## CASE STUDY

## SAN DIEGO, CALIFORNIA

Generating Water Quality Information to Protect Beach Towns from Border Sewage.



The Surfrider Foundation San Diego Chapter provides water quality information to expand the coverage of agency water testing programs, empower and engage the local community to protect their beaches, and raise awareness of regional water quality issues. Most notably, the chapter's Blue Water Task Force is shedding light on the severity of cross-border sewage pollution and is helping to drive community solutions.

Similar to many coastal cities, San Diego has a highly developed watershed with a slurry of water quality problems associated with stormwater runoff, sewage outflows and aging sewage infrastructure. San Diego is also a border town neighboring the Mexican city of Tijuana. Over the years, Tijuana's rapid population growth has outpaced its infrastructure capacity, causing frequent sewage spills into international coastal waterways.

In addition to spills, more than 20 million gallons of sewage per day are discharged into the Pacific Ocean just five miles south of the U.S.-Mexico border. This partially treated effluent regularly flows north and pollutes beaches in southern San Diego County during summer south swells. Sewage contamination problems are so severe and frequent that beaches in the southern-most town of Imperial Beach were closed for roughly half of every year from 2015-2017. In fact, a massive sewage spill in 2017 dumped about 143 million gallons of raw sewage into the Pacific Ocean near surfing and recreational areas in San Diego.

Despite the devastating environmental and public health impacts that these ongoing sewage discharges are causing, minimal efforts have been made by government officials to address these issues. The fact that the most heavily impacted community of Imperial Beach has a poverty rate of approximately 20% raises environmental justice concerns as well. Unfortunately, water quality conditions continue to worsen in this border region and responsible federal agencies, including the International Border Water Commission, have failed to take effective action on the issue.

It was this inaction by government agencies that prompted the Surfrider Foundation to step in. The San Diego Chapter





**Above:** A Mar Vista High School student collects a water sample at the Imperial Beach Pier. And to the right, San Diego BWTF volunteer Elijah Garcia teaches students about water testing at the La Jolla Public Library.

and South Bay communities have teamed up to develop the Clean Border Water Now Campaign. The goal of this collaboration is to empower local communities on both sides of the border to take a stand against these ongoing sewage problems and to demand much-needed infrastructure upgrades.

The San Diego Chapter established its first Blue Water Task Force (BWTF) water testing lab at Mar Vista High School in Imperial Beach in 2018 to measure bacteria levels in the border region. Since then, two additional labs have been launched, at Coronado High School and at the chapter's office, to monitor beaches further north. Together, their efforts are making a big splash. The student-led BWTF labs have been featured in prominent local news outlets, such as The Coronado Times and San Diego 7 News at 4, spreading critical awareness about regional water quality issues.



Surfrider volunteers collect water samples every Thursday at ten popular beaches and surf breaks from Imperial Beach to Tourmaline Surf Park in Pacific Beach. The San Diego County Health Department generally tests on Monday or Tuesday, so the chapter's BWTF is providing timely water quality information to inform safe ocean recreation for the weekend. Water test results are posted online and are included in a Weekend Beach Report that is broadcasted widely via social media. To view a map of the chapter's sampling sites and their water test results, visit the Blue Water Task Force website, or sign up to receive email updates. Additional water quality information and current advisories issued by the county are available here.

The San Diego Chapter is also leveraging its BWTF program to engage the local community. For example, water quality experts are invited to speak at the chapter's quarterly BWTF meetings. Surfrider volunteers have also given presentations at local universities and even hosted a community water quality lab at the La Jolla Public Library, where they engaged local students in hands-on science with The Wet Lab.

In addition, the chapter is supporting other research efforts to better understand the complex, binational sewage problem that is affecting the region, including a sewage source tracking study that is being planned by the Southern California Coastal Water Research Project. In order to develop effective community solutions to the sewage problem, the chapter is also connecting diverse groups



and interests across the region. For instance, the San Diego BWTF routinely works with Mexico-based nonprofit organizations to conduct a coordinated water quality sampling effort of beaches in the Tijuana River Watershed on both sides of the border.

The chapter is also working closely with the U.S. Border Patrol Council to document pollution events and bring attention to this national security problem. Border patrol agents have expressed concern about the long-term health complications of direct exposure from polluted waters in the Tijuana River Valley. For instance, cases of Hepatitis A, MRSA, and flesh-eating bacteria have been linked to exposure in the South Bay. Watch these videos to hear border patrol agents describe the dangerous conditions they have to work in and the impact it has had on their health.

As a result of all of these documented impacts, Surfrider has turned toward the courts to file a citizen suit against the International Boundary and Water Commission, to prompt the agency to address their numerous violations and the harm that has impacted the local community. This year, the chapter hopes to see their efforts to build wide-scale community awareness of the international sewage and pollution problems lead to funded solutions that will restore clean water and safe beach experiences to the border region.

The San Diego Chapter is truly leading a united force that's standing up for clean water. Special thanks to Las Patronas,

Lionfish, and San Diego Gas & Electric for their support of the San Diego Chapter's Blue Water Task Force and Clean Border Water Now campaign.



**Above:** A San Diego Chapter volunteer speaks to the crowd at a community rally for Clean Border Water Now in Imperial Beach, CA.