MORRO BAY NATIONAL ESTUARY PROGRAM



COLLECTIVE IMPACT

2022

PROTECTING AND RESTORING MORRO BAY FOR PEOPLE AND WILDLIFE SINCE 1995

A NOTE FROM THE EXECUTIVE DIRECTOR

In March 2022, I had the privilege of taking the helm of the Morro Bay National Estuary Program. It has been a year of shifting tides, growth, reigniting strong partnerships, and working together to protect, restore, and conserve the estuary and watershed.

The heart of our organization is based on community, and it has been an exciting year coming out of COVID-19 shutdowns to be able to reinvigorate our relationships and collaborations with so many organizations, partners, and individuals. It has been a year of healing and growth, bringing in new talent and perspectives, and building a legacy of protecting and restoring this beautiful land and estuary.



The Estuary Program is unique in that it is "place-based." We have a long-standing history of working with the community to identify environmental issues and help co-develop solutions to improve our environment for wildlife and people. Our approach to accomplishing our mission is a trifecta of scientific monitoring, restoration & conservation, and outreach & education. Each of our program areas contributes to our mission, but the most meaningful impact happens when we intertwine these efforts.

So many exciting accomplishments in 2022 are worth highlighting, but we remain humble and inspired knowing there is still so much work to be done. The following report highlights some of the projects we are most proud of this year.

With so many new opportunities and projects coming in 2023, we have brought on some amazing new talent to help build our capacity and bring new perspectives to our program. Our growth is associated with our goals of accelerating actions in our newly updated Comprehensive Conservation and Management Plan (CCMP) with an increase in resources from the Bipartisan Infrastructure Law. This represents an important and timely investment for our community to protect and increase the resilience of our cherished coastal resources. We look forward to this coming year and working with all of you to create a healthy and thriving Morro Bay and watershed.

Sincerely,

Melodie Grubbs Executive Director

ESTUARY PROGRAM STAFF 2022

Melodie Grubbs | Executive Director Ann Kitajima | Assistant Director Chrystina Newton | Finance & Operations Administrator Carolyn Geraghty | Restoration Program Manager Jenn Fields | Restoration Coordinator Riley Hine | Community Engagement Coordinator Forest Lurz | Education & Outreach Specialist Makenzie O'Connor | Monitoring Projects Manager Nick Soares | Monitoring Coordinator Ben Grassman | Monitoring Technician Andrea Cornelius | Environmental Planning Intern Hannah Woolsey | Former Environmental Planning Intern Ayla-Louise Mateo | Former Environmental Planning Intern Sequoia Wade-Dunleavy | Former Eelgrass Technician Mike Multari | Former Interim Executive Director Rachel Pass | Former Science Writer & Editor

THE BAY FOUNDATION OF MORRO BAY 2022

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SIGNIFICANT HIGHLIGHTS IN 2022

AN UPDATED CCMP

As a National Estuary Program, we develop and implement a guiding strategic plan called the Comprehensive Conservation and Management Plan (CCMP). The CCMP defines the priority issues facing the health of the Morro Bay estuary and watershed and presents action plans to effectively address those issues. Over the past few years, we worked with stakeholders to update our CCMP and release an updated version in 2022. You can read all about the updates on our website library.

5
NEW FULL-TIME
STAFF MEMBERS

10

OUTREACH EVENTS

EXCITING NEW FUNDING

In July, the US Environmental Protection Agency (EPA) announced that each National Estuary Program will receive an extra \$4.5 million in the next five years. This funding will be used towards the missions and actions that each National Estuary Program has laid out in its Management Plan (CCMP). This funding comes from the Bipartisan Infrastructure Law (BIL), with an emphasison funding projects related to climate resilience, environmental equity, and water quality and habitat improvement.

787
VOLUNTEER
HOURS

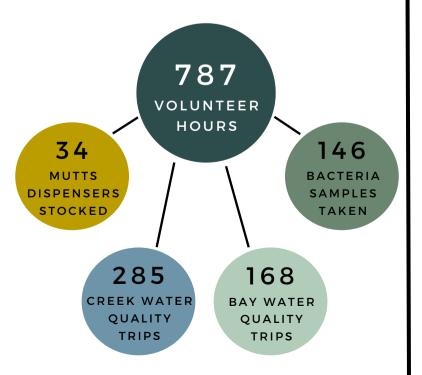
18,500

VISITORS TO THE NATURE CENTER

VOLUNTEERS BY THE NUMBERS



53 VOLUNTEERS



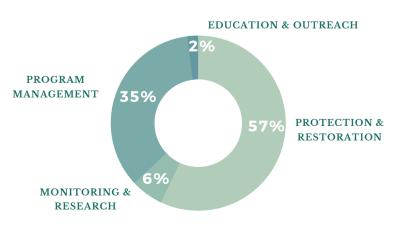
FUNDING AT A GLANCE





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.



EXPENSES

This graphic shows the portion of funds spent in each program area for the 2022 fiscal year.

PARTNERING TO SHARE KNOWLEDGE: BIOASSESSMENT MONITORING IN THE SLO WATERSHED

For the past 20 years, Estuary Program staff and volunteers have conducted bioassessment monitoring each spring to track creek health in the Morro Bay watershed. Our partner in this effort over the last decade has been the Harold J. Miossi Charitable Trust, which has provided over \$120,000 in funding and whose support helps make the work possible.

The Trust's interest in this effort started with a desire to support monitoring that can guide land management. Excited by the success of our Morro Bay watershed effort, the Trust wanted to see the work expand into neighboring San Luis Obispo watershed. The Estuary Program partnered with Cal Poly and the city of SLO, and with financial support from the Trust, the team is establishing a SLO bioassessment effort. The Estuary Program is lending our technical expertise to help get the work started.

With the launch of the partnership in 2022, the SLO team was able to monitor five sites on Stenner and San Luis Obispo Creeks. The work was conducted by Cal Poly students as part of a hands-on lab class, providing them with training in real-life monitoring skills. The city of SLO provided technical expertise, assisted with landowner access, and provided support in the field. The data collected during the first year of the project provides



baseline data on the conditions of creeks in the SLO watershed and will inform management as various projects are implemented to protect water quality and quantity. The Estuary Program's role will continue for two additional seasons to help the SLO effort get fully established.

EXPANDING EDUATION & OUTREACH IN 2022

With more events starting back up in the area in 2022, the Estuary Program expanded our education and outreach efforts to re-engage with the community. The Estuary Program tabled and hosted a total of ten events in 2022. Below are the highlights of our education and outreach events from the year.

We coordinated cleanup events with ECOSLO for the California Coastal Cleanup Day, with the Morro Bay Triathlon, and a solo cleanup by community volunteers. From these three cleanups, we were able to remove over 75 pounds of trash and debris and prevent that litter from contaminating our local waterways.

The Estuary Program was the official nonprofit of the Morro Bay Triathlon and provided over 700 racers and spectators the opportunity to learn about bay habitats and water quality. We also tabled at the Cambria Harvest Festival, the Wildlife Symposium, and the Los Osos Family Fun Fair. Our Mutts for the Bay program, which is supported by the Harold J. Miossi Charitable Trust, tabled at the Woods Humane Society Wiggle Waggle festival, reaching hundreds of local community members.



The Estuary Program plans to keep this momentum up and continue engaging with this wonderful community and the people who love the estuary. Keep an eye out for the Spring 2023 State of the Bay events on our website so we can catch you at an event!

MONITORING & RESTORING EELGRASS IN MORRO BAY

Eelgrass habitat provides important ecological benefits and helps build a more climate-resilient estuary. Eelgrass provides critical habitat for many species, improves water quality, and helps to stabilize sediment on the bay floor. The 2020 eelgrass map showed a large rebound in eelgrass acreage with 146 acres, up from 42 acres in 2019. The 2021 map indicated an even larger increase, with intertidal eelgrass expanded to about 500 acres.

We have worked with Cal Poly, EPA, US Fish & Wildlife Service, and many other partners to monitor eelgrass health, research bay water quality, and conduct restoration with the goal of maintaining healthy eelgrass beds in the bay. We were also fortunate to have the support of many donors and volunteers who helped make our monitoring and restoration efforts possible. We are excited to see such a large expansion of eelgrass in Morro Bay, and we will continue monitoring and mapping efforts with our partners to further understand trends and conditions in the bay that affect eelgrass habitat.



Eelgrass Extent



Fall 2017 (13 acres)





Fall 2021 (500 acres)





MONITORING MICROPLASTICS IN MORRO BAY

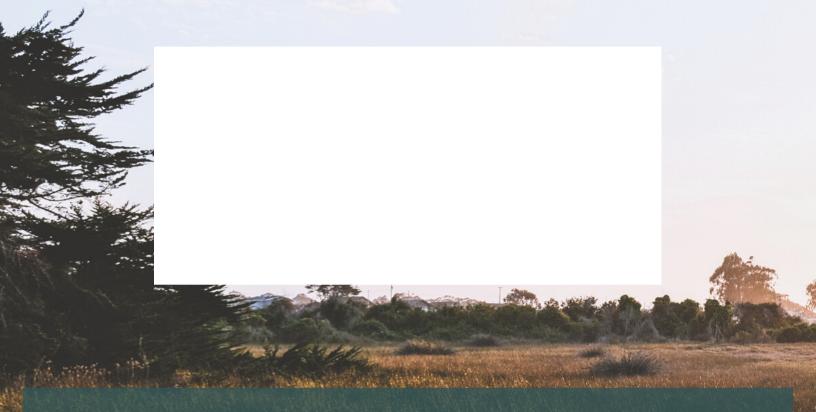
Our Community Projects Program gives us an opportunity to partner with individuals and organizations on efforts to protect and restore Morro Bay and its watershed.

In 2022, a Community Project was completed that investigated the presence of microplastics in Morro Bay. This research project was led by Dr. Nikki Adams of Cal Poly and a team of students. Microplastics cannot be seen with the naked eye and are created from the wearing down of larger plastic pieces. Students collected sediment samples in the bay each month and examined these samples under a microscope to detect the presence of microplastics. The study found microplastics at all three beaches they monitored: Coleman Beach, Windy Cove, and Pasadena Point. The most common type of microplastic found was fibers, most likely derived from polyester clothing, tires, and marine ropes.





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STATE OF THE BAY 2023

Explore the new State of the Bay report examining the health of the Morro Bay estuary and watershed:

MBNEP.org/State-of-the-bay-2023

COME TO OUR EVENTS

Visit our website to see where you can find us this Spring as we share our findings from the 2023 State of the Bay report. We will be tabling at various farmers markets, hosting nature journaling hikes and science explorations talks, and more!

KEEP IN TOUCH

Follow us & subscribe to our blog:

f Facebook.com/mbestuary



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