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

EO SUMMARY REPORT: Michael Montgomery
MEETING DATE: November 18, 2020

ITEM: 7

Overview of Regional Water Board Proposed Strategic Priorities – Discussion of the Board's programs and its work plan and priorities for the 2020-2021 Fiscal Year

DISCUSSION:

Strategic Priorities

Climate Change/Water Resilience

We are working on a range of projects coordinated through existing and newly established partnerships (e.g., San Francisco Bay Conservation and Development Commission (BCDC). We have made significant investments in new partnerships and stakeholder engagement. We have gathered valuable input, guidance and/or resources on our climate change priorities as well as specific projects; and we plan to build on our outreach and coordination, specifically focusing on environmental justice interests (e.g., through our role on the Leadership Advisory Group of Bay Adapt).

We have made progress on our cornerstone project to address shoreline resiliency/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). We have been coordinating with key technical stakeholders over the past year, including sharing our report, Wetland Fill Policy Challenges and Future Regulatory Options: Findings and Recommendations. Key stakeholders include U.S. Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency, National Marine Fisheries Service, U.S. Fish and Wildlife Service, BCDC, County of Marin, California Coastal Conservancy, San Francisco Estuary Partnership, and San Francisco Estuary Institute.

Priority Activities

Building Partnerships and Stakeholder Involvement- We continue to evaluate our new partnerships and seek input, guidance and/or resources on our climate change priorities as well as specific projects similar to our partnerships with the Bay Area Flood Agencies Association (BAFPAA), the Bay Area Regional Collaborative (BARC) and the Bay Area Coastal Hazards Adaptation Resiliency Group (CHARG).

Updating Wetland Policies to Address Climate Change- We are developing an amendment to the Basin Plan to address the threats posed by climate change to wetlands and the near shore environment that will likely include:

- policies for efficiently planning and permitting climate change adaptation projects while protecting wetlands and nearshore habitats;
- policies that prevent and address impacts to the wetlands and nearshore habitats, such as drowning from sea level rise or degradation as communities install projects to protect shoreline infrastructure; and descriptions of when and where filling or loss of some types of wetlands may be considered beneficial, incentives to use nature-based solutions (green infrastructure) for shoreline resiliency, and a framework for evaluating and addressing cumulative, regional impacts of shoreline resiliency projects.

Guiding SF Bay Regional Planning for Shoreline Resilience- We are participating in Bay Adapt, an initiative to establish regional agreement on the actions necessary to protect our people and the natural and built environment from rising sea levels, including:

- Executive Officer participation on the Leadership Advisory Group to help design the process and identify actions and criteria to prioritize actions;
- Staff participation on each of three workgroups that focus on regional consistency, local planning, and project implementation to recommend sea level rise adaptation actions considering four main issues: equity and communities, natural environment, housing and jobs, and infrastructure;
- Integration of nature-based solutions and wetland protection; and
- Identification of policies and permitting strategies to efficiently permit projects as they come forward.

We continue to work with the ACOE and other dredgers to deliver sediment from navigation dredging projects to wetland restoration and other shoreline adaptation projects through our permits.

We will continue to engage financing partners in follow-up to our July workshop. Specifically, we will continue work with BCDC's "Financing the Future" working group. We are going to gather information on projects that are eligible for financing through the Clean Water Revolving Loan Fund and the Water Infrastructure Finance Act program. We will promote program leveraging to allow expanded funding for key climate resilience projects.

Permitting Habitat Restoration Ahead of Climate Change Impacts- We are planning, designing and permitting habitat restoration projects funded by the San Francisco Bay Restoration Authority by participating on the Bay Restoration Regulatory Integration Team (BRRIT). Our staff, as a member of the BRRIT, is reviewing proposed projects in collaboration with other federal and state regulatory agencies to improve the permitting and implementation of these projects ahead of and for most effective adaption to sea level rise and other climate change impacts such as flooding and drought.

On-land Resilience and Adaptation Strategies- We are still encouraging Bay Area municipalities and transportation planning agencies to identify infrastructure adaptation

needs associated with climate change and to consider how green infrastructure approaches can help address those needs. 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.

In addition, we are beginning to inventory vulnerable closed sites that have waste in place and do meet unrestricted use; conditioning water recycling projects 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 Recycled Water Committee facilitated by the Bay Area Clean Water Agencies.

Permitting for Shoreline Resiliency and Adaptation- We are adding sea level rise adaptation requirements to permits for facilities with waste discharge control requirements. These include:

- 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;
- including new provisions in permits for landfills and other waste management units that require review and periodic update of long-term flood protection plans to ensure that sea level rise and other climate change impacts are considered when designing, operating and maintaining long-term waste containment; and
- improving cleanup requirements for contaminated sites located along the San Francisco Bay margin so cleanup or containment is completed sooner and includes site closure plans that both prepare the sites for intended reuse and protect the site from sea level rise.

Providing Technical Guidance on Climate Change Risk Assessments and Adaptation Measures- We are providing technical guidance on climate change risk assessments and adaptation measures by funding the next phase of Adaptation Atlas and by participating in technical advisory committees.

The current phase of Adaptation Atlas will incorporate new sediment supply and demand data into the evaluation of nature-based adaptation measures, evaluate opportunities for integrating wastewater infrastructure with nature-based adaptation measures, and compare species dispersal dynamics with mapped marsh restoration opportunities. In addition, this phase of the Adaptation Atlas will select three pilot locations for developing phased adaptation strategies to gradually build climate change resiliency over time.

Our staff are participating in technical advisory committees for the following projects and programs:

- The City of Alameda's *Response of the Shallow Groundwater Layer and Contaminants to Sea Level Rise* report which evaluated potential flood and contamination hazards from emergent groundwater caused by sea level rise.
- The Shallow Groundwater Response to Sea Level Rise Project is evaluating potential flood hazards from emergent groundwater caused by sea level rise.
- The Tomales Bay Nature Based Adaptation Study is developing pilot projects to evaluate the feasibility of living shoreline projects for adapting to sea level rise.
- The SF Bay Regional Monitoring Program's Sediment Workgroup is developing a conceptual model for sediment in the Bay and undertaking studies to evaluate sediment interactions between mudflats and marshes.
- The Wetland Regional Monitoring Program is currently in development, and seeks to provide information to improve wetland restoration project success and support the long-term, region-wide resilience of the Estuary's tidal wetlands.

Stormwater

Our priority stormwater efforts this year are reissuance of the Municipal Regional NPDES Stormwater Permit (MRP) and implementation of trash controls by Caltrans. Our stormwater efforts address a wide variety of pollutants from a variety of sources. Problem stormwater discharges are often comprised of relatively low levels of pollutants distributed broadly over the landscape, and controlling those discharges can require programs of implementation with broad geographic spread, such as programs to control trash or legacy pollutants like PCBs, or to use green stormwater infrastructure to reduce the built urban environment's polluted runoff impacts. These efforts often are focused in areas where other work is needed, such as storm drain infrastructure renewal and urban greening to adapt to climate change, or measures like multi-modal "complete" streets or Safe Routes to Schools to support the Bay Area's growing and increasingly dense population. As we focus this year on the reissuance of the MRP, we will continue to support opportunities for integrative solutions that can achieve multiple benefits, such as green stormwater infrastructure that can achieve clean water goals by controlling trash and slowing and filtering runoff; achieve climate change adaptation and air quality goals by supporting healthy street trees to reduce the urban heat island effect; and support healthy communities by providing attractive placemaking and safer opportunities for walking and cycling.

The pandemic has underlined the challenges of implementing effective programs, particularly by exacerbating the Bay Area's existing housing crisis and increasing the population experiencing homelessness, which is increasing discharges of trash and sewage associated with homelessness. While longer-term solutions are expected to require changes in municipalities' local land use planning, we will work to include in the reissued MRP expectations for near-term measures to address these discharges.

We are continuing to work with municipalities, the Bay Area Stormwater Management Agencies Association (BASMAA), environmental organizations, and other interested stakeholders on the MRP's planned late 2021 reissuance. Key reissuance issues include:

- updating requirements for the control of PCBs, mercury, and trash;
- setting next steps on implementation of green infrastructure plans; and
- controlling illicit discharges of sanitary waste associated with homelessness.

We intend to include Board workshops as part of the reissuance process, allowing an opportunity to discuss issues ahead of an adoption hearing.

We are continuing to implement the trash reduction requirements in Caltrans' statewide stormwater permit and the associated Cease and Desist Order (CDO) issued by the Board in February 2019. The CDO requires Caltrans to control trash discharges from at least 4,000 acres by June 30, 2022. The next step is Caltrans' submittal by December 31, 2020, of a revised trash control implementation workplan that incorporates clarified budget commitments and a more-detailed implementation plan sufficient to achieve the CDO's stated goal of control of all significant trash generating areas on its Bay Area right-of-way by December 2, 2030. As part of this, we are working to ensure that Caltrans is coordinating with Bay Area municipalities on these requirements. The CDO, in combination with the MRP's trash control requirements, has leveraged increased coordination between these parties, which has come at the cost of much staff time, but improves clean water outcomes. Caltrans' statewide stormwater permit is also in the process of reissuance, and we are assisting with that effort.

Organizational Development

Our management team has been engaged in developing our organization through workforce planning. In February 2020, our management team developed a specific list of workforce plan actions and began implementing them. We plan to create an Action Plan by December 2020 that includes at least the actions discussed in this report; additional actions will be added as they emerge through existing forums, such as management team meetings, program and division meetings, and staff input on "employee engagement".

The priority actions being implemented now are:

1. Recruitment
    a. Use social media to advertise job vacancies and to promote career opportunities (completed, on-going)
    b. Partner with the State Water Board's Recruitment Unit and use and expand our own personal and professional networks (to broaden geography, institutions, and types of people) (in progress)

2. Retention
    a. Intentionally converse with staff about their career paths and development/growth opportunities (at a minimum, supervisors with their direct reports, and at all levels) (in progress, on-going)
3. Development
    a. Provide training and development assignments (e.g., lead staff or project management roles on important projects with large scopes or complexity, short-term and medium-term assignments to cross-division teams like the sustainable groundwater and climate change teams) (in progress, on-going)
    b. Re-establish our mentoring program, buddy system, particularly for new staff (completed, on-going)

Our effort has been in parallel with the State Water Board workforce planning effort, facilitated by CalHR, and guided by CalEPA. The overall effort has been informed by an employee engagement survey of all employees. The survey was open for employees for a couple months and was closed for input in December 2019.

In April 2020, the CalHR consultant presented the results of the employee engagement survey. Our organization scored the highest of any of the divisions or departments at the State Water Board and of all Regional Water Boards. Nevertheless, our management team committed to identifying actions to do better and improve in our organizations' weaker areas. The two areas that the survey indicated would most enhance our employees' engagement are: Leading Change and Training and Development.

In April, we identified the need to accelerate a change opportunity that had started months prior. This opportunity came in response to feedback that the Executive Officer and the management team needed to act urgently on an evolving organizational desire for dialogue and actions on Racial Equity/Justice and fostering an organizational culture that proactively supports diversity and inclusion. The desire was a clear outgrowth of the broader, heightened social awareness in the greater community and the nation, but also our awareness that our organization had not updated or focused efforts in these areas.

With the support of AEO Lisa Horowitz McCann, and other key managers and staff, we implemented the following activities between April and September.

1. Training for our management team on Implicit Bias Awareness
2. Held an all-staff discussion and several small group listening sessions on racial equity, diversity and inclusion

3. Formed a small team to design and implement a training session for all staff on racial equity and environmental justice[1]
4. Implemented a successful All-Staff Training, Racial Equity and Environmental Justice[2] that set and achieved the following objectives:
    a. Understand racial equity and environmental justice
    b. Provide resources to extend our learning and application of environmental justice
    c. Inspire change that improves effectiveness at addressing environmental justice
    d. …while protecting water quality, habitat and human health
5. Supporting Lindsay Whalin's participation on the State Water Board's Racial Equity Workgroup (to develop an organization-wide action plan, including a resolution for the State Water Board and other Regional Water Boards to consider adopting)

In August 2020, we presented the Employee Engagement results to all our staff. At that meeting we told them that ensuring their "engagement" was one of management's highest priorities and that we valued and needed their input to vet the results of the survey, and broaden our understanding of the results from all staffs' perspectives. We received feedback in multiple forums- via Zoom chat as part of the agenda at the All-Staff meeting, via email, from supervisor-led discussions at Unit and Division meetings, and exec managers and division leads reaching out to staff for one-on-one conversations. Based on the feedback, our management team identified and prioritized actions to improve our ability to *lead change* and provide *training and development*.

Our management team has already implemented the following actions over the last two to three months in response:

1. Water Board Training Academy launched our new Water Leadership Program to train and develop leaders throughout the State Water Board and the Regional Water Boards. Our management team encouraged their staff to consider enrolling in a certificate program that provides several courses and opportunities for leadership development. Fifteen staff people, who are not supervisors or

[1] The team consisted of the following staff members: Lindsay Whalin, Melissa Gunter, Samantha Harper, David Tanouye, and Matias Tejon-Leon; Lisa Horowitz McCann was the team sponsor and liaison to our executive team and management team.

[2] This training session included a mix of delivery modes (e.g., pre-watching a film, story-telling about lived experiences of racial inequity and environmental injustice, listening to presentations, thinking and writing, small-group listening and reflecting, sharing data and mapping tools, case studies and community outreach materials). The sessions were presented or facilitated by experienced and trained professionals, including Greg Gearheart, member of the Government Alliance on Race and Equity, teacher of equity and environmental justice, and Director of the Office of Information, Management and Analysis at the State Water Board; Adriana Renteria, Director of the Office of Public Participation at the State Water Board, Environmental Justice Coordinator, Tribal Liaison, Agricultural Liaison, Ombudsperson for the Board and small businesses; and professionally trained practitioners and facilitators, who are also Water Board staff, including Samantha Harper, Melissa Gunter, and Lisa Horowitz McCann. This training session was attended by 90% of all Water Board staff and received very positive reviews and feedback. Most importantly, several staff are already implementing practices and using tools they learned during the session.

managers, signed up for the certificate series, which means they committed to a year-long program, including six courses on leadership and the practice of leadership. Collectively, they represent a broad diversity of types of people, technical classifications and expertise, and Water Board program experience.

2. On Monday, October 26, 2020, our management team participated in an executive coaching session on how to lead and manage change. We secured the executive coach through the Water Boards Training Academy. During the session, the management team worked on a "case study," a real project to improve our practices and protocols for providing routine and annual performance feedback for all staff at all levels.
3. In October we also piloted a program for open competition of temporary backfills for management positions to create staff leadership development opportunities.

The following actions are under consideration to improve our ability to *lead change* include:

1. Training (for succession planning) on our Budget and budgeting in preparation for on-going changes to priorities, resource needs and financial commitments
2. Creating and supporting cross-division/program project teams to foster broader, integrated knowledge and awareness of our technical issues, programs and regulatory approaches
3. Continuing implementation of racial equity, diversity and inclusion activities through a change management lens, including:
    a. Holding an all-staff Implicit Bias training (in development now, scheduled for April 2021)
    b. Promoting and supporting staff participation in the Cal EPA Affinity Groups program
    c. Supporting a book club for staff and management that want to share and discuss how organizations address racial inequity and improve organizational culture
4. Improving telework capacity by securing resources for staff and by the EO's participation in the statewide post-pandemic, telework workgroup
5. Review current environmental justice activities and consider organizing them and managing them with a cross-division/program team
    a. Identify a lead person for the team, assign team members from different programs and divisions, and assign a management and/or executive sponsor or liaison to the team
    b. Capture current efforts in stormwater inspection and enforcement, cleanup site prioritization, and TMDL/Basin planning and engagement strategies
    c. Identify two Board members to assist in meeting with environmental justice stakeholders, act as liaisons to State Board, work with

management and/or technical staff to help formulate program goals and track progress and ultimate success of implementation

d. Support Xavier Fernandez's participation on the state-wide Environmental Justice Roundtable (when lead person for the team is selected, this responsibility may transfer to the lead person)

6. Review current climate change activities and organize them and manage them with a cross-division/program

    a. Identify a lead person for the team, assign team members from different programs and divisions, and assign a management and/or executive sponsor or liaison to the team (already initiated, in progress, to be completed in 4-8 weeks)

    b. Create/write an action plan that includes all the current activities (discussed in Climate Change section of this report)

    c. Identify two Board members to assist in meeting with climate action stakeholders, act as liaisons to State Board, work with management and/or technical staff to help formulate program goals and track progress and ultimate success of implementation

    d. Support Lisa Horowitz McCann's participation on the state-wide Climate Change Action workgroup (when lead person for the team is selected, this responsibility will likely be transferred to the lead person)

The following actions are under consideration to improve our ability to train and develop staff.

1. Implement a pilot project to conduct performance reviews that are "360" for the management team in alignment with the performance cycle (including, at a minimum, getting feedback from each manager's direct reports to help evaluate each manager's success supervising their staff and leading assigned programs and initiatives).
2. Conduct training for all managers on performance management and updated, current best practices and policies of the Water Board, to:

    a. Improve our culture and comfort giving and receiving feedback to keep us on a continuous improvement path and insure efficient adaptive management and integration of new information and situations

    b. Make dialogue about the challenges of workload management easier and more routine

    c. Hone our ability to set and meet measurable and realistic goals and project schedules

3. Use teams for cross division/program efforts, projects and initiatives as an opportunity to provide leadership opportunities to staff, secure broader input from more staff and more diverse expertise and points of view, and create new and better ways of doing things efficiently.

We plan to finalize our Action Plan by the end of the year and will both continue to implement existing actions and initiate implementation of new actions in the Action Plan by 2021. The new actions will be folded into our overall, existing workforce planning effort. The Action Plan will include at least the actions discussed in this report; additional actions will be added as they emerge through existing forums, such as management team meetings, program and division meetings, and staff input on "employee engagement" and other targeted forums about leading change, training and development, racial equity and environmental justice and climate change.

Program Priorities

Planning Division Priorities

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 Regional 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.

Accomplishments:

- In March 2019, the Regional Water Board adopted a resolution listing lower Los Gatos Creek as impaired for temperature because this creek is too warm to support endangered steelhead trout. In October 2020, the State Water Board upheld this listing.

Priority activities:

- Bring Climate Change Wetland Policy update to the Board for consideration.
- Bring triennial review and list of priority Basin Planning Projects to the Board for consideration
- Bring a chlorine water quality objective amendment to the Board for consideration. If adopted, bring to State Board for approval
- Bring an amendment to update the bacteria water quality objectives to the Board for consideration.

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.

Accomplishments:

- In November 2019, the Regional Board adopted a TMDL to reduce bacteria loads in the Petaluma River and its tributaries to protect the water contact recreation beneficial use. In June 2020, State Water Board approved the TMDL. In October 2020, OAL approved the TMDL. We submitted the TMDL to the U.S. Environmental Protection Agency for approval on November 4.

Priority activities:

- Support implementation of all 17 approved TMDLs and one water quality improvement plan, including coordinating with the Watershed Division to incorporate provisions in the Municipal Regional Stormwater Permit that implement sediment, bacteria, PCB/Hg, and pesticide TMDLs. into the municipal regional stormwater permit;
- Bring the Pillar Point Harbor and Venice Beach bacteria TMDL to the Board for consideration. If adopted, bring to State Board for approval;
- Bring the TMDL for beaches in Foster City and South San Francisco to the Board for consideration; and
- Bring a resolution to implement a Water Quality Improvement Plan to address sediment in the San Gregorio watershed to the Board for approval.

Deemphasized Activities:

- Less participation in studying and developing a Water Quality Improvement Plan for low dissolved oxygen in Pescadero Marsh; and
- Less involvement in implementation of the Pescadero-Butano Watershed Sediment TMDL.

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).

Accomplishments:

- We measured fine sediment indicators in Pescadero Creek watershed to determine baseline conditions for a sediment TMDL that was recently adopted.
- We sampled for fecal indicator bacteria, nutrients, and conducted microbial source tracking in San Geronimo Creek to evaluate an existing bacteria impairment and determine if onsite wastewater treatment system were a substantial source.
- We sampled for bacteria and microbial source tracking in watersheds draining to Pillar Point Harbor and Venice Beach in support of TMDL development.
- We assisted with dissolved oxygen monitoring at a year-round location in Suisun Marsh to evaluate the effect of TMDL implementation actions on water quality.
- We sampled water temperature in Coyote Creek to determine if steelhead were negatively affected by thermal stress.

Priority activities:

- Collect information on sediment conditions in Pescadero Creek to inform the Pescadero Creek sediment TMDL;

Deemphasized Activities:

- SWAMP will not conduct its typical bioassessment and stream sampling program this spring and summer because one of the two SWAMP staff was re-tasked to COVID-19 contact tracing.

<u>Dredging and Disposal Program: LTMS</u>

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.

Accomplishments:

- In February 2020, the Regional Water Board reissued, to ACOE, the combined Waste Discharge Requirements and Water Quality Certification for the San Francisco Bay Federal Channel Maintenance Dredging Program.

Priority activity:

- Work with the U.S. Army Corps of Engineers to maximize the amount of dredged material taken to beneficial reuse; and
- Work on screening criteria and methodology for dredged sediment and excavated upland soils.

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.

Accomplishments:

- We worked together on a large high-risk equestrian facility located next to the Petaluma River to identify and implement necessary management measures.
- In response to our newly adopted Bacteria TMDL for the Petaluma River Watershed, we worked to identify CAF facilities that will be required to participate in our CAF program and prepared outreach materials and enrollment information.
- We participated on two technical advisory committees for grazing and dairy grant projects planned and implemented within the Sonoma Creek and Tomales Bay watersheds.
- We conducted four ranch inspections in late 2019.
- In 2020, using a modified approach to ensure public safety during the COVID-19 pandemic, we assessed 19 parcels using GIS-based tools to identify 1) where grazing operations may exist but are not currently enrolled in the grazing program, and 2) where future ranch inspections should be prioritized due to potential water quality concerns observed in air photos, such as areas of gullying due to overgrazing, erosion of unpaved road surfaces, and livestock trampling of stream banks

Priority activities:

- Ensure the smooth transfer of dairy operations from the expiring Conditional Waivers for Dairies to the Confined Animal Facility Waste Discharge Requirements, such that dairies continue or begin to properly manage waste, minimize transport of sediment and bacteria to streams, and monitor groundwater.

Deemphasized Activities:

- Oversite of State and federal grants consistent with TMDL implementation and the nonpoint source policy will continue, but we will spend less time helping to develop new projects for the next round of funding; and
- Implementation of Grazing Conditional Waivers for the Tomales Bay, Sonoma Creek, and Napa River watersheds, due to difficulties working with ranchers and stakeholders under COVID-19 restrictions.

Irrigated Lands Regulatory Program and Cannabis Programs

The Vineyard Program implements the Napa River and Sonoma Creek sediment TMDLs. It employs general Waste Discharge Requirements (WDRs) that require permittees to assess and document the erosion potential of their farmed areas, and to install and maintain best management practices (BMPs) to reduce surface erosion and fine sediment discharges to receiving waters. The program contains monitoring and reporting requirements that will provide program feedback and information on fine sediment load reductions and progress made towards the restoration of beneficial uses in the Napa River and Sonoma Creek watersheds.

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 legal 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, pesticide and nutrient management practices, and domestic and cultivation-related wastes.

Accomplishments:

- We worked to get 1,410 vineyard properties enrolled under the WDRs, and obtained 100 percent compliance with requirements to submit annual fees to the State Board.
- Through focused outreach, we also facilitated getting 97 percent of the enrolled properties to join compliance assistance programs being administered by the Napa and Sonoma Farm Bureaus.
- We also received and approved the group water quality monitoring plan on time, thereby allowing the monitoring program to begin in 2021.

Priority activities:

- Continue rollout of the Vineyard WDRs and the statewide Cannabis WDRs 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.

Division Workforce Development – 2020 Opportunities and Challenges

Like many parts of government, the Watershed Management Division has been experiencing significant renewal as staff reach retirement age or are promoted. In the past year, about one-third of the division's staff retired or were promoted; over the past five years, almost two-thirds of the division's staff has retired or been promoted, and we have welcomed a total of ten new staff. We continue efforts to maintain institutional knowledge while recognizing the significant energy and ideas brought by staff who are new to the division or, in some cases, new to the agency. Staff have risen to the challenges brought by 2020, including the shift to working from home, delays in hiring associated with budget uncertainty in Sacramento, a 10 percent reduction in time and pay, and dedication of staff to COVID-19 contact tracing and wildfire response. As the year continues, we will continue to prioritize our work to respond to high-priority needs and facilitate continued progress on longer-term projects, given available resources.

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.

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, and with Caltrans to ensure the updated trash control plan it will submit by December 31, 2020, will meet those requirements.

Accomplishments:

- Caltrans trash target for June 2020 met
- Reviewed all MRP Permittees' submitted green infrastructure plans and provided comment to support green infrastructure planning language in the reissued permit.
- Maintained MRP reissuance stakeholder process during the COVID-19 shift to online meetings

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 the MRP reissuance process
- Coordinate with State Board staff on the reissuance of the following statewide NPDES stormwater permits:
  - Small and Non-Traditional Municipalities
  - Caltrans

<u>Statewide Industrial and Construction Stormwater Program</u>

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. Due to the pandemic and staffing constraints, we have a reduced inspection plan this year, focusing on high priority facilities and sites identified by considering several factors, such as potential threat to water quality and environmental justice considerations.

Accomplishments:

- In coordination with our Enforcement Section and based on referrals from municipal stormwater programs, brought under the industrial stormwater general permit more than 120 “non-filer” facilities requiring coverage.

Priority activities:

- Implement the industrial and construction stormwater programs, including conducting targeted field inspections, ensuring timely submittals of required reports, and reviewing permittee technical reports
- Coordinate with State Board staff on the reissuance of the statewide NPDES construction and industrial stormwater general permits

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.

Accomplishments:

- Reissued Stream Maintenance Program order for the Santa Clara Valley Water District, and updated the order to recognize work addressing impacts associated with homelessness

- Issued 401 certifications for climate change adaptation projects and coordinated with the South Bay Shoreline Project partners and the South Bay Salt Pond Restoration Project leads to clarify flexibility for accepting sediment needed to construct the projects while maintaining water quality standards.

Priority activities:

- Coordinate with the U.S. Army Corps of Engineers to ensure smooth implementation of the new 401 water quality certification federal rule, effective September 11, 2020. The rule effects procedural and substantive changes to how the Corps considers certain state water quality certification actions.
- Coordinate internally and with other agencies to address project and policy issues related to anticipated sea level rise; continue to participate on the multi-agency Bay Restoration Regulatory Integration Team and its associated Policy and Management Committee; establish a position for the BRRIT, funded by external sources, to help permit Bay margin restoration projects (primarily those funded by regional Measure AA); and coordinate with State Board staff and Sustainable Conservation on development of a statewide order authorizing large habitat restoration projects.
- 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, for Contra Costa and San Mateo counties.
- Coordinate with State Water Board staff to develop WDRs and Certification for the Anderson Dam seismic reconstruction, a key Santa Clara Valley Water 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;
- 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, Port of San Francisco, Port of Oakland, and Cargill; and
- Implement our General WDRs for in-Bay overwater structures (e.g., pile placement/replacement activities).

<u>On-site Wastewater Treatment Program</u>

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. 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. 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, Marin, 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. LAMP completion has been delayed by county public health staff diversion to the COVID-19 response effort and, in some cases, wildfire response. In Napa County's case, it is being coordinated with the State Water Board's completion of a winery general order. As such, approval of the remaining county-based LAMPs is likely to be delayed. During this time, county staff will continue to oversee on-site systems using their current ordinances.

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. We utilize statewide general WDRs when appropriate for new discharges, and we are transitioning individual WDRs to general WDRs to improve consistency and to streamline permitting. We are updating WDR monitoring report submittals to focus on electronic submittal, which will also facilitate report tracking and review.

Accomplishments:

- Began transitioning WDR reporting to electronic submittal to facilitate tracking and review
- Issued Notice of Applicability covering Lawson's Landing's (Marin County) updated onsite wastewater disposal system under statewide general WDRs.
- Completed progressive enforcement actions on facilities needing waste discharge authorizations or system updates, including actions intended to lead to a rehabilitated on-site system at Olema Campground (Marin County). Construction of the rehabilitated system is ongoing.

Priority Activities:

- 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.
- Address problem facilities to ensure effective system operation.
- Transition WDR monitoring report submittal to electronic submittals, and continue report review and response where data indicates problem issues.

<u>Recycled Water Program</u>

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. The Division oversees recycled water projects largely using the 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

Accomplishments:

- Transitioned most recycled water programs under our 1996 order to the statewide WRRs.

Priority Activities:

- Work with stakeholders to address technical barriers and regulatory challenges with large scale projects
- Authorize new on-site water recycling projects, including those on South Bay technology company campuses.

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 California Water Code. The Enforcement Section within the Division assists other Water Board divisions primarily with enforcement that involves penalty assessment. The Enforcement Section's activities and priorities are described in Item 8, *Enforcement Actions and Priorities for Fiscal Year 2020-2021*. We completed 24 penalty enforcement actions and imposed more than $2 million in administrative civil liabilities, nearly half of which will fund supplemental environmental projects and enhanced compliance actions.

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 degrade water quality, or harm people or aquatic life.

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, roughly 50 of which regulate municipal wastewater treatment plants.

The Board adopts and reissues NPDES permits at public hearings after considering public input. NPDES permits may be issued for terms no longer than five years. We oversee compliance with the NPDES permits by reviewing self-monitoring reports, conducting inspections, assisting dischargers with compliance, and pursuing enforcement as necessary.

Accomplishments:

- Reissued 20 NPDES permits. At the end of the fiscal year, 95 percent of our permits were current.
- Reissued (jointly, with U.S. EPA) permit for San Francisco's Oceanside Water Pollution Control Plant and related discharges, requiring San Francisco to update its Long-Term Control Plan to identify options to eliminate, relocate, or reduce the magnitude or frequency of combined sewer overflows.
- Issued a new general permit for public fireworks displays.
- Oversaw ongoing activities required by the Nutrients Watershed Permit, which secured $2.2 million per year to support scientific research on nutrient impacts on San Francisco Bay, and required major dischargers to evaluate how they can reduce nutrient loads by recycling wastewater and using natural treatment systems (e.g., wetlands).

Priority Activities:

- **Reissue NPDES permits.** For the last decade, we maintained a permitting backlog of less than 10 percent by reissuing approximately 15 NPDES permits per year. This performance exceeded U.S. EPA's nationwide goals. This year, our backlog will grow because fewer permits will be reissued. Instead, we will prepare at least four new permits and significantly update several others to reflect major operational changes at some facilities. At the same time, one permit case manager has been reassigned for covid-19 contact tracing, the State is implementing a personal leave program amounting to a 10 percent staff cut, and other key priorities are competing for our very limited remaining resources.
- **Resolve unintended consequences of regulatory decisions.** Sometimes, well-intentioned one-size-fits-most regulatory decisions result in unintended consequences. When this happens, we need to resolve unfair or unreasonable outcomes. For just one example, in 2017 the Board issued a general permit that tightened requirements for discharges of groundwater treated to remove fuels and volatile organic compounds. The permit implements existing water quality standards as required by current regulations, but the resulting limits are unachievable in some instances due to naturally occurring selenium in groundwater. With help from the Planning Division, we are developing site-specific selenium objectives that, if adopted, may relieve these dischargers of unwarranted compliance liabilities.
- **Facilitate regional wastewater infrastructure planning and renewal.** Many of our most vital concerns share one trait: they require thoughtful infrastructure planning and renewal. Many of the Region's treatment facilities were built following enactment of the Clean Water Act in 1972 and are nearing the end of their design life. Upgrades and replacements are underway—or at least being considered—throughout the Region, providing a critical opportunity to prepare for the future.
    - *Climate Change*. Local and regional planning is needed to ensure that collection and treatment facilities prepare for rising sea and groundwater levels, among other climate change effects.
    - *Recycling*. Infrastructure improvements are needed to recycle—not waste—more treated wastewater as potable water demand rises and supplies dry up.
    - *Nutrients*. Infrastructure improvements may be needed to respond to nutrient enrichment in San Francisco Bay. Such improvements could include nature-based systems that take up nutrients and contaminants of emerging concern, while providing habitat and climate change resilience.
    - *Sewer Overflows*. Collection systems must be upgraded and maintained to prevent sanitary sewer overflows that spill untreated sewage into our waters and threaten human health.

General NPDES Permits

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 six Board-issued general NPDES permits:

- Fuels/VOCs Groundwater Pump and Treat Discharges;
- Potable Water Treatment Filter Backwash Discharges;
- Brackish Extracted Groundwater Discharges;
- Aggregate Mining, Sand Washing, and Sand Offloading Discharges;
- Public Fireworks Display Discharges; and
- Floating and Graving Dry Dock Discharges.

The Division also oversees seven statewide general permits issued by the State Water Board. These address discharges from about 140 sanitary sewer collection systems and about 100 community water supply systems, utility vault dischargers, and aquatic pesticide, herbicide, and fungicide applicators.

Pretreatment and Pollution Prevention

Pollution prevention and pretreatment both aim to prevent pollution at its source because wastewater treatment plants cannot realistically remove all pollutants end-of-pipe. The pollution prevention program focuses on residential and commercial sources. The pretreatment program focuses on industrial sources. The Clean Water Act requires municipal wastewater agencies to implement their own NPDES programs to reduce industrial pollution before it reaches their treatment plants. Due to reduced funding and contractor support from U.S. EPA, we have fewer resources to invest in pretreatment. The requirements in our municipal wastewater permits provide a backstop against any backsliding in this mature and successful program.

Social Media Outreach

The Division hosts the social media outreach program on behalf of the entire agency.

Groundwater Protection and Toxics Cleanup Divisions (GWPD & TCD)

These two Divisions implement cleanup and waste containment 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.

Both divisions implement the *Site Cleanup Program* to address recent and historic spills from a variety of industrial, manufacturing, and commercial sources. The TCD also implements the petroleum *Underground Storage Tank (UST) Cleanup Program* and supports local agencies that do the same. The GWPD implements our *Departments of Defense and Energy Cleanup Program*, which addresses our region's active and closed military bases and national laboratories. GWPD also implements our *Landfill Program*, which addresses municipal solid waste landfills and industrial waste management units.

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, supporting the State Water Board's Recycled Water Policy, 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.

Reduced staff hours and pandemic related restrictions have modestly impacted the GWPD and TCD work productivity and work interactions. Staff have reduced inspections, and permitting actions by approximately 9% and have shifted nearly all face-to-face meetings, and trainings to a virtual format, which is some cases has reduced public interactions.

Site Cleanup Program (SCP)

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

Our 15 SCP staff oversee nearly 600 active cases. Many of these sites are discovered during property transfers or redevelopment, and the resulting cleanup work dovetails with site reuse. We prioritize sites considering several factors including threat to beneficial uses and human health, environmental justice and disadvantaged communities, and the need to accelerate cleanup. We also have about 280 inactive cases due to various factors including discharger inability to pay and limited staff resources.

The *Site Cleanup Subaccount Program* covers high-threat, under-funded sites that are not in our SCP cost recovery or underground storage tank programs. Funding is from the gasoline tax

Accomplishments:

- We have successfully engaged with local agencies, communities, and developers to set our regulatory expectations for cleanup and abatement of volatile contaminants that pose a vapor intrusion threat to building occupants.
    - Our 2019 Vapor Intrusion Mitigation Fact Sheet communicates our need for robust operations, maintenance, and monitoring programs that are fully funded and implemented for the duration of site cleanup. In response, we have already seen accelerated cleanups, and improved community awareness and engagement at some redevelopment sites.
    - To reinforce expectations, we've developed a template for a cleanup and abatement order for sites where vapor mitigation systems are expected to operate for many years because cleanup is slow or technically infeasible.
- We have overseen the implementation of three State Water Board orders requiring investigation of per- and polyfluoroalkyl substances (PFAS) at our region's landfills, airports, and chrome-plating facilities. Our May 2020 Board Status Report summarized this information. To support and prioritize this and future PFAS-related investigations, earlier this year we developed risk-based Environmental Screening Levels (ESLs) for the two most common PFAS compounds (PFOS and PFOA).
- In FY 2019-2020, we closed 29 SCP cases exceeding our goal of 25 closures.

Priority Activities:

Priority activities for the SCP have been affected by the COVID pandemic and the resulting resource cuts and decreased work productivity. In response, we have strategically adjusted our goals to maintain our most important mission-driven priorities.

- We will update our July 2009 low-threat case closure assessment tool to improve successful investigation and cleanup that is protective of public health, water quality, and the environment. The update will focus on vapor intrusion, environmental justice/community engagement, climate change (including sea level rise and drought resiliency), and groundwater use. The update will discuss these considerations in relation to our prioritization algorithm.
- Similarly, we are continuing to strategically evaluate our regulatory approach to vapor intrusion sites to optimize our resources based on threats to human health. Our approach includes the use of multiple tools, such as orders and directives, recommendations to local agencies that have building occupancy authority, property deed restrictions, and voluntary agreements. Another aspect of our strategy is updating our 2014 Vapor Intrusion Framework on mitigating threats using protective systems and optimal safeguards while cleanup progresses. This update is intended to provide additional guidance on the use of "active" and "passive" mitigation systems discussed in our July 2019 Vapor Intrusion Mitigation Fact Sheet.
- We anticipate the need to investigate a growing number of municipal, manufacturing, and military sites where per- and polyfluoroalkyl substances (PFAS) were historically discharged. This includes implementing a fourth State Water Board investigation order for refineries and bulk terminals. Our PFAS Environmental Screening Levels will help us prioritize sites that pose threats to our drinking water and aquatic ecosystems, and we are evaluating our staffing needs to address this work.
- To better protect drinking water resources in our region, we are implementing a supply well protection strategy focused on identifying and cleaning up contaminant sources in the vicinity of public and domestic supply wells that are known to be impacted. Based on information from the State Water Board's Division of Drinking Water, we have identified about 40 impacted supply wells in our region, including some with detected PFAS compounds. This conceptual approach will work from the affected receptor (i.e., the supply well) to the contaminant discharge source, complementing our typical approach from the discharge site outward.

<u>Underground Storage Tank (UST) Cleanup Program</u>

We 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 cases closed. We work with the State Water Board, which 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. We currently oversee 206 UST cases in the program.

Accomplishments:

- During the 2019-2020 Fiscal Year, the UST Program closed 33 cases exceeding our goal of 31 closures. This includes seven cases co-managed with Alameda County Water District.
- We moved five cases into active remediation meeting our yearly goal.
- We provided support on ten UST cases enrolled in the State's Expedited Cleanup Account Program (ECAP). Statewide, there are 228 UST cases enrolled in the program, which streamlines the UST Cleanup Fund claims process for enrolled sites.

Priority Activities:

- Prepare for an influx of 50 to 60 UST cases that are planned for transfer to us from two Local Oversight Program (LOP) agencies in our region. On June 30, 2021, the San Francisco and Sonoma County LOPs will no longer oversee UST cases and will transfer their remaining cases to us increasing our caseload by about 25%.
- Implement program improvements and mandates.
    - Evaluate cases for closure using the State Water Board's low-threat closure policy to achieve our target of 32 closures.
    - Pursue options to restart 24 stalled UST cases in our region.
    - Support local agencies that retain programs for investigating and remediating UST sites and that implement State requirements for upgrading and monitoring UST systems.

<u>Land Disposal Program (LDP)</u>

The Land Disposal Program oversees the treatment, storage, and disposal of nonhazardous 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. 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.

Accomplishments:

- updated Waste Discharge Requirements (WDR) for the Oyster Bay/Davis St Landfill in San Leandro and the Clover Flat Landfill in Calistoga.
- General WDR Amendment that standardized acceptance criteria for contaminated soils at all our Region's active municipal solid waste landfills.
- PFAS sampling was completed at 26 landfills and the data is currently being reviewed.
- significant progress at the former Santa Clara Landfill where a foundation pile installation method was accepted for the $8 billion mixed used redevelopment project.
- guided the Clover Flat landfill back towards compliance after issuing an Emergency Cleanup and Abatement Order for several concerning issues including a release of leachate and sulfur-rich sediment into an adjacent creek.

Priority Activities

- Ensure redevelopment of former waste disposal sites is done in a way that provides long-term protectiveness against water quality impacts and climate change
- Continue to focus on mercury mine site cleanups where impacts to our Region's waters are occurring- funded through SB445

<u>Departments of Defense and Energy Cleanup Programs (DOD/DOE)</u>

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 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. 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). All of these sites follow the Federal cleanup process mandated by the Comprehensive Environmental Response, Compensation, and Liability 14 Act (CERCLA).

Accomplishments

- Last fiscal year we continued our efforts to evaluate PFAS contamination at the Region's military bases. Region 2 staff negotiated expedited investigation and remediation at three high priority PFAS impacted sites. The work at Treasure Island and Alameda Point involves the protection of surface water (San Francisco Bay) and the work at Travis Air Force Base involves the protection of drinking water wells located downgradient of the base.

- Region 2 staff increased efforts with regards to San Francisco Bay polychlorinated biphenyl (PCB) sediment contamination. We made progress moving the Navy and the Army towards implementing PCB sediment remediation at former Hunters Point Naval Station and Oakland Army Base.
- Staff also worked collaboratively with the military and were successful at achieving regulatory closure at 66 sites, since July 2019. These sites included former fuel storage tanks, industrial sites associated with the fabrication and maintenance of aircraft and naval vessels, and two entire former bases: Almaden Air Station in Los Gatos and former Nike Missile Battery 08/09 located in Tilden Park, Berkeley.

Priority Activities

- Continue to cleanup and close contaminated sites at DoD/DoE facilities that will ensure our Region's contaminated military bases and sites impacted by releases of petroleum, metals, VOCs and PCBs are cleaned up and closed to levels that will be protective of human health and the environment.