

Practical Vision and Program Accomplishments for Fiscal Year 2023-2024

The Practical Vision is a tool used to focus limited resources onto the region's highest priorities. Twenty-six projects were undertaken during Fiscal Year 2023-2024 (FY 23-24) to implement the Practical Vision. The Board's adoption of the FY 23-24 Operational Plan in September 2023 allocated budget resources and allowed for project implementation, assignment of project teams, and establishment of project milestones and schedules.

Along with the work of the Practical Vision, San Diego Water Board staff attend to day-to-day programmatic work. This work falls into four broad categories: planning, permitting, compliance assessment, and enforcement. Every year, San Diego Water Board staff prepare programmatic work plans that include performance measure commitments tracked by the State Water Resources Control Board (State Water Board) and reported to the legislature. Although some Practical Vision projects overlap with program performance measure commitments, there is a large body of work beyond the Practical Vision priorities that staff must complete each year to meet the Board's programmatic responsibilities.

This report describes important Practical Vision projects and core program accomplishments undertaken FY 23-24. The projects and accomplishments are categorized into Practical Vision chapters or core program work.

Chapter 1. Healthy Waters

Tijuana River Border Pollution Control Efforts. During FY 23-24, staff continued to develop the *Lower Tijuana River Indicator Bacteria and Trash Advance Restoration Plan for Total Maximum Daily Loads (ARP)*. The [draft ARP](#) was posted online for public review and comment on January 10, 2024.

Staff hosted an in-person public workshop and a separate virtual public workshop on February 26 and 28, 2024, respectively. The purpose of the public workshops was for San Diego Water Board staff to (1) provide an overview of the draft ARP; (2) receive verbal comments from interested parties on the draft ARP; and (3) in accordance with Assembly Bill 2108, receive verbal comments on any concerns related to environmental justice or potential impacts on water quality for disadvantaged communities and/or Native American Tribes due to the draft ARP's future implementation.

Written comments on the draft ARP were accepted until March 13, 2024. The Mayor of Imperial Beach, San Diego Coastkeeper, and Phase I municipal separate storm sewer systems (MS4) copermittees of the Tijuana River Watershed Management Area submitted written comments.

The ARP implementation plan proposes a memorandum of understanding between the San Diego Water Board, the U.S. International Boundary and Water Commission (USIBWC), the U.S. Environmental Protection Agency (USEPA), and possibly the

Department of Homeland Security to establish agreements, roles, and responsibilities to control transboundary sources of pollution within specified timeframes, respective jurisdictions, and respective funding allocations. Staff will present the ARP to the San Diego Water Board to consider for adoption in 2024.

The San Diego Water Board also issued a [time schedule order \(TSO\)](#) to USIBWC during FY 23-24 due to ongoing noncompliance with USIBWC's National Pollutant Discharge Elimination System (NPDES) permit and cease and desist order for the South Bay International Wastewater Treatment Plant (SBIWTP). The TSO was adopted on December 18, 2023, during a special Board meeting. The TSO establishes interim reporting requirements and a deadline of August 15, 2024, for return to compliance with secondary treatment standards.

San Diego River Investigative Order Completed. Responsible Parties have completed their initial response to an [Investigative Order](#) issued by the Board that required an investigation to quantify and identify the sources and pathways of human fecal material to the Lower San Diego River. Several prior studies revealed poor water quality related to fecal indicator bacteria (FIB) in the Lower San Diego River Watershed and immediately downstream in the Pacific Ocean. A 2016 Surfer Health Study and subsequent wet weather microbial survey revealed HF 183 (a marker of human waste) at detectable concentrations at almost all survey locations across most storms. In partial response to the results of the study and survey, Investigative Order R9-2019-001 was issued in 2019 to fourteen regulated parties to identify and quantify sources and pathways of human fecal material. The regulated parties were required to describe the circumstances causing the discharges and discuss how the data obtained in the investigation will be used to assess the effectiveness of their programs in preventing discharges of human waste.

The regulated parties worked with the Southern California Coastal Water Research Project (SCCWRP) to develop and complete a workplan investigating potential loading and pathways from public sewage collection system, private sewer laterals, unhoused populations in the watershed, onsite wastewater collection systems, illicit connections and illicit discharges, and sanitary sewer overflows. Results of the investigation were provided to the Board on June 12, 2024. Staff are reviewing the findings of both the technical investigations and the jurisdictional program effectiveness assessments and anticipate providing the Board with an informational item in November 2024.

Installation Restoration Site 9 (“Fiery Marsh”), San Diego Bay Benthic Community Study, Naval Air Station North Island.

In April of 2022, the San Diego Water Board, Department of Toxic Substances Control, and United States Department of the Navy (collectively the Parties), began an Informal Dispute Resolution (IDR) process to come to an agreement on the details of a benthic community assessment at Installation Restoration (IR) Site 9 at Naval Air Station North Island, also known as the “Fiery Marsh.” The IDR expresses the Parties’ intent to collaborate in conducting a benthic community assessment in San Diego Bay sediments near IR Site 9 which will be used to evaluate if a discharge of legacy chemicals from shallow groundwater to the Bay is affecting beneficial uses of San Diego Bay. After several in-person meetings, the Parties agreed that it was necessary to conduct a benthic community evaluation of the biodiversity and environmental conditions present in the benthic zones. The benthic community evaluation was conducted in accordance with requirements of the State Water Board’s Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Objectives. From September through November 2023, the Department of Navy collected sediment samples and cores from eight locations in the Bay. The samples were analyzed for benthic invertebrate community composition (taxonomy), toxicity bioassays, sediment chemistry, and grain size analysis. The outcomes for these multiple lines of evidence were combined into a final integrated station assessment which indicated that the benthic community is not being impacted by the IR Site 9 shallow groundwater chemicals discharging into San Diego Bay and beneficial uses of marine/estuarine habitat are protected. The Parties continue to meet monthly to discuss and resolve the other environmental issues at IR Site 9.



Lake San Marcos and Upper San Marcos Creek Watershed: In 2023, staff drafted a tentative Cleanup and Abatement Order (CAO) aimed to improve water quality conditions in Lake San Marcos and the Upper San Marcos Creek and restore beneficial uses in these water bodies. CAO development followed more than ten years of voluntary work to investigate and characterize impacts of nutrients in the Watershed and Lake and develop plans to restore beneficial uses through mitigation and remediation. Board staff drafted the tentative CAO to: (1) avoid continued delays in implementation of cleanup actions, (2) provide an enforceable timetable for cleanup work implementation, (3) provide a detailed, transparent framework for the responsible parties to follow to attain the restoration goals; and (4) require modes of accountability that are not available under a voluntary cleanup arrangement. The Board adopted the [CAO \(R9-2024-0009\)](#) on March 13, 2024. It names as responsible parties the lake owner, Citizens Development Corporation, and four public agencies (San Diego County, Cities of San Marcos and Escondido, and Vallecitos Water District), which are the same entities that

have been voluntarily performing investigation and cleanup work since 2011. The CAO directs the parties to (1) supplement 2016 risk assessments to address health concerns raised by Lake residents and provide a baseline of current Lake and Creek conditions, (2) evaluate source control measures to limit recontamination of the Creek and Lake after cleanup remedy implementation, (3) identify cleanup remedies for the Lake and Creek, (4) implement remedies, and (5) conduct post-remedy monitoring to ensure Creek and Lake water quality objectives and beneficial uses have been restored. The CAO includes an adaptive management process: if the parties do not meet remedial goals, the CAO directs them to re-evaluate source control measure performance and adapt their remedial strategy (i.e., revisit steps 2 through 5).

Chapter 2. Monitoring and Assessment

Report on Ambient Concentrations of Pollutants in San Diego Bay Sediments. To improve assessments of [key beneficial uses](#) associated with sediment conditions in San Diego Bay, such as fish and shellfish consumption and healthy habitats, staff produced a technical report titled “*San Diego Bay Sediment Pollutants: Evaluation of Contemporary Ambient Concentrations to Inform Water Quality Management.*” The report was developed to provide staff and the public information on sediment conditions in San Diego Bay in locations that have presumed lower levels of historic or current anthropogenic impacts due to their distance from known pollutant sources. Staff and the regulated community can use the improved understanding of ambient conditions of specific pollutants to make more informed regulatory and enforcement decisions. The analyses used data from Water Board-required regional monitoring programs that use randomly selected stations throughout San Diego Bay. That sampling design helps reduce sampling bias and provides a better overall picture of water or sediment quality. Prior to publication, the report was submitted for scientific peer review. The [report](#) and a [fact sheet](#) were distributed to the public in January 2024 and are available on [our website](#).

Chapter 3. Recover Stream, Wetland, and Riparian Areas

San Mateo Creek Invasive Species TMDL to Restore Steelhead Habitat. The Executive Officer signed Resolution [R9-2024-0012](#) in January 2024, certifying that the impairment of San Mateo Creek biological integrity caused by invasive species is expected to be restored by actions of a non-regulatory third party. San Mateo Creek is identified by the National Marine Fisheries Service (NMFS) as a CORE 1 population segment in the federal Southern California Steelhead Recovery Plan, with a portion of the creek listed as critical habitat. The endangered southern California Steelhead (*Oncorhynchus mykiss*) are being restricted by the presence of invasive aquatic predators and competitors such as largemouth bass, sunfish, and bullfrog, which outcompete steelhead for resources and prey on juvenile steelhead while also degrading water quality. The Executive Officer’s action is one of the under-looked State Water Board Impaired Waters Policy alternatives to a traditional TMDL approach for water quality impairments. The Restoration Plan and the Executive Officer certification

were made possible by an award from the State Water Board of \$198,894 in federal Clean Water Act section 319 funds managed by San Diego Water Board staff for California Trout, Inc, (Caltrout), a 501(c)3 nonprofit organization, to develop a coordinated watershed management plan to address the impairment. CalTrout will develop the Watershed Plan in consultation with a technical advisory committee that includes the Acjachemen tribal nation, San Diego Water Board, California Department of Fish and Wildlife, National Marine Fisheries Service, United States Marine Corps at Camp Pendleton, United States Forest Service, and a resource conservation district.

Caulerpa prolifera invasive species threat in San Diego Bay. Since the highly invasive algae *Caulerpa prolifera* was found in the Coronado Cays area of San Diego Bay in September 2023, staff have worked with the Southern California Caulerpa Action Team (SCCAT) to develop, fund, and implement a Rapid Response and Eradication Plan. The outbreak of a *Caulerpa* species, all of which are banned in California, is a major threat to the biological integrity of San Diego Bay and the associated recreational and fishing beneficial uses. As of June 2024, known *Caulerpa* within the Coronado Cays and the adjacent San Diego Bay National Wildlife Refuge has been treated. However, effectiveness verification surveys must continue for at least 6 months and additional areas within the Cays and the Refuge need to be surveyed before the SCCAT can demarcate the infestation area with a high level of confidence. Therefore, staff will continue their efforts into at least FY 24/25. Staff are also coordinating with staff from the Santa Ana regional board and the State Water Board Emergency Management Program involved in a *Caulerpa prolifera* outbreak in Newport Bay. Among other activities, staff quickly helped secure remediation funding from the State Water Board Cleanup and Abatement Account (CAA), co-chaired the SCCAT, provided boat and topside support to California agency survey divers, and participated in outreach and media events. The CAA funding was critical to remediating the majority of the known *Caulerpa* within the Coronado Cays and helped leverage subsequent funding from various local (e.g. Port of San Diego), state (CDFA), and federal (e.g. USFWS) for surveys and remediation within the Wildlife Refuge.

Chapter 7. Mitigate Climate Change Impacts

Work to address Climate Change. During fiscal year 23-24 staff continued participation in several groups working to mitigate the impacts of climate change. These efforts include:

- Monthly meetings with the San Diego Regional Climate Collaborative (Climate Collaborative) and contributions to their Sea Level Rise and Policy and Adaptation Working Groups. The Climate Collaborative was established in 2011 as a network for public agencies to advance climate change solutions that mitigate greenhouse gas emissions and adapt to the effects of climate change.
- Hosted the San Diego Regional Climate Collaborative workshop on extreme heat in Southern California. The Climate Collaborative workshop was organized by the National Science Foundation's Coastlines and People (CoPe) and [SoCal Heat Hub](#) (Hub) from the University of California, San Diego (UCSD). The Hub is a

research team based out of Scripps Institution of Oceanography at UCSD, funded as part of CoPe research initiative. The newly formed hub has assembled to study the issue of extreme heat in the coastal region of Southern California amidst climate change.

- Providing input and perspective to the City of San Diego on their Coastal Resilience Master Plan. The Coastal Resilience Master Plan is an implementation action of [Climate Resilient SD](#). The plan will identify nature-based solutions for locations along San Diego's coast to improve the resilience of our communities to sea level rise while also benefiting wildlife, habitat, and natural coastal resources.
- Continued long-standing participation in the [Wetland Recovery Project](#) Wetland Managers Group and the Directors Group which together consists of directors and staff of eighteen public agencies coordinating the protection, restoration, and enhancement of California's coastal wetlands and watersheds between Point Conception and the Mexican border; and the [Integrated Regional Water Management Regional Advisory Committee in San Diego County](#) which is a collaborative effort aimed at developing long-term water supply reliability, improving water quality, and protecting natural resources.

Chapter 8. Provide Effective Community Engagement and Communication

Public Engagement. During fiscal year 23-24 San Diego Water Board staff increased efforts to provide meaningful public engagement opportunities and ensure our outreach efforts are timely and meet the needs of our constituency.

In February 2024 Healthy Waters Branch staff from the Restoration and Protection Planning Unit applied community engagement best practices to promote public participation during the public comment period for draft Total Maximum Daily Loads for the lower Tijuana River. Considering feedback from a 2019 California Environmental Quality Act (CEQA) scoping workshop on the same matter and the goals of Chapter 8 of the 2021 Practical Vision, staff held one in-person workshop at a facility adjacent to the subject river and held one virtual workshop in the evening. These methods provided interested and potentially affected members of the public with opportunities to communicate with staff in person near sites of work or residence and virtually after work hours. This approach increased the attendance and nearly doubled the public comments that staff received from a similar public workshop held during the CEQA scoping phase that relied on a single daytime workshop.

Our Surface Waters Branch staff provided a guest lecture during an environmental studies class at the University of California, San Diego. The Environmental Studies class at the University of California, San Diego is an undergraduate interdisciplinary course focusing on one of a variety of topics related to environmental studies such as environmental policy and politics, foreign study in environmental problems, environmental history, nature writers, and ethics and the environment. San Diego Water Board staff shared the career path taken to join the Water Board team, informed the

students about the laws and policies governing stormwater, and invited the class to participate in a discussion about the challenges of regulating storm flows in an aging and growing metropolis during a time of changing climate and a growing population of unhoused individuals.

Our Surface Waters Branch staff also participated in outreach at the [Mathematics, Engineering, Science Achievement](#) (MESA) Student Leadership Conference (SLC) in October 2023. The MESA program supports underserved students seeking degrees in Science, Technology, Engineering, and Mathematics (STEM) by providing academic resources and personal development opportunities. MESA's annual SLC brings together engineering, computer science, and other STEM undergraduate students with industry professionals to develop the next generation of diverse leaders. More than 200 students and 23 industry professionals attended this year's MESA SLC. San Diego Water Board staff Mireille Lecourtois and Michelle Santillan participated in the MESA SLC for the second year in a row as Team Captains, leading groups of up to ten students through a design project and team-building exercises. Staff also sponsored a table during the MESA SLC Career Fair and informed interested students about career opportunities within the San Diego Water Board and the State Water Resources Control Board.

Groundwater Protection Branch staff provided outreach for the Irrigated Lands Program when they held three public workshops in August 2023 to receive input regarding the proposed changes to the San Diego Water Board's current general waste discharge requirements (WDRs) for discharges from commercial agricultural operations in the San Diego Region ([Order Nos. R9-2016-0004 and R9-2016-0005](#)). Staff also held a Board workshop in April 2024 to present the requirements included in [Tentative Order R9-2024-0029](#) *General Waste Discharge Requirements for Discharges from*

Commercial Agricultural Operations in the San Diego Region and to solicit feedback regarding the requirements from Board members, stakeholders, and interested members of the public. In November 2023 Board staff also participated in the panel discussion meeting hosted by the UC Nursery and Floriculture Alliance to discuss the precedential nitrogen reporting requirements included in State Water Board [Order WQ 2018-0002](#) regarding *Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed* and the difficulty that nurseries have complying with those requirements. Lastly, Agriculture Program staff attended the Ramona Valley Vineyard Association meeting in January 2024 and presented information about Order Nos. R9-2016-0004 and R9-2016-0005 and the reissuance of the San Diego Water Board's agricultural orders.

Waste Discharge Requirements Program staff engaged in extensive stakeholder outreach and communication during the development of [Order No. R9-2024-0001](#), *Conditional Waivers of Waste Discharge Requirements for Low Threat Discharges in the San Diego Region*. Efforts included updating the conditional waivers web page with the latest information, hosting two online public workshops, and actively engaging with tribal communities. Additionally, a 30-day public comment period was held to collect feedback on the order. Staff also presented a detailed review of each waiver and its proposed changes for the 2024 renewal at the March 13, 2024 Board meeting.

In 2021, Site Restoration, Military Facilities Unit staff created its own per- and polyfluoroalkyl substances (PFAS) Shiny application for the San Diego Water Board website as part of an effort to share information efficiently with the public, stakeholders, dischargers, and other government agencies. The [PFAS Shiny application](#) works with GeoTracker to show all PFAS investigations at landfills, industrial facilities, and Department of Defense facilities within the San Diego region. In the last year the PFAS Shiny application has been active for 221 hours, which means someone has had the application open for approximately 36 minutes per day over the past year. Next to the Basin Plan Map web application, the PFAS Shiny application is the most frequently accessed web application we have on the San Diego Water Board website, opened almost daily for the last 2 years.

Land Disposal Program staff engaged with community groups and residents to identify unpermitted discharges and nuisance conditions at industrial and construction sites and took responsive actions to maintain public health and the enjoyment of property. Staff ensured public transparency and awareness of our enrollment and enforcement actions undertaken to maintain water quality and discharger accountability through direct contact by phone and email, as well as uploading documents to public databases. Staff continue to work closely with Dischargers to provide information regarding applicable regulations, next steps expected by Staff to promote timely and complete report submittals. Staff also respond to public inquiries in a timely manner and assist in accessing documents in GeoTracker and responding to public records requests. Additionally, public comment periods for Land Disposal Waste Discharge Requirement addendums and enforcement orders provide adequate time for the public to submit comments or questions to the Board for consideration. One member of the Land Disposal team also participates during their personal time in a pen pal program that connects STEM professionals with underserved middle school students across the nation to foster their interest in STEM and continuing their education after high school.

Underground Storage Tank Program staff engaged in outreach efforts related to sites that involve an unauthorized leaking underground storage tank which included mailing unauthorized release information factsheets, corrective action implementation letters, and proposed closure notification letters to individual property owners, water districts, and city engineers that fall within the area impacted by the unauthorized release. Outreach efforts also included contacting individual property owners via telephone to request property access for private well water quality and/or soil and groundwater investigations.

Site Restoration Unit staff provided a tentative Cleanup and Abatement Order (CAO) for Lake San Marcos and Upper San Marcos Creek for public comment from September to November 2023. Staff provided responses to comments in the agenda package for the March 2024 Board meeting. Unit staff also provided a tentative CAO for Suzy Cleaners/Former Ha's Cleaners for public comment in February to March 2024 and are currently working on responses to these comments. Lastly, Unit staff provided notices to adjacent property owners for cases that staff are proposing to issue a No Further Action letter and recommend cleanup case closure.

Chapter 9. Supported, Empowered, Energized Organizational Community

Adaptation to Hybrid Workforce. The San Diego Water Board remained focused on ensuring continuity of operations throughout the fiscal year as it implemented a hybrid work environment. The Water Board team continues to effectively complete their work either through a home centered or office centered schedule in a manner that achieved nearly all performance targets while keeping good working relationships with the regulated community via remote meeting platforms. Starting June 17, 2024, the San Diego Water Board fully implemented the State Water Board's Return to the Office Guidelines and Updated Telework Policy whereby all staff are reporting to work in the office at least two days per week. Additionally, the San Diego Water Board has welcomed staff from other Water Board offices to use our hoteling cubicles so they can meet the two days in the office policy.

Core Program Accomplishments

Time Schedule Order for Compliance with Bacteria Total Maximum Daily Load.

Consistent with the San Diego Water Board's values of communication and transparency, several coordination and engagement meetings with Responsible Permittees were held in 2023 and 2024 leading to the adoption of [Time Schedule Order R9-2024-0010](#) (TSO), *An Order Requiring Designated Responsible Permittees to Comply with Bacteria, Project I-Twenty Beaches and Creeks TMDL Requirements Prescribed in the Regional Municipal Separate Storm Sewer Systems Permit*. These meetings, prior to the San Diego Water Board TSO adoption hearing, were instrumental in responding to dischargers questions and concerns regarding a high priority water quality issue within the region. The TSO extends the Bacteria TMDL dry weather final compliance date from April 4, 2021, to September 30, 2028, while directing TSO Responsible Permittees to take immediate actionable steps to investigate and abate sources of bacterial pollution impacting waterbodies.