



INTRODUCING BETWEEN THE TIDES: A SEASONAL NEWSLETTER

Welcome to the Estuary Program's new seasonal newsletter! Four times each year we will be sharing updates on our program's monitoring, restoration, and education & outreach work in Morro Bay and the watershed. We will highlight some of our most popular blogs, introduce our upcoming events, announce volunteer opportunities, and share programmatic news. Thank you for following along with our work to protect and restore the Morro Bay estuary!

FEATURED



**MAPPING MORRO BAY'S
EELGRASS**



**EXPANDING COMMUNITY
ENGAGEMENT**



MUTTS FOR THE BAY

MAPPING MORRO BAY'S EELGRASS

Eelgrass is a flowering plant that puts down its roots in our bay floor and provides habitat for a variety of wildlife.

Eelgrass serves many essential functions in our bay, including improving water quality and sequestering carbon. Since the early 2000s, the Estuary Program has conducted regular monitoring to track eelgrass health and acreage in the bay.

The challenge with mapping eelgrass is that it grows both in the shallow intertidal and deeper subtidal zones. Throughout spring 2023, sonar technology was used to map eelgrass at deeper depths while drone aerial imagery was used to survey exposed mudflat areas at low tides.



*Eelgrass creates habitat for algae and sea critters—including this red algae (*Smithora naiadum*) and white-and-orange-tipped nudibranch.*



Image from drone flight. The brown textured patches on the image are eelgrass. Image courtesy of Merkel & Associates, Inc.



In Spring 2023, Restoration staff conducted groundtruthing in the estuary using high-accuracy GPS units and site photos.

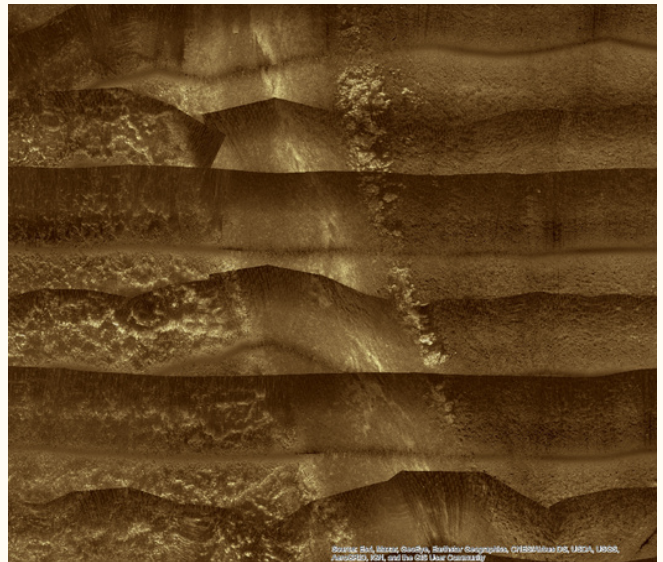


Image from sonar survey of Morro Bay. The brighter textured areas represent dense eelgrass beds. Image courtesy of Merkel & Associates, Inc.

Estuary Program staff conducted extensive groundtruthing to confirm conditions on the ground. A combination of automated modeling and manual analysis will be used to convert the images into a bay-wide eelgrass map.

Mapping efforts in partnership with Cal Poly in 2021 indicated 500 acres of eelgrass. Staff out and about on the bay through the spring saw signs of impacts to eelgrass from the winter's heavy storms, which could cause loss of eelgrass from dislodgment from high flows, prolonged freshwater input, reduced water quality, macroalgae competition, and increased sediment. The 2023 eelgrass map is expected in spring of next year, so stay tuned.



Catch us at the Downtown SLO Farmers Market up to four times a year. We would love to answer any questions you have, talk about volunteer opportunities, and give you some free materials and stickers!

EXPANDING COMMUNITY ENGAGEMENT AROUND THE BAY

Over the past year, the Estuary Program has been expanding the type and frequency of our education and outreach programs. You may have seen us at a local farmers market, volunteered at one of our cleanup events, or attended one of our science talks. Here is just a sample of what we've got planned for the coming year.

REACHING OUR YOUNGEST RESIDENTS AND VISITORS: NATURE CENTER PROGRAMMING

The Estuary Program has a free-entry Nature Center upstairs at 601 Embarcadero in Morro Bay. The Nature Center is an ideal place to host field trips and events, and this summer we started a Nature Center Science Storytime program. Every second Saturday from June to August, we cohosted a story time and craft with a partner organization.



In June, Sea Otter Savvy taught us all about sea otters. In July, Woods Humane Society and New Life K-9s focused on humane and eco-friendly pet ownership and highlighted our Mutts for the Bay program.

PICK IT UP AND PACK IT OUT: COASTAL CLEANUPS



Over the past year, we have been a part of six coastal cleanups around the Morro Bay estuary and cleaned up over 200 pounds of trash that were bound for the estuary and ocean. Stay tuned for upcoming cleanups including September 23 ECOSLO Creeks to Coast cleanup.

BRINGING THE SCIENCE TO YOU: SCIENCE ON TAP

We are bringing back regular science talk events with our new Science on Tap program! Four times a year, we will host science talks at various breweries, wineries, taphouses, coffee shops, and more to share the work of our program and our partners. Join us at our first event at Oak and Otter Brewing Company in San Luis Obispo on Tuesday, September 19.





Mutts for the Bay

Our Mutts for the Bay program maintains 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 an eco-friendly dog owner. Stay tuned for new materials from our Mutts for the Bay program, including new stickers, brochures, children's activities, and more. Catch us at farmer's markets and hosting Mutts for the Bay cleanup efforts and dog-friendly parks and trails!



Catch the Estuary Program at various events to learn more about Mutts for the Bay, test your knowledge with Dog Poop Trivia, and grab a free bag dispenser for your leash so you'll never be caught without a bag.



The Mutts for the Bay program needs you! We currently have seven dispensers that need sponsors. Fill out the sponsorship interest form at MBNEP.org/mutts-for-the-bay to get in touch with us about sponsoring a dispenser for a year.

Blog Recap

In case you missed them the first time around, here are highlights from our most popular blogs of the spring.



MORRO BAY WILDLIFE SPOTLIGHT: BY-THE-WIND SAILORS

May 19

This popular blog shared the secrets of this strange species that washed up on our Central California shores in May. Read more about By-the-Wind Sailors and why they showed up on our coast in such high numbers.

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STATE OF THE BAY 2023

March 31

This spring the Estuary Program shared the 2023 State of the Bay report. These reports are compiled every three years to share the most recent scientific data to help us understand bay and watershed health. We host a series of events to share the results. Catch up on some highlights from the report in this blog.

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CALIFORNIA SUPER BLOOM: HOW TO ENJOY THE PHENOMENON RESPONSIBLY

April 21

After the winter rains, we experienced a Super Bloom in many parts of California. This blog dives into the conditions that cause a Super Bloom and how to responsibly enjoy it.

Photo credit: Erin Moses-Wierman.

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ENDEMIC SPECIES OF MORRO BAY

June 16

Learn about some of the species that are found only in the Morro Bay watershed, including the Morro Shoulderband Snail, the Morro Manzanita, and Splitting Yarn Lichen.

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Upcoming Events

Join us! Learn more at MBNEP.org/events and register for limited-capacity events at MBNEP.Eventbrite.com

SEPTEMBER EVENTS



September 2: Campfire program at Hearst San Simeon State Park, time TBD

September 10: Los Osos Family Fun Fair, 12 to 4 p.m.

September 14: Downtown SLO Farmers Market, 6-9 p.m.

September 18: Science on Tap at Oak and Otter Brewing Company

September 23: Creeks to Coast Cleanup with ECOSLO, 9-12 p.m. Join us at the Morro Rock location. Register with ECOSLO. Walk-ups are also welcome!

OCTOBER EVENTS



October 10: Restoration Volunteer Event. Details on our website!

October 19: Downtown SLO Farmers Market, 6-9 p.m.

October 21: Downtown Morro Bay Farmers Market, Main Street, 2:30 to 5:30 p.m.

October 28: Woods Humane Society Wiggle Waggle Fall Festival, 12-3 p.m.

[MBNEP.ORG/EVENTS](https://MBNEP.org/events)

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