

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

David Gibson, Executive Officer



**Executive Officer's Report
September 8, 2021**

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The September 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

No Reports

Part B – Significant Regional Water Quality Issues

1. Sandia Creek and Santa Margarita River Steelhead Update

Staff Contact: Chad Loflen

On-going efforts in the Santa Margarita River and Estuary appear to be paying off for the RARE beneficial use. At the most recent [Southern California Steelhead Coalition](#) meeting, representatives from the United States Geological Survey, California Department of Fish and Wildlife, and United States Marine Corps at Camp Pendleton reported on this year's finding of multiple individuals of steelhead/rainbow trout (*O. mykiss*) as well as Arroyo Chub (*Gila orcuttii*, a southern California endemic) on Sandia Creek, a major tributary of the Santa Margarita River. Pacific lamprey (*Entosphenus tridentatus*), a State Species of Special Concern that also migrates from freshwater to the ocean, was sighted but not confirmed.

Southern California Steelhead are considered an evolutionary significant unit (ESU) under the Endangered Species Act ("ESA", August 18, 1997, 62 Federal Register 43937)) and have been identified as a genetically distinct subpopulation, with fewer than 500 individuals left in southern California. *O. mykiss* exhibit a complex life-history that differs from other Pacific salmonids. They can be anadromous or freshwater residents, with the anadromous form referred to as "steelhead" and resident forms referred to as "rainbow trout." Anadromous individuals can spend multiple years in freshwater prior to smoltification, which enables them to enter the ocean, and then spend up to 3 years in saltwater prior to returning to streams to spawn. Unlike almost all salmonids, steelhead do not die after spawning, and can spawn more than once.

Historic stocking of rainbow trout has occurred throughout southern California, and these efforts used hatchery raised *O. mykiss* whose brood stock came from northern California. Fin clips were collected during the Sandia Creek survey for genetic analysis to determine if the individuals are native Southern California Steelhead or come from historic stocking efforts. In July, following the positive identification of *O. mykiss*, California Trout and the California Department of Fish and Wildlife also conducted eDNA sampling along the Santa Margarita River and on Sandia and Rainbow creeks. eDNA, which stands for "environmental DNA," is a newer method of sampling that looks for traces of an organism's shed DNA (e.g. from feces, skin cells, etc.) in water, soil, or sediment. The San Diego Water Board's SWAMP program has successfully piloted the use of eDNA in water sampling to identify the presence of sensitive and invasive species during bioassessment, and eDNA is now being used as a tool for species-specific management by state and federal agencies. July's eDNA sampling detected DNA from *O. mykiss* in the lower Santa Margarita River as well as Sandia Creek.

State and federal agencies at the Southern California Steelhead Coalition meeting were in general agreement that the presence of *O. mykiss* and possible sighting of Pacific

lamprey were documentation of the success of downstream management actions taken, particularly by United States Marine Corps Base Camp Pendleton, to improve the habitat connectivity of the Santa Margarita River watershed. In the late 1990's agencies conducted extensive surveys of the Santa Margarita River and tributaries and found no salmonids or lamprey. Since then the Marine Corps has conducted multiple habitat improvements, including:

- The installation of a fish passage facility on the lower Santa Margarita River at the Lake O'Neill diversion weir (2019);
- The removal of hundreds of acres of non-native riparian vegetation, primarily *Arundo donax*, in the lower Santa Margarita River; and
- The continuous removal of aquatic invasive species on base.

These efforts appear to be paying off, as Pacific lamprey were observed in Santa Margarita River in 2019 by a Camp Pendleton biologist, and an *O. mykiss* smolt was observed below the fish passage structure in May 2021, followed by the more recent *O. mykiss* observations upstream during surveys in May, June, and July of 2021.

Separately, Water Board staff are developing a watershed-wide plan with numerous stakeholders to address chronic eutrophication impairments in the Santa Margarita River that will also improve conditions for steelhead and other aquatic species. Information on that effort is at [Santa Margarita River Estuary | San Diego Regional Water Quality Control Board \(ca.gov\)](#).



July 2021 eDNA Detection Site on Lower Santa Margarita River. Photo: Caltrout.

2. Commercial Agriculture Regulatory Program Update

Staff Contact: Jason DuMond

The San Diego Water Board adopted Commercial Agriculture Orders R9-2016-0004 and R9-2016-0005 (General Agricultural Orders) in November 2016. The Board's Commercial Agriculture Regulatory Program (Program) has worked extensively on efforts to increase enrollment, identify collaboration opportunities for education and outreach with local municipalities and Third-Party Group grower coalitions, and enforcement.

Outreach and Education

Program staff are building partnerships with local agencies such as the San Diego County Water Authority. The San Diego County Water Authority now requires growers to enroll in the General Agricultural Orders prior to receiving the discounted water rate for agriculture uses. This prompting by the San Diego County Water Authority resulted in Program staff enrolling 130 new growers in the General Agricultural Orders since April 1, 2021.

Program staff also continue stakeholder outreach and education efforts. At the online Virtual Climate Action and Agriculture Symposium in May 2021, San Diego Water Board staff presented an overview of the requirements from the State Water Resources

Control Board's [Order WQ 2018-0002](#), *In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin Watershed that are Members of a Third-Party Group Issued by the California Regional Water Quality Control Board, Central Valley Region* (Eastern San Joaquin Order). The Eastern San Joaquin Order requires growers to report the amount of nitrogen they apply to their crops and calculate the amount of nitrogen removed through plant uptake of nitrogen. This new statewide requirement provides data to inform both staff and growers about where nitrogen concentrations in soils are elevated and may pose a threat to water quality, and help staff prioritize inspection efforts. Regional Water Boards are mandated to incorporate the new requirements of the East San Joaquin Order into their respective agricultural orders.

Finally, Program staff continue to encourage Third-Party Groups to educate their members on how to protect water quality and reduce discharges from their operations. Staff are planning a series of in-person meetings with growers to promote the implementation of effective best management practices (BMPs) and the requirements of the General Agricultural Order. This effort will also include the development of educational materials, such as a walkthrough presentation that will be available on the San Diego Water Board's website, to help growers with the enrollment process.

Annual Monitoring Reports and Water Quality Restoration Plans

The Third-Party Groups submitted the 2020 Annual Monitoring Reports (AMR) to the San Diego Water Board on April 30, 2021. Staff reviewed the AMRs and found that eight Water Quality Benchmarks continued to be exceeded. These constituents are total nitrogen, total phosphorus, nitrate with nitrite, sulfate, total dissolved solids, *escherichia coli*, *enterococci*, and fecal coliform. The General Agricultural Order requires the Third-Party Groups to develop and submit Water Quality Restoration Plans (WQRPs) when a monitoring site has a constituent that exceeds the Water Quality Benchmark in three of the last four monitoring events. The Third-Party Groups are currently developing WQRPs to address the constituents exceeding Water Quality Benchmarks. Program staff will review the WQRPs and provide written comment.

Inspections

The COVID-19 pandemic limited staff's ability to conduct inspections in the past year. However, complaint response inspections are ongoing and more inspections are planned for the fall of 2021 based on the following factors: type of operation (i.e. orchards and nurseries), size of operation, proximity to impaired water bodies and key use areas, data presented in AMRs, and BMP practices. Program staff will coordinate inspection efforts with the Board's Monitoring Assessment and Research Unit to simultaneously conduct water quality monitoring during site inspections.

Enforcement

Since November 2020, two settlement offers to resolve penalties have been accepted and there is currently one outstanding Administrative Civil Liability Complaint that may be resolved by settlement or hearing in the coming months. These actions were issued to growers who failed to pay their annual fee or failed to enroll in the General Agricultural Order within 30 days after receiving a Staff Enforcement Letter.

The San Diego Water Board also issued 34 Notice of Violations (NOV) to growers who were formerly members of the De Luz Third-Party Group (De Luz Group). Since the De Luz Group dissolved in the summer of 2019 due to a lack of funding, the growers with the De Luz Group are required to join a new Third Party Group. Over 75 percent of the 34 growers who received an NOV have joined a Third Party Group or reported that they are no longer engaged in agricultural practices.

3. San Diego Water Board Regional Recycled Water Use in 2020

Staff Contact: Brandon Bushnell

Recycled water is an important water resource for the region, which is highlighted in the Sustainable Local Water Supply chapter of the San Diego Water Board's Practical Vision.¹ The State Water Resources Control Board (State Water Board) adopted the *Policy for Water Quality Control for Recycled Water* (Recycled Water Policy)² in 2009, with amendments in 2013 and 2019, to streamline and standardize permitting for recycled water projects.

The 2019 Recycled Water Policy amendment established statewide goals to increase recycled water use from 714,000 acre-feet per year (afy)³ in 2015 to 1.5 million afy by 2020, and to 2.5 million afy by 2030. To track these goals, the 2019 Recycled Water Policy amendment required wastewater treatment plants discharging more than 20,000 gallons per day to collect data monthly, and report annually, the volumes of wastewater received, treated and discharged for beneficial reuse (e.g. recycled water), and the volumes of wastewater treated and discharged without beneficial reuse. This volumetric data collection and reporting will help identify additional opportunities for recycled water production and reuse. The statewide data for 2020 shows that 728,250 acre-feet of recycled water was produced, which is less than the goal of 1.5 million acre-feet in the Recycled Water Policy.

Wastewater treatment plants within the San Diego Water Board's jurisdiction reused approximately 17 percent of the wastewater collected in 2020. From a total of 347,184 acre-feet of influent wastewater collected, 58,533 acre-feet of recycled water was produced, and 276,794 acre-feet was treated and disposed without beneficial reuse as shown in Figure 1 below.

¹ The Practical Vision can be found at the following webpage:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/docs/PV-WQCC_Version.pdf

² The Recycled Water Policy can be found at the following webpage:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf

³ 1 acre-foot equals 325,851 gallons.

Figure 1. Recycled Water Produced vs Effluent Disposed in 2020

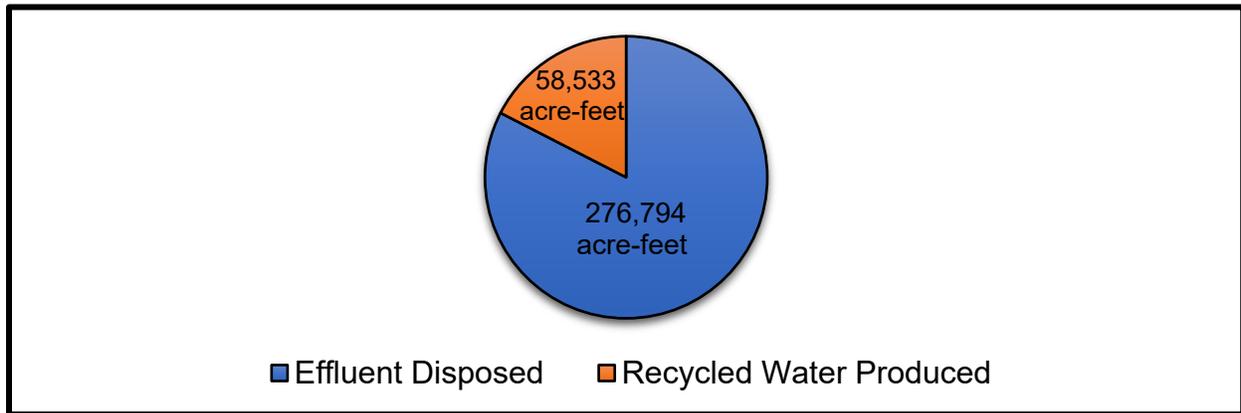
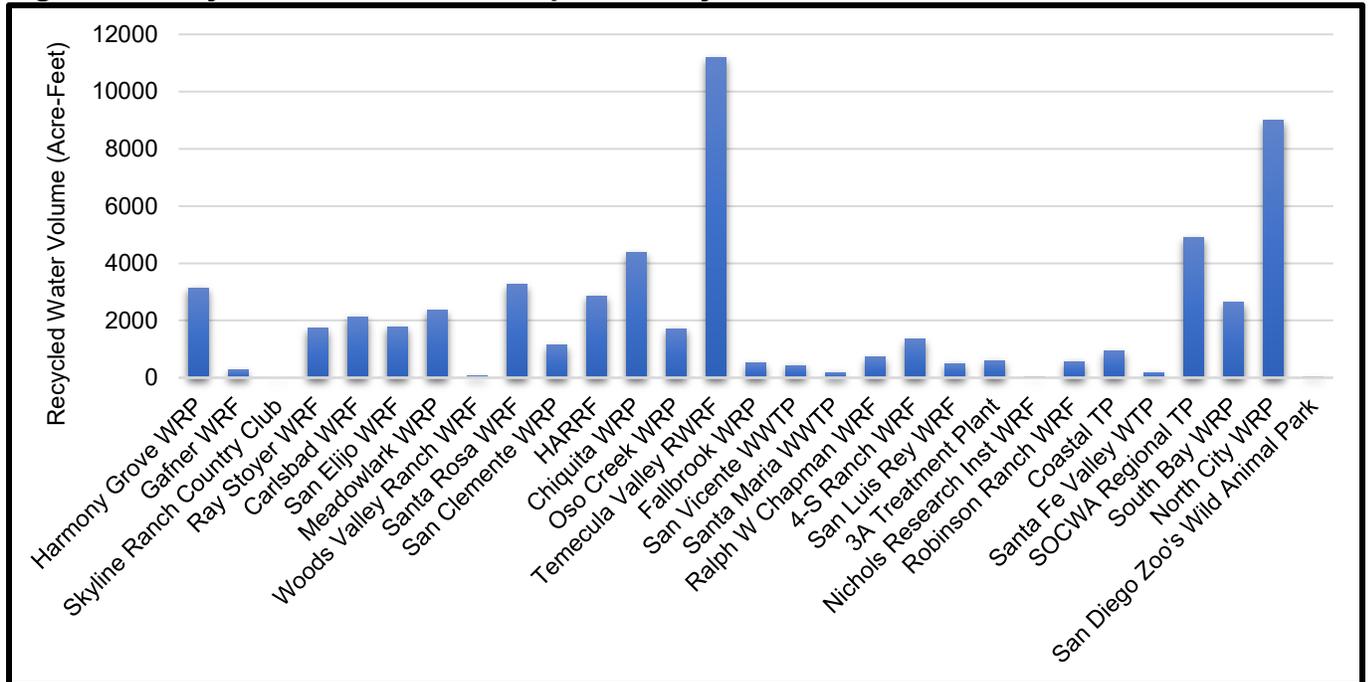


Figure 2 below shows the volume of recycled water produced by each facility within the region for calendar year 2020:

Figure 2: Recycled Water Produced per Facility in 2020⁴

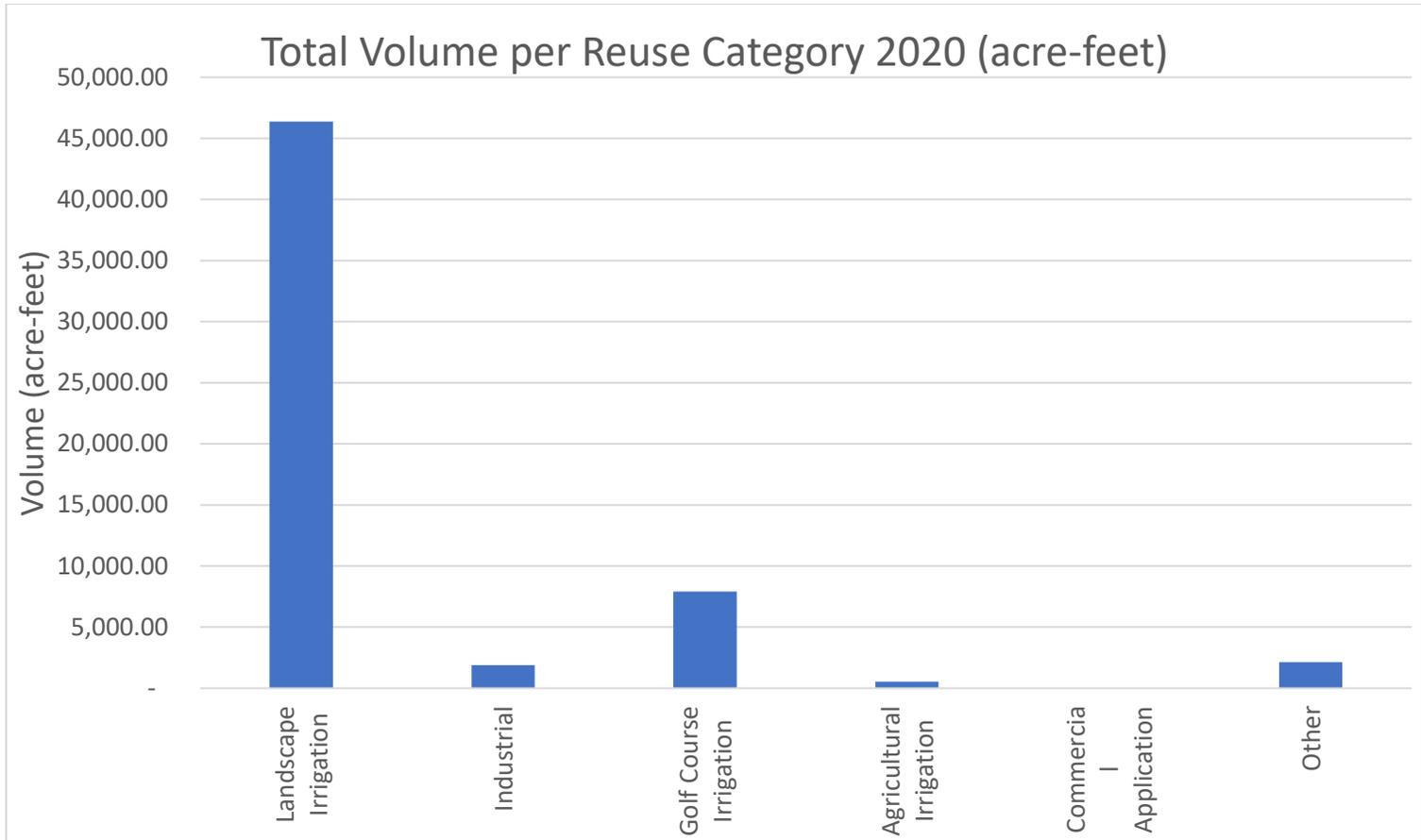


The Temecula Valley RWRP is the biggest producer of recycled water within the region. However, most of the recycled water produced at the Temecula Valley RWRP is reused in the California Regional Water Quality Control Board, Santa Ana Region for landscape irrigation. The City of San Diego’s North City and South Bay WRPs are the biggest producers of recycled water that is reused within the San Diego Water Board region.

⁴ Acronym Definitions: WRP – Water Reclamation/Recycling Plant, WRF - Water Reclamation/Recycling Facility, RWRP – Regional Water Reclamation Facility, HARRF – Hale Avenue Resources Recovery Facility, TP – Treatment Plant, and WTP or WWTP – Wastewater Treatment Plant

Figure 3 below shows the volume of recycled water by uses from all the facilities in the region:

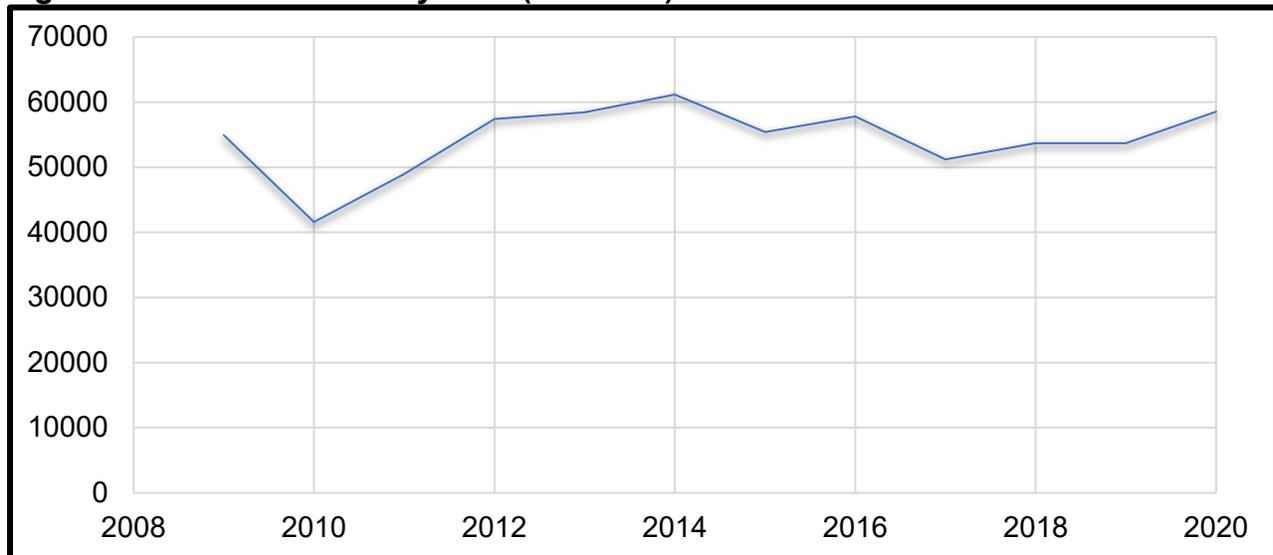
Figure 3: Total Volume per Reuse Category 2020



Most of the recycled water produced in the region is used for landscape irrigation at areas such as freeway medians or common areas of housing developments. The use of non-potable recycled water is limited by customer’s demand for recycled water.

Figure 5 below shows volume of recycled water reused over the last 12 years in the region:

Figure 5: Volume Reused by Year (acre-feet)



As shown in the figure above, recycled water production has been relatively stable for about a decade. However, recycled water production is expected to increase due to many agencies developing recycled water projects for direct or indirect potable reuse. The region has several new indirect potable reuse projects currently in construction and development including but not limited to the following:

- The City of San Diego is constructing the North City Pure Water Treatment Plant that will produce up to 33,604 afy of advanced treated recycled water for indirect potable reuse.
- The City of Oceanside is constructing the Pure Water Oceanside advanced water purification program that will produce an additional 3,920 afy of advanced treated recycled water for indirect potable reuse.
- Padre Dam Municipal Water District, the City of El Cajon, the County of San Diego, and Helix Water District are developing plans for the East County Advanced Water Purification Program to produce 12,881 afy of recycled water for indirect potable reuse.

San Diego Water Board staff plan several activities in the upcoming year to support recycled water reuse: 1) prioritize applications for new recycled water projects and the expansion of existing recycled water projects; 2) engage with recycled water producers and purveyors to assist with identifying and applying for available grants and funds managed by the State Water Board; 3) redesign and maintain the San Diego Water Board's website for recycled water to promote effective communication with recycled water project proponents; and 4) evaluate and comment on salt and nutrient management plans submitted for the San Diego Water Board's consideration.

4. Public Release of Proposed Enforcement Settlements

Staff Contact: Chiara Clemente

In August 2021, the San Diego Water Board's Prosecution Team released two proposed settlement agreements for public comment. To inform interested parties of the proposed settlements and comment period, the Prosecution Team posts notices on our web page and distributes notices to the [email subscription list](#) for penalty assessment notices.

On August 4, 2021 the Prosecution Team released Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Settlement) No. R9-2021-0141 for public review and comment. The Settlement is an agreement between the City of San Marcos and the San Diego Water Board's Prosecution Team to address alleged violations of California State Water Resources Control Board (State Water Board) Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (CGP) for the San Marcos Creek District Infrastructure Project (Project), WDID No. 9 37C3895799. To resolve the alleged violations without formal administrative proceedings, the City has agreed to the final imposition of an administrative civil liability in the amount of \$32,254. **Written comments are due by 5:00 p.m. on September 3, 2021.**

On August 10, 2021 the San Diego Water Board Prosecution Team released Settlement No. R9-2021-0272 for public review and comment. The Settlement is an agreement between the Santa Margarita Water District and the San Diego Water Board's Prosecution Team to address alleged violations of California Water Code Section 13376 by failing to timely obtain regulatory coverage for the Aufdenkamp Connection Transmission Main Relocation Construction Project. To resolve the alleged violations without formal administrative proceedings, the District has agreed to the final imposition of an administrative civil liability in the amount of \$16,940. **Written comments are due by 5:00 p.m. on September 13, 2021.**

Both tentative Orders and attachments are available for review on the Water Board's [tentative Orders webpage](#).⁵ Instructions on how to submit written comments are described in the 30-day Notice on the webpage.

Consideration of either or both Settlement Orders is an action delegable to the Executive Officer pursuant to Section 2.d of [Resolution R9-2014-0046](#).⁶ All written comments received will be reviewed and provided to the Executive Officer for consideration.

⁵ https://www.waterboards.ca.gov/sandiego/board_decisions/tentative_orders/

⁶ https://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2014/R9-2014-0046.pdf

5. 2018 Triennial Review Project No. 1: Tijuana River Valley Quality Restoration TMDLs

Staff Contact: Melissa Corona

A. PROJECT INFORMATION

Project Lead: Melissa Corona

Supervisor: Cynthia Gorham

Report Date: September 2021

Report Period: March 2021-August 2021

Overall Status: On track

Website:

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

Project Description:

The purpose of this project is to develop Total Maximum Daily Loads (TMDLs) for indicator bacteria and trash in the 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 TMDL development process includes timely communication with the Tijuana River Valley Recovery Team, selecting numeric targets, identifying pollutant load reductions, and evaluating potential management actions.

Although the Tijuana River is on the 2014-2016 Clean Water Act Section 303(d) List of Water Quality Limited Segments for impairments due to a total of 20 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 Commitments:

Development of TMDLs for indicator bacteria and trash with implementation plans 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 | Fall 2021 (Revised from Summer 2020) | On track |
| Public review of draft TMDL technical report | Winter 2021-22 (Revised from | On track |

| Key Milestone | Target Date | Status |
|--|--|----------|
| | Winter 2020-21) | |
| Basin Plan amendment package to San Diego Water Board for adoption | April 2022 (Revised from August 2021) | On track |

B. PROGRESS REPORT: Tijuana River Valley TMDLs

Reporting Period Events

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|--------------------------------------|--|
| Accomplishments during period | n/a |
| Collaboration during period | Briefings to Tijuana River Valley Recovery Team Steering Committee (March and June). |
| Activities planned but not completed | <ul style="list-style-type: none"> • Internal review and revision of the draft TMDL staff report is near completion. • Preparation of external scientific peer review materials is near completion. |
| Key issues during period | <ul style="list-style-type: none"> • Major revisions to the TMDL approach were made during this period based on recent recommendations by counsel and the U.S. Environmental Protection Agency (USEPA) regarding quantifying pollutant loads coming from both the U.S. and Mexico rather than focusing specifically on polluted transboundary flows. • The TMDL implementation plan will include proposed projects currently being evaluated by USEPA. These implementation projects will be funded, in part, by <i>United States-Mexico-Canada Agreement (USMCA)</i> funds appropriated by Congress in 2019. As of August 2021, USEPA has narrowed down the options to three alternatives, each with a set of wastewater infrastructure projects in the U.S. and Tijuana. |

Looking Forward

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| Activities planned for next period | <ul style="list-style-type: none"> • Completion of internal review and revision anticipated in September. • Submittal to external scientific peer review will follow internal review. |
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|---------------------------|---|
| Key issues on the horizon | This project could be affected by a number of efforts involving the Tijuana River Valley, including the San Diego Water Board's involvement in a lawsuit against the United States Section of the International Boundary and Water Commission (USIBWC), USEPA selection of USMCA-funded projects, efforts associated with IBWC Minute 320, and efforts led by the Tijuana River Valley Recovery Team. |
|---------------------------|---|

6. 2018 Triennial Review Project No. 3: Contact Water Recreation (REC-1) Water Quality Objectives

Staff Contact: Michelle Santillan

A. PROJECT INFORMATION

Project Lead: Michelle Santillan

Supervisor: Cynthia Gorham

Report Date: September 2021

Report Period: March 2021-July 2021

Overall Status: On track

Website:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/issue3.shtml

Project Description:

The purpose of this project is to implement and track progress of recommendations outlined in the [2014 Triennial Review Project Summary Report \(2018\)](#). The goal is to focus on short-term actions that can be completed within the next three years.

Project Objective:

1. To protect REC-1 beneficial uses,
2. To adopt new and/or updated regulations based upon the latest technical findings and scientific understanding,
3. To facilitate effective use of resources by regulated parties, and
4. To ensure judicious use of San Diego Water Board resources.

Triennial Review Commitments:

Staff committed to focus on short-term actions that can be completed within the next three years that were identified in the 2018 recommendations report for the 2014 Triennial Review REC-1 project. These actions may include:

1. Updating the municipal separate storm sewer systems (MS4) permit,
2. Updating waste discharge requirements for sanitary sewer systems,
3. Issuing an Investigative Order for the San Diego River Watershed, and

4. Updating Chapter 3 of the Basin Plan to reflect the latest statewide water quality standards for bacteria in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays and Estuaries of California, and for Ocean Waters of California.

| Key Milestone | Target Date | Status |
|--|--------------------|---|
| Draft Basin Plan Amendment for Public Review | May 2019 | Released in December 2019 |
| Public Hearing for San Diego River Watershed Investigative Order | June 2019 | Adopted by San Diego Water Board on June 12, 2019 |
| Basin Plan Amendment for Board Consideration | December 2019 | Adopted by San Diego Water Board on March 5, 2020 |
| Updates to Basin Plan Amendment for Public Review | October 2020 | Complete |
| Updated Basin Plan Amendment for Board Consideration | December 8, 2020 | Complete |
| Public Workshop for MS4 Permit Renewal | TBD | |
| Public Hearing for MS4 Permit Renewal | Winter 2022 | |
| Draft Revisions to Regional WDRs for Sanitary Sewer Systems | TBD | Staff participated in the State Water Board effort to identify proposed revisions to statewide requirements for sanitary sewer systems. |

B. PROGRESS REPORT: REC-1 Water Quality Objectives**Reporting Period Events**

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| Accomplishments during period | <p>The Basin Plan amendment to incorporate the latest statewide bacteria water quality objectives (Resolution No. R9-2020-0254) was adopted by the State Water Board in April 2021. The Basin Plan amendment is currently under review at the Office of Administrative Law (OAL).</p> <p>Staff prepared and submitted to State Water Board a workplan for sampling human genetic markers and fecal indicator bacteria at reference beaches minimally impacted by anthropogenic activities. If approved, work would be contracted using funds from the Surface Water Ambient Monitoring Program and would begin in fall 2021.</p> |
| Collaboration during period | <ul style="list-style-type: none"> • The internal bacteria workgroup met in April and June 2021. The group meets on a bimonthly basis to share information and coordinate actions. • Since April 2020, San Diego Water Board staff have met with Responsible Parties, including relevant MS4 copermittees, in regular Steering Committee Meetings to discuss ongoing monitoring associated with the San Diego River Investigative Order (R9-2019-0014). With the exception of the homeless survey which had to be delayed due to the COVID-19 pandemic, all other monitoring is progressing as scheduled. |
| Activities planned but not completed | None |
| Key issues during period | <p>The State Water Board released an informal draft Statewide Sanitary Sewer System General Order and held two public workshops, in April 2021, to provide stakeholders and interested parties information regarding the preliminary informal staff draft General Order. Additional information can be found at: Sanitary Sewer Overflow Reduction Program California State Water Resources Control Board</p> |

Looking Forward

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| <p>Activities planned for next period</p> | <ul style="list-style-type: none"> • The Basin Plan amendment to incorporate the latest statewide bacteria water quality objectives is currently being reviewed by OAL. If OAL concurs with the non-regulatory status of the Basin Plan amendment, staff will finalize the documents and prepare the updated version of the San Diego Basin Plan for online posting. |
| <p>Key issues on the horizon</p> | <ul style="list-style-type: none"> • The San Diego Water Board has initiated the Triennial Review and has released a preliminary list of projects. One of the proposed projects on the preliminary list is to 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. |

7. Sanitary Sewer Overflows in the San Diego Region – June 2021 (Attachment B-7)

Staff Contact: Keith Yaeger

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), which affect the likelihood of an SSO. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, 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 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, pathogenic organisms, toxic pollutants, nutrients, 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 the closure of beaches and other recreational areas, the inundation of property, and the 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 SSO spills are required to be reported under the [Statewide General](#)

[SSO Order](#),⁷ the [San Diego Regional General SSO Order](#),⁸ and/or individual National Pollutant Discharge Elimination System (NPDES) permit requirements. Some federal entities⁹ 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 in June 2021 are provided in the following attached tables:

- Table 1: June 2021 - Summary of Public and Federal Sanitary Sewer Overflow Events
- Table 2: June 2021 - Summary of Private Lateral Sewage Discharge (PLSD) Events
- Table 3: June 2021 - 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
- 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 June 2020 to June 2021. During that period, 34 of the 63 collection systems in the San Diego Region regulated under the Statewide SSO Program reported one or more sewage spills. Twenty-nine collection systems did not report any sewage spills. A total of 233 sewage spills were reported and 138,702 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](#).

⁷ 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*.

⁸ San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

⁹ 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.

8. Transboundary flows from Mexico into the San Diego Region – June 2021 (*Attachment B-8*)

Staff Contact: Keith Yaeger

Water and wastewater in the Tijuana River and from canyons located along the international border ultimately drain from the City of Tijuana, Mexico 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,¹⁰ are reported by the USIBWC pursuant to [Order No. R9-2014-0009](#),¹¹ the 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.

In June 2021, there were two reported dry weather transboundary flows. In total, the reported dry weather transboundary flows during this period resulted in 967 gallons of contaminated water¹² flowing from Mexico into the United States.

Details on the transboundary flows reported in June 2021 are provided in the attached tables:

- Table 1: June 2021 - Summary of Transboundary Flows from Mexico by Event
- Table 2: June 2021 - 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

¹⁰ 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.

¹¹ On May 12, 2021, the San Diego Water Board adopted Order No. R9-2021-0001 which supersedes the expired Order No. R9-2014-0009 effective July 1, 2021.

¹² As used in this report, the term “contaminated water” is intended to refer to water that either meets the definition of “contamination” under Water Code section 13050(k) or that creates, or threatens to create, a condition of “pollution” under Water Code section 13050(l).

These figures show the number and volume of transboundary flows per month from June 2020 through June 2021. Between November 2020 and April 2021, the number and volume of transboundary flows increased 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 the headworks of the SBIWTP are inoperable. With the gate valves inoperable, USIBWC currently has no control over the amount of flow entering the SBIWTP other than communications with Mexico to limit the flow. When the pipeline from Mexico to the SBIWTP is at capacity, excess flow will backup and overflow at a wet well in Mexico and enter the United States at Stewart's Drain. While the number of transboundary flows decreased in May and June 2021, the infrastructure issues in Mexico and the SBIWTP have yet to be resolved.

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)¹³ 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, provides secondary treatment for a portion of the sewage from Tijuana, Mexico 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. R9-2014-0009.
- Several pump stations and wastewater treatment plants in Tijuana, Mexico.
- The River Diversion Structure and Pump Station CILA in the City of Tijuana 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 MGD).

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

No reports

¹³ The Mexican section of the IBWC.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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

September 8, 2021

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

October 13, 2021

MEETING CANCELLED

November 9-10, 2021

San Diego Water Board

| Action Agenda Item | Action Type | Written Comments Due |
|---|---|----------------------|
| Addendum 1 to Order No. 87-54, Waste Discharge Requirements for the City of San Diego, West Miramar Solid Waste Disposal Facility, San Diego County. <i>(Amy Grove)</i> | Waste Discharge Requirements Rescission | TBD |
| Rescission of Order No. R9-2009-0072, Waste Discharge Requirements for County of San Diego, San Pasqual Academy, San Diego County (Tentative Order No. R9-2021-0173). <i>(Komeylyan)</i> | Waste Discharge Requirements Rescission | TBD |
| Waste Discharge Requirements for Temecula West Village LLC, Western Bypass and Altair Project, Riverside County (Tentative Order No. R9-2021-0177). <i>(Darren Bradford)</i> | Waste Discharge Requirements | TBD |
| Rescission of Order No. R9-2020-0005, Permit No. CA0001350, Waste Discharge Requirements for Cabrillo Power I LLC, Encina Power Station, San Diego County, Discharge to the Pacific Ocean (Tentative Order No. R9-2021-TBD). <i>(Debbie Phan)</i> | NPDES Permit Rescission | TBD |

| Action Agenda Item | Action Type | Written Comments Due |
|---|--------------------|-----------------------------|
| Administrative Civil Liability Complaint against Baldwin & Sons, Inc. et al., Portola Center South Construction Site, Complaint No. R9-2020-0006. <i>(Melbourn)</i> | ACL Hearing | update |

December 8, 2021
San Diego Water Board

| Action Agenda Item | Action Type | Written Comments Due |
|---|---|-----------------------------|
| Rescission of Order No. 94-02, Waste Discharge Requirements for Cowboy Country LLC, Mr. Terry Mathis and Mr. Paul Price, Cowboy Country RV Park (Tentative Order No. R9-2021-0185). <i>(Sherrie Komeylyan)</i> | Waste Discharge Requirements Rescission | TBD |
| Addendum No. 1 to Order No. R9-2003-0007, Master Reclamation Permit with Waste Discharge Requirements for the Production and Purveyance of Recycled Water for Olivenhain Municipal Water District, 4-S Ranch Wastewater Treatment Plant, San Diego County. <i>(Sherrie Komeylyan)</i> | Waste Discharge Requirements Addendum | |

| Action Agenda Item | Action Type | Written Comments Due |
|--|--------------------------------|----------------------|
| <p>Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the San Juan Creek Ocean Outfall (Tentative Order No. R9-2021-0054, NPDES No. CA0107417). <i>(Joann Lim and Keith Yaeger)</i></p> | <p>NPDES Permit Reissuance</p> | <p>TBD</p> |
| <p>Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the Aliso Creek Ocean Outfall, (Tentative Order No. R9-2021-0055, NPDES No. CA0107611) <i>(Joann Lim and Keith Yaeger)</i></p> | <p>NPDES Permit Reissuance</p> | <p>TBD</p> |
| <p>Amendment of Order No. R9-2019-0166, Waste Discharge Requirements for the City of Oceanside, San Luis Rey Water Reclamation Facility, La Salina Wastewater Treatment Plant, and Mission Basin Groundwater Purification Facility Discharge to the Pacific Ocean Through the Oceanside Ocean Outfall (Tentative Order No. R9-2021-TBD). <i>(Joann Lim and Keith Yaeger)</i></p> | <p>NPDES Permit Amendment</p> | <p>TBD</p> |

| Action Agenda Item | Action Type | Written Comments Due |
|--|------------------------------|----------------------|
| Amendment of Order No. R9-2019-0169, Waste Discharge Requirements for the Fallbrook Public Utility District, Fallbrook Water Reclamation Plant, and Santa Margarita Groundwater Treatment Plant Discharge to the Pacific Ocean through the Oceanside Ocean Outfall (Tentative Order No. R9-2021-TBD). (Joann Lim and Keith Yaeger) | NPDES Permit Amendment | TBD |
| Amendment of Order No. R9-2019-0168, Waste Discharge Requirements for Genentech, Inc. Discharge to the Pacific Ocean through the Oceanside Ocean Outfall (Tentative Order No. R9-2021-TBD). (Joann Lim and Keith Yaeger) | NPDES Permit Amendment | TBD |
| Waste Discharge Requirements for the City of Oceanside Indirect Potable Reuse Project via Groundwater Injection in the Mission Basin (Tentative Order No. R9-2021-0100). (Brandon Bushnell) | Waste Discharge Requirements | TBD |
| Cleanup and Abatement Order for the East Basin of Harbor Island (Tentative Resolution No. R9-2021-TBD). (Sarah Mearon/Daniel Boyd) | Resolution | TBD |
| Resolution in Support of Conceptual Unified Monitoring and Assessment Program for San Diego Bay (Tentative Resolution No. R9-2021-TBD). (Wayne Chiu) | Resolution | TBD |
| Approval of 2021 Triennial Basin Plan Review 3-Year Workplan (Tentative Resolution No. R9-2021-0116). (Santillan) | Resolution | August 17, 2021 |

| Action Agenda Item | Action Type | Written Comments Due |
|---|--------------------|-------------------------------------|
| Update on the Clean Water Act Section 401 Program for Dredge and Fill Material and Discharges. <i>(Eric Becker)</i> | Informational Item | NA |

Agenda Items Requested by Board Members**August 12, 2020**

| Requested Agenda Item | Board Member | Status |
|---|---------------------|---------------|
| Any agreement or resolution to use Supplemental Environmental Project funds to supplement SCCWRP Ambient Monitoring Programs include an effort to avoid spending SEP funds on administrative costs. | Abarbanel | Summer 2021 |

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 | Fall 2021 |

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 | Fall 2021 |

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 | Fall 2021 |

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 | Fall 2021 |

| Requested Agenda Item | Board Member | Status |
|---|---------------------|---------------|
| Information regarding the Water Board's Training Academy climate change courses | Abarbanel | Upcoming |

May 12, 2021

| Requested Agenda Item | Board Member | Status |
|---|---------------------|---------------|
| Update from SCCWRP regarding current research projects. | Abarbanel | Fall 2021 |

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 | Winter 2021-22 |

August 11, 2021

| Requested Agenda Item | Board Member | Status |
|---|---------------------|---------------|
| Drought and sustainability meeting with County Water Authority to find out how we can support our efforts | Abarbanel | December 2021 |
| Briefing regarding the new State Water Resources Control Board fresh water harmful algal blooms policy. | Olson | February 2022 |

Table 1: June 2021 – Summary of Public and Federal Sanitary Sewer Overflow Events

| Responsible Collection System Agency | Total Volume (Gallons)¹⁴ | Total Recovered (Gallons)¹⁵ | Total Reaching Surface Waters (Gallons)¹⁶ | Total Reaching Separate Storm Drain and Recovered (Gallons)¹⁷ | Total Discharged to Land (Gallons)¹⁸ | Surface Water Body Affected¹⁹ | Miles of Pressure Sewer | Miles of Gravity Sewer | Population in Service Area²⁰ |
|---|--|---|---|---|--|---|--------------------------------|-------------------------------|--|
| California Department of Parks and Recreation Winterhaven | 600 | 600 | 0 | 0 | 600 | Not Applicable | 1.2 | 0.6 | 1,350 |

¹⁴ Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

¹⁵ Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

¹⁶ 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.

¹⁷ Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

¹⁸ Total Discharged to Land = total amount reaching land.

¹⁹ 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."

²⁰ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

| Responsible Collection System Agency | Total Volume (Gallons)¹⁴ | Total Recovered (Gallons)¹⁵ | Total Reaching Surface Waters (Gallons)¹⁶ | Total Reaching Separate Storm Drain and Recovered (Gallons)¹⁷ | Total Discharged to Land (Gallons)¹⁸ | Surface Water Body Affected¹⁹ | Miles of Pressure Sewer | Miles of Gravity Sewer | Population in Service Area²⁰ |
|---|--|---|---|---|--|---|--------------------------------|-------------------------------|--|
| City of Chula Vista | 40 | 0 | 0 | 0 | 40 | Not Applicable | 3.4 | 511.0 | 265,070 |
| City of San Diego | 25 | 25 | 0 | 0 | 25 | Not Applicable | 112.5 | 2,931.4 | 2,300,000 |
| City of San Diego | 50 | 50 | 0 | 0 | 50 | Not Applicable | 112.5 | 2,931.4 | 2,300,000 |
| City of San Diego | 2,700 | 2,200 | 1,500 | 10 | 1,190 | San Diego River | 112.5 | 2,931.4 | 2,300,000 |
| City of San Diego | 2,225 | 1,900 | 325 | 1,900 | 0 | Los Peñasquitos Lagoon | 112.5 | 2,931.4 | 2,300,000 |
| City of San Diego | 275 | 0 | 270 | 0 | 5 | Chollas Radio System Open Space | 112.5 | 2,931.4 | 2,300,000 |
| City of San Diego | 35 | 35 | 0 | 10 | 25 | Not Applicable | 112.5 | 2,931.4 | 2,300,000 |
| City of San Clemente | 228 | 228 | 0 | 114 | 114 | Not Applicable | 3.7 | 177.6 | 65,543 |
| Eastern Municipal Water District | 5,000 | 5,000 | 0 | 0 | 5,000 | Not Applicable | 33.0 | 636.0 | 254,286 |
| Trabuco Canyon Water District | 110 | 110 | 0 | 0 | 110 | Not Applicable | 9.0 | 46.5 | 12,700 |

| Responsible Collection System Agency | Total Volume (Gallons) ¹⁴ | Total Recovered (Gallons) ¹⁵ | Total Reaching Surface Waters (Gallons) ¹⁶ | Total Reaching Separate Storm Drain and Recovered (Gallons) ¹⁷ | Total Discharged to Land (Gallons) ¹⁸ | Surface Water Body Affected ¹⁹ | Miles of Pressure Sewer | Miles of Gravity Sewer | Population in Service Area ²⁰ |
|--|--------------------------------------|---|---|---|--|---|-------------------------|------------------------|--|
| United States Department of the Navy, Naval Facilities Engineering Systems Command Southwest | 600 | 100 | 500 | 100 | 0 | San Diego Bay | Not Reported | Not Reported | Not Reported |

Table 2: June 2021 – Summary of Private Lateral Sewage Discharge Events

| Responsible Collection System Agency | Total Volume (Gallons) ₂₁ | Total Recovered (Gallons)²² | Total Reaching Surface Waters (Gallons) ₂₃ | Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)²⁴ | Surface Water Body Affected²⁵ | Population in Service Area²⁶ | Number of Lateral Connections |
|---|---|---|--|---|---|--|--------------------------------------|
| City of El Cajon | 25 | 0 | 25 | 0 | Not Reported | 103,186 | 17,100 |
| City of El Cajon | 60 | 30 | 30 | 30 | Not Reported | 103,186 | 17,100 |
| City of Escondido | 200 | 0 | 0 | 200 | Not Applicable | 148,000 | 27,081 |

²¹ Total Volume = total amount that discharged from private lateral to a separate storm drain, drainage channel, surface water body, and/or land.

²² Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

²³ 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.

²⁴ 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.

²⁵ 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."

²⁶ As reported in the Collection System Questionnaire required under Order No. 2006-0003-DWQ.

Table 3: June 2021 – Summary of Sewage Discharges by Source

| Spill Type | Month/Year | Number of Spills | Total Volume (Gallons)²⁷ | Total Recovered (Gallons)²⁸ | Total Reaching Surface Waters (Gallons)²⁹ | Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)³⁰ |
|-------------------|-------------------|-------------------------|--|---|---|---|
| Public Spills | June 2021 | 11 | 11,288 | 10,148 | 2,095 | 9,193 |
| Federal Spills | June 2021 | 1 | 600 | 100 | 500 | 100 |
| Private Spills | June 2021 | 3 | 285 | 30 | 55 | 230 |
| All Spills | June 2021 | 15 | 12,173 | 10,278 | 2,650 | 9,523 |

²⁷ Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

²⁸ Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

²⁹ 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.

³⁰ 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

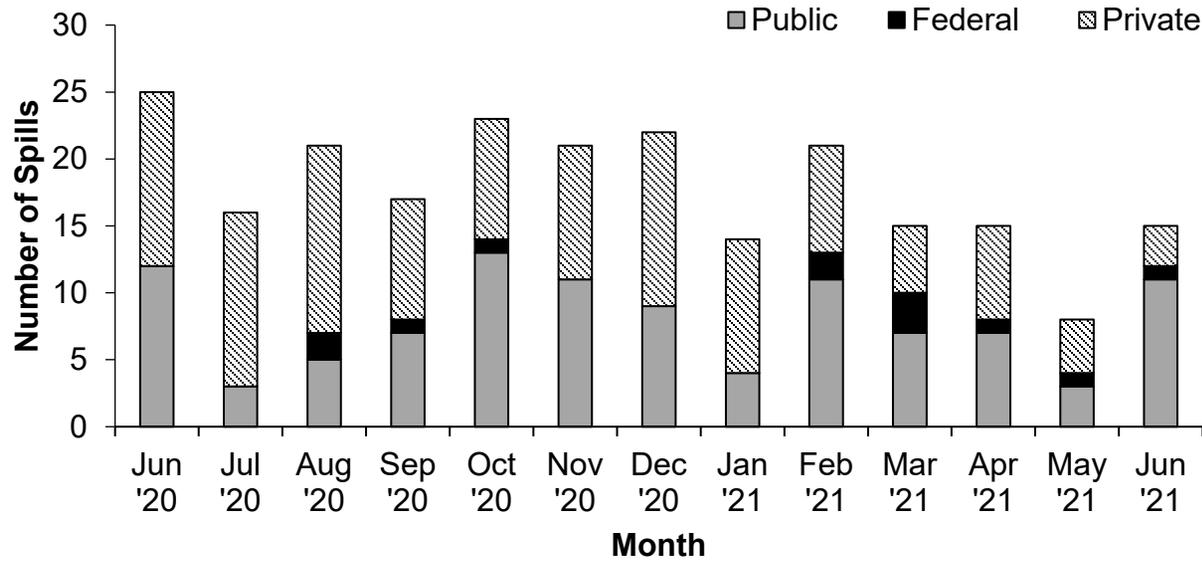


Figure 1: The number of public, federal, and private sewage spills per month from June 2020 to June 2021.

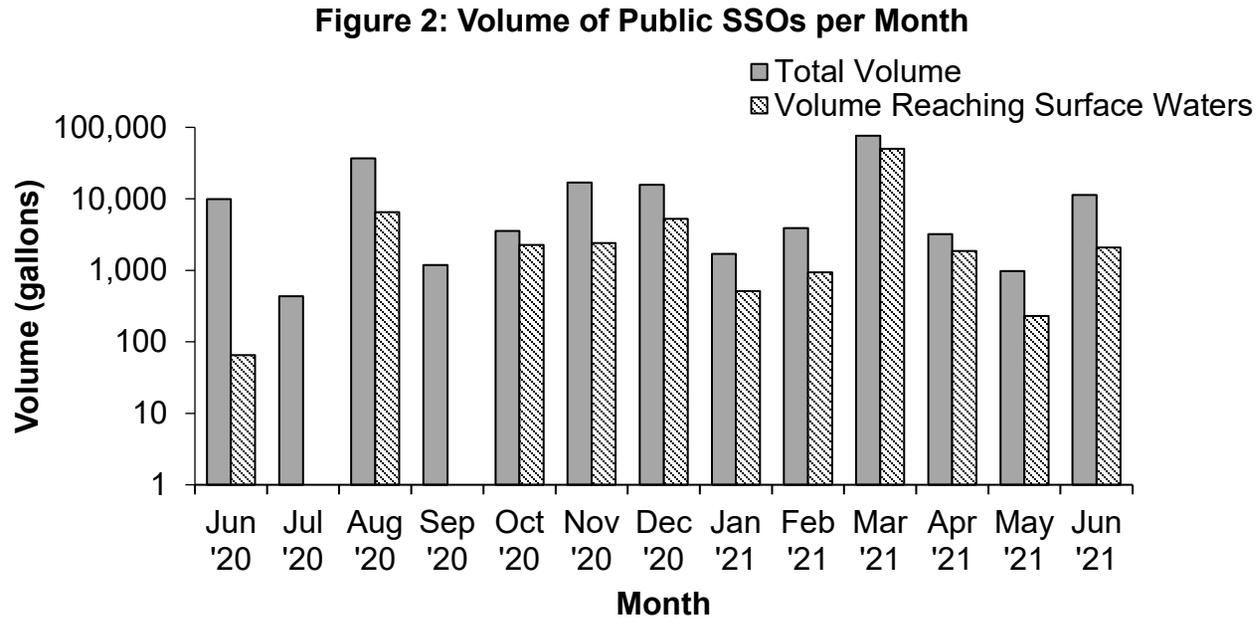


Figure 2: The volume of sanitary sewer overflows (SSOs) from public agencies per month from June 2020 to June 2021. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

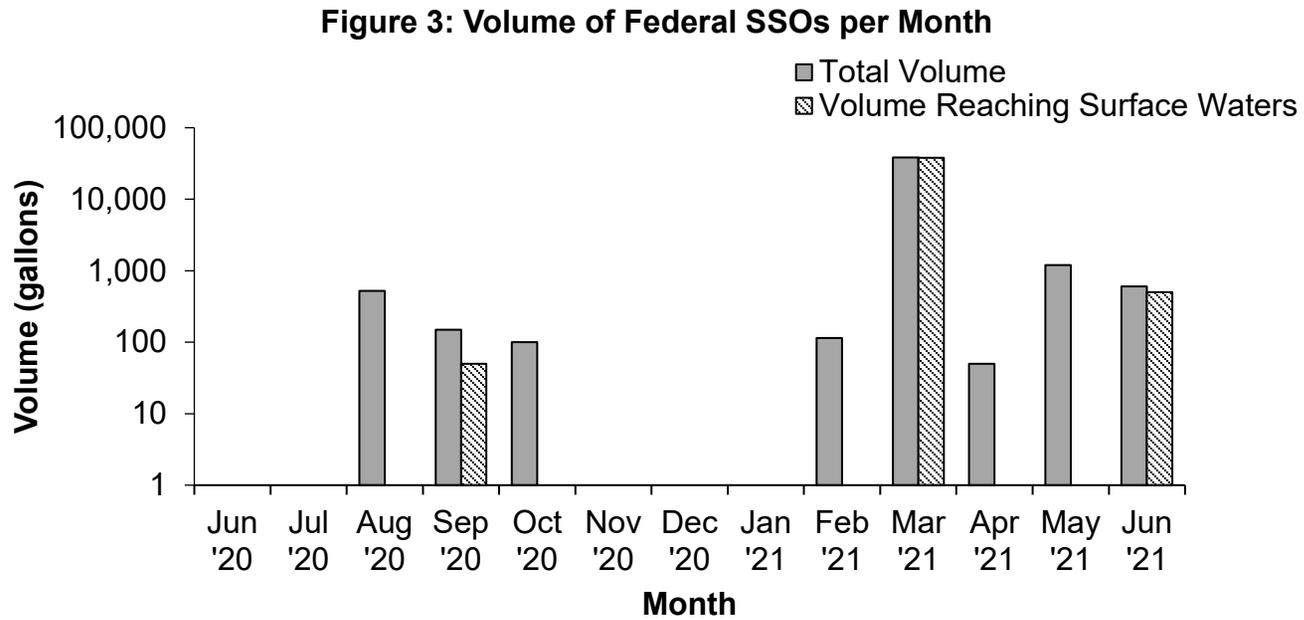


Figure 3: The volume of sanitary sewer overflows (SSOs) from federal agencies per month from June 2020 to June 2021. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

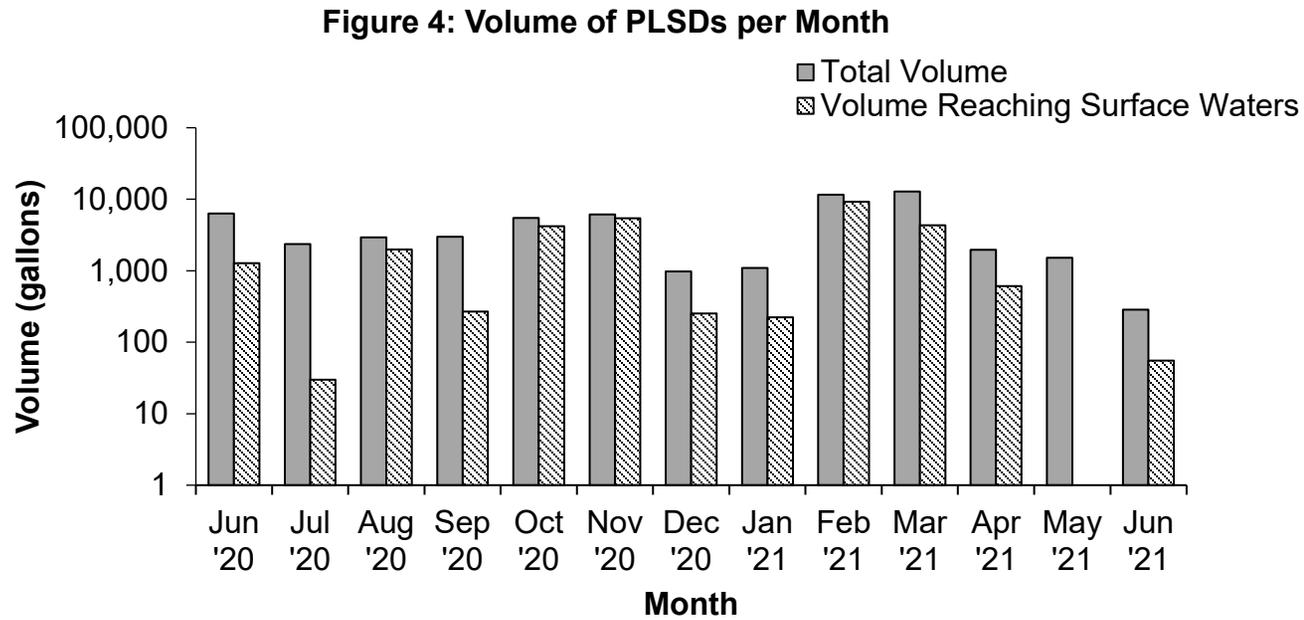


Figure 4: The volume of private lateral sewage discharges (PLSDs) per month from June 2020 to June 2021. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

Table 1: June 2021 – Summary of Transboundary Flows from Mexico by Event¹

| Location | Transboundary Flow Start Date | Transboundary Flow End Date | Weather Condition ² | Total Volume (Gallons) | Total Recovered (Gallons) | Total Reaching Surface Waters (Gallons) | Additional Details Reported By USIBWC |
|----------------|-------------------------------|-----------------------------|--------------------------------|------------------------|---------------------------|---|--|
| Canyon del Sol | 6/2/2021 | 6/2/2021 | Dry | 850 | 0 | 850 | USIBWC reported excessive flows from Mexico. USIBWC also reported that trash accumulated in the Canyon del Sol canyon collector system. As a result, some of the flow crossing the United States/Mexico border at Canyon del Sol bypassed the canyon collector system and continued into the Tijuana River Valley. |
| Canyon del Sol | 6/7/2021 | 6/7/2021 | Dry | 117 | 0 | 117 | USIBWC reported excessive flows from Mexico. As a result, some of the flow crossing the United States/Mexico border at Canyon del Sol bypassed the canyon collector system and continued into the Tijuana River Valley. |

¹ Transboundary flow volumes are obtained from self-monitoring reports submitted by USIBWC under Order No. R9-2014-0009.

² Order No. R9-2014-0009 requires monthly reporting of all dry weather transboundary flows defined as the preceding 72 hours have been without precipitation greater than 0.1 inch, based on the Goat Canyon Pump Station rain gauge. Wet weather transboundary flows are not required to be reported and information is provided voluntarily.

Table 2: June 2021 - Summary of Transboundary Flows from Mexico

| Location | Weather Condition¹ | Month/Year | Number of Transboundary Flows | Total Volume (Gallons) | Total Recovered (Gallons) | Total Reaching Surface Waters (Gallons) |
|----------------------------|--------------------------------------|-------------------|--------------------------------------|-------------------------------|----------------------------------|--|
| Tijuana River Main Channel | Dry Weather | June 2021 | 0 | 0 | 0 | 0 |
| Tijuana River Main Channel | Wet Weather | June 2021 | 0 | 0 | 0 | 0 |
| Canyon Collectors | Dry Weather | June 2021 | 2 | 967 | 0 | 967 |
| Canyon Collectors | Wet Weather | June 2021 | 0 | 0 | 0 | 0 |
| All Locations | Wet and Dry | June 2021 | 2 | 967 | 0 | 967 |

¹ Order No. R9-2014-0009 requires monthly reporting of all dry weather transboundary flows. Wet weather transboundary flows are not required to be reported. All wet weather transboundary flow information is provided voluntarily.

Figure 1: Number of Transboundary Flows

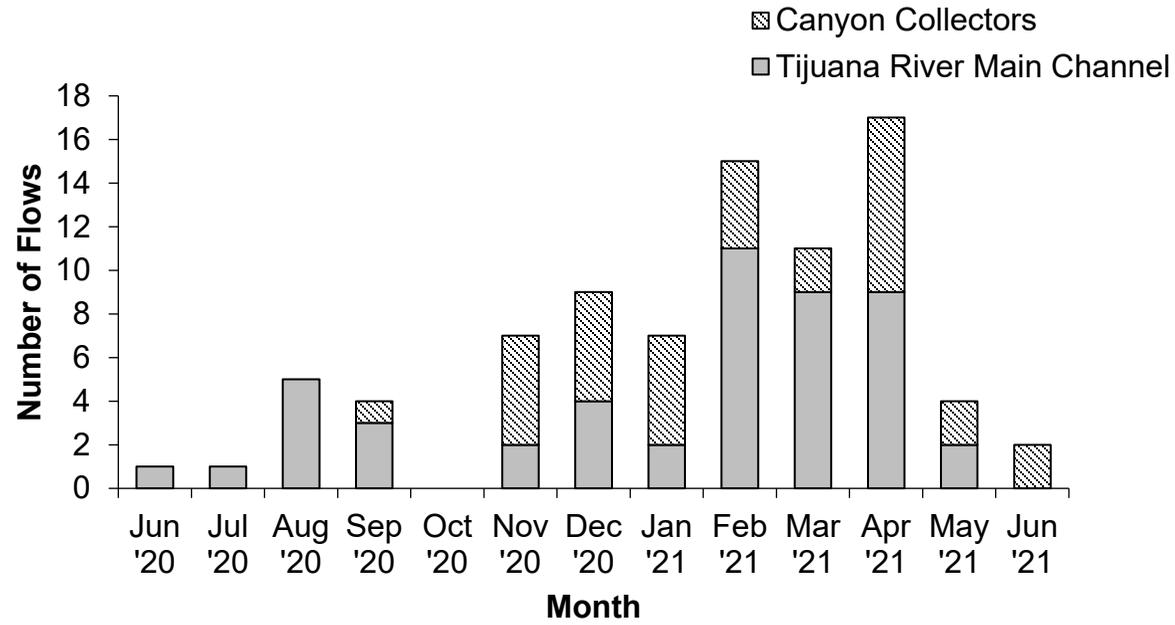


Figure 1: Number of dry weather transboundary flows per month from June 2020 through June 2021 at the canyon collector systems and the Tijuana River main channel.

Figure 2: Tijuana River Transboundary Flow Volume

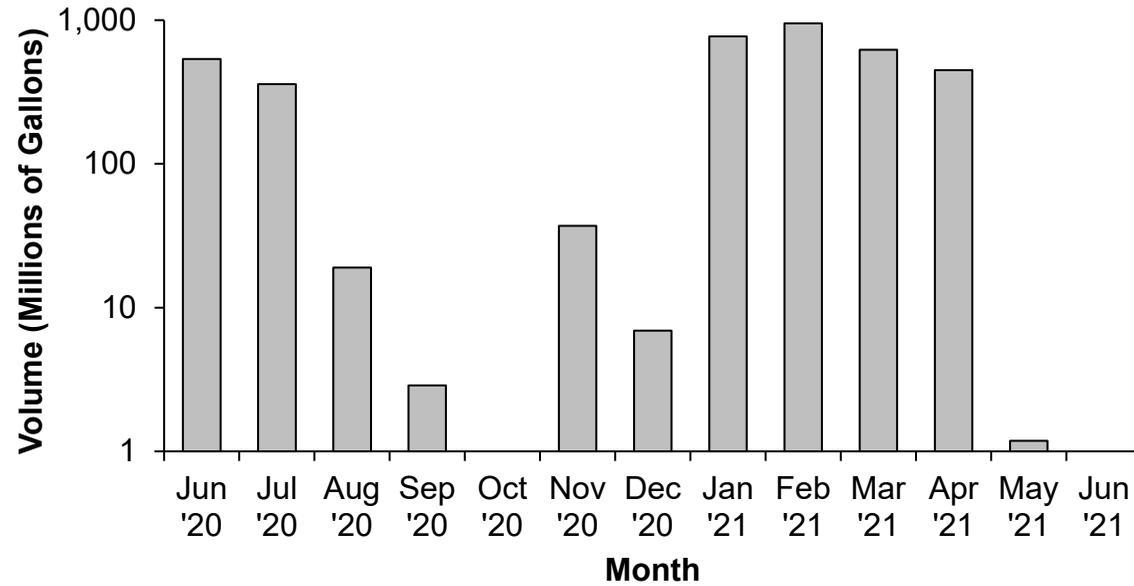


Figure 2: Volume of dry weather transboundary flows per month from June 2020 through June 2021 at the Tijuana River main channel. Note the logarithmic scale on the vertical axis showing the wide variation in transboundary flow volumes.

Figure 3: Canyon Collector Transboundary Flow Volume

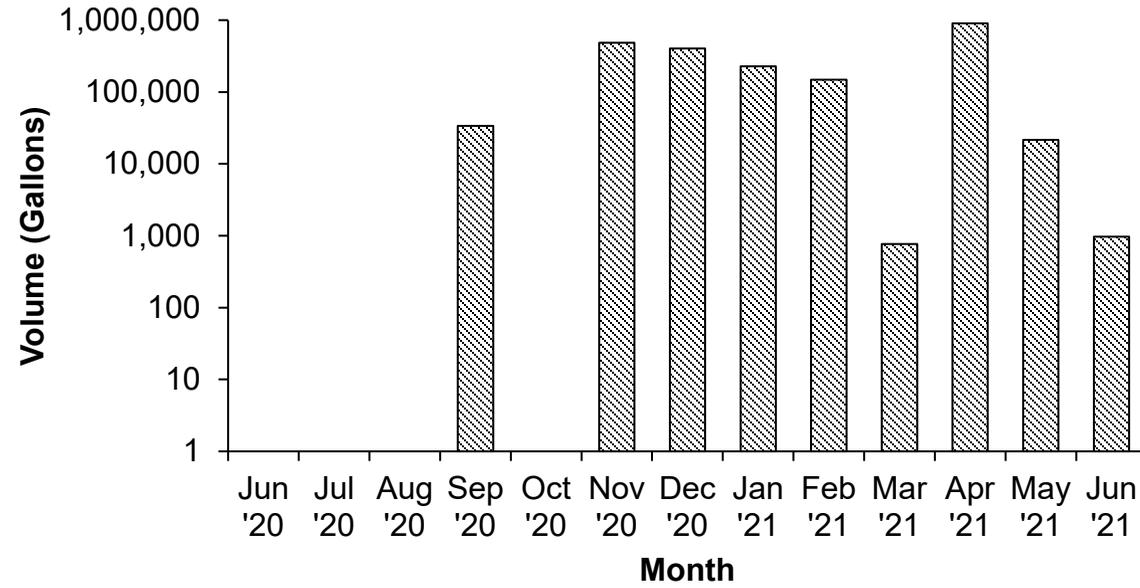


Figure 3: Volume of dry weather transboundary flows per month from June 2020 through June 2021 at the canyon collector systems. Note the logarithmic scale on the vertical axis showing the wide variation in transboundary flow volumes.