

Practical Vision and Program Accomplishments for Fiscal Year 2021-2022

The San Diego Water Board [Practical Vision](#) is a tool used to focus limited resources onto the region's highest priorities. The Board endorsed forty-one projects for Fiscal Year 2021-2022 (FY 21-22) to implement the Practical Vision. The Board's adoption of the FY 21-22 Operational Plan in August 2021 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 21-22.

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 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 expected to begin by the end of 2021.
- 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. The San Diego Water Board also drafted a multi-agency 10-page comment letter to US EPA regarding the Draft Programmatic Environmental Impact Statement. 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).

- In September 2021, the Legislature adopted SB 170 that allocated \$20 million for projects to restore and protect water quality in border rivers. In addition, the FY 22-23 Budget included an additional \$15 million for border river projects. On July 19, 2022, the State Water Board adopted a Resolution to make the funds available for key projects and establish the plan to encumber the funds. The SB 170 funds must be encumbered by June 2024 and fully expended by June 2026. This year's budget funds must be encumbered by June 2023 and fully expended by 2025. The San Diego Water Board coordinated efforts in the TRVRT to identify projects and assemble the proposals for consideration by the State Water Board and will manage the resulting grant agreements.
- Moving to protect water quality in the Pacific Ocean and safeguard public health and the environment, the San Diego Water Board adopted a cease and desist order in May 2021 directing the United States Section of the International Boundary and Water Commission (USIBWC) to make repairs and comply with the requirements of its reissued National Pollutant Discharge Elimination System (NPDES) permit. Located in south San Diego County, the South Bay International Wastewater Treatment Plant (SBIWTP), owned and operated by the USIBWC, treats an average of 25 million gallons per day of raw sewage that flows across the international border from Tijuana, Mexico. The SBIWTP discharges secondary-treated wastewater to the Pacific Ocean through the South Bay Ocean Outfall at a point approximately three miles offshore. Due to improper maintenance of the facility, wastewater flows entering the plant have regularly surpassed treatment capacity resulting in excess pollutant discharges that threaten marine life and pose risks to public health. The SBIWTP also treats contaminated runoff at several canyon drainages along the border. Runoff that bypasses the canyon collector systems ultimately flows into the Tijuana River and Tijuana River Estuary, areas of significant ecological importance for rare and endangered species, as well as coastal waters of the Pacific Ocean. The cease and desist order requires the USIBWC to submit a compliance report that identifies all control measure shortcomings, inadequacies, and maintenance issues to be addressed, and includes a schedule for hiring contractors to design,

install and put into operation the new or modified control measures. The cease and desist order directs USIBWC to attain compliance with the NPDES permit's effluent limitations for flow, settleable solids, and turbidity no later than January 2022.

- The Water Board will be working with the US IBWC on Minute 320 General Framework for Binational Cooperation in Transboundary Issues in the Tijuana River Basin.

Significant Construction Storm Water Enforcement Penalty for Portola Center South in Lake Forest

Following multiple inspections, the unauthorized sediment-laden stormwater discharges at a luxury home construction site in southern Orange County, and years of unsuccessful staff negotiation, the San Diego Water Board (Board) unanimously adopted a \$6.6 million penalty in Administrative Civil Liability (ACL) [Order No. R9-2022-0094](#). Throughout FY21-22 Board staff spent considerable time bringing closure to an ACL complaint for the Portola Center South site in the City of Lake Forest. The Prosecution Team, composed of Compliance Assurance Unit staff, worked closely with attorneys from the State Water Board's Office of Enforcement. The Team combed through thousands of documents to provide written and oral rebuttal evidence and testimony on topics ranging from evidence authentication, interpretation of the statewide construction stormwater general permit (CGP) and the Enforcement Policy, calculation of unauthorized stormwater runoff discharge volumes, and application of the responsible parties doctrine during a three-day [ACL hearing](#) (January 10, 12, and 13, 2022).

Board staff and counsel on the Advisory Team advised the Board on a number of evidentiary and substantive arguments from both the Prosecution Team and the responsible parties. The sheer number and days of violations, volume of unauthorized sediment laden construction stormwater runoff discharges, and the continued and recurring failures to comply with best management practice (BMP) requirements of the local municipal ordinances and CGP were unprecedented within the San Diego region.

Chapter 2. Monitor and Assess

Clean Water Act Sections 303d and 305b Integrated Report. Following review of nearly a decade's worth of monitoring results, staff completed the region's periodic assessment of surface water body conditions and identification of impaired waters. The two assessments form the "Integrated Report" which combines reporting requirements from Clean Water Act sections 303d and 305b. The State Water Board approved the regional report in January 2022 and the United States Environmental Protection Agency approved the report in May 2022. The California 2020-2022 Integrated Report can be viewed in its entirety on the State Water Board [website](#). There is also an [interactive online map](#) displaying the condition and impaired status of all waterbodies assessed for the 2020-2022 Integrated Report. The San Diego Water Board and staff will use the

2020-2022 Integrated Report to inform where to focus efforts and resources to preserve, enhance, and restore the quality of California's water resources in our region.

Staff reviewed data from 358 waterbodies and assessed 3,998 waterbody-pollutant combinations resulting in findings that added 257 and removed 33 waterbody-pollutant combinations to the list of impaired waterbodies. There was an increase in listing and delisting during this cycle partially due to an increase in the amount of available data. The report identifies priority impaired waterbodies for actions to restore water quality for human and wildlife uses. Those priorities informed the adoption of the San Diego Water Board's [Triennial Basin Plan review workplan](#) adopted in December 2021.

Chapter 6. Strategize to Achieve Resilient Local Water Supply

Padre Dam NPDES Permit and the groundbreaking at the East County Advanced Water Purification Project Groundbreaking Ceremony

The San Diego Water Board reissued Order No. R9-2022-0003, *NPDES Permit for the Padre Dam Municipal Water District (Padre Dam) Ray Stoyer Water Recycling Facility* (Ray Stoyer WRF) on February 9, 2022. The Ray Stoyer WRF provides tertiary treatment of up to 2 million gallons per day (MGD) of wastewater from residences and commercial establishments within the cities of Santee and El Cajon, and the unincorporated community of Lakeside.

The Ray Stoyer WRF permit establishes requirements for the discharge of tertiary treated wastewater to Santee Lakes and Sycamore Creek, a tributary of the San Diego River. Consistent with the *Strategize for Healthy Waters* chapter of the Practical Vision, the permit integrates all applicable technology-based requirements, water quality-based effluent limitations, and receiving water quality standards to optimize protection of public health for recreational activities within Santee Lakes as well as water quality and beneficial uses of Sycamore Creek. Additionally, the permit includes provisions allowing for participation in regional monitoring and assessment programs in keeping with San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

The East County Advanced Water Purification Program (ECAWP Program), implemented by Padre Dam and members agencies of the ECAWP Joint Powers Authority (JPA), broke ground on June 1, 2022. The ECAWP Program is a collaborative effort by members of the JPA, which consists of Padre Dam, Helix Water District, the County of San Diego, and the City of El Cajon. As part of the ECAWP Program, the JPA will construct a new water recycling facility replacing the Ray Stoyer WRF and construct a new advanced water purification plant to produce highly treated recycled water. Highly treated recycled water produced from the advanced water purification plant will be blended with water in Lake Jennings and treated again at Helix Water District's R.M. Levy Water Treatment Plant before distribution as drinking water.

The treatment facilities that make up the ECAWP Program are scheduled to be completed in 2026. The ECAWP Program will generate up to 11.5 MGD of highly treated recycled water, meeting approximately 30 percent of current water supply demands for east San Diego County. The ECAWP Program will create a new, reliable, locally controlled source of potable water, which is consistent with the *Strategize to Achieve a Resilient Local Water Supply* chapter of the Practical Vision.

Attendees of the groundbreaking ceremony included representatives of the JPA, elected officials, water industry leaders, representatives of the San Diego Water Board and the U.S. Environmental Protection Agency.

City of Oceanside, Advanced Water Purification Facility, Indirect Potable Reuse for Groundwater Recharge Waste Discharge Requirements Adoption

The San Diego Water Board adopted its first indirect potable reuse permit for the City of Oceanside's (City) Advanced Water Purification Facility ([Order No. R9-2021-0100](#)). This permit allows the City to inject up to 3.0 million gallons per day of advanced treated recycled water from its Advanced Water Purification Facility into the groundwater aquifer of the San Luis Rey Hydrologic Unit. The City will send secondary treated wastewater from the San Luis Rey Water Reclamation Facility to the Advanced Water Purification Facility that will provide advanced treated recycled water for the groundwater recharge project. Advanced treated recycled water injected into the aquifer will mix with groundwater to increase the City's local drinking water supply. The City will extract the augmented groundwater 3 months after injection and treat the groundwater at its Mission Basin Groundwater Purification Facility before distribution for potable use. The State Water Resources Control Board's Division of Drinking Water will continue to regulate the production of potable water at the Mission Basin Groundwater Purification Facility.

Order No. R9-2021-0100 supports the use of advanced treated recycled wastewater as a reliable supplement to traditional water supplies and includes monitoring requirements for constituents of emerging concern consistent with the State Water Resources Control Board's [Recycled Water Policy](#). Adoption of this permit is consistent with the goals of the *Strategize to Achieve Resilient Local Water Supply* chapter of the San Diego Water Board's [Practical Vision](#). Indirect potable reuse projects are an important step to achieve a sustainable local water supply. The Board's approval of this project also supports the State of California's recognition of the human right to water, which calls on state agencies to consider how its activities impact and advance the human right to safe, clean, affordable, and accessible water to support basic human needs. The use of sustainable local water supply sources will help reduce the San Diego Region's dependence on imported water, increase the reliability of water supplies, promote drought resiliency, and ensure the State of California continues its role as a leader in recycled wastewater production and environmental protection.

NPDES Permit Reissuance for San Juan Creek Ocean Outfall and Addition of South Coast Water District's Doheny Desalination Project. The San Diego Water Board reissued the NPDES permit Order No. R9-2012-0012, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107417 with the adoption of Order No. R9-2022-0005 (2022 Order) in March 2022. The 2022 Order regulates the discharges of secondary-treated wastewater from four publicly owned treatment works (POTWs), waste brine from two groundwater treatment plants, and effluent from an urban runoff treatment plant through the San Juan Creek Ocean Outfall (SJCOO) to the Pacific Ocean and includes an additional discharge to the SJCOO for the disposal of brine from South Coast Water District's proposed Doheny Desalination Project. The Doheny Desalination Project proposes to use subsurface intakes, commingle the brine waste with wastewater from the POTWs, and discharge the commingled effluent through the existing SJCOO. Once constructed and fully operational, the Doheny

Desalination Project will produce 5 million gallons per day (MGD) of potable drinking water.

The adoption of the 2022 Order, with the inclusion of the Doheny Desalination Project, is consistent with Chapter 6 of the Practical Vision, *Strategize to Achieve Resilient Local Water Supply*, which states “the Water Board must use its authority to help achieve a resilient local water supply and advance water security by using local sources in a manner that improves water quality and reduces greenhouse emissions associated with water transport.” One of the efforts Chapter 6 cites for a sustainable local water supply is the “environmentally responsible use of groundwater and surface water.”

To assess the impacts from the Doheny Desalination Project and other facilities that discharge to the SJCOO, the 2022 Order includes a requirement to investigate alternatives for tracking the location and movement of the SJCOO wastewater plume and its potential encroachment on shoreline water contact recreational areas. This plume tracking requirement is consistent with Chapter 2 of the Practical Vision, *Monitor and Assess*, which states “The Water Board needs water quality information from monitoring and assessment programs to strategically carry out its Mission of protecting and restoring the health of waters in the San Diego Region.” The San Diego Water Board also included similar plume tracking investigative requirements recently included in NPDES permits for POTWs discharging to the ocean.

Core Program Accomplishments

Continued Remote 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 Year 21-22. In fact, 95% 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.

Additionally, timely compliance by the regulated community with Water Board orders and other requirements was generally considered to be an essential function during the COVID-19 pandemic and San Diego Water Board staff continued to respond, investigate and, when necessary, acted on issues and complaints related to non-compliance.

Memorandum of Agreement on U.S. Navy Maintenance Dredging of Contaminated Sediment in San Diego Bay

The San Diego Water Board Executive Officer and United States Department of the Navy (Navy) signed a Memorandum of Agreement (MOA), in December 2021. The main purpose of the MOA is to reduce the dispersion of contaminated sediments from Navy maintenance dredging projects into other areas of San Diego Bay. The MOA establishes standard receiving water limitations, monitoring requirements, and best management practices for the Navy’s maintenance dredging operations. Standardizing

these water quality protection requirements in the MOA will also expedite the issuance of Clean Water Act Section 401 Water Quality Certification for these projects. Having the MOA in place now is important because the Navy plans to conduct significant maintenance dredging in the Bay over the next five years, including the removal of approximately 62,000 cubic yards of contaminated bay sediment from naval vessel berthing and fleeting areas.