

# Staff Report 61

## INTRODUCTION

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In 2023, more than 44 billion gallons of contaminated water and raw sewage flowed across the border into San Diego County. As of June 2024, the International Boundary and Water Commission has recorded 33.55 billion gallons of polluted flows through the Tijuana River Valley and into the Pacific Ocean, wreaking disastrous consequences on the environment and communities. The transboundary pollution enters Californian waters through several pathways:

- Pollution comes through the Main Channel of the Tijuana River, a concrete channel that flows directly to the Tijuana River Estuary and the Pacific Ocean and is intended to accommodate wet-weather flows.
- Pollution also enters through the Canyon Collectors, a series of concrete channels and basins that collect wastewater flowing through border tributaries and are intended to pump that wastewater to a treatment plant.
- Pollution is discharged directly into the ocean in Mexico, just south of the border, and then carried north by ocean currents to the waters off southern California.

While the problem is longstanding, its cause is not a mystery: the current wastewater infrastructure, on both sides of the border, is inadequate. It is inadequate because it is not designed to deal with the current volume of wastewater, and because it has not been appropriately maintained. So untreated wastewater enters the Main Channel even during dry weather; the Canyon Collectors do not capture and divert all the wastewater coming through the tributaries; and infrastructure problems in Mexico result in additional wastewater discharges directly into the ocean.

The problem's severity has been increasing due to urban growth and development in Tijuana resulting in greater wastewater treatment needs; climate change causing more frequent and severe storms that overwhelm the treatment capacity; and more frequent infrastructure failures on both sides of the border due to increasingly deferred maintenance.

But the solution is also not a mystery: the United States government must adequately maintain its own infrastructure and must expand that infrastructure to protect Californians both now and in the future. For decades, the United States government failed to do so, and Californians—particularly those in Imperial Beach and neighboring communities—are bearing the brunt of that failure.

Over the last few years, under new leadership from the federal agencies charged with maintaining the infrastructure and a new federal administration, momentum has slowly started shifting toward addressing the problem. However, the solutions that are being pursued are not fully funded and will take years to implement.

This staff report contains an overview of the Tijuana River pollution crisis, the Commission's involvement, and the current efforts to finally bring it to an end. This report is also intended to set the stage for presentations by the U.S. Section of the International Boundary and Water Commission (USIBWC), San Diego Regional Water Quality Control Board, and other groups and representatives to provide their own perspectives on the crisis.

## **CONTEXT AND BACKGROUND:**

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Nearly three-quarters of the Tijuana River Watershed is in Mexico, but it drains into the Pacific Ocean through the 8 square-mile Tijuana River Valley north of the border in Imperial Beach. The Tijuana River Valley is a natural floodplain with tidally flushed wetland and riparian areas that support threatened and endangered species and includes several federally listed historical and archaeological sites. The river valley includes a tidal saltwater estuary at the mouth of the Tijuana River and sandy beaches along the Pacific shoreline to the west.

Due to urban development, industrial activity, and inadequate storm and wastewater treatment infrastructure, transboundary flows have heavily impacted the region. In 2023, transboundary flows, which are a combination of untreated wastewater, trash, and sediment, exceeded 44 billion gallons. These polluted flows are adversely affecting water and air quality in the region, stressing the estuarine and coastal habitat and organisms, and prompting beach closures along the San Diego coast, but especially beaches in Imperial Beach that have been closed for most of the last three years as a result of the polluted flows.

**JURISDICTION OVERVIEW:**

The Commission has jurisdiction over tide and submerged land located in and near the Tijuana River Watershed and the Pacific Ocean. The Commission manages these lands under the Public Trust Doctrine, a doctrine that mandates that California's oceans, rivers, and lakes be used to benefit the statewide public and preserved for navigation, fishing, maritime commerce, ecological preservation, and public access and recreation. The transboundary pollution is directly interfering with both the Commission's mission and the public's rights to enjoy their waters.

The Commission leases land in the Tijuana River Estuary to the California Department of Parks and Recreation for the Border Field State Park (Item 37, December 3, 1999), ~~and to the U.S. Fish and Wildlife Service for the Tijuana River National Estuarine Research Reserve. The transboundary pollution damages both lease areas, impeding their ecological and recreational purposes. The Border Field State Park, which supports an array of public access benefits, including hiking, biking, and equestrian activities, has been intermittently closed to the public by California State Parks due to unsafe conditions caused by transboundary flows. The most recent closure began on June 17, 2024, and is still in effect. This closure also interferes with research opportunities at the Tijuana River Estuary and is causing delays in City and County dredging and berm repair efforts.~~

The Commission also leases property in the Tijuana River estuary to the U.S. Fish and Wildlife Service for the Tijuana River National Estuarine Research Reserve. (Item 24, December 16, 1980.) The Commission approved the lease to effectuate the long-term preservation of the coastal wetlands in the Tijuana River estuary, yet this purpose has been dramatically frustrated by the pollution. The Commission's lease with the U.S. Fish and Wildlife Service requires the beaches next to the Reserve to be open to the public, but those beaches have been closed due to the pollution.

The Commission also has jurisdiction over the Pacific Ocean adjacent to Imperial Beach and other beaches that have been closed to the public due to contamination. One of the Commission's primary responsibilities is protecting public access to the ocean. Local jurisdictions have had to make difficult decisions to close beaches due to excessive levels of bacteria and pollutants due to the pollution. This is a necessary measure to protect public health, but it is unacceptable that the community is unable to access clean and safe beaches and coastal waters

The City of San Diego and the USIBWC lease tide and submerged land from the Commission in the Pacific Ocean for an outfall associated with the South Bay

International Wastewater Treatment Plant ([Item 40, February 27, 1996.](#)). This outfall is used by the USIBWC to discharge treated wastewater from the South Bay International Treatment Plant. Transboundary pollution is not intended to be discharged from this outfall; however, in cases of emergency where the plant exceeds its flow capacity, untreated flows may be released through the outfall.

The Tijuana River Watershed is regulated by various agencies. The International Boundary and Water Commission is a binational agency that oversees water treaties between the United States and Mexico, and is the federal entity charged with implementing international agreements that regulate water quality along the United States – Mexico border.

The USIBWC operates the South Bay International Wastewater Treatment Plant and other water quality infrastructure on the U.S. - side of the border intended to protect California's water quality from transboundary pollution following through the Tijuana River.

The San Diego Regional Water Quality Control Board (San Diego Water Board) administers water quality laws, including the Clean Water Act. The San Diego Water Board regulates USIBWC water discharges under a National Pollutant Discharge Elimination System (NPDES) permit. The USIBWC has been out of compliance with its permit since 2021, but as of August, it anticipated reaching compliance by October 2024. The San Diego Water Board and its staff have been closely monitoring the USIBWC's efforts.

The U.S. EPA has a border office focused on issues related to the Tijuana River Valley; and the City of Imperial Beach, County of San Diego, and the City of San Diego operate the valley's treatment plant and do most of the monitoring associated with it.

### **RECENT COMMISSION ACTION:**

Throughout this crisis, the Commission has vigorously advocated for a resolution. The Commission has commented on the environmental review of infrastructure projects, advocated and supported legislation to direct funding and resources toward addressing the crisis. In 2018, the Commission filed a lawsuit alongside those filed by the San Diego Water Board; the San Diego Unified Port District; the Cities of San Diego, Chula Vista, and Imperial Beach; and the Surfrider Foundation, over the pollution discharges from the USIBWC's facilities. After the federal government announced additional funding for wastewater infrastructure through a Record of Decision for the United States-Mexico-Canada Agreement (discussed below), the

parties reached a settlement with the USIBWC in April 2022. The settlement dismissed the lawsuits in exchange for the USIBWC improving its canyon collector network, supporting a main channel berm, improving its stakeholder communication, and taking other steps to address the pollution that flows across the border.

## **TIJUANA RIVER VALLEY POLLUTION CRISIS UPDATE:**

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### **ENVIRONMENTAL, PUBLIC HEALTH AND ENVIRONMENTAL JUSTICE IMPACTS**

Transboundary flows carry sediment, trash, contaminated wastewater, and untreated sewage through the river and into the ocean, adversely impacting nearby coastal communities and habitats. The main beach in Imperial Beach has been closed for much of the past three years due to excessive and unsafe levels of bacteria from untreated sewage flows that pose a health risk to the public.

As California experiences record-high temperatures this summer, not being able to access the coast to find relief from inland heat is an additional consequence. Residents are also severely impacted by the effects of the transboundary flows, reporting gastrointestinal and respiratory illnesses due to poor air and water quality.

Growing concerns over air quality impacts due to the transboundary flows have led to formal requests for the Center for Disease Control and the California Department of Public Health to investigate. San Diego County recently approved funds to purchase air purifiers for residents who live in the region due to the noxious odors.

These transboundary flows and associated public health and access impacts highlight a critical environmental justice issue for the communities of Imperial Beach, which faces a high pollution burden and has a higher lower-income population compared to other cities within the County of San Diego. The Commission's Environmental Justice Policy seeks to advance a vision where "environmental justice communities are no longer disproportionately impacted by pollution or environmental hazards, and all Californians can access and enjoy our beautiful public lands and natural resources." Addressing transboundary flows and mitigating public health impacts are necessary to ensure communities can breathe clean air and have access to a safe coast.

In addition to public health impacts, sensitive and critically important habitats are at risk of degradation due to the high influx of pollutants and contaminants. Recent

surveys and observations by the Tijuana River National Estuarine Research Reserve researchers have reported reduced fish species and overall presence of fish.

Addressing the pollution requires binational collaboration to reduce and treat flows, federal infrastructure expansion, and regional mitigation and restoration efforts.

### **FEDERAL INFRASTRUCTURE AND ACTION UPDATES**

The USIBWC is a federal agency that operates under treaties between the United States and Mexico. The federal government, through the USIBWC, has exclusive authority to operate the infrastructure intended to protect California residents from transboundary pollution. Therefore, the funding to maintain and expand this infrastructure must come from the federal government.

In 2020, Congress passed the United States-Mexico Canada Agreement Implementation Act, which appropriated \$300 million to the U.S. EPA to address the much-needed infrastructure repairs. In response, the U.S. EPA and the International Boundary and Water Commission conducted an environmental review of infrastructure improvement projects and signed a Record of Decision for the proposed United States-Mexico-Canada Agreement (US-MCA) Mitigation of Contaminated Transboundary Flows Project in June 2023. This Decision identified core projects to implement to address and mitigate transboundary flows. These projects include expanding the South Bay International Wastewater Treatment Plant, managing Tijuana canyon flows to the International Wastewater Treatment Plant, implementing Tijuana sewer repairs, and building an Advanced Primary Treatment Plant.

Using funds appropriated under the United States – Mexico Canada Agreement Implementation Act, the U.S. International Boundary and Water Commission has begun to implement a phased construction approach to expand the South Bay Plant, which would expand the capacity of the Plant to up to 50 million gallons per day. In August 2024, the U.S. International Boundary and Water Commission awarded a contract for the design and construction of the rehabilitation and expansion of the South Bay Plant. This expansion and rehabilitation project will double the Plant's current treatment capacity to treat an average of 25 million gallons per day to 50 million gallons per day, with a peak flow capacity of 75 million gallons per day. Total design and construction are expected to take up to five years, and the cost is estimated at around \$600 million dollars. Currently, around \$400 million has been appropriated towards the project.

The USBWC has also committed to partnering with agencies in Mexico to investigate and identify sources contributing to the alarming level of dry weather flows that are entering the Tijuana River Valley.

Solving the current scale of transboundary flows requires a holistic approach of infrastructure improvement projects, as highlighted by the Record of Decision, which requires additional funding and environmental review.

### **STATE PROJECTS AND UPDATES:**

While the federal government has the exclusive authority to maintain and expand the infrastructure directly addressing transboundary flows, the State has funded projects to help address the impacts of infrastructure failures in federal facilities and in Mexico. In 2021, Senate Bill 170 funded three projects in the Tijuana River Valley through the State Water Resources Control Board Division of Financial Assistance. These include the Tijuana River Flood Control Trash Control Structure, the Smuggler's Gulch Dredging Project, and the Tijuana River Valley Hydrology and Habitat Restoration.

The Tijuana River trash control structure project involves the design, construction, operation, and maintenance of a floating trash boom system for one storm season in the main channel of the river, immediately downstream of the international border. The Rural Community Assistance Center has obtained the necessary permits and installation of this demonstration project is expected to be complete late 2024. This demonstration project is in the process of obtaining environmental permits to begin installation, which is expected to be complete by early 2025.

The Smuggler's Gulch dredging project will remove up to 30,000 cubic yards of accumulated sediment, trash, and debris in Smuggler's Gulch and the Tijuana River Pilot Channel. This accumulation of sediment, trash, and debris contributes to flooding, threatening public and private properties and critical habitats. This dredging project is necessary before the installation of permanent sediment and trash capture infrastructure at Smuggler's Gulch, which will be funded by a separate grant. The project will be completed by fall 2025.

The Tijuana River Valley hydrology and habitat restoration project will remediate a contaminated seven-acre property adjacent to the Tijuana River and restore it to native upland coastal sage scrub habitat. The County has completed the demolition of on-site structures, soil preparation, irrigation installation, and planting of vegetation. The project will be completed by fall 2025.

In addition to these three projects, the San Diego Water Board has developed a draft Advance Restoration Plan to address water quality impairments through an implementation plan with actions to restore and maintain water quality standards. San Diego Water Board staff will present the Advanced Restoration Plan to the San Diego Water Board to for adoption later this year.

### **LEGISLATIVE UPDATES**

Commission staff have tracked several legislative efforts this year related to the Tijuana River transboundary pollution crisis. In February 2024, the Commission adopted a support position on AJR 12 (Alvarez) Tijuana River: Cross-Border Pollution. This since adopted resolution urges the United States Congress and President Biden to fully fund the United States Environmental Protection Agency's Comprehensive Infrastructure Solution for the Tijuana River owing to the ongoing impacts to public health, the environment, and the local economy caused by cross-border pollution and would urge President Biden to declare a national emergency due to those ongoing impacts. On September 27, 2024, Governor Newsom signed SB 1342 (Atkins), which makes two infrastructure projects eligible for California Environmental Quality Act streamlining certification. These include the repair, rehabilitation, or replacement of the South Bay Sewage Treatment Plant operated by the International Boundary and Water Commission.

### **COMMISSION NEXT STEPS:**

The Commission remains engaged in identifying opportunities to support federal, state, and local efforts in addressing the transboundary pollution crisis. Commission staff are developing a webpage that summarizes current federal and state projects that are in progress and planned to mitigate transboundary flows and impacts. This webpage will help the public navigate the efforts underway and identify involved agencies to better understand how they may get involved. Commission staff expects to publish this webpage by October 17, ~~2024~~. During the October 17 Commission Meeting, Commission staff may receive additional direction on specific next steps to take.

### **OTHER PERTINENT INFORMATION:**

1. The proposed action is not a project as defined by CEQA because it is an administrative action that will not result in direct or indirect physical changes in the environment.



Authority: Public Resources Code section 21065 and California Code of Regulations, title 14, sections 15060, subdivision (c)(3), and 15378, subdivision (b)(5).

## **RECOMMENDED ACTION:**

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It is recommended that the Commission:

## **STATE'S BEST INTERESTS:**

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Find that the proposed actions are in the best interests of the State.

## **AUTHORIZATIONS:**

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1. Direct staff to continue to be engaged, support and partner with federal, state and local government partners and stakeholders to identify and facilitate resolutions to the Tijuana River transboundary pollution crisis, including but not limited to engagement with the Commission's lessees in the Tijuana River estuary, the U.S. Fish and Wildlife Service, California State Parks and Recreation, and the USIBWC.
2. Direct staff to continue to advocate for adequate funding to comprehensively address the Tijuana River transboundary pollution crisis.
3. Authorize staff to send a letter to the Biden Administration emphasizing the need to address the transboundary pollution crisis as quickly and comprehensively as possible, through full federal funding, an emergency declaration, and all other powers available to the federal government in order to finally address the public health and ecological crisis from the transboundary pollution, restore public access, and to allow federal agencies to satisfy the purposes of their leases with the Commission.