

Tijuana River Research Reserve Education is Change on the Ground

2017

Connect



235 acres of salt marsh

10,699 visitors

Tijuana Estuary Visitor Center



Prepare

114 teachers trained

1,805 students engaged

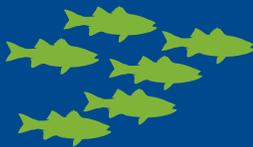
3,666 student contact hours

Improve



1,478 volunteers

3,296 lbs. trash removed



"Thank you for teaching my students about the watershed and helping them realize the things they can do to help their environment. ... the bilingual [lesson]...helps them value their language and culture."

Ms. Cabrera
Nestor Language Academy

"Through TRAM, the Tijuana Estuary has proven vital as it connects people on both sides of the border, prepares them for action, and improves the region by catalyzing sustainable solutions."

Steven Wright
4Walls Intl



Teachers on the Estuary Training Leads to Student Success

Most of Marci Sponsler's seventh-grade students had never heard of an estuary. Then Sponsler attended her first Teachers on the Estuary (TOTE) training at the Tijuana River Reserve. She returned to Roosevelt Middle on fire to use the estuary as a living classroom, using concepts from TOTE and NERRS Estuaries 101. With her fellow teachers, she created a curriculum that allows students to study estuaries, in the field and classroom, and make evidence-based conclusions about how they are impacted by development, pollution, and climate. **Nearly 50% of students tested on their estuary knowledge got a B or better**, and their school has a new curriculum that aligns nicely with California's Next Generation Science Standards.

Eight Years of Binational Watershed Clean Ups

2017 marked the 8th Annual Tijuana River Action Month. Tijuana River Action Month (TRAM) is a month-long series of events coordinated with 7 agencies and non-profits from both sides of the border within the Tijuana River Watershed. During the five weeks between September 16th and October 14th, there were a total of ten TRAM events in the United States and Mexico. These events included cleanups, habitat restoration, and environmental workshops. Since 2010, volunteers have removed **261 tons of trash**. Volunteers cross-trained in stewardship and interpretation help to educate TRAM participants.

California's Tijuana River Reserve is one of 29 sites in the National Estuarine Research Reserve System. Each site is a state federal partnership that combines research, monitoring, and education to advance the understanding and management of estuarine environments.



*Tijuana
River*
National Estuarine
Research Reserve



National Estuarine Research Reserve Education Change on the Ground in 2017

Connects

People to Estuaries

**1 million+
ACRES**

of natural classrooms & living laboratories with



**28 INTERPRETIVE
CENTERS**



**650,340
VISITORS**

learn about estuaries through Research Reserve outreach & education



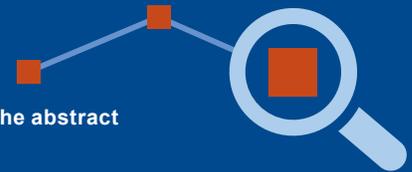
Aloha to our Hawai'i Reserve, designated in 2017!

Prepares

the Next Generation

**87,899
STUDENTS**

take learning out of the abstract & into the outdoors



**3,079
TEACHERS**

are trained in the estuary & supported in the classroom



SKILLS BUILT

- ✓ Observation
- ✓ Asking research questions
- ✓ Problem solving
- ✓ Data driven decision making

ESTUARY SCIENCE

LOCAL DATA

LAB WORK

FIELD INVESTIGATION

Improves

the Environment

**12,849
CITIZENS**

are trained & inspired to protect their coasts & estuaries



VOLUNTEER ACTIONS

- ✓ Protect wildlife
- ✓ Monitor water quality
- ✓ Plant native species
- ✓ Clean up the coasts

**28 RESEARCH RESERVE
EDUCATORS**

lead programs that foster coastal stewardship in communities in 23 states



Creating value through education
39,035 volunteer hours = \$942,305*