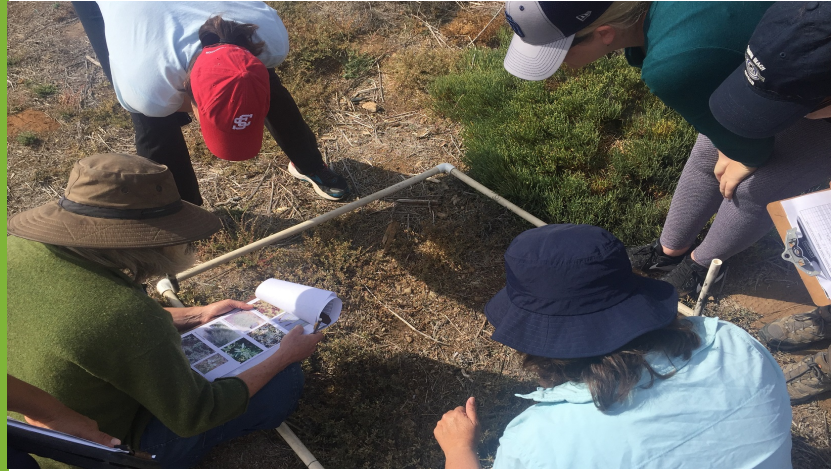


# Tijuana River Research Reserve Education is Change on the Ground



2022

## Connect



235 acres of salt marsh

7,815 visitors

Tijuana Estuary Visitor Center



## Prepare

34 teachers trained

6,401 students engaged

6,076 student contact hours

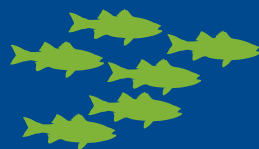
## Improve



2,849 volunteer hours

*"The Teacher Leaders that will facilitate [our] community [of practice] all said that their learning experiences at the ... Reserve were of high quality and something they recommend to their peers. ... The Tijuana Estuary is known as one of the high impact science teacher education programs in our region."*

**Alec Barron**  
Director of the San Diego Science Project



*"Thank you for the meaningful experience. I appreciated the thoroughness of how all aspects of the topic and program was discussed over the 3-day training. Thank you for all you do. I look forward to attending more trainings."*

**Tina**  
Chula Vista Middle School TOTE teacher

## Teachers on the Estuary (TOTE) is back at the Tijuana River Reserve

For almost two years during the pandemic, the Tijuana River Reserve had to cancel their TOTE Trainings due to very low enrollment, even for 100% virtual trainings. To make up for missed trainings, the reserve provided three hybrid TOTE trainings from October 2021 to November 2022. Research and CTP staff, including the Margaret Davidson fellow Nancy Torres, participated in the trainings. The San Diego County Office of Education science coordinator helped with planning, production of virtual sessions, and developing the asynchronous portions. The in-person days covered Estuaries 101, data literacy, SWMP Scenarios, school program activities, and a reserve tour to Border Field State Park along the border. A total of 38 primarily middle and high school teachers attended the three trainings and 71% intended to incorporate the NERRS estuary education resources in their classrooms.

## National City Library Patrons Visit Reserve on August 20th through Statewide Partnership

In 2022, a partnership was developed between the California State Library and California State Parks with the Office of the First Partner's Outdoor Access for All initiative. From this, a California State Parks Free Library Pass was created. A Park Pass grant was then established to encourage library patrons to visit parks. At National City Public Library, about twenty minutes north of the Reserve, Senior Library Technician Tiffany Roberts was awarded one of the first grants.

Tiffany contacted Education Coordinator and State Park Interpreter Anne Marie Tipton and requested for Reserve staff to provide a tour for 30-40 people. To provide a better experience for the tour, Anne Marie enlisted the help of two long-term Reserve docents. Together they provided a 1.5 hour tour with multiple stops discussing aspects of the Reserve for thirty-two attendees, including seven children and extended families. The grant also provided a nature backpack with outdoor exploration equipment. Anne Marie and the docents even showed the library patrons how to use the tools in the packs before and during the tour. Only one person had ever visited the Reserve before, so the docents were excited to work with this new group and it seemed like library patrons really enjoyed themselves.

California's Tijuana River Reserve is one of 30 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 ESTUARY**  
TIJUANA RIVER NATIONAL ESTUARINE RESEARCH RESERVE



# National Estuarine Research Reserve Education

## Change on the Ground in 2022



### Connects

People to Estuaries

**1 million+  
ACRES**

of natural classrooms & living laboratories with



**26 INTERPRETIVE  
CENTERS**



*Hello to the Connecticut Reserve, designated in 2022!*



**296,131 VISITORS**

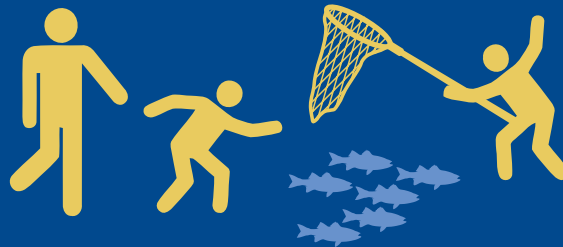
learn about estuaries through Research Reserve outreach & education

### Prepares

the Next Generation

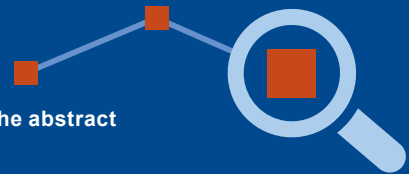
**4,347 TEACHERS**

are trained in the estuary & supported in the classroom



**54,773 STUDENTS**

take learning out of the abstract & into the outdoors



#### SKILLS BUILT

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

ESTUARY SCIENCE

LOCAL DATA

LAB WORK

FIELD INVESTIGATION

### Improves

the Environment

**10,570 CITIZENS**

are trained & inspired to protect their coasts & estuaries



#### VOLUNTEER ACTIONS

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

**30 RESEARCH RESERVE EDUCATORS**

lead programs that foster coastal stewardship in communities in 25 states



Creating value through education  
37,371 volunteer hours = \$1,119,261\*