

Practical Vision and Program Accomplishments for Fiscal Year 2022-2023

The Practical Vision is a tool used to focus limited resources onto the region's highest priorities. Forty-five projects were undertaken during Fiscal Year 2022-2023 (FY 22-23) to implement the Practical Vision. The Board's adoption of the FY 22-23 Operational Plan in August 2022 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 22-23.

Chapter 1. Healthy Waters

Tijuana River Border Pollution Control Efforts: Total Maximum Daily Loads Development, USMCA Project Funding Secured. The San Diego Water Board is involved in several efforts (listed below) to address transboundary flows carrying sewage, trash, and sediment into the Tijuana River Valley from Mexico that have polluted the area for decades, particularly after storms. Polluted transboundary flows are the worst they have been in 30 years, which has exacerbated the chronic serious threat to public health, water quality, and the environment. However, in 2020-2021 progress has been made on several fronts that, if sustained, could result in measurable positive public and environmental health outcomes. It is critical that these efforts are followed through to completion to protect public health in the communities of San Ysidro and Imperial Beach, and to address 55 water quality impairments and restore the water quality and environmental health of the Tijuana River Valley and coastal waters of the Pacific Ocean.

- The Board continued development of Total Maximum Daily Loads (TMDLs) for indicator bacteria and trash from the Tijuana River Valley transboundary flows. Scientific peer review is complete, and the technical reports are under revision.
- The United States-Mexico-Canada Agreement (USMCA) became effective July 1, 2020. USMCA funding priorities includes an appropriation of \$300 million for wastewater infrastructure projects near the U.S.-

Mexico international border. The San Diego Water Board participates in the United States Environmental Protection Agency led USMCA Interagency Consultation Group, which offers the San Diego Water Board an opportunity to promote allocation of funds to endorse U.S.-side preferred project alternatives. These recent efforts build on previous San Diego Water Board-led Tijuana River Valley Recovery Team (TRVRT) work, including the 2012 TRVRT Recovery Strategy and 2015 Five-Year Action Plan (Resolution Nos. R9-2012-0030 and R9-2015-0035). Although the USMCA funding is far below what the infrastructure required is likely to cost, it did support a Final Programmatic Environmental Impact Statement approved in December 2022 and a Record of Decision approved by USEPA and USIBWC in June 2023.

- The San Diego Water Board helped identify three projects for funding through SB 170 in the Tijuana River Valley:
 - Tijuana River Trash Boom, \$4.7 million, RCAC/Alter Terra
 - Smuggler's Gulch Improvement Project \$2 million, County of San Diego
 - Brown Property/Tijuana River Valley Habitat and Hydrology Restoration Project, \$2 million, County of San Diego
- The San Diego Water Board was awarded \$175,000 that it will use to support the USIBWC/CILA Minute 320 Binational Framework to Address Sediment, Water Quality and Solid Waste in the Tijuana River Watershed in Mexico and the U.S.

Commercial Agricultural Operations Project: Identify and Inspect Nurseries in Key Areas. The San Diego Water Board began this Operational Plan project in July 2020, and it was completed in June 2023. The goal of this project was to review and ensure compliance with the General Agriculture Orders at nurseries in key areas. Staff identified nurseries in key areas to inspect in fiscal year 2020-2021 but did not conduct any inspections due to the COVID-19 pandemic. In fiscal years 2021-2022 and 2022-2023, Staff conducted 29 inspections of 22 nurseries. Staff prioritized inspections in the Rainbow Creek watershed due to the Total Maximum Daily Load (TMDL) for total nitrogen and total phosphorus in Rainbow Creek. Staff conducted inspections of every nursery in Rainbow Valley enrolled in the Agricultural Order. Staff issued one notice of violation, one investigative order, and one staff enforcement letter, based on inspection observations. In August 2022, Staff began informally coordinating with County of San Diego Agriculture, Weights & Measures (AWM) staff by inviting AWM staff to conduct joint inspections with Board Staff. In April 2023, Staff began to formally incorporate coordinating with AWM staff into the standard protocol for inspections as a result from feedback received from growers during inspections. Staff developed relationships with growers and other regulatory agencies by coordinating inspections and sharing experience and information during inspections. Program staff inspected all nurseries identified in key areas as of June 30, 2023. Conducting inspections of agricultural operations, including nurseries, orchards, and vineyards, is the new standard protocol

for the Commercial Agriculture Regulatory Program. Staff will continue to prioritize inspecting agricultural operations by the proximity to key areas supporting key beneficial uses.

Alternative Compliance Program for Natural Systems – City of Chula Vista. The Stormwater Management Unit assisted the City of Chula Vista with the development of a city-wide Alternative Compliance Program (ACP). This ACP will be used to comply with the Regional Municipal Separate Storm Sewers Permit (Regional MS4 Permit). The ACP proposes the use of stream rehabilitation Natural Systems Management Practices as the mechanism for alternative compliance with the Permit. The overall goal of the ACP is to provide alternative mechanisms to meet stormwater compliance criteria while providing a greater water quality benefit and improved habitat within the City of Chula Vista watersheds. To assure the ACP met the Regional MS4 Permit requirements, the San Diego Water Board worked with the City to develop a process that documents the watershed baseline condition for inclusion into the ACP. As projects move forward and use the City-wide ACP, the detailed baseline in the alternative compliance program ensures that a greater overall watershed benefit can clearly be identified and tracked overtime.

Chapter 2. Monitoring and Assessment

Strategic Water Quality Assessment Approach for San Diego Bay. The San Diego Water Board adopted [Resolution No. R9-2022-0019](#) endorsing the Strategic Water Quality Assessment Approach for San Diego Bay (Assessment Approach) on [November 9, 2022](#). This Operational Plan project began in [FY 21/22](#).

The Assessment Approach is a tool to identify information needed to determine if the Bay's waters are healthy for swimming, fish and shellfish are safe to consume, and habitats are flourishing. It provides structure for identifying, collecting, and analyzing information necessary to meet the goals of the Board's Healthy Waters Strategy for San Diego Bay ([2012](#)).

The Healthy San Diego Bay Strategy calls for making decisions about key beneficial uses based on assessments of conditions. Initial assessments of the Bay's conditions, conducted in 2016-17, were informative but did not meet the needs of the Healthy SD Bay Strategy, so in FY 2019/2020 staff began to rebuild an assessment strategy for the Bay based on the Board's Framework for Monitoring and Assessment in the San Diego Region ([2012](#)). Throughout development, and as we move forward, staff relied on clear communication and transparency to achieve the SD Bay Strategy goals. The result is a guide of best practices for assessing water quality of San Diego Bay.

This new Bay Assessment Approach will improve stewardship of the Bay by enabling us to align priorities and decisions based on what is most important to know about the key beneficial uses of the Bay. The project required sustained leadership to bring together interests of various existing monitoring and assessment efforts. As a result, the Assessment Approach can serve as common guidance for internal, external, and partnership monitoring and assessment efforts.

Chapter 3. Recover Stream, Wetland, and Riparian Land

Inter-Agency Program Coordination Project. The Inter-Agency Program Coordination Operational Plan project was completed in June 2023. The project was developed to ensure the San Diego Water Board's existing wetland policies and regulatory approaches were aligned with those of other regulatory agencies that are also responsible for protecting the regions' wetlands. San Diego Water Board Wetland Protection and Restoration (WRP) Unit staff initiated regular meetings to coordinate regulatory efforts on land development and other dredge and fill projects with California Fish and Wildlife, U.S. Army Corps of Engineers, and other resource agencies. This project resulted in WRP staff participating in monthly pre-application meetings with the resource agencies to assure all regulatory matters are address in the application before it is submitted to an agency. These meetings provide applicants with an important opportunity to receive feedback on their compensatory mitigation proposals and often result in a more efficient permitting process. Additionally, WRP staff hold quarterly coordination meetings with the U.S. Army Corps of Engineers to discuss the Water Quality Certification process, resulting in more streamlined permitting, and participate in monthly Santa Margarita Watershed pre-application meetings run by Riverside County that help to educate project applicants on the differences between San Diego Water Board and Santa Ana Water Board dredge and fill project permitting requirements. WRP staff will continue participating in the multi-agency pre-application meetings in the future to help guide project applicants through the ever changing regulatory landscape.

Chapter 7. Mitigate Climate Change Impacts

Timely Information on Atmospheric Rivers. The San Diego Water Board was fortunate to provide an informational item on Atmospheric Rivers (ARs) at its March 2023 Board Meeting. Dr. Marty Ralph, one of the world's experts on understanding and predicting ARs and chief of the Center for Western Weather and Water Extremes at the Scripps Institution of Oceanography, provided an informative overview of AR science, the impacts on California, and how new research is helping the State better manage water. His efforts to create Forecast-Informed Reservoir Operations optimizes reservoir management to maximize hydroelectric power generation, minimize flooding and keep capacity as full as practicable. His work will also prove insightful as the San Diego Water Board updates design storm criteria for water quality and hydromodification best management practices. The Board, staff, and numerous stakeholders left the meeting with a better understanding of ARs and an appreciation of the volatile precipitation patterns in the State.

Chapter 8. Provide Effective Community Engagement and Communication

Water Board Updates to the San Diego River Conservancy. Staff provided an overview of Board purview and an in-depth discussion on efforts to understand bacterial contamination in the lower portion of the San Diego River watershed at the November 2022 meeting of the San Diego River Conservancy. Beneficial uses were discussed in the context of fecal indicator bacteria projects such as designation of key uses and key areas, enforcement priorities, Total Maximum Daily Loads, and the 2014 Surfer Health Study. Data was provided showing the consistent and ubiquitous nature of HF 183, which is a conservative marker of human fecal waste. Board staff also provided an update on progress by Responsible Parties to meet the requirements of an Investigative Order to identify and quantify the sources and pathways of human waste to the lower San Diego River. Sources discussed included sanitary sewer overflows, private sewer laterals, exfiltration from the sewage collection system, onsite wastewater treatment systems, illegal discharges, illicit connections, and contributions from unhoused communities in the watershed. The item provided a solid foundation for future cooperation as the Investigative Order final reports arrive in June 2024 and both agencies decide how best to reduce human health risk and ecosystem impact from human waste.

Chapter 9. Supported, Empowered, Energized Organizational Community

Adaptation to Hybrid Workforce. The San Diego Water Board remained focused on ensuring continuity of operations during the COVID-19 pandemic and committed to our mission to safeguard public health, water quality, and the environment. San Diego Water Board staff worked remotely the entirety of Fiscal Years 20-21 and 21-22. In fact, 96% of the Water Board team effectively completed their work from home in a manner that achieved nearly all performance targets while keeping good working relationships with the regulated community via remote meeting platforms.

Starting in FY 22-23, the San Diego Water Board successfully pivoted to a Hybrid Workforce. Staff can telework part time or fulltime based on business need and with supervisor approval. Currently, about 50% of our staff is successfully teleworking four or more days a week.

In October 2022 our office physically shifted to a hybrid workforce environment by converting 60% of our cubicle workspaces to hoteling workstations. These hoteling stations provide workspaces that can be reserved and used by any home centered staff (teleworking 3 or more days a week). Hoteling also enabled us to have enough office space to welcome the Division of Drinking Water into our space and save the State of California commercial space rent moving forward. In addition to the financial savings for the State, our hybrid workforce is also helping to reduce traffic and greenhouse gas emissions and is providing opportunities for a better work/life balance for staff.

Core Program Accomplishments

Applying the Practical Vision and Enforcement Policy to Prevent Sanitary Sewer Overflows, Create Habitat, and Provide Environmental Education. The Board adopted two significant enforcement orders in [June 2023](#) that respond to an 11-million-gallon sewer overflow from the City of San Diego's collection system to Sweetwater River and San Diego Bay. These actions reflect the Board's [enforcement priorities](#) and goals for achieving our [Practical Vision](#), provide a schedule for timely sewer improvements and habitat and educational opportunities for the surrounding communities, and create a region-wide deterrence for similar violations.

The Board's Prosecution Team prioritized the violation for formal enforcement because the spill occurred in waters surrounded by disadvantaged communities, discharged sewage to San Diego Bay that threatened areas of special importance for multiple key beneficial uses (i.e., ecosystem health, fish and shellfish consumption, and recreation), and the discharger had a recent history of similar violations.

The harm to the environment and community was partially mitigated through two Supplemental Environmental Projects (SEPs) that will create, restore, and enhance intertidal habitat and provide learning and recreational opportunities in the surrounding underserved communities. In addition to the SEPs, the Board adopted a Cease and Desist Order that ensures the implementation of sanitary sewer corrective actions occur in a timely manner. Lastly, to create a strong deterrent Water Board Staff negotiated a Stipulated Administrative Civil Liability (ACL) Order that assesses a \$4.6 million penalty in accordance with the State Enforcement Policy, of which \$3.6 million was used to fund the SEPs.

Together these enforcement actions accomplished the enforcement objectives of a) reducing the likelihood of reoccurrence through implementation of corrective actions, b) mitigating for the environmental damages that occurred through implementation of environmental projects, and c) establishing a meaningful deterrent for the entire regulated community through monetary penalties intended to motivate dischargers into implementing the necessary actions to prevent sewer overflows.

General National Pollutant Discharge Elimination System (NPDES) Permit Issuance for Shipyards Adjacent to San Diego Bay. The San Diego Water Board adopted General NPDES permit Order No. R9-2023-0012, General Waste Discharge Requirements for Discharges from Shipyards to San Diego Bay (2023 General Order) in May 2023.

BAE Systems San Diego Ship Repair Incorporated (BAE), Continental Maritime of San Diego (Continental), and General Dynamic National Steel and Shipbuilding Company (NASSCO) are shipyards located adjacent to San Diego Bay. These shipyards construct, modify, repair, and maintain naval and other marine vessels. The discharges of industrial stormwater and industrial wastewater from these facilities to San Diego Bay were previously regulated through separate NPDES permits. These permits had similar requirements because of their common operations and locations. Rather than requiring

each shipyard operating adjacent to San Diego Bay to apply for a separate permit, the 2023 General Order established a streamlined and consistent process for regulating all shipyards operating in San Diego Bay. The 2023 General Order regulates discharges of industrial stormwater and industrial wastewater from shipyard operations through effluent limitations, discharge prohibitions, receiving water limitations, and monitoring requirements to protect the beneficial uses of San Diego Bay. The discharges associated with shipyard operations include discharges of industrial stormwater; deflooding water from floating dry docks, graving docks, and building ways; ballast water; water used for cleaning floating booms; weight test water; and water from an ion exchange treatment system.

Prior to the adoption of the 2023 General Order, the San Diego Water Board held a public Environmental Justice workshop pursuant to AB 2108 that requires public outreach to impacted Disadvantaged Communities when Water Board considers General Permits.

The Big Dipper Returns to Operation. A necessary function of the San Diego Water Board in fulfilling its mission is the ability to sample water, soil, sediment, and tissue samples throughout its jurisdiction. Understanding aquatic beneficial uses and the unique industrial, commercial, and military facilities along the coast is also critically important. Some of the more challenging areas to access are the bays, harbors, and near-shore coastal environments found in the region. Fortunately, the Water Board has the Big Dipper to assist in these areas.



The Big Dipper is an 18-foot-long Parker center console boat with twin 50 hp Yamaha outboard motors. Her three primary missions include response, training, and monitoring. Response includes reconnaissance of spills and natural disasters. Training involves education of Water Board staff and leadership from other State agencies through tours of beneficial uses and sites of specific interest. Monitoring is perhaps the most common use of the boat and involves compliance assurance and ambient

condition sampling of surface and mid-level water, sediment, and plant and animal tissues.

As with any sea-going vessel, maintenance and periodic upgrades are vital to safe and reliable utilization of the boat. Unfortunately, procurement and contracting challenges kept the Big Dipper out of the water for over 4 years between August 2018 and September 2022. It was only through the perseverance and hard work of Kimberly McMurray-Cathcart, Sheila Christine McQuaid-Moran, Chad Loflen, and Jimmy Smith that several repairs and necessary upgrades were completed, and boat operations finally recommenced in early 2023. The first monitoring task involved the collection of California spiny lobster from Mission Bay, San Diego Bay, and Oceanside Harbor to help assess pollutant impacts for those consuming lobster, with a focus on subsistence and tribal uses as part of the State of California's Safe to Eat monitoring workgroup.

Watershed Water Quality Improvement Plan Updates. Stormwater staff are completing review and providing feedback on the ten watershed Water Quality Improvement Plan (WQIP) annual reports. Through 20 comment letters, staff provided compliance feedback to the Regional MS4 Permit Copermitees. During this fiscal year staff reviewed and recommended Executive Officer acceptance of the Los Peñasquitos, Santa Margarita River, San Luis Rey River, Tijuana River, and Carlsbad watershed WQIP updates. The Los Peñasquitos watershed WQIP update included revisions to the Sediment TMDL interim goals necessary to ensure interim compliance with the Los Peñasquitos Lagoon restoration project will be met through measurable progress of salt marsh restoration. The Santa Margarita River Watershed Management Area (WMA) WQIP update included revisions to update the numeric goals for the Santa Margarita River Estuary Restoration Plan to ensure interim and final goals for nutrient load reductions were met. The San Luis Rey River WMA WQIP update included revisions to the wet weather reasonable assurance demonstration to use the WQIP implementation compliance pathway for interim and final wet weather waste load allocations for the Twenty Beaches and Creeks Bacteria TMDL. The Tijuana River WQIP update included the results of an Upper Tijuana River Nutrient Study and revisions to 303(d) listed waterbodies and Priority Water Quality Conditions. Updates to the Carlsbad WMA WQIP included revisions to Dry Weather goals for nutrient load reduction in Upper San Marcos Creek Hydrologic Area.

Records Management Process: Retention, Training, and the Back Scanning Project. The Records Management Process Operational Plan Project was completed in June 2023. The goal of the project was to provide training to ensure all staff are aware of their responsibilities to manage records and obligations to maintain and produce public records. This effort also educated staff about compliance with the Public Records Act and the State Water Board Records Retention Schedule. In fiscal year 22-23, records staff conducted unit-specific and office wide records management training events. Unit-specific training was an important part of this project because the State Water Board has established different record processes for different programs, making a one-size-fits-all approach to records management impossible. Through the program meetings, we identified several challenges and crafted solutions specific to the individual programs and updated processes for records staff to respond to records

requests more efficiently. Mission Support Services staff will continue to provide periodic training and records audits to ensure staff are up to date on record management processes and requirements.

GIS and Data Science Workgroup Project. The GIS and Data Science Workgroup Operation Plan Project was completed in June 2023. The goal of this project was to provide a regular internal forum for San Diego Water Board programs to communicate and identify data and information needs and uses and develop GIS and data management and visualization tools to support program implementation. The San Diego Water Board does not have dedicated GIS staff, yet use of GIS and data science and visualization is very important to many of our programs. The GIS and Data Science Workgroup was successful in providing staff with an opportunity share information, receive training, and identify internal and external resources for numerous projects and tasks. As a result of the workgroup, use of GIS and data visualization tools have increased. Examples of the success of this project include the creation and use of GIS maps for presentations to the Board and others, and the use of GIS maps and information to prioritize program activities to align with Board priorities. Workgroup members created various web-based applications and tools for program use, some of which are available on our public web page and share monitoring and assessment information: [Monitoring and Assessment | San Diego Regional Water Quality Control Board](#). Moving forward, interested staff will meet informally to share GIS and data information and needs, and former workgroup members will assist with projects to ensure we continue our effective use of GIS into the future.