

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

David Gibson, Executive Officer



**Executive Officer's Report
October 11, 2023**

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The October 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. Border Water Quality Update

Staff Contact: David Gibson

Since the September 2023 Board Meeting, the International Boundary and Water Commission (IBWC) has started the repairs of the South Bay International Wastewater Treatment Plant (ITP). Two new pumps have been installed at the Hollister Ave. Pump Station and it has been put back into service. The transboundary flows captured in the Smuggler's Gulch and Goat Canyon Collectors are now being pumped to the ITP for treatment and access to Border Field State Park has been restored. IBWC has reached out to CESPT to identify the excess flows in the Tijuana River and tributary canyons and to get the Los Laureles sewage pump station back into operation. Repairs to the pipeline PB1A are underway and expected to be complete by November 2023. IBWC submitted the Third Quarter 2023 Compliance Assurance Report for the ITP NPDES Permit and Cease and Desist Order No. R9-2021-0107 (attached). Additional Notices of Violation and an enforcement order are in process. Starting October 18, 2023, staff and I will meet semi weekly with IBWC staff at the ITP and I will prepare supplemental reports on the status of repairs to bring the ITP back into compliance with the NPDES Permit and Cease and Desist Order.

On September 21, 2023, I conducted site visits to the Tijuana River Valley and Imperial Beach (figures 1-3 below). IBWC is continuing to collect and remove tires from Mexico deposited during recent storms in the Tijuana River Flood Control Channel (Figure 1). IBWC has worked with CalRecycle to depose of the collected tires. The Tijuana River was flowing at approximately 40 mgd (as reported by IBWC on 9-20-2023) and consisted of raw sewage and runoff. Strong odors and symptoms consistent with hydrogen sulfide exposure have been reported to the San Diego Water Board by residents in the area.

As of October 2, 2023, beaches at Border Field State Park and south Imperial Beach have been closed for 663 consecutive days due to sewage flows from Mexico into the Pacific Ocean and Tijuana River. Without full funding and implementation of the entire [Record of Decision](#), including both ITP expansion (partially funded) and the construction of a Tijuana River Diversion and Treatment system (unfunded), the impacts to the Tijuana River Valley and beaches from the border to Coronado are unlikely to be mitigated.

I have been asked to provide a brief update to the California Coastal Commission Meeting on October 11, 2023 in Imperial Beach. The public meeting of the California- Mexico Border Relations Council will meet at the San Diego Regional Water Quality Control Board Hearing Room on October 23, 2023. A copy of the Agenda and Meeting Notice will be posted on the San Diego Water Board website when it is available from CalEPA.



Figure 1: Tires collected by IBWC from the Tijuana River Flood Control Channel for Disposal on (9-21-23).



Figure 2: Imperial Beach Closed (9-21-23).



Figure 3: Tijuana River at the Saturn Ave crossing. Raw sewage flows and foam accompanied by strong odors (9-21-23).

2. California-American Water Company Boil Water Advisory Incident (*Attachment A-2*)

Staff Contact: David Gibson

In August 2023 California-American Water Company (Cal-Am Water) issued a “Boil Water Advisory” for customers that reside in the City of Imperial Beach, City of Coronado customers south of Fiddlers Cove, and customers in portions of the city of San Diego, and small area of Chula Vista, due to positive E. Coli results found in the drinking water. The State Water Resources Control Board, Division of Drinking Water (DDW), in conjunction with California-American Water, advised Cal-Am Water customers that reside in certain locations within the above cities to use boiled tap water or bottled water for drinking and cooking purposes as a safety precaution. DDW also inspected the Cal-Am Water Coronado water system with a focus on distribution system tanks and the routine sample sites in question and their respective upstream and downstream repeat locations.

In response to the detection of E. Coli at one of Cal-Am Water’s routine sampling locations, DDW completed a Level 2 Assessment (L2A) for the affected Cal-Am Water Coronado public water system (*Attachment A-2*) that includes specific information about the incident. In

response to the L2A assessment, DDW required Cal-Am Water to complete necessary corrective actions to upgrade its bacteriological sample site stations and a storage tank vent structure as needed and provide data regarding previous bacteriological confirmation tests collected from the pipeline disinfections during a pipeline replacement project.

Cal-Am provided a response to the L2A on September 25, 2023, meeting the required deadline. The two sample stations that had positive results have been upgraded with dedicated sample stations, and a new screen meeting mandated requirements has been installed on the storage tank vent structure. All samples from the previous pipeline replacement project were submitted and do not show positive results for E. Coli or any connection to the incident. Lastly, Cal Am is in the process of conducting hazard assessments for any cross connections that may be present in the vicinity of the positive bacteriological sample sites.

At this time, a specific cause for the E. Coli detection has not been identified.

Part B – Significant Regional Water Quality Issues

1. Design Storms

Staff Contacts: Jimmy Smith and Erica Ryan

October 1 marks the official start of the next rainy season for the San Diego Region. The current rainfall patterns on this highly urbanized area result in increased flow rates and runoff volumes that quickly convey pollutants to receiving waters, overwhelm flood control conveyances, and erode natural stream banks. The overall impact to receiving waters is decreased water quality resulting in an increasing number of impaired waterbodies. The San Diego Region already has over 250 impaired waterbodies and waterbody segments.

Despite the increased rainfall runoff volume that comes with urbanization, local agencies are adept at building conveyances that minimize flooding associated with most storm events. The creation of flood control systems that efficiently deliver runoff to the bays and oceans have prevented most catastrophic flooding that endangers life and property. The flood control system is built to withstand a design storm capacity that captures all but the largest volume from rain events. Design storm engineering is also applied to seawalls and to bridges that span creeks and rivers. The San Diego Water Board requires best management practices (BMPs) in several of its pollutant programs to be built to a specified design storm. The definitions of these design storms remain mostly accurate given the State and federal requirements to define the storm from the most recent data. Climate change, however, seems to be causing rapidly increasing storm intensity, therefore BMP design storm requirements may need to change.

San Diego Water Board Program Utilization

The San Diego Water Board utilizes design storms in several permits and other regulatory actions.

- Landfills must adequately protect against washout, and erosion of waste and/or cover materials to maintain the integrity of the containment system. The Discharger must

implement a stormwater management system designed to control landfill-related runoff from a 100-year, 24-hour storm event. The Discharger must reevaluate the definition of a "100-year, 24-hour storm event" every 5 years and adjust the design and construction of stormwater conveyance or containment systems as necessary for new stages and units at the landfill as they are developed. The landfill must also enroll in the Statewide Industrial General Permit for Stormwater.

- National Pollutant Discharge Elimination System (NPDES) permits for ocean outfalls also have design storm requirements intended to protect facilities against operational upset. Generally, facilities must be protected against a 100-year storm event frequency as defined by a local flood control district or by the National Oceanic and Atmospheric Administration. Protection must be against erosion, overland runoff and any other impacts resulting from the storm event.
- Soil and groundwater cleanups at Department of Defense (DOD) installations typically rely upon a mutually agreed upon Record of Decision (ROD). The RODs often require consideration of floods, erosion and infiltration when determining cleanup actions and can be revisited every 5 years to accommodate shifting conditions due to climate change. There is no specific design storm requirement in RODs.
- Non-DOD cleanup activities rely upon Cleanup and Abatement Orders (CAOs) that honor Resolution R9-2018-0051 *Addressing Threats to Beneficial Uses from Climate Change*. The CAOs direct Dischargers to evaluate cleanup methods and technology that are resilient to climate change effects, including more intense stormwater discharges. The CAOs do not have a design storm requirement but each Discharger's efforts to consider climate change impacts are evaluated individually.
- Almost all individual Waste Discharge Requirements (WDRs) have design storm criteria language such as this: "The waste containment and disposal features must be protected against a 100-year storm event as defined by the San Diego County Flood Control District (FCD). All waste treatment, containment, and disposal facilities must be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour storm event as defined by the FCD." The design storm is based on the San Diego County Flood Control District's Hydrology Manual.

Stormwater permitting has several programs utilizing design storms.

- The Statewide Industrial Stormwater Permit requires advanced BMPs when there are Level 2 Exceedances designed for a runoff volume from an 85th percentile 24-hour storm event, as determined from local historical rainfall records or the maximum flow rate of runoff produced from a rainfall intensity of at least 0.2 inches per each hour of a storm event.
- The Statewide Phase II Municipal Separate Storm Sewer System (MS4) permit and the Statewide stormwater permit for CalTrans require BMPs to be designed to contain an 85th percentile, 24-hour storm event.
- The Phase I MS4 permit for the San Diego Region also has a design storm requirement to contain an 85th percentile, 24-hour storm event and further characterizes the design storm by stipulating evaluation of local rainfall data over 30 years. The BMPs are

designed to retain (i.e., intercept, store, infiltrate, evaporate and evapotranspire) onsite pollutants. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermitttees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its jurisdiction.

This permit also requires BMPs for hydromodification control to limit downstream flooding and erosion. For flow rates (Q) ranging from 10, 30 or 50 percent of the pre-project 2-year runoff event (0.1Q2, 0.3Q2, or 0.5Q2) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations are not allowed to deviate above the pre-project rates and durations by more than 10 percent and more than 10 percent beyond the length of the flow duration curve. A flow threshold of 0.1Q2 corresponds to a channel with a HIGH susceptibility to erosion, a flow threshold of 0.3Q2 corresponds to a channel with a MEDIUM susceptibility to erosion, and a flow threshold of 0.5Q2 corresponds to a channel with a LOW susceptibility to erosion. For flow rates ranging from the lower flow threshold to Q5 (5-year runoff event), the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q5 to Q10, post-project peak flows may exceed pre-project flows by up to 10 percent for a 1-year frequency interval. The specific lower flow threshold will depend on results from the Southern California Coastal Water Research Project channel screening study and the critical flow calculator.

- The Statewide General Construction Stormwater Permit requires dischargers to replicate the pre-project runoff water balance (defined as the amount of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event, or the smallest storm event that generates runoff, whichever is larger. Dischargers are given the option of calculating the required runoff volume using continuous simulation modeling such as the USEPA's Stormwater Management Model (SWMM) or Hydrologic Simulation Program Fortran (HSPF). Such methods used by the discharger will be reviewed by the Regional Water Board. Dischargers within a Phase I or Phase II MS4 permit can satisfy the Construction Permit if they meet the applicable MS4 permit requirements described previously.

Design Storm Considerations

The general definition of an 85th percentile storm event is the event that has a precipitation total greater than or equal to 85 percent of all storm events over a given period of record in a specific area or location. For example, to determine what the 85th percentile storm event is in a specific location, all 24-hour storm data over a 30-year period would be tabulated and an 85th percentile storm would be determined from this record (i.e., 15 percent of the storms would be greater than the number determined to be the 85th percentile storm). The 85th percentile storm is the 24-hour rainfall value that may produce initial runoff. Typically, the 24-hour, 85th percentile design storm criteria is used to size pollutant control and hydromodification post construction BMP facilities to treat the first flush of a rain event. The size of the design storm event for a post construction BMP facility is generally smaller than the design storm event used for flood control or storm drain facilities. Flood control or storm drain facilities are typically designed to accommodate the total highest rainfall from either the 24-hour, 50 year or 100-year reoccurring storm events.

Based upon the County of San Diego 85th percentile precipitation isopluvial map,¹ the 85th percentile 24-hour rainfall event at the San Diego Water Board Office that can produce runoff would be 0.60 to 0.65 inches.

For perspective, flood control facilities are generally designed for larger storm events with a 24-hour duration and average recurrence interval frequencies of either 100-years or 50-years. These design storm events are based on the average of the highest total rainfall amounts over the total number of years. The design purpose is to accommodate worst case runoff volumes in flood control facilities caused by infrequent but larger rain events. For example, NOAA's Precipitation Frequency Data Server² estimates that the 100-year, 24-hour storm event at the San Diego Water Board office would produce a total of 4.31 inches based on the average of the highest rainfall amounts in the data record over the 100-year period. Similarly, for the 5-year, 24-hour storm event, the total rainfall that would be produced at the San Diego Water Board office is estimated to be 2.46 inches based on the average of the highest rainfall amounts in the data record over the 5-year period.

Many of these design storm requirements rely upon hydrology manuals developed by a local agency and rely on data provided by local flood control districts. Each manual or data set uses a hyetograph to graphically represent the distribution of rainfall intensity over time (typically 24 hours) and the total rainfall volume for that period. While this effectively shows the amount of rainfall upon an area, it does not translate directly to conditions in receiving waters. Hydrographs show the volume of discharge in a creek or river over time. The relationship between a hyetograph and hydrograph will vary depending upon the characteristics of the catchment basin, such as soil types, steepness, and percent imperviousness. The goal of hydromodification control BMPs is to maintain the natural hydrograph up to a certain point of intensity as shown on a hyetograph.

Relying upon historic data to size BMPs that are to effectively control pollutants and flow from developed watersheds assumes a stable distribution of storm intensities each season for decades into the future. A BMP that can contain an 85th percentile storm for a 24-hour period built today based upon the past 30 years of data (back to 1983), may not be able to contain that same design storm today or in 20 years when the historical record would start in the year 2003. If, however, annual storm intensities are stable from year to year, then there is no need to adjust permit requirements.

¹ Appendix E, <https://www.sandiegocounty.gov/dpw/floodcontrol/floodcontrolpdf/hydro-hydrologymanual.pdf>

² https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=ca

Volatile and variable precipitation has California oscillating between periods of intense drought to larger storms arriving in a series of atmospheric rivers, as experienced in the winter of 2022/2023.^{3,4} California's Fourth Climate Change Assessment⁵ also predicts heavier precipitation events and more frequent drought. These larger storms challenge existing stormwater infrastructure and invite investigation into the accuracy of existing storm-sizing criteria for pollutant and hydromodification control BMPs.

Generally, climate change models predict a warmer climate that will allow the atmosphere to hold more water such that when it does rain, there is more volume to fall. Warmer temperatures will also decrease snowfall. While the same total volume of water may fall to the earth each year, it's more likely to fall as rain rather than snow and to arrive in fewer storms. Less snow means the water will quickly move downstream and not be held in a 'natural reservoir.' The same annual precipitation falling in fewer storms directly increases each storms' intensity and increases the time for the watershed to dry out and harden, which reduces infiltration and increases runoff. These conditions would directly increase peak flows of the hydrograph and raise the intensity of the hyetograph.

How quickly and how greatly these changes to rainfall intensity materialize is a critical consideration when contemplating adjustment of design storm requirements. If the storm intensity increases relatively slowly then the continually evolving 5-year or 30-year rainfall evaluation will generally keep up with the changes. Rapid changes, however, will increasingly reduce the efficiency of existing BMPs. The San Diego Region may already be experiencing more intense rainfall as shown by the work of Dr. Luis Parra (Figure 1) which would indicate further evaluation of design storm criteria is needed.

³ Gershunov, A., Shulgina, T., Clemesha, R.E.S. *et al.* Precipitation regime change in Western North America: The role of Atmospheric Rivers. *Sci Rep* 9, 9944 (2019).
<https://www.nature.com/articles/s41598-019-46169-w>

⁴ Swain, D.L., Langenbrunner, B, Neelin, J.D. and Hall, A. Increasing precipitation volatility in twenty-first-century California. *Nature Climate Change* Articles 8(5), (May 2018)
(https://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/ThreatsForestHealth/Climate/CI_Swain_et_al_2018_Increasing_Precip_Volatility.pdf)

⁵ <https://www.climateassessment.ca.gov/>

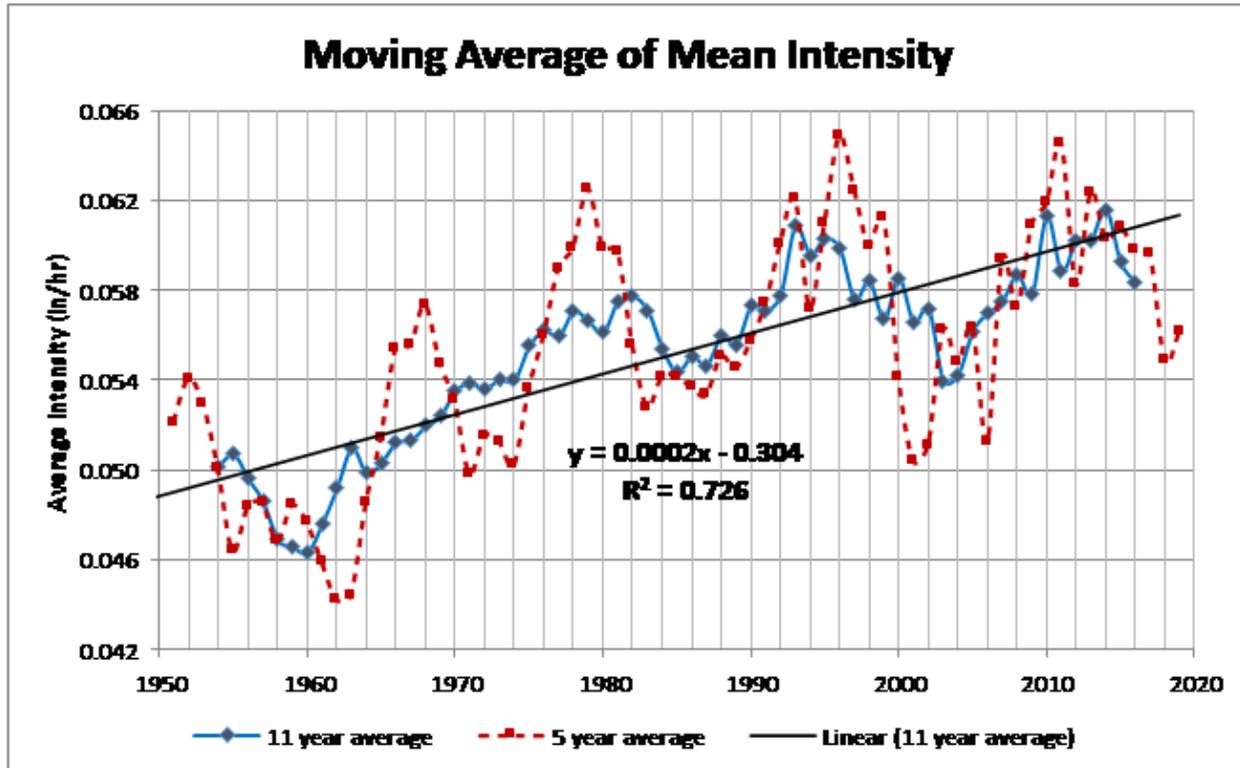


Figure 4: Storm Intensity - Prepared by Dr. Parra from REC Consultants, from 100% complete hourly data (San Diego Lindberg Station).

Next Steps

The San Diego Water Board is navigating next steps for this issue.

- A project to more deeply investigate any needed adjustments to design storm criteria is one of many climate change efforts under consideration. Such a project would rely heavily upon the scientific community's ability to predict changes to rainfall intensity and would need to proactively incorporate uncertainty into any permit requirements.
- It is estimated that less than 5 percent of the San Diego Region has pollutant control and/or hydromodification controls in place. The existing efficiency of these BMPs relies heavily upon correct construction and routine maintenance. Both aspects are subject to inspection by Board staff and have been the subject of prior enforcement.
- Further consideration of BMP design and efficacy should be considered before adjustments to sizing are made to accommodate a potentially different design storm.
- The State Water Resources Control Board and the California Stormwater Quality Association are also interested in this issue. San Diego staff are following their developments and providing comments as appropriate.

2. 2021 Triennial Review Project No. 1: Designation of Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB) Beneficial Uses to Surface Waters in the San Diego Region

Staff Contact: Jody Ebsen

A. PROJECT INFORMATION

Project Lead: Jody Ebsen

Supervisor: Cynthia Gorham

*Report Date: October 2023
Report Period: May-August 2023
Overall Status: On track*

Website:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/tribal_beneficial_uses.html.

Project Description:

This project will designate surface water bodies, where appropriate, with the CUL, TSUB, and SUB beneficial uses. It builds on the work that was completed with the adoption of Resolution No. R9-2020-0254, which incorporated these beneficial uses into the San Diego Region Basin Plan. During the initial phase of this project, the San Diego Water Board is working with tribes to identify water bodies appropriate to designate with tribal beneficial uses. Completion of the project will extend beyond the 2021 triennial review cycle.

Project Objective:

Develop working relationships with local tribes and establish new tribal beneficial use designations where appropriate to waters in the San Diego region with a Basin Plan amendment.

Triennial Review Commitment:

Work in consultation with Tribes to designate waterbodies, as appropriate, in the San Diego Region with the CUL, T-SUB and SUB beneficial uses.

Key Milestone	Target Date	Status
Project Charter	2022	Completed
Tribal Summit	2022	Completed
Participate in Statewide Tribal Beneficial Uses Workgroup	2022	Ongoing
Regular meetings with Tribal Work Group	FY 23/24	Ongoing
Develop Initial Project Scope with Tribal Work Group	FY 23/24	Ongoing

Key Milestone	Target Date	Status
Begin information gathering	FY23/24	Ongoing
Identify list of water bodies for Tribal Beneficial Uses	FY 24/25	TBD

B. PROGRESS REPORT: Tribal Beneficial Uses

Reporting Period Events

Accomplishments during period	None
Collaboration during period	Participated in monthly meetings with a tribal work group to begin developing project scope. Discussed available reference materials, examples of data collection approaches from other regions, the San Diego Basin Plan, and current grant funding opportunities. Current discussions are to define the project scope that will influence data needs and focus efforts on protecting water bodies with the tribal beneficial uses. Collaborated with other Regional Boards and State Water Board Office of Public Participation, Tribal Affairs through the Tribal Beneficial Uses Workgroup.
Activities planned but not completed	None
Key issues during period	None

Looking Forward

Activities planned for next period	Attend and provide a TBU project presentation to the 2023 Tribal EPA & U.S. EPA Region 9 Conference in October. Continue outreach with tribal representatives on discussions identifying water bodies and tribal uses; complete project scope to establish a procedure for water body identification and data needs.
Key issues on the horizon	None

3. 2021 Triennial Review Project No. 2: Tijuana River Valley Water Quality Restoration

Staff Contact: Melissa Corona

A. PROJECT INFORMATION

Project Lead: Melissa Corona

Supervisor: Cynthia Gorham

*Report Date: October 2023
Report Period: May–August 2023
Overall Status: On track*

Website:

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

Project Description:

The purpose of this project is to establish Total Maximum Daily Loads (TMDLs) for indicator bacteria and trash in the lower Tijuana River because the San Diego Water Board has identified human health and ecosystem impacts in the Tijuana River Valley as regional priorities for many years. The San Diego Water Board will continue work on development and approval of TMDLs. Staff will complete the peer and public review processes, continue to coordinate with stakeholders, and prepare an amendment to the Water Quality Control Plan for the San Diego Basin (Basin Plan amendment) for adoption by the Board and for approval from the State Water Resources Control Board, Office of Administrative Law, and the U.S. Environmental Protection Agency (USEPA).

Although the Tijuana River is on the 2020-2022 Clean Water Act section 303(d) List of Water Quality Limited Segments for impairments due to over 30 pollutants, control of the anthropogenic sources of indicator bacteria and trash is likely to result in a significant reduction of the remaining pollutants.

Project Objective:

The objective is to reduce pollutant loads entering the Tijuana River in order to restore and maintain the chemical, physical, and biological integrity of the Tijuana River as well as the downstream Tijuana River Estuary and coastal waters.

Triennial Review Commitment:

Development of TMDLs for indicator bacteria and trash with an implementation plan to restore impaired waters in the Tijuana River Valley.

Key Milestone	Target Date	Status
California Environmental Quality Act (CEQA) scoping meeting	May 15, 2019	Completed
Peer review of draft TMDL technical report	Summer 2023	Completed

Key Milestone	Target Date	Status
Public review of draft TMDL technical report and comment period	Winter 2023-24	Delayed (originally planned for Winter 2020-21)
Basin Plan amendment package to San Diego Water Board for adoption	March 2024	Delayed (originally planned for August 2021)

B. PROGRESS REPORT: Tijuana River Valley Water Quality Restoration

Reporting Period Events

Accomplishments during period	Staff reached out to Region 9 Tribes and disadvantaged communities that could be potentially affected by implementation of the TMDLs to gather any environmental justice concerns they may have (May and June 2023). Staff submitted the draft TMDL staff report for external scientific peer review (June 2023). Staff received comments from external scientific peer reviewers (August 2023).
Collaboration during period	Briefing to Tijuana River Valley Recovery Team Steering Committee (June 2023).
Activities planned but not completed	N/A
Key issues during period	<p>On June 9, 2023, the U.S. Environmental Protection Agency (USEPA) and U.S. International Boundary and Water Commission (USIBWC) approved a Record of Decision (ROD) on the United States-Mexico-Canada Agreement Mitigation of Contaminated Transboundary Flows Project (USMCA Project). The ROD is based on the USMCA Project's Final Programmatic Environmental Impact Statement.</p> <p>In June 2023, all mayors representing cities within San Diego County sent a letter to the Biden-Harris administration formally requesting a federal emergency declaration for the Tijuana River Valley and shoreline of Imperial Beach due to the public health impacts of fecal contamination and other pollutants.</p> <p>In July 2023, 42 San Diego County nonprofit and community-based organizations sent a letter to Governor Newsom requesting a state and federal emergency declaration for the Tijuana River Valley and shoreline of Imperial Beach due to public health impacts from pollution in the river and coastline.</p>

	<p>Flows exceeding the capacity of the South Bay International Wastewater Treatment Plant (SBIWTP) have compromised its treatment equipment and operations. The plant is no longer in compliance with its National Pollutant Discharge Elimination System (NPDES) permit. The upstream collection system in Tijuana and the SBIWTP are in need of repairs to regain adequate operations for NPDES compliance. In August 2023, Governor Newsom sent letters to President Biden, Senate Majority Leader Chuck Schumer, and House Minority Leader Hakeem Jeffries requesting federal appropriations to make the urgently needed repairs to the SBIWTP.</p>
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Looking Forward

<p>Activities planned for next period</p>	<p>Staff will brief Tijuana River Valley Recovery Team Steering Committee on project status. Staff will respond to external scientific peer review comments and edit the draft TMDL staff report if needed. Staff will schedule a public workshop.</p>
<p>Key issues on the horizon</p>	<p>This project could be influenced by a number of efforts involving the Tijuana River Valley, including funding decisions and potential environmental impacts related to the USMCA Project, rehabilitation of the SBIWTP, efforts associated with International Boundary and Water Commission (IBWC) Minutes 320 and 328, and efforts led by the Tijuana River Valley Recovery Team.</p>

4. 2021 Triennial Review Project No. 4: Contact Water Recreation (REC-1) Water Quality Objectives

Staff Contact: Michelle Santillan

A. PROJECT INFORMATION

Project Lead: Michelle Santillan

Supervisor: Cynthia Gorham

Report Date: October 2023

Report Period: May – August 2023

Overall Status: On track

Website:

Not available at this time.

Project Description:

This project was first introduced during the 2014 Triennial Review. At the time, the focus of the project was to determine whether and to what extent data supported amending the objectives, implementation provisions for applicable bacteria Total Maximum Daily Loads (TMDLs), or the TMDLs themselves. Bacteria TMDLs were adopted in June 2008 and February 2010. In July 2018, San Diego Water Board staff prepared a summary report of the 2014 REC-1 Triennial Review Project that made recommendations for next steps. Recommendations were based on discussions and feedback from external and internal workgroups as well as the various technical studies that had been completed to date. During the 2018 Triennial Review, the focus for the project shifted towards implementation of actions that were identified in the 2018 recommendations report. The short-term actions included updates to the existing storm water (MS4) permit, audits of Illicit Discharge Detection and Elimination programs, updates to waste discharge requirements for sanitary sewer systems, and updates to Chapter 3 in the Basin Plan. Staff continues to implement and track the requirements of the 2018 Triennial Review. Furthermore, as part of the 2021 Triennial Review, staff will investigate the feasibility of the development of a narrative risk-based objective and potential revisions to the 20 Beaches and Creeks Bacteria TMDL.

Project Objective:

- Investigate and develop a narrative (risk-based) water quality objective that is protective of the REC-1 beneficial use.
- Establish, if appropriate, a numeric translator for the human-specific *Bacteriodes* HF183 to implement the narrative objective.
- Initiate review and develop recommendations for amending the Bacteria TMDLs.

Triennial Review Commitment:

Investigate the development of a narrative objective that would allow the use of human specific markers while being protective of the REC-1 beneficial use.

Key Milestone	Target Date	Status
Final Report for Investigative Order No. R9-2019-0014	June 2024	On track
Final Report for SWAMP Sampling at Reference Beaches	2023	On track
California Environmental Quality Act (CEQA) scoping meeting for new objective	TBD	TBD
Public Workshop for MS4 Permit Renewal	Spring 2023	On track
Draft Revisions to Regional WDRs for Sanitary Sewer Systems	TBD	TBD

B. PROGRESS REPORT: REC-1 Water Quality Objectives

Reporting Period Events

Accomplishments during period	<p>Staff hosted the second in a series of focused meetings on June 20, 2023, for the reissuance of the MS4 Permit. The focus of the meeting was to discuss streamlining reporting requirements. The Monitoring Assessment and Research Unit (MARU) has completed bioassessment monitoring at various inland surface waters and open space sites. Some of the sites were also monitored for indicator bacteria and HF 183.</p>
Collaboration during period	<p>The internal REC-1 workgroup met in June and August 2023. The internal REC-1 workgroup meets on a bimonthly basis to share information and coordinate actions. Sampling for the Surface Water Ambient Monitoring Program (SWAMP) Beach study is nearing completion. This study, which is funded using Region 9’s SWAMP allocation and being conducted in conjunction with San Diego State University, is assessing traditional indicator bacteria concurrently with alternative indicators, including coliphage, HF183, adenovirus, norovirus, and pepper mild mottled virus. The results are expected to assist the assessment of the applicability of alternative indicators in San Diego Water Board programs. A draft report is expected in spring 2024.</p>

	Staff participated in a steering committee led by the Southern California Coastal Water Research Project (SCCWRP) to discuss progress on the San Diego River Investigative Order on August 31, 2023. Investigations into on-site waste treatment systems, illicit connections and illicit discharges, and sanitary sewer overflows are complete.
Activities planned but not completed	Review of regional WDRs for Sewage Collection Agencies has been delayed
Key issues during period	None

Looking Forward

Activities planned for next period	<p>Staff will continue to host focused meetings for the reissuance of the MS4 Permit.</p> <p>A subcommittee of the San Diego Water Board will meet in October 2023 to receive updates on the San Diego River Investigative Order and to discuss possible next steps.</p> <p>The next quarterly progress report for the San Diego River Investigative Order is due by the end of October 2023. Analysis of leakage from laterals and main lines of the sewer collection system are on-going. Additional sampling of urban encampments, small catchment basins and bottom-of-the-watershed loading are planned for this fall, pending the arrival of storms.</p> <p>Staff will initiate Tribal Consultations for proposed amendments to the bacteria TMDLs.</p>
Key issues on the horizon	<p>SCCWRP has completed monitoring and is finishing data analysis for a study evaluating the relationship between human fecal pollution indicators and health risks in stormwater. Funding for the study was provided by the Southern California Stormwater Monitoring Coalition (SMC). The SMC is a regional partnership of 16 stormwater agencies throughout southern California. The results of this study may assist the San Diego Water Board in the analysis of the bacteria TMDLs.</p> <p>MARU will be preparing a white paper to outline findings of their bioassessment monitoring and to make recommendations for future work. The results of these monitoring efforts are expected to provide insight into background levels of indicator bacteria and HF183 in relatively undisturbed areas.</p>

5. 2023 Triennial Review Project No. 6: Santa Margarita River Nutrient Total Maximum Daily Loads, Advanced Restoration Plan

Staff Contact: Melissa Liotta

A. PROJECT INFORMATION

Project Lead: Melissa Liotta

Supervisor: Cynthia Gorham

Report Date: October 2023

Report Period: May – August 2023

Overall Status: On track

Website:

[Santa Margarita River Estuary | San Diego Regional Water Quality Control Board \(ca.gov\)](#).

Project Description:

Consistent with the Impaired Waters Policy, staff are developing an Advanced Restoration Plan to address the impairment of the Santa Margarita River due to excessive nutrient loading and eutrophication. The Advanced Restoration Plan (formerly known as a Water Quality Restoration Plan) relies on implementing existing regulatory measures, such as permits, policies, and plans, to achieve nutrient load reductions and numeric targets in order to restore the beneficial uses of the Santa Margarita River.

The Santa Margarita River was added to the Clean Water Act section 303(d) Impaired Waters list for nutrients (nitrogen and phosphorus) in 2012. Excessive nutrient loading into the Santa Margarita River and its tributaries contributes to the overproduction of algae, a condition known as eutrophication. Adverse effects due to eutrophication result in a failure to meet the water quality objectives protective of the most sensitive beneficial uses of Cold Freshwater Habitat (COLD) and Rare, Threatened, or Endangered Species (RARE). Moreover, nutrients discharged to the surface waters and groundwater in the Santa Margarita watershed contribute to the eutrophication impairment of the Santa Margarita River Estuary. Major sources of nutrients to the Santa Margarita River include Municipal Separate Storm Sewer Systems (MS4s) and agricultural land uses in San Diego and Riverside counties.

The Advanced Restoration Plan to restore beneficial uses will address the impairment consistent with the State Water Board [Impaired Waters Policy](#) and 2015 and 2023, memorandums from the United States Environmental Protection Agency on alternative responses to impaired waters that retain more flexibility and efficiency than the traditional

approach to setting total maximum daily loads (TMDLs).^{6,72} San Diego Water Board staff have already completed several milestones in the Advanced Restoration Plan's development, including the California Environmental Quality Act scoping meeting in 2020, and both a comprehensive climate change analysis and calculations of the nutrient assimilative capacity (i.e., TMDLs) of the Santa Margarita River in 2021.

Project Objective:

Using adaptive management through a phased restoration approach the Advanced Restoration Plan aims to:

- Reduce loading of nitrogen and phosphorus from point and non-point sources into the river.
- Achieve numeric targets protective of the most sensitive beneficial uses of COLD and RARE, which include dissolved oxygen, algal biomass, and algal biological diversity.
- Phase in riparian and hydrologic habitat restoration if nutrient load reductions do not achieve the numeric targets.

Triennial Review Commitment:

Development of an Advanced Restoration Plan for the Santa Margarita River that includes numeric targets and the nutrient assimilative capacity of the river expressed as TMDLs for total nitrogen and total phosphorous with an implementation plan to restore impaired waters in the Santa Margarita River.

Key Milestone	Target Date	Status
California Environmental Quality Act (CEQA) scoping meeting	October 27, 2020	Completed
Climate Change Analysis	February 14, 2021	Completed
Calculate the nutrient assimilative capacity of the Santa Margarita River (expressed as TMDLs)	December 15, 2021	Completed

⁶ United States Environmental Protection Agency. 2015. Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. Available: https://www.epa.gov/sites/default/files/2015-10/documents/2016-ir-memo-and-cover-memo-8_13_2015.pdf [Accessed Aug 21, 2023].

⁷ United States Environmental Protection Agency. 2023. Information Concerning 2024 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. Available: https://www.epa.gov/system/files/documents/2023-03/2024IRmemo_032923.pdf [Accessed Aug 31, 2023].

Santa Margarita Nutrient Initiative Group Stakeholder Meetings	Ongoing	In process
Draft Staff Report	Summer 2023	On Track
Review of draft Staff Report by the Santa Margarita River Nutrient Initiative Group	Summer 2023	On Track
Peer review of draft Staff Report	Fall/Winter 2023	On Track
Public review of draft Staff Report	Spring 2024	On Track
Water Quality Restoration Plan action to the San Diego Water Board or Executive Officer for consideration	Summer 2024	On Track

B. PROGRESS REPORT: Santa Margarita River Advanced Restoration Plan

Reporting Period Events

Accomplishments during period	Hired a new project manager, Melissa Liotta.
Collaboration during period	Coordination with Steering Committee to discuss the draft Staff Report Monthly Santa Margarita River Technical Advisory Committee meetings Bimonthly internal Santa Margarita River watershed workgroup
Activities planned but not completed	Preparation of the draft Staff Report for external Steering Committee review was delayed in order to onboard the new project manager.
Key issues during period	None

Looking Forward

Activities planned for next period	Completion of stakeholder Steering Committee review and recommendations. Begin external scientific peer review. Provide the San Diego Water Board with an update on the Advanced Restoration Plan.
Key issues on the horizon	None

6. Sanitary Sewer Overflows in the San Diego Region – July 2023 (Attachment B-6)

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 in 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](#),⁸ the [San Diego Regional General SSO Order](#),⁹ and/or individual National Pollutant Discharge Elimination System (NPDES) permit requirements. Some federal entities¹⁰ report this information voluntarily. Most

⁸ State Water Board Order WQ 2022-0103-DWQ, *Statewide General Waste Discharge Requirements General Order for Sanitary Sewer Systems*. State Water Board Order WQ 2022-0103-DWQ was adopted on December 9, 2022, and became effective on June 5, 2023. State Water Board Order WQ 2022-0103-DWQ supersedes Order 2006-0003-DWQ, the previous statewide waste discharge requirements for sanitary sewer systems.

⁹ San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

¹⁰ 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.

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) for July 2023 are provided in the following attached tables:

- Table 1: July 2023- Summary of Public and Federal Sanitary Sewer Overflow Events
- Table 2: July 2023 - Summary of Private Lateral Sewage Discharge Events
- Table 3: July 2023 - Summary of Sewage Discharges by Source

A summary view of information on sewage spill trends from July 2022 to July 2023 are provided in the following attached figures:

- Figure 1: Number of Spills per Month
- Figure 2: Volume of Public SSOs per Month
- Figure 3: Volume of Federal SSOs per Month
- Figure 4: Volume of PLSDs per Month

The Statewide General SSO Order which became effective on June 5, 2023, no longer requires agencies to submit electronic spill reports for public SSOs that are less than 50 gallons in volume that do not reach surface waters. Some agencies may still voluntarily report that information. As a result, tables 1 and 3, and figures 1 and 2 may not include information from public SSOs that are less than 50 gallons in volume that did not reach surface waters. Some agencies are still voluntarily submitting electronic spill reports for spills from private laterals less than 50 gallons in volume that do not reach surface waters.

From July 2022 to July 2023, 38 of the 64 collection systems in the San Diego Region reported one or more sewage spills. Twenty-six collection systems did not report any sewage spills. A total of 239 sewage spills were reported with about 10,281,851 gallons of sewage reaching 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](#).

7. Transboundary Flows from Mexico into the San Diego Region – July 2023 (Attachment B-7)

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,¹¹ 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)¹² 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 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 2023, there was a total of 7 reported transboundary flow resulting in more than 292 million gallons of contaminated water flowing from Mexico into the United States.

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

- Table 1: July 2023 - Summary of Transboundary Flows from Mexico by Event
- Table 2: July 2023 - Summary of Transboundary Flows from Mexico

¹¹ Tijuana River transboundary flows typically consist of a mixture of groundwater, urban run-off, storm water, treated sewage wastewater, and untreated sewage wastewater from infrastructure deficiencies and other sources in Mexico.

¹² The Mexican section of the IBWC.

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 2022 through July 2023. During this period, there were a total of 25 reported transboundary flows resulting in more than 39.56 billion gallons of contaminated water flowing from Mexico into the United States.

The 42-inch pipeline from the pump station PB1A in Tijuana, Mexico has been out of service since July 30, 2022, due to a piping rupture in Matadero Canyon. As a result, PB1 pumping capacity remains reduced and excess flows are being diverted to the SBIWTP. The excess flows include sand, trash, and debris that have overwhelmed all five primary sedimentation tanks (PSTs) and rendered them out of service pending cleaning and rehabilitation. The lack of solids removal in the primary treatment system has resulted in biological overloading of the secondary treatment system and solids washout within the effluent. Excess flows are expected to continue until pipeline PB1A repairs are completed in November 2023.

The 72-inch and 96-inch valves at Junction Box 1 (JB1) remain inoperable. The contract for final design and construction has been awarded. Construction completion of JB1 is estimated to be in 12-18 months.

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

1. State Water Board Policy Notices

Staff Contact: Jeremy Haas

Notices of opportunity for public comment regarding potential State Water Resources Control Board actions are posted online at [Documents for Public Comment | California State Water Resources Control Board](#).

While Regional Water Board staff do not provide comments during the public comment period for potential State Water Board Policy or rule-making actions, staff generally have opportunities to participate in the development of proposed actions prior to the public comment period. In deciding to expend resources to participate when such opportunities arise, San Diego Water Board staff consider the stated priorities and interests of the Board, as expressed in the Practical Vision and annual Operational Plan, and the potential effects on priorities within programs.

The following is a list of recent policy notices of interest provided by the State Water Board:

- [Making Conservation a Way of Life](#). The State Water Board began a rulemaking process for this item on August 18, 2023. Public comments will be accepted through October 17, 2023. State Water Board staff will host a public hearing on October 4,

2023. The hearing will include an overview of the proposed regulation, the regulatory timeline and process, and presentations from interested parties. In addition, anyone may present oral or written comments. More information is available online at the [rulemaking webpage](#).

- Revised Cannabis Cultivation General Waste Discharge Requirements. The State Water Board will hold a hearing to accept public comments and consider adoption of proposed changes to the WDRs and associated conditional waiver of WDRs (Order WQ 2019-0001-DWQ) on November 7, 2023. The written comment period closed August 18, 2023. More information is available at the Cannabis Cultivation Program website: [Water Board Cannabis Cultivation Programs | California State Water Resources Control Board](#).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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

October 11, 2023
APPENDED TO EXECUTIVE OFFICER'S REPORT

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

**November 8, 2023
San Diego Water Board Meeting Room**

Action Agenda Item	Action Type	Written Comments Due
Presentation for the City of San Diego on its Asset Management Program <i>(TBD)</i>	Informational Item	N/A
Cease and Desist Order for Pine Hill Egg Ranch and Demler Brothers' Pullet Farm (Tentative Order No. R902023-0129). <i>(Jeremy Haas, Vincent Vu)</i>	Cease and Desist Order	4-Sept-23

**December 13, 2023
San Diego Water Board Meeting Room**

Action Agenda Item	Action Type	Written Comments Due
Rescission of Order No. 95-15, Waste Discharge Requirements for Mrs. Sue Latimer and Mr. Jim Shafer of Sallows-Sun Island Club Near Harbison Canyon (Tentative Order No. R9-2023-0103) <i>(Mahsa Izadmehr)</i>	Rescission of Waste Discharge Requirements	16-Oct-23
Recission of Order No. 93-47, Waste Discharge Requirements for County of Orange, Joplin Youth Center, Orange County (Tentative Order No. R9-2023-0042) <i>(Mahsa Izadmehr)</i>	Rescission of Waste Discharge Requirements	16-Oct-23
Addendum No. 5 to Order No. 90-09 for Republic Services, Otay Annex Landfill. <i>(Erin Schmitt)</i>	Waste Discharge Requirements Amendment	13-Nov-23

Action Agenda Item	Action Type	Written Comments Due
Waste Discharge Requirements for the City of Escondido Membrane Filtration/Reverse Osmosis Facility, San Diego County (Tentative Order No. R9-2023-0131) <i>(Brandon Bushnell)</i>	Waste Discharge Requirements	23-Oct-23

January 2024
No Meeting Scheduled

Agenda Items Requested by Board Members**March 10, 2021**

Requested Agenda Item	Board Member	Status
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	Summer 2023

May 11, 2022

Requested Agenda Item	Board Member	Status
Lockheed Martin Tow Basin Cleanup Updates	Abarbanel, Olson	Ongoing
Environmental Justice outreach event	Warren	Winter 2023-24
Agricultural effects resulting from Colorado River water allocation reductions.	Olson	Complete September 2023

November 9, 2022

Requested Agenda Item	Board Member	Status
Update on monitoring and debris removal associated with the NPDES permit for discharges from fireworks	Various	Fall 2023
Annual progress reports on implementation of the Strategic Water Quality Assessment Approach for San Diego Bay	Olson, Warren	Ongoing

March 8, 2023

Requested Agenda Item	Board Member	Status
Update regarding the Southern California ROMS-BEC coastal water-quality model	Abarbanel	Fall 2023

May 10, 2023

Requested Agenda Item	Board Member	Status
Information regarding agricultural water quality best practices that are working in other regions and other topics raised during the agricultural workshop	Olson, Warren	Fall 2023

June 14, 2023

Requested Agenda Item	Board Member	Status
Update regarding determination process for transferring an onsite wastewater treatment system (OWTS) from WDRs to the General Order	Warren	Complete September 2023
Update on the accuracy of various storm events, given the new weather patterns we are experiencing	Warren	Complete October 2023
Update on the volume of sewage from spills that reached a surface water	Olson	Complete October 2023 (Information in the Monthly SSO Executive Officer Reports)
Regular updates from the City of San Diego regarding progress assessing and repairing the sewage collection systems identified during the ACL hearing	Olson, Warren	October 2023
A tour of the Harbor Island Living Shoreline Project	Warren	Fall 2023
Identify options for the Board to address the San Diego City Council about concerns regarding the City's sanitary sewer overflow issues and other sewer-related concerns	Olson	October 2023

August 9, 2023

Requested Agenda Item	Board Member	Status
Update on the status of the Lake Cuyamaca fish advisory signs	Warren	December 2023

September 13, 2023

Requested Agenda Item	Board Member	Status
Information regarding the number of drinking water wells that could be shut down using current data if the maximum contaminant level (MCL) of 10 ppb for hexavalent chromium is approved and implemented.	Cantu	November 2023
Information from the Division of Drinking Water (DDW) regarding the circumstances and cause of the Cal-Am boiled water order that was issued to Imperial Beach and some surrounding areas.	Olson	Complete October 2023

Table 1: July 2023 – Summary of Public and Federal Sanitary Sewer Overflow Events¹

Responsible Collection System Agency	Total Volume (Gallons)²	Total Recovered (Gallons)³	Total Reaching Surface Waters (Gallons)⁴	Total Reaching Separate Storm Drain and Recovered (Gallons)⁵	Total Discharged to Land (Gallons)⁶	Surface Water Body Affected⁷	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area⁸
City of Laguna Beach	561	561	0	561	0	Not Applicable	9.0	92.0	18,000
City of Laguna Beach	4,201	4,201	0	4,201	0	Not Applicable	9.0	92.0	18,000
City of National City	9,750	7,800	0	0	9,750	Not Applicable	1.0	105.0	58,967
City of San Diego	1,500	0	0	0	1,500	Not Applicable	112.2	2,944.9	2,380,000
City of San Diego	1,950	0	1,950	0	0	Mission Bay	112.2	2,944.9	2,380,000
San Diego County Sanitation District	980	980	0	980	0	Not Applicable	5.3	422.0	199,000

¹ Table 1 may not include information on public SSOs that were less than 50 gallons in volume and that did not reach surface waters.

² Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

⁴ 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.

⁵ Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

⁶ Total Discharged to Land = total amount reaching land.

⁷ 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.”

⁸ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Responsible Collection System Agency	Total Volume (Gallons) ²	Total Recovered (Gallons) ³	Total Reaching Surface Waters (Gallons) ⁴	Total Reaching Separate Storm Drain and Recovered (Gallons) ⁵	Total Discharged to Land (Gallons) ⁶	Surface Water Body Affected ⁷	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area ⁸
South Coast Water District	146	146	0	146	0	Not Applicable	3.0	138.0	42,174

Table 2: July 2023 – 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 Affected ⁵	Population in Service Area ⁶	Number of Lateral Connections
Carlsbad Municipal Water District	708	708	0	708	Not Applicable	85,000	24,025
City of El Cajon	25	25	0	25	Not Applicable	101,709	17,100

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.

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 Affected ⁵	Population in Service Area ⁶	Number of Lateral Connections
City of San Diego	330	330	0	330	Not Applicable	2,380,000	267,188
City of Vista	74	74	0	74	Not Applicable	90,000	17,109
Padre Dam Municipal Water District	13	13	0	13	Not Applicable	69,641	15,568

Table 3: July 2023 – Summary of Sewage Discharges by Source¹

Spill Type	Month/Year	Number of Spills	Total Volume (Gallons) ²	Total Recovered (Gallons) ³	Total Reaching Surface Waters (Gallons) ⁴	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons) ⁵
Public Spills	July 2023	7	19,088	13,688	1,950	17,138
Federal Spills	July 2023	0	0	0	0	0
Private Spills	July 2023	5	1,150	1,150	0	1,150
All Spills	July 2023	12	20,238	14838	1,950	18,288

¹ Information displayed may not include public SSOs that were less than 50 gallons in volume that did not reach surface waters.

² Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

³ Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

⁴ 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.

⁵ 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: Number of Spills per Month

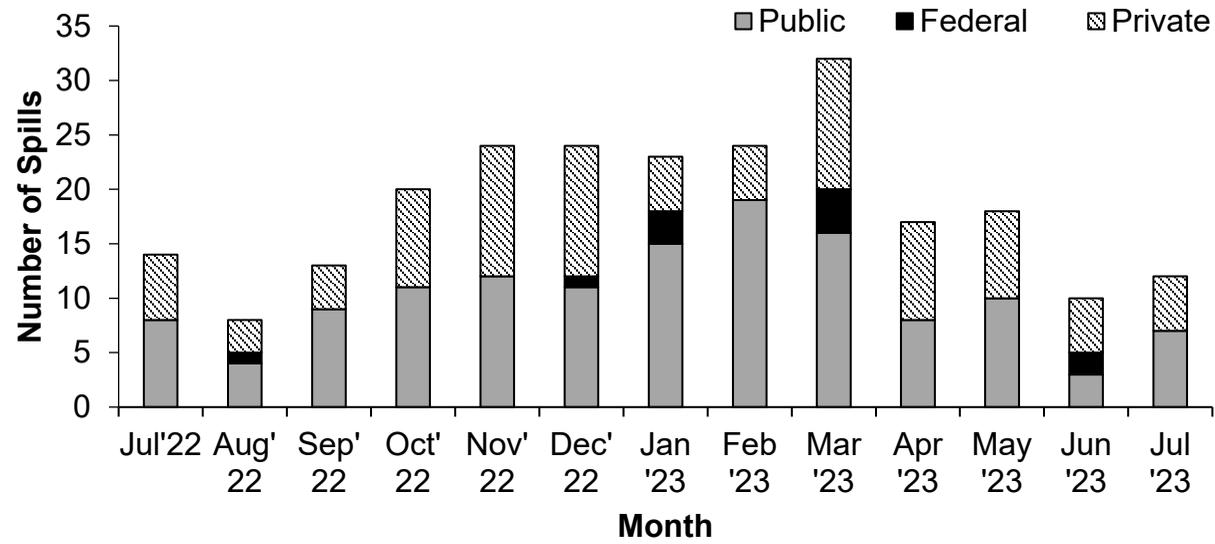


Figure 1: The number of public, federal, and private sewage spills per month from July 2022 through July 2023. Note total number of spills per month may not include public SSOs that were less than 50 gallons in volume that did not reach surface waters.

Figure 2: Volume of Public SSOs per Month

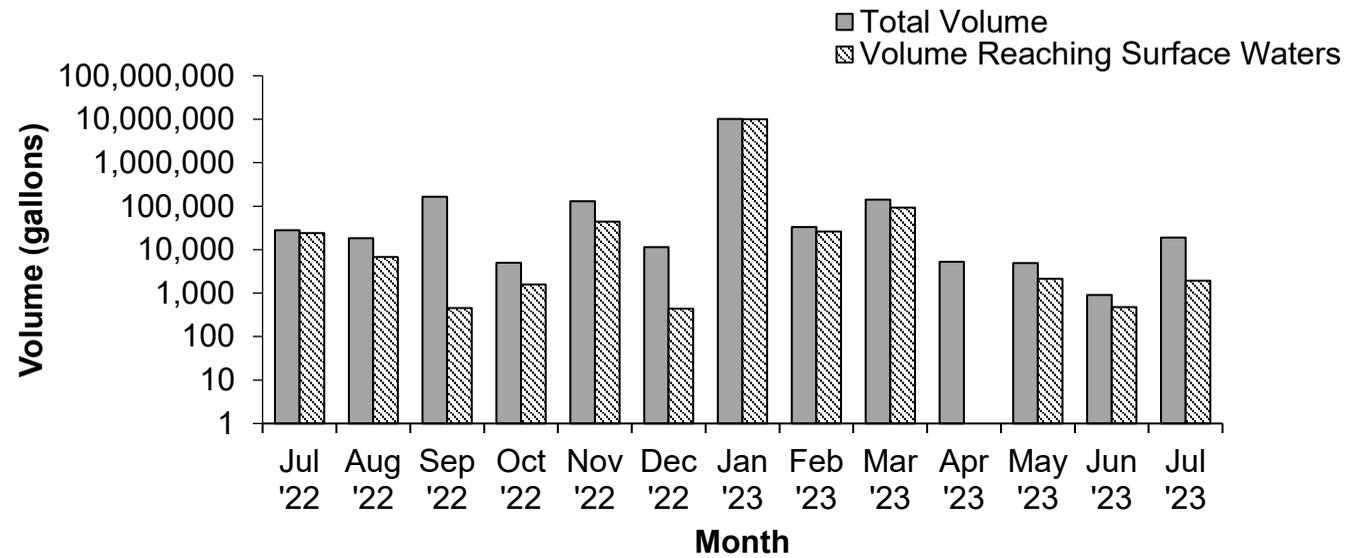


Figure 2: The volume of SSOs from public agencies per month from July 2022 through July 2023. Note, spill totals may not include public SSOs that were less than 50 gallons in volume that did not reach surface waters. Also, note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

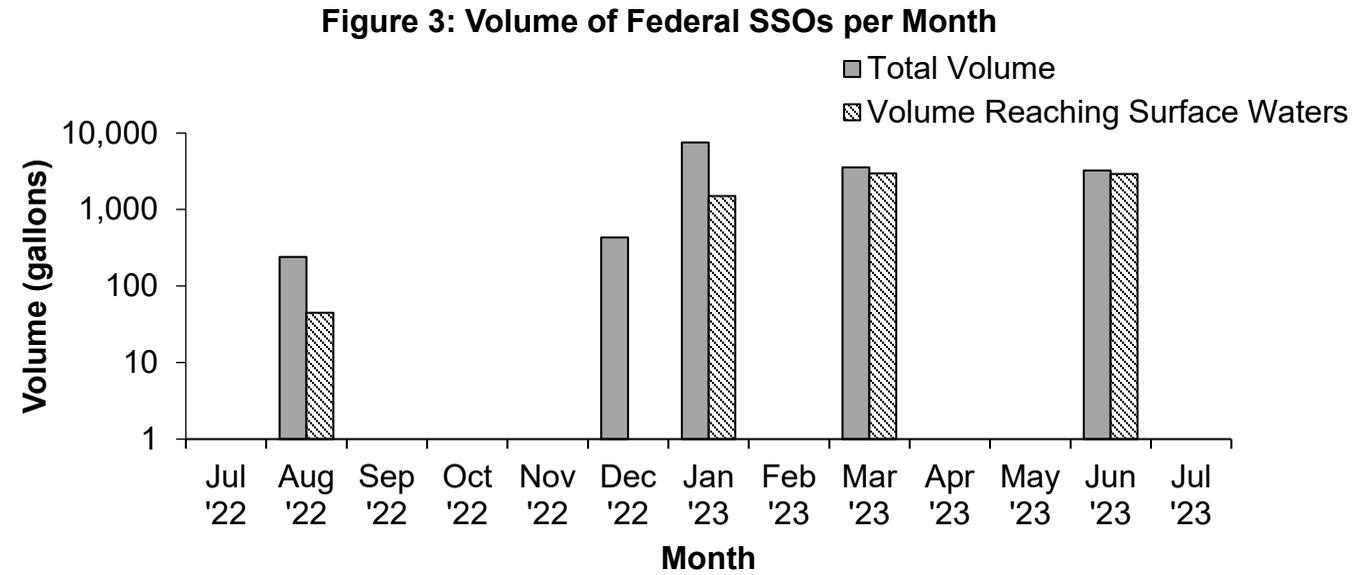


Figure 3: The volume of SSOs from federal agencies per month from July 2022 through July 2023. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

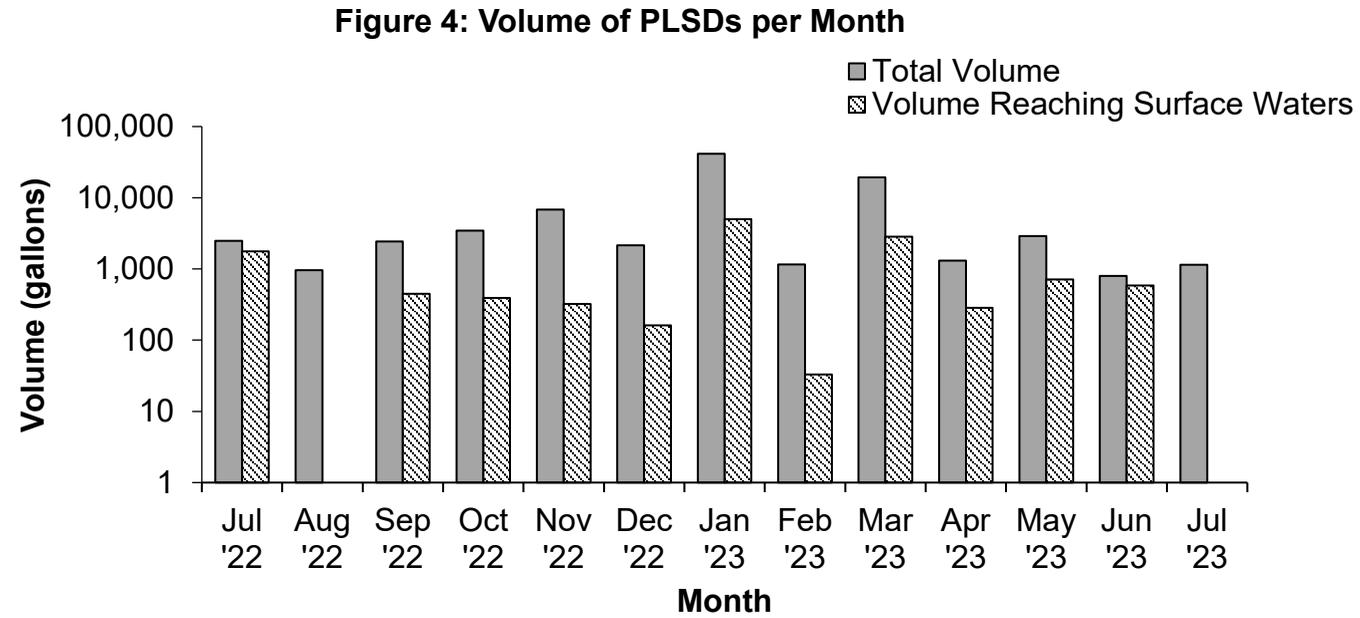


Figure 4: The volume of PLSDs per month from July 2022 through July 2023. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

Table 1: July 2023 – Summary of Transboundary Flows from Mexico by Event¹

Location	Transboundary Flow Start Date	Transboundary Flow End Date	Weather Condition ²	Total Volume (Million Gallons) ³	Total Volume Recovered (Million Gallons) ³	Total Volume Reaching Surface Waters (Million Gallons) ³	Additional Details Reported By USIBWC
Tijuana River Main Channel	7/5/2023	7/7/2023	Dry	11.634	0	11.634	Dry weather flows from numerous sources in Mexico. ⁴
Tijuana River Main Channel	7/7/2023	7/10/2023	Dry	8.914	0	8.914	Dry weather flows from numerous sources in Mexico.
Tijuana River Main Channel	7/10/2023	7/11/2023	Dry	3.791	0	3.791	Dry weather flows from numerous sources in Mexico.
Tijuana River Main Channel	7/11/2023	7/17/2023	Dry	25.8	0	25.8	Dry weather flows from numerous sources in Mexico.
Tijuana River Main Channel	7/17/2023	7/19/2023	Dry	8.793	0	8.793	Dry weather flows from numerous sources in Mexico.

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. USIBWC reported that there was no precipitation as recorded at Marron Valley in July 2023. The rain gauges at Goats Canyon and Smugglers Gulch were not operable and are scheduled for maintenance and repair.

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

⁴ Dry weather flows from numerous sources in Mexico and above the containment capacity of the San Diego-Tijuana wastewater system has resulted in transboundary flows down the Tijuana River.

Location	Transboundary Flow Start Date	Transboundary Flow End Date	Weather Condition ²	Total Volume (Million Gallons) ³	Total Volume Recovered (Million Gallons) ³	Total Volume Reaching Surface Waters (Million Gallons) ³	Additional Details Reported By USIBWC
Tijuana River Main Channel	7/19/2023	7/25/2023	Dry	11.5	0	11.5	Dry weather flows from numerous sources in Mexico.
Tijuana River Main Channel	7/26/2023	8/19/2023	Dry	221.9	0	221.9	Dry weather flows from numerous sources in Mexico.

Table 2: July 2023 - Summary of Transboundary Flows from Mexico¹

Location	Month/Year	Number of Transboundary Flows	Total Volume (Million Gallons)	Total Volume Recovered (Gallons)	Total Volume Reaching Surface Waters (Million Gallons)
Tijuana River Main Channel	July 2023	7	292.332	0	292.332
Canyon Collectors	July 2023	0	0	0	0
South Bay International Wastewater Treatment Plant	July 2023	0	0	0	0
All Locations	July 2023	7	292.332	0	292.332

¹ For transboundary flows that start and end in different months, Table 2 includes the transboundary flow in the month the transboundary flow started.

Figure 1: Number of Transboundary Flows

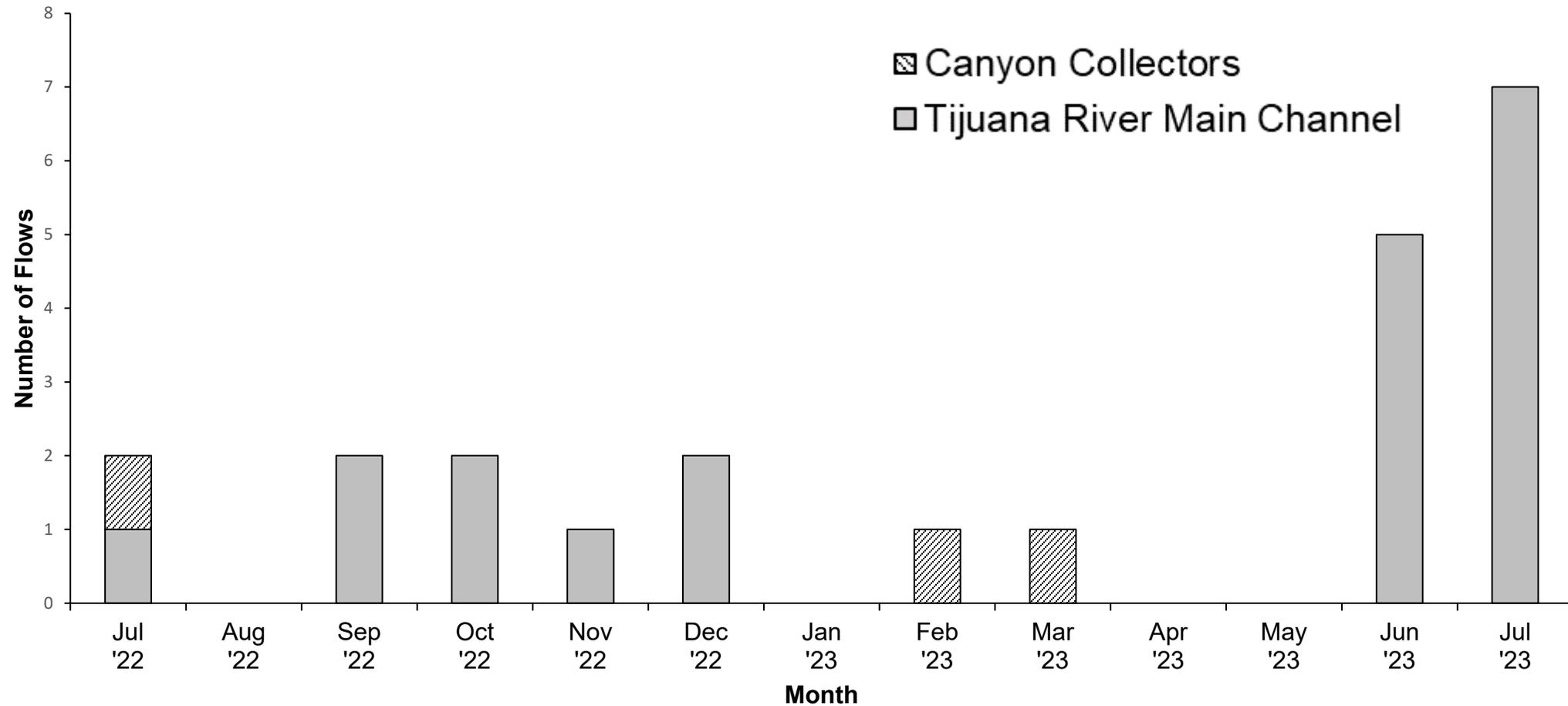


Figure 1: Number of reported transboundary flows per month from July 2022 through July 2023 at the canyon collector systems and the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the transboundary flow in month the transboundary flow started. For example, flows in January through June 2023 that started in December 2022 are only show in December 2022.

Figure 2: Tijuana River Transboundary Flow Volume

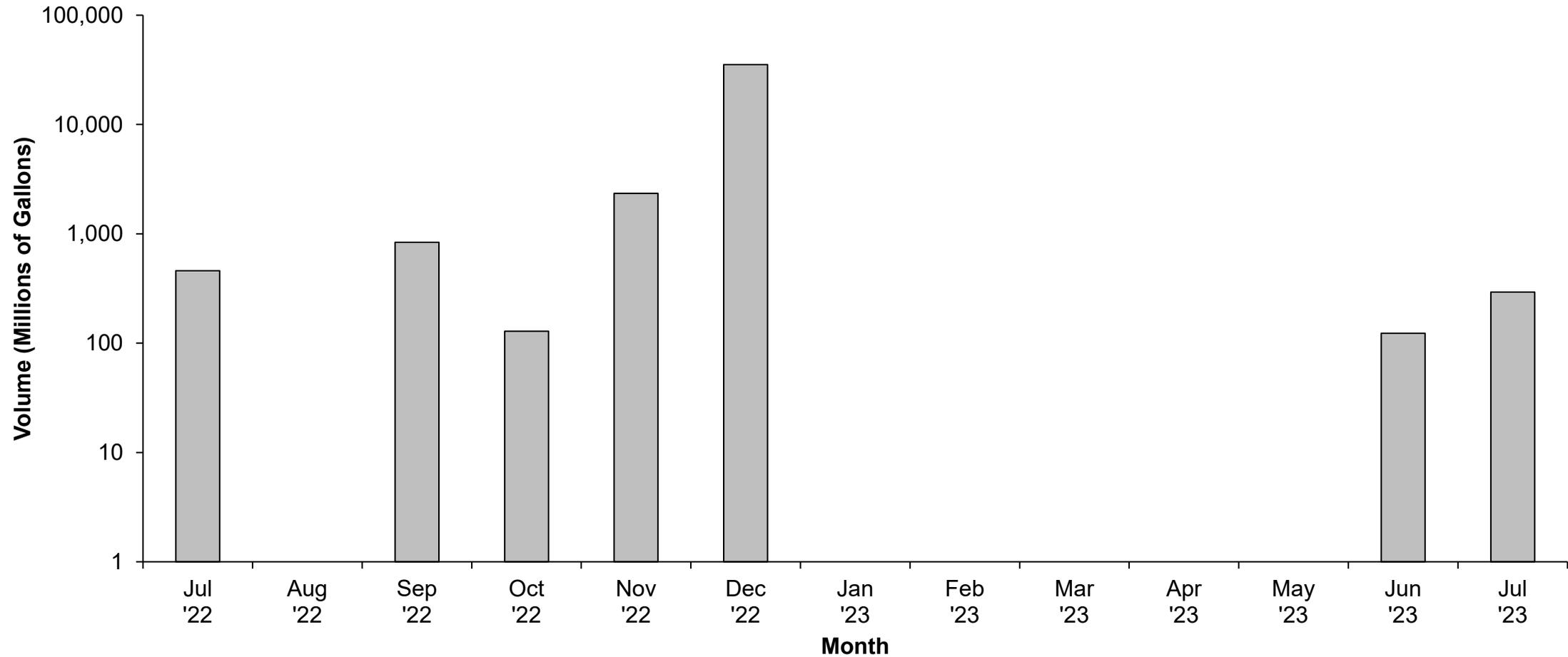


Figure 2: Volume of reported transboundary flows per month from July 2022 through July 2023 at the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the total volume of the transboundary flow in the month the transboundary flow started. For example, flows in January through June 2023 that started in December 2022 are only show in December 2022. Note the logarithmic scale on the vertical axis to accommodate the variation in transboundary flow volumes.

Figure 3: Canyon Collector Transboundary Flow Volume

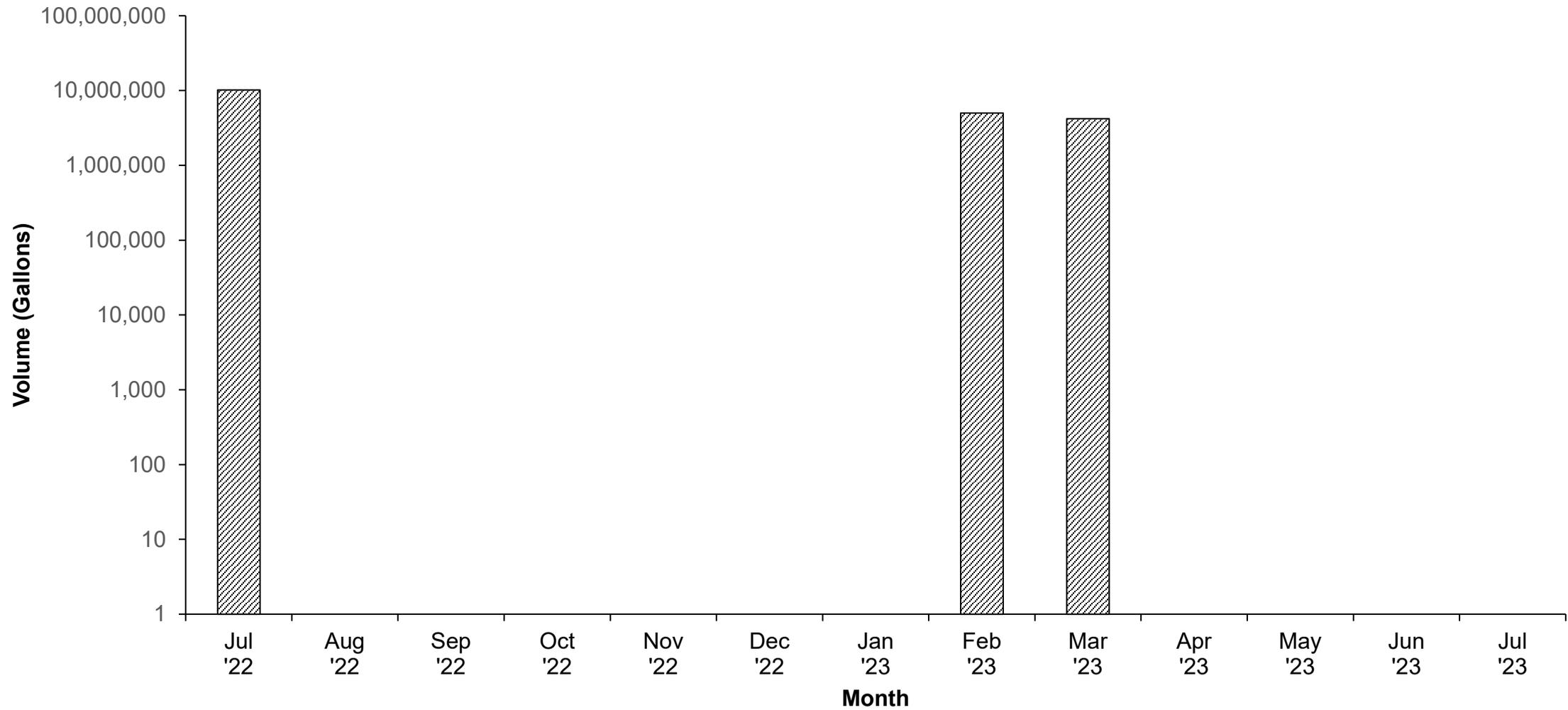


Figure 3: Volume of reported transboundary flows per month from July 2022 through July 2023 at the canyon collector systems. Note the logarithmic scale on the vertical axis to accommodate variation in transboundary flow volumes.