

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

EXECUTIVE OFFICER SUMMARY REPORT
MEETING DATE: September 14, 2016

ITEM: 7

SUBJECT: **Overview of Regional Water Board Proposed Priorities - Workshop on the Board's Programs and Their Proposed Priorities for the 2016-2017 Fiscal Year**

DISCUSSION: This item is the initial workshop to present the proposed priorities for the Board in fiscal year (FY) 2016-17 in carrying out its mission of preserving, protecting, restoring, and enhancing the waters of the San Francisco Bay Region for the benefit of the entire region. In a departure from last year's single workshop on Board priorities, this year we are implementing a two-workshop process: the first workshop presents proposed priorities for each of the Board's divisions, and the second workshop will present Board-wide priorities based on Board member direction and public comment received at the first workshop and prior to the second workshop. It is the intent of these workshops to provide an opportunity for the Board, Board staff, and stakeholders to discuss these priorities in open session.

The proposed priorities in the attachments have been developed by management of each of the Board's divisions based on the budget allocated to the division for FY 2016-17. Appendix A is a matrix that divides the Board's budget of 100.8 positions for FY 2016-17 into each source of funding and into each division.

Appendix B is a division-by-division summary of specific proposed priorities and activities each division will carry out based on its budget. These specific priorities and activities in turn are concise statements of anticipated work that staff may undertake and may not fully describe all the activities the division intends to do. Each division summary is based on the funding it is allocated for FY 2016-17 and the limitations on the use of that funding.

For the second workshop, currently scheduled for the October Board meeting, each division summary will be expanded to more fully identify the division's goals and objectives, the challenges in achieving those goals and objectives, and how those challenges shape the division's priorities. Additionally, we will prepare a matrix to better portray how each division's programs carry out the Board's mission.

**RECOMMEN-
DATION:** This is an information item not requiring action by the Board.

APPENDICES: A – Region 2 FY 16-17 Budget Distribution by Division
B - Division-by-Division Summary of Priorities, Funding, and Programs

Appendix A

Region 2 FY 16-17 Budget Distribution by Division

Region 2 FY 16-17 Budget Distribution by Division

			NPDES	Watershed	Planning	G'dwater	Toxics	Exec/Admin
PROGRAM		PY	PY	PY	PY	PY	PY	PY
NPDES (Fees)		11.3	11.3					
Stormwater (Fees)		10.3		9.4	0.9			
Water Qual Cert (Fees)		4.2		4.2				
LTMS (Gen)		1.1			1.1			
WDRs (Fees)		2.5		2.5				
Landfills (Fees)		0.8				0.8		
Landfills (CalRecycle)		2.4				2.4		
Enforcement (Fees)		1.9	1.9					
Ambient Monitoring (Fees)		2.0			2.0			
Site Cleanup (Gen)		1.1	1.1					
DoD (Fed Reimb)		7.8				7.8		
Site Cleanup (Reimb)		15.1				6.2	8.9	
LLNL Site 300 (Fed Reimb)		0.3				0.3		
TMDL (Fed)		4.0			4.0			
Non-Point Source (Fed)		2.5			2.5			
UST (Gen)		3.1					3.1	
UST (Tank Fund)		7.2					7.2	
UST (Fed)		0.8					0.8	
SB445 Sub-account (Tank Fund)		2.8				0.9	1.9	
Basin Planning (Fees)		6.3			6.3			
CALFED Implement (Gen)		0.1			0.1			
Reg Wetland Planning (Gen)		1.2		0.7	0.5			
Program Mgmt (Indirect)		12.0	1.0		1.0			10.0
Total Budget by PY		100.8	15.3	16.8	18.4	18.4	21.9	10.0

Funding sources:

Fees – State Water Board’s Waste Discharger Permit Fund; total = 39.3 py

Gen – State’s General Fund; total = 6.6 py

CalRecycle – California Department of Resources, Recycling, and Recovery; total = 2.4 py

Fed Reimb – Department of Defense/Energy reimbursement account; total = 8.1 py

Reimb – State Water Board’s reimbursement account; total = 15.1 py

Fed – U.S. EPA designated funding; total = 7.3 py

Tank Fund – State Water Board’s Underground Storage Tank Cleanup Fund; total = 10.0 py

Indirect – indirect costs charged to all funds; total = 12.0 py

Appendix B

Division-by-Division Summary of
Priorities, Funding, and Programs

Planning and TMDL Division

The Planning and TMDL Division, under Division Chief Naomi Feger, is responsible for maintaining our Basin Plan, including policy development such as climate change policies, developing and implementing TMDLs, monitoring the region's waters, providing regulatory oversight for dredging and dredged material reuse projects, overseeing grant programs, and administering the non-point source program. Its FY 2016-17 budget provides for 18.4 staff positions. This is an increase of 1.5 positions from the previous year. The increase is due to the conversion of contract resources allocated to our SWAMP program to a permanent staff position and moving a half of a position from the Watershed Management Division to Planning to work on wetlands restoration and climate change policy development.

Priorities for the 2016-17 Fiscal Year

- 303(d) and 305(b) Integrated Report: complete the Regional Water Quality Assessment including identifying Impaired Waters; adoption and submission of recommendations to State Water Board.
- Bring the Butano-Pescadero Sediment TMDL to the Board for its consideration.
- Bring the Vineyard Regulatory Program to the Board for its consideration. These General WDRs would implement sediment TMDLs in the Sonoma Creek and Napa River watersheds.
- Reissue the Grazing Waiver of WDRs for the Sonoma Creek and Napa River watersheds to implement pathogen TMDLs.

Other 2016-17 Fiscal Year Division Activities

- Continue development of other TMDLs according to the workplan submitted to the State Water Board and U.S. EPA (see attached summary of the workplan).
- Continue or initiate policy development based on the Board's 2015 Triennial Review priorities:
 1. Site-specific DO objectives for Suisun Marsh;
 2. Climate change/sea level rise and wetland regulatory policies, including use of treated wastewater;
 3. Lake Merced - consideration of DO and pH site-specific objectives; and
 4. Nutrient Management Strategy – implementation support and development of nutrient water quality objectives.
- Implement the Confined Animal Facility General WDR and Dairy Waiver adopted by the Board last fiscal year.
- Continue implementation of Grazing Conditional Waivers for the Tomales Bay, Sonoma Creek, and Napa River watersheds.
- Support implementation of all TMDLs previously adopted (see attached summary).
- Oversee SWAMP, continue watershed-based monitoring, and provide technical support to the Regional Monitoring Program.
- Oversee State and federal grants consistent with TMDL implementation and the non-point source policy.
- Oversee the Long-Term Management Strategy for Dredged Material Placement, including evaluating strategic placement and beneficial reuse of dredged material.

- Oversee large landscape scale restoration, flood control, development/redevelopment and public infrastructure projects, such as the Napa River/Napa Creek Flood Protection Project, and provide coordination and technical guidance to internal cross-divisional teams of Board staff for oversight and permitting.

Division Programs

Basin Planning - The Water Board is required to develop, adopt (after public hearings), and implement a Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region. The Basin Plan is the Board's master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the region. The plan must include: a statement of beneficial water uses for all of the region's waters that the 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 the Board's regulatory programs.

Total Maximum Daily Loads (TMDLs) are actions to restore clean water. Section 303(d) of the federal Clean Water Act requires that states identify ("list") 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. Implementation of TMDLs involves multiple Board programs depending on the actions identified in each TMDL. This Division has taken on implementation of agricultural permitting programs to implement TMDLs and address non-point sources of pollution (see below).

SWAMP - Since 1999, our regional Surface Water Ambient Monitoring Program (SWAMP) has been monitoring water quality in the region's watersheds and contaminants in fish from reservoirs, the ocean, and bays other than the Bay. Data collected by SWAMP has an important role in assessing the quality of our region's waters, including new potential threats to water quality such as harmful algal blooms, evaluating listing status, and in supporting TMDL development. Our region's SWAMP program has successfully collaborated with the region's stormwater programs to develop a watershed monitoring coalition to ensure consistent and high-quality watershed monitoring.

Dredging and Disposal/LTMS - Any dredging and dredged material disposal activity in San Francisco Bay, its marshes, and its creeks requires Board approval, usually via waste discharge requirements or a water quality certification. The dredging program is included in the Basin Plan's implementation program. Division staff work with federal, State, and local partners in implementing the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) and applying LTMS as the regional vehicle to manage dredging, disposal, and reuse activities in the region. A recent focus of the program includes consideration of approaches for maximizing reuse of dredged material for tidal marsh restoration, including sea level rise/climate change adaptation projects.

Non-Point Source (NPS) - The primary causes of continuing water quality impairment in the region are from 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 both from agriculture and urban development. The Planning Division has taken the lead on implementing the NPS program as part of its TMDL implementation activities. The Division also currently manages over 15 federal NPS grants, the majority of which are targeted to address NPS pollution and implement TMDLs. Past and present grants include equestrian facility improvements, dairy and rangeland water management practices, dam removal, creek restoration, and citizen monitoring projects.

SF Bay Region TMDL Program Plan – 5 Year Outlook - Sept 14, 2016

Project	Listings	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
San Francisco Bay & Delta						
Suisun Marsh Dissolved Oxygen (DO), Mercury, & Nutrients	3	Staff Report	Board Action	Implementation	Implementation	Implementation
Oakland Inner Harbor Pacific Dry Dock Hotspot	1	Develop Regulatory Recommendation*	Staff Report	Board Action	Implementation	Implementation
San Francisco Bay Dioxins/ Furans	24	Project Report	Staff Report	Board Action	Implementation	Implementation
San Mateo - Bayside and Coast						
Butano & Pescadero Creeks Sediment (Upper Watershed)	2	Board Action	Implementation	Implementation	Implementation	Implementation
Pescadero Marsh DO (Lower Watershed)	Not listed	Monitoring & Analyses	Conceptual Model/Impairment Assessment	Staff Report	Board Action	Implementation
San Francisquito Creek Sediment**	1			Project Report	Board Action	Board Action
Permanente Creek Selenium	1	Staff Report	Board Action	Implementation	Implementation	Implementation
San Gregorio Creek Sediment	1	Conceptual Model/Impairment Assessment	Staff Report	Board Action	Implementation	Implementation
Stevens Creek Toxicity	1	Conceptual Model/Impairment Assessment	Project Report	Staff Report	Board Action	Implementation
Sonoma						
Petaluma River Nutrients and Pathogens	2	Conceptual Model/Impairment Assessment	Staff Report	Board Action	Implementation	Implementation
Marin						
Walker Creek Nutrients	1	Monitoring & Analyses	Conceptual Model/Impairment Assessment	Project Report	Staff Report	Board Action
Lagunitas Creek Nutrients	1	Monitoring & Analyses	Conceptual Model/Impairment Assessment	Project Report	Staff Report	Board Action
Region-wide						
PCBs in Bay Region Reservoirs	8	Monitoring & Analyses	Conceptual Model/Impairment Assessment	Project Report	Staff Report	Board Action
Statewide						
Mercury in SF Bay Region Reservoirs	7	Staff Report	State Board Action	Implementation	Implementation	Implementation

*Potential cleanup action rather than TMDL

**San Francisquito TMDL – currently on hold pending outcome of other efforts in the watershed

SF Bay Region TMDL Program Plan – 5 Year Outlook - Sept 14, 2016

List of Completed TMDLs in Implementation Phase	
Completed TMDLs	Regional Water Board Adoption Year
Diazinon & Pesticide-Related Toxicity in Bay Area Urban Creeks (Urban Creeks Pesticide TMDL)	2005
Tomales Bay Pathogens	2005
SF Bay Mercury	2006
Sonoma Creek Pathogens	2006
Napa River Pathogens	2006
Walker Creek Watershed Mercury	2007
Richardson Bay Pathogens	2008
Guadalupe River Watershed Mercury	2008
Sonoma Creek Sediment	2008
SF Bay PCBs	2009
Napa River Sediment	2009
San Pedro Creek and Pacifica State Beach Bacteria	2012
Tomales Bay Mercury	2012
Lagunitas Creek Sediment	2014
North SF Bay Selenium	2015
SF Bay Beaches Bacteria	2016

List of Alternative TMDLs in Implementation Phase	
Project Name	Regional Water Board Adoption Year
San Vicente Creek Water Quality Improvement Plan for Bacteria	2016

Toxics Cleanup Division

The Toxics Cleanup Division, under Division Chief Stephen Hill, is one of two divisions at the Board that focuses on groundwater protection and cleanup/restoration. The Division oversees all underground storage tank (UST) cleanup cases and most Site Cleanup Program (SCP) cases regulated by our region. It also supports various local agencies that oversee smaller UST and SCP cases. Its FY 2016-17 budget provides for 21.9 staff positions, which represents an increase of 1.0 position over the previous year, due to our region receiving 4 new positions for the SCP program, with the other 3 going to the Groundwater Protection Division.

Priorities for the 2016-17 Fiscal Year

- Oversee the UST cleanup program, specific to leaking underground fuel tanks, according to priorities and performance measures as described in the semi-annual status reports to the Board (posted online). A key priority in the UST cleanup program is implementing the State Water Board's low-threat closure policy.
- Oversee cleanup of sites enrolled in the SCP cost recovery program, primarily solvent, dry cleaner, and other industrial chemical release sites, according to priorities and performance measures as described in the semi-annual status reports to the Board (posted online). Key priorities in SCP are focusing on high-priority cases (as identified by our new case-prioritization tool) and increasing our understanding of the public health hazards of vapor intrusion so that we can adequately evaluate and mitigate vapor-intrusion threats for the cases we oversee.
- Implement two of the four SB445 ("site cleanup subaccount") projects in our region: 1) identify and oversee high-threat, under-funded dry cleaner sites and 2) oversee other high-threat, under-funded sites identified during last FY's screening of SCP inactive cases.

Division Programs

The Division is responsible for overseeing the cleanup of and restoration of groundwater quality at sites contaminated by unauthorized waste discharges, as opposed to overseeing permitted waste disposal sites such as landfills. Division staff issue Water Code section 13267 directives and prepare Water Code section 13304 cleanup orders to require necessary site investigation and cleanup.

Underground Storage Tank Cleanup Program – The UST program focuses on the cleanup of impacts from leaking underground storage tanks. Most leaking USTs have released petroleum products to soil and groundwater although some have released solvents such as trichloroethylene. Most releases occurred before the 1998 State and federal deadline for upgrading USTs. At petroleum UST sites, we work with the State Water Board, which reimburses eligible cleanup costs through its UST Cleanup Fund. We also coordinate with local agencies, such as county environmental health departments, that oversee many of the petroleum UST sites in our region. We currently oversee 330 UST cases (304 active and 26 inactive).

Site Cleanup Program – The SCP program covers all unauthorized waste discharge sites that are not covered by the UST program. These include spills and historic releases from industrial facilities, dry cleaners, petroleum pipelines, bulk fuel terminals, and various smaller sites. Many of these sites are discovered as a result of property transfer or redevelopment, and the resulting cleanup work dovetails with site reuse. We regularly collaborate with local government on Brownfield restoration – the

cleanup and reuse of properties where site utilization is complicated by contamination. We also interact with U.S. EPA, which has delegated to us the responsibility for overseeing several federal Superfund sites. We currently oversee 834 SCP cases (535 active and 299 inactive); the large number of inactive cases is due to various factors (e.g., discharger inability to pay, discharger recalcitrance, and limited staff resources).

Most program funding comes from the SCP cost recovery program, where dischargers are billed for our actual time spent overseeing cleanup of their sites, but, starting last FY, this program also received some non-cost-recovery funding through new state legislation (SB445) that allows use of funds from the State Board's UST Cleanup Fund for our oversight of cleanup of otherwise unfunded or underfunded sites. The Toxics Division implements two of the region's four SB445 projects: screening SCP backlog cases and focusing on dry cleaner release sites. FY 16-17 will be the second year for our SB445 projects. We expect to build on the first year's efforts by initiating oversight of several high-priority cases we identified last year in the SCP backlog and by continuing efforts to identify dry cleaner release sites in priority groundwater basins.

Goals and Objectives

Our broad goal is to protect human health, protect and restore water quality, and protect the environment in our oversight of SCP and UST cases. The following objectives flesh out this goal:

- Control human health exposure to site contaminants
- Control groundwater contaminant migration
- Prevent or mitigate impacts to water supply wells and surface waters
- Require cleanup within a reasonable timeframe to meet protective cleanup levels
- Require risk management measures when it is infeasible to fully meet protective cleanup levels
- Leverage scarce staff resources to get the most "bang for the buck" (oversee cases where cleanup is ancillary to redevelopment or where a modest oversight effort is likely to yield significant cleanup benefits)
- Provide community outreach and incorporate public comments prior to major cleanup decisions

Challenges

Our ability to meet these objectives is limited by several factors:

- Many contaminants – notably chlorinated solvents – are "recalcitrant": they do not naturally degrade in the subsurface, resulting in longer groundwater plumes, and, once released to the subsurface, they are hard to clean up.
- At some sites, it is hard to predict when vapor intrusion is occurring without intrusive and staff-intensive investigations (vapor intrusion is when volatile chemicals migrate from groundwater or soil into occupied buildings).
- It is difficult to "work backwards" from an impacted water supply well to find the source or sources of its contamination, due to complex subsurface conditions and a plethora of potential sources.

- In the SCP program, there is no reimbursement of cleanup costs by the State as there is in the UST program, and some dischargers are unable to afford site investigation and cleanup costs, which can be in the millions of dollars at the more-contaminated sites.
- While new unauthorized releases are rare, “legacy” releases are fairly common and we have not found all the contaminated sites yet; most of the “undiscovered” sites will have to wait for private-sector “due diligence” efforts at the time of property transfer or redevelopment.

Measuring Success

The Water Boards have defined several performance measures in the cleanup programs that help us to measure our success, and we have generally met or exceeded those performance measures:

- Number of case closures: this measure signifies the completion of site investigation and cleanup and the attainment of cleanup levels (or self-implementing risk management if full attainment of cleanup levels is infeasible). We track case closures in GeoTracker and set annual case-closure targets. Last FY, we closed 50 UST cases and 91 SCP cases, significantly exceeding our closure targets in both programs.
- Number of cases starting remediation: this measure signifies the start of tangible efforts to clean up a site, with either interim or final cleanup measures. We track this measure in GeoTracker and set annual targets. Last FY, we started remediation at 9 UST cases (below our annual target) and 25 SCP cases (significantly exceeding our annual target). We attribute the UST result to the maturity of our UST cases; most of them have already passed this milestone.
- Number of cases with human health exposure controlled: this measures our ability to quickly eliminate short-term health impacts discovered during site investigation (e.g., require vapor intrusion mitigation where needed). We track this measure in GeoTracker but have not yet set annual targets. Currently, 94% of our UST cases and 97% of our SCP cases either meet this measure or are still doing site investigation to see if this measure is met.
- Number of cases with groundwater contaminant migration controlled: this measures our ability to prevent continued migration and to protect “clean” groundwater (e.g., using slurry walls or “pump and treat” systems). We track this measure in GeoTracker but have not yet set annual targets. Currently, 88% of our UST cases and 93% of our SCP cases either meet this measure or are still doing site investigation to see if this measure is met.

The time needed to reach cleanup levels varies significantly between different sites, with fuel UST cases tending to take less time since petroleum mixtures tend to bio-degrade significantly. Performance measures therefore capture several intermediate milestones prior to case closure. Success in meeting these performance measures will over time lead to a shrinking caseload, as the pace of case closures exceeds the intake of newly-discovered cases. When the cleanup programs began in the early 1980s, we expected them to be short lived. With the benefit of more than 30 years of experience, we now expect the programs, especially the SCP program, to continue indefinitely – although the necessary staffing and funding should decline over time.

Groundwater Protection and Waste Containment Division

The Groundwater Protection and Waste Containment Division (GWPD), under Division Chief Terry Seward, is one of two divisions at the Board that focuses on groundwater protection and cleanup/restoration. The GWPD's primary goal is to restore beneficial uses and ensure the protection of water quality, human health, and the environment where discharges of waste or contaminants occur, such as at spill or leak sites, solid waste landfills, waste ponds, and other land disposal facilities. Additional goals include: ensuring that contaminated sites are cleaned up, waste left in place is contained, impacted wetlands and habitat are restored, proposed changes in the land use of regulated sites maintain water quality and human health protection, and potential impacts from sea level rise are considered during program implementation.

The Division is divided into three sections: two that regulate soil, surface water, and groundwater cleanup and protection activities at Department of Defense (DoD), Department of Energy (DoE), and Site Cleanup Program (SCP) sites; and one that regulates solid waste landfills, waste ponds, complex SCP sites such as petroleum refineries and chemical manufacturers, and soil, surface water, and groundwater cleanups at large. The FY 2016-17 budget provides for 18.4 staff positions, which is an increase of 3 positions from the previous year due to our region receiving 4 new positions for the SCP program, with the other position going to the Toxics Cleanup Division. This increase helps offset the reduction of two DoD positions that were reallocated to a different region last fiscal year. We expect that as an increasing number of DoD sites privatize and are shifted into the SCP program, we will need to realign positions between the DoD and SCP programs.

Priorities for the 2016-17 Fiscal Year

- Evaluate proposed developments and reuse over former landfill and mine sites, including the Santa Clara landfill, Oyster Point landfill, Sierra Point landfill, and Hillsdale mine.
- Oversee closure of five bay-front waste management units (WMUs) at the Tesoro Refinery in Martinez. The five units encompass 45 acres and are proposed to be closed through a combination of waste removal, consolidation, and stabilization. The footprint of the WMUs will be reduced through partial clean closure of certain units.
- Ensure cleanup of closed military bases and other DoD/DoE sites protects and restores soil and groundwater and facilitates site transfer and redevelopment. In the next two years we anticipate large portions of the Hunters Point Naval Shipyard, Treasure Island Naval Station, and the Concord Naval Weapons Station to ready for transfer.
- Implement two of the four SB445 ("site cleanup subaccount") projects in our region: 1) evaluation of mercury mines and 2) implement groundwater management:
 - Evaluate and prioritize cleanup of high threat mercury mines in the region, particularly in Santa Clara, Napa, and Solano counties.
 - Identify baseline groundwater quality for salts, nutrients, and other industrial chemicals and selectively apply regulatory tools to protect and restore groundwater by controlling discharges and requiring further source identification and abatement.

Division Programs

Department of Defense and Energy Programs – Staff in the DoD and DoE programs predominately oversee the cleanup and restoration of groundwater and soil contaminated by historic releases at federally-owned or operated sites. Staff also address the ecological and surface water-related impacts caused by these releases where they exist.

There are 40 facilities in the DoD Program in our region. Most are former U.S. Navy, Army, and Air Force bases that were closed as a result of the congressionally-mandated Base Realignment and Closure Program first instituted in 1991. The DoD Program also includes Formerly Used Defense Sites (FUDS), which are facilities that were owned, operated, or leased by a branch of the DoD for various uses such as missile silos, gun batteries, listening posts, and radar stations.

DoD Program staff focus on overseeing the cleanup of former military facilities and facilitating the safe transfer of land from DoD to local entities, such as a city or its master developer, for redevelopment or open space. After the land transfer, DoD Program staff continues to oversee facilities that have remaining cleanup and/or requirements to manage residual contamination. At that time, these facilities are transferred out of the DoD program and moved into the SCP program. As such, we must stop charging our staff time to the DoD program, enroll the new land owner in the SCP cost recovery program, and start charging our staff time to that new owner. Past examples of this transfer process include the Presidio of San Francisco, Pt. Molate in Richmond, Moffett Field in Mountain View, and a large portion of the both Mare Island Naval Shipyard and Alameda Naval Air Station. The DoD program also oversees the cleanup of the U.S. Maritime Administration's Suisun Bay Reserve Fleet (the "mothball fleet").

There are four facilities in the DoE Program (Lawrence Livermore National Lab, Sandia National Lab, Lawrence Berkeley National Lab, and the Stanford Linear Accelerator Center). The DoE Program utilizes a federal grant to pay for our costs in overseeing cleanup of these sites. These are operating facilities that are not currently planned for transfer to civilian reuse.

Site Cleanup Program (SCP) – Staff in the SCP program oversee the cleanup of impacts from current or historic unauthorized discharges to soil and groundwater. In some cases, these discharges make have also impacted surface waters or sediments. SCP sites in the Division more commonly include aboveground storage tank facilities, oil refineries and pipelines, power generation plants, contaminated wetlands, abandoned and active mines, privatized military sites, and former and active gun clubs, while SCP sites in the Toxic Cleanup Division more commonly include solvent and other industrial tank leaks and spills. Division staff issue Water Code section 13267 directives and prepare Water Code section 13304 cleanup orders to require necessary site investigation and cleanup.

Land Disposal Program - The Land Disposal Program oversees the treatment, storage, and disposal of waste within waste management units (WMUs). WMUs include active and closed municipal landfills, waste piles associated with mining operations, surface impoundments or ponds, and industrial landfills such as those found at refineries and chemical manufacturing plants.

Our primary objective while regulating WMUs is to ensure that wastes are properly contained and do not degrade surface water or groundwater quality. Staff enforces regulations, such as CCR title 27, that consist of design standards for WMU liners, covers, environmental monitoring, and cleanup, when necessary. To implement these regulations, Division staff prepare waste discharge requirements (WDRs) for Board consideration and adoption. WDRs contain specifications and provisions that

protect surface and groundwater water quality and require reporting on the long-term functionality of the measures taken to contain waste. As Division staff update WDRs, we are including provisions directing site owners to regularly review and update their long-term flood protection plans to ensure any climate change impacts are addressed in ensuring long-term waste containment.

Division Challenges to Achieving Priorities

The Division faces the following key challenges in implementing its priorities:

- **Funding/Staff Resources:** Certain portions of our program workloads are unfunded or underfunded. This includes work on new issues related to the region's compost facilities that are regulated under recently-adopted statewide general WDRs, Land Disposal Program sites, mine sites, impacts to groundwater from salts and nutrients, addressing sea level rise, performing risk assessments, and evaluating risk associated with emerging contaminants and petroleum metabolites. Use of SB445 funding, initially provided to the regions last year, only partially addresses this funding shortfall.

Additional funding/resource concerns include the need to obtain additional funding/resources in the SCP program to account for the privatization of DoD sites. It is vital that we continue to provide oversight of transferred former military facilities to help streamline their redevelopment and restoration in a manner that is protective of human health and water quality. We expect the new SCP program resources provided in this year's budget to partially address this funding shortfall.

- **Balancing Cleanup and Risk Management:** Getting the balance right between cleanup of contaminated sites and implementation of long-term risk management measures at such sites is a challenge, particularly when local agencies propose changes in the land use of such sites. We commonly face this challenge at closed landfills where waste remains onsite and at closed military bases where long-term risk management is part of the cleanup remedy. This increasing trend requires an ever-evolving attention to remedy design, institutional and engineering controls, and community concerns.

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 Division's FY 2016-17 budget provides for 15.3 staff positions, which is constant from the previous fiscal year.

Priorities for the 2016-17 Fiscal Year

- ***Reissue NPDES permits according to online schedule and work plan provided to U.S. EPA.*** Maintaining this core regulatory program protects beneficial uses and sustains the enormous water quality improvements the NPDES program has accomplished since Congress enacted the federal Clean Water Act in 1972. Our objective is to maintain a backlog of less than 10 percent (U.S. EPA's nationwide goal). A significant challenge is adapting often out-of-date regulations for permit issuance in light of aging infrastructure, evolving water quality concerns (e.g., nutrients), and climate change and sea level rise.
- ***Monitor progress of treatment upgrade and optimization evaluations required by the regionwide nutrients permit.*** Understanding upgrade and optimization options at wastewater treatment plants will be useful if nutrient load reductions become necessary to restore beneficial uses in the future. This ongoing study could facilitate achieving reductions in an efficient and equitable manner that balances multiple concerns and hopefully provides benefits beyond decreased nutrient loading. We meet with the Bay Area Clean Water Agencies regularly to monitor progress and expect to receive their final report by July 2017. The work is challenging because potential upgrades and optimization options are site-specific; municipal wastewater treatment plants must be evaluated individually.
- ***Audit wastewater collection system adequacy of maintenance and capital improvement rates, and enforce requirements, where warranted, to reduce sewage spills and inflow and infiltration.*** Collection system maintenance is essential to avoid sanitary sewer overflows and protect beneficial uses. Maintenance and regular capital improvement of collection systems is also essential to minimize wet weather flows at municipal wastewater treatment plants. Excess flows can reduce treatment efficiency and lead to bypassing some treatment processes. We are working to improve the metrics we use to evaluate collection system maintenance and prioritize our oversight efforts, but developing appropriate and useful metrics remains a challenge.
- ***Pursue and track enforcement for all Board programs consistent with priorities specified in enforcement report Board will receive in October 2016.*** Enforcement is critical to maintaining the integrity of our regulatory programs and ensuring their intended benefits of protecting and restoring water quality. We meet monthly to discuss enforcement referrals and select enforcement cases in accordance with stated priorities. While we can and do pursue enforcement related to cases already subject to our regulatory oversight, finding illicit discharges not currently subject to our oversight is an ongoing challenge.

Other 2016-17 Fiscal Year Division Activities

- ***Inspect wastewater facilities according to work plan provided to U.S. EPA.*** We conduct inspections to evaluate compliance but, just as importantly, to better understand the facilities we oversee, develop rapport with dischargers, and assist dischargers with compliance. We inspect major NPDES dischargers at least every other year and minor NPDES dischargers with individual NPDES permits at least every five years. Typically, our inspections are very focused

in scope because U.S. EPA has ceased providing contractor support for inspections, and we have received no new funds or staff resources.

- ***Review discharge monitoring reports to verify compliance with permit requirements.*** The NPDES program relies on “self-monitoring.” We review reports to understand each discharger’s compliance status, to check that data are reported properly, to confirm that all violations are recorded, and to evaluate whether any followup (e.g., enforcement) is necessary. We aim to review 100 percent of the monthly, quarterly, and annual reports we receive from dischargers with individual permits. This oversight work can be particularly challenging and time-consuming when new or less-sophisticated dischargers require compliance assistance.
- ***Work with the Bay Area Pollution Prevention Group on regional pollution prevention efforts.*** Pollution prevention seeks to keep pollutants from entering wastewater and requiring expensive and potentially ineffective treatment end-of-pipe. Dischargers report their pollution prevention activities annually, and we encourage them to develop and report metrics to demonstrate program effectiveness. Traditional public outreach strategies may now offer diminishing returns; therefore, we are challenging agencies to innovate (e.g., by working more closely with industries, citizen groups, and regulatory agencies).
- ***Implement anticipated new State Toxicity Plan requirements.*** The State Water Board intends to consider new toxicity water quality objectives and an associated implementation program that will supersede significant portions of our Basin Plan. We are engaged in this process. Understanding and implementing the new requirements will likely be challenging for both dischargers and us.
- ***Track and respond to reported spills or other water quality-related emergencies.*** We must be nimble and effective in responding to incidents that could affect water quality. Although we are not “first responders,” we track every significant spill and complaint we receive from the State Office of Emergency Services and our spill hotline and investigate or forward the report to appropriate Board or other agency staff for followup. To respond to spills and complaints outside of business hours, all supervisors and managers to take turns checking the spill hotline during nights and weekends.

Division Programs

NPDES Permit Program - The federal Clean Water Act requires that all discharges to waters of the United States must be covered by NPDES permits – “NPDES” is short for the National Pollutant Discharge Elimination System. U.S. EPA has delegated permit issuance to the State Water Board system, but that permitting must still follow federal regulations, which include the requirement to review and reissue all permits every five years. NPDES permits contain specific requirements that limit pollutants in discharges. They also require “self-monitoring” by dischargers to ensure that discharges meet permit requirements. After considering public comments, the Board adopts new permits and reissues existing permits at public hearings. Permit issuance/reissuance/amendment cannot be delegated to the Executive Officer, and U.S. EPA retains the ability to object to a permit after the Water Board has issued it.

Individual NPDES Permits – Facilities the Board permits under the Division’s oversight include municipal wastewater treatment plants, their associated sanitary sewage collection systems, and industries that directly discharge treated wastewater to surface waters. Smaller industries that discharge to sewer systems rather than waters of the U.S. are regulated by municipalities pursuant to our

pretreatment program requirements. (Wastewater discharges to land and NPDES stormwater permits are regulated separately and managed by the Watershed Management Division.)

The Division oversees about 75 individual NPDES permits covering about 80 treatment facilities. About two-thirds are municipal wastewater treatment facilities, which together discharge about 500 million gallons per day of treated wastewater within the region. We routinely inspect treatment facilities, review monitoring reports, and enforce permit requirements.

General Permits – In addition to individual NPDES permits, the Division oversees five Board-adopted general NPDES permits. General permits are an efficient and equitable way to regulate similar discharges. A facility seeking coverage under a general permit files a notice of intent to comply with the general permit. After we verify that the facility qualifies for coverage, we issue an authorization to discharge. Currently, about 92 facilities are enrolled under these regional permits:

- Fuels/VOCs Groundwater Pump and Treat

- Potable Water Treatment Filter Backwash

- Brackish Extracted Groundwater

- Aggregate Quarries and Sand Mining

- Dry Docks and Shipyards

The Division also implements seven statewide general permits issued by the State Water Board. These address sanitary collection systems, community water supply systems, utility vault discharges, and aquatic pesticide, herbicide, and fungicide applications.

Pretreatment and Pollution Prevention – 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; many agencies regulate industries that discharge to their facilities. We oversee U.S. EPA contractors that conduct pretreatment program inspections and audits to ensure compliance. Similarly, we also require municipal wastewater agencies to implement pollution prevention programs that encourage residents and businesses to reduce wastewater pollution. We support these efforts by working with the Bay Area Pollution Prevention Group (a Bay Area Clean Water Agencies subcommittee). We also present the Dr. Teng-chung Wu Pollution Prevention Award each fall.

Enforcement – The Division's Enforcement Section assists all Board divisions, primarily with enforcement that involves penalty assessment and special projects that target compliance within a particular industry or program. Other Board divisions lead their own informal and some formal enforcement actions. However, if violations are significant or chronic, or involve unregulated discharges, other divisions can enlist Enforcement Section expertise.

Enforcement actions range from informal actions (conversations, letters, and notices of violation) to formal actions (cleanup and abatement orders, cease and desist orders, and administrative civil liability penalties). Orders require violators to correct existing violations and prevent future ones; penalties assess fines for past violations. The Board has authorized the Executive Officer to take certain formal actions, such as issuing cleanup and abatement orders and assessing penalties where there is minimal public comment. The Water Code prescribes mandatory monetary penalties for many NPDES violations of numeric discharge limits. Other penalties are determined in accordance with a methodology specified in the State Water Board Enforcement Policy.

Watershed Management Division

The Watershed Management Division, under Division Chief Keith Lichten, oversees stormwater runoff control, which includes developing and overseeing large municipal stormwater permits and implementing the statewide permits for: industrial stormwater; construction stormwater; Caltrans stormwater; and small-municipality stormwater. In addition, the Division oversees the stream and wetland protection, recycled water, and onsite wastewater treatment programs. Its FY 2016-17 budget provides for 16.8 staff positions, which is a half position less than the previous year due to moving that half position to the Planning Division to work on wetlands restoration and climate change policy development. The Division works with an additional 5 staff dedicated to work for specific agencies, such as Caltrans and flood control agencies, whose positions are indirectly funded by those agencies.

Priorities for the 2016-17 Fiscal Year

- Work with BASMAA, environmental organizations, and the public on implementation of the reissued Municipal Regional Stormwater Permit, including implementation of measures to control PCBs, mercury, and trash, and the development of green infrastructure plans
- Bring general waste discharge requirements (WDRs) for wineries to the Board for its consideration
- Bring general WDRs for in-Bay pile placement/replacement activities to the Board for its consideration
- Bring WDRs for stream maintenance programs and flood management projects to the Board for its consideration
- Review, coordinate with other regions, and approve county-based Local Agency Management Programs for Onsite Wastewater Treatment Systems, per State Board policy

Other 2016-17 Fiscal Year Division Activities

- Review, inspect, and recommend adoption of WDRs, primarily related to small municipal and rural wastewater discharges to land
- Statewide stormwater permits for industrial, construction, and Caltrans activities:
 - Inspect facilities, track compliance, and recommend enforcement as appropriate for permittees enrolled in the statewide general permits
 - Recommend enforcement as appropriate for late annual reports (industrial and construction permittees)
 - Ensure facilities have re-enrolled under the reissued statewide industrial general permit
 - Complete site-specific outreach to construction sites below former mercury mines
- Creek and wetland fill projects
 - Review applications and expeditiously issue water quality certifications
 - Oversee and permit stream and wetland restoration projects and habit conservation plans; work with interested entities to develop general WDRs for restoration projects
 - Complete the Wetland Mitigation Compliance/Success Inventory for North Bay counties
- Review applications and approve water recycling projects pursuant to the Board's and the State Board's general water recycling requirements

Division Programs

Municipal Stormwater – Under the federal Clean Water Act, the “Phase I” program for Municipal Separate Storm Sewer System (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, this year, we are focusing our work with the MRP permittees on implementing the MRP’s requirements for PCB and trash reduction and the development of green infrastructure plans.

In addition to the MRP, the California Department of Transportation (Caltrans) is covered under a statewide Phase I stormwater permit. This year, we are focusing on implementation of the trash reduction requirements in Caltrans’ permit and ensuring that Caltrans is coordinating with Phase I municipalities on these and related TMDL requirements.

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 the Port of Oakland, to implement a stormwater management program as a means to control stormwater discharges from the MS4s. In early 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 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. This year, we will initiate work with key non-traditional permittees (e.g., BART) on recognizing and developing a plan to address upcoming trash reduction requirements.

Industrial Stormwater - Facilities that involve a variety of industrial activities must be covered under the statewide industrial stormwater general permit. Facilities covered under the industrial general permit include manufacturing operations, transportation facilities where vehicles are maintained (including fueling and washing), landfills, hazardous waste sites, and other similar operations. A facility seeking coverage under the general permit must file a notice of intent (NOI) with the State Board to comply with the general permit. At the time it files its NOI, the facility must have prepared and be implementing a Stormwater Pollution Prevention Plan (SWPPP) and regularly monitor the effectiveness of the SWPPP. Covered facilities must submit annual reports on SWPPP implementation to the Regional Water Boards. The Water Code requires us to enforce against facilities that do not timely submit their annual reports. There are approximately 1,300 facilities covered under this general permit in our region.

Construction Stormwater - 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 that regulates stormwater leaving construction sites. A construction site owner/operator seeking coverage under the general permit must file an NOI with the State Board to comply with the general permit. At the time it files its NOI, the owner/operator must have prepared and be implementing a SWPPP and regularly monitor the effectiveness of the SWPPP. Each covered site must submit an annual report on the implementation of its SWPPP to the Regional Water Boards. There are approximately 1,300 facilities covered under

this general permit in our region. In addition to our regular oversight, this year we are conducting outreach to those sites downstream of former mercury mines, with the goal of reducing sediment discharges that may be high in mercury.

While the Water Boards continue to move forward with required web-based reporting and database use for both the industrial and construction stormwater programs, we are also continuing to encounter challenges with database performance. These have required a significant investment of staff time to help permittees use the system. We are coordinating with State Board staff to obtain sufficient IT resources to ensure the system runs smoothly and to reduce this substantial drain on staff time.

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](#), with the exception of dredging activities consistent with the Long Term Management Strategy for the Placement of Dredged Material, which are overseen by the Planning Division. The Stream and Wetland Protection Program addresses protecting and restoring streams and wetlands and minimizing impacts from non-wastewater discharges to all waters of the State in our region, but focuses especially on minimizing impacts to wetlands, riparian areas, and headwaters because these water bodies have high resource value, are vulnerable to being filled, and are not systematically protected by other State and federal regulatory programs. Our implementation of the Program gets us involved with the protection of special-status species, the regulation of hydromodification impacts, and the restoration of creeks and wetlands, such as the South Bay Salt Pond Restoration Project and the Cal EcoRestore project in the Suisun Marsh. The Program encourages watershed-level analysis and protection, because some functions of wetlands, riparian areas, and headwater streams—including pollutant removal, flood water attenuation, and habitat connectivity—are better protected at the watershed than project-specific level.

Implementation of the Program focuses on the issuance and oversight of water quality certifications under Clean Water Act section 401 and of WDR under the Water Code. Certifications can be issued by the Executive Officer, while WDRs must be adopted by the Board. Thus, WDR issuance is usually reserved for projects that are long-term, have significant impacts, and/or have significant public interest. The Division issues approximately 250 certifications annually.

This year, in addition to our regular program activities, we are: coordinating with State Water Board staff on the development of the new state dredge and fill policy; developing and implementing program management tools that will allow us to better track and respond to certification applications; working with the State Board and internally to prepare and issue statewide and regional general permits that will streamline the permitting process for low impact projects; completing a North Bay 401 certification compliance audit focusing on mitigation implementation and reporting; coordinating internally and with other agencies to address project and policy issues related to anticipated sea level rise; and anticipating shifts needed to address projects associated with Cal EcoRestore mitigation projects in the Suisun Marsh and Measure AA.

Recycled Water - The purpose of the State Board's Recycled Water Policy is to increase the use of recycled water from municipal wastewater sources that meets the definition in Water Code section 13050(n) in a manner that implements State and federal water quality laws. When used in compliance with the Recycled Water Policy, water recycling criteria in CCR title 22, and all applicable State and federal water quality laws, 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 WDRs adopted by the State Board in 2014. This year, we intend to prepare a non-potable reuse order for the San Francisco Public Utilities Commission to provide a permitting mechanism for their cutting-edge reuse program that utilizes all available water flows in the city (rainwater—falls on roofs, stormwater—falls on sidewalks and streets, groundwater, gray water, and onsite-treated black water).

Onsite Wastewater Treatment – The Division oversees the Board’s program for regulating discharges of treated wastewater to land via WDRs. Onsite 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). LAMPs describe how local agencies will review, approve, and oversee septic systems consistent with the OWTS Policy, but in a way that is appropriate for their local soil and groundwater characteristics, demographics, and planning policies.

In May 2016, multiple Bay Area counties submitted LAMPs to us, and they are under review. More information on LAMPs and our process is in the Information Item in the [November 2014 Board Agenda Package](#).

The Board also periodically considers for adoption WDRs prepared by Division staff to facilities such as wineries, camps, or agricultural processing 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 system that, per our professional judgment, requires direct oversight by the Water Board. Existing WDRs are reviewed by Division staff on a periodic basis to determine whether they need to be updated or revised.