

**California Regional Water Quality Control Board
San Diego Region**

David Gibson, Executive Officer



**Executive Officer’s Report
November 9, 2022**

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The November report for the Tentative Schedule of Significant NPDES Permits, WDRs, and Actions, Agenda Items Requested by Board Members, and the attachments noted above are included at the end of this report.

Part A – San Diego Region Staff Activities

1. Personnel

Staff Contact: Dulce Romero

An updated San Diego Water Board staff list can be viewed at: [San Diego Regional Water Quality Control Board Staff List \(ca.gov\)](#)

Recruitment

We are actively recruiting for six positions: one limited-term Senior Environmental Scientist Specialist and one Office Technician in the Healthy Waters Branch, one Water Resource Control Engineer, one Graduate Student Intern, one Environmental Scientist and one Scientific Aid in the Surface Water Protection Branch.

Retirement

Whitney Ghoram retired on September 30, 2022, after 36 years of service at the San Diego Water Board. During this time Whitney worked in almost all of the water quality control programs at the Board. Her work included performing over 1,200 facility inspections, and reviewing hundreds of groundwater discharge applications, enrollments and terminations. Whitney started her career working for eight years on both permit writing and enforcement. She spent the next 17 years working with dewatering permits, renewing the San Diego Bay dewatering permit four times, holding workshops for all four renewals and making Board presentations. She then began working in the stormwater program and spent the next eleven years focusing largely on regulating industrial and construction discharges. She was the Board's lead industrial stormwater contact for many of the region's municipalities and dischargers. In 2016, she received the Regulator of the Year Award from the Industrial Environmental Association. Her contributions also included her work for years as Health and Safety Coordinator. With such a breadth and depth of experience, Whitney made significant contributions to achieving the goals of the Clean Water Act and Porter Cologne Water Quality Control Act through her dedication and steadfast professionalism.

Information regarding our vacancies is located on the CalCareers and San Diego Water Board websites: <https://calcareers.ca.gov/CalHRPublic/Search/AdvancedJobSearch.aspx>
https://www.waterboards.ca.gov/sandiego/about_us/employment/

2. Border Water Quality Update

Staff Contact: David Gibson

As of October 28, 2022, the beaches from Border Field State Park to Imperial Beach have been posted 301 consecutive days due to high fecal coliform concentrations resulting from sewage releases at Punta Bandera and several suspected locations between Playas de Tijuana and Playas de Rosarito. During 2022, closures extended as far north as the Hotel del Coronado. Real time beach status can be found at [County of San Diego Beach Water Quality \(sdbeachinfo.com\)](#)

On October 4 and 5, 2022 I participated in the USEPA Eligible Public Entities Coordination Group and public meetings regarding the USMCA projects. USEPA provided [updates](#) on the Programmatic Environmental Impact Statement. I provided an update on the proposed projects for the funding allocated for the Border rivers by the California Legislature. At present,

we are advising State Water Board Division of Financial Assistance on the pending projects proposed and identified by the State Water Board in July 2022:

- Tijuana River Trash Boom(s): Rural Community Assistance Center/Alter Terra \$4,000,000 Installation of trash boom in main channel.
- Sewage System Monitoring: US IBWC/CILA/CESPT \$200,000 Install SmartCovers or equivalent devices to monitor sewage system for maintenance and operations needs and early identification of failures in Tijuana.
- Smuggler's Gulch Improvement Project: County of San Diego - \$4,000,000. construction of a basin and trash boom, restoration of grade to remove wastes and reduce flooding in Matadero Canyon/Smuggler's Gulch.
- Brown Property Restoration: County of San Diego \$ 1,800,000. Removal of historically placed fill and waste and annually deposited sediment and trash in Tijuana River downstream of Hollister Avenue bridge to reopen a natural braided channel hydrology of the 25- year floodplain.

The US International Boundary and Water Commission (IBWC) is working with SDSU to establish a water quality monitoring station for the Tijuana River Channel. This new equipment will be adjacent to the existing IBWC flow monitoring equipment and will measure real time pH, conductivity, turbidity, chromomorphc dissolved organic matter (CDOM), tryptophan-like fluorescence (TLF), temperature, and dissolved oxygen.

Collection of this data will support research in cross-border loads of sediment and bacteria with data made available to IBWC, US EPA, City of Imperial Beach, NOAA, and the public.

The 2022 California Mexico Border Relations Council will meet on November 14, 2022 (1:00pm-4:00pm) at Rincon Government Center at 1 Government Center Ln, Valley Center, CA 92082. The meeting will be held in-person and via Zoom. Those planning to attend in-person should RSVP to Elizabeth.King@calepa.ca.gov, who is working with the hosts at Rincon Government Center to expedite visitor check-in.

[2022 California-Mexico Border Relations Council Meeting | CalEPA](#)

3. Stormwater Plume Tracking in the Tijuana River

Staff Contact: Vicente Rodriguez

NASA DEVELOP is partnering with the San Diego Water Board to map and characterize stormwater plumes from the Tijuana River using remote sensing. NASA DEVELOP will create and use a Google Earth Engine (GEE) script to track stormwater and wastewater plumes over time to assess their interactions and to determine the success of efforts at the United States and Mexico international border to improve coastal water quality. NASA DEVELOP plans to validate remotely sensed parameters with in-situ data. NASA DEVELOP also plans to create a tutorial guide to allow others to create the GEE script.

NASA DEVELOP is an applied sciences program which builds capacity in both participants and partners to use NASA Earth satellite observations to inform applications addressing environmental challenges. Participants are typically students or recent graduates who conduct

10-week feasibility studies, as a team, to address community concerns around the globe. There is more information about the program at the website <https://appliedsciences.nasa.gov/what-we-do/capacity-building/develop>.

Part B – Significant Regional Water Quality Issues

1. Lake San Marcos Update: Aeration Pilot Study Update (Attachment B-1)

Staff Contact: Sarah Mearon

Lake San Marcos is a seasonally stratified reservoir impaired by elevated phosphorus and nitrogen, excess algal growth, and low dissolved oxygen. The lake and San Marcos Creek, upstream and downstream of the lake, are on the California 303(d) list of impaired water bodies for several pollutants. These impairments interfere with the recreation and habitat beneficial uses of the lake. The Site Restoration Unit has provided oversight of investigation and restoration activities for this case since 2015.

Citizens Development Corporation (CDC), along with the County of San Diego, the Cities of San Marcos and Escondido, and Vallecitos Water District (collectively, the Parties), are cooperatively and voluntarily working to restore the water quality of Lake San Marcos and Upper San Marcos Creek. The Parties prepared a Remedial Investigation/Feasibility Study Report in 2016 that includes recommendations for lake and watershed restoration measures. One of the proposed remedies is the combination of a lake aeration system and a modified selective withdrawal system, the goal of which is to increase lake circulation, prevent stratification, and improve oxygenation in the lake.

The Parties installed and began operating Phase I of an aeration system at Lake San Marcos in April 2022. The system has successfully prevented lake stratification in the spring, summer, and early fall of 2022 by promoting vertical mixing of lake water in the deep portion of the lake. The system operates by pumping compressed air to 10 diffuser arrays located at the bottom of the lake. Lake waters mix as rising bubbles entrain water from the bottom of the lake and transport it to the lake surface. Vertical mixing counteracts differential thermal warming of surface waters in the summer months and promotes a thermally mixed condition (i.e., lake temperature is similar throughout the water column). Maintaining the lake in a mixed condition prevents stratification, which in turn reduces nutrient release from sediments and prevents the formation of a nutrient-rich anoxic layer at the bottom of the lake. A summary of the data collected to date is presented in the *Lake San Marcos Interim Aeration Pilot Study Progress Report*, which is available by contacting Executive Assistant, [Chris Blank](#).

The parties will submit an aeration pilot study report to the San Diego Water Board in December 2022, which will include recommendations on how the system might be optimized in future project phases. Board staff will continue to provide updates on Lake San Marcos as information becomes available.

2. Loma Alta Slough Phosphorous TMDL Water Quality Restoration Plan

Staff Contact: Jody Ebsen

Website:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/loma_alta_tmdl.html

Loma Alta Slough in the City of Oceanside is on the Integrated Report (303(d) List/305(b) Report) listed as an impaired water with eutrophic conditions, and recent data indicate improvements to water quality are occurring. Board staff pursued a Total Maximum Daily Load (TMDL) investigation and identified phosphorus as the pollutant of concern and the pollutant sources as dry-weather discharges conveyed by the municipal storm drains (MS4) to Loma Alta Slough. The [Regional MS4 Permit](#) (Order R9-2013-0001, as amended) prohibits such non-storm water discharges into the MS4, and discharges from the MS4 that cause a condition of pollution in receiving waters. The San Diego Water Board then adopted Resolution No. [R9-2014-0020](#) to reduce eutrophic conditions and restore Loma Alta Slough in June 2014. To discuss current water quality conditions, San Diego Water Board staff from the Restoration and Protection Planning and the Storm Water Management units met on site with staff from the City of Oceanside and their consultants, Weston Solutions, Inc. on August 9, 2022.

The City of Oceanside identified elimination of dry-weather flows from the surrounding Loma Alta watershed as a high priority and focused its efforts to eliminate these discharges. Implemented strategies (such as inspections, public education and providing a public hotline to report illicit discharges) and water quality monitoring are reported annually in the [Carlsbad Watershed Management Area Water Quality Improvement Plan](#).

Scientific research on nutrient impaired waters has demonstrated that nutrient concentrations are only one indicator of eutrophic waters, and other factors like biological indicators need to be considered. Loma Alta Slough TMDL investigation considered several potential indicators for targets and ultimately identified macroalgae biomass and percent cover as the numeric targets to indicate restored conditions. This approach uses measures of biological integrity by linking ecological response indicators such as algae biomass, water/sediment chemistry, fish and wildlife with co-factors such as hydraulic residence time, circulation, water temperature, and light availability in the water column.

Data collected by the City of Oceanside indicate that conditions have improved over the years and the numeric targets for macroalgae biomass and percent cover have been met since 2019. Past conditions showed the Slough covered with algae. Now Slough conditions appear healthier with clear expanses of water. The data collected in 2022 will be reported in the Water Quality Improvement Plan that is due in January 2023.

3. Update on Harmful Algal Blooms (HABs) in the San Diego Region

Staff Contact: Carey Nagoda

Background

Cyanobacteria and algae naturally occur in freshwater and estuarine environments. They perform many ecosystem roles, including producing oxygen and being a food source for aquatic fauna. However, under certain conditions, cyanobacteria and/or algae can rapidly grow causing "blooms." These blooms can be harmful to humans and animals if the cyanobacteria produce toxins or, once the cyanobacteria and/or algae die and decay, decrease dissolved oxygen levels. Low dissolved oxygen levels can result in impacts to wildlife (e.g., fish kills).

State Water Board

In response to Assembly Bill 834, the State Water Board received funding to hire five staff for the Freshwater and Estuarine Harmful Algal Bloom (FHAB) Program. The FHAB Program leads and coordinates HABs monitoring and response activities across the state, providing complaint tracking and response assistance. Table 1 shows the total number of HABs reports from the past four years.

Table 1. HABs reports provided to the Water Boards

	2018	2019	2020	2021	2022
TOTAL REPORTS	190	241	370	602	565 (as of 8/31/2022)

San Diego Water Board

Staff in the Monitoring, Assessment and Research Unit (MARU) conduct HABs monitoring as time and funding allow, and to comply with Assembly Bill 834, which requires the regions to respond to bloom notifications and conduct routine monitoring, though no staff positions were provided to the San Diego Region to implement the requirements mandated by Assembly Bill 834. The San Diego Water Board uses several approaches for monitoring potentially harmful blooms. These include complaint response, [satellite imagery notification](#), and routine sampling before the three major holidays (Memorial Day, July 4th and Labor Day) during bloom season, also referred to as pre-holiday assessments. In 2022, MARU responded to complaints at six different waterbodies, satellite imagery notifications at two reservoirs, and focused pre-holiday efforts at nine streams with high recreational use by dogs and humans.

Complaint Response

Complaints of potentially harmful cyanobacteria blooms are received from the public via an [online bloom reporting tool](#), email or phone call. This year's complaints included visual observations, a concern about a dog ingesting river water, dead fish, and human leg pains. MARU staff assessed each site visually. When a potential HAB was present, samples were collected for cyanobacteria species identification, cyanotoxin analyses and/or cyanotoxin gene copy concentration, where appropriate. When a HAB was not present (e.g., duckweed or other harmless aquatic plant), samples were not collected.

Two of the six complaint sites contained cyanobacteria blooms with toxins above [trigger levels](#) and warranted sign postings (Figure 1). Posting signage is not legally required but is strongly encouraged by MARU staff. The State of California has created signs that are freely available for use on the State's harmful algal bloom website. The San Diego Water Board also has pre-printed signs available for use upon request. The San Dieguito River at Arroyo Preserve, an

area with hiking trails where people bring dogs, had Caution signs posted from June through September, until the bloom dissipated. MARU staff conducted the initial and follow-up sampling, and the property owner (Rancho Santa Fe Association) is now considering conducting routine monitoring at the site. The San Luis Rey River estuary, where many children and dogs play in the water, had Caution signs posted from August through September (Figure 1), until the toxic cyanobacteria mats (Figure 2) were washed out by wave action and rain.



Figure 1 One of several signs posted at the San Luis Rey River estuary warning the public about the toxic cyanobacteria bloom.



Figure 2 Mats of cyanobacteria in the San Luis Rey River estuary

Other Monitoring Efforts

Notifications are sent to San Diego Water Board staff when satellite data, processed by the National Oceanic and Atmospheric Administration, indicate that a cyanobacteria bloom is likely occurring at a larger reservoir in the region. When the satellite tool first became available about six years ago, MARU staff responded to all notifications. Since then, many reservoir managers have incorporated cyanobacteria and cyanotoxin monitoring into their own programs. An excellent example is Vista Irrigation District at Lake Henshaw. They conduct weekly sampling and provide updates to the San Diego Water Board when laboratory results are available. Lake Henshaw has been experiencing a bloom all year, and Caution signs are posted at multiple locations around the reservoir. Because of the efforts put forth by reservoir managers, sampling reservoirs for cyanobacteria and cyanotoxins is a lower priority for MARU.

Pre-Holiday Assessments

HABs monitoring in streams, where people and dogs are known to recreate (whether it is allowed or not) is a priority for the MARU. This is where all resources were focused during the 2022 pre-holiday assessments. These assessments are conducted statewide, and lab funding is provided by the State Water Board. Sampling before each holiday was conducted in the San Diego region at two sites in the Mount Laguna area of Cleveland National Forest (Big Laguna Lake and Water Of The Woods), Cedar Creek Falls, Chollas Lake, Escondido Creek at Elfin Forest Reserve, Pine Valley Creek swimming hole, San Diego River at the YMCA, San Diego River RCP Ponds, and the Santa Margarita River swimming hole (sampling efforts provided by The Wildlands Conservancy for this site). All samples analyzed before the major holidays provided great news for the Region. While some sites contained some cyanobacteria, no HABs were present, and no sites warranted postings. The State Water Board produces press releases for each pre-holiday assessment, and the regions work with the water body managers where necessary.

While no HABs were present for the pre-holiday sampling, San Diego Water Board staff conducted follow-up sampling at Cedar Creeks Falls after the pre-holiday assessments since it looked like a bloom was starting just before the trail was closed to the public for several weeks in August and September due to extreme temperatures. Once the trail re-opened, samples were collected on September 19th. *Microcystis* was observed, covering the water surface of the ponded area below the falls, and the concentration of Microcystin toxins was very high (94.6 ug/L), above the "Danger" threshold. MARU staff immediately notified Cleveland National Forest Rangers and provided signs for their use. In addition, the Forest Service and San Diego Water Board posted a notification of the danger on multiple social media outlets. MARU staff are working with the Forest Service to conduct follow-up sampling as conditions improve.

Data Availability

All monitoring results are accessible to the public and displayed on the [FHABs incidents reporting map](#).

4. Enforcement Actions for July, August, and September 2022(Attachment B-4)

Staff Contact: Chiara Clemente

During the months of July, August, and September 2022, the San Diego Water Board issued 5 Administrative Civil Liability Orders, 1 Investigative Order, 2 Cleanup and Abatement Orders, 7 Notices of Violation, and 2 Staff Enforcement Letters. A summary of each written enforcement action taken is provided in the attached table. The State Water Board's [Enforcement Policy](#) contains a brief description of the kinds of enforcement actions the Water Boards can take.

Additional information on violations, enforcement actions, and mandatory minimum penalties is available to the public from the following on-line sources:

State Water Board Office of Enforcement webpage:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/

California Integrated Water Quality System (CIWQS):

http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

State Water Board GeoTracker database: <https://geotracker.waterboards.ca.gov/>

5. Sanitary Sewer Overflows in the San Diego Region – July and August 2022 (Attachment B-5)

Staff Contact: Fisayo Osibodu

Sanitary sewer systems experience periodic failures resulting in sanitary sewer overflow (SSO) discharges that may affect waters of the United States and/or the State of California (State). There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), that can influence the likelihood of an SSO and the volume of the discharge. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station failures, power outages, excessive stormwater inflow or groundwater infiltration, debris blockages, failures due to aging sanitary sewer systems, lack of proper operation and maintenance, insufficient capacity, and contractor-caused damages.

Many SSOs are preventable with adequate and appropriate facilities, source control measures, and proper operation and maintenance of the sanitary sewer system.

SSO discharges from public sewage collection systems and private laterals into the San Diego Region can contain high levels of suspended solids, pathogens, toxic pollutants, nutrients, and oil and grease. SSO discharges can pollute surface and ground waters, thereby threatening public health, adversely affecting aquatic life, and impairing the recreational use and aesthetic enjoyment of surface waters. Typical impacts of SSO discharges include closure of beaches and other recreational areas, inundation of property, and pollution of rivers, estuaries, and beaches.

State agencies, municipalities, counties, districts, and other entities (collectively referred to as public entities) that own or operate sewage collection systems report SSO spills through an on-line database system, the *California Integrated Water Quality System* (CIWQS). These SSOs are required to be reported under the [Statewide General SSO Order](#),¹ the [San Diego Regional General SSO Order](#),² and/or individual National Pollutant Discharge Elimination System (NPDES) permit requirements. Some federal entities³ report this information voluntarily. Most SSO reports are available to the public on a real-time basis at the [State Water Board Public SSO Report Database](#).

Details on the reported SSOs and private lateral sewage discharges (PLSDs) in July and August 2022 are provided in the following attached tables:

- Table 1: July 2022 - Summary of Public and Federal Sanitary Sewer Overflow Events
- Table 2: August 2022 - Summary of Public and Federal Sanitary Sewer Overflow Events
- Table 3: July 2022 - Summary of Private Lateral Sewage Discharge Events
- Table 4: August 2022 - Summary of Private Lateral Sewage Discharge Events
- Table 5: July and August 2022 - Summary of Sewage Discharges by Source

A summary view of information on sewage spill trends are provided in the following attached figures:

- Figure 1: Number of Spills per Month

¹ State Water Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* as amended by Order No. WQ 2013-0058-EXEC, *Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*.

² San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

³ Marine Corp Base Camp Pendleton reports sewage spills to CIWQS as required by its individual NPDES permit, Order No R9-2019-0167, NPDES Permit No. CA0109347, *Waste Discharge Requirements for the Marine Corps Base, Camp Pendleton, Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant at Haybarn Canyon, Discharge to the Pacific Ocean through the Oceanside Ocean Outfall*. The United States Marine Corps Recruit Depot and the United States Navy voluntarily report sewage spills through CIWQS.

- Figure 2: Volume of Public SSOs per Month
- Figure 3: Volume of Federal SSOs per Month
- Figure 4: Volume of PLSDs per Month

The figures show the number and total volume of sewage spills per month from July 2021 through August 2022. During this period, 27 of the 64 collection systems in the San Diego Region reported one or more sewage spills. Thirty-seven collection systems did not report any sewage spills. A total of 214 sewage spills were reported and more than 125,401 gallons of sewage reached surface waters.

Additional information about the San Diego Water Board sewage overflow regulatory program is available on the [San Diego Water Board's SSO Website](#).

6. Transboundary Flows from Mexico into the San Diego Region – July and August 2022 (Attachment B-5)

Staff Contact: Vicente Rodriguez

Water and wastewater in the Tijuana River and from canyons located along the international border ultimately drain from the City of Tijuana, Baja California, Mexico (Tijuana) into the United States. The water and wastewater flows are collectively referred to as transboundary flows. The United States Section of the International Boundary and Water Commission (USIBWC) has built canyon collectors that capture dry weather transboundary flows for treatment at the South Bay International Wastewater Treatment Plant (SBIWTP) located at the United States/Mexico border. Dry weather transboundary flows that are not captured by the canyon collectors for treatment at the SBIWTP, such as flows within the main channel of the Tijuana River,⁴ are reported by the USIBWC pursuant to [Order No. R9-2021-0001](#), the National Pollutant Discharge Elimination System (NPDES) permit for the SBIWTP discharge. These uncaptured flows can enter waters of the United States and/or the State of California (State), potentially polluting the Tijuana River Valley and Estuary, and south San Diego beach coastal waters.

According to the 1944 *Water Treaty for the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* and stipulations established in [IBWC Minute No. 283](#), the USIBWC and the Comisión Internacional de Límites y Aguas (CILA)⁵ share responsibility for addressing border sanitation problems, including transboundary flows. Efforts on both sides of the border have led to the construction and ongoing operation of several pump stations and treatment plants to reduce the frequency, volume, and pollutant levels of transboundary flows. This infrastructure includes but is not limited to the following:

- The SBIWTP, located just north of the United States/Mexico border, which provides secondary treatment for a portion of the sewage from Tijuana and transboundary flows conveyed from canyon collectors located in Smuggler's Gulch, Goat Canyon, Canyon del

⁴ Tijuana River transboundary flows typically consist of a mixture of groundwater, urban runoff, storm water, treated sewage wastewater, and untreated sewage wastewater from infrastructure deficiencies and other sources in Mexico.

⁵ The Mexican section of the IBWC.

Sol, Stewart's Drain, and Silva Drain. The secondary-treated wastewater is discharged to the Pacific Ocean through the South Bay Ocean Outfall, in accordance with USIBWC's NPDES permit, Order No. R9-2021-0001.

- Several pump stations and wastewater treatment plants (WWTPs) in Tijuana, including the San Antonio de los Buenos WWTP, the La Morita WWTP and the Arturo Herrera WWTP.
- The River Diversion Structure and Pump Station CILA in Tijuana which diverts dry weather transboundary flows from the Tijuana River. The flows are diverted to a discharge point at the Pacific Ocean shoreline, approximately 5.6 miles south of the United States/Mexico border; or the flows can be diverted to SBIWTP or another wastewater treatment plant in Tijuana, depending on how Tijuana's public utility department (CESPT) directs the flow into the collection system. The River Diversion Structure is not designed to collect wet weather river flows and any river flows over 1,000 liters per second (35.3 cubic feet per second, 22.8 million gallons per day).

In July and August 2022, there were a total of two reported transboundary flows resulting in more than 470.2 million gallons of contaminated water flowing from Mexico into the United States.

Details on the transboundary flows reported in July and August are provided in the attached tables:

- Table 1: July and August 2022 - Summary of Transboundary Flows from Mexico by Event
- Table 2: July and August 2022 - Summary of Transboundary Flows from Mexico

A summary view of information on transboundary flow trends are provided in the following attached figures:

- Figure 1: Number of Transboundary Flows per Month
- Figure 2: Tijuana River Transboundary Flow Volume per Month
- Figure 3: Canyon Collector Transboundary Flow Volume per Month

These figures show the number and volume of transboundary flows per month from July 2021 through August 2022. During this period, there were a total of 64 reported transboundary flows resulting in more than 9.1 billion gallons of contaminated water flowing from Mexico into the United States. The number and volume of transboundary flows has increased compared to previous years due to infrastructure issues in Mexico and at the SBIWTP.

While the full extent of the infrastructure issues in Mexico is unknown, the San Diego Water Board is aware of several infrastructure issues at the SBIWTP. Notably, the gate valves at Junction Box 1 (JB1) of the SBIWTP are largely inoperable. With the gate valves inoperable, USIBWC currently has limited control over the amount of flow entering the SBIWTP other than through communications with Mexico to limit the flow. Under the terms of the San Diego Water Board's Cease and Desist Order No. R9-2021-0107, as amended by Order No. R9-2021-0220 (CDO), USIBWC was required to complete the design for the repair of the gate valves no later than January 31, 2022.

The preliminary design was completed by January 31, 2022. However, USIBWC has been unable to award a contract for the final design and the repair of JB1. In the most recent update

to their CDO Compliance Assurance Report, USIBWC has stated the status of the contract award date is April 30, 2023, and the revised projected completion date of JB1 is now October 30, 2024.

On December 13, 2021, USIBWC notified the San Diego Water Board that a section of the International Collector (also referred to as the International Interceptor) has deteriorated. The International Collector is a critical wastewater pipeline in Mexico that conveys Tijuana wastewater and Tijuana River flows to Pump Station 1 (PB1) in Mexico or the SBIWTP. The deteriorated section of the International Collector is located beneath the highway just across the United States/Mexico border at Stewart's Drain (see Figure 4). When the International Collector is pressurized above typical operational wastewater flows, the wastewater backs up and leaks from the deteriorated section and flows into the United States at Stewart's Drain. The International Collector can become over pressurized when pumping capacity at PB1 is insufficient during peak flows and when capacity is reduced due to power outages, pump failures, or blockages within the collection system. The number of transboundary flows at Stewart's Drain has increased because of the deteriorated section of the International Collector. In response to the increase in transboundary flows at Stewart's Drain, USIBWC, CESPT, and CILA implemented several corrective actions to reduce the number and volume of transboundary flows at Stewart's Drain. On January 15, 2022, CESPT and CILA shut down Pump Station CILA to relieve pressure on the deteriorated section of the International Collector. On January 28, 2022, Pump Station CILA was brought back online but at a reduced pumping capacity. The reduced flow from Pump Station CILA decreased but did not eliminate the transboundary flows at Stewart's Drain. On February 8, 2022, USIBWC raised the gate at JB1 to allow additional flow into the SBIWTP and further reduce backpressure on the International Collector. Raising the gate on JB1 appears to have resolved the transboundary flows at Stewart's Drain. It is currently unknown whether there is an obstruction in the collection system that resulted in additional backpressure, or if the International Collector has deteriorated such that it can no longer withstand typical backpressure in the system.

Additional information about sewage pollution within the Tijuana River Watershed is available on the [San Diego Water Board's Tijuana River Watershed Website](#).

Part C – Statewide Issues of Importance to the San Diego Region

1. Fiscal Year 21-22 Invoice Collection Report and Fiscal Year 22-23 Annual Fee Schedule

Staff Contact: Kimberly A. McMurray-Cathcart

Payment of annual fees is required by Water Code section 13260. If a person discharges waste or proposes to discharge waste that could affect the quality of the waters of the State, then a report of waste discharge should be submitted to the appropriate Regional Water Board and annual fees should be paid. The amount of the annual fees scheduled for each type of discharge are reviewed every year by the State Water Board. The State Water Board is required by Water Code section 13260 to adjust fees annually to conform to the revenue levels set forth in the Budget Act. Following review and any adjustment, the State Water Board adopts regulations which establish an annual schedule of fees in accordance with Water Code

section 13260. The State Water Board adopted the annual schedule of fees for Fiscal Year (FY) 2022-23 on 20 September 2022.⁶

Annual fees are collected through scheduled invoicing of dischargers by the State Water Board. Annual fee revenue is deposited in the Waste Discharge Permit Fund (WDPF), as required by Water Code section 13260. Inquiries from dischargers about the nature, basis, and content of the invoices sent by the State Water Board are fielded by the Fee Coordinators at the Regional Water Boards.

Distinct from WDPF annual fees, Site Cleanup Program (SCP) dischargers are not subject to invoicing for payment of annual fees under Water Code section 13260. Instead, Water Code section 13304 authorizes the Regional Water Boards to recover costs associated with the oversight of clean up at sites where a discharge of waste has occurred, and that discharge creates or threatens to create a condition of pollution or nuisance. The SCP is funded from the Cleanup and Abatement Account (Cleanup Account), oversight costs are billed to responsible parties pursuant to Water Code section 13365, and the costs recovered are deposited back into the Cleanup Account in accordance with Water Code section 13441. The State Water Board invoices dischargers on behalf of the Regional Water Boards for oversight work performed by staff assigned to an SCP site.

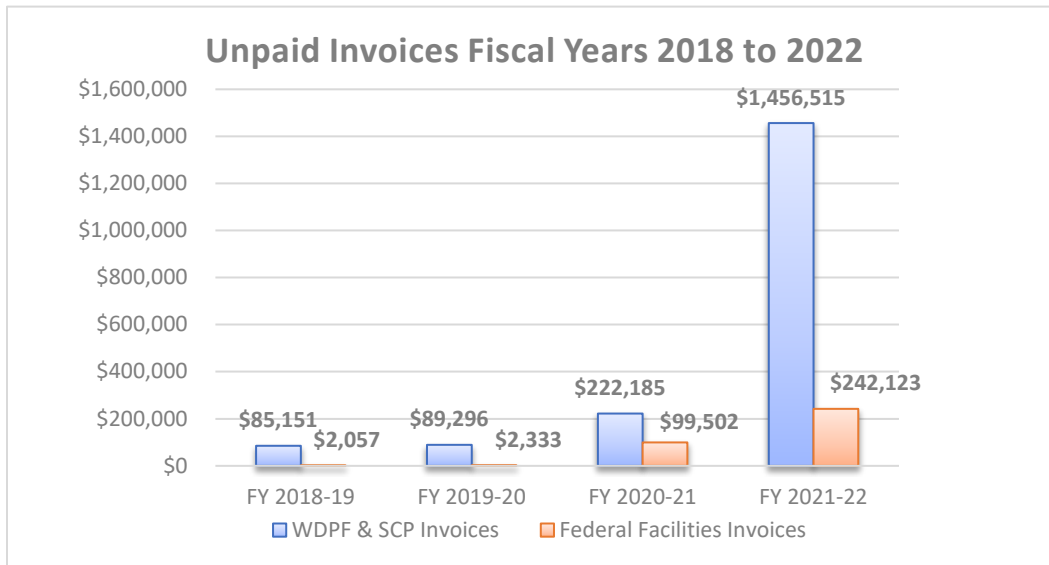
Collection of WDPF and SCP Fees Fiscal Years 2018-19 to 2021-22

The State Water Board generated 3,121 WDPF invoices for San Diego Water Board dischargers in FY 2021-22. The invoices represented \$12,345,094 in revenue for the WDPF; approximately 18 percent more revenue than was invoiced in FY 2020-21. Increased revenue for the WDPF in FY 2021-22 from invoices generated in the San Diego region is largely attributable to increases in annual fees adopted in the FY 2021-22 Fee Schedule and an increase in enrollments for NPDES construction stormwater coverage.

The State Water Board sent San Diego Water Board responsible parties in the SCP 186 invoices for work performed between July 2021 and June 2022. The invoices represented \$792,036 in Cleanup Account recovery costs, which is a 7.26% percent increase in recovery costs billed over the same period in FY 2020-21.

⁶ The Fee Schedule is in the California Code of Regulations title 23, section 2200 (Fee Schedule). The FY 2022-23 Fee Schedule will be lodged with the Office of Administrative Law and filed with the Secretary of State prior to becoming regulations. The Fee Schedule can be found at https://www.waterboards.ca.gov/resources/fees/water_quality/.
<http://www.waterboards.ca.gov/resources/fees/>

As of September 2022, the total amount of unpaid WDPF and SCP invoices from FY 2018-19 through FY 2021-22 is \$1,853,148. Of that total, \$346,015 is owed by federal agency facilities.



The total amount of unpaid invoices for each fiscal year between July 2018 and June 2022 is displayed above alongside the amounts attributable to federal facilities. Overall, receivables generally decrease over time due to persistent collection efforts. For example, as of 1 July 2021 the total amount of unpaid WDPF and SCP invoices for FY 2020-21 was \$406,738 with \$212,750 attributable to federal facilities. As of 1 July 2022, as reflected above, this amount was reduced by \$193,988.

Process for Collection of Unpaid Invoices

Thirty days after a WDPF annual fee or SCP invoice is sent, payment to the State Water Board is due (Due Date). Following the Due Date, the State Water Board Division of Administrative Services (DAS) pursues payment compliance through a notice process to dischargers with unpaid invoices. DAS mails delinquent parties a Demand for Payment within 30 days following the Due Date, a Notice of Violation within 60 days, and then a Final Collection Letter within 90 days. The Final Collection Letter notifies a discharger that the overdue payment will be sent to a collection agency.

Across the State, there is about a 98 percent success rate collecting amounts due on invoices from dischargers. The remaining two percent of past due invoices are sent to a collection agency. The San Diego Water Board relies on the DAS process and has generally pursued civil liability for past due annual fees through an Administrative Civil Liability (ACL) complaint only when the discharger is facing an ACL for other violations.

Pursuant to Water Code section 13261, the Water Boards can assess civil liability in an amount up to \$1,000 per day for unpaid annual fee invoices. Unpaid annual fee invoices may also justify rescission of waste discharge requirements, including storm water and other National Pollutant Discharge Elimination System (NPDES) permits. Under Water Code section 13304, a judgment lien may be recorded on a property where SCP oversight costs have not been recovered from a discharger and that lien may be foreclosed by the State to recover money on the judgment lien.

Federal facilities do not receive Demands for Payment, Notices of Violation and Final Collection Letters for failure to pay invoices, as overdue payments attributable to federal agency facilities are referred to the State Water Board, Office of the Chief Counsel, for collection.

Fiscal Year 2022-23 Annual Fee Schedule Highlights

The FY 2022-23 Fee Schedule was adopted by the State Water Board as proposed by DAS on 20 September 2022. Annual fees will increase across all programs in FY 2022-23, except NPDES Stormwater. The increase in annual fees ranges from 3 to 5 percent in all other programs except for the Water Quality Certification/401 Cert program (WQC) which will increase by 13.1 percent. While no annual fee increase was proposed for the NPDES Stormwater program, two new stormwater fee categories were adopted: for Statewide programmatic broadband construction projects; and Regionwide programmatic fees for linear projects.

Budget cost drivers included one Budget Change Proposal (BCP). The BCP was for a technology refresh to replace outdated equipment and improve security. The budget also included a 2.42 percent increase (the Water Boards' share) for the cost of the services provided by State operations, primarily services provided by the State Controller's office. In FY 2021-22 the budget also increased 2.1 percent to incorporate a pro-rata Water Boards' share of the cost of the State Controller's Office to support finance administration functions Statewide. However, these budget cost drivers in FY 2022-23 did not result in significant increases in fees to meet revenue generation expectations in the budget.

Revenues in FY 2021-22 exceeded expenditures in all programs except the Cannabis and the WQC programs. Adequate revenues were generated largely because deferrals of fee increases adopted by the State Board in FY 2020-21 (during the height of COVID-19) were discontinued in FY 2021-22 and full annual fee increases to support the programs were implemented last year. Theoretically, this could have resulted in no annual fee increases in FY 2022-23, but for the need to ensure a prudent WDPF reserve.

Close to "real time" WDPF balances are now available after many years of struggling to ascertain the status of the WDPF reserve during the multiple year transition to the Statewide accounting system FI\$Cal. The beginning balance of the WDPF at the end of FY 2021-22 (30 June 2022) provided DAS with projections of what the WDPF balance would be based on the existing FY 2021-22 Fee Schedule if no increase in annual fees was adopted in FY 2022-23. Based on budget expenditures and projections of revenue anticipated at the end of FY 2022-23, DAS determined the WDPF reserve could fall below 1 percent, given fluctuations in revenue dependent on the number of enrollments and variables associated with collection of past due invoices. Based on this, the State Water Board increased annual fees across most programs to ensure a prudent WDPF reserve of 5 percent, except NPDES Stormwater, given revenue generated in FY 2021-22 and projected revenue in FY 2022-23 was and would be sufficient to meet a prudent WDPF reserve.

Following the State Board resolution to adopt the Fee Schedule, the proposal will be filed with the Office of Administrative Law (OAL) for review as emergency rulemaking under Government Code section 11342.545. OAL allows interested persons 5 calendar days to submit comments on the proposed Fee Schedule under Government Code section 11349.6. The Fee Schedule is expected to be approved by OAL and filed with the California Secretary of State in

November of 2022. The Fee Schedule will be effective as a regulation as of the date it is filed with the Secretary of State and DAS can begin to generate invoices. The State Water Board anticipates invoicing for FY 2022-23 annual fees will begin for some programs in December 2022.⁷ Throughout the fiscal year, approximately 26,000 invoices will be generated and mailed, the staggered timing being associated with specific programs. Typically, about 5 percent of invoiced parties contact the San Diego Water Board Fee Coordinator with questions. Some inquiries, such as requests to terminate or transfer permit coverage, involve follow-up actions facilitated with program staff.

⁷ DAS generates invoices based on information entered by San Diego Water Board staff into the California Integrated Water Quality System database which can be found at (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/) and by State and Regional Water Boards staff in the Storm Water Management and Tracking System database which can be found at (https://www.waterboards.ca.gov/water_issues/programs/stormwater/smarts/).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

Significant NPDES Permits,
WDRs, and Actions of the
San Diego Water Board

November 9, 2022
APPENDED TO EXECUTIVE OFFICER'S REPORT

**TENTATIVE SCHEDULE
SIGNIFICANT NPDES PERMITS, WDRs, AND ACTIONS
OF THE SAN DIEGO WATER BOARD**

Action Agenda Items – San Diego Water Board

**December 14, 2022
San Diego Water Board**

Action Agenda Item	Action Type	Written Comments Due
PFAS Update. <i>(Brian McDaniel)</i>	Informational Item	N/A
DDW Update and Introduction <i>(David Gibson)</i>	Informational Item	N/A
State of the Ocean Reports by the San Elijo Joint Powers Authority (SEJPA) and the Encina Wastewater Authority (EWA), Status and Trends of Water Quality Conditions in the Vicinity of the San Elijo Ocean Outfall and the Encina Ocean Outfall (The SEJPA and EWA Reports are required in the Monitoring and Reporting Program for the NPDES permits for discharges through the San Elijo Ocean Outfall to the Pacific Ocean (SEJPA, San Elijo Water Reclamation Facility, Order No. R9-2018-0003, NPDES Permit No. CA0107099) and through the Encina Ocean Outfall to the Pacific Ocean (EWA, Encina Water Pollution Control Facility, Order No. R9-2018-0059 (NPDES Permit No. CA0107395)). Note: Discussion during this item will be limited to the matters presented in the SEJPA and EWA Reports and no action will be taken. <i>(Joann Lim)</i>	Informational Item	N/A

**January 2023
No meeting scheduled**

February 8, 2023
San Diego Water Board Meeting Room

Action Agenda Item	Action Type	Written Comments Due
Administrative Civil Liability for violations of Construction General Storm Water Permit. <i>(Christina Arias)</i>	ACL Hearing	TBD
Department of Defense: Select Installation Restoration Site Updates. <i>(Sean McClain)</i>	Informational Item	N/A
Enforcement Update from State Water Board Office of Enforcement. <i>(Chiara Clemente)</i>	Informational Item	N/A

March 8, 2023
San Diego Water Board Meeting Room

Action Agenda Item	Action Type	Written Comments Due
Rescission of Order No. 95-34, Waste Discharge Requirements for Outdoor World RV Park, Inc., Outdoor World Retreat & RV Park (aka Boulevard KOA) (Tentative Order No. R9-2023-0008). <i>(Brandon Bushnell)</i>	Waste Discharge Requirement Reissuance	TBD
Rescission of Order No. 94-93, Waste Discharge Requirements for the County of San Diego, Potrero Park near Potrero (Tentative Order No. R9-2023-0002). <i>(Mahsa Izadmehr)</i>	Waste Discharge Requirement Reissuance	12/17/2022
NPDES Permit Amendment of Order No. R9-2021-0001, NPDES No. CA0108928, Waste Discharge Requirements for the United States Section off the International Boundary and Water Commission, South Bay International Wastewater Treatment Plant Discharge to the Pacific Ocean Through the South Bay Ocean Outfall (Tentative Order No. R9-2022-0133). <i>(Vicente Rodriguez)</i>	NPDES Permit Amendment	TBD

Action Agenda Item	Action Type	Written Comments Due
General Waste Discharge Requirements for San Diego Bay Shipyards, San Diego County (Tentative Order No. R9-2023-0012, NPDES No. CAG039001). <i>(Debbie Phan)</i>	General NPDES Permit Reissuance	TBD

Agenda Items Requested by Board Members**September 9, 2020**

Requested Agenda Item	Board Member	Status
Update on new scientific information regarding climate change and how we are including climate change considerations in our work.	Abarbanel	Ongoing

February 10, 2021

Requested Agenda Item	Board Member	Status
Update about the range of chemicals that might cause problems with the symporter of the fetus.	Olson	Winter 2022-23

March 10, 2021

Requested Agenda Item	Board Member	Status
Annual update on the progress and accomplishments of the Project Clean Water program, including information related to the impacts of the program on water quality.	Abarbanel, Warren	Ongoing
Region-wide workshop regarding the water quality issues in the Tijuana River Valley, including a discussion of water quality objectives and steps needed to achieve them.	Abarbanel	2022

April 14, 2021

Requested Agenda Item	Board Member	Status
Update from State Board on the lessons learned regarding the use of Zoom remote meeting platform for Board Meetings to inform how the Regional Boards move forward when we return to the office and hold Board meetings in person	Warren	2022
Information regarding the Water Board's Training Academy climate change courses	Abarbanel	November 2022

June 9, 2021

Requested Agenda Item	Board Member	Status
Update about the issues associated with the South Orange County Wastewater Authority's (SOCWA's) Coastal Treatment Plant being in a fire zone.	Warren	2022

August 11, 2021

Requested Agenda Item	Board Member	Status
Drought and sustainability meeting with County Water Authority to find out how we can support their efforts	Abarbanel	2022

December 8, 2021

Requested Agenda Item	Board Member	Status
Update on the Contact Water Recreation (REC-1) Water Quality Objectives project, with information regarding the use of HF-183 in particular.	Olson	2022

February 9, 2022

Requested Agenda Item	Board Member	Status
Update on homeless issues along the San Diego River and efforts being made to address the issues	Strawn	Summer 2022

March 9, 2022

Requested Agenda Item	Board Member	Status
Update on SOCWA Ocean Acidification and Hypoxia Model.	Abarbanel, Strawn	Summer 2022

May 11, 2022

Requested Agenda Item	Board Member	Status
Atmospheric Rivers Presentation from Dr. Marty Ralph, Scripps Institution of Oceanography	Abarbanel	Fall 2022

August 10, 2022

Requested Agenda Item	Board Member	Status
Lake San Marcos Update – Aeration Treatment data	Abarbanel	November 2022
Lockheed Martin Tow Basin Cleanup Updates	Abarbanel, Olson	Ongoing
Environmental Justice outreach event	Warren	Summer 2023
Agricultural effects resulting from Colorado River water allocation reductions.	Olson	Ongoing
Update on the PFAS investigation at the San Diego International Airport	Olson	December 2022
Update on current status and future plans for the City of San Diego Pure Water Project	Abarbanel	Winter 2022-23
Update on harmful algal blooms in the San Diego Region	Olson	Winter 2022-23

Enforcement Actions for July, August, and September 2022

NPDES WASTEWATER

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
7/29/2022	<u>Administrative Civil Liability Order No. R9- 2022-0063</u>	San Diego City Metropolitan Wastewater Dept. (Public Utilities), Point Loma Wastewater Treatment Plant & Ocean Outfall, San Diego	Settlement Order in the amount of \$3,000 resolving mandatory minimum penalties (MMPs)	<u>National Pollutant Discharge Elimination System (NPDES) Order No. R9-2017- 0007</u>
7/29/2022	<u>Administrative Civil Liability Order No. R9- 2022-0070</u>	CVS Pharmacy, CVS Permanent groundwater extraction (GW Ex) 5455 La Jolla Blvd., La Jolla	Settlement Order in the amount of \$9,000 resolving MMPs	<u>NPDES Order No. R9- 2015-0013</u>
7/29/2022	<u>Administrative Civil Liability Order No. R9- 2022-0069</u>	City of Coronado, GW Ex, Parker Pump Station Replacement Project, Coronado	Settlement Order in the amount of \$3,000 resolving MMPs	<u>NPDES General Order No. 2015-0013</u>
7/29/2022	<u>Administrative Civil Liability Order No. R9- 2022-0064</u>	SeaWorld Parks & Entertainment, Inc., SeaWorld San Diego, San Diego	Settlement Order in the amount of \$6,000 resolving MMPs	<u>NPDES Order No. R9- 2018-0004</u>
9/13/2022	<u>Administrative Civil Liability Order No. R9- 2022-0108</u>	CAPEXCO c/o Keywest Engineering, GW Ex at 13247 Poway Road, Poway	Settlement Order in the amount of \$36,000 resolving MMPs	<u>NPDES General Order No. R9-2015- 0013</u>

Enforcement Actions for July, August, and September 2022

NPDES STORMWATER

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
7/21/2022	Investigative Order No. R9-2022-0128	San Diego City Stormwater Department, Phase I MS4, San Diego	Request for technical reports related to alleged unauthorized non-storm water discharges in the Hillcrest area	NPDES General Order No. R9-2013-0001

WASTE DISCHARGE REQUIREMENTS: WASTEWATER

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
9/22/2022	Notice of Violation No. R9-2022-0138	KPC Mount Palomar Winery LLC, Mount Palomar Winery, Temecula	Multiple reporting violations and unauthorized discharges of winery process wastewater causing nuisance odors	Waste Discharge Requirement (WDR) Order No. 93-125
7/7/2022	Staff Enforcement Letter	MHC TT, LP (R9), Pio Pico Preserve, Jamul	Deficient reporting	WDR Order No. 84-006
7/7/2022	Staff Enforcement Letter	Marjorem LLC, Outdoor World RV Park, Inc., Boulevard	Deficient reporting	WDR Order No. 95-034

Enforcement Actions for July, August, and September 2022

WASTE DISCHARGE REQUIREMENTS: AGRICULTURE

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
9/9/2022	Notice of Violation No. R9-2022-0146	Upper Santa Margarita Irrigated Lands Group, Temecula	Deficient and late reporting	WDR Order No. R9-2016-0004

WASTE DISCHARGE REQUIREMENTS: CANNABIS

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
9/19/2022	Cleanup and Abatement Order No. R9-2022-0013	Rodney and Jane Pimentel Property, Vista	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264
7/21/2022	Notice of Violation	Duane Matekel Property, Aguanga	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264
7/21/2022	Notice of Violation	Esteban Gonzalez Property, Hemet	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264
7/21/2022	Notice of Violation	Louis Guerra Property, Aguanga	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264
7/21/2022	Notice of Violation	William Roger Reaves and Marrie J. Reaves Property, Hemet	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264
9/15/2022	Notice of Violation	Betsworth Limited Partnership Property, Valley Center	Unauthorized discharges related to cannabis cultivation	California Water Code (CWC) Sections 13260 and 13264

Enforcement Actions for July, August, and September 2022

SITE CLEANUP

Enforcement Date	Enforcement Action	Entity/ Facility/Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
8/10/2022	Cleanup and Abatement Order No. R9-2022-0007	Lockheed Martin Corporation, Tow Basin, San Diego Bay	Cleanup and Abatement of sediment and waste discharged at the former Tow Basin and Marine Terminal and Railway Facilities	Basin Plan

Table 1: July 2022 – Summary of Public and Federal Sanitary Sewer Overflow Events

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain and Recovered (Gallons)⁴	Total Discharged to Land (Gallons)⁵	Surface Water Body Affected⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area⁷
City of Imperial Beach	950	950	0	950	0	Not Applicable	4.6	39.5	27,674
City of National City	24,000	0	24,000	0	0	Paradise Creek	1.0	105.0	58,967
City of San Diego	762	762	0	300	462	Not Applicable	112.5	2931.2	2,300,000
City of San Clemente	420	420	0	420	0	Not Applicable	3.7	177.6	51,339

¹ Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

⁴ Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

⁵ Total Discharged to Land = total amount reaching land.

⁶ Agencies are only required to note the surface water body affected if the discharge reaches or has the potential to reach a surface water. If the discharge did not reach a surface water and does not have a potential to reach a surface water (i.e., a discharge to land or a discharge to a separate storm drain that is fully recovered) the surface water body affected is listed as “Not Applicable.” If the discharge was to a surface water body or to a separate storm drain and was not fully recovered, and the surface water body was not reported, the surface water body affected is listed as “Not Reported.”

⁷ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain and Recovered (Gallons)⁴	Total Discharged to Land (Gallons)⁵	Surface Water Body Affected⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area⁷
Rancho California Water District	187	187	0	0	187	Not Applicable	2.5	52.0	19,801
South Coast Water District	830	830	0	0	830	Not Applicable	3.0	138.0	43,193
Eastern Municipal Water District	600	500	0	0	600	Not Applicable	30.0	609.0	258,132
Otay Municipal Water District	10	10	0	0	10	Not Applicable	2.4	81.4	19,700

Table 2: August 2022 – Summary of Public and Federal Sanitary Sewer Overflow Events

Responsible Collection System Agency	Total Volume (Gallons) ¹	Total Recovered (Gallons) ²	Total Reaching Surface Waters (Gallons) ³	Total Reaching Separate Storm Drain and Recovered (Gallons) ⁴	Total Discharged to Land (Gallons) ⁵	Surface Water Body Affected ⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area ⁷
City of Laguna Beach	4,000	4,000	0	3,800	200	Not Applicable	9.0	92.0	18,000
City of San Diego	2,960	2,960	0	2,840	120	Not Applicable	112.5	2931.2	2,300,000
City of San Diego	495	200	0	0	495	Not Applicable	112.5	2931.2	2,300,000
City of San Diego	10,800	4,000	6,800	4,000	0	San Diego River	112.5	2931.2	2,300,000

¹ Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

⁴ Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

⁵ Total Discharged to Land = total amount reaching land.

⁶ Agencies are only required to note the surface water body affected if the discharge reaches or has the potential to reach a surface water. If the discharge did not reach a surface water and does not have a potential to reach a surface water (i.e., a discharge to land or a discharge to a separate storm drain that is fully recovered) the surface water body affected is listed as “Not Applicable.” If the discharge was to a surface water body or to a separate storm drain and was not fully recovered, and the surface water body was not reported, the surface water body affected is listed as “Not Reported.”

⁷ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Responsible Collection System Agency	Total Volume (Gallons) ¹	Total Recovered (Gallons) ²	Total Reaching Surface Waters (Gallons) ³	Total Reaching Separate Storm Drain and Recovered (Gallons) ⁴	Total Discharged to Land (Gallons) ⁵	Surface Water Body Affected ⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area ⁷
United States Marine Corps Base Camp Pendleton	240	0	45	0	195	Drainage channel tributary to Santa Margarita River	39.2	125	83,340

Table 3: July 2022 – Summary of Private Lateral Sewage Discharge Events

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)⁴	Surface Water Body Affected⁵	Population in Service Area⁶	Number of Lateral Connections
City of El Cajon	135	135	0	135	Not Applicable	101,709	17,100
City of San Diego	416	416	0	416	Not Applicable	2,300,000	266,181
City of San Diego	12	0	12	0	Mission Bay	2,300,000	266,181
Padre Dam Municipal Water District	1,660	3	1,657	3	Drainage Channel Tributary to San Diego River	70,724	15,716
City of Vista	60	60	0	60	Not Applicable	90,000	17,109
Rainbow Municipal Water District	200	100	100	0	Drainage Channel Tributary to Bonsall Creek	12,766	3,275

¹ Total Volume = total amount that discharged from private lateral to a separate storm drain, drainage channel, surface water body, and/or land.

² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

⁴ Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land = total amount reaching separate storm drain that was recovered and/or total amount reaching land.

⁵ Agencies are only required to note the surface water body affected if the discharge reaches or has the potential to reach a surface water. If the discharge did not reach a surface water and does not have a potential to reach surface water (i.e., a discharge to land or a discharge to a separate storm drain that is fully recovered) the surface water body affected is listed as "Not Applicable." If the discharge was to a surface water body or to a separate storm drain and was not fully recovered, and the surface water body was not reported, the surface water body affected is listed as "Not Reported."

⁶ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Table 4: August 2022 – Summary of Private Lateral Sewage Discharge Events

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)⁴	Surface Water Body Affected⁵	Population in Service Area⁶	Number of Lateral Connections
City of San Diego	835	835	0	835	Not Applicable	2,300,000	266,181
City of Vista	80	80	0	80	Not Applicable	90,000	17,109
City of Vista	50	50	0	50	Not Applicable	90,000	17,109

¹ Total Volume = total amount that discharged from private lateral to a separate storm drain, drainage channel, surface water body, and/or land.

² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

⁴ Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land = total amount reaching separate storm drain that was recovered and/or total amount reaching land.

⁵ Agencies are only required to note the surface water body affected if the discharge reaches or has the potential to reach a surface water. If the discharge did not reach a surface water and does not have a potential to reach surface water (i.e., a discharge to land or a discharge to a separate storm drain that is fully recovered) the surface water body affected is listed as "Not Applicable." If the discharge was to a surface water body or to a separate storm drain and was not fully recovered, and the surface water body was not reported, the surface water body affected is listed as "Not Reported."

⁶ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Table 5: July and August 2022 – Summary of Sewage Discharges by Source

Spill Type	Month/Year	Number of Spills	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)⁴
Public Spills	July 2022	8	27,759	3,659	24,000	3,759
Public Spills	August 2022	4	18,255	11,160	6,800	11,455
Federal Spills	July 2022	0	0	0	0	0
Federal Spills	August 2022	1	240	0	45	195
Private Spills	July 2022	6	2,483	714	1,769	614
Private Spills	August 2022	3	965	965	0	965
All Spills	July 2022	14	30,242	4,373	25,769	4,373
All Spills	August 2022	8	19,460	12,125	6,845	12,615

¹ Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

⁴ Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land = total amount reaching separate storm drain that was recovered and/or total amount reaching land.

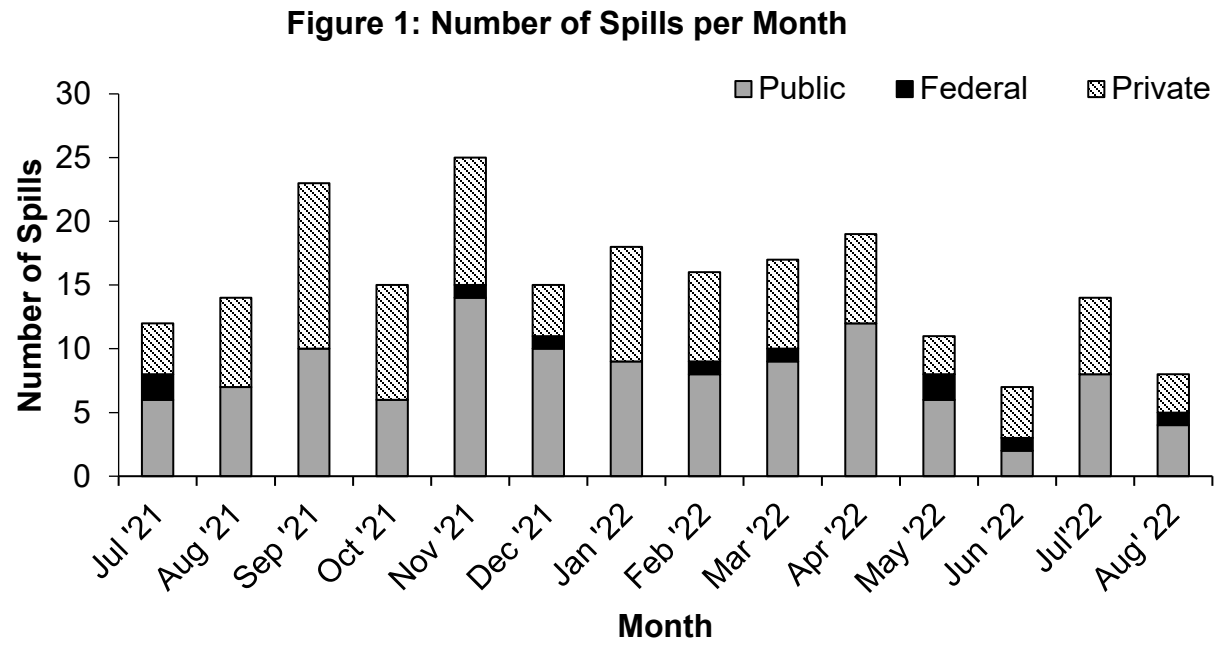


Figure 1: The number of public, federal, and private sewage spills per month from July 2021 through August 2022.

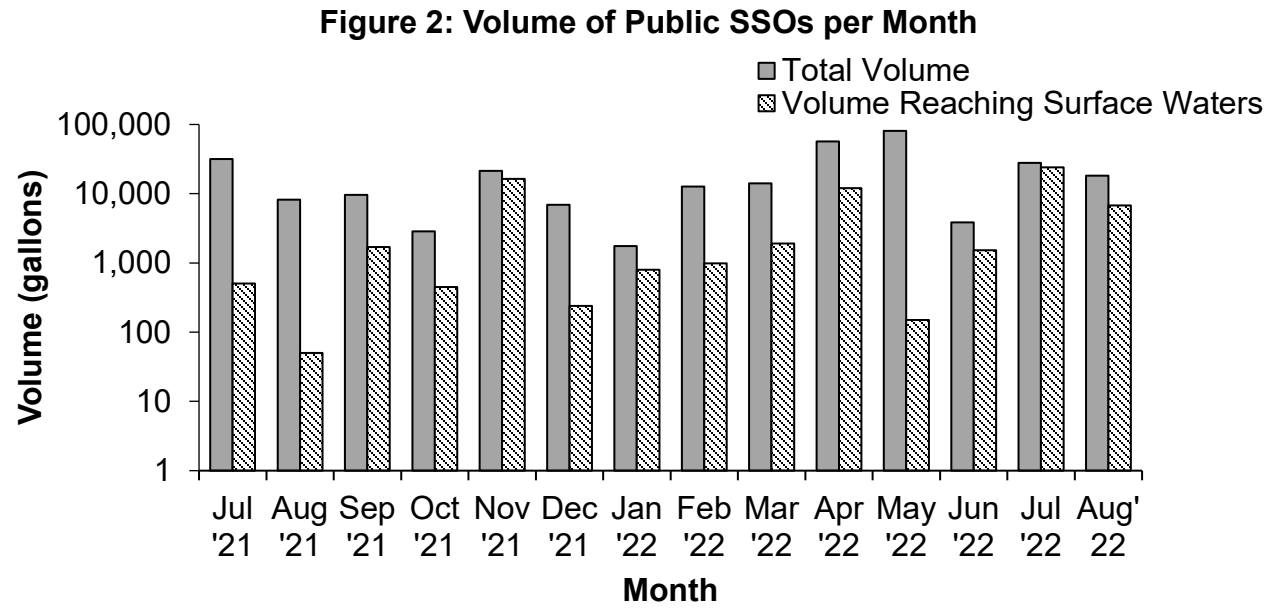


Figure 2: The volume of sanitary sewer overflows (SSOs) from public agencies per month from July 2021 through August 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

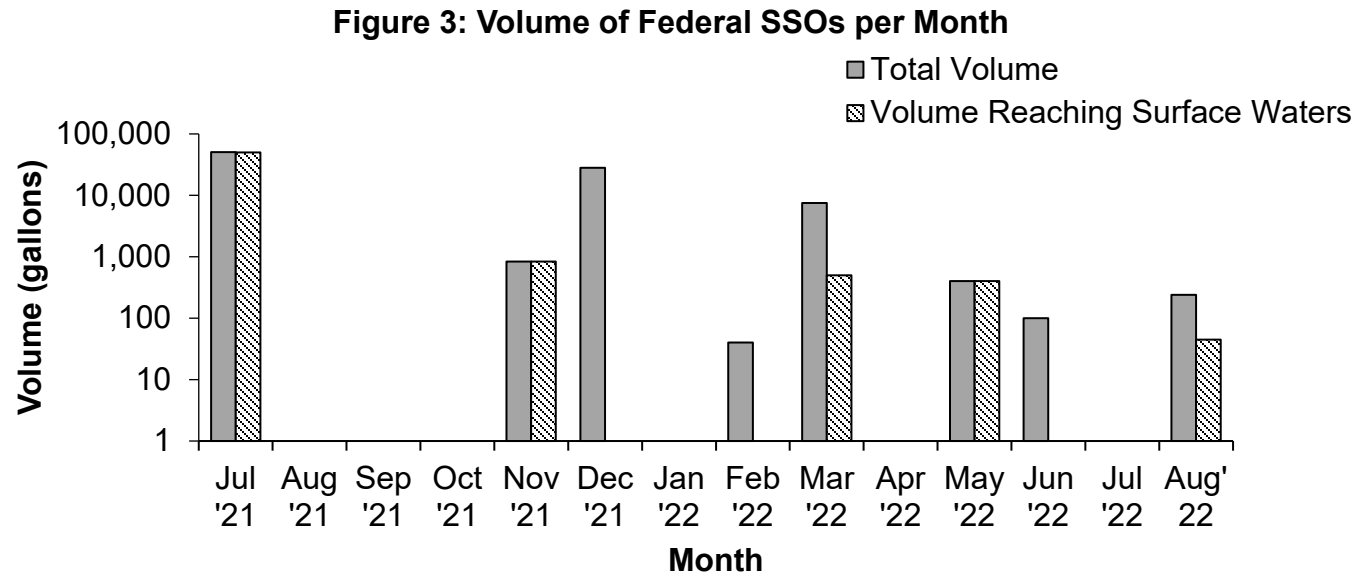


Figure 3: The volume of SSOs from federal agencies per month from July 2021 through August 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

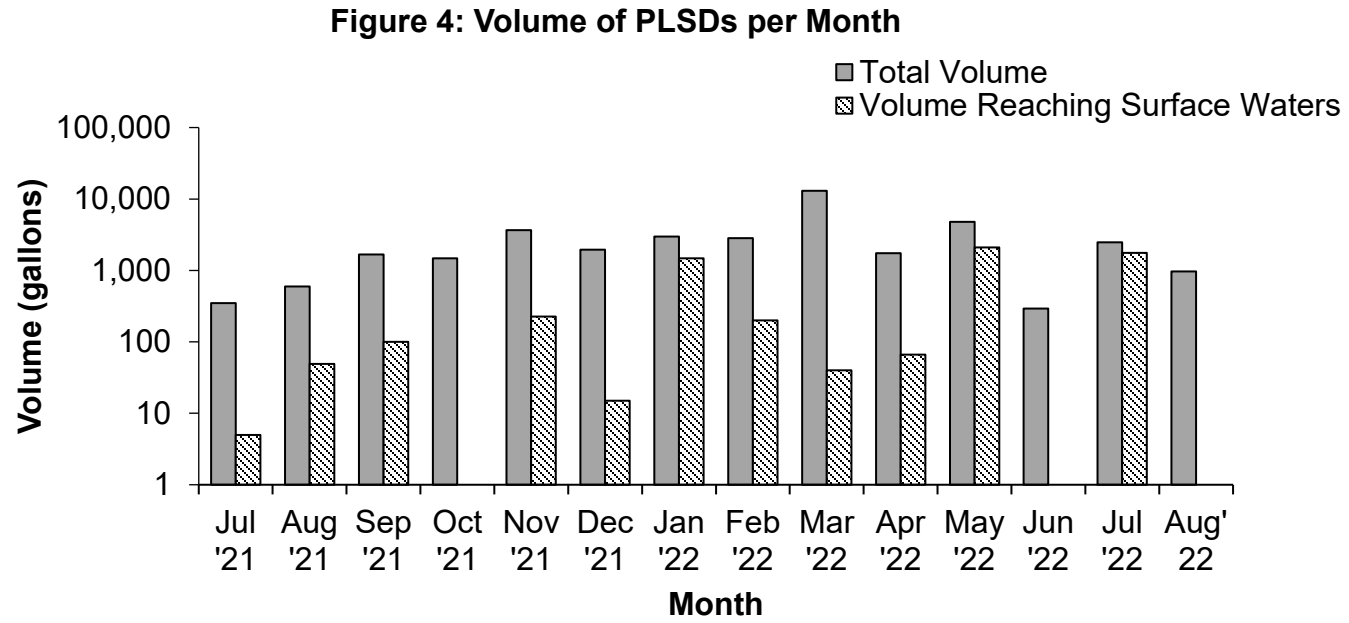


Figure 4: The volume of private lateral sewage discharges (PLSDs) per month from July 2021 through August 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

Table 1: July and August 2022 – Summary of Transboundary Flows from Mexico by Event¹

Location	Transboundary Flow Start Date	Transboundary Flow End Date	Weather Condition ²	Total Volume (Gallons) ³	Total Volume Recovered (Gallons) ³	Total Volume Reaching Surface Waters (Gallons) ³	Additional Details Reported By USIBWC
Smuggler’s Gulch Canyon Collector	7/31/22	8/1/22	Dry ⁴	10,200,000	0	10,200,000	This flow was the result of broken wastewater lines at Mexican Pump Stations PB1A and PB1B. The United States Smuggler’s Gulch Canyon Collector was shut down due to excessive sediment in the flow.
Tijuana River Main Channel	7/31/22	8/17/22	Dry	460,000,000	0	460,000,000	This flow was the result of broken and inoperable pipelines at Mexican pump stations PB1A and PB1B which required the shutdown of Mexican pump station PBCILA because PBCILA sends flows to PB1A and PB1B. The pipeline at pump station PB1B is back in operation, and the pipeline at pump station PB1A is currently being repaired. PBCILA was in operation the week of 8/16/22.

¹ Transboundary flow volumes are obtained from self-monitoring reports submitted by USIBWC pursuant to Order No. R9-2021-0001.

² Order No. R9-2021-0001 defines wet weather as the period of time when a storm event produces 0.1 inches or greater within a 24-hour period plus 72 hours after, based on the Goat Canyon Pump Station rain gauge.

³ Total transboundary flow volume, total volume recovered, and total volume reaching surface waters is an estimate provided by USIBWC.

⁴ USIBWC reported that there was no precipitation in the months of July and August at the Goat Canyon Pump Station rain gauge.

Table 2: July and August 2022 - Summary of Transboundary Flows from Mexico¹

Location	Month/Year	Number of Transboundary Flows	Total Volume (Gallons)	Total Volume Recovered (Gallons)	Total Volume Reaching Surface Waters (Gallons)
Tijuana River Main Channel	July 2022	1	460,000,000	0	460,000,000
Tijuana River Main Channel	August 2022	0			
Canyon Collectors	July 2022	1	10,200,000	0	10,200,000
Canyon Collectors	August 2022	0			
All Locations	July 2022	2	470,200,000	0	470,200,000
All Locations	August 2022	0			

¹ For transboundary flows that start and end in different months, Table 2 includes the transboundary flow in the month the transboundary flow started. For example, the transboundary flow at the Tijuana River main channel that started on July 31, 2022, and ended on August 17, 2022, is included in July but not in August. The same applies to the transboundary flow that started on July 31, 2022, and ended on August 1, 2022.

Figure 1: Number of Transboundary Flows

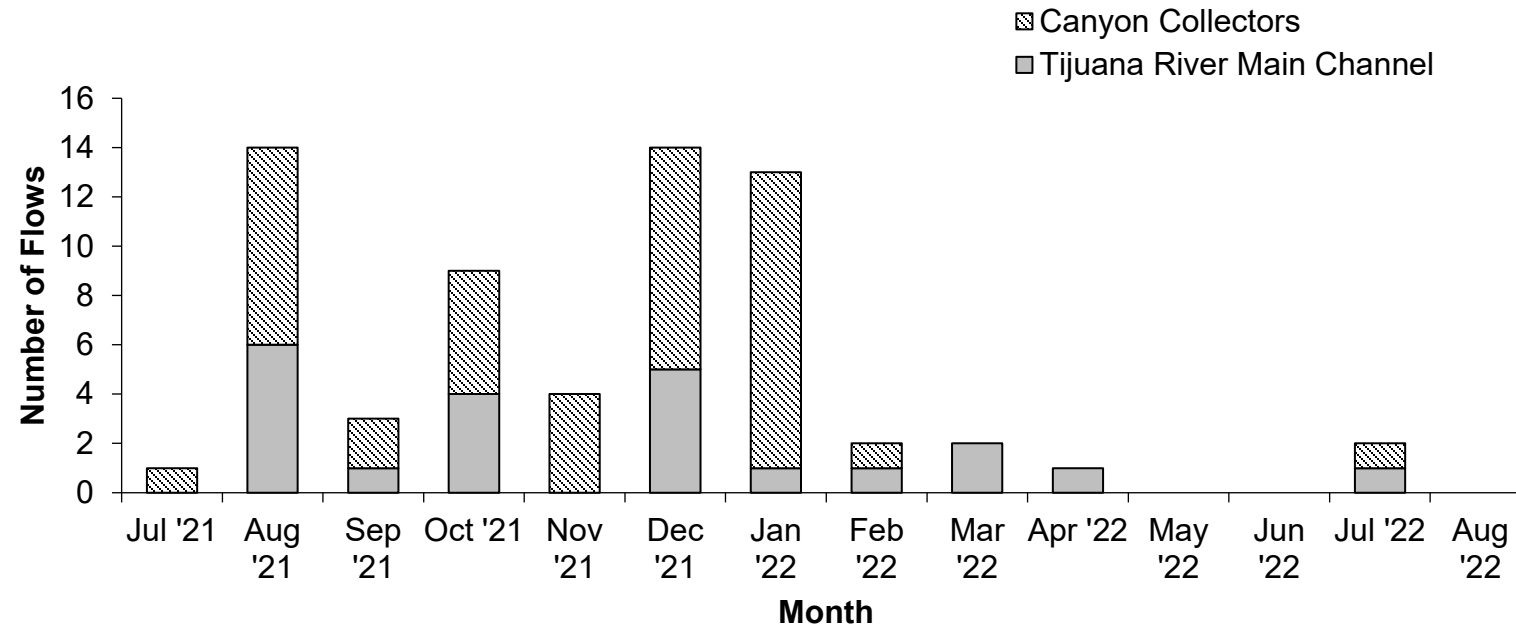


Figure 1: Number of reported transboundary flows per month from July 2021 through August 2022 at the canyon collector systems and the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the transboundary flow in month the transboundary flow started. The number of transboundary flows at the canyon collectors in October 2021 includes a transboundary flow at Canyon K, which does not have a canyon collector system.

Figure 2: Tijuana River Transboundary Flow Volume

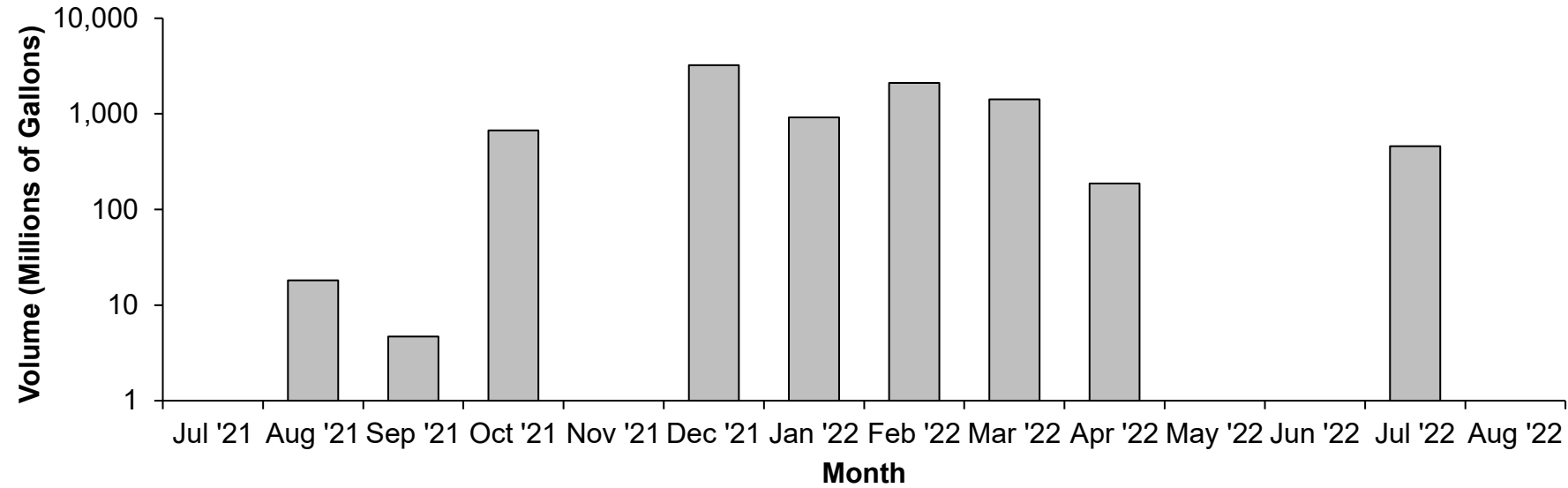


Figure 2: Volume of reported transboundary flows per month from July 2021 through August 2022 at the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the total volume of the transboundary flow in the month the transboundary flow started. Note the logarithmic scale on the vertical axis showing the wide variation in transboundary flow volumes.

Figure 3: Canyon Collector Transboundary Flow Volume

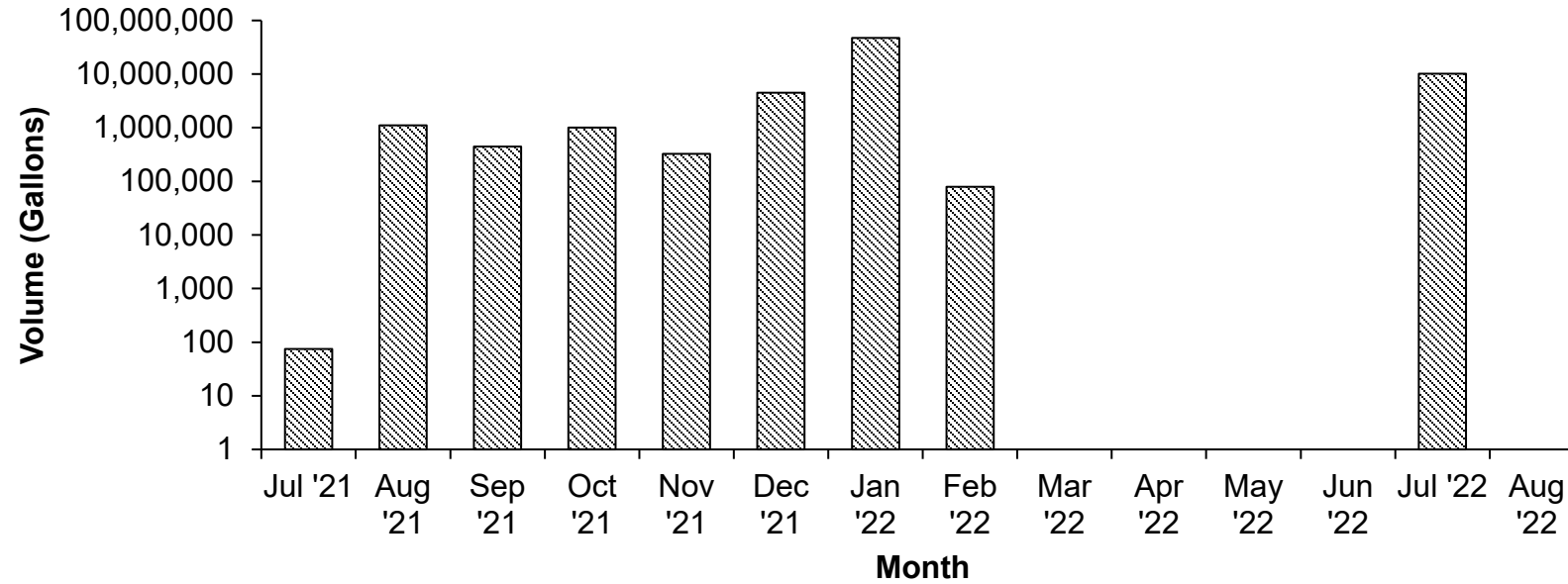


Figure 3: Volume of reported transboundary flows per month from July 2021 through August 2022 at the canyon collector systems. The volume reported in October 2021 includes the transboundary flow at Canyon K, which does not have a canyon collector system. Note the logarithmic scale on the vertical axis showing the wide variation in transboundary flow volumes.

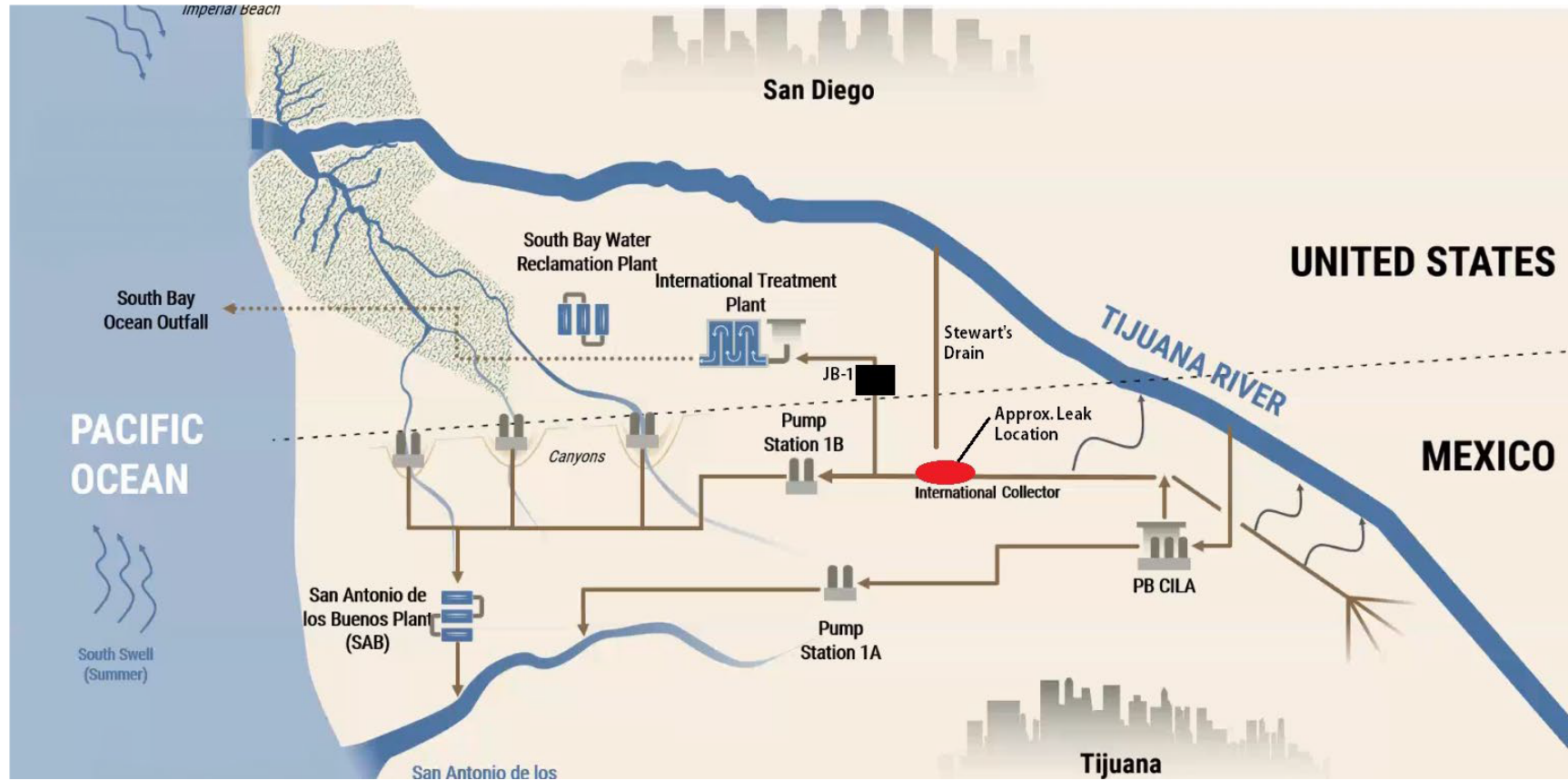


Figure 4: Map of wastewater infrastructure in the United States and Mexico. The approximate location of the deteriorated section of the International Collector is shown in red. Map provided by USIBWC.