPDES Wastewater and Enforcement Division

The NPDES Wastewater and Enforcement Division, under Division Chief Bill Johnson, oversees permits for discharges of treated wastewater to surface waters pursuant to the federal Clean Water Act and the California Water Code. The Enforcement Section within the Division assists other Water Board divisions primarily with enforcement that involves penalty assessment. The Enforcement Sections activities and priorities are described in Item 5B, *Enforcement Actions and Priorities for Fiscal Year 2019-2020*.

NPDES Permit Program

The federal Clean Water Act requires that all discharges to waters of the United States be covered by NPDES permits. "NPDES" stands for "National Pollutant Discharge Elimination System." U.S. EPA has delegated NPDES permit issuance to the Water Boards, and permitting must follow federal regulations. NPDES permits ensure that wastewater discharges do not harm receiving waters.

The Division oversees permits for municipal wastewater treatment plants, their associated sanitary sewage collection systems, and industries that directly discharge treated wastewater to surface waters (e.g., refineries). The Division oversees about 75 individual NPDES permits covering about 80 treatment facilities, about two thirds of which are municipal wastewater treatment facilities.

The Board adopts and reissues NPDES permits at public hearings. We oversee compliance with the NPDES permits by reviewing self-monitoring reports, conducting inspections, and assisting dischargers with compliance.

Priority Activities:

- **Reissue NPDES permits.** Consistent with U.S. EPA's nationwide goals, we maintain a permitting backlog of less than 10 percent by reissuing approximately

15 NPDES permits per year.

- **Track evaluation of options for nutrient discharge reduction by natural systems and water recycling.** The Nutrient Watershed Permit reissued in 2019 requires major municipal wastewater treatment plants that discharge to the Bay to evaluate options for nutrient discharge reduction by natural systems (e.g., wetlands and horizontal levees) and water recycling. Dischargers must also provide data to support nutrient fate and transport modeling and improve our understanding of harmful algae blooms.
- **Oversee wastewater collection systems to reduce inflow and infiltration and sewage spills.** Collection system maintenance is essential to minimize excessive inflow and infiltration that contribute to high wet weather flows, and to avoid sanitary sewer overflows (SSOs). SSOs pose human health risks and, if they reach surface waters, can threaten water quality. We are prioritizing and systematically inspecting collection systems and will continue to push collection system agencies to reduce inflow and infiltration from private sewer laterals.

General NPDES Permits Program

General permits are an efficient and equitable way to regulate similar types of discharges. When a general permit exists for a particular type of discharge, a facility may seek coverage under that permit by filing a notice of intent to comply with the permit. After we verify that the facility qualifies, we issue an authorization to discharge. About 110 facilities are enrolled under five Board-issued general NPDES permits:

- Fuels/VOCs Groundwater Pump and Treat Discharges;
- Potable Water Treatment Filter Backwash Discharges;
- Brackish Extracted Groundwater Discharges;
- Discharges from Aggregate Quarries and Sand Mining; and
- Discharges from Dry Docks and Shipyards.

The Division also oversees seven statewide general permits issued by the State Water Board. These address discharges from about 130 sanitary sewer collection systems and about 100 community water supply systems, utility vault discharges, and aquatic pesticide, herbicide, and fungicide applicators.

Pretreatment and Pollution Prevention Program

Pretreatment and pollution prevention both aim to prevent pollution at its source. The pretreatment program requires municipal wastewater agencies to reduce industrial pollution before it reaches their treatment plants. Due to reduced funding and contractor support from U.S. EPA, we will need to evaluate the benefits of investing staff resources.

Toxics Cleanup Division and Groundwater Protection and Waste Containment Division (GWPD)

These two Divisions manage four programs which share many of the same objectives:

- Control human health exposure to site contaminants;

- Control groundwater contaminant migration and prevent or mitigate impacts to water supply wells and surface waters;
- Require cleanup within a reasonable timeframe to meet protective cleanup levels and restore beneficial uses;
- Require risk management measures when it is infeasible to fully meet protective cleanup levels or when cleanup will take several years;
- Provide community outreach and incorporate public comments prior to major cleanup decisions; and
- Address impacts from sea level rise at vulnerable sites where contamination is left in place.

Responsibility for the Site Cleanup Program and Site Cleanup Sub-Account Program is shared between Toxics Cleanup Division and GWPD. GWPD oversees cleanup at DOD and DOE sites and has a program for management of active and closed non-hazardous waste management units. The Toxics Cleanup Division oversees most underground storage tank (UST) cleanup cases and supports various local agencies that also oversee UST and SCP cases.

Outside of the existing programs we have an effort underway to prioritize groundwater basins considering groundwater quality, threats, impairments, and use. This project has important implications for optimizing cleanup timeframe and granting low-threat case closures, and for informing Water Board management decisions for selective use of our regulatory tools to control discharges and drive further source identification and abatement. Our approach includes: 1) evaluating baseline conditions including beneficial uses, supply well impacts, localized salt and nutrient areas of concern, and other water quality/habitat threats, 2) engaging local groundwater agencies and reviewing their groundwater management plans, and 3) documenting findings for each groundwater basin in a fact sheet for information sharing and coordination with local agencies and the public.

Site Cleanup Program

The uncontrolled release of pollutants to soils and groundwater from a variety of commercial, military, municipal and industrial current and former facilities poses a significant threat to the health and welfare of the communities and natural systems we are charged to protect and restore. We use our authorities (e.g., Water Code Sections 13267 and 13304) to compel parties to investigate and cleanup sites with varied pollutants.

Toxics Division and the Groundwater Protection Division currently oversee 829 SCP cases (600 active and 229 inactive). Many of these sites are discovered as a result of property transfer or redevelopment, and the resulting cleanup work dovetails with site reuse. We prioritize sites using our updated [case-prioritization tool](#). The large number of inactive cases is due to various factors including discharger inability to pay, discharger recalcitrance, and limited staff resources.

The Site Cleanup Subaccount Program (SCAP) covers high-threat, under-funded sites that are not in the UST program or cost recovery. Funding is from the gasoline tax.

Priority Activities:

- Update our July 2009 low-threat case closure assessment tool to incorporate climate change considerations, groundwater basin priorities, vapor intrusion assessment and mitigation guidance, and factors for assessing cleanup feasibility;
- Cleanup of high threat mine sites using SB445 funds to evaluate the impacts of several closed mines in Santa Clara, Napa, and Solano counties;
- Implement source-investigation strategies to address 34 impacted supply wells in our region including a response strategy for sites impacted by per- and polyfluoroalkyl substances (PFOS/PFAS);
- Develop technical guidance on how to evaluate contaminated groundwater discharges to surface water, including within tidal mixing zones; and
- Finalize the Water Board/Department of Fish and Wildlife Memorandum of Understanding for spill response (State Water Board adoption to be considered in October 2019).

UST Cleanup Program

Oversee the investigation and cleanup of leaking underground fuel tanks to protect human health and the environment, with progress tracked by meeting performance targets for cases starting remediation and case closures. We work with the State Water Board, who reimburses responsible parties for eligible cleanup costs through its UST Cleanup Fund, which is funded by a gasoline tax. We also coordinate with local agencies, such as county environmental health departments, who oversee many of the fuel UST sites in our region. Our division currently oversees 233 UST cases.

Priority Activity:

- Continue to focus on program improvements in implementing the State Water Board's low-threat closure policy in order to meet upcoming target of 31; and
- Continue to evaluate scientific developments on petroleum hydrocarbon oxidation products (HOPs) such as metabolites, particularly where these products threaten surface water bodies.

Department of Defense and Energy Program

Board staff in the Department of Defense (DoD) program focus on overseeing cleanup of former military facilities, including those that have transferred from the military to State or local entities for redevelopment or reuse. There are currently about 33 military-related facilities in the Region comprising about 411 individual cleanup sites. Many facilities are former Navy, Army, and Air Force bases closed under the congressionally mandated Base Realignment and Closure Program first instituted in 1991. Six military facilities in the Region continue to operate today. Some facilities are *Formerly Used Defense Sites* (FUDS), which typically include missile silos, gun batteries, listening posts, radar stations and other specialized facilities. The military follows the Federal cleanup process mandated by the *Comprehensive Environmental Response, Compensation, and Liability*

Act (CERCLA). Under CERCLA, the military is required to comply with State laws, regulations, and policies.

Board staff also oversee investigation and cleanup at four Department of Energy (DoE) federal laboratories (Lawrence Livermore National Lab, Sandia National Lab, Lawrence Berkeley National Lab, and the Stanford Linear Accelerator Center).

Priority Activities:

- We will ensure the safe reuse of the Region's former military bases as we anticipate that high-priority sites at the former Hunters Point Naval Shipyard, Treasure Island Naval Station, and Concord Naval Weapons Station will soon be ready for transfer to local agencies. High priority shoreline sites also exist at Alameda Point, Mare Island, Moffett Field, Point Molate, and Point Ozol; and
- The continued privatization of military sites requires a shift of DoD Program resources to SCP cost recovery. We will continue to provide regulatory oversight of privatized DoD sites to ensure that redevelopment activities do not undermine prior remedies and that additional cleanup for the new land use is protective of human health and water quality.

Land Disposal Program

The Land Disposal Program oversees the treatment, storage, and disposal of non-hazardous wastes within waste management units (WMUs) under State regulations that address discharge of waste to land (i.e., title 27 of the California Code of Regulations). WMUs include active and closed municipal landfills, waste piles associated with mining operations, and industrial surface ponds or landfills such as those found at refineries and chemical manufacturing plants.

Our primary objective in regulating WMUs is to ensure that wastes are properly contained and do not degrade surface water or groundwater quality. Staff enforces State regulations that consist of design standards for WMU base liners, covers, environmental monitoring, and cleanup when necessary. To implement these regulations, Division staff prepare WDRs for Board consideration and adoption. As we update WDRs, we are including provisions that require Dischargers to regularly review and update their long-term flood protection plans to ensure that climate change impacts are considered when designing and maintaining disposal areas for long-term waste containment.

Priority Activities:

- The former Tesoro (now Marathon) Refinery in Martinez contains five bay-front WMUs that have yet to be formally closed under final cover. The 45-acre project is proposed for final closure through a combination of waste removal, consolidation, and stabilization to safely contain waste material at historical waste disposal sites and restore/improve habitat; and
- Issue updated guidance for establishing appropriate waste acceptance criteria for our Region's active municipal solid waste landfills.