December 11, 2025

Senator Catherine S. Blakespear
1021 O Street, Suite 7720
Sacramento, CA 95814

Assemblymember Damon Connolly
State Capitol
P.O. Box 942849
Sacramento, CA 94249-0012

Sent via email to Senator.Blakespear@Senate.ca.gov; Assemblymember.Connolly@asm.ca.gov.

Re: Joint Informational Hearing Senate Environmental Quality and Assembly Environmental Safety and Toxic Materials – Monitoring Impacts and Progress in the Tijuana River Valley

Dear Senator Blakespear and Assemblymember Connolly,

San Diego Coastkeeper submits the following informational letter regarding the transboundary pollution crisis impacting the Tijuana River Valley and surrounding communities. Coastkeeper is a nonprofit environmental organization dedicated to the preservation, protection, and restoration of the waters, environment, wildlife, and natural resources within San Diego County's watersheds. We took up this issue in 2023 and are committed to using every means at our disposal to address and solve this crisis.

As you are aware, the transboundary pollution problem is extremely complex, multifaceted, and dynamic. It is now an environmental, social justice, and public health catastrophe that continues to disproportionately impact lower income communities of color across South San Diego County. Through our extensive advocacy and public engagement work on this issue, Coastkeeper has compiled significant volumes of data and information. We hope the following summary will assist elected officials and other decisionmakers determine how to most impactfully allocate their limited resources to achieve a lasting 100% solution to this crisis.

I. Issue #1: IBWC Binational Wastewater System

A. Existing System Overview and Schematic

Pursuant to multiple agreements and USMCA Minutes, the United States and Mexico devised a binational system to capture and treat wastewater flows from Tijuana. Image 1 below shows how

the current system was designed to operate, including maximum flow and treatment capacities.[1] However, this plan was authorized in 1990 in Minute 283, and completed in 1997 when the population of the Tijuana Metropolitan Area was only around 1 million people. The population now stands at around 2.3 million.

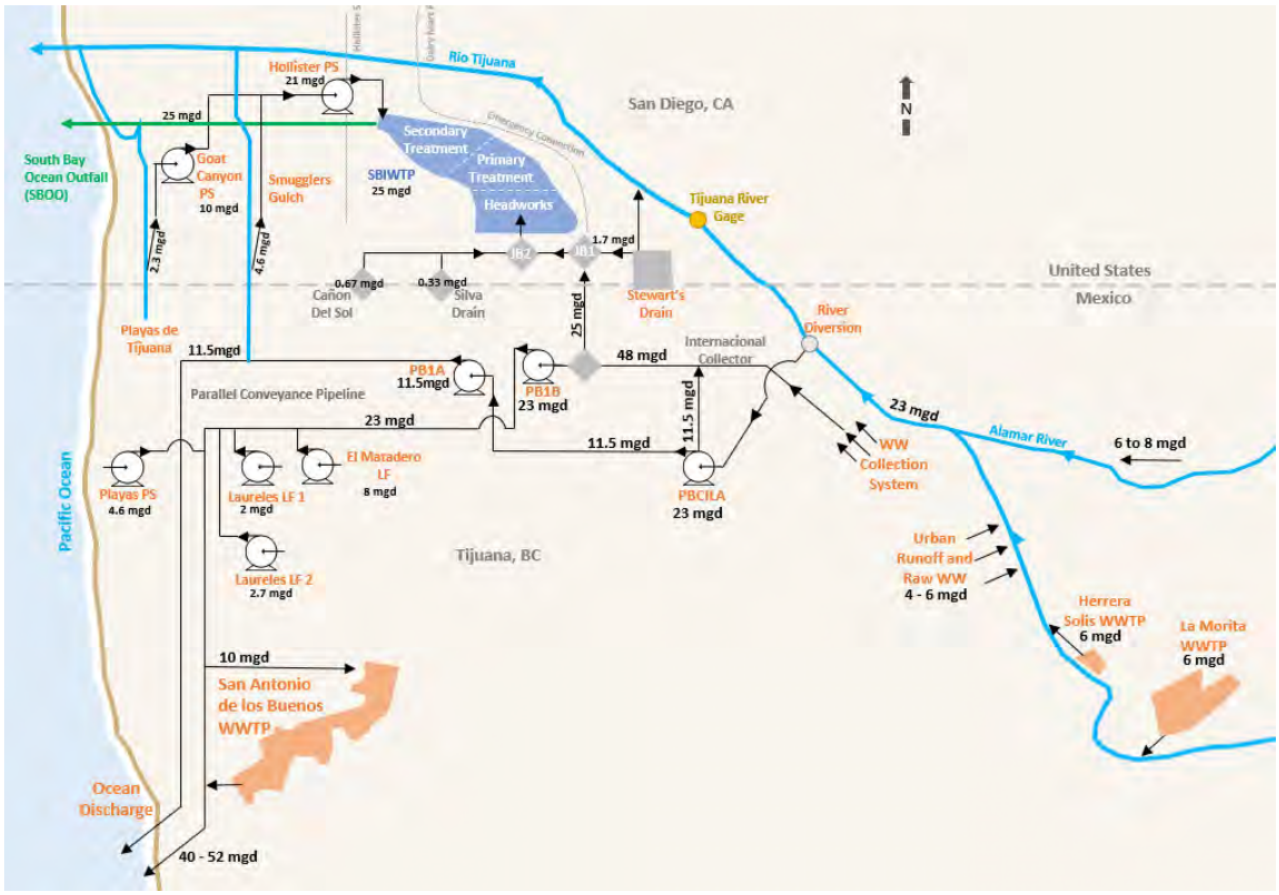

Image 1 – The current wastewater diversion and treatment system

Unfortunately, over the past ten to fifteen years, nearly every infrastructure component identified in Image 1, on both side of the U.S.-Mexico border, has broken down or failed at some point.

Following years of deferred maintenance and neglect, a low point was reached in 2023 when the USIBWC South Bay International Wastewater Treatment Plant (SBIWTP) was nearly destroyed following Tropical Storm Hilary.[2] At that time, Junction Box 1, which regulates flows into the

[1] North American Development Bank, *Tijuana River Diversion Study: Flow Analysis, Infrastructure Diagnostic and Alternatives Development, South Bay International Wastewater Treatment Plant Existing Assessment and Rehabilitation Report* (Jul. 7 2019).
[2] USIBWC Letter, URGENT SOUTH BAY WASTEWATER PLANT REPAIRS NEEDED FOLLOWING TROPICAL STORM HILARY; PLANT REHABILITATION AND EXPANSION MOVING FORWARD (Sept. 13, 2023), https://ibwc.azurewebsites.net/wp-content/uploads/2023/09/Press_Release_091323.pdf.

SBIWTP, had been inoperable since 2019, and thus USIBWC could not regulate flows into the plant to protect it from high inflows. As a result, following Hilary:

- 1 of 6 influent pumps was operable;
- 2 of 7 Activated Sludge Tanks were operable;
- 1 of 2 Waste Activated Sludge Pumps was running (and it was running inefficiently);
- 1 of 2 Unstabilized Sludge Storage Tanks was operating (and only at 50% capacity);
- 0 of 4 pumps were operable at the Hollister canyon collector pumping station;
- 1 of 5 pumps at the primary non-potable water pump station were operable; and
- 0 of 4 pumps were operable at the secondary pump station.

This negatively impacted all plant processes, resulting in partially treated sewage being discharged through ocean outfall, untreated transboundary sewage flows, and rampant Clean Water Act violations.

B. Good News & Recent Improvements

Following collaborative advocacy and lobbying efforts, the federal government provided over $650 million in recent funding allocations to USIBWC to complete major repairs and expansion for the SBIWTP. With that money, USIBWC has repaired or replaced all the components enumerated above (and more), as well as built out redundancies to make the SBIWTP significantly more resilient. As a result, beginning in November 2024, the SBIWTP complied with its Clean Water Act effluent requirements for the first time in several years, and continues to do so.

Beyond bring the SBIWTP back to baseline, there have been two recent critical improvements to overall system capacity that are not captured by Image 1 above.

First, in April 2025, the San Antonio de los Buenos Wastewater Treatment Plant (SAB) came back online for the first time in over five years. The SAB is currently treating 18 million gallons per day (MGD) of wastewater. However, that treated effluent is then mixed with about 27-32 MGD of completely untreated wastewater, which discharges directly onto the beach at Punta Bandera.

Second, in late October 2025, the SBIWTP expanded its capacity to treat a total of 35 MGD. It now treats 25 MGD to secondary treatment standards (as required by the CWA), and an additional 10 MGD to a lesser "primary" treatment standard. This 25 + 10 MGD are then blended and discharged 3 miles into the ocean via the South Bay Ocean Outfall (SBOO). The additional 10 MGD is a temporary stop gap that prevents this 10 MGD of wastewater from flowing into the U.S. via the main stem of the Tijuana River, while USIBWC is constructing the permanent expansion of the SBIWTP to 50 MGD.

Following the 10 MGD expansion, starting in October 2025, dry weather wastewater flows into the U.S. via the main stem of the Tijuana River were down to just 2-3 MGD. For reference, during the summer of 2024 when noxious odors and air pollution concerns spiked, dry weather wastewater flows in the River were approximately 40 MGD.

C. Overall System Capacity Moving Forward

At present, the binational system treats only about 53 MGD (18 +35). Total wastewater flows generated in the Tijuana Metropolitan area has been approximately 75-85 MGD in recent years. Excess wastewater that is not treated either 1) flows into the U.S. via Tijuana River and Estuary, and ultimately the Pacific Ocean at the mouth of the Tijuana River in Imperial Beach, or 2) is diverted to SAB Creek, but bypasses all treatment, and is discharged directly onto the beach as raw sewage at Punta Bandera.

The Arturo Herrera and La Morita WWTPs in Mexico each treat about 6 MGD (*see* Image 1). However, these WWTPs currently discharge their treated effluent back into the Tijuana River. Thus, these treated flows then mix with sewage and other pollutants, before being pulled from the river and treated *again* by either the SBIWTP or SAB, or simply bypassing each and discharging directly into the estuary or ocean.

More good news – plans already exist to significantly expand the overall system treatment capacity to 78 MGD within the next 2-3 years. These plans are set forth in detail in USMCA Minute 328,[3] and the July 24, 2025 Memorandum of Understanding (MOU)[4] between the U.S. and Mexico. Most notably:

1. The U.S. will expand treatment capacity at the SBIWTP from 25 to 50 MGD by December 2027.

2. Mexico will divert 10 MGD of treated effluent entering the Tijuana River from the Arturo Herrera and La Morita WWTPs to a site upstream of the Rodríguez Dam. According to the MOU, Mexico was required to immediately seek funding for this, and to begin construction before the end of 2025.

Thus, plans and funding are already in place such that by 2027, the total binational wastewater system treatment capacity will be approximately 78 MGD. While this is a significant improvement over the current 53 MGD, it still falls short of the estimated 85 MGD that Tijuana has produced in recent years. Furthermore, these plans do not account for future growth, and/or future water supplies development in Tijuana (*e.g.,* if Tijuana begins to recycle water, or develops the desal plant that is proposed to be constructed in Rosarito). More potable water supplies will result in more wastewater generated.

During a presentation to the San Diego Regional Water Quality Control Board in August 2025, USIBWC Commissioner McIntosh noted that he was unsure whether Tijuana population estimates and growth forecasts were accurate, and thus USIBWC was running additional feasibility and cost analyses for a potential additional expansion of the SBIWTP from 50 to 75 MGD. During that same presentation, Commissioner McIntosh also expressed a desire to work with Mexico to significantly increase the capacity of the SAB Plant to 43 MGD.

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[3] https://www.ibwc.gov/wp-content/uploads/2022/11/Min328.pdf.
[4] https://www.epa.gov/system/files/documents/2025-07/proy-mde-semarnat-epa-23jul25-ing-rev2-us-rev-24jul25rev-clcsc.pdf.

D. IBWC U.S.-Side Projects and Needs

1. Dedicated O&M funding for the SBIWTP

The recent $650 in allocations to USIBWC were one-time, lump sum allocations which have already been dedicated to bringing the SBIWTP back to baseline, and for expansion of the plant to 50 MGD. However, ongoing operations and maintenance (O&M) funding to ensure the expanded SBIWTP and related infrastructure continue to function properly for years to come is still lacking.

Generally, congressional funding of the SBIWTP (and the USIBWC overall) has been woefully insufficient for decades, and the lack of O&M funding on both sides of the border has always been a problem since the inception of the Minute 283 infrastructure scheme. The Government of Mexico was contributing $2.0 million toward the annual operation and maintenance costs, a mere pittance. Since 2023, Mexico has paid $1.62 pesos per cubic meter of wastewater treated at the SDIWTP, but the U.S. must still cover the rest of the plant's O&M costs, estimated at 80% of the total costs.[5]

According to a November 2025 "Quarterly Update" from U.S. EPA, EPA and Mexico SEMARNAT are developing strategies for O&M costs and accounts. EPA and SEMARNAT set up a Binational O&M workgroup (EPA, SEMARNAT, CONAGUA, NADBank and both IBWC sections) to work on this issue.[6]

E. IBWC Mexico-Side Projects

There are numerous ongoing and/or outstanding Minute 328 projects to repair wastewater infrastructure in Mexico.[7] As the SAB Plant has been completed, most of the remaining projects identified for prioritization in the July 2025 MOU focus on rehabilitating collectors, interceptors, and pump stations located entirely within Mexico.

Per the MOU, construction on the following must begin in 2026: rehabilitation of the Insurgentes Collector, Matadero Pump Station, Laureles Pump Station 2, Poniente Interceptor, Oriente Interceptor, Collector Carranza, and a backup power supply for PB1.

Construction in Calendar Year 2027 must include: upgrades to the Arturo Herrera and La Morita WWTPs, Phase II of International Collector rehabilitation, repairs to the Antiguo Force Main, a lift station and force main from Sainz Canyon to Arturo Herrera, and enclosure of the open wastewater channel from PB1 to SAB WWTP. December 31, 2027 is the deadline to complete all Minute 328 projects. Image 2 shows a visual representation of the current status of these projects.[8]

[5] https://www.ibwc.gov/wp-content/uploads/2022/11/Min328.pdf.
[6] https://www.epa.gov/sustainable-water-infrastructure/usmca-tijuana-river-watershed-public-updates.
[7] https://ibwc.azurewebsites.net/10-mgd-incremental-increase-100-days/.
[8] *Id*.

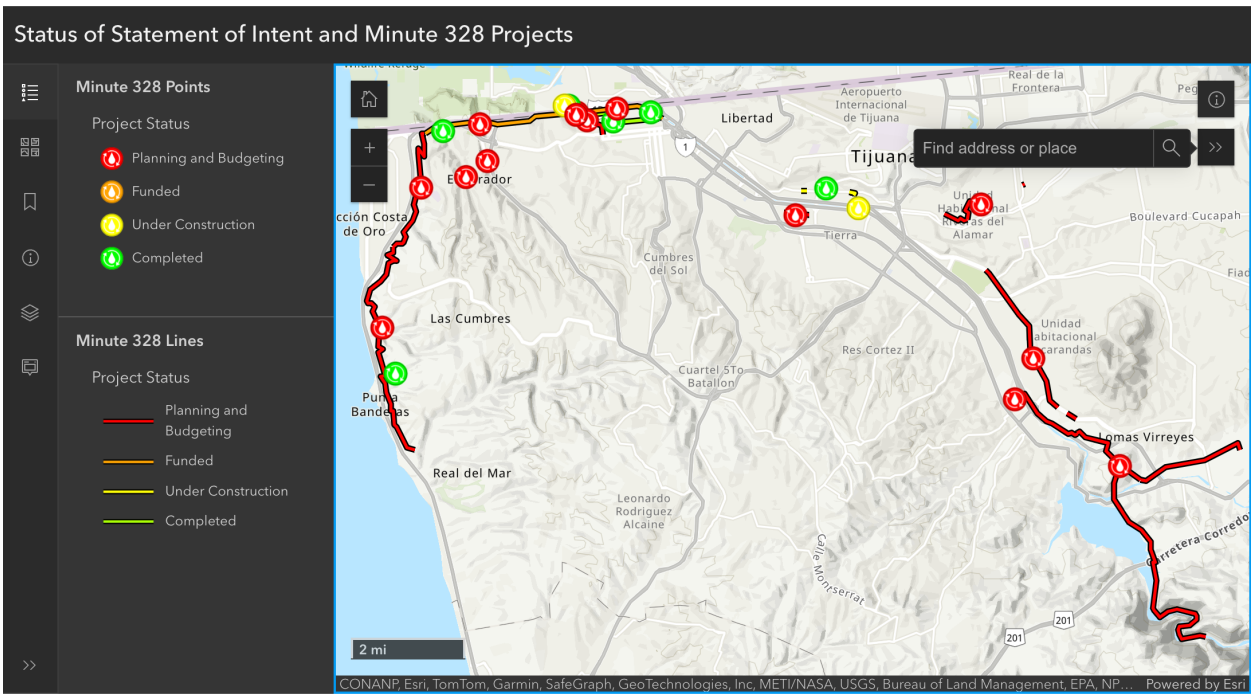

Image 2 – USIBWC Interactive Projects Portal, showing current status of projects in Mexico

F. Future Projects Identified in the July 2025 MOU Deemed Necessary for a Durable Solution to the Transboundary Crisis

Paragraph 4 of the July 2025 MOU sets forth several additional project proposals. Coastkeeper strongly supports, and agrees that the following would be necessary to achieving a 100% solution:

a. Initiate engineering and financial feasibility analysis of installing an ocean outfall at the SABWWTP in Tijuana, building upon prior studies conducted by the NADBank and the Tijuana Utility -CESPT.

   i. Currently a mixture of treated and raw sewage is discharged directly into the surfzone at Punta Bandera. Researchers at the Scripps Institution of Oceanography have found the surfzone plays a significant role in transporting pathogens northward along the coast during south swell events. Furthermore, harmful compounds, pathogenic bacteria, and viruses in wastewater become airborne once the sewage enters the surfzone, where sea spray aerosols are ejected from breaking waves.[9] Thus an ocean outfall that would discharge pollutants far beyond the surf zone would significantly reduce the amount of pollution currently reaching U.S. beaches.

b. Assess the technical and financial feasibility of expanding treatment capacity of the SAB WWTP in Tijuana from 18.26 to 43.37 million gallons per day (MGD).

[9] https://scripps.ucsd.edu/crossborderpollution.

c. Construct and maintain the sediment basin at Matadero Canyon (currently undertaken by Secretariat of National Defense of Mexico SEDENA);
    i. Currently, excessive sediment from this canyon, associated with ongoing massive construction projects in Mexico, flows into the U.S. via Smuggler's Gulch. These flows clog USIBWC canyon collector infrastructure with sediment, leading to more frequent bypasses of raw wastewater and toxic sediment deposits into the Tijuana River Estuary and Smugglers Gulch pilot channel.

d. Identify sediment and trash projects that can be cost-shared amongst appropriate entities (for example, enhancements to stormwater infrastructure serving roadways along urbanized sections of the Tijuana River; trash capture devices, and sediment dredging operations);
    i. *See* Coastkeeper's concerns about wet weather sediment and trash issues under Issue # 3, below.

e. Develop a routine schedule and cost-sharing formula for cleaning and sediment dredging operations in the Tijuana River;

f. Create an O&M account at NADBank which would set aside a portion of all dollars provided to Mexico to be held for future O&M costs. The O&M account should be developed in partnership with NADBank and a new binational workgroup, which would explore and design alternative O&M strategies to ensure proper maintenance of infrastructure investments, ultimately extending their operational lifespan.

G. Transparency and Information Sharing are Lacking

Informational updates from USIBWC are currently limited to ad hoc tweets, press releases, and quarterly updates from the U.S. EPA. The IBWC's interactive page on the Status of Statement of Intent and Minute 328 Projects fails to provide any meaningful progress details beyond the status each project as depicted in Image 2.[10] Additionally, while the Regional Board's website on the crisis includes significant background information, it fails to provide crucial informational updates to protect public and environmental health.[11]

When repair or rehabilitation work is conducted on either side of the border, various pumps, pipelines, collectors, or other infrastructure are frequently turned off or bypassed. This can result in significantly higher wastewater flows into the Tijuana River Valley via the main stem of the river. However, the public currently receives no warning about such projects or flow increases!

For example, on November 10, 2025, USIBWC started a planned bypass operation to install Junction Box 1. Flows into the SBIWTP dropped from about 34 MGD to 21.7 MGD on November 11, 2025. During this operation, dry weather flows in the Tijuana River increased from ~2-3 MGD to ~20-30 MGD. While this bypass resulted in a tenfold increase in dry weather

[10] https://ibwc.azurewebsites.net/10-mgd-incremental-increase-100-days/.

[11] https://www.waterboards.ca.gov/sandiego/water_issues/programs/tijuana_river_valley_strategy/border_water_quality/index.html.

sewage flows into the Tijuana River Valley and Estuary, no notice or warning was provided to local communities, stakeholders, or the public. Given the magnitude of this public health crisis, that is unacceptable.

Coastkeeper believes the State Legislature could play an important role in more frequent public updates regarding the status of all Statement of Intent Minute 328 and July 2025 MOU Projects, and any planned construction projects that will take certain components offline and/or result in bypasses and higher wastewater flows. While the USIBWC is a federal agency, the legislature can direct the actions of the State and Regional Water Boards, which have permitting and enforcement authority over the USIBWC and SBIWTP.

II. Issue #2: Saturn Boulevard Underpass and Sewage Gas Aerosolization

The Tijuana River culverts beneath Saturn Boulevard create a sudden elevation drop, essentially a sewage waterfall, which has created a foamy, turbulent section of the river. This turbulence aerosolizes sewage gases, exacerbating air quality and public health concerns including spikes in hydrogen sulfide, odors, and hundreds of other potentially harmful gases.[12] This issue must be addressed immediately to alleviate a major pollution hotspot in San Diego's most vulnerable southern communities including Imperial Beach, Nestor, and San Ysidro. While the County of San Diego and the San Diego Air Pollution Control District have launched programs to provide local residents with in-home air filters, these efforts have been hampered with logistical difficulties.[13] Moreover, these air filters are a mere band aid which cannot protect residents as soon they crack a window open or step outside.

Image 3: Saturn Boulevard culvert and resulting foam

[12] https://scripps.ucsd.edu/news/tijuana-rivers-toxic-water-pollutes-air#:~:text=Prather's%20aerosol%20research%20has%20been,and%20Stigler%2DGranados%20of%20SDSU..

[13] https://www.sandiegouniontribune.com/2025/12/08/thousands-of-air-purifiers-delivered-to-south-bay-but-residents-and-officials-push-for-concrete-solutions/.

The jurisdictional jigsaw puzzle of the Tijuana River Valley has added to the difficulty of implementing a solution to this waste waterfall. The Navy owns the channel surrounding this section of the Tijuana River. The City of San Diego owns the road and the culvert itself. The County of San Diego own land surrounding the river channel in this area. *See* Image 4 below. Coastkeeper has been informed that the County is conducting a feasibility study regarding potential solutions, which may include rebuilding the road and/or culvert, moving the entire channel (which would necessarily involve significant dredging and clearing), or extending the culvert pipes to more gradually lower the elevation of the water. While Coastkeeper lacks additional details about potential projects, any option selected will almost certainly require state funding and/or streamlined permitting to fix this substantial public health threat as soon as possible.

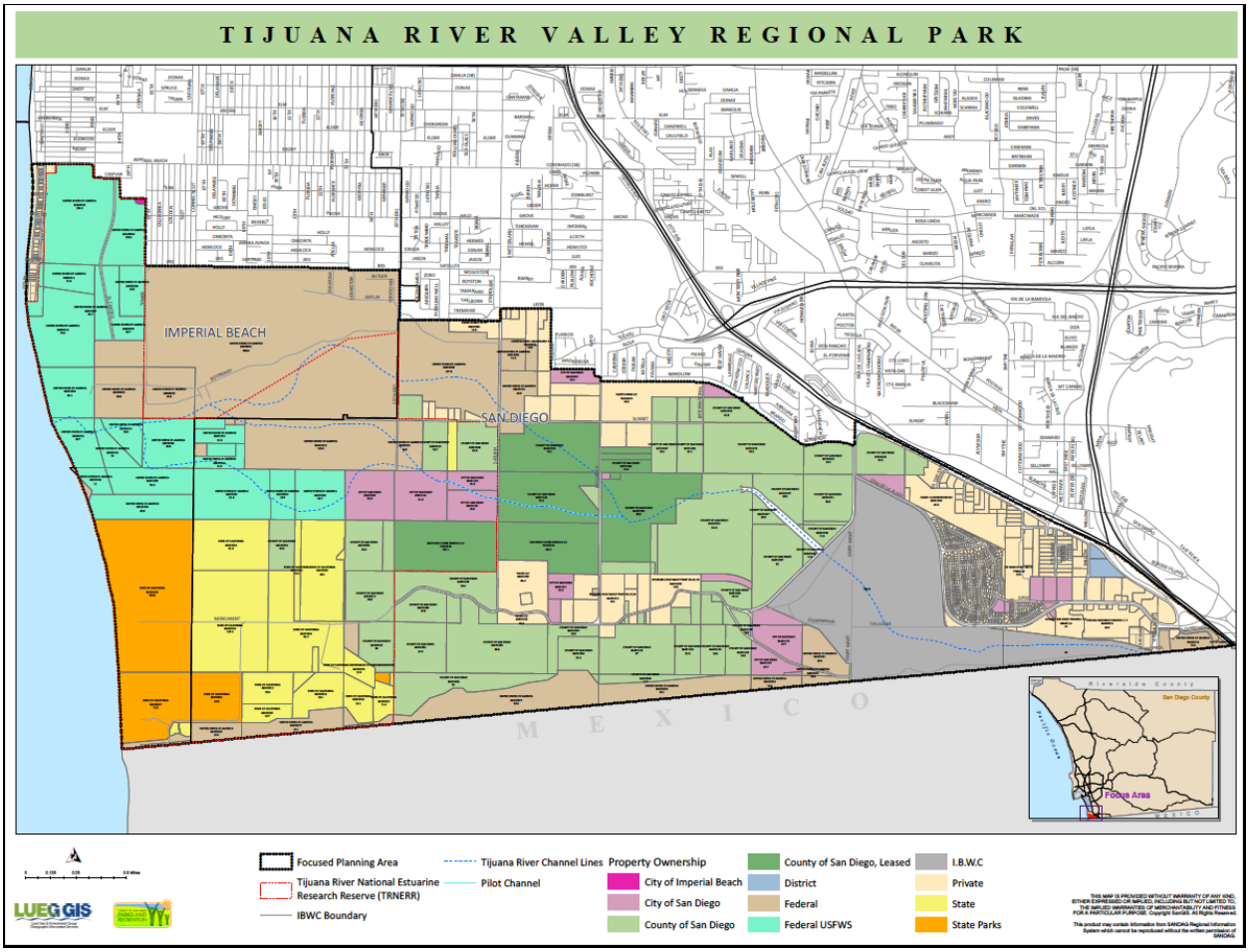

Image 4 – Jurisdictional Map of Tijuana River Valley

III. Issue # 3: Wet Weather Flows, Sediment, and Trash

Note that Issue #1: the binational wastewater system, pertains to the day-to-day operation of the binational wastewater system during dry weather. Wet weather presents its own set of added pressures and challenges. For context, we previously noted that during October 2025, dry weather flows were down to just 2-3MGD. During recent wet weather events, flows in the

Tijuana River totaled 602 million gallons on November 15, 2025, and 933 million gallons on November 18, with peak flow rates over 4.5 billion MGD.

The primary concerns related to wet weather flows are sediment & trash. With each rain event, enormous volumes are pollutant-laden sediment and trash flow into the U.S. via the Tijuana River, and the five northward flowing canyon systems (Stewart's Drain, Canyon del Sol, Silva Drain, Smuggler's Gulch, Goat Canyon). Over time, these trash and sediment deposits accumulate in the Tijuana River Valley, radically polluting and physically altering the river and the estuary.

Image 5 – Accumulated sediment and trash deposits in Smuggler's Gulch in 2024

The trash boom across the Tijuana River just north of the border successfully captured 500 tons of trash last wet season, and an additional 90 tons already this wet season.[14] The boom costs about $4.7 million a year to maintain and operate, and more booms are needed in the aforementioned northward flowing canyons. Additionally, certain areas of the Tijuana River and channel are already ten feet higher than normal due to year over year sedimentation deposits.[15] This makes flooding and infrastructure damage significantly more likely as climate changes fuels larger and flashier storm systems in our region.

[14] https://www.borderreport.com/news/environment/trash-boom-in-mexico-would-be-more-efficient-cheaper-project-manager-says/.
[15] https://www.wkrg.com/news/tijuana-river-poses-flooding-risks-if-not-dredged-expert-says/.

Image 6 – Smugglers Gulch filled with trash and sediment, March 1, 2024

Image 7 – Smuggler's Gulch after channel clearing and dredging, September 24, 2024

The situation demands immediate attention to avoid history repeating itself. The Smuggler's Gulch Pilot Channel filled with sediment and trash for years without proper maintenance. The County of San Diego, tasked with maintaining the channel, failed to fund the Smuggler's Gulch dredging project for thirteen years. The storms of January and February 2024 resulted in a breach of the pilot channel levee, and raw sewage flooded and ponded in neighboring private property and a brand new San Diego County Campground.

Image 8 – Smuggler's Gulch Pilot Channel breach and flooding of adjacent property

As such, funding and streamlined permitting is desperately needed for trash boom implementation, channel maintenance and dredging, and projects such as sedimentation basins in both the U.S. and Mexico.

IV. Conclusion

Although some aspects of the transboundary pollution crisis have improved in recent years, significant work is still required to achieve a durable 100% solution. A new USMCA Minute between the U.S. and Mexico must be finalized by the end of 2025. The obligations of each country contained therein (or the lack thereof) will provide essential context for how the State of California can best engage to address the crisis, particularly regarding infrastructure O&M funding.

Regardless of the contents of the new Minute, the State can also assist with the dire Saturn Boulevard bridge public health hazard, implementation and maintenance of trash booms, channel maintenance and dredging, and permit streamlining to conduct these activities as rapidly as possible.

Coastkeeper also urges the state legislature to pursue novel solutions such as SB10 which would have generated funds associated with multi-billion dollar cross border trade, and allowed for those funds to be used to mitigate the environmental and public health harms associated with the explosion in trade and growth of the greater Tijuana metropolitan area. The Tijuana River Estuary, a vital coastal wetland, is on the brink of complete ecological collapse. Thus, funding and novel policy approaches to raise such funds will be desperately needed for many years to restore this internationally protected, and ecologically critical habitat.

Coastkeeper welcomes and questions or opportunities for further discussion and collaboration with your staff.

Respectfully,

Phillip Musegaas
Executive Director
San Diego Coastkeeper