
MORRO BAY NATIONAL ESTUARY PROGRAM



OUR
COLLECTIVE
IMPACT
2025

A photograph showing the silhouettes of two people walking across a grassy hillside. The sky is a warm, golden-yellow color, suggesting sunset. In the background, there are hills and a body of water. The overall mood is peaceful and hopeful.

PROTECTING AND RESTORING MORRO BAY
FOR PEOPLE AND WILDLIFE SINCE 1995

A NOTE FROM ESTUARY PROGRAM STAFF

From classrooms and field sites to creek banks and community events, 2025 was a year of learning, collaboration, and action across the Morro Bay watershed.

Monitoring efforts included hundreds of water quality and bacteria monitoring trips that revealed encouraging trends such as improving conditions at Upper Los Osos Creek and declining bacteria levels at key bay sites.

Through our education and outreach efforts, we connected students, educators, and community members to the watershed by hosting educator workshops, welcoming more than 700 students for field trips, and engaging the public through events, cleanups, and written outreach.

Restoration work focused on improving ecosystem health and resilience through invasive species removal, habitat protection, steelhead recovery efforts, and the implementation of one of the Central Coast's first low-tech, process-based creek restoration projects.

We could not be prouder of the program's accomplishments in 2025, and it would not have been possible without the support of our many partners and volunteers.



Collaboration is a core value of our organization, and our work relies on many nonprofits, agencies, landowners, municipalities, volunteers, and the Morro Bay watershed community. It is your stewardship that helps achieve the goal of protecting and restoring Morro Bay. We thank you for all of the ways, big and small, that you've contributed to such an impactful year.

With gratitude,

-Morro Bay National Estuary Program Staff

ESTUARY PROGRAM STAFF 2025

Melodie Grubbs | *Executive Director*

Ann Kitajima | *Assistant Director*

Chrystina Newton | *Finance & Operations Administrator*

Carolyn Geraghty | *Restoration Program Director*

Jenn Fields | *Restoration Projects Manager*

Forest Lurz | *Education Coordinator*

Bella Slosberg | *Community Engagement Coordinator*

Makenzie O'Connor | *Monitoring Projects Manager*

Nick Soares | *Monitoring Coordinator II*

Fiona Litton | *Monitoring Coordinator*

Jodi Marfia | *Administrative Assistant*

Mike Multari | *Environmental Planning Advisor*

Sam Lance | *Former Environmental Planning Intern*

Sabrina Chase | *Former Community Engagement & Education Intern*

Riley Hine | *Former Community Engagement Projects Manager*

Marlie Keasler | *Former Monitoring Technician*

Emma Dyson | *Former Monitoring Technician*

Kendra Twist | *Former Monitoring Technician*

THE BAY FOUNDATION OF MORRO BAY 2025

Board of Directors

Bill Henry | *President*

Dr. Jason Curtis | *Vice President*

Gary Ruggerone | *Secretary*

Leonard Moothart | *Treasurer*

Kyle Nessen

Sally Krenn

Ron Munds

Dr. Deanna Richards

Shaunna Sullivan

INCREASING OUR UNDERSTANDING OF STEELHEAD IN THE MORRO BAY WATERSHED

The Morro Bay watershed is home to a unique species called steelhead trout (*Oncorhynchus mykiss*). These fish are born in freshwater streams like Chorro Creek. Those known as rainbow trout spend their entire lives in the creek. Others, known as steelhead, spend a few years in creek and estuary environments before journeying to the ocean. We conducted a two-year study in local creeks to determine how and when steelhead migrate to the estuary.

To track the fish, we captured and tagged them before returning them unharmed to the creek. The tags are microchips similar to the type used in dogs and cats. When we recaptured tagged fish, we re-weighed and measured them to calculate their growth rate. We installed antennas in Chorro Creek that scan their tags as the fish swim by to track their movements.

Using the data from the tags and antenna, we determined that about 60% of the tagged fish were likely to be resident rainbow trout. The remaining fish were migratory steelhead trout, detected moving towards where fresh water and salt water meet in the estuary. Some of these migratory fish later returned upstream, making them two-way migrants.

Based on fish movement, the window for moving from freshwater to saltwater habitat was roughly January to April, but this is typically dependent on a large rain event.

This study provided fascinating new information on this iconic species, and we hope to undertake tagging work in San Bernardo, Pennington, and Dairy Creeks in the future.



ESTUARY PROGRAM'S EXPANDED EDUCATION EFFORTS IN 2025

The Estuary Program works to increase our community's understanding of environmental science through our education efforts. This year, the Estuary Program hosted 28 field trips and reached over 700 students throughout the Morro Bay watershed. These students came from public, private, and charter schools, as well as homeschool groups, and ranged in age from 5 to 18.

We also hosted field trips for classes from Cal Poly and Cuesta College, as well as for groups like the Sierra Club and California Naturalist Program. While most field trip attendees came from schools in the county, some were from as far away as Lake Tahoe and Los Angeles. For some students, this was their first time visiting Morro Bay, and for others, their first time seeing the ocean.

Many of our outdoor field trips take place in local natural areas such as the Elfin Forest and Morro Rock. Students are encouraged to observe and engage with the local ecosystem and connect their experience to prior knowledge. We often teach about the ecological importance of estuaries, and why the Estuary Program works to keep our local land and waterways clean and healthy.

We want students to come away from their field trip not only knowing more about the local ecosystem but also understanding how they can make a positive environmental impact in their everyday lives.



A YEAR IN REVIEW

Through field work, education programs, community stewardship, and hands-on conservation efforts—Estuary Program staff, dedicated volunteers, and community members worked to protect and restore Morro Bay for people and wildlife.

700+

K-12 FIELD TRIP
PARTICIPANTS

24

EVENTS HOSTED
OR ATTENDED

11

STUDENT
FELLOWSHIPS

19,000

VISITORS TO THE
NATURE CENTER

2025 BY THE NUMBERS

**690+ MONITORING
TRIPS CONDUCTED**

**20 ACRES
OF ICEPLANT ERADICATED**

**2,050 PEOPLE
REACHED AT COMMUNITY EVENTS**

**400 INVASIVE
SEA LAVENDER PLANTS REMOVED**

**2,200+ VOLUNTEER
HOURS**



335+
VOLUNTEERS

**THANK YOU
VOLUNTEERS!**

MUTTS FOR THE BAY HIGHLIGHTS

Our Mutts for the Bay program maintains a network of 36 dog waste bag dispensers throughout Morro Bay and Los Osos with the help of a dedicated group of volunteers. The program is supported by donations from individuals and local businesses, as well as a generous grant from the Harold J. Miossi Charitable Trust. This program not only provides free dog poop bags throughout the community but also educates folks on how to be eco-friendly dog owners. Keep an eye out for us at farmers markets and Mutts for the Bay cleanup efforts at dog-friendly parks and trails!

12

VOLUNTEERS

332.5K

BAGS USED IN 2025

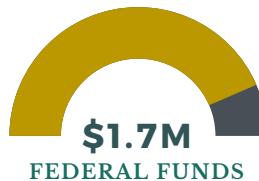


Harold J. Miossi
CHARITABLE TRUST

FUNDING AND EXPENSES

INCOME

These two graphics show the portion of Estuary Program income from federal and non-federal sources. Non-federal sources include donations, volunteer hours, and state and private grants.



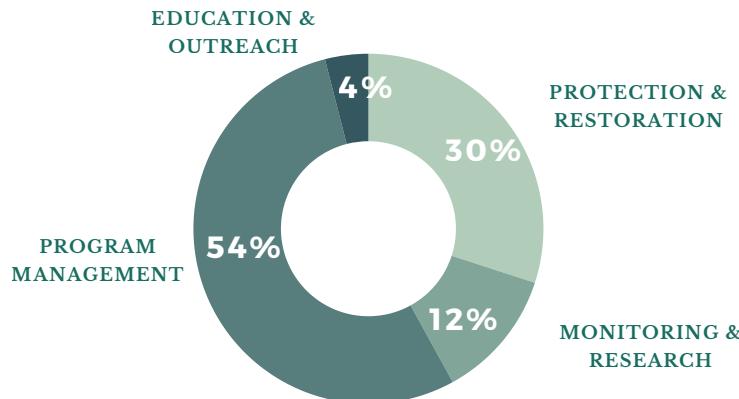
\$1.7M
FEDERAL FUNDS



\$250K
NON-FEDERAL FUNDS

EXPENSES

This graphic shows the portion of funds spent in each program area for the 2025 fiscal year.



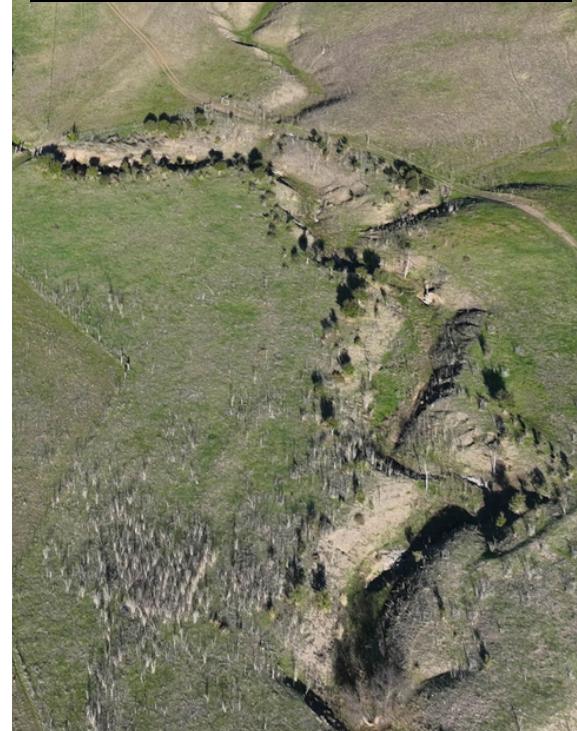
LOW-TECH SOLUTIONS TO IMPROVE WALTERS CREEK HABITAT

The Estuary Program and our partners work to restore and improve habitat in the watershed. In 2025, we monitored, planned, and built low-tech process-based restoration (PBR) structures to improve ecosystem function in Walters Creek. We used brush and other natural materials to hand-build simple structures similar to what beavers would build within the creek. The structures mimic natural processes such as ponding water and trapping sediment.

Walters Creek typically flows for only a few months in the winter/spring and runs dry by midsummer. Techniques using PBR can increase surface flows to expand native plant and wetland habitat for sensitive species like California red-legged frog and southwestern pond turtle.

In September, we installed over forty PBR structures in Walters Creek with the help of the California Conservation Corps, Forestry Corps, and other partners. Following the storms in November, we're already seeing water ponding behind some of the upstream structures, demonstrating that the PBR techniques can help keep water in the creek. We will also track sediment changes at the site by comparing pre and post-project elevation data.

PBR is an iterative process. As essential creek functions are restored, sites often experience rapid changes. This requires monitoring of factors like vegetation, elevation, wildlife presence, and surface flows to assess site conditions. We then use that data for adaptive management to repair and improve the structures. We will continue our monitoring and adaptive management efforts over the next five years. We are excited to see how the structures respond to winter rains and how we can continue to improve creek function through similar low-tech process-based approaches.



STATE PARKS PARTNERSHIP EXPANDS CURRICULUM SUPPORT

Our Community Projects are monitoring, restoration, and education efforts developed in collaboration with partners to help protect and restore Morro Bay.

While State Parks is well known for its excellent educational programming, they sometimes lack funding for supporting materials. The Estuary Program funded the printing of nearly 24,000 copies of the [Discover MPAs Activity Guide](#), a 20-page publication to teach youth about Marine Protected Areas (MPA) in California. The MPA program conserves a network of statewide coastal areas while allowing public access for uses like swimming, diving, and surfing.

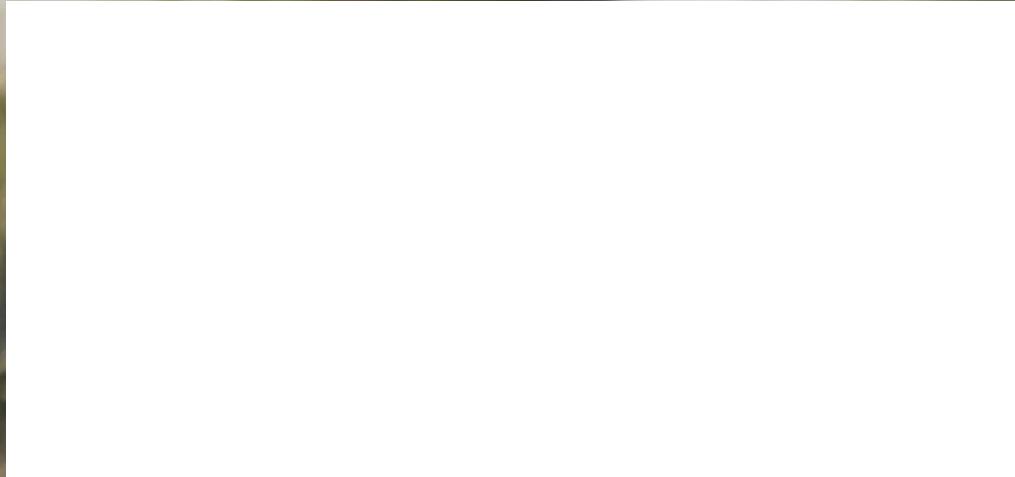
State Parks staff distributed the guides throughout the San Luis Obispo Coast District at campgrounds, the natural history museum, the Coastal Discovery Center, and at special events. Although the guide is available online, the Estuary Program and State Parks wanted to provide a printed guide. Not everyone has access to a printer, and visiting teachers were especially excited to have access to these.

The Estuary Program is pleased with this expansion of environmental education content, in collaboration with California State Parks, to benefit students, visitors, and the local community.





MORRO BAY NATIONAL ESTUARY PROGRAM
601 EMBARCADERO, SUITE 11
MORRO BAY, CA 93442



SUBSCRIBE TO LEARN MORE:

Semi-weekly Blog at MBNEP.org/blog

Quarterly Newsletter, *Between the Tides*,
at MBNEP.org/newsletter

Event details at MBNEP.eventbrite.com

VISIT & EXPLORE

Virtual Nature Center:
learn.MBNEP.org

Educational Activities:
MBNEP.org/education

Learn More on Our Website:
MBNEP.org

COME SEE US

We would love to see you at our events,
tabling booths, and volunteer opportunities!
Learn more at MBNEP.org/events

Come and visit our free Nature Center on the
Embarcadero! We have added new exhibits
and activities this year.

KEEP IN TOUCH

Follow us on social media:

 Facebook.com/mbestuary

 @MorroBayNEP