



2025 ANNUAL REPORT

*Implementing innovative nature-based solutions along
Southern California's coast to adapt to climate change,
enhance ecosystems, and benefit communities.*



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A MESSAGE FROM CEO TOM FORD

Dear Friends,

The Bay Foundation is dedicated to implementing nature-based solutions along Southern California's coast to adapt to climate change, enhance ecosystems, and benefit communities. Since 1990, our team of scientific and communications experts has been driving forward research, restoration, and stewardship. In 2025, we made substantial strides and expanded our initiatives in ocean resilience, coastal adaptation, and environmental engagement.

The accomplishments below demonstrate what your support enables us to achieve. We hope they inspire you, just as they have inspired us, to further our mission of protecting and restoring Southern California's coastline. Continue reading to discover our impact.

Thank you for your interest and support!

Cheers,

Tom Ford
Chief Executive Officer
The Bay Foundation



| 2025 AT A GLANCE



6

6 acres of kelp restored and celebrated 12 years of kelp forest restoration



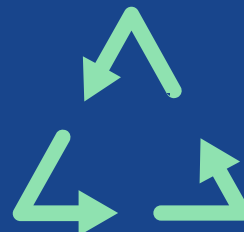
990

over 990 native plants planted across Santa Monica Bay's coastline from Zuma Beach to Manhattan Beach



10,218

10,218 red abalone and 3,094 white abalone outplanted into the ocean



1,000

over 1,000 pounds of food scraps recycled locally with Environmental Charter Schools at co-established community compost hubs



34

34 hosted volunteer restoration events with 533 volunteers



2,900 +

over 2,900 boaters engaged in pollution prevention and environmental stewardship



OCEAN RESILIENCE

TBF's Ocean Resilience Program reverses ecological loss by restoring kelp forests, eelgrass meadows, and recovering threatened and endangered species of abalone.

RESTORING KELP FORESTS



What is the significance of restoring kelp? Southern California kelp forests support an incredibly diverse and biologically productive ecosystem, home to over 700 species of algae, invertebrates, fish, and marine mammals. Giant kelp is one of the fastest-growing organisms on the planet, and as it grows, it absorbs carbon dioxide from the seawater as part of the initial stage of a carbon sequestration pathway. The ability of giant kelp forests to mitigate ocean acidification and reduce erosional forces makes them invaluable for coastal resilience. Additionally, a dense kelp canopy diminishes wind chop, keeping the waves nice and glassy for improved surfing conditions.

What does restoration look like? Without a healthy kelp ecosystem, sea urchin predators and competitors are diminished. As a result, purple sea urchins become too numerous on the reef, overgrazing the kelp and preventing it from returning in the future, a condition that can persist for decades. The resulting urchin barrens have low biodiversity and biological production. TBF dive teams systematically reduce purple urchins to allow for the kelp forest and the remaining urchins to flourish.

In 2025, The Bay Foundation (TBF), in collaboration with academic researchers and commercial sea urchin harvesters, restored another 6 acres off Palos Verdes. Over the past 12 years, TBF has restored 83.34 acres. The Palos Verdes Kelp Restoration Project and TBF are internationally recognized for the scale and success of this landmark effort.

TBF's Volunteer Dive Program continues to develop, with 50 dives led and nearly 1,000 dive hours recorded in 2025. If you are an American Academy of Underwater Sciences (AAUS) diver and would like to join our efforts, please visit [our website](#) for more information, and we'll be in touch.

Through our kelp forest restoration initiative, TBF's Ocean Resilience Program and partners continue to document the growth of kelp forests following our efforts. SCUBA divers measure this by counting and sizing algae, fish, and invertebrates. These measurements indicate increases in diversity, abundance, and biomass of macroalgae (seaweeds) and fish at our restoration sites compared to pre-restoration values. Learn more details in [this report](#).

RECOVERING ABALONE



TBF contributed to the recovery of the federally endangered white abalone (*H.sorenseni*), a species found in rocky reef habitats along the Southern California coastline and northern Baja Mexico. Collaborating in a statewide initiative to prevent this species from extinction, TBF operates two mariculture facilities at the Southern California Marine Institute (SCMI). These facilities are dedicated to growing, feeding, assessing, and acclimating captive-bred white and red abalone before their release into the ocean.

In 2025, 4,905 white abalone were transferred to TBF's aquaculture facilities. In addition to managing these mariculture facilities and caretaking for thousands of baby abalone, TBF's scientific divers collaborate with other organizations to release captive-bred white and red abalone once they reach outplant size – defined as 25 mm or greater, or approximately one inch – suitable for introduction into their natural habitat in the ocean. These abalone are temporarily housed on the ocean floor in Protective Outplanting Devices. (PODs) The PODs safeguard the abalone as they acclimate to their new ocean environment.



In 2025, 3,096 white abalone were outplanted off Palos Verdes. TBF continues to monitor these individuals post-release to assess their viability and enhance success. Similar efforts were undertaken, resulting in the care of over 5,000 red abalone at TBF's facilities. With the contributions of other partners, 10,218 red abalone were outplanted in 2025.

TBF is proud to be a collaborator in the Pacific Coast Ocean Restoration Initiative (PCOR). This statewide effort works to enhance kelp forest habitat, recover white abalone, and advance the capacity to produce sunflower stars in aquaculture facilities. With support from PCOR and the State of California, TBF is building out new facilities to increase capacity as we strive to outplant 17,500 white abalone across five new rocky reef sites in Southern California by fall 2027. The ultimate goal is to grow and outplant enough abalone so that their population stabilizes avoiding extinction.

RESEARCHING & RESTORING EELGRASS



Eelgrass (*Zostera*) is a marine flowering plant that serves as an economically and ecologically valuable habitat found in temperate regions worldwide. Eelgrass can form extensive beds or meadows that provide habitat for juvenile fishes, filter nutrients, sequester carbon, and retain sediment. Despite the importance of eelgrass meadows, these habitats are experiencing alarming rates of loss due to the cumulative impact of global threats and local stressors. Eelgrass beds are found near coastlines, making them more vulnerable to disturbances from coastal development, nutrient loading, and severe storms. To combat this loss, TBF and Paua Marine Research Group (PMRG) are addressing research gaps regarding open coast eelgrass habitats and developing restoration techniques.

In 2025, TBF's Ocean Resilience Program, PMRG, and Scripps Institution of Oceanography conducted quarterly SCUBA-based surveys to monitor eelgrass within the Bay. These surveys are conducted by teams of SCUBA divers who measure the extent of the eelgrass and the fish and invertebrates associated with the eelgrass. The divers also deploy and maintain instruments on the ocean floor within the eelgrass beds to measure temperature, dissolved oxygen, and light – key factors for eelgrass health and persistence. The data collected through this monitoring effort will be used to establish a comprehensive monitoring program and set targets for future conservation efforts. This partnership is being funded by Prop 50 funds through the Santa Monica Bay Restoration Commission.



COASTAL ADAPTATION

TBF's Coastal Adaptation Program expands California native plant communities to enhance coastal resilience and revitalize coastal biodiversity on Southern California sandy beaches.

GROWING DUNES



Los Angeles' iconic beaches are recognized worldwide, serving as the heart of surf culture and the coastal lifestyle that defines Southern California. To reduce the threats of coastal erosion, flooding, sea level rise, and ensure future generations have a beach to enjoy, TBF is actively growing beach dunes. In collaboration with various cities, lifeguards, LA County, and California State Parks, TBF cultivates native plants on the beaches by distributing millions of seeds and planting potted specimens into the sand.

The native plants' branches and roots naturally collect and hold sand, a dynamic process of burial and growth that continues throughout the seasons, allowing dunes to reach heights of 3 feet within a few years. Once established, the habitat created by these plants supports butterflies, migrating birds, and other wildlife. This emergence of life enhances the beach-going experience while also acting as a natural defense, safeguarding the beach. The U.S. Geological Survey warns that California could lose up to 75% of its beaches in the next 75 years due to rising sea levels, with Southern California facing significant losses by 2100. By growing plants and dunes on our beaches, we can reduce these impacts!



In 2025, TBF's Coastal Adaptation Program, in collaboration with the City of Santa Monica, California State Parks, Refugio Oil Spill Trustees, State of California Coastal Conservancy, and California Coastal Commission, continued to maintain and enhance our Santa Monica, Manhattan Beach, Dockweiler, and Malibu dune sites. In all, 2025 efforts amounted to:

- Millions of seeds distributed
- 990+ native plants planted
- 34 community restoration events hosted
- 553 volunteers engaged and contributed
- Continued to document sightings of threatened species such as the Western Snowy Plover (threatened) and El Segundo Blue Butterfly (endangered) at several dune restoration sites
- Received approval from the California Coastal Commission to restore around 30 additional acres of dunes in Santa Monica in 2026

Over the years, thousands of volunteers have contributed to our beach dunes. Thank you, volunteers! Your efforts have been invaluable. Please join us at an [upcoming restoration event](#) to get involved and make a difference.



ENVIRONMENTAL ENGAGEMENT

TBF's Environmental Engagement Program fosters the transformation of perceptions, attitudes, and behaviors into concrete, pro-environmental action using an integrative approach that combines social science, education, leadership building, and creative, empowered communications.

ADVOCATING FOR CLEAN BOATING



With 4 million boaters, California boasts one of the highest levels of recreational boating in the United States. This high volume puts significant pressure on local waterways. Without proper management, pollutants from boats – like sewage, used oil, hazardous waste, marine debris, aquatic invasive species, and emerging contaminants – can accumulate, posing a serious threat to these vital marine ecosystems. TBF is committed to preventing pollution from boating activities and promoting responsible stewardship.

In 2025, TBF's Environmental Engagement Program made progress toward this goal, including the following:

- 2,900 pollution prevention toolkits, California Boater Kits, distributed across Southern California
- 130 individuals trained as environmental educators ("Dockwalkers") in partnership with California State Parks and California Coastal Commission's Boating Clean and Green Program



- 25 years of the Dockwalker Program celebrated - since the year 2000, more than 130,000 statewide boaters have been engaged through the program
- 5 presentations delivered, reaching 300 individuals on preventing pollution
- 1 community-based social marketing pilot implemented in Oceanside, California, to study and engage recreational boaters on proper sewage disposal
- 100 + survey respondents were acquired to inform data collection around marine composting toilet awareness and input
- 3 issues of the educational newsletter, *The Changing Tide*, co-produced
- 70 + sewage disposal facilities monitored across Southern California to ensure functionality
- Joined the Ocean Sewage Alliance to collaborate with ocean sewage pollution stakeholders

[Learn more](#) about clean boating and check out stewardship resources for recreational boaters.

ADVOCATING FOR COMMUNITY COMPOSTING



Table to Farm, initiated in 2016, is a partnership between TBF, Environmental Charter Schools (ECS), and the surrounding community collaborating to recycle organic food waste and grow local fresh food. By composting locally within the community, we create healthy soil, enhance water retention, and increase carbon capture.

This initiative not only lessens the need to transport waste to distant processing facilities- thereby reducing air pollutants and carbon dioxide emissions- but also promotes the advantages of local gardening, enriches the landscape, and provides access to fresh produce.



Together with ECS in 2025, we:

- Recycled thousands of pounds of food across these community compost systems
- Attended 2 events to connect with community members on the initiative and distribute food scrap collection caddies
- Promoted 8 monthly community garden volunteer events

REDUCING SINGLE-USE DISPOSABLES



Globally, over 300 million tons of plastic are produced annually, and less than 9% is recycled. By 2050, plastic is expected to outweigh all fish in the oceans. Much of this marine debris is a result of disposable plastic products, specifically single-use disposable food and beverage packaging that have a short life span and are quick to be thrown “away”. Plastic pollution implications are vast and harmful, spanning from its extraction to its disposal. Source control is the most effective measure that reduces plastic use and ultimately prevents ocean-bound plastic.

In 2025, TBF continued to participate in the [Reusable LA](#) coalition, a strong network of partners working to resolve plastic pollution in LA by championing source reduction and reuse through legislative advocacy, outreach, and engagement. In 2025, Reusable LA met with all 15 City of LA Councilmembers to discuss a potential reuse ordinance. Related efforts involved the distribution of thousands of “[Hold the Plastic Please](#)” educational tip cards to the public to inform food service businesses and consumers on active legislation.

TBF also worked to enhance the impact of the City of Los Angeles’ [Reusable Foodware Microgrant Program](#), with TBF’s Environmental Engagement Program playing a key role in supporting its implementation. This project wrapped up in summer 2024, engaging 120 restaurants in efforts to reduce single-use disposables at the source and promote reuse for dine-in. [Watch this video](#) to learn more about the initiative and its influence.



RESOURCING COLLABORATORS

This effort provides financial resources to organizations taking action to advance restoration and enrich communities.

ADVANCING THE MARINE WORKFORCE



In 2025, TBF received funding from the [California State Coastal Conservancy](#) to launch the Santa Monica Bay Coastal Habitat Restoration Program (SMBCHRP), a program focused on nature-based restoration projects to help the Santa Monica Bay better withstand the impacts of climate change. Several of our innovative partners are directly leading these restoration efforts. Specifically, we are collaborating with [Aquatic Futures Foundation](#) (AFF) & UCLA to launch a Workforce Scientific Diver Training Program. This program aims to develop a marine science workforce dedicated to restoring Santa Monica Bay, offering training from entry-level to advanced levels. Individuals completing this training will have the opportunity to intern with TBF's Ocean Resilience marine science team.



In 2025, AFF expanded access to the underwater world by training new divers and swimmers through two Open Water Scuba courses, two Ocean Comfort courses, and a Scientific Dive course, equipping students not just with skills but with the confidence and knowledge to become ocean stewards. Specifically:

- Establishing key program infrastructure: planning training sessions, building community partnerships, and developing outreach strategies to support spring/summer 2025 initiatives
- 2 Open Water Scuba Course: Over 10 participants trained in the PADI Open Water Diver level (completion supported by academic, confined-water, and checkout dives)
- 2 Ocean Comfort Courses: 70 total participants completed a one-day intro program (ocean safety, snorkeling, swim skills, and Discover SCUBA)
- 1 AAUS Scientific Dive Program: 4 students advanced through 6+ field days at Catalina Island and Redondo Beach, including open-water scientific training and certification-relevant in-water skill development

RESTORING CULTURAL HERITAGE



The Gabrielino Tongva Springs Foundation (GTSF) expanded its efforts to revitalize the Kuruvungna Village Springs. TBF was able to support some of this work through the Santa Monica Bay Coastal Habitat Program, managed by the California Coastal Conservancy.

Kuruvungna Village Spring is a historic Native American village that's over 7,000 years old and is located in West Los Angeles. With SMBCHRP resources, GTSF will increase its public-facing programming and restoration, resulting in the expansion of native vegetation, naturalized water flow, removal of hardscape (i.e., concrete), and ultimate improvement in Santa Monica Bay water quality.



In 2025, GTSF:

- Installed native plants and began the removal of impermeable surfaces to create stormwater swales
- Hosted monthly volunteer events, restoring native plant communities and maintaining the site; Volunteers also got to experience programming featuring cultural, historical, and environmental education
- Increased capacity for restoration and education through seed preservation, signage, planting, and irrigation
- Initiated the planning and design for a new native plant nursery

INCREASING COASTAL RECREATION



Through funding from the National Estuary Program (NEP) and the Infrastructure Investment and Jobs Act (IIJA), the [Santa Monica Bay National Estuary Program](#) (SMBNEP) and TBF (SMBNEP's host organization) are supporting [Black Surfers Collective](#) (BSC) in implementing swim lessons, water safety trainings, and surf lessons, and shaping environmental awareness.

By offering swim and surf lessons, BSC fosters a safe and fun environment for water exploration. This approach helps cultivate a newfound appreciation for water-based recreation and creates a generation of future environmental stewards connected to the coast.



In 2025, BSC:

- Planned programming for summer and early fall 2025
- Hosted Nick Gabaldon Day on June 7, 2025, with 235 attendees
- Organized summer activities around beach and ocean safety, environmental stewardship, and the history of surfing
- Hosted additional beach and surf events on July 12, August 9, and September 13, 2025, at Dockweiler Beach Tower 50, with an average attendance ranging from 150 to 300 participants per event, supported by 40 to 50 volunteers each day
- Provided free surf lessons for children, teens, and adults from the greater Los Angeles communities
- Incorporated ocean stewardship education into the events focusing on microplastics, kelp beds, and sand dunes

RESEARCHING THE BREAKWATER



Through funding from the National Estuary Program (NEP) and the Infrastructure Investment and Jobs Act (IIJA), the [Santa Monica Bay National Estuary Program](#) (SMBNEP) and TBF (SMBNEP's host organization) are supporting UCLA's Coastal Flood Lab to study Santa Monica's Breakwater Rocky Intertidal Preserve.

This effort aims to ultimately protect the Santa Monica Pier and surrounding coastal infrastructure from storm events and sea level rise. It will enhance the natural resources around the pier, expanding recreational and educational opportunities while increasing fishing access. Anticipated outcomes include conducting outreach and building partnerships, environmental monitoring, and model development to inform design and planning.



In 2025, TBF and UCLA Coastal Flood Labs conducted:

- Breakwater and pier species cataloging: initiated and in process
- eDNA sampling: collected in April and May 2025
- Hydrodynamic monitoring:
 - Deployed 2 Acoustic Doppler Current Profiles (ADCPs) to measure waves and currents
 - Deployed 3 additional ADCPs in September 2025 with a conductivity, temperature, depth (CTD) sensor array and 2 pressure sensors mounted to the ADCP frames
 - Deployed 14 anchor-and-buoy systems with fluorimeters located north, south, and both inshore and offshore of the breakwater
- Tracer/dye and follow-up sampling:
 - Conducted two rhodamine dye releases plus an eDNA environmental tracer
 - Collected near-bottom water samples in two rounds following the surface release, and four rounds following the near-bottom release
- [Produced a video](#) recapping the fall 2025 dye release efforts

SUPPORTING COASTAL ACCESS + ECOLOGY



The [Santa Monica Bay National Estuary Program \(SMBNEP\)](#) and TBF, which hosts SMBNEP, are also financing the following projects through the Infrastructure Investment and Jobs Act (IIJA):

A Coastal Access and Beach Visitor User Data Study led by the [Beach Erosion Authority for Clean Oceans and Nourishment \(BEACON\)](#). To create effective coastal access programs, it's essential for local, regional, state, and federal managers to gain a deeper understanding of public beach use and the obstacles that hinder full access. Collaborating with several partners, including the Los Angeles County Department of Beaches and Harbors, the Mountains Restoration and Conservation Authority, California State University Channel Islands, and BEACON, this study aims to gather and analyze current data on beach use – particularly through cell phone location data – to address a significant research gap. This information will play a vital role in future coastal beach access initiatives.

In 2025, BEACON and project partners processed the summer beach count and calibrated it against cell phone counts from the same locations and times to estimate visitors. An ArcGIS Online system was built to power the reports, maps, and dashboards.

A second initiative funded by the IIJA includes a Beach Management Certification developed by the [Beach Ecology Coalition \(BEC\)](#). This project aims to provide web-based materials, training modules, and testimonials to help current and prospective beach managers and practitioners adopt an ecologically informed approach to coastal management. Supported by decades of partnership-building, research, and best practices developed by BEC, this project equips managers with the knowledge to ensure public safety, ecological integrity, and coastal resilience.

In 2025, all 10 subject-area scripts were completed and vetted with USC Sea Grant and LA County Beaches & Harbors, with 20% of the course formatted into online educational scripts. BEC also gathered course media (interviews, coastal video, and burn-site photos), identified reviewers for next-stage content, and is nearing completion of the course website trailer and completion certificate artwork.



COASTAL RESEARCH INSTITUTE

TBF and Loyola Marymount University's Coastal Research Institute engages LMU faculty, undergraduate, and graduate students in multidisciplinary, hands-on approaches to research related to coastal resource management affecting Santa Monica Bay and its watersheds.

ADVANCING COASTAL RESEARCH



LMU and TBF's [Coastal Research Institute](#) (CRI) brought together TBF and LMU faculty advisors and students to study topics related to our beaches and dunes and the rocky intertidal. In the rocky intertidal methods were tested to measure heavy metals in the tissues of mussels. Other efforts measured the environmental stress experienced by mussels from increased temperatures and hyposalinity (low salinity). Two groups led monitoring and research efforts to track the growth and development of sand dunes and the native plants that establish the dunes themselves. Methods were developed to understand how pollinators may prefer individual plants based on the plant's production of scent from its flowers. This ongoing work aids TBF in informing the effect of our efforts to protect and restore our coastline through the implementation of the Santa Monica Bay National Estuary Program Comprehensive Monitoring Plan.



Most of this work occurs during a six-week summer program co-led by LMU's Seaver College of Science and Engineering via the Coastal Research Institute. This program looks to directly involve Environmental Science majors and others in real-world experience, advancing their skills and appreciation for the value of applied science.

WHO WE ARE



Board of Directors

TBF's Board of Directors oversees progress, focusing on the organization's fiscal health, capacity, and operational stature.



Staff

TBF's staff are science and communication experts who are passionate about implementing nature-based solutions to protect and enhance local coastal waters.

STAY CONNECTED





THANK YOU



Laura Doss-Hertz