



SANTA MONICA BAY  
NATIONAL ESTUARY PROGRAM

# **SANTA MONICA BAY NATIONAL ESTUARY PROGRAM**

**Bipartisan Infrastructure Law FY23-24  
Semi-Annual Report**

**1 October 2023 – April 30, 2024**

Report Date: April 30, 2024

**Prepared for the United States Environmental Protection  
Agency**

### Acronyms

BEACON	Beach Erosion Authority for Clean Oceans and Nourishment
BIL	Bipartisan Infrastructure Law
BSC	Black Surfers Collective
CCMP	Comprehensive Conservation and Management Plan
CMP	Comprehensive Monitoring Program
CSUCI	California University Channel Islands
FY	Fiscal year
Memorandum	National Estuary Program Bipartisan Infrastructure Law Funding Implementation Memorandum for Fiscal Years 2022-2026
MRCA	Mountains Restoration and Conservation Authority
NEP	National Estuary Program
NRHP	National Register of Historic Places
RCDSMM	Resource Conservation District of Santa Monica Mountains
SCMI	Southern California Marine Institute
SMBNEP	Santa Monica Bay National Estuary Program
SMBRC	Santa Monica Bay Restoration Commission
State Parks	California Department of Parks and Recreation
TBF	The Bay Foundation
USEPA	United States Environmental Protection Agency

## Overview

This annual report provides an update on the BIL Fiscal Year 2023 and 2024 Work Plan tasks for the period 1 October 2023 through 30 April 2024.

### Purpose

The purpose of the two-year FY23-24 BIL Work Plan is to:

- Identify projects and objectives to further CCMP implementation and NEP BIL priorities for BIL funding beginning in FY23 and continuing through FY24 (1 October 2023 to 30 April 2024); and
- Outline partners, outputs or deliverables, long-term outcomes, budget, and timeline of work to be implemented with FY22-26 BIL funds.

### SMBNEP BIL Funding Priorities

Environmental justice and addressing climate change are key USEPA priorities reflected in the first two goals of the FY22-26 USEPA Strategic Plan. The USEPA is embedding these goals in its programs, policies, and activities, including implementation of the NEP BIL funds. Specifically, the NEP BIL funds are covered under the Justice40 Initiative with a target of ensuring that at least 40% of benefits from the BIL flow to underserved communities. Each NEP must also develop an Equity Strategy providing their plan to meet the NEP Justice40 target. The BIL funding opportunity is to be used to further implementation of the SMBNEP CCMP while meeting the priorities of addressing climate resilience and equity.

Climate resilience is embedded in many of the 44 actions in the CCMP Action Plan and is identified as an overarching goal to mitigate impacts and increase resiliency to climate change. Equity is also embedded in many CCMP actions, but Action #28, Support Disadvantaged Communities, seeks to develop communication strategies and identify barriers facing underserved communities to achieve healthy habitats while promoting equitable distribution of community benefits. This includes barrier removal and engagement in restoration, greening, and pollution reduction projects, and support of regional strategies that increase resilience of underserved communities.

The primary CCMP actions supported by the FY23-24 activities in this Work Plan are identified for each project. However, many other CCMP actions will be directly and indirectly furthered by the cross-cutting nature of the projects. The FY23-24 BIL Work Plan activities have been thoughtfully designed to factor in a broad array of equity and climate resilience benefits, while also addressing the SMBNEP CCMP top four priorities and seven overarching goals. Future SMBNEP BIL reporting will include metrics addressing implementation of equity and climate resilience goals, including the Justice40 targets.

### **Structure of Semi-Annual Report**

This section of the semi-annual report is organized by project included in the FY22-23 BIL Work Plan. For each project the outcomes and deliverables are identified and brief updates on implementation of the next steps are included in a table. A narrative section follows the table for next steps that require more description. In some cases, the table identifies there were no project activities during this time-period; this could be due to factors including but not limited to funding, partner prioritizations, or permitting delays.

**BIL Project #1***Palos Verdes Kelp Restoration Project*

**Connection to CCMP:** Action #2 – Restore Kelp Forests

**Connection to CMP:** Rocky Reef Indicators: Kelp Canopy Coverage / Urchin Barren Extent, Fish Production, Water Temperature Change

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Palos Verdes Kelp Restoration Project	<p>Identification and mapping of restoration site.</p> <p>Pre-monitoring of restoration site.</p> <p>Restoration efforts applied to 8 acres of rocky reef at Point Fermin. Related efforts at White Point and Underwater Arch Cove, approximately 5 acres.</p> <p>Post-monitoring of restoration site, e.g., kelp forest community surveys of restored site, and urchin gonad index, (conducted annually).</p> <p>Production and distribution of annual report detailing efforts and results to date.</p>	Initiated	<p>TBF staff surveyed and designated 2.7 acres of urchin barren for restoration at Underwater Arch Cove. Restoration activities were completed in these 2.7 acres during winter 2023/24.</p> <p>TBF launched a newly configured volunteer dive program through TBF to support this effort. 18 divers have been onboarded to the program and 14 are actively diving with TBF staff. Volunteer divers have contributed 57.5 hours underwater.</p> <p>TBF staff are informing and preparing a Quality Assurance Project Plan for kelp restoration/rocky reef monitoring to be submitted for review in spring 2024</p>

**Project #1 Background:**

Giant kelp forests grow from rocky reefs, in temperate waters, providing a three-dimensional structure that in Southern California supports over 700 species of algae, invertebrates, fishes, mammals, and birds. Numerous stressors have reduced the extent and condition of the giant kelp forests in Santa Monica Bay, leading to loss of fishing, recreation, and ecological integrity. The cumulative impact of these stressors often results in the establishment of urchin barrens. Urchin barrens have greatly reduced productivity and diversity when compared to resilient kelp forests. Giant kelp forests strongly affect the ocean waters and the adjacent coast, locally mitigating climate change factors associated with ocean acidification, and coastal erosion from sea level rise and increased storminess.

The Palos Verdes Kelp Restoration Project is internationally recognized as one of the largest and most successful projects of its kind. A consortium of biologists, fishermen, and academic researchers have spent over 10,000 hours SCUBA diving to restore and study the resulting kelp forest off the Los Angeles coastline. Kelp forests deliver benefits to the entirety of our coast and coastal ocean. For more than 15,000 years, humans have relied on this often-forgotten forest for sustenance and inspiration. This project allows us to maintain this legacy.

**Project Narrative:**

TBF staff have surveyed and designated 2.7 acres of urchin barren at Underwater Arch Cove. This area is delineated into three distinct quadrats, each composed of four blocks that are 30 meters by 30 meters in extent. These are again further subdivided into 15, 2 meter wide by 30 meter long transects used to define and manage restoration actions. This scale has proven to be ecologically relevant and successful, being applied over the past ten years of effort restoring kelp forests off Palos Verdes.

TBF has completed restoration activities in Underwater Arch Cove during winter 2023/24. This work has been conducted by TBF staff, commercial sea urchin harvesters, and a newly configured volunteer dive program through TBF. Volunteer divers, that are current American Academy of Underwater Scientists, are recruited and onboarded by TBF staff from local universities and the community. Supported by TBF staff these divers are then guided to the correct locations to reduce purple sea urchin densities to target densities to drive the rocky reef from an ecologically urchin barren stable state to a kelp forest state.

TBF staff are informing and preparing a Quality Assurance Project Plan for kelp restoration/rocky reef monitoring.

**BIL Project #2***Palos Verdes Abalone Restoration Project*

**Connection to CCMP:** Action #3 – Recover Abalone Population

**Connection to CMP:** Rocky Reef Indicators: Invertebrate Indicator Species, Landslides and Sedimentation, Turbidity / Light Penetration, Water Temperature Change, Invertebrate Recruitment

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Palos Verdes Abalone Restoration Project	<p>Establish outplant site, conduct biological monitoring, deploy, maintain and download sensors for physical and chemical parameters i.e., temperature and dissolved oxygen.</p> <p>Aquaculture facility improvements and maintenance.</p> <p>Purchase, construct and deploy outplant modules and time series cameras.</p> <p>Purchase and cultivate red abalone for outplant.</p> <p>One to two outplants annually for two to four years. 6,500 to 10,000 abalone outplanted over the entirety of the project.</p>	Initiated	<p>TBF staff and SCMI aquarists have informed the design for aquaculture facility improvements.</p> <p>Equipment, supplies, and parts lists have been identified to update the facility improving performance and capacity of the abalone aquaculture labs.</p> <p>Construction windows for the two labs will be staggered and started in summer 2024.</p> <p>Outplant site identification and restoration activities will begin in fall 2024.</p> <p>TBF staff have begun drafting the Quality Assurance Project Plan to be submitted to EPA in the final quarter of 2024.</p>

**Project #2 Background:**

Seven species of abalone, black, white, pink, red, pinto/threaded, flat, and green persist in Southern California despite precipitous declines due to overharvest, disease, and other factors. Fisheries for these species were closed in Southern California in 1997. Two of these species are federally listed as endangered, requiring active management to support their recovery within their natural range. These abalone live on rocky reefs and in the rocky intertidal where they graze on algae while hiding from predators and sometimes the sun, in crevices.

Abalone are ecosystem engineers that compete for food and space with sea urchins and other benthic life forms. When present in significant numbers the reefs they inhabit are more diverse, support less sediment and resultantly lead to improved water quality. Actively outplanting abalone to the rocky reefs off Palos Verdes will aid in long term resilience of our kelp forest-rocky reef systems. Long term goals include reestablishing the millennia old traditions of sustainable harvest of abalone for food, ceremony, and to reacquire lost cultural connections.

Partners involved in this project will continue to develop and test improved methodologies for raising and spawning abalone to increase their numbers in commercial abalone farms and within research facilities. Thousands of abalone will be produced, grown, transported, and conditioned for their outplanting to the ocean. Once placed onto the reefs off our shores, these abalone will be protected while they acclimate to their natural environment and eventually released. Scientific monitoring will continue to inform the success of these efforts, to adapt and maximize their effectiveness.

**Project Narrative:**

This project is a continuation of an ongoing project. In coordination with SCMI aquarists, the design of aquaculture facility improvements progressed through the summer of 2023. Equipment, supplies, and parts lists have been identified to update the facility to increase the performance and capacity of the abalone aquaculture labs. Construction windows for the two labs will be staggered and started in 2024. TBF staff have begun drafting the Quality Assurance Project Plan to be submitted to EPA in late 2024.

Outplant site identification and restoration activities will begin in fall 2024.



### **BIL Project #3**

*Santa Monica Breakwater Rocky Intertidal Preserve*

**Connection to CCMP:** Action #5 – Assess and Implement Offshore Artificial Reefs; #38 – Monitor Rocky Intertidal Habitats

**Connection to CMP:** Rocky Intertidal Indicators: Area of Rocky Intertidal Habitats, Response to Human Disturbance, Biodiversity Survey, Invasive Species, Presence of Disease, Habitat Change Due to Sea Level Rise, Temperature change, Increased Storminess

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
<p>Santa Monica Breakwater Rocky Intertidal Preserve</p>	<p>Conduct outreach and develop partners.</p> <p>Conduct environmental monitoring to inform design, engineering, and environmental planning.</p> <p>Identify lead agency and support development of EIR and associated processes for permitting.</p> <p>Contract for materials and construction.</p> <p>Monitor establishment and trends of the resulting intertidal community.</p> <p>Conducted biological (CRANE), Uniform Point Contact (UPC), and Swath surveys.</p> <p>2022/2023 Data sources were cross-checked, standardized and processed.</p>	<p>Initiated</p>	<p>UCLA Senior Practicum developed outreach materials and held outreach events on the Santa Monica Pier.</p> <p>A series of environmental DNA samples were collected neighboring and distant from the Santa Monica Breakwater.</p> <p>TBF staff conducted a LIDAR survey of the breakwater with Dr. Timu Galien (UCLA) in January 2023.</p> <p>Communication with City of Santa Monica and Pier Corporation staff has been ongoing.</p> <p>Two benthic sampling protocols were completed, Uniform Point Contact (UPC) and Swath. Swath surveys include identification and enumeration of mobile invertebrates and kelps, while UPC Surveys quantify reef structure, substrate, and benthic cover. For fishes, four benthic and four midwater transects were completed and included identification, enumeration, and size estimation for fish species.</p>

**Project #3 Background:**

This project creates an adaptable intertidal system and neighboring subtidal habitat that will provide refuge from existing stressors, allow for the study of rocky intertidal dynamics, as well as testing and trials of materials, aspects, and design for intertidal / subtidal enhancement. Results of these efforts will help inform the creation of living breakwaters along other exposed sections of the Southern California coastline.

This program would provide protection for the Santa Monica Pier and coastal infrastructure from sea level rise and storm events. The pier is a prominent and highly valued coastal asset, used by communities throughout Los Angeles and the world, receiving millions of visitors annually. The pier supports tourism, education, sport, and subsistence fishing. This project would enhance the natural resources neighboring the pier adding to the recreational/educational landscape and contribute to increased fishing opportunity for fishers.

Rocky Intertidal: The rocky intertidal is a dynamic habitat dominated by marine organisms that is variably submerged, washed, splashed, sprayed, or left to dry depending on the exposure, elevation, tides, waves, and storms. The rocky intertidal is often recognized by tidepools, mussel colonies, and expanses of a diversity of life that attracts many visitors. “An incredibly high number of local-residents and tourists flock to these locations for the opportunity to see marine life in its natural state.” (Peter Raimondi et al., 2022, Assessment of Rocky Intertidal habitats for the California Marine Protected Area Monitoring Program.) In the same report, Dr. Raimondi reminds us of the impacts of this intense visitorship including overexploitation, pollution, and habitat alteration. Climate change related stressors include warmer waters and temperatures, sea level rise, increased storminess, and ocean acidification. In addition, extensive mapping by the MARINE, (Multi Agency Rocky Intertidal Network) defines the extent of rocky intertidal habitat for the entire state of California to be roughly five square kilometers. In summary, the rocky intertidal is loved, vulnerable, and one of the rarest habitats in the state.

**Project Narrative:**

Though not funded through BIL a group of UCLA IoES Senior Practicum Students, supported by TBF staff, completed their project regarding the Santa Monica Pier Breakwater. The project advanced understanding of historic and current conditions of the environment neighboring the Santa Monica Pier Breakwater. Additional effort was undertaken, by these students, to define awareness for and develop public outreach messaging related to the project. Their efforts were concluded in June 2023.

This project incorporated mapping of the historic extent of Santa Monica State Beach in response to physical changes to

the coastline resulting from the construction of the Breakwater. In addition, the students organized a research cruise to collect environmental DNA and water quality samples neighboring the breakwater in late spring. These samples may help inform baseline biological characterization of the breakwater needed to support environmental planning.

More information can be accessed via the project website: <https://bayfoundationpracticum.wordpress.com/>.

Watch the [UCLA TBF Practicum Team's Zodiac Trip](#) video.

**BIL Project #4**

*Venice - Marina del Rey - Playa del Rey Foredune Beach Restoration Project*

**Connection to CCMP:** Action #6 – Restore Healthy Beaches

**Connection to CMP:** Sandy Shores Indicators: Habitat Protection, Beach Management Practices, Shoreline Erosion / Topography Change, Coastal Flooding, Hazard / Disturbance Response

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Venice - Marina del Rey - Playa del Rey Foredune Beach Restoration Project	<p>Contract with partner.</p> <p>Conduct outreach.</p> <p>Define scope and scale of the project.</p> <p>Contract for seed and plant propagation.</p> <p>Conduct baseline site characterization.</p> <p>Install and maintain site infrastructure to allow for germination and growth of the plants.</p> <p>Conduct annual monitoring and maintenance of the site.</p> <p>Outreach materials developed, public engagement strategy initiated, and survey conducted.</p> <p>Hosted public stakeholders meeting.</p>	Initiated	<p>Contract between Venice Oceanarium and TBF for outreach and engagement is executed.</p> <p>Outreach materials in design.</p> <p>17 Outreach events were held.</p> <p>Design, illustrate, print and distribute tri-fold leaflet</p> <p>Distributed surveys questionnaires about where best to locate the sand dunes in Venice.</p> <p>Designed and printed card announcements for stakeholders meeting.</p> <p>Distributed announcement cards for stakeholders meeting emphasizing residences on the Venice—Marina Peninsula.</p> <p>Hosted stakeholders meeting at the Electric Lodge.</p> <p>Set up an outdoor display on the Venice Pier about sand and sand dunes: 12 sessions/2 hrs.</p>

### **Project #4 Background:**

Several beach dune projects have been created in the past years along the Los Angeles coastline. These projects serve to create small dunes using native vegetation, increasing the ability of the project site to retain sand, captured by the leaves, branches and roots of the plants. These living shorelines benefit wildlife and enhance the visitor experience while forming a beach ecosystem that is resistant to erosion and sea level rise.

This adaptation to rising sea levels and stormier oceans will protect key infrastructure for beach visitors from across Los Angeles and the world. The sites proposed in this project are some of the more vulnerable to sea level rise and erosion based upon widely applied models for coastal flooding.

Foredune Beach Restoration: Plants specially adapted to the intense wind, salt spray and sunshine naturally inhabit the shoreline, often just above high tide. These project(s) would involve seeding the beach with these native plants and keeping trucks, other vehicles and limiting human presence while these plants germinate and mature. The methods are very direct with the installation of post and rope and / or sand fencing to delineate the boundary followed by seeding. Project sites can be established within a few weeks. Throughout the creation process research, monitoring and education can occur to elucidate the many changes to the beach from the growth and expansion of the plants.

### **Project Narrative:**

A contract was executed with the Venice Oceanarium to design, develop, and implement a multi-level program for schools and community events. These presentations are to advance awareness, participation, engagement, and support for a dune restoration project in the vicinity of Venice Beach.

TBF presented to a small group organized by the Venice Oceanarium at a private home, in the spring of 2023. This meeting was attended by ~24 people. There were many conversations regarding the benefits of dunes for improving coastal habitats and providing resilience towards coastal erosion related to climate change. Other dialogue was focused on the potential locations and extent of the project footprint.

To support a potential coastal dune project, Venice Oceanarium began a series of strategic communications and community engagement activities. Starting with a designed and printed tri-fold leaflet enhanced with engaging illustrations to provide clear information about the project. These materials were tools used during the educational outreach by setting up an outdoor display on the beach and Venice Pier. This installation ran for 12 sessions, each lasting 2 hours, where the

Oceanarium shared valuable information about the significance of sand and dune ecosystems. A survey to gather community input on the best locations for the sand dunes was distributed at the end of each conversation. This not only educated the public but also heightened community interest and support for the dune restoration efforts.

To initiate the project, community and agency stakeholders were consulted; among those Venice Oceanarium and TBF consulted were for the following: Venice Neighborhood Council, Venice architect/landscape: Isabelle Duvivier, Verdant Venice, LA City Council District 11: Traci Park's office, County of Los Angeles: District 2: Holly Mitchell's office; District 3: Lindsay Horvath's office; State Assembly #61, State Senate #24: Ben Allen, US Congress #36: Ted Lieu's office. Agencies: State Parks, LA County Dept. of Beaches & Harbors, LA County Lifeguard. Advocacy Orgs.: LA Audubon, CA Audubon, Heal the Bay, Surfrider Foundation, Venice Surfing Association, and USC Sea Grant.

Venice Oceanarium and TBF staff hosted two stakeholder meetings focusing on the Venice Beach and Marina Peninsula. One was intended for organizations by invitation and another open meeting was for the residential and commercial community at the Electric Lodge, a central Venice arts and community space. For the community meeting Venice Oceanarium created, printed, and distributed card announcements specifically targeting stakeholders and residents in the Venice—Marina Peninsula communities. These efforts culminated in a well-attended stakeholder meeting, further allowing conversations with the community and ensuring a collaborative approach to the environmental stewardship of the Venice coastal area. The meetings provided a platform for extended and in-depth introduction of the project scope, concept, scientific elements and the accompanying visuals/graphics (photography, maps, schematics and illustrations); the program generated and allowed for the appropriate time required for sufficient inquiry, discussion and feedback.

The next steps are to refine the project design based upon feedback from the stakeholder meetings and follow up feedback received since those meetings and to seek community buy-in for moving forward with an adjusted design and location. The project has a narrow pathway for meeting competing community interests as the site has unusual characteristics that complicate designation of the project footprint. Some of the limiting factors can be attributed to unusual beach sand elevation profiles, major adjacent sanitary sewer infrastructure and multiple agencies within and bordering the site. Once an adjusted design is generated it will be reintroduced to the agency stakeholders, the community organizations and community members consistent with the first-round effort.



**BIL Project #5**

*Adamson House Living Shoreline Project*

**Connection to CCMP:** Action #6 – Restore Healthy Beaches; Action #12 – Restore Small Coastal Lagoons

**Connection to CMP:** Sandy Shores Indicators: Anthropogenic Infrastructure / Beach Hardening, Habitat Protection, Beach Management Practices, Shoreline Erosion / Topography Change, Coastal Flooding, and Hazard / Disturbance Response

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Adamson House Living Shoreline Project	<p>Establish partnerships.</p> <p>Conduct outreach.</p> <p>Inform environmental design, engineering, and monitoring.</p> <p>Support environmental planning and permitting.</p> <p>Source and purchase materials for site modification, e.g., cobbles, trees, plants.</p> <p>Support contracting and construction.</p> <p>Held project kick-off and monthly project calls.</p> <p>Coordinated and performed a conceptual alternative design analysis and generated updated design figures.</p>	Initiated	<p>MOU with TBF, Integral Consulting and California State Parks in process.</p> <p>Site visit conducted by TBF, EPA Region IX, Santa Monica Bay Restoration Commission staff.</p> <p>MOU executed.</p>

**Project #5 Background:**

The Adamson House at Malibu State Beach is listed on the National Register of Historic Places (NRHP) and designated as a California State Historical Landmark No. 966, and the property is situated upon the separately listed NRHP ethnographic Chumash village of Humaliwo. Due to changing watershed, lagoon, and beach dynamics, both of these historical and culturally significant properties have been facing increasing erosion since 2018. This has resulted in the loss of portions of the estate, exposure of archaeological midden deposits and underlying infrastructure, and has degraded ecosystem services in the greater area. The risk of further damage is now imminent.

This proposed project would implement and construct a “living shoreline” along Malibu Lagoon State Beach and the Adamson House, using drift logs, cobble and sand that is native to the Santa Monica mountains and found on site (see attached draft design to address the fluvial and coastal erosion). The goal of this project is to address both fluvial and coastal erosion, protect cultural resources, enhance coastal recreation, and buy time for the next crucial phase of adaptation planning (removing Rindge Dam to restore natural sediment transport). This proposed project aligns well with several State and Federal Strategic Plans and would advance the objectives to fund and promote feasible nature-based solutions through innovative and transferable pilot projects and demonstrate the efficacy of proactive adaptation measures across the state.

Since 2019, State Parks, working with Integral Consulting, has been developing designs, technical reports, and meeting with regulatory agencies to complete the necessary environmental review to receive permits through the full regulatory process. Permit applications have been filed with the City of Malibu as the lead permitting agency in March of 2022, and this project already has support and buy-in from key community constituents and stakeholders. This project to date has been funded by State Parks through support of the Adamson House Foundation and is currently under contract through the State Coastal Conservancy to begin moving through the permitting process. However additional funding for permitting, environmental review and construction is necessary. Pending funding and upon the completion of technical studies and ongoing outreach, this project is expected to be “shovel ready” in early 2024 if funding is secured. Adding value to the State, this proposed project will also leverage partner collaborations with SMBNEP and Cal State University Channel Islands (CSUCI) to develop a monitoring program to track the performance of this living shoreline construction, providing a valuable blueprint for adaptation project implementation throughout the Country.

**Project Narrative:**

TBF, Integral Consulting, and California State Parks have worked on a Memorandum of Understanding, (MOU) to further project planning and permitting for this project. Noteworthy progress has been made in the past months.

TBF, EPA Region IX, Santa Monica Bay Restoration Commission Staff, were hosted by State Parks at the Adamson House in September 2023. This site visit allowed for a more in-depth understanding of the physical dynamics associated with the project and an appreciation for the human use and ecological context of the beach, lagoon, and shoreline.

Monthly calls have been conducted throughout 2024 involving the project partners to further refine the scope of work and engage with the proper agencies. Design considerations and assessment of the existing infrastructure e.g., sea walls, fences, and dunes are being incorporated into project planning.

**BIL Project #6**  
*Beach Management Certification Project*

**Connection to CCMP:** Action #6 – Restore Healthy Beaches; Action #25 – Support BMPs, Public Access, and Improved Trail Systems

**Connection to CMP:** Sandy Shores Indicators: Anthropogenic Infrastructure / Beach Hardening, Habitat Protection, Beach Management Practices, Shoreline Erosion / Topography Change, Coastal Flooding, and Hazard / Disturbance Response

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Beach Management Certification Project	Establish partners.  Identify and organize advisory team.  Establish memorandum of understanding.  Define and create curricula.  Support website design.  Host website.	Initiated	Project design in development, scope of work being refined.  Contract negotiated and executed April 2024.

**Project #6 Background:**

The direct and indirect impacts of beach management practices can result in deleterious effects to coastal ecosystems. Heavy equipment is often used to manage beaches in southern California, and beyond, to enhance the visitor experience and protect coastal infrastructure. These practices include but are not limited to, beach grooming, the placement and service of waste receptacles, formation and maintenance of seasonal berms, construction and maintenance of coastal access features, lighting, sweeping, parking lots, and infrastructure utilized by first responders.

This project will provide web-based materials, training modules, and testimonials to inform current and prospective beach managers and practitioners to identify, understand and operate in an ecologically contextual approach to coastal management. This effort will be directly supported by the decades of partnership building, research, and resultant best practices recommended of the Beach Ecology Coalition. These recommendations are the result of extensive information exchange and research. Many coastal managers utilize and further refine these preferred approaches to maintain highly acceptable experiences for the public visitors to southern California beaches. This effort would seek to further institutionalize the best practices of beach managers to ensure public safety, ecological integrity, and create a coastal landscape resilient to climate change.

**Project Narrative:**

TBF and the Beach Ecology Coalition have been refining the outputs of this project to focus on the key elements of the Certification. Research has been conducted to inform the proper location, hosting, analytics, and length for this web-based tool. The ultimate design of the project is in development incorporating these key factors.

**BIL Project #7***Black Surfers Collective: Diversity in the Line-up*

**Connection to CCMP:** Action #25 – Support BMPs, Public Access, and Improved Trail Systems; Action #28 – Support Disadvantaged Communities

**Connection to CMP:** Not applicable

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Black Surfers Collective: Diversity in the Line-up	<p>Contract with Black Surfers Collective, (BSC) to provide and support swimming and surfing lessons, transportation, educational materials, and website development.</p> <p>Support summer camp programs for underserved youth from Los Angeles.</p> <p>Established marketing effort; launched brand, website, business systems, logistics analysis and strategic event coordination/planning activities.</p>	Initiated	<p>TBF staff have contracted with BSC to begin project planning and contracting of project partners in preparation for 2024 schedule of programming.</p> <p>Conducted four surfing/cultural engagement events in summer 2023.</p>

**Project #7 Background:**

“Look, anytime you try to talk about diversity in surfing, it all boils down to access.” “Sure, there could be more welcoming attitudes at the beach itself, but also just getting to the beach is expensive. Surf equipment is expensive. Lunch at the beach is expensive. But once we get minority and inner-city kids to the beach and get them in the water they have fun. They’re hooked.” Jeff Williams, co-president Black Surfers Collective (BSC; Stirring the Melting Pot, Surfer Magazine June

2, 2018).

The programs and services provided by the BSC directly remove barriers that limit beach visitorship for underserved community members. Through their network of partners BSC supports swim lessons, water safety, and cultural and environmental awareness. BSC acknowledges, by leveraging swim lessons for families to swim together and by providing transportation in the neighborhoods where our target demographic resides, we create an atmosphere of safe, fun, water exploration. With this newly founded appreciation for water-based recreation we are grooming future generations of stewards willing to protect what they have come to love and feel welcome in coastal settings.

In 1976 the California State Legislature recognized, in the precedent setting Coastal Act, that: “The California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.” The Act further states in two of five basic goals to: “Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.” And “Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.”

### **Project Narrative:**

TBF staff supported the board of directors of Black Surfers Collective, (BSC) throughout this report period. This support aided BSC in formalizing their organization, and refining deliverables. By mid-summer 2023 BSC was organizing and hosting several events on the beaches of Los Angeles County, offering surf lessons, cultural programming, and engaging numerous partners.

### **Project Partnerships and Planning Meetings:**

During this reporting period, the Black Surfers Collective (BSC) led planning meetings in collaboration with Surf Bus Foundation, Heal the Bay, and Surfrider LA as project partners. These collaborative efforts aimed to enhance the impact and outreach of our initiatives.

### **Website Launch and Promotional Videos:**

One of our key accomplishments during this period was the successful launch of our new website. In addition, we produced engaging promotional videos to amplify our message and reach a wider audience, effectively showcasing the essence of the Black Surfers Collective and our mission.



### **Surf Events:**

The Black Surfers Collective hosted a series of impactful surf events, with notable highlights:

Pan African Beach Days:

- Dates: July 9, August 13, September 10.
- Participation: Approximately 65 individuals per event, including 40 dedicated surf volunteers.
- Community Engagement: Participants were provided with lunch, and each received swag bags generously provided by LA28games. Additionally, Target contributed free swimsuits and board shorts, enhancing the overall experience for our community.

### **Impact and Learning:**

Participants not only enjoyed the thrill of learning to surf but also gained valuable insights into water safety. Our events served as a platform for sharing historical knowledge, fostering a deeper connection with the community.

The Black Surfers Collective remains committed to creating meaningful experiences, promoting water safety awareness, and fostering community connections through our surfing initiatives. We look forward to building on these successes and expanding our impact in the coming months.

**BIL Project #8**

*Coastal Access and Beach Visitor User Data Study*

**Connection to CCMP:** Action #25 – Support BMPs, Public Access, and Improved Trail Systems; Action #28 – Support Disadvantaged Communities

**Connection to CMP:** Not applicable

Project Name	Outputs and Deliverables	Status	Semi-Annual Report Update
Coastal Access and Beach Visitor User Data Study	<p>Establish partnerships, contract with partner management team.</p> <p>Purchase cell phone data encompassing the coast of Los Angeles County.</p> <p>Conduct analysis of the data.</p> <p>Create an online data user interface to allow for public utilization of the dataset.</p> <p>Conduct social surveys to further inform drivers of beach and coastal user patterns and preferences.</p> <p>Data Planning, Assessments, Determinations &amp; Recommendations: needs, specifications, acquisition process, quality control and methods.</p>	Initiated	<p>Contract agreement completed July 2023 between BEACON and TBF.</p> <p>BEACON internal financial accounting, and project management for the BIL funds were conducted in July-August 2023.</p> <p>BEACON organization convened a meeting of its partners in September 2023. The meeting focused on refinement of outputs, logistics and schedule, for the contract period.</p> <p>Reviewed data needs with subcontractors and project partners. Updated data acquisition requirements, solicited acquisition vendors, and established a data acquisition agreement.</p> <p>Calibrated data acquisition with partner summer beach count data collection.</p> <p>Final steps negotiated with cell phone data vendor on data methods, including data acquisition options, data analysis and display options.</p>

**Action #8 Background:**

Local, regional, state, and federal managers must better understand public beach use by underserved and underrepresented communities and the barriers and constraints that prevent full access to develop equitable coastal beach access programs, projects, sites, and facilities. TBF, working with several local and regional partners, including Los Angeles County Department of Beaches and Harbors, the Mountains Restoration and Conservation Authority (MRCA), CSUCI, and the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), and other cooperating agency partners, have initiated efforts to collect contemporary data on beach use which can fill an important data and research gap, focusing on cell phone location data.

The data can help planners and stakeholders alike to better understand public use of the beach by visitors. It is expected that the massive scale of the metropolitan area that comprises the SMBNEP study area will be brought into focus with detailed user data made possible by the mobile technology use pattern study. This supplemental data is a key element of the program and project goals for the immediate and foreseeable future as it will identify which fraction of the millions of residents and travelers use the coastal resources in the SMBNEP study area and eliminate speculation as to how to identify and/or assign resources to disadvantaged communities census tract data (CalEnviroScreen). TBF, and its partners, are requesting funding to acquire, analyze, validate, and report on cell phone location data for all beach access locations within Los Angeles County, this effort captures data on all users, with a specific focus of the work to identify areas and sites that are frequented by residents of underserved communities.

The methodology and approach to this work is being adapted from efforts by the Narragansett Bay National Estuary Program, and USEPA Office of Research and Development. TBF and its partners are currently completing an initial pilot scale analysis of data applied to 50 selected points of interest along the coastline of Santa Barbara County, Ventura County, and a selected portion of Santa Monica Bay. Importantly, we have partnered with USEPA staff who proved this concept for the Narragansett Bay Estuary Program.

This project will enable us to understand where visitors call home and begin to decipher, through survey, the barriers and constraints that prevent fuller public access to the coast. The COVID experience in Los Angeles and surrounding counties within greater Southern California has already shown the importance of the beach as a center of community life. Projected climate change impacts for inland areas of Los Angeles County describe increases in heat which will increase the need for refuge along the coast. This study will provide clarity of the region's needs and capacity to support fuller access to the coast in an equitable manner.

**Project Narrative:**

There is no additional narrative for this reporting period.

**BIL Project #9**  
*SMBNEP Equity Strategy*

Project Name	Objectives	Status	Semi-Annual Report Update
SMBNEP Equity Strategy	Produce equity strategy document.	Complete	<p>A BIL Project Manager was selected in March 2023 and started in April 2023.</p> <p>The equity strategy was developed based upon EPA guidance and with direct support from EPA staff.</p> <p>The final draft of the Equity Strategy was submitted on June 1, 2023. (The iterative editing process proceeded throughout the summer. Final approval was achieved on September 28, 2023. See <a href="#">Equity Strategy</a>.)</p>

**Project #9 Background:**

Equity Strategies for the EPA National Estuary Programs and Geographic Programs

The purpose of the equity strategy is to ensure that each NEP/GEO program is reviewing RFAs, and potential projects that use BIL funds<sup>1</sup> through the lens of equitable and fair access to the benefits from environmental programs for all communities. The equity strategy should outline how BIL funds will be used to sustain and increase investments in disadvantaged communities (including tribes) and the benefits that flow to them. These strategies are intended to meet the goals of Executive Orders 14008 and 13985 – Justice40 and EPA’s Equity Action Plan respectively.

**Project Narrative:**

There is no additional narrative for this reporting period.