

Climate Resilient Monterey Bay



MONTEREY BAY LIVING SHORELINES PROGRAM

SUMMARY

The Monterey Bay Living Shorelines Program (MBLSP) is a collaborative initiative between California State Parks, the California Marine Sanctuary Foundation, the Central Coast Wetlands Group, and Groundswell Ecology. Building on a decade of successful dune restoration work, the program is now implementing the California State Parks Sea Level Rise Adaptation Strategy along 60 miles of Monterey Bay coastline from Año Nuevo Point to Garrapata Creek. Phase I is already advancing the top-ranked living shoreline sites to 30% design and creating a geospatial decision-support database that characterizes vulnerability, habitat value, cultural and ecological resources, shoreline armoring, and projected benefits of nature-based solutions. With NOAA funding, the program is moving into implementation by constructing a fully permitted living shoreline at Rio Del Mar State Beach and advancing three additional high-priority projects to 100% design and construction, restoring more than 10 acres of coastal habitat to reduce flood risk, stabilize dunes, and build long-term coastal resilience.

PROJECT OBJECTIVES

The project is currently working to operationalize State Parks' Sea Level Rise Adaptation Strategy by deploying nature-based shoreline protection on State Park lands. It is prioritizing and advancing high-impact living shoreline projects that reduce wave runup, storm surge impacts, and erosion hazards affecting coastal access, infrastructure, and nearby communities. It is also restoring self-sustaining dune ecosystems by removing invasive vegetation, rebuilding dune morphology with cobble, woody debris, and sand movement, and revegetating with native species that trap and stabilize sediment. In parallel, the program is institutionalizing climate resilience through geospatial planning, full-scope design and permitting, and community stewardship and monitoring, building a replicable model for climate-ready shoreline management in Monterey Bay.

PROJECT ACTIVITIES

The team is currently developing and using an ArcGIS geodatabase to identify and rank candidate shoreline enhancement sites based on vulnerability, ecosystem function, and projected risk-reduction benefits. With these data in hand, Groundswell and partners are implementing a fully permitted project at Rio Del Mar State Beach and advancing three additional prioritized sites from 30% to 100% design, completing CEQA, Coastal Development, and federal environmental review.

ADAPTATION STRATEGY

Flood Risk Reduction



PARTNERS



Groundswell Coastal Ecology



California State Parks



Central Coast Wetlands Group



This work is part of Climate Resilient Monterey Bay (CRMB), an initiative through the California Marine Sanctuary Foundation. CRMB is Federally funded as part of the Climate Resilience Regional Challenge through the Inflation Reduction Act and administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration.



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On-the-ground implementation is underway using natural and nature-based techniques including installing cobble berms and large woody debris beneath sand to stabilize dunes, constructing artificial dune forms to accrete sand, moving sand to increase dune height and volume, and removing invasive plants that impede dune processes. All restored areas are being planted with native dune vegetation, and community members are being engaged in volunteer planting and stewardship to support long-term establishment and public ownership of the work.

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