

# SENATE ENVIRONMENTAL QUALITY COMMITTEE AND ASSEMBLY ENVIRONMENTAL SAFETY AND TOXIC MATERIALS COMMITTEE

SENATOR BLAKESPEAR ASSEMBLY MEMBER CONNOLLY CHAIRS

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#### JOINT LEGISLATIVE INFORMATIONAL HEARING

Monitoring Impacts and Progress in the Tijuana River Valley

# **BACKGROUND INFORMATION**

#### **Executive Summary**

For decades, millions of gallons of untreated sewage and stormwater runoff have frequently polluted the Tijuana River Valley near the United States-Mexico border. Rapid population growth, industrial development, and urbanization in Tijuana driven by foreign investment has overwhelmed aging and underfunded sewage infrastructure leading to structural failures. These failures and the limited capacity of the system have resulted in cross-border, or transboundary flows that spill into state coastal waters and decimate the environment. Although there are binational efforts to implement infrastructure improvements on both sides of the border, resolution of this issue will take years and billions of dollars in funding. Meanwhile, communities in San Diego continue to suffer from environmental and public health impacts as state and local leadership work to identify localized solutions and resources to alleviate these effects. This hearing will provide information on the current state of this crisis in the Tijuana River Valley by highlighting scientific findings and advancements, impacts to local communities from polluted air and waters, and the response of state and local agencies.

# **Background: A Century-Old Problem**

The Tijuana River watershed is a 1,750 square mile drainage basin that channels rain, snow melt, and runoff through a series of streams, creeks, and rivers to the ocean. This particular watershed straddles the international border between the United States and Mexico with a large portion (three-fourths) of the watershed in Mexico (Figure 1). Part of the watershed flows through the city of Tijuana, Mexico, into the United States through the Tijuana River Valley and estuary in San Diego County, then drains into the Pacific Ocean. The Tijuana River Valley and estuary are bounded by the residential communities of San Ysidro and Imperial Beach. The Tijuana River also channels wastewater from Tijuana, creating polluted transboundary flows when improperly managed.

The negative impacts of transboundary flows on water quality and human health in this region date back to the 1930's. The International Boundary and Water Commission (IBWC) was designated by a treaty between the United States and Mexico in 1944 to address water quality, flood control, and sanitation issues. There are two sections of the IBWC, the United States Section (USIBWC) and the Mexico Section (Comisión International de Limites y Aguas, CILA), and each section has exclusive jurisdiction over projects on its respective side of the border.



**Figure 1.** The Tijuana River watershed.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Tijuana River National Estuarine Research Reserve. (2025). <u>Tijuana River Watershed</u>.

# The Sewage Infrastructure and its Shortcomings

The IBWC oversees a sewage diversion system in the cross-border region to manage sewage originating from Tijuana and water from the Tijuana River. The diversion system is intended to prevent transboundary flows and consists of a network of pipes and pump stations that sends sewage and river water to treatment plants before releasing the effluent into the environment. The diversion system (Figure 2) can be summarized as follows:<sup>2</sup>

The Planta de Bombeo CILA pump station (PB-CILA) in Mexico diverts dry-weather flows from the Tijuana River (capacity: 35 million gallons per day, MGD) to Pump Station 1A (PB1-A) or into the International Collector. PB1-A is a sanitary sewer pump station (11.5 MGD) that conveys flows of river water to the San Antonio de los Buenos Creek. The International Collector is a concrete pipe that transports diverted river water from PB-CILA and untreated wastewater collected in downtown Tijuana by gravity and has a flow capacity of 103 MGD. The International Collector directs flows to two treatment facilities, the San Antonio de los Buenos Wastewater Treatment Plant (SABTP, 18 MGD) in Mexico through Pump Station 1B (PB1-B, 23 MGD) and the South Bay International Wastewater Treatment Plant (SBIWTP, 35 MGD) in the United States. SABTP also collects wastewater from canyon pump stations (Matadero, Los Laureles 1 and 2, 6.3 MGD) and the Playas Pump Station (2.2 MGD) that divert wastewater in the canyons and the Playas de Tijuana neighborhood. SABTP discharges into the San Antonio de los Buenos Creek which outlets into the Pacific Ocean. Along with flows from the International Collector, the SBIWTP also receives wastewater from the canyon collector system that captures and diverts flows in Goat Canyon, Smuggler's Gulch, Cañón del Sol, Silva Drain, and Stewart's Drain. The SBIWTP discharges its effluent through the South Bay Land and Ocean Outfalls into the Pacific Ocean.

Although the diversion system is intricate, it is not without limitations. Deferred maintenance, insufficient treatment, mechanical challenges, power outages, trash build-ups, capacity exceedances, and subsequent system shutdowns all lead to disruptions and failures of the diversion system, resulting in polluted transboundary flows. Transboundary flows occur primarily through three pathways: the Tijuana River, cross-border canyon tributaries, and northward-flowing ocean currents from the outlet of the San Antonio de los Buenos Creek. Dryweather flows typically range between 20 to 30 MGD, and can fall within the operational capacity of the diversion system. However, population growth and urbanization are projected to increase dry-weather flows that will stress the operational capability of the system. During rainy season, wet-weather flows can be billions of gallons per day, far exceeding the capacity of the system. Climate change is exacerbating transboundary flows through increasingly frequent and intense tropical storms and atmospheric rivers. Record rainfall brought by an atmospheric river

<sup>&</sup>lt;sup>2</sup> U.S. EPA and USIBWC. (2022). <u>Final Programmatic Environmental Impact Statement: USMCA Mitigation of Contaminated Transboundary Flows Project.</u>

<sup>&</sup>lt;sup>3</sup> California State Lands Commission. (2025). <u>Tijuana River Valley Transboundary Pollution Crisis</u>.

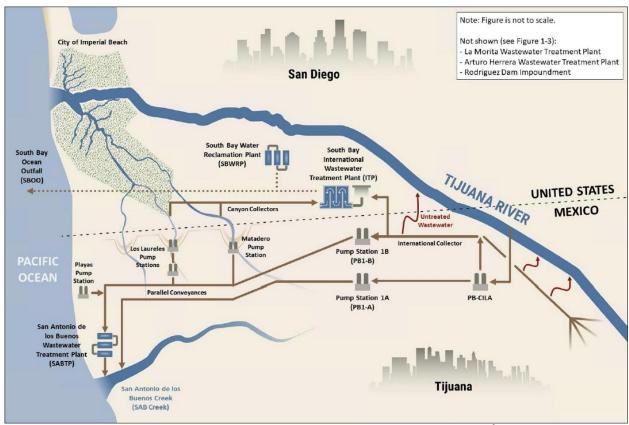


Figure 2. Schematic of existing wastewater diversion and treatment system.<sup>2</sup>

dumped 14.5 billion gallons of untreated sewage and trash into the Tijuana River Valley in January 2024.<sup>4</sup>

#### Recent Developments on a Binational Solution

To address transboundary flows, the IBWC established a binational work group that included the U.S. Environmental Protection Agency (U.S. EPA) and Mexico's National Water Commission (CONAGUA). The U.S. EPA and CONAGUA fund and administer the Border Water Infrastructure Program (BWIP), which facilitates infrastructure implementation along the border to address drinking water and sanitation issues. Following advocacy from local, state, and Congressional leadership and litigation against the USIBWC, in 2020, Congress appropriated \$300 million through the United States-Mexico-Canada Agreement (USMCA) to fund grants under BWIP. 5,6,7,8

<sup>&</sup>lt;sup>4</sup> De La Fe, R. (2024). 14.5 billion gallons of raw sewage, trash flood Tijuana River Valley.

<sup>&</sup>lt;sup>5</sup> U.S. Environmental Protection Agency. (2025). <u>Tijuana River Watershed Provisions in United States-Mexico-Canada Agreement (USMCA): USMCA Implementing Legislation Excerpts.</u>

<sup>&</sup>lt;sup>6</sup> State Water Board. (2022). <u>Regional Leaders Announce Settlement in Tijuana River Valley Sewage Litigation</u>.

<sup>&</sup>lt;sup>7</sup> Jennewein, C. (2019). New USMCA Trade Deal Includes \$300 Million to Stop Tijuana River Pollution.

<sup>&</sup>lt;sup>8</sup> Peters, S. (2019). Peters and San Diego Delegation Secure \$300 Million in USMCA to Combat Tijuana Sewage.

In 2021, the U.S. EPA developed a Comprehensive Infrastructure Solution that would guide efforts for years to come. This included a suite of binational infrastructure improvement projects that could significantly improve the conditions in the Tijuana River Valley. In 2022, the U.S. EPA and CONAGUA signed the Statement of Intent, which created a framework for implementing the Comprehensive Infrastructure Solution, specified near-term (2022-2027) and long-term projects, and identified resources. The IBWC has issued a series of "Minutes" since its inception, outlining actions to meet the obligations set forth under the 1944 Treaty. Issued simultaneously with the Statement of Intent, Minute No. 328 demonstrated the IBWC's commitment to implement the Statement of Intent by detailing proposed projects and cost-sharing responsibilities between the United States and Mexico. Near-term projects include, but are not limited to, an expansion of the SBIWTP from 25 MGD to 50 MGD, rehabilitation of pumps and conveyance infrastructure, and improvements for the SABTP. The cost to complete the list of near-term projects was initially estimated to be \$474 million, with the United States responsible for allocating \$300 million towards the expansion of the SBIWTP.

With time and further evaluation, these initial estimates proved insufficient and additional federal funds would be necessary. Assessments of the SBIWTP indicated that the need for rehabilitation prior to expansion would increase the estimated cost to over \$900 million. In September 2024, the U.S. EPA formally transferred the previously appropriated \$300 million through USMCA to the USIBWC to allocate towards the expansion of the SBIWTP, following letters and advocacy from the Newsom Administration and local, state, and Congressional leadership. Congressional leadership, with the support of state and local leadership, also secured additional appropriations exceeding \$600 million from the federal government in 2024, including \$151 million in the Department of State, Foreign Operations, and Related Programs Appropriations Act (H.R.4665), \$210 million in the Water Resources Development Act (H.R.8812), and \$250 million in the American Relief Act (H.R.10545). Is, 16,17,18

In July 2025, a memorandum of understanding (MOU) between the United States and Mexico was released to reaffirm commitments made under Minute No. 328 for near-term actions through

<sup>&</sup>lt;sup>9</sup> U.S. Environmental Protection Agency. (2021). <u>EPA Announces Holistic Approach to Address Water Pollution</u> from the Tijuana River Watershed.

<sup>&</sup>lt;sup>10</sup> U.S. Environmental Protection Agency and Comisión Nacional del Agua. (2022). <u>Statement of Intent</u>.

<sup>&</sup>lt;sup>11</sup> International Boundary and Water Commission. (2022). <u>Minute No. 328: Sanitation Infrastructure Projects in San Diego</u>, California – Tijuana, Baja California for Immediate Implementation and for Future Development.

<sup>12</sup> U.S. International Boundary and Water Commission. (2023). SBIWTP Expansion Project: Project Update.

<sup>&</sup>lt;sup>13</sup> U.S. Environmental Protection Agency. (2025). <u>USMCA Tijuana River Watershed and Adjacent Coastal</u> Transboundary Wastewater Flows.

<sup>&</sup>lt;sup>14</sup> Office of Governor Newsom. (2023). Letter from California Governor Newsom to U.S. President Biden.

<sup>&</sup>lt;sup>15</sup> Office of Governor Newsom. (2024). <u>California secures critical funding to address Tijuana River sewage crisis in Imperial Beach and surrounding communities.</u>

<sup>&</sup>lt;sup>16</sup> Department of State, Foreign Operations, and Related Programs Appropriations Act, H.R.4665, 118<sup>th</sup> Congress 2023-2024 Session, (2023).

<sup>&</sup>lt;sup>17</sup> Water Resources Development Act, H.R.8812, 118<sup>th</sup> Congress 2023-2024 Session.

<sup>&</sup>lt;sup>18</sup> American Relief Act, H.R.10545, 118th Congress 2023-2024 Session.

2027, and outline outstanding funding responsibilities between the two countries.<sup>19</sup> The MOU expressed the intention of the United States to complete an interim expansion of the SBIWTP from 25 to 35 MGD by August 2025, which was completed on schedule.<sup>20</sup> The MOU also signaled the development of a new Minute by December 31, 2025, that would include over a dozen actions believed to ensure a "comprehensive and durable solution". These actions include feasibility assessments for infrastructure improvements at the SABTP, identifying sediment and trash projects, developing an infrastructure master plan to account for population growth, and developing a binational monitoring system that accounts for flows and water quality.

While binational entities continue to work to fund and implement infrastructure improvements that may substantially reduce or eliminate transboundary flows, actions to alleviate the current and future impacts of these flows on the communities closest to the Tijuana River Valley should not be delayed. Thoroughly understanding various impacts on communities throughout the San Diego region, and especially local to the source, will inform other meaningful solutions.

# **Questions to consider:**

• How would the fully implemented Comprehensive Infrastructure Solution protect communities with the increasing frequency of tropical storms and atmospheric rivers driven by climate change, especially when transboundary flows exceed billions of gallons per day?

# Monitoring Impacts: Environmental, Economic, & Public Health

Transboundary flows have a severe impact on the region's economy, environment, and health of the surrounding communities. Since 2018, over 100 billion of gallons of highly toxic wastewater have crossed the border, contaminating the air, water, and soil.<sup>21</sup> The wastewater consists of untreated sewage, runoff, industrial waste, pesticides, and carries with it sediment, trash, plastic, and tires.<sup>22,23,24</sup> Nearly 400 chemicals have been detected in this wastewater, including more than 175 toxic chemicals, some originating from pharmaceuticals, illicit drugs, and biocides.<sup>23,25</sup> The following sections will discuss impacts along the coast, from inland, and to public health.

<sup>&</sup>lt;sup>19</sup> U.S. Environmental Protection Agency and Mexican Secretariat for Natural Resources. (2025). <u>Memorandum of Understanding on Addressing the Sanitation and Environmental Crisis in the Tijuana-San Diego Region</u>.

<sup>&</sup>lt;sup>20</sup> U.S. Environmental Protection Agency. (2025). <u>EPA and US IBWC Announce Major Milestone in Delivering 100% Solution to the Tijuana River Sewage Crisis</u>.

<sup>&</sup>lt;sup>21</sup> County of San Diego Board of Supervisors. (2023). <u>Agenda Item 16: Proclamation of a Local emergency for U.S.-</u> Mexico Transboundary Pollution Environmental Crisis and Request for Federal State of Emergency.

<sup>&</sup>lt;sup>22</sup> McLamb, F., et. al. (2024). Evidence of transboundary movement of chemicals from Mexico to the U.S..

<sup>&</sup>lt;sup>23</sup> Cooper, A., et. al. (2025). <u>Identifying wastewater chemicals in coastal aerosols</u>.

<sup>&</sup>lt;sup>24</sup> Tijuana River Valley Recovery Team. (2012). Recovery Strategy: Living with the Water.

<sup>&</sup>lt;sup>25</sup> Stigler Granados, P. E., et. al. (2024). <u>Tijuana River Contamination from Urban Runoff and Sewage: A Public Health Crisis at the Border.</u>

# Impacts Along the Coast

The Tijuana River Estuary is the largest functioning wetland in southern California and is designated as a "Wetland of International Importance" by the United Nations. <sup>26</sup> It is a productive ecosystem that supports diverse populations of birds, fish, and invertebrates. <sup>27</sup> Protected by the Tijuana River National Estuarine Research Reserve, the estuary provides a critical habitat for multiple endangered species and many threatened wildlife and vegetation. Transboundary flows lead to invasive plant infestations, critically low dissolved oxygen levels harmful to aquatic organisms, and breeding grounds for mosquito populations carrying disease, especially with the influx of waste tires. <sup>28,29</sup> The estuary and the Tijuana River are listed on the Clean Water Act section 303(d) List of Impaired Water Bodies due to excess levels of 20 pollutants. In April 2025, the Tijuana River was ranked the second most endangered river on American River's annual list. <sup>30</sup> Non-governmental organizations and local governments have pursued restoration activities over the years with ongoing efforts, deploying trash booms and reducing invasive species, sediment, and trash. <sup>24,31,32,33,34</sup>

Transboundary flows can travel miles up the coast through ocean currents. The contamination in the ocean can also become aerosolized through sea spray at the coast.<sup>23</sup> The degraded water quality impacts estuarine and aquatic wildlife, workers, and beachgoers, as exposure to the chemicals, bacteria, and pathogens through ingestion and inhalation can lead to gastrointestinal and respiratory illnesses.<sup>25,35,36</sup> Due to the high levels of fecal matter bacteria, beaches such as Imperial Beach and the Silver Strand have consistently been closed in recent years, even for as long as 1,000 consecutive days, restricting access for the local communities.<sup>37</sup> Businesses have suffered from beach closures, some losing at least \$100,000 in earnings last year.<sup>38</sup> Workers, such as park rangers, lifeguards, and military service members, experience increased exposure to the contamination and higher risks of illness with limited protections and little to no accommodations.<sup>37,39</sup>

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<sup>&</sup>lt;sup>26</sup> Ramsar Convention on Wetlands. (2025). The List of Wetlands of International Importance.

<sup>&</sup>lt;sup>27</sup> Safran, S., et. al. (2017). Tijuana River Valley Historical Ecology Investigation.

<sup>&</sup>lt;sup>28</sup> Pollock, C. (2016). Project will Recycle 50,000 Tires to Prevent Zika Habitat Near Tijuana Border.

<sup>&</sup>lt;sup>29</sup> San Diego Regional Water Board. (2025). U.S.-Mexico Border Water Quality.

<sup>&</sup>lt;sup>30</sup> American Rivers. (2025). <u>Tijuana River</u>.

<sup>&</sup>lt;sup>31</sup> Tijuana River National Estuarine Research Reserve. (2025). <u>Large Scale Restoration</u>.

<sup>&</sup>lt;sup>32</sup> County of San Diego. (2024). <u>Tijuana River Valley Improvements</u>.

<sup>&</sup>lt;sup>33</sup> WILDCOAST. (2024). WILDCOAST Installs New Trash Boom to Tackle Ocean Debris at US – Mexico Border.

<sup>&</sup>lt;sup>34</sup> Rural Community Assistance Corporation. (2025). RCAC Deploy Trash Boom to Fight Tijuana River Pollution.

<sup>&</sup>lt;sup>35</sup> Boehm, A. and Soller, J. (2012). Recreational Water Risk: Pathogens and Fecal Indicators.

<sup>&</sup>lt;sup>36</sup> Danil, K., et. al. (2023). Systemic Erysipelas Outbreak among Free-Ranging Bottlenose Dolphins.

<sup>&</sup>lt;sup>37</sup> Murga, T. (2024). A troubling milestone for U.S.-Mexico border region: 1,000 days without clean ocean water.

<sup>&</sup>lt;sup>38</sup> Murga, T. (2024). County report hints at economic impact sewage crisis has on South Bay businesses.

<sup>&</sup>lt;sup>39</sup> U.S. Department of Defense Inspector General. (2025). <u>Management Advisory: Naval Command Should Relocate</u>, Reschedule, or Cancel Navy SEAL Training When Water Bacteria Levels Exceed Safety Standards.

The County of San Diego regularly conducts water quality sampling and monitors the conditions at beaches to inform advisories and closures. <sup>40</sup> The County also manages a dashboard to inform the public of environmental data, including beach closures, wastewater flows, and smell complaints. <sup>41</sup> In 2023, Scripps Institution of Oceanography was awarded \$3 million by the State of California to develop a five-day pathogen forecast model to predict water quality conditions for Playas Tijuana, Imperial Beach, Silver Strand, and Coronado. <sup>42</sup> Phase I of this model was completed in July and is publicly accessible, informing beachgoers and sampling efforts of the County. <sup>43</sup> Phase II of the model will incorporate data assimilation and provide a forecast of the pathogen norovirus to better illustrate the risk of illness.

# Impacts from Inland

Although beach closures may protect local residents from contaminated water, aerosolization of contamination from the ocean can still spread across the communities of San Ysidro, Imperial Beach and beyond, increasing health risks to residents without direct water contact.<sup>25</sup> More recently, a scientific study from UC San Diego has reinforced community reports of strong odors originating from miles inland near San Ysidro.<sup>44</sup> On Saturn Blvd., a culvert channeling



**Figure 3.** Wastewater aerosolizing and generating foam at the "hot spot" on Saturn Blvd.

wastewater under the road is aerosolizing the wastewater through turbulence, emitting various toxic gases. The channel's drop structure and constricted design accelerates the flow of the wastewater, generating turbulence and a foam visible with satellite images (Figure 3). This area has become more commonly known as the "hot spot". Amongst the toxic gases emitted, hydrogen sulfide has been detected at levels 70 times the 1-hour nuisance standard developed by the California Air Resources Board (CARB) (30 parts per billion, ppb) without the diversion of wastewater to SABTP, particularly at night when temperatures are cooler and winds are low. Even with the diversion of wastewater, hydrogen sulfide

has been detected to exceed chronic exposure levels (7.3 ppb) consistently during nighttime. These high exposure levels put tens of thousands of community members across the South Bay at risk, especially those living in the residential neighborhoods of Nestor and Egger Highlands

<sup>&</sup>lt;sup>40</sup> County of San Diego Department of Environmental Health and Quality. (2025). Beach and Bay Program.

<sup>&</sup>lt;sup>41</sup> County of San Diego Health & Human Services Agency. (2025). <u>Tijuana River Valley Environmental Dashboard</u>.

<sup>&</sup>lt;sup>42</sup> Wood, L. (2023). UC San Diego's Scripps Oceanography Awarded Funding to Develop Pathogen Forecast Model.

<sup>&</sup>lt;sup>43</sup> Monroe, R. (2025). Scripps Researchers Unveil User-Friendly Tool to Alert Beachgoers to Contamination.

<sup>&</sup>lt;sup>44</sup> Rico, B., et. al. (2025). Heavily polluted Tijuana River drives regional air quality crisis.

located less than half a mile away from the "hot spot". Hydrogen sulfide is known to cause negative respiratory and neurological impacts at the acute exposure level, and while epidemiological information for chronic effects is limited, some studies suggest chronic exposure levels may be associated with ocular, cardiovascular, respiratory, and neurological impacts. <sup>45,46,47</sup>

#### **Public Health Surveys**

Residents proximal to the "hot spot" and surrounding the Tijuana River Valley have been facing a public health crisis, experiencing unpleasant odors, perceived poor air quality, increased health concerns, and disruptions to daily activities. <sup>48</sup> A few public health assessments have been conducted to assess resident exposure to toxic chemicals, understand community needs, and inform public health interventions.

In October 2024, the County of San Diego Health and Human Services Agency worked with the Centers for Disease Control and Prevention (CDC) to conduct a Community Assessment for Public Health Emergency Response Study (CASPER), which collected 189 surveys representing the nearly 41,000 households in the region and listed considerations for action. ASPER reported that sewage smells impact 94% of households and their daily activities, nearly half of households experience headaches, respiratory symptoms, throat irritation, and gastrointestinal issues and attribute them to the sewage crisis, and the majority of households face emotional distress and impacts to their health, property, finances, or peace of mind.

Following this initial survey, the County also conducted an Assessment of Chemical Exposures (ACE) with the CDC Agency for Toxic Substances and Disease Registry. 49 Out of over 2,000 survey responses, ACE reported that 63% experienced disruptions in attending work or school due to symptoms believed to be attributed to the sewage crisis, nearly 80% take extra steps to avoid the affected area, and 92% do not believe the affected area is a safe place to visit, work, or live.

San Diego State University (SDSU) has been conducting an online survey since October 2024, and displays the results on their "Healthy Water, Healthy Air" dashboard.<sup>50</sup> Unlike CASPER and ACE, this survey can be completed monthly for additional data tracking. Out of over 400 respondents, 99% smell unpleasant odors, 75% experience respiratory issues, and 70% of households with children or older adults reduced outdoor activity. Additionally, SDSU is currently conducting a non-targeted chemical analysis, to detect chemicals and pathogens in the

<sup>&</sup>lt;sup>45</sup> Office of Environmental Health and Hazard Assessment. (1999). <u>Chronic RELs and toxicity summaries using the previous version of the Hot Spots Risk Assessment guidelines.</u>

<sup>&</sup>lt;sup>46</sup> Batterman, S., et. al. (2023). <u>Low level exposure to hydrogen sulfide: a review of emissions, community exposure, health effects, and exposure guidelines.</u>

<sup>&</sup>lt;sup>47</sup> Nuvolone, D., et. al. (2019). <u>Health effects associated with chronic exposure to low-level hydrogen sulfide from geothermoelectric power plants.</u>

<sup>&</sup>lt;sup>48</sup> County of San Diego Health & Human Services Agency. (2024). CDC Health Survey.

<sup>&</sup>lt;sup>49</sup> County of San Diego Health & Human Services Agency. (2024). <u>ATSDR Exposures Survey (ACE)</u>.

<sup>&</sup>lt;sup>50</sup> San Diego State University. (2025). Healthy Water, Healthy Air Community Health Survey.

air, water, and soil of the Tijuana River Valley. These surveys could ultimately inform a broader epidemiological study, which County officials are seeking to conduct.

#### Questions to consider:

- How can the State facilitate more preventative measures in addressing pollutants, such as trash and tires, that originate in Tijuana?
- How are employers currently supporting workers that are impacted by transboundary pollution and what resources or tools do they lack to support workers?
- Can the pathogen forecast model be expanded beyond its current boundaries and is there a need for that?
- How can we ensure the public continues to have access to tools like the pathogen forecast model?
- What are the key challenges in addressing the air pollution originating from the "hot spot"?
- In what ways are the current standards for hydrogen sulfide and other pollutants insufficient in the context of the "hot spot" and the Tijuana River Valley?
- If an additional air quality standard for hydrogen sulfide was developed or existing standards were updated, what would need to be considered in those evaluations and how would a new standard serve to protect public health?
- How can universities and government agencies work together more effectively in advancing data collection and monitoring efforts?

#### **Monitoring Progress: State and Local Response**

## The "Hot Spot" and the San Diego Air Pollution Control District

In response to evidence of hydrogen sulfide emissions at the "hot spot", the San Diego Air Pollution Control District (SDAPCD) deployed three hydrogen sulfide monitors to increase surveillance. The monitors are located in the communities of Imperial Beach, San Ysidro, and Nestor, with one monitor placed at an elementary school within a mile of the "hot spot". Data from these monitors are currently displayed on the County's environmental dashboard. Community guidelines were also developed for tiered hydrogen sulfide levels, with public recommendations and local agency interventions, including public notification at nuisance levels and evacuation orders at extremely high levels. Some local scientists and officials do not find these guidelines to be stringent enough, and suggest more action is needed to respond appropriately to consistent chronic exposure levels of hydrogen sulfide.

Additionally, through the Air Improvement Relief Effort Program (AIRE), SDAPCD allocated \$2.7 million towards purchasing 10,000 air purifiers for local residents, to be reimbursed by the

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<sup>&</sup>lt;sup>51</sup> San Diego Air Pollution Control District. (2025). Air Quality Monitoring.

CARB.<sup>52,53</sup> While over 7,500 air purifiers have been distributed, at least 40,000 households are impacted by this hazardous air quality and experts recommend air purifiers in every room of each home and in classrooms to protect children.

# The Role of the San Diego Regional Water Board

The San Diego Regional Water Quality Control Board (SD Regional Water Board), in coordination with the State Water Resources Control Board (State Water Board), regulates discharges into waters of the state, implements plans, and enforces water quality objectives for the San Diego region. The SBIWTP and its associated infrastructure, owned by the USIBWC, is regulated by the SD Regional Water Board under a federal permit, which includes conditions such as discharge requirements, effluent limitations, and monitoring and reporting requirements.<sup>54</sup>

For reasons within and outside of its control, the USIBWC has violated multiple permit requirements since the permit was reissued in 2021, including exceedances of effluent limits and failures to report. The SD Regional Water Board has exercised enforcement over recent years through multiple orders to increase compliance, requiring the USIBWC to complete repairs and address deferred maintenance. In 2023, the USIBWC invested \$10 million for repairs and improvements to bring the SBIWTP into compliance with its permit. The SBIWTP has been under compliance with its secondary effluent limitations since November 2024, with few exceptions. The recent, interim capacity expansion of the SBIWTP from 25 MGD to 35 MGD in August would lead to permit violations. The additional 10 MGD receives less treatment than the remaining 25 MGD before being blended together, putting the total discharges at risk of exceeding the required effluent limitations. As a response, the SD Regional Water Board issued another order with interim effluent limitations, remedial requirements, and preventative actions.

Since the Tijuana River and estuary fall on the Clean Water Act 303(d) List of Impaired Water Bodies, total maximum daily loads (TMDL) for each pollutant must be developed along with an implementation plan. Because implementing a TMDL may prove ineffective and impractical at this time, in December 2024, the SD Regional Water Board approved an Advance Restoration Plan (ARP) to reduce the amount of trash within 5-9 years and indicator bacteria within 7 years in the lower Tijuana River. The implementation of the ARP may require agreements between the SD Regional Water Board, USIBWC, and U.S. EPA to identify actions, procedures, and roles in order to achieve the water quality objectives.

<sup>&</sup>lt;sup>52</sup> San Diego Air Pollution Control District. (2025). <u>Air Improvement Relief Effort Program</u>.

Murga, T. (2025). Air Pollution Control District still has purifiers for those affected by cross-border sewage odors.
San Diego Regional Water Board. (2021). Waste Discharge Requirements for the USIBWC South Bay

International Wastewater Treatment Plant.

<sup>&</sup>lt;sup>55</sup> San Diego Regional Water Board. (2021). Cease and Desist Order No. R9-2021-0220.

<sup>&</sup>lt;sup>56</sup> San Diego Regional Water Board. (2023). Time Schedule Order No. R9-2023-0189.

<sup>&</sup>lt;sup>57</sup> San Diego Regional Water Board. (2025). Cease and Desist Order No. R9-2025-0139.

<sup>&</sup>lt;sup>58</sup> San Diego Regional Water Board. (2024). <u>Tijuana River Indicator Bacteria and Trash Advance Restoration Plan</u>.

In addition to regulatory actions, the SD Regional Water Board has guided restoration activities for over a decade. In 2009, the SD Regional Water Board formed the Tijuana River Valley Recovery Team (Recovery Team), consisting of over 30 organizations and government agencies, which developed a Recovery Strategy in 2012.<sup>24</sup> The Recovery Strategy identified actions to address the water quality, sediment, and trash, and restore the beneficial uses of the Tijuana River Valley.<sup>24</sup> In 2015, the Recovery Team developed a Five-Year Action Plan that included projects from the Recovery Strategy and Minute 320.<sup>59</sup> Though substantial progress was made on various projects within the Five-Year Action Plan, the severity of the impacts due to transboundary flows remained unmitigated. In 2018, the SD Regional Water Board pursued litigation alongside other state agencies, local municipalities and organizations against the USIBWC, resulting in a 2022 comprehensive settlement following various federal agreements and funding commitments. Pursuant to the settlement, the USIBWC agreed to specified infrastructure improvements, monitoring efforts, and notification requirements, as well as the intent to implement the U.S. EPA Comprehensive Infrastructure Solution.<sup>6</sup>

## Allocating State Funding & Prop 4

In addition to federal funding allocations for infrastructure improvements at the SBIWTP, the State has allocated \$35 million since 2019 for various projects, including habitat restoration, sediment and trash collection, pathogen forecasting, and other projects developed by the Recovery Team. 60 The Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act (SB 867, Allen, Chapter 83, Statutes of 2024) included a provision for \$50 million to be available to the State Water Board for loans or grants for projects that would address water quality problems arising in the California-Mexico cross-border rivers and coastal waters. The Bond Act authorized funds for water quality projects in the Tijuana River Valley Watershed and associated with the New River Water Quality, Public Health, and River Parkway Development Program. This Bond Act was approved by voters through Proposition 4 (Prop 4) in November 2024 and the 2025 Budget Act (SB 105, Allen, Chapter 104, Statutes of 2025) allocated over \$46 million to the State Water Board under these provisions. In September 2025, the Recovery Team refined a list of potential projects in the Tijuana River Valley from previous efforts to which the State Water Board could allocate Prop 4 funding. These high-priority projects address sedimentation and trash, infrastructure rehabilitation, restoration efforts, and the culvert system at the "hot spot".

Going forward, the State Water Board will determine how the funding will be allocated to cross-border rivers through emergency regulations, pursuant to the Administrative Procedure Act (APA). This will ensure more meaningful public participation in the State Water Board's decisions, however, this process may prolong the release of the urgently needed funding to projects. The Governor's proposed 2025-2026 budget exempted Prop 4 funding from the

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<sup>&</sup>lt;sup>59</sup> Tijuana River Valley Recovery Team. (2015). Five-Year Action Plan.

<sup>&</sup>lt;sup>60</sup> Office of Governor Newsom. (2024). <u>California joins federal and community partners to launch pilot project to help clean up Tijuana River.</u>

requirements of APA, similar to previous resource bonds, however, the APA exemption was removed in the enacted budget and guideline adoption through emergency regulations was authorized.<sup>61</sup> Weary of impending delay, state and county officials have continued to call for the immediate release of the funding.<sup>62</sup>

# Efforts led by San Diego County Leadership

Local officials have initiated various assessments in recent years to inform their response. Funded with the passage of SB 507 (Hueso, Chapter 542, Statutes of 2017), the County of San Diego developed a Needs and Opportunities Assessment (NOA) that identified solutions to address transboundary flows, sediment, and trash in Tijuana River, Smuggler's Gulch, Goat Canyon, and Yogurt Canyon.<sup>63</sup> The assessment was published in 2020, with significant contribution from the Recovery Team following their various efforts in years prior. The NOA continues to inform project selection and funding allocations to date, including the list of projects proposed for Prop 4 funding allocations.

In September 2025, the San Diego County Board of Supervisors approved a four-part plan to inform and advance efforts to address local impacts. The four-part plan includes procuring federal advocacy services and implementing an epidemiological public health impact study, economic impact study, and infrastructure feasibility study to address the "hot spot" at Saturn Blvd.<sup>64</sup> The Board also plans to advocate to the State Water Board to fund a two-year comprehensive contamination study that will support federal advocacy efforts to receive Superfund designation.<sup>65</sup>

# Declaring a State of Emergency

Since 1993, multiple local municipalities have declared a state of emergency over the sewage crisis in the Tijuana River Valley.<sup>66</sup> In 2023, 18 mayors in San Diego County called on Governor Newsom to declare a state of emergency.<sup>67</sup>

Declaring a state of emergency at the state level would allow the Governor to exercise complete authority over all agencies, direct state agencies to employ state resources for any activities that would alleviate damage, and expend any money appropriated to such activities. Under the California Emergency Services Act, a state of emergency would only waive state statutes and regulations for emergency response. However, according to a letter from the Newsom Administration in 2023, no state statute or regulation has been identified that if waived, would

<sup>&</sup>lt;sup>61</sup> Legislative Analyst's Office. (2025). Proposition 4 Spending Plan.

<sup>&</sup>lt;sup>62</sup> Office of Assembly Member David Alvarez. (2025). <u>Assemblymember David Alvarez & Supervisor Aguirre Call</u> for Immediate Allocation of \$46 Million in <u>State Funds to Address Cross-Border Pollution</u>.

<sup>&</sup>lt;sup>63</sup> County of San Diego. (2020). <u>Tijuana River Valley Needs and Opportunities Assessment</u>.

<sup>&</sup>lt;sup>64</sup> San Diego County Board of Supervisors. (2025). General Legislative Session, September 9, 2025.

<sup>&</sup>lt;sup>65</sup> San Diego County Board of Supervisors. (2025). General Legislative Session, September 30, 2025.

<sup>&</sup>lt;sup>66</sup> Murga, T. (2023). What would happen if Tijuana sewage crisis is declared an emergency?.

<sup>&</sup>lt;sup>67</sup> City of Imperial Beach. (2023). Letter from 18 San Diego Mayors to Governor Newsom.

provide relief.<sup>68</sup> Furthermore, the letter indicated that a state of emergency declared at the state level would not be able to accelerate federal work nor would lead to a federal emergency declaration.

At the federal level, a state of emergency could provide individual, public, or hazard mitigation assistance. Even if a state of emergency was declared at the federal level, other complications have been noted. Under the federal Stafford Act, the sewage crisis at the border doesn't fit the definitions of an emergency or major disaster and assistance that would be provided are for a limited time. States would also need to exhaust their resources in addressing the emergency and demonstrate the need for federal assistance and if issued, there are cost-sharing provisions that the state would be subjected to. Despite potential complications, state and local officials continue to advocate for a declaration of a state of emergency at the federal level.

## Questions to consider:

- What are the barriers the air district faces in creating new guidelines surrounding hydrogen sulfide with the existing standards? Can additional notification guidelines or requirements be established to be responsive to outstanding public health concerns?
- How would the development of an additional air quality standard for hydrogen sulfide support the work of the air district?
- What are the current needs to support the AIRE program and ensure all affected households and sensitive receptors gain access to air purifiers? What are the current needs to support ongoing monitoring efforts?
- Would further expansion of the South Bay International Wastewater Treatment Plant result in discharges that are insufficiently treated? How will the San Diego Regional Water Board ensure sufficient treatment of discharges with both the interim expansion and all future expansions?
- What is the anticipated timeline for completing the regulations and awarding funds through Prop 4 with APA emergency regulations? Would the timelines differ between allocations to address cross-border rivers compared to other programs? What would be the associated time and cost savings if an APA exemption was adopted?
- How much is it estimated to cost to address the "hot spot" at Saturn Blvd and what sources of funding are being considered?
- What types of actions could be informed by the findings of the epidemiological public health and economic impact studies in the four-part plan?
- How can universities and government agencies work together more effectively in advancing data collection and monitoring efforts?

<sup>&</sup>lt;sup>68</sup> Office of Governor Newsom. (2023). <u>Letter from the Newsom Administration Legal Affairs to the California Coastal Commission</u>.

# **Understanding the Current Role of the State**

For border communities, and across the San Diego region, polluted transboundary flows have deprived the public of a beloved natural space, perpetuated intolerable impacts to public health, and contributed to continual devastation of the environment. Even as the U.S. and Mexican governments advance binational efforts to achieve a comprehensive solution, the work being done by local leaders, agencies, and organizations remains vital for confronting the ongoing impacts of the Tijuana River Valley sewage crisis. The need for information, resources, and policy solutions persists and this hearing aims to highlight key issues and areas in which the State of California can take a prominent role to protect communities from inexcusable harm.

## Related Legislation

**SB 10 (Padila, 2025)** creates a permanent source of funding for remediation by authorizing funds from the Otay Mesa East Port of Entry toll road to be allocated towards restoration. This bill is currently active and held in the Assembly Transportation Committee.

**AJR 16 (Alvarez, 2025)** urges the federal government to fully fund the Comprehensive Infrastructure Solution and take additional specified actions to address transboundary flows. This bill is currently active and held in the Senate Environmental Quality Committee.

**SJR 18 (Padilla, Chapter 175, 2024)** requested the Centers for Disease Control and Prevention to conduct further investigation into the potential health impacts attributed to pollution in the Tijuana River.

AJR 12 (Alvarez, Chapter 201, 2024) urged the United States Congress and Biden Administration to fully fund the Comprehensive Infrastructure Solution and declare a national emergency due to the ongoing impacts.

**SB 1208 (Padilla, 2024)** would have prohibited a regional water board from issuing a waste discharge permit for a new solid waste landfill if located in an area tributary to the Tijuana River. This bill died on the Assembly floor.

SB 867 (Allen, Chapter 83, Statutes of 2024) enacted the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 authorizing the issuance of bonds in the amount of \$10 billion to finance projects including, but not limited to drought, flood, and water resilience, coastal resilience, park creation, outdoor access, and clean air programs.

AB 1597 (Alvarez, 2023) would have authorized funds made available to the California Environmental Protection Agency (CalEPA) for North American Development Bank for loans, grants, and expenditures to address water quality problems arising in the California-Mexico cross-border watersheds. This bill was placed on the suspense file in the Senate Appropriations Committee.

**SB 1181 (Hueso, Chapter 542, Statutes of 2022)** required CalRecycle to strengthen the California tire tracking system to quantify the number of used tires flowing form California into Mexico.

- **AB 2248 (Eduardo Garcia, 2022)** would have made \$100 million available from the General Fund to the State Water Board for grants and direct expenditures to address water quality problems arising in the California-Mexico cross-border rivers. This bill was vetoed by Governor Newsom.
- **SB 1301 (Hueso, Chapter 368, Statutes of 2020)** required CalEPA and the California Natural Resources Agency to collaborate to create a Tijuana River Valley Watershed Action Plan to be reviewed and updated on a 3-year cycle.
- **SB 690 (Hueso, Chapter 381, Statutes of 2019)** encouraged the State Coastal Conservancy to prioritize projects identified in feasibility studies conducted by the County of San Diego for the Tijuana River Valley when expending funds to address transboundary flows and pollution in the Tijuana River Valley.
- **AB 74 (Ting, Chapter 23, Statutes of 2019)** appropriated \$15 million for the Tijuana River Border Pollution Control Project.
- SR 57 (Hueso, 2019) called on Governor Newsom to explore all available state resources to address the sewage crisis in the Tijuana River Valley and support the San Diego Congressional delegation in their request sent to the IBWC in July 2019.
- **SJR 1 (Hueso, 2019)** would have urged the federal government to prioritize the public health crises at the California-Mexico border and declared support of the Attorney General's lawsuit challenging a national emergency declaration for the construction of the border wall. This bill was held in the Senate Committee on Judiciary.
- SB 558 (Hueso, 2019) would have established the Commission on California-Mexico Affairs and required them to develop policy proposals and recommendations to issues pertaining to the border between California and Mexico. This bill was vetoed by Governor Newsom.
- **SJR 22 (Hueso, Chapter 241, 2018)** urged the federal government and USIBWC to take immediate action to address cross-border pollution in the Tijuana River Valley.
- SB 1367 (Atkins, Chapter 738, Statutes of 2018) required the San Diego River Conservancy to establish a Watershed Consortium Program to create advisory panels that identify potential project funding to restore the watersheds of the Otay, Sweetwater and Tijuana River.
- **SB 507 (Hueso, Chapter 542, Statutes of 2017)** appropriated \$500,000 to the County of San Diego to update the Recovery Team's 2012 "Recovery Strategy: Living with the Water" to include issues related to wastewater and runoff and a study focused on the improvement and protection of natural lands, including the Tijuana River channel.
- **SCR 90 (Hueso, Chapter 80, 2014)** declared the Legislature's intent to work with the Recovery Team to protect and preserve the Tijuana River Valley, improve management of sediment and trash, flood control, ecosystem management, and recreation and education, and promote bilateral ties with Mexico.
- **SB 167 (Ducheny, Chapter 333, Statutes of 2009)** required CalRecycle to include the development of specified projects relating to waste tires in the California-Mexico border region in the five-year plan for waste tire programs, and authorized funds generated by the California tire fee to be used for related border activities.