

COASTAL CONSERVANCY

Staff Recommendation
September 14, 2023

MONTEREY BAY LIVING SHORELINES PROGRAM

Project No. 23-049-01
Project Manager: Jessica Madden

RECOMMENDED ACTION: Authorization to disburse up to \$889,225 to the California Marine Sanctuary Foundation to establish the Monterey Bay Living Shorelines Program, which consists of developing a project prioritization framework, preparing three priority conceptual level plans, completing three ongoing living shoreline projects, developing a tool to monitor and assess effectiveness of living shoreline projects, conducting robust community engagement, and coordinating with State Parks to produce effective pathways for State Parks to integrate living shorelines into its resource management approaches in the Monterey Bay region.

LOCATION: Monterey Bay, Santa Cruz and Monterey Counties

EXHIBITS

- Exhibit 1: [Project Location Map](#)
 - Exhibit 2: [Site Specific Maps](#)
 - Exhibit 3: [Photos](#)
 - Exhibit 4: [Project Letters](#)
-

RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed \$889,225 to the California Marine Sanctuary Foundation (“the grantee”) to establish the Monterey Bay Living Shoreline Program, which consists of developing a project prioritization framework, preparing three priority conceptual level plans, completing three ongoing living shoreline projects, developing a tool to monitor and assess effectiveness of living shoreline projects, conducting robust community engagement, and coordinating with California Department of Parks and Recreation (State Parks) to produce effective pathways for State Parks to integrate

living shorelines into its resource management approaches in the Monterey Bay region (the “project”).

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 3 of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. The Monterey Bay Marine Sanctuary Foundation is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a grant of an amount not to exceed \$889,225 to the California Marine Sanctuary Foundation (CMSF) to establish the Monterey Bay Living Shoreline Program (MBLSP or the project), which consists of developing a project prioritization framework, preparing three priority conceptual level plans, completing three ongoing living shoreline projects, developing a tool to monitoring and assess effectiveness of living shoreline projects, conducting robust community engagement, and coordinating with State Parks to produce effective pathways for State Parks to integrate living shorelines into its resource management approaches in the Monterey Bay region. The MBLSP is a collaborative effort between the California Marine Sanctuary Foundation, Groundswell Ecology, Central Coast Wetlands Group, Integral Consulting, and State Parks (the project team).

State Parks owns and manages over 65% of the Monterey Bay coastline, including 20 State Park units, 4 coastal campgrounds, approximately 60 miles of coastal habitat, and more than 80 miles of the California Coastal Trail. Combined, these State Park units serve 6.8 million visitors each year. State Parks faces significant challenges to protect its ecological, cultural, and economic resources from the impacts of sea level rise, coastal erosion, increased storm frequency and intensity, and other climate-related stressors. State Parks is currently actively managing these problems but does not have the pathways in place to integrate well-designed living shoreline solutions into its management approaches.

Living shorelines, also known as natural or green infrastructure, are recognized as effective and sustainable solutions to coastal hazards. Living shorelines rely on nature-based materials such as plants, wood, sand, or rock to protect and stabilize shorelines. In addition to providing

physical protection from flooding and coastal erosion, living shorelines create habitat, increase biodiversity, enhance water quality of nearshore marine waters and estuaries through biofiltration and percolation, and promote richer and more engaging coastal visitor experiences. Green infrastructure that conserves natural processes is an alternative to hard armoring for the long-term management of coastal park units. State Parks identifies green infrastructure as a preferred adaptive solution for addressing impacts to coastal lands.

Over the last decade, members of the project team have collaborated with State Parks staff from the Monterey and Santa Cruz Districts to successfully implement multiple living shoreline projects that have enhanced native habitats and demonstrated increased storm resilience. Last year, State Parks adopted a Sea Level Rise Adaptation Strategy (2022), which sets out six principles to guide a coordinated response to sea level rise in coastal units. The proposed MBLSP will provide needed assistance to State Parks to implement the guiding principles outlined in the Sea Level Rise Adaptation Strategy on a regional scale and establish a support network and streamlined approach to planning, implementing, and monitoring successful living shoreline projects.

The overarching goal of the MBLSP is to establish a robust regional framework that will enhance management of the Monterey Bay coastline, foster resilience, and accelerate the pace and quality of living shoreline projects. To achieve this goal, the project team will work to (a) create a project prioritization framework, (b) initiate three conceptual level plans, (c) continue implementation at three existing sites, and (d) create a monitoring and assessment tool to evaluate success. These project elements are described in more detail below.

Under the prioritization framework component of the project, the project team will seek to identify locations for future implementation of living shoreline enhancements. The project team will determine the prioritization of potential living shoreline projects by collecting data on a wide range of project attributes, including climate change vulnerabilities (coastal erosion, sea-level rise), ecological factors (habitats, special status species), habitat resilience and migration potential, importance of coastal accessways to local communities, cultural resources, and existing coastal hardening structures, among others. The resulting geospatial dataset will inform the prioritization framework that will allow State Parks to efficiently assess vulnerabilities, understand nature-based adaptation options, and identify high-priority projects.

The project team will then advance up to three top ranked projects to 30% design. Designs will focus on using “green softer” strategies, such as vegetation and dune habitat restoration, to enhance coastal resilience to sea-level rise and erosion, support biodiversity, and enhance visitor access. The team will also provide necessary documents to State Parks for permitting and environmental review.

In addition to these planning project elements, the project team will work with local restoration partners, communities, and Tribes to continue implementation of existing living shoreline and coastal restoration projects at Natural Bridges State Park, Seabright Beach (Twin Lakes State Beach), and Salinas River State Beach (Exhibit 1). In total, approximately 34 acres will be restored across these three sites (Exhibit 2).

At Natural Bridges State Park, the project team will restore coastal habitat in the southeastern dune area, north back dune/coastal bluff area, and western coastal bluff area for a total of one acre. Restoration at Natural Bridges State Park will include planting of locally sourced and propagated native vegetation, installation of interpretive signage and symbolic fencing to protect restored habitat, and community planting days. At Seabright Beach, coastal dune habitat will be restored on recently buried woody debris that serves as a foundation for engineered dunes on the upper beach. In addition, coastal bluff habitat will be restored to reduce erosion and enhance stormwater management at the San Lorenzo overlook. Restoration efforts at Seabright Beach will include removal of iceplant and other non-native plants, planting of native vegetation, and installation of interpretive signage and symbolic fencing for a total of approximately three acres of restored coastal habitat. This work will be carried out by the project team with significant participation of the Groundswell Community Volunteer Group and additional help from other community volunteers during community planting days. At Salinas River State Beach, approximately five acres of foredune habitat and twenty-five acres along the back dune will be restored, for a total of thirty acres. Restoration efforts at this site will include iceplant eradication on the back dune area, placement of natural living shoreline materials (e.g. haybales, woody debris) along the foredune, planting native dune vegetation, and installation of symbolic fencing. This work will be completed by the project team and community volunteers. These living shoreline resiliency projects will dissipate wave energy, and increase biofiltration, sand accretion, and biodiversity. This work will be conducted concurrently with other activities in the project under existing permits, and will inform other activities of the MBLSP, such as community engagement and development of an assessment methodology.

To evaluate the effectiveness of living shoreline solutions, the project team will develop a monitoring and assessment tool to track the ecological and resiliency benefits provided by living shoreline projects within the project area. The project team will use this tool to document and evaluate the success of living shorelines at existing implementation sites. The results of these assessments can be used to compare relevant metrics between sites, before and after storm events, and baseline to future states of living shorelines. The monitoring and assessment tool will help identify effective restoration methodologies for different scenarios, create valuable baseline data for the region, and inform future planning and adaptive management decisions.

The project team will coordinate MBLSP development with State Parks Resource Managers from the Monterey and Santa Cruz Districts through quarterly meetings to ensure the program is tailored specifically to State Parks' needs. Outcomes of the project will directly inform State Parks' "Park Infrastructure Database," which identifies projects in need of funding and tracks these projects from conception to funding and implementation. State Parks will also receive templates for project design and permitting, a project implementation guide, local partner contacts, restoration monitoring methods, draft assessment tools for evaluating living shoreline efficacy, and development of outreach and engagement resources. Story Maps will be designed for integration into individual park unit websites and the Sea Level Rise Adaptation Strategy: Coastal Resilience in Action website. The project will culminate in a training workshop for State Parks' staff and other stakeholders to fully integrate MBLSP into State Parks operations, to share lessons learned, and to facilitate planning for future implementation projects.

The proposed project will provide multiple platforms for the community to provide feedback and participate in all stages of MBLSP, including project prioritization, planning, and implementation of living shoreline projects. A variety of educational components, including interpretive signage and community stewardship events, will be used as an interactive opportunity to help engage local community members in hands-on and meaningful experiences and learn about the benefits of using nature-based approaches. The project team has been in communication with local Tribes while developing prior living shoreline planning and implementation projects and will continue to involve tribes throughout the development of the MBLSP both through the community engagement activities as well as through State Parks' well-established Tribal consultation process.

Site Description: The project area includes coastal State Parks lands from Año Nuevo Point to Garrapata Creek (Exhibit 1) and spans a diverse range of habitats, including sandy beaches, rocky shores, coastal dunes, wetlands, and estuaries. State Parks owns over 65% of the coastline within this stretch, which is managed by both Santa Cruz District and Monterey District. The 20 State Parks units in the Monterey Bay feature facilities, buildings, four State Parks campgrounds, and many picnic areas. This region is known for exceptionally rich biodiversity, scenic beauty, and recreational opportunities that attract millions of visitors each year. The most popular State Park in the project area is Asilomar State Beach, which sees 1.4 million visitors annually. State Parks owns and manages approximately 60 miles of coastal habitat and over 80 miles of the California Coastal Trail. These resources serve local communities along the Monterey Bay coastline, many of which are identified as disadvantaged or severely disadvantaged (e.g., Monterey, Seaside, Sand City, Marina, Castroville, Pajaro, Watsonville, Las Lomas, Live Oak, and Santa Cruz Beach Flats).

Exhibit 2 shows the location of the implementation work at the three locations: Natural Bridges State Park, Seabright Beach (Twin Lakes State Beach), and Salinas River State Beach.

Grant Applicant Qualifications: The project team has been implementing site-specific living shoreline projects for 15 years in the Monterey Bay region. The project team includes project managers, biologists, restoration experts, coastal geomorphologists, and environmental educators who have extensive experience in sea level rise planning and adaptation, regional coordination, developing monitoring protocols to evaluate project success, engaging disadvantaged communities through environmental education programs, and managing large grants and contracts. Furthermore, the project team has built partnerships with numerous non-profit organizations, governmental agencies, municipalities, and contractors needed to build project capacity and complete tasks on-time. CMSF, who is serving as the primary applicant, will provide project oversight, financial management and other services to build capacity for the project that directly supports its mission of enhancing the coastal environment and communities by leveraging science, technology, and collaboration. Recently, CMSF worked with state agencies to implement a statewide Sea Level Rise Awareness campaign, which utilized various communication tools including the creation of a new website, social media, billboards, and videos. CMSF has supported dozens of projects in areas of interpretive education and outreach, habitat management, sea level rise planning, environmental monitoring, and water quality and supply enhancement.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the "Consistency with Conservancy's Strategic Plan" section below.

2. Project is a good investment of state resources.

The project is a good investment of state resources because it advances statewide goals and plans. The project aligns with the California Climate Adaptation Strategy's priority to "accelerate nature-based climate solutions and strengthen climate resilience of natural systems." More specifically, it supports Goal C to integrate nature-based climate solutions into relevant infrastructure and investments. The project is also consistent with California's 30x30 initiative and its key objective to "mitigate and build resilience to climate change." This objective recognizes the need to expand nature-based approaches into climate adaptation efforts throughout the state. Local State Parks District staff support this project to address goals identified in the 2022 California State Parks Sea Level Rise Adaptation Strategy.

The project aims to enhance current and future living shoreline implementation by restoring habitat and protecting public recreational amenities along the coast. This will benefit Californians, including those from disadvantaged communities near the project area. The project also supports the development of a living shoreline program that can serve as a model for other nature-based climate adaptation projects in the Monterey Bay region and beyond.

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

The project team has consulted with local Tribes during prior living shoreline planning and implementation projects, as well as other wetland and watershed restoration work, resulting in Tribal land acknowledgements and accurate historical information on signage at several dune restoration sites. The project team will continue to consult with interested Tribes throughout the development of the MBLSP through meetings, workshops, online surveys, and hands-on restoration experiences, as well as through State Parks' well-established Tribal consultation process.

4. Project benefits will be sustainable or resilient over the project lifespan.

The proposed project will facilitate the future restoration of shoreline habitats along the Monterey Bay coastline, which will provide sea level rise adaptation for recreational amenities vulnerable to coastal hazards. Living shoreline projects are an effective tool for addressing expected sea level rise due to climate change as they reduce wave exposure while preserving ecosystem benefits. Coastal resiliency and climate adaptation are fundamental to the project,

which will consider the anticipated lifespan of proposed actions in response to sea-level rise and other climate change impacts. The options considered in the prioritization framework and conceptual level plans will prevent future adaptation from becoming more difficult.

5. Project delivers multiple benefits and significant positive impact.

The project will advance planning and adaptation efforts that will achieve the following objectives: a) provide co-benefits and alleviate multiple stressors within communities, such as protecting access to parks and open space, improving flood protection, enhancing beach and other coastal habitats, and other environmental benefits; b) increase equity and environmental justice by benefiting disadvantaged residing in the project area; c) increase community-resilience to future climate change impacts such as sea level rise, storm surge high tide events, and flooding; and d) provide community benefits such as increased civic engagement and hands-on restoration volunteer opportunities.

6. Project planned with meaningful community engagement and broad community support.

The project team has developed meaningful relationships with the community and successful pathways for engagement in prior living shoreline implementation projects. The community gave positive feedback regarding the outcomes of existing living shoreline projects, demonstrating support for expanding and continuing this work through the MBLSP.

This project integrates community outreach and engagement with diverse stakeholders throughout project development. Coastal users, Tribes, economically-disadvantaged neighborhoods, and other local community members will be invited to engage in a variety of activities to make participation feasible for everyone. Platforms for engagement with this project will range from interpretive signage and online surveys to small group meetings and community workshops. Feedback that stems from these community engagement activities will directly inform the prioritization framework and future living shoreline projects. Hands-on restoration opportunities will also be offered at existing living shoreline and coastal restoration projects. These activities will be designed to foster meaningful connections with the community, build support for the project, and foster community investment in the project outcomes.

PROJECT FINANCING

Coastal Conservancy	\$889,225
State Parks Foundation	\$25,000
Project Total	\$914,225

Conservancy funding is anticipated to come from an appropriation from the Greenhouse Gas Reduction Fund (GGRF) to the Conservancy for the Climate Ready Program for purposes of nature-based projects to address sea level rise (Budget Act of 2022, SB 154, as amended by AB 178, Chapter 45 of the Statutes of 2022). The Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act (Health and Safety Code (HSC) Sections

39710 – 39723) requires that GGRF funds be used to (1) facilitate the achievement of reductions of GHG emissions consistent with the Global Warming Solutions Act of 2006 (HSC Sections 38500 *et seq*), and (2) to the extent feasible, achieve other co-benefits, such as maximizing economic, environmental and public health benefits and directing investment to disadvantaged communities (HSC Section 39712(b)). The Global Warming Solutions Act of 2006 sets forth (among other things) certain GGRF funding priorities (HSC Section 38590.1).

The California Air Resources Board (“CARB”) has adopted guidelines that establish program goals that agencies must achieve with their GGRF funds. Consistent with the CARB 2018 Funding Guidelines, the proposed project will help the Conservancy meet its GGRF program goals because the project will:

- Facilitate GHG emission reductions (which includes carbon sequestration) and further the purposes of AB 32 and related statutes;
- Benefit Priority Populations (disadvantaged communities, low-income communities, or low-income households);
- Maximize economic, environmental, and public health co-benefits to the State; and
- Avoid substantial burdens to disadvantaged communities and low-income communities.

The proposed project will help meet these objectives by planning and facilitating future coastal adaptation implementation projects that will support resilience to sea-level rise and storm surge, thereby increasing carbon sequestration and reducing flooding and infrastructure damage resulting in reduced GHG emissions from remediation and rebuilding. In addition, the project will assess the feasibility and initiate the planning of nature-based adaptation measures, thereby supporting the research, development, and deployment of innovative measures and practices. The proposed project is also consistent with this funding source because it will reduce the impacts of sea level rise on communities and natural resources.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy’s jurisdiction (Section 31113(a)). This project is within the Conservancy’s jurisdiction because it is within the coastal zone pursuant to Public Resource Code § 30103.

Pursuant to Section 31113(b), the Conservancy is authorized to award grants to public agencies to undertake projects that reduce greenhouse gas emissions, address extreme weather events,

sea level rise, storm surge, beach and bluff erosion, saltwater intrusion, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.

Pursuant to Section 31113(c), the Conservancy must prioritize grants for projects that maximize public benefits and have one of several purposes, including reducing emissions of greenhouse gases, preserve and enhance coastal wetlands and natural lands, providing recreational opportunities, reducing flood risk, and enhancing fish and wildlife habitat.

Section 31113 also requires the Conservancy to prioritize projects that use natural infrastructure to help coastal communities adapt to climate change and projects that provide multiple public benefits, including, but not limited to, protection of communities, natural resources, and recreational opportunities. See Section 31113(d)(1). The proposed project will help develop future adaptation measures to protect coastal habitats and recreational infrastructure using nature-based adaptation measures.

Consistent with these sections, the proposed project will facilitate the development of nature-based living shoreline infrastructure within the Monterey Bay region to reduce the threat of sea level rise and enhance coastal dune and other habitats, where feasible.

CONSISTENCY WITH CONSERVANCY'S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 1.1 Commit Funding to Benefit Systemically Excluded Communities**, the proposed project will improve environmental conditions within a disadvantaged community and improve resiliency to sea level rise.

Consistent with **Goal 4.1 Sea Level Rise Adaptation Projects**, the proposed project will fund planning and implementation of living shoreline and nature-based sea level rise adaptation measures.

Consistent with **Goal 4.3 Multi-Benefit Nature-Based Climate Adaptation**, the proposed project plans and builds capacity for future multi-benefit nature-based climate adaptation projects.

CEQA COMPLIANCE:

The planning elements of the proposed project include preparing feasibility and technical studies, preliminary designs, and environmental review documents. Thus, the proposed project involves only data gathering, resource evaluation, planning, and feasibility analyses for possible future actions that have not yet been approved or funded. These activities are statutorily exempt from review under CEQA pursuant to Title 14 of the California Code of Regulations Section 15262, which exempts planning and feasibility studies for possible future actions that have not yet been approved, adopted, or funded. These elements are also categorically exempt under Section 15306, which exempts data collection and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. Consistent with Section 15262, the project will consider environmental factors. Consistent with Section 15306, the data collection and resource evaluation components of the project will not cause major or serious disturbance to the environment.

The restoration activities at Natural Bridges State Park, Seabright Beach, and Salinas River State Beach are categorically exempt from CEQA pursuant to Title 14 California Code of Regulations Sections 15302-15304 as follows:

- Section 15302 exempts the replacement of existing structures where the new structure will be located on the same site and will have the same purpose as the structure replaced. The proposed project will replace existing fencing and signs in the same areas of the project site;
- Section 15303(e) exempts the construction and location of limited numbers of new, small facilities or structures, like fences and signs. The proposed project will erect a limited amount of additional, new fencing and signage on the project site; and
- Section 15304 exempts minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. The project's minor alterations to vegetation involve eradication of invasive iceplant primarily through hand spraying of herbicides to minimize the possible impact of herbicides on nearby plants. The iceplant will be pulled by hand in some areas to ensure no special status species are impacted. The project's minor alterations to vegetation also include reseeding and replanting with native dune plants.

Upon approval of the project, Conservancy staff will file a Notice of Exemption.