

FALL 2024

VOL. 2, ISSUE 4

BETWEEN THE Tides

FEATURED



**RESTORATION HIGHLIGHT:
MAPPING INVASIVE SPECIES
TO PROTECT CREEK HEALTH**



**EDUCATOR WORKSHOPS 2025:
TIME TO REGISTER!**



**MUTTS FOR THE BAY
CORNER**



MORRO BAY
NATIONAL ESTUARY PROGRAM

FALL LETTER FROM THE DIRECTOR

REFLECTIONS FROM OUR STAFF RETREAT: STRENGTHENING OUR TEAM AND MISSION

This fall, the Estuary Program team gathered for a rejuvenating staff retreat. Set against the stunning backdrop of the gorgeous coast north of Morro Bay, the retreat offered invaluable opportunities for team bonding.

One of the primary purposes of the retreat was to foster stronger relationships among team members. In our day-to-day work, it's easy to get caught up in tasks and responsibilities. The retreat provided a dedicated space for us to connect on a personal level and share experiences, strengthening the ties which are essential for a collaborative work environment.

Camp Ocean Pines, one of our education partners, kindly offered their facilities for our retreat. Our team explored the camp's nature center and exhibits, including a saltwater touch tank that the Estuary Program helped fund. We met Camp Ocean Pine's critters including a rescued rosy boa snake and "Earl," the resident great horned owl. The team also showed off their skills in fun and friendly games of archery and ax throwing.



Next, staff headed further north for a guided walk through the Piedras Blancas Lighthouse restoration sites. Surrounded by the sights and sounds of this rugged stretch of coastline, the nature walk was an opportunity to learn from knowledgeable docents about community restoration efforts and to reflect on our personal motivations for working in conservation.

With the insights gained and connections strengthened during our time together, our team at the Estuary Program is energized and focused on the year ahead.

The commitment and collaboration of our team along with the support of our community will be essential in protecting and restoring this special place. We invite you to join us on this journey, whether through volunteering, joining events, or simply staying informed through our blog and newsletter. Together, we can create a sustainable future for Morro Bay and its remarkable ecosystems. Thank you for your continued support!

-Melodie Grubbs, Executive Director

RESTORATION HIGHLIGHT: MAPPING INVASIVE SPECIES TO PROTECT CREEK HEALTH

The Estuary Program works throughout the creeks and bay to restore and preserve habitats. One aspect of this effort is management of invasive species, which are non-native organisms that can spread rapidly and harm the environment. While invasive animals like the New Zealand mud snail often capture attention, invasive plants are also of significant concern. Once they take hold, they can easily overrun landscapes, outcompete native vegetation, reduce biodiversity, and alter ecosystems. These plants not only disrupt habitats but also impact water resources, agriculture, and recreational areas. Understanding and addressing the challenges posed by invasive plants is crucial for preserving local ecosystems.

This spring, the Estuary Program mapped invasive plant species along creeks (also known as the riparian zone) in the Chorro Creek subwatershed. The effort involved walking nearly twelve stream miles and resulted in the identification of over 20 non-native species. The survey mapped over 300 locations with non-native species.



Giant reed uses quite a bit of water, displaces native vegetation, constricts stream systems, and increases local flood risk by trapping sediment and raising the streambed. Photo courtesy of James Moore, SLO County.

Results from the effort determined that creeks leading into Chorro Creek were healthy, with limited some areas of non-native species. In contrast, Chorro Creek had the highest percent cover and abundance of non-native plant species compared to other creeks in the watershed. The non-native species found were given a local threat level ranking of 1 (generally not of concern), 2 (moderate concern), or 3 (highest concern) based on the potential of the species to constrict stream channels, reduce biodiversity within the riparian corridors, and spread throughout the watershed. In Chorro Creek, cape ivy (*Delairea odorata*) and giant reed (*Arundo donax*) were given a ranking of 3 and were found in several locations. Both species negatively impact riparian and stream habitat required for sensitive species like steelhead trout and California red-legged frogs.



Cape ivy grows in dense patches that can crowd out native vegetation and be toxic to aquatic organisms and mammals.

This winter, we will use drone technology to find large invasive species like giant reed in Chorro Creek in areas that we were not able to access on foot. We are working with partners to seek additional funding to implement invasive species management for higher risk species and improve creek health for native wildlife.

EDUCATOR WORKSHOPS 2025: TIME TO REGISTER!

The Estuary Program in partnership with Cal Poly and Creek Lands Conservation is excited to launch our third year of educator workshops. Starting in January, we will host a series of three workshops that are open to educators who teach in classrooms and outdoors. The series this year will focus on coastal ocean literacy, nature journaling, environmental stewardship, and the Morro Bay watershed and estuary. Also included will be optional sessions with Project WET to obtain a Project WET certification and textbook! Along with free textbooks and materials, participants will receive a stipend for attending and can build connections with local environmental education groups and peers.

The 2025 dates have been set. The all-day sessions are scheduled on January 25, February 22, and March 8. The Project WET sessions will take place in the evenings on January 29, February 26, and March 12. You need to be able to commit to attending all three Saturday sessions in order to participate. Those interested in Project WET certification must be able to attend all of the brief Project WET sessions.

To register, go to [MBNEP.eventbrite.com](https://mbnep.eventbrite.com) and sign up for all three sessions. We hope to see you there!



2025 Educator Workshop Series

COASTAL
OCEAN LITERACY

Join us for a series of three educator workshops about how to teach coastal ocean literacy, climate change, environmental stewardship, and restoration with NGSS applications! We are also offering an optional three-part virtual series to get your Project WET certification!






25 January 2025


22 February 2025


8 March 2025

\$350
stipend!


\$30 to
Register



 Morro Bay, CA

 9 a.m. - 4 p.m.

For more info & to register:
[MBNEP.Eventbrite.com](https://www.mbnep.org/Eventbrite.com)

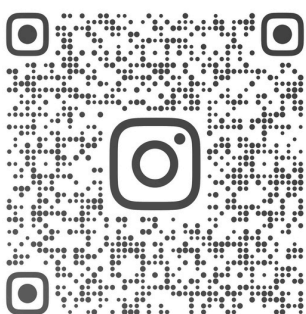


2024 teacher training attendees participating in indoor and outdoor activities.



Mutts for the Bay Corner

Our Mutts for the Bay program has had a productive fall season! We are excited to start distributing our newly revised Mutts for the Bay activity and coloring book. This book follows our main character, Kai, as she adopts a dog from her local shelter and learns how to be an eco-friendly dog owner. For a copy of the activity book, look for us at future events or visit our Nature Center at 601 Embarcadero in Morro Bay for a free copy.



FOLLOW OUR
INSTAGRAM ACCOUNT
@MUTTSFORTHEBAY

In October, we tabled at the Woods Humane Society Wiggle Waggle Fall Festival for the third year in a row. We talked to dog owners from all over the county about eco-friendly dog ownership and water quality in the Morro Bay watershed, and handed out free items such as leash bag dispensers, stickers, and brochures. We love seeing local dog owners out in the community and helping them learn how to care for their dogs while caring for the environment!

Blog Recap

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



AUGUST 2024 FIELD UPDATES: SUPPORT FOR THE PACIFIC EDNA COASTAL OBSERVATORY (PECO)

September 13, 2024

Learn more about how DNA can be used to better understand fish populations in our bay. This project works with partners including McGill University to track fish biodiversity within eelgrass beds.



WIDESPREAD EELGRASS RECOVERY RESULTS IN HIGHEST RECORDED ACREAGE

August 16, 2024

This blog shares the latest baywide eelgrass acreage map and explains the process to create them.



TAKING PHOTOS AND GETTING CURIOUS: A PEEK INTO THE FASCINATING LIFE THAT DWELLS IN THE MORRO BAY ESTUARY

July 19, 2024

Interested in learning about creatures living in the Morro Bay estuary? This blog highlights some of the intriguing species found in our eelgrass beds.



MORRO BAY EELGRASS: HOW DID WE GET HERE AND WHAT DOES THE FUTURE HOLD?

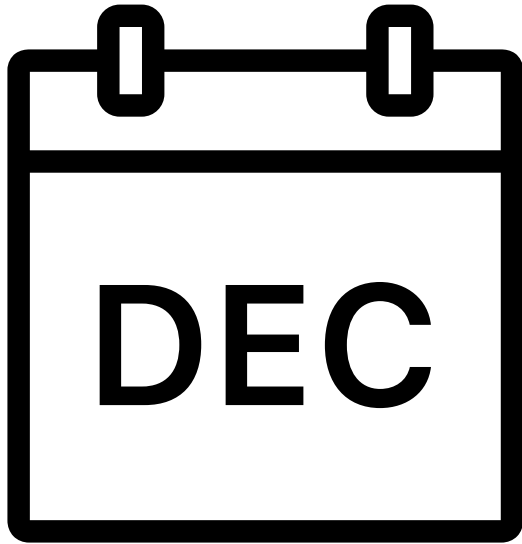
September 6, 2024

Want to learn more about the possible reasons for the decline and recovery of Morro Bay's eelgrass? This blog lays out possible factors that played a role and what we expect for the future of eelgrass in the bay.

Upcoming Events

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

Stay tuned for more events in the upcoming months!



DECEMBER EVENTS

December 1st- December 31st:

End of the Year Fundraiser

EARLY 2025 EVENTS

January 15th: Science Explorations

January 25th, February 22nd, and March 8th:

Coastal Ocean Literacy [educator workshop series](#)



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

[MBNEP.EVENTBRITE.COM](https://MBNEP.Eventbrite.com)