



# Tijuana River

## National Estuarine Research Reserve



**Location:** 15 miles south of San Diego in Imperial Beach, California, on the Mexican border

**Date Designated:** 1982

**Area Protected:** 2,293 acres

**Web Address:** [trnerr.org](http://trnerr.org)

**Management:** Daily oversight is provided by California State Parks and the U.S. Fish and Wildlife Service, with assistance from the Southwest Wetlands Interpretive Association. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance.

### Access and Infrastructure

- The reserve encompasses a visitor's center with activities, programs, and exhibits, and Border Field State Park, which offers picnic and barbecue areas, horse corrals, educational panels, and outdoor activities. There are 22 miles of hiking trails in the reserve, including numerous horseback riding trails in the state park that run along the Pacific Ocean.
- The Tijuana Slough National Wildlife Refuge lies within the northern half of the reserve.
- Within Border Field State Park is Monument Mesa, a four-acre recreational area with views of the ocean and estuary, in close proximity to the Mexican border.

**The Tijuana River National Estuarine Research Reserve** preserves one of the largest remaining coastal wetland habitats in southern California. The reserve is situated in a highly urbanized location set between the cities of San Diego and Tijuana, Mexico. Three-quarters of the reserve's watershed is in Mexico, so reserve programs apply an international perspective to critical issues of habitat restoration, endangered species management, storm water pollution, and recreational use.

This perspective, along with the diversity of habitats and the range of human and physical challenges facing the reserve, make the area rich for study in both the biological and social sciences. A large goal of the research and monitoring conducted here is to facilitate adaptive management by coupling science with stewardship.

**NOAA Office for Coastal Management**

# TIJUANA RIVER

## *National Estuarine Research Reserve*

### Interesting Things to Know

- This is a unique “intermittent estuary,” meaning it experiences extreme changes in streamflow throughout the year, with extended periods of drought and floods.
- The reserve is an essential breeding, feeding, nesting ground, and key stopover point on the Pacific Flyway for over 370 species of birds, including six endangered species.
- Border monument number 258, a site marking the United States and Mexico border, which was decided in 1850 following the Mexican-American War, is visible through Friendship Park on Monument Mesa.
- The reserve programs approach estuary management with thoughtful evaluation of the past, present, and future conditions of this region—balancing an understanding of historical ecology with present-day research and monitoring, and the latest models for climate change.

### About the Programs

The nation’s 30 research reserves represent a tremendous asset, protecting nearly 1.4 million acres and providing habitat where plants and wildlife thrive. Community benefits include recreation, flood protection, and water filtration. Because the following programs are offered at each reserve, the system is able to make an environmental impact at the local level, as well as nationally.

**Stewardship.** Site protection and enhancement are part of every research reserve. Activities may include managing land and water resources, restoring habitat, controlling invasive species, maintaining biodiversity, and reducing environmental stressors.

**Research.** Reserve research is focused on how environmental factors—such as nutrient loading, climate change, invasive species, and storms—impact coastal ecosystems. The monitoring program, known as the System-Wide Monitoring Program, or SWMP, provides long-term data on water quality, weather, biological communities, habitat, and land-use and land-cover characteristics. This combination of research and data provides a strong, science-based foundation for addressing coastal management challenges

**Training.** To provide the community with the information and skills needed to integrate coastal science into local decision-making and everyday lives, reserves provide specialized courses and information. Reserve training professionals are active in community planning and improvement initiatives.

**Education.** Local data generated at the reserve provide students with a firsthand experience of local environmental conditions. Educators lead student, teacher, and citizen field trips that are life-changing experiences, as participants see, feel, and smell what makes an estuary one of the most remarkable places in the world.

