

California Regional Water Quality Control Board
San Diego Region

David Gibson, Executive Officer



Executive Officer's Report
December 14, 2022

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The December 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

On November 18, 2022, pursuant to the National Environmental Policy Act, the U.S. Environmental Protection Agency (US EPA) and International Boundary and Water Commission, U.S. Section (US IBWC) have issued a [Final Programmatic Environmental Impact Statement](#) (Final PEIS) for the proposed United States–Mexico–Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project (the Proposed Action). The Proposed Action involves the planning, design, and construction of infrastructure to reduce transboundary flows from Tijuana that routinely convey sewage polluted flows, industrial wastes, and trash into the Tijuana River Valley, Estuary, and coastal waters in the U.S. Once the Final PEIS is certified, we will work with US EPA and US IBWC and their contractors on the first steps of scoping and drafting the NPDES Permits for the proposed facilities.

On November 29, 2022, the Commissioners of the U.S. and Mexico sections of IBWC convened the Binational Core Group (BCG) at the US IBWC International Wastewater Treatment Plant in San Ysidro. The meeting included discussions on a review and analysis of inventory of projects, a strategy to coordinate binational work groups focused on water quality, sediment, and trash and related impacts (e.g., flooding), and selection of priority projects. The BCG also discussed a Minute 320 Funding Strategy, an update on Minute 328, and recent EPA and CONAQUA ([Comisión Nacional del Agua](#)) activities.

Recent storms have resulted in polluted storm water runoff through the Tijuana River Valley that has impacted water quality in the River Valley, Estuary and Coastal Waters. The operation of the PB CILA river diversion in Tijuana and the five Canyon Collectors were suspended during the storms and returned to service promptly. Nonetheless, as of December 2, 2022, beaches between Border Field State Park and Imperial Beach have been closed for 336 consecutive days.

Part B – Significant Regional Water Quality Issues

1. Commercial Agricultural Regulatory Program Update

Staff Contacts: Cailynn Smith and Abigail Pashina

San Diego Water Board staff provided the Board with an update on the Commercial Agricultural Regulatory Program (Ag Program) and monitoring results from the Third-Party Groups during the September 2022 Board Meeting. The Board also heard presentations from Hannah Gbeh, former Executive Director of the San Diego Region Irrigated Lands Group (SDRILG) and Steve Corona, Project Director of the Upper Santa Margarita Irrigated Lands Group (USMILG), and received comments from growers attending the meeting. Board members requested additional information on the following Ag Program topics, based on the information and comment presented:

- Algae growth and total phosphorus concentrations
- Nitrate in drinking water supply wells

- Impacts on agriculture from increased fuel and supply costs
- Ag Program enrollments, and
- Ag Program enforcement actions

San Diego Water Board staff prepared this report to address the topics of algae growth and total phosphorus, and nitrate in drinking water supply wells. Staff plan to bring the remaining topics back to the Board as part of a public workshop with growers, San Diego County representatives, and the State Water Resources Control Board's (State Water Board) Division of Drinking Water.

Algae Growth and Total Phosphorus Concentrations

The San Diego Water Board's Commercial Agriculture Regulatory Program regulates discharges from agriculture through two permits:

- Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region* (Third-Party Ag Order) and
- Order No. R9-2016-0005, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers not Participating in a Third-Party Group in the San Diego Region* (Individual Ag Order, collectively the Ag Orders).¹

The Ag Orders require surface water monitoring for pollutant parameters, which include total phosphorus. In addition, the Third-Party Ag Order requires surface water bioassessment monitoring, which includes parameters to assess the algal stream condition index (ASCI).

The SDRILG collected bioassessment and surface water monitoring data from four locations in the San Luis Rey and San Dieguito watersheds (Figure 1) and three locations in the Santa Margarita watershed (Figure 2) in 2021. The USMILG did not collect any bioassessment or surface water monitoring data in 2021.

¹ The San Diego Water Board adopted the Ag Orders on November 9, 2016. Copies of the Ag Orders can be found on the Ag Program's webpage:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/commercial_agriculture/.

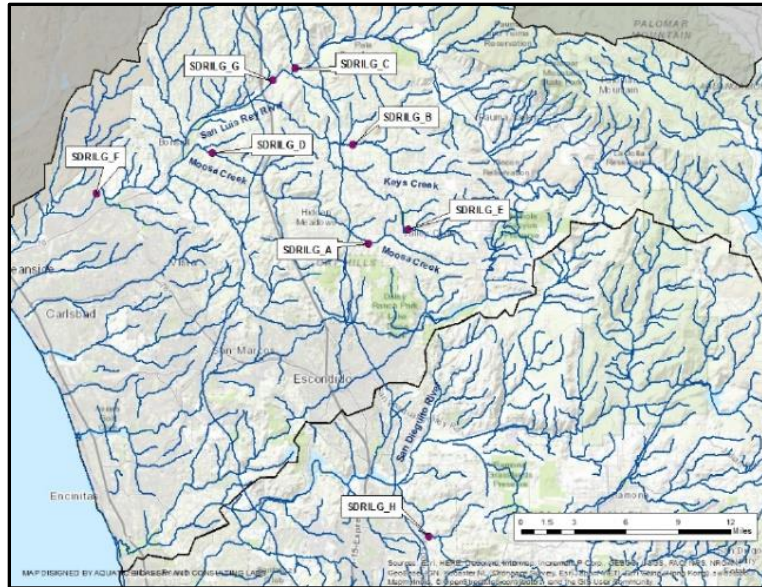


Figure 1: SDRILG's eight bioassessment monitoring locations in the San Luis Rey and San Dieguito watersheds. Data was not collected at sites A, C, E, and H.

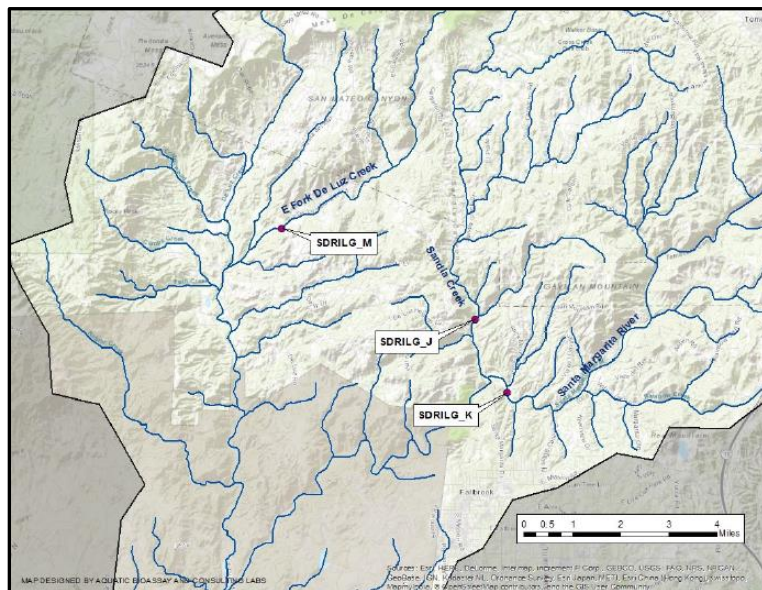


Figure 2: SDRILG's three bioassessment monitoring locations in the Santa Margarita watershed.

San Diego Water Board staff reviewed the SDRILG's bioassessment and surface water monitoring data and compared the data to ASCI threshold values (Table 1) developed by the

Southern California Coastal Water Research Project (SCCWRP).² SCCWRP modeled two algal indices (ratio of observed-to-expected taxa and multimetric indices (MMI)) with three algal assemblages each (diatom, soft-bodied algae, and a hybrid assembly of both diatoms and soft-bodied algae) to determine which algal index was the most accurate at predicting algal blooms in streams. SCCWRP determined that the diatom MMI and hybrid MMI indices were the most accurate models. The 10th percentile threshold in both indices is 0.86. Streams with an ASCI score below 0.86 are categorized as “likely altered” by anthropogenic activity. The 1st percentile in both indices is 0.75. Streams with an ASCI score below 0.75 are categorized as “very likely altered” by anthropogenic activity.

Table 1: San Diego Region Irrigated Lands Group 2021 Bioassessment Data

	San Luis Rey Watershed				Santa Margarita Watershed			Threshold
	Site B	Site D	Site F	Site G	Site J	Site K	Site M	
	South Fork Keys Creek	Moosa Canyon Creek	San Luis Rey River	San Luis Rey River	Sandia Creek	Santa Margarita River	De Luz Creek	
ASCI	0.66	0.41	0.32	0.62	0.71	0.85	0.65	0.75, 0.86
Total Phosphorus (mg/L)	0.0396	0.371	0.14	0.127	0.0236	0.0439	0.07	0.1
Total Nitrogen (mg/L)	7.993	4.475	2.949	6.804	3.938	0.675	4.243	1.0

San Diego Water Board Staff identified in the SDRILG's data that six of the seven sites have ASCI scores below the “very likely altered” threshold (red-shaded cells) and that one site (Site K) has an ASCI score below the “likely altered” threshold (yellow-shaded cell). Staff also identified that only three of the seven sites had total phosphorus concentrations above the water quality objective of 0.1 milligrams per liter (mg/L). Staff's review of the SDRILG's data found the relationship between total phosphorus concentrations and algal blooms to be inconclusive.

Nitrate in Drinking Water Supply Wells

The United States Geological Survey, National Water-Quality Assessment Program identifies nitrate as the primary form of nitrogen in agricultural soils. Nitrate can easily pass through the soil into the underlying groundwater because of its solubility in water. Nitrate in groundwater can persist for decades, accumulating to high concentrations, as more nitrogen is applied to the land surface.

The accumulation of nitrate (as NO₃) in groundwater can pose a risk to human health when ingested. Groups with the greatest risk of becoming ill through ingesting nitrate are infants

² Scientific study published in the journal *Ecological Indicators* titled “Predictive biological indices for algae populations in diverse stream environments”. Article was made available to the public on September 16, 2020. The article can be accessed at the following link: https://ftp.sccwrp.org/pub/download/DOCUMENTS/JournalArticles/1135_AlgalStreamConditionIndex.pdf.

under the age of 6 months and pregnant persons. Nitrate can interfere with the ability of red blood cells to carry oxygen to the tissues in the body.

Nitrate in drinking water is widespread in numerous areas of the country, however, most of the population is served by public water supply systems. In California, these public water supply systems are regulated by the state and required to analyze the water for nitrates and report those results to the California Department of Public Health (CDPH). Private water supply wells are not subject to the drinking water regulations established by CDPH. CDPH recommends private water supply well owners, concerned about nitrate concentration, have drinking water supply wells analyzed by a certified laboratory. CDPH also recommends private water supply well owners refer to California's published maximum contaminant levels (MCLs) for water quality guidance.

The San Diego Water Board developed the Third-Party Ag Order to require Members or the Third-Party Groups on behalf of their Members (collectively Members) to implement a drinking water supply well program, due to the potential severity and urgency of health issues associated with drinking groundwater with high concentrations of nitrates. The purpose of the San Diego Water Board's water supply well program is to: 1) identify wells that have nitrate concentrations that threaten to exceed the MCL of 45 mg/L, and 2) notify any well users of the potential health risks associated with high nitrate concentrations. The Third-Party Ag Order requires an initial groundwater sampling of all drinking water supply wells located on Agricultural Operation sites within the first year of being enrolled in the Third-Party Ag Order. Drinking water supply wells owners are required by the Third-Party Ag Order to continue monitoring for nitrates at the following frequencies, based on the initial groundwater sampling results:

- Drinking water supply wells with nitrate concentrations less than 36 mg/L, are required to be sampled once every five years, and
- Drinking water supply wells with nitrate concentrations equal to or above 36 mg/L, are required to be sampled annually.

The Third-Party Ag Order requires Members to notify the San Diego Water Board and the applicable County Health Department within 24 hours of receiving a result showing a nitrate concentration equal to or greater than the 45 mg/L. The Third-Party Ag Order also requires Members to notify all individuals using the drinking water supply well of the nitrate concentrations and the potential threat to human health, within ten days of receiving a result showing a nitrate concentration equal to or greater than 45 mg/L. The San Diego Water Board will assume the responsibility to notify water supply well users if a Member is not the property owner.

The Third-Party Ag Order requires that the notification sent to affected individuals include all the following information provided in the State Water Board's notification template:³

³ The template for the Nitrate MCL exceedance can be viewed by visiting the following link: [Templates for Public Notification | California State Water Resources Control Board](#).

- A statement warning people not to give the contaminated water to infants under six months old, or pregnant persons
- A statement warning people not to use the water when making baby formula
- A statement warning people not to boil the well water as it can make the nitrates present in the water more concentrated
- Information on the potential health impacts of nitrate poisoning and what is/what can be done to address the contamination, and
- Contact information for Ag Program staff or Third-Party Group staff

Staff will continue to update the San Diego Water Board on the Ag Program monitoring results and human health risks associated with elevated nitrate concentration in drinking water supply wells subject to the Ag Orders.

2. Palomar Airport Landfill High Heat Event

Staff Contact: Josh Hufferd

The County of San Diego Department of Public Works (County DPW) notified the San Diego Water Board of a high heat event at the Palomar Airport Landfill (Landfill), on October 20, 2022. Staff participated in a joint landfill inspection with the County DPW, San Diego County Airport Authority, County of San Diego Department of Environmental Health and Quality Local Enforcement Agency, and San Diego County Air Pollution Control District on November 2, 2022. County DPW staff delineated the high heat event to a small area within Unit 3 of the Landfill (Figure 3). The high heat event created a circular depression in the Landfill cover, approximately six inches deep, and 25 feet in diameter (Figure 4).

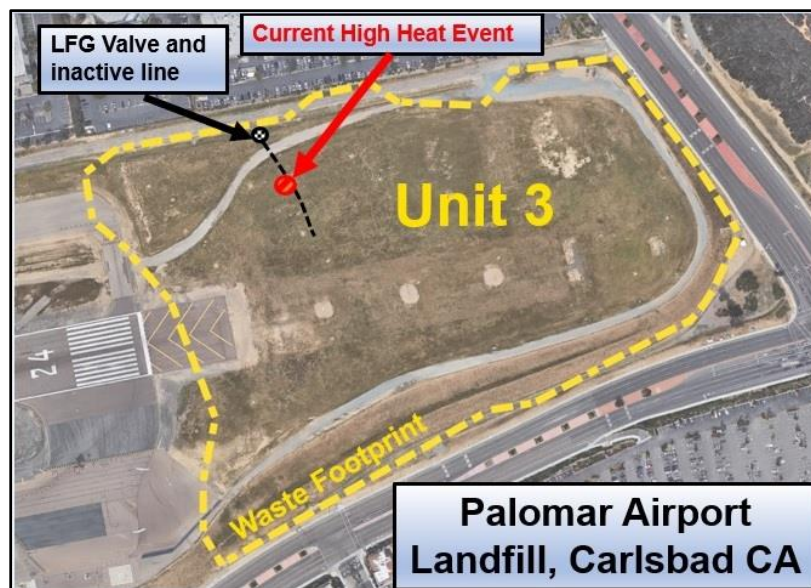


Figure 3: Aerial photograph of Palomar Airport Landfill, Unit 3.



Figure 4: Inspection photograph of the heat depression within the Unit 3 cover.

Municipal solid waste landfills naturally produce heat as a byproduct of the breakdown of waste by microorganisms. High heat events can occur when air enters the landfill, triggering the rapid oxidation of waste, which produces additional heat. Unmitigated high heat events can escalate into landfill fires when temperature within the waste reach the point of spontaneous combustion. The California Department of Resources Recycling and Recovery developed a *Landfill Fire Guidance Document*,⁴ which provides the following general criteria to confirm the existence of a subsurface landfill fire:

- Substantial settlement of the landfill cover, over a short period of time.
- Smoke or smoldering odor emanating from the landfill cover or landfill gas (LFG) extraction system.
- LFG carbon monoxide levels exceed 1,000 parts per million.
- Combustion residue observed in the LFG extraction wells and/or headers.
- LFG temperature exceeds 140° Fahrenheit.
- Landfill waste temperature exceed 170° Fahrenheit.

County DPW staff observed surface cracks in the Landfill cover, heat damage to the LFG condensate sump at the center of the Landfill cover depression, and recorded a waste temperature of 101.5 degrees Fahrenheit. These observations support the County's characterization that the Landfill is experiencing a high heat event and not a landfill fire.

The County DPW intends to smother the high heat event by identifying and eliminating the pathways for air to enter into the Landfill. County DPW staff closed the LFG header valve on October 20, 2022, but subsurface temperatures remained high. County DPW staff cut and capped the LFG header line on November 3, 2022, but oxygen levels in the Landfill remained high. County DPW staff concluded that the LFG header lines and valve were not responsible for causing the high heat event.

County DPW staff continue to monitor the high heat event and investigate the possible pathways for air to enter into the Landfill. Water Board staff will continue to provide support to

⁴ <https://calrecycle.ca.gov/SWFacilities/Fires/LFFiresGuide/>

the County and other regulatory agencies during the high heat event investigation and provide periodic updates to the Board.

3. San Onofre Nuclear Generating Station Update 2022

Staff Contact: Sherrie Komeylyan

California Coastal Commission Approves Permit Extension

The California Coastal Commission (Commission) held a public meeting in San Diego to hear recommendations and comments from its staff, government representatives, and members of the public as it considers a Coastal Development Permit extension for the San Onofre Nuclear Generating Station (SONGS) owned by Southern California Edison (SCE). SCE requested the permit extension to continue allowing materials to be stored on site until November 15, 2035, while the US Department of Energy works to find a permanent disposal facility. Commission staff concurred with the extension request after reviewing the results of the ongoing monitoring and inspections, and a thorough analysis confirming the integrity of the SONGS TN NUHOMS dry fuel storage system. The Commission considered the staff recommendations and approved the permit extension on October 13, 2022.

San Onofre Nuclear Generating Station Decommissioning Progress

SCE held a quarterly progress meeting on October 25, 2022, for the Federal Facilities Agreement (FFA) agencies which include the California Department of Toxic Substances Control (DTSC), San Diego Water Board, Department of the Navy, and U.S. Environmental Protection Agency. The purpose of the meeting was to present details regarding the ongoing decommissioning of SONGS and allow the agencies an opportunity to ask questions and provide comments.

Key points discussed during the quarterly progress meeting included:

- SCE actions taken to achieve compliance with the Corrective Action Consent Agreement⁵
- Results of perimeter air and groundwater monitoring or other tests performed under the Resource Conservation and Recovery Act Facilities Agreement
- SCE projected work for the next reporting period; and
- Updated SCE project schedule.

SONGS Ongoing Investigations and Cleanups

The U.S. Nuclear Regulatory Commission has full regulatory and compliance authority over the decommissioning of SONGS, including the radiological aspects. DTSC is the lead agency on non-radiological constituents providing regulatory oversight of the SONGS decommissioning and dismantlement activities. The FFA agencies continue to meet biweekly

⁵ Corrective Action Consent Agreement for non-radiological soil and groundwater investigation of SONGS under Resource Conservation and Recovery Act protocols, Department of Toxic Substances Control, 2020.

and discuss the cleanup progress on potential areas of concern discovered during the SONGS decommissioning. The status of each SONGS property is discussed below:

- Parcel 14 – SCE started excavation activities on the east site of the AT&T line containing tetrachloroethane contaminated soil and anticipates addressing soils containing elevated concentrations of aerially deposited lead (ADL) by the end of October 2022.
- Construction Debris Area – SCE collected soil and construction debris samples in the construction debris area in September 2022. The soil samples were collected to assess contamination from construction debris and potential threats to water quality and the environment. SCE submitted a *Revised Preliminary Endangerment Assessment Report, Construction Debris Area, Camp Pendleton, California* to the FFA agencies on October 20, 2022.
- Probable Maximum Flood (PMF) Berm, Channel, and Basin – Caltrans completed its removal action of ADL contaminated soil from the PMF Channel. Caltrans also cleaned out the storm drains leading to the PMF channel which should mitigate the potential for future ADL contamination in the PMF channel.

Staff will continue to update the San Diego Water Board on an annual basis, as additional information becomes available. The quarterly progress reports and associated documents for SONGS are available for review on the DTSC EnviroStor webpage under the "Site/Facility Docs" tab: https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001331.

4. Sustainable Groundwater Management Act Update

Staff Contact: Sherrie Komeylyan

Groundwater Sustainability Plans in the San Diego Water Board Region

The Department of Water Resources (DWR) received Groundwater Sustainability Plans (GSP) for the region's two medium-priority basins, the Upper San Luis Rey Subbasin and San Pasqual Basin. The Pauma Valley and San Pasqual Valley Groundwater Sustainability Agencies (GSA) submitted the GSPs in January 2022, as part of the implementation process for the Sustainable Groundwater Management Act (SGMA). DWR provided the following information for the GSP submittals:

- Upper San Luis Rey Subbasin –The multi-agency Pauma Valley Groundwater Sustainability Agency (GSA) submitted the GSPs in January 2022, as part of the implementation process for the Sustainable Groundwater Management Act (SGMA). Agencies of the Pauma Valley GSA are the Upper San Luis Rey Resource Conservation District, Pauma Valley Community Service District, Pauma Municipal Water District, Yuima Municipal Water District, and San Luis Rey Municipal Water District. DWR identified 5 areas within the Upper San Luis Rey Subbasin that are not managed by the Pauma Valley GSA (Figure 5). DWR sent notices to the property owners within the identified unmanaged areas, requesting groundwater extraction reports be prepared and submitted to DWR by February 1, 2023.

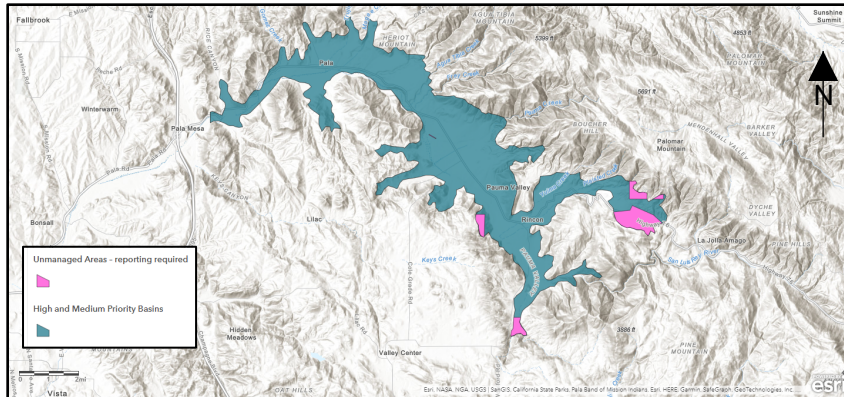


Figure 5: Map of the Upper San Luis Rey Subbasin.⁶

- San Pasqual Valley Basin – The City of San Diego and the County of San Diego entered into a Memorandum of Understanding to create a multi-agency GSA for the San Pasqual Valley. The San Pasqual Valley GSA submitted its GSP in January 2022, as part of the implementation process for the SGMA. The San Pasqual Valley Basin does not include any unmanaged areas (Figure 6).

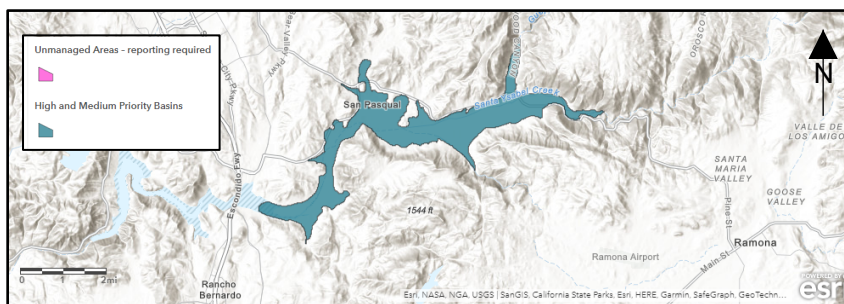


Figure 6: Map of the San Pasqual Valley Basin.⁷

DWR will evaluate the GSPs by January 2024, to determine compliance with SGMA, GSP Regulations, and whether implementation of the GSPs will achieve the sustainability goal for the basins.

More information regarding SGMA and the GSPs are available on the following DWR website: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans>.

Next Steps

DWR will approve the GSPs for the Upper San Luis Rey Subbasin and San Pasqual Valley Basin no later than January 2024. Board staff will continue attending the Water Board's statewide SGMA Roundtable meetings and providing annual update to the Board.

⁶ https://www.waterboards.ca.gov/water_issues/programs/sgma/sgma_status.html

⁷ https://www.waterboards.ca.gov/water_issues/programs/sgma/sgma_status.html

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

Staff Contact: Fisayo Osibodu

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

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

State agencies, municipalities, counties, districts, and other entities (collectively referred to as public entities) that own or operate sewage collection systems report SSO spills through an on-line database system, the *California Integrated Water Quality System* (CIWQS). These SSOs are required to be reported under the [Statewide General SSO Order](#),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 SSO reports are available to the public on a real-time basis at the [State Water Board Public SSO Report Database](#).

⁸ 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*.

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.

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

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

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

- Figure 1: Number of Spills per Month
- 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 August 2021 through September 2022. During this period, 32 of the 64 collection systems in the San Diego Region reported one or more sewage spills. Thirty-two collection systems did not report any sewage spills. A total of 215 sewage spills were reported and more than 75,792 gallons of sewage reached surface waters.

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

6. Transboundary Flows from Mexico into the San Diego Region – September 2022 (Attachment B-6)

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

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

(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 Limites 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 September 2022, there were a total of two reported transboundary flows resulting in more than 838.5 million gallons of contaminated water flowing from Mexico into the United States.

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

- Table 1: September 2022 - Summary of Transboundary Flows from Mexico by Event
- Table 2: September 2022 - Summary of Transboundary Flows from Mexico

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

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

These figures show the number and volume of transboundary flows per month from September 2021 through September 2022. During this period, there were a total of 52 reported transboundary flows resulting in more than 9.9 billion gallons of contaminated water

¹² The Mexican section of the IBWC.

flowing from Mexico into the United States. The number and volume of transboundary flows has increased compared to previous years due to infrastructure issues in Mexico and at the SBIWTP.

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

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

No Reports

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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

December 14, 2022
APPENDED TO EXECUTIVE OFFICER'S REPORT

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

**January 2023
No Meeting Scheduled**

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

Action Agenda Item	Action Type	Written Comments Due
Public Workshop: The San Diego Water Board will hold a public workshop to receive information and discuss proposed requirements in the public draft of Tentative Time Schedule Order No. R9-2023-0006, an Order Requiring Designated Responsible Permittees to Comply with Bacteria TMDL Requirements Prescribed in the Regional Municipal Separate Storm Sewer Systems Permit for the San Diego Region. The San Diego Water Board will not take any formal action on this item at the workshop. <i>(Mireille Garcia Serrato and Laurie Walsh)</i>	Public Workshop	TBD
NPDES Permit Amendment of Order No. R9-2021-0001, NPDES No. CA0108928, Waste Discharge Requirements for the United States Section of the International Boundary and Water Commission, South Bay International Wastewater Treatment Plant Discharge to the Pacific Ocean Through the South Bay Ocean Outfall (Tentative Order No. R9-2023-0009). <i>(Vicente Rodriguez)</i>	NPDES Permit Amendment	TBD
PFAS Update <i>(Brian McDaniel)</i>	Informational Item	N/A
Department of Defense: Select Installation Restoration Site Updates. <i>(Sean McClain)</i>	Informational Item	N/A
Enforcement Update from State Water Board Office of Enforcement. <i>(Chiara Clemente)</i>	Informational Item	N/A

March 8, 2023
San Diego Water Board Meeting Room

Action Agenda Item	Action Type	Written Comments Due
Recission of Order No. 95-34, Waste Discharge Requirements for Outdoor World RV Park, Inc. Outdoor World Retreat & RV Park (aka Boulevard KOA) (Tentative Order No. R9-2023-0008). <i>(Brandon Bushnell)</i>	Waste Discharge Requirement Rescission	TBD
Recission of Order No. 94-93, Waste Discharge Requirements for the County of San Diego, Portrero Park near Portrero (Tentative Order No. R9-2023-0002). <i>(Mahsa Izadmehr)</i>	Waste Discharge Requirement Rescission	TBD
General Waste Discharge Requirements for San Diego Bay Shipyards, San Diego County (Tentative Order No. R9- 2023-0012, NPDES No. CAG039001). <i>(Debbie Phan)</i>	General NPDES Permit Reissuance	TBD
Dr. Marty Ralph, Director of the Center for Western Weather and Water Extremes at Scripps Institution of Oceanography (SIO) will present an informational item on the physical processes that create Atmospheric Rivers. <i>(Jimmy Smith)</i>	Informational Item	N/A

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

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

February 10, 2021

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

March 10, 2021

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

April 14, 2021

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

June 9, 2021

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

August 11, 2021

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

December 8, 2021

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

February 9, 2022

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

March 9, 2022

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

May 11, 2022

Requested Agenda Item	Board Member	Status
Atmospheric Rivers Presentation from Dr. Marty Ralph, Scripps Institution of Oceanography	Abarbanel	March 2023

August 10, 2022

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

September 14, 2022

Requested Agenda Item	Board Member	Status
Update on the Commercial Agricultural Program	Various	December 2022

Requested Agenda Item	Board Member	Status
Public Workshop to discuss the concerns of the regulated community and to receive input on the future update to the agricultural orders	Abarbanel	Spring/ Summer 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	Spring 2023
Annual progress reports on implementation of the Strategic Water Quality Assessment Approach for San Diego Bay	Olson, Warren	August 2023

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

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain and Recovered (Gallons)⁴	Total Discharged to Land (Gallons)⁵	Surface Water Body Affected⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area⁷
City of Laguna Beach	70	70	0	70	0	Not Applicable	9.0	92.0	18,000
City of National City	8,900	8,900	0	700	8,200	Not Applicable	1.0	105.0	58,967
City of National City	300	300	0	300	0	Not Applicable	1.0	105.0	58,967
City of San Diego	152,350	80,000	0	0	152,830	Not Applicable	112.5	2931.2	2,300,000

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

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

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

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

⁵ Total Discharged to Land = total amount reaching land.

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

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

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain and Recovered (Gallons)⁴	Total Discharged to Land (Gallons)⁵	Surface Water Body Affected⁶	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area⁷
City of San Diego	740	210	0	0	740	Not Applicable	112.5	2931.2	2,300,000
City of San Diego	17	17	0	0	17	Not Applicable	112.5	2931.2	2,300,000
San Diego State University	10	10	0	0	10	Not Applicable	0.0	6.0	40,000
Santa Margarita Water District	500	50	450	0	50	Drainage channel tributary to Segunda Descheca Canada	14.0	638.9	170,000
City of Solana Beach	200	200	0	200	0	Not Applicable	2.0	49.0	14,000

Table 2: September 2022 – Summary of Private Lateral Sewage Discharge Events

Responsible Collection System Agency	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)⁴	Surface Water Body Affected⁵	Population in Service Area⁶	Number of Lateral Connections
Fallbrook Public Utility District	25	5	0	25	Not Applicable	23,000	4,699
Fallbrook Public Utility District	100	50	0	100	Not Applicable	23,000	4,699
Vallecitos Water District	2300	1,850	450	1,850	Not Reported	108,392	20,737
Vallecitos Water District	10	10	0	10	Not Applicable	108,392	20,737

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

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

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

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

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

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

Table 3: September 2022 – Summary of Sewage Discharges by Source

Spill Type	Month/Year	Number of Spills	Total Volume (Gallons)¹	Total Recovered (Gallons)²	Total Reaching Surface Waters (Gallons)³	Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land (Gallons)⁴
Public Spills	September 2022	9	163,807	89,757	450	1,270
Federal Spills	September 2022	0	0	0	0	0
Private Spills	September 2022	4	2,435	1,915	450	1,985
All Spills	September 2022	13	166,242	91,672	900	3,255

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

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

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

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

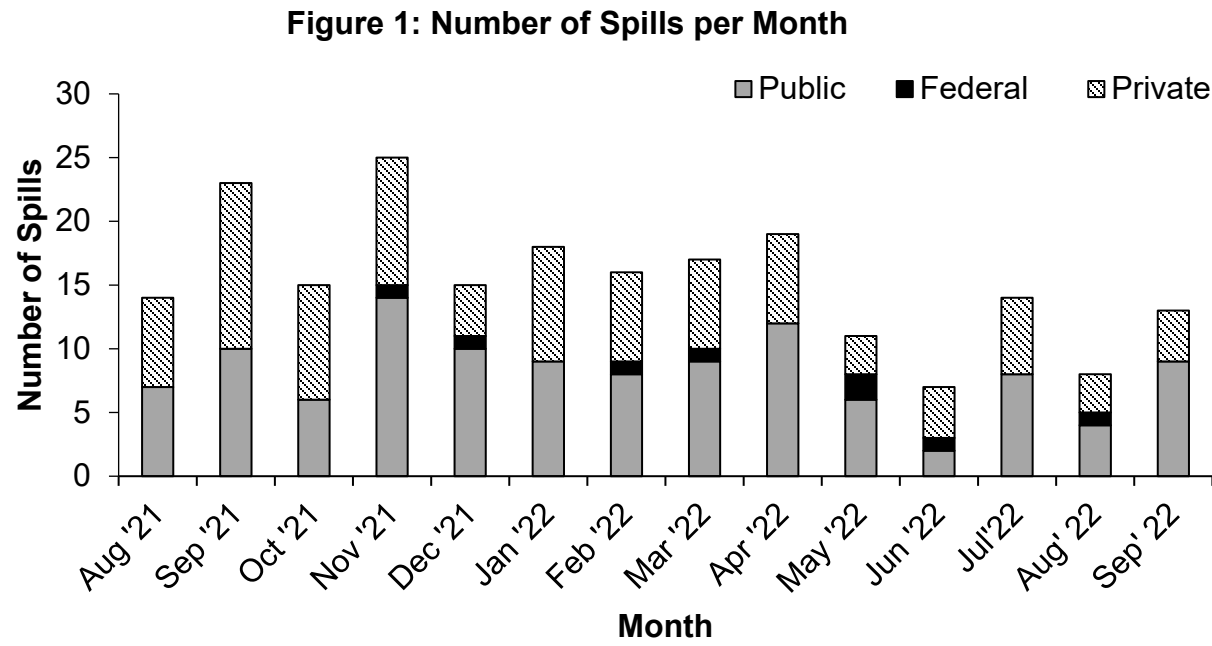


Figure 1: The number of public, federal, and private sewage spills per month from August 2021 through September 2022.

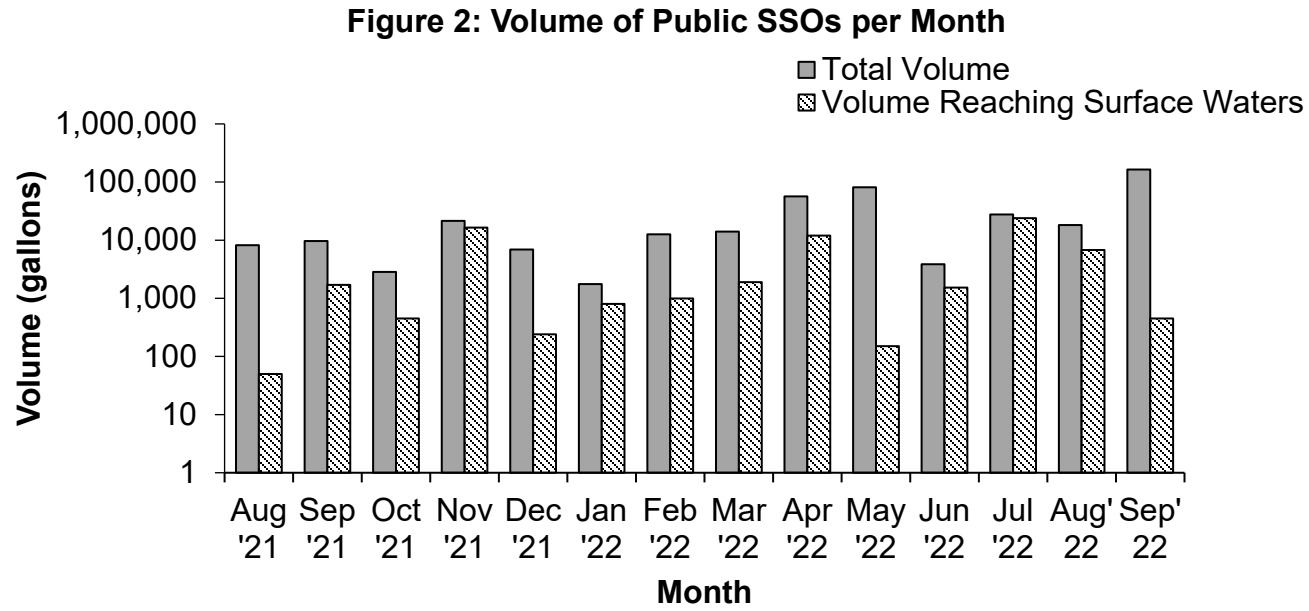


Figure 2: The volume of sanitary sewer overflows (SSOs) from public agencies per month from August 2021 through September 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

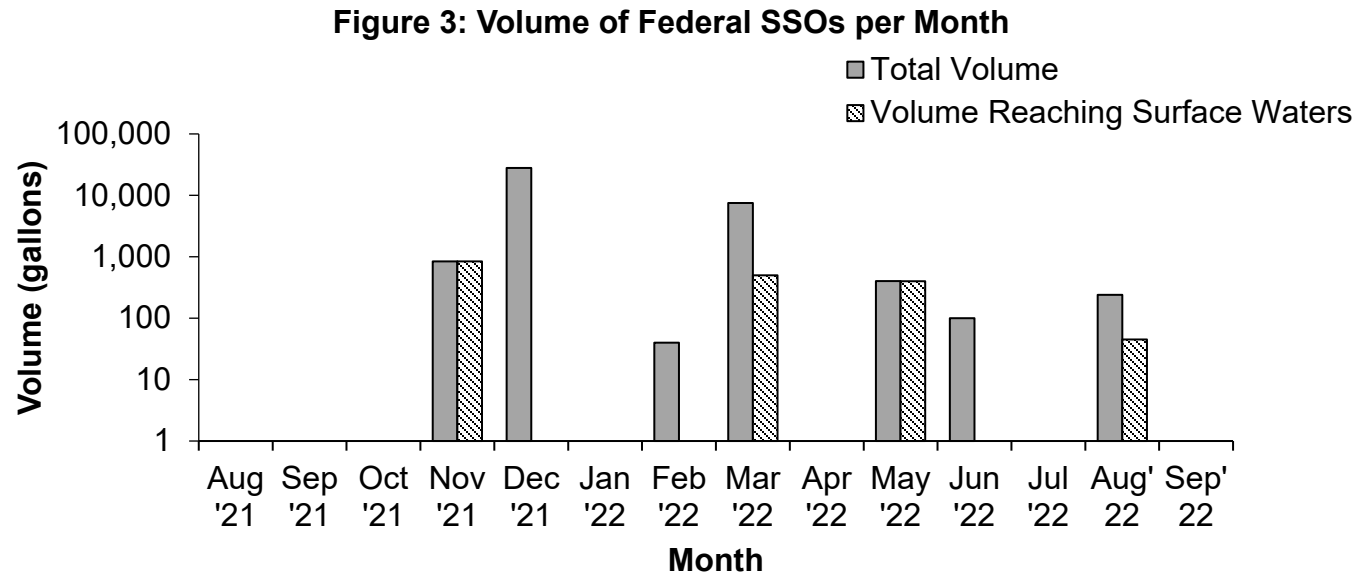


Figure 3: The volume of SSOs from federal agencies per month from August 2021 through September 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

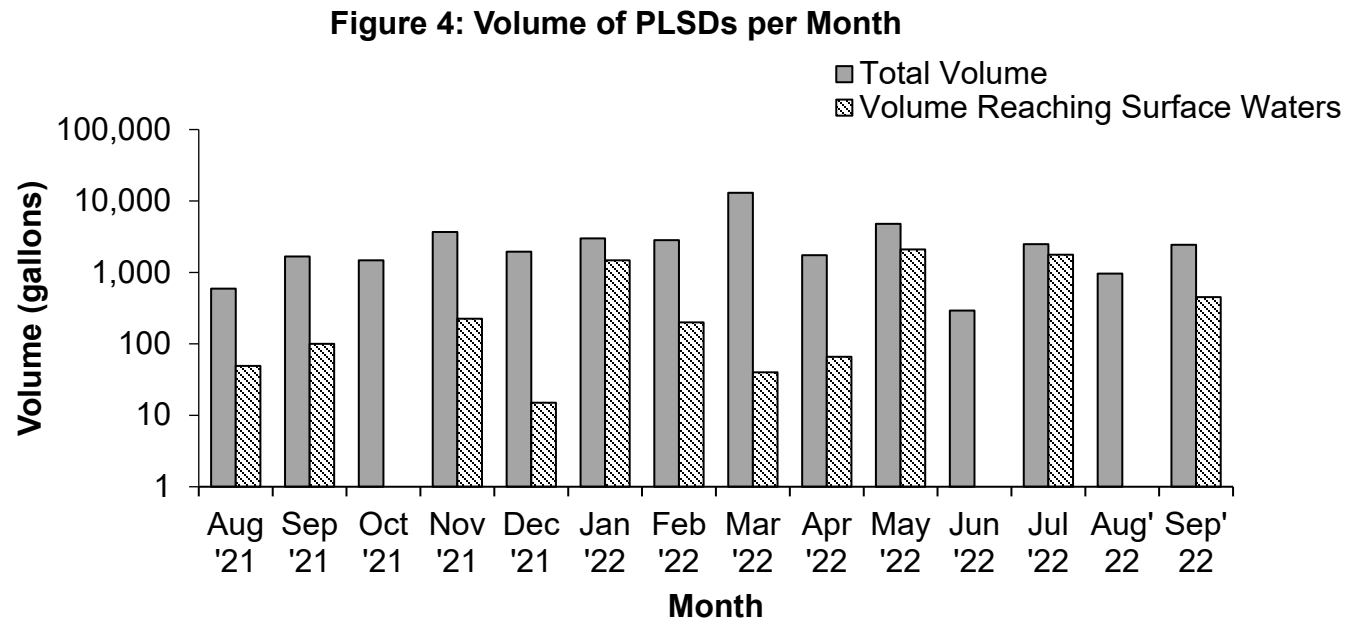


Figure 4: The volume of private lateral sewage discharges (PLSDs) per month from August 2021 through September 2022. Note the logarithmic scale on the vertical axis showing the wide variation in spill volumes.

Table 1: September 2022 – Summary of Transboundary Flows from Mexico by Event¹

Location	Transboundary Flow Start Date	Transboundary Flow End Date	Weather Condition ²	Total Volume (Gallons) ³	Total Volume Recovered (Gallons) ³	Total Volume Reaching Surface Waters (Gallons) ³	Additional Details Reported By USIBWC
Tijuana River Main Channel	9/9/22	9/19/22	Wet ⁴	693,000,000	0	693,000,000	Rain Event
Tijuana River Main Channel	9/19/22	9/24/22	Dry	145,500,000	0	145,500,000	Shutdown of Mexican pump station PBCILA for repairs at Mexican pump stations PB1A and PB1B.

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

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

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

⁴ USIBWC reported that there was precipitation of 0.40 inches in the month September at Smugglers Gulch Pump Station rain gauge. The rain gauge at Goat Canyon Pump Station was not operable.

Table 2: September 2022 - Summary of Transboundary Flows from Mexico¹

Location	Month/Year	Number of Transboundary Flows	Total Volume (Gallons)	Total Volume Recovered (Gallons)	Total Volume Reaching Surface Waters (Gallons)
Tijuana River Main Channel	September 2022	2	838,500,000	0	838,500,000
Canyon Collectors	September 2022	0			
All Locations	September 2022	2	838,500,000	0	838,500,000

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

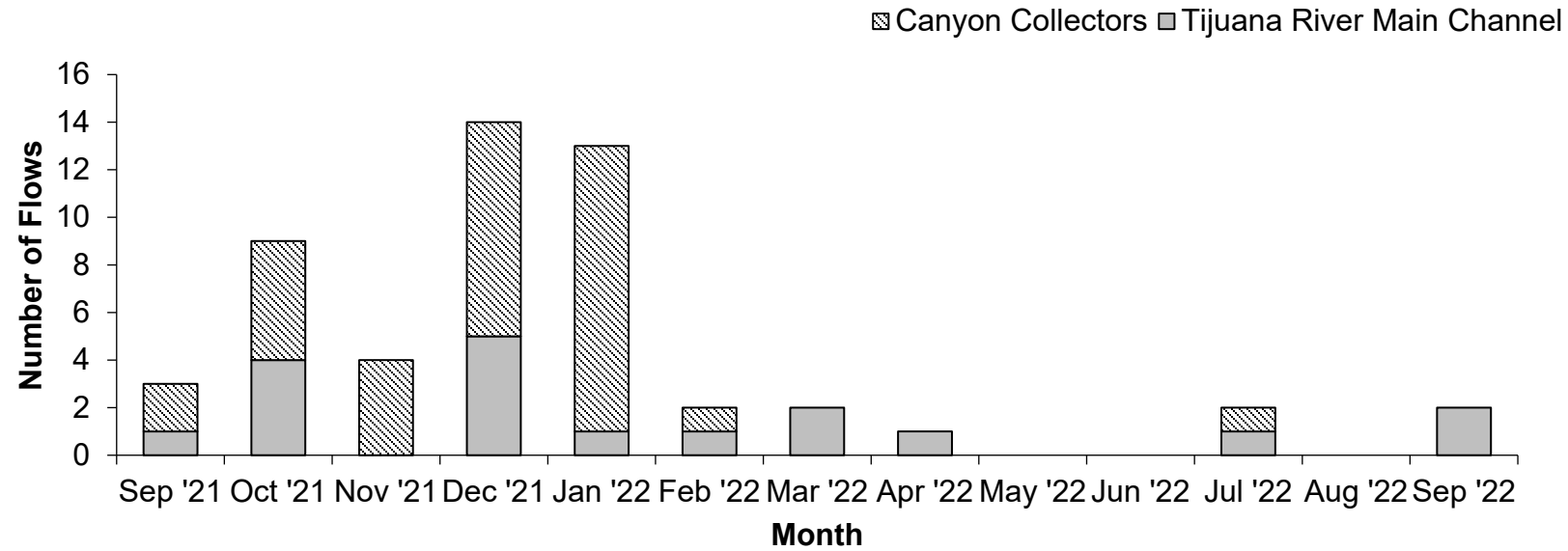


Figure 1: Number of reported transboundary flows per month from September 2021 through September 2022 at the canyon collector systems and the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the transboundary flow in month the transboundary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

Figure 2: Tijuana River Transboundary Flow Volume

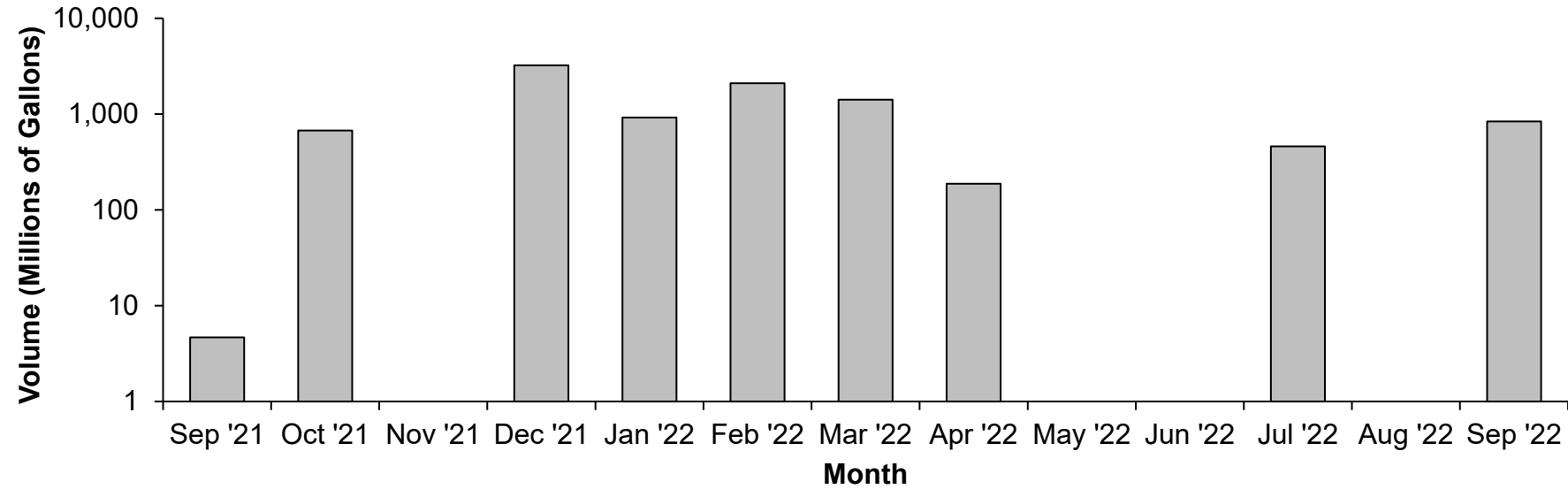


Figure 2: Volume of reported transboundary flows per month from September 2021 through September 2022 at the Tijuana River main channel. For transboundary flows that start and end in different months, the figure includes the total volume of the transboundary flow in the month the transboundary flow started.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

Figure 3: Canyon Collector Transboundary Flow Volume

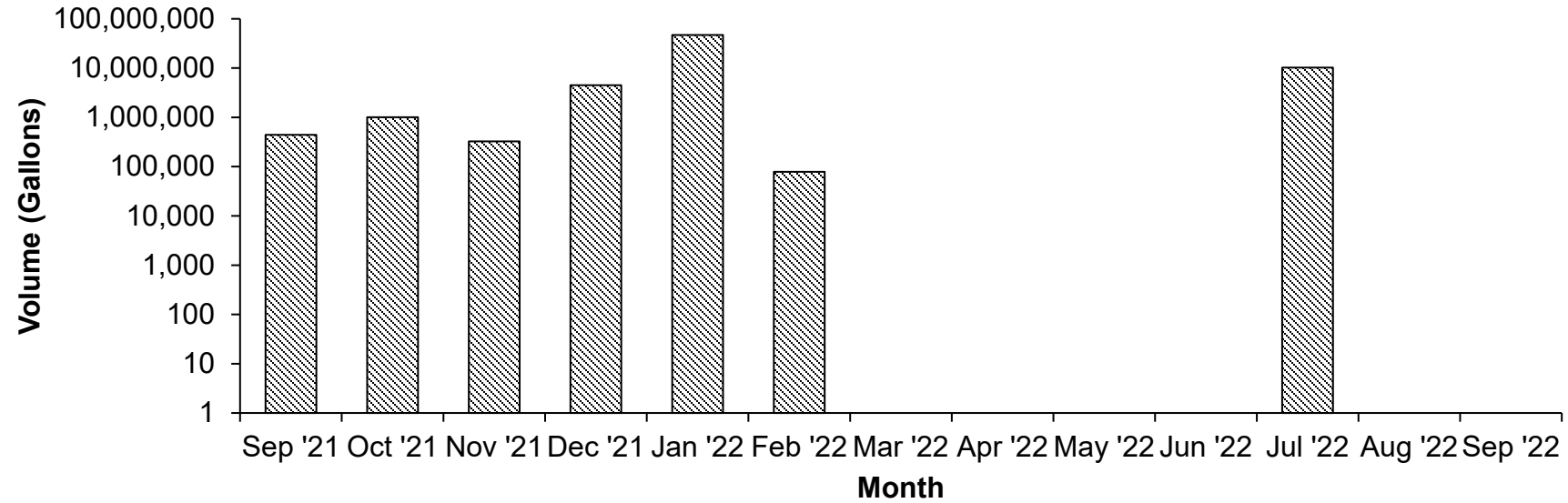


Figure 3: Volume of reported transboundary flows per month from September 2021 through September 2022 at the canyon collector systems. The volume reported in October 2021 includes the transboundary flow at Canyon K, which does not have a canyon collector system. Note the logarithmic scale on the vertical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