

WINTER 2024

VOL. 2, ISSUE 1

BETWEEN THE Tides

FEATURED



**PROTECTING THE DUNES
THROUGH INVASIVE PLANT
MANAGEMENT**



**INCREASING OUR REACH
THROUGH EDUCATOR
TRAININGS**



**MUTTS FOR THE BAY
2023 RECAPPED**



MORRO BAY
NATIONAL ESTUARY PROGRAM

WINTER LETTER FROM THE DIRECTOR

A captivating dance unfolds with the rhythm of the tides. As the king tides ebb and flow, they unveil a canvas of opportunity for the diverse birdlife that calls the Morro Bay estuary home. These avian residents, ranging from elegant egrets to nimble sandpipers, rely on the dynamic nature of the estuarine ecosystem. The king tides, which occur when the gravitational pull of the sun and moon align, orchestrate a grand spectacle.

As the waters retreat, a buffet of marine life is revealed, offering a feast for the feathered inhabitants. High tides bring their own narrative to the estuary, with rising waters reclaiming the mudflats and transforming the estuary into a watery expanse. The avian ballet adapts to this change, as birds seek refuge on higher ground.

While the birds in Morro Bay are well adapted to the dynamic estuary, the bay is changing with rising sea levels and other climate change impacts. Extreme high tides provide a glimpse into the future of what the new normal could be like with higher sea levels.

At the Estuary Program, we have been taking several proactive measures to better understand how our environment will change. Will the salt marsh begin to disappear? How will habitats within and around the bay shift?

Our work includes a partnership with the United States Geological Survey to conduct field monitoring and modeling to better understand



the impacts of sea level rise and the adaptation actions we can take to boost the resilience of the estuary and its wildlife.

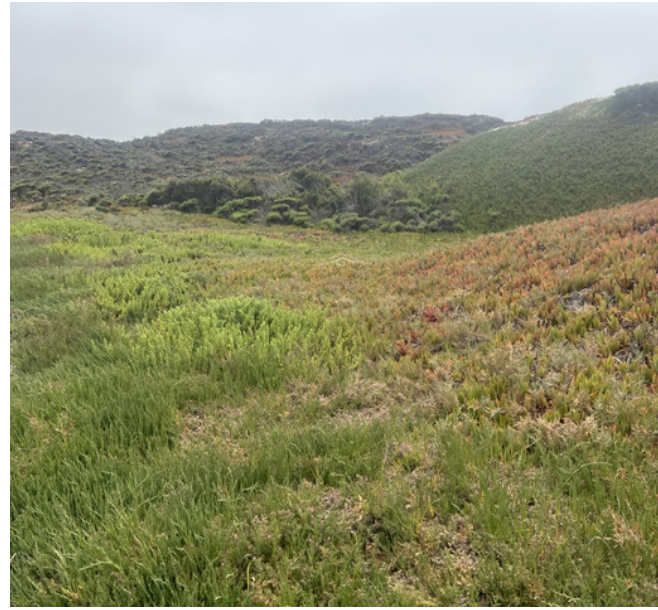
Our partnership with CeNCOOS, the California Ocean Observing System, provides important real-time water quality data to track short and long-term changes in the estuary. These science and data-driven efforts are essential to the work that we do and help inform actions we can take as a community to improve the estuary's resilience and to safeguard the survival of this special place that we all value.

-Melodie Grubbs, Executive Director

PROTECTING THE DUNES THROUGH INVASIVE PLANT MANAGEMENT

Ice plant is one of the most common non-native plant species found on the sand dunes and shoreline of the Morro Bay estuary. It can reduce biodiversity and crowd out native vegetation, including several rare and protected species. Ice plant was historically planted for soil stabilization along railroads and highways in the early 1900s and was first documented on the Morro Bay sandspit in the 1960s. However, the plant does the opposite of what it was intended for—once ice plant grows into large mats, the heavy leaves and shallow roots increase the likelihood of landslides and can instead destabilize the dunes.

This fall, we started a multi-year management effort to reduce ice plant cover on the sand dunes to improve dune habitat. We mapped and surveyed dune plant species with local partners to monitor pre-management conditions and eradicated over 30 acres of ice plant. These efforts support native plant revegetation and improve habitat for sensitive species such as the endangered California seablite. Protection of these areas is especially important as the sandspit provides the estuary with a buffer from sea level rise and coastal storm impacts. We have further ice plant control slated for later this year, with follow-up mapping and survey efforts planned to track progress.



Ice plant intermixed with suda.



The red vegetation above shows ice plant that is dying on the Sand Spit.

Vegetation monitoring on the Sand Spit.

INCREASING OUR REACH THROUGH EDUCATOR WORKSHOPS

A highlight of last year's education & outreach efforts was the creation of our educator training workshops. In partnership with Cal Poly and California State Parks, we hosted three workshops at the Morro Bay Museum of Natural History, reaching over 50 attendees from all over California. Participants represented a wide range of educators including classroom teachers, naturalists, docents, interpreters, and more. By "teaching the teachers," we were able to expand our reach and create an impact far greater than what our program could do on its own.

We have continued the program this year, hosting a series of three workshops this spring in partnership with Cal Poly, State Parks, and Southwest Marine Educators Association (SWMEA). The series is focusing on coastal ocean literacy, and by the end of the series, educators will learn how to effectively teach lessons on the coast, ocean, and climate change resiliency. Participants will finish the series of workshops with a hands-on habitat restoration activity and will learn how to incorporate environmental stewardship into their classrooms.



The training series also provides an opportunity to network with other local educators and partners that include Cal Poly, State Parks, and Creek Lands Conservation. We look forward to creating more of these educator training series in the near future!



The workshops are hosted at the beautiful Morro Bay State Parks Museum of Natural History.



Mutts for the Bay

Mutts for the Bay had a great year in 2023! Through our network of 36 dispensers throughout Morro Bay and Los Osos, we gave out approximately 320,000 bags, preventing thousands of pounds of dog waste from being left on our trails, sidewalks, and in our parks. We are so thankful to our volunteers that stock the dispensers for the community and to our sponsors who help fund the bag supply.

We only have three dispensers that are currently open for sponsorship! Reach out to us if you would like to sponsor one of the two dispensers at Lila Keiser Park or the dispenser at Morro Bay City Park (the triangle park).

You can see each of these locations on our Mutts for the Bay dispenser map, fill out a sponsor interest form, and donate to the program at MBNEP.org/Mutts-for-the-bay.



This dispenser located at Lila Keiser Park is one of three dispensers currently available for sponsorship!

It's easy to become a sponsor! Fill out an interest form online and a member of our staff will reach out with information including which dispensers are available. We will work with you to design a custom sticker to display on the dispenser, and your donation will be acknowledged on our Mutts for the bay webpage. An annual sponsorship costs \$400, and you can easily set up recurring payments.

Another way to support the Mutts for the Bay program is to donate. Contributions of any size help us conduct education and outreach on the importance of eco-friendly dog ownership in our watershed.

Blog Recap

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



MUTTS FOR THE BAY: ECO-FRIENDLY TIPS FOR YOU AND YOUR PUP

November 17

Have you ever wondered how you and your dog can be more eco-friendly? This blog post contains tips for how to be conscious of the environment while raising your pet.

[CLICK TO READ](#)



THANK YOU TO OUR VOLUNTEERS!

November 24

This blog highlights the many volunteers that help our program run! From beach cleanups to refilling pet waste bag dispensers to long-term monitoring projects, our volunteers contributed hundreds of hours in 2023.

[CLICK TO READ](#)



NOVEMBER FIELD UPDATES: ASSESSING ESTUARY HEALTH ON THE CALIFORNIA COAST

December 8

Learn more about how the Estuary Program is partnering with local and state research groups to help assess the health of the Morro Bay estuary.

[CLICK TO READ](#)



FROM THE DIRECTOR'S DESK: 2023 IN REVIEW

December 22

Our annual Director's Desk blog highlights the restoration, monitoring, and education efforts from 2023 to help create a more resilient bay and watershed.

[CLICK TO READ](#)

Upcoming Events

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



APRIL EVENTS

April 11: Downtown SLO Farmers Market, 6-9 p.m.

April 13: Morro Bay Farmers Market, 2-5 p.m.

April 19: Cal Poly Surfrider's Make Waves Film Festival

April 20: Earth Day Cleanup at Morro Rock, 9-11 a.m.

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

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

Job Opportunities

We are hiring! Learn more at MBNEP.org/join-our-team.

Part-Time

**ENVIRONMENTAL
PLANNING INTERN**

**MONITORING
TECHNICIAN**

Full-Time

**MONITORING
COORDINATOR
WITH THE CENTRAL COAST
AMBIENT MONITORING
PROGRAM (CCAMP)**