# Issue Briefing: Tijuana River Pollution CAUSES, IMPACTS, SOLUTIONS.





The Tijuana Estuary is one of the largest remaining coastal wetlands in southern California.

It is an important stop in the Pacific flyway and provides habitat for over 300 bird species.

The binational Tijuana River Watershed, spans approximately 1,750 square miles, with 3/4 in Mexico and 1/4 in the U.S. At its terminus, there are over 18,000 acres of some of the most ecologically significant coastal, marine, and island ecosystems on the Pacific Coast. These includes: the Tijuana River National Estuarine Research Reserve (2,293 acres), Tijuana River Valley Regional Park Preserve (1,800 acres), Tijuana River Mouth State Marine Conservation Area (1,930 acres), San Diego Bay National Wildlife Refuge (3,940 acres); and the Coronado Islands, part of the Biosphere Reserve of the Pacific Islands (45,786 acres).

The Tijuana Estuary is one of the largest remaining undeveloped coastal wetlands in Southern California and an important stop in the Pacific flyway for over 300 bird species, including endangered and threatened species such as the light-footed clapper rail, California least tern, Least bell's vireo, Western snowy plover and California gnatcatcher.

The Tijuana River Mouth State Marine Conservation Area (MPA) at the Tijuana River's terminus protects key habitat for numerous marine species, including bottlenose dolphins, great white sharks and sea lions.



The Tijuana River Mouth MPA is part of a network of 500,000 acres of MPAs that also ecologically link across the border to over 2.4 million acres of Mexico's Biosphere Reserve of the Pacific Islands, which provide habitat for 200 endemic species, and are critical areas for the reproduction of 36 seabird species, two sea turtles and four pinnipeds (CONANP, 2005).





## **IMPACTS**

Sewage leaking from inadequate infrastructure in Tijuana drains into the Tijuana River, across the border, and into the coastline south of Imperial Beach, CA. During wet weather, the Tijuana River can flow up to a billion of gallons per day, fouling the beaches of Border Field State Park, Imperial Beach, Silver Strand, and Coronado CA. Over 90% of San Diego County's beach closures in 2018 were due to Tijuana River pollution.

A second major source of pollution comes from the completely inefficient Punta Bandera sewage treatment plant, located approximately seven miles south of the border. It discharges over 40 million gallons of sewage into the surf zone, fouling beach water quality as far south as Rosarito, and as far north as Coronado, CA depending on ocean currents. This plant is in critical need of an upgrade.

Waste-tires carried by the Tijuana River and its tributaries pose a major environmental and public health threat. Semi-used tires are exported by the State of California to Mexico where after a short remaining life, they're illegally and used by some for informal engineering purposes. In wet weather, these tires dislodge, washed down the watershed, across the border, and into the Tijuana River Valley and its tributaries, littering recreational trails and open spaces. Here they collect sewage contaminated water, and become vectors for disease-carrying mosquitoes, such as Aedes aegypti, and Aedes albopictus which can carry the Dengue, Zika, Yellow fever, and West Nile viruses.

**Plastic pollution** has a significant impact on fisheries, the blue economy, and the health of wildlife and possibly humans. Land-based marine litter significantly hinders the ability of local agencies and government entities to carry out watershed and coastal cleanups and restoration and, impedes the protection and management of protected open space, recreational areas, and wildlife reserves.



## **SOLUTIONS**

#### Sewage

- Work with Baja California's state public services commission of Tijuana (CESPT) to upgrade Punta Bandera sewage treatment plant, and prevent sewage spills that impact Playas de Tijuana and Imperial Beach.
- Expand the capacity of the CILA pump station, placed by CESPT to prevent unseasonal dry weather flows from crossing the border and impacting beach water quality in Imperial Beach.
- Construct a diverter system in the main Tijuana River flood channel on the U.S. side at the river's point of entry to reduce cross-border sewage entering the ocean and impacting San Ysidro's air quality. This infrastructure should have allocated annual funding for its operation and maintenance.

#### **Waste-tires**

 Work with CALRECYCLE to help implement their statemandated directive to fund tire-recycling projects along the border, including projects in Mexico to help curb and eliminate the flow of cross-border waste-tires.

### Plastic pollution

- Help incentivize a PET recycling market in the City of Tijuana to curb the use of plastics.
- Continue to partner with local schools in Tijuana and San Diego to increase understanding of regional environmental issues and ways to advocate for their solution.
- Work with Tijuana's municipal government to develop a comprehensive solid waste management program that includes a properly managed landfill, recycling, and organic waste composting and increased trash collection services to irregular communities located throughout canyons that drain into the Tijuana River.
- Installation of appropriate low-to-medium flow trashcapture devices in the main Tijuana River flood channel at the U.S.-Mexico border point of entry.
- Work with the state of Baja California to implement a plastic bag, styrofoam, and single-use plastics ban.

