

# Climate Resilient Monterey Bay



## CARMEL RIVER FLOODPLAIN RESTORATION & ENVIRONMENTAL ENHANCEMENT (CRFREE) POST-CONSTRUCTION RESTORATION & MANAGEMENT

### SUMMARY

The Carmel River Floodplain Restoration and Environmental Enhancement (CRFREE) Project will be a multi-phase effort designed to reduce flood risk and restore ecological function at the confluence of the lower Carmel River and Carmel Lagoon. Led by Big Sur Land Trust and Monterey County, the \$55M project will reconnect 102 acres of historic floodplain by removing levees, grading floodplains, and constructing a causeway for State Route 1 (better known locally as "Highway 1"), all of which will divert high river flows away from developed areas and into a restored floodplain. The NOAA- supported phase will stabilize and manage the newly graded and reconnected floodplain through active revegetation, invasive species control, and interim habitat management to ensure that flood-risk reduction and ecological outcomes will be achieved and sustained over time.

### PROJECT OBJECTIVES

The NOAA phase of the CRFREE project will advance three linked objectives. First, the work will stabilize the newly graded and reconnected floodplain to reduce flood risk for homes, businesses, and public infrastructure by ensuring that restored flow paths and floodplain surfaces will function as designed under future storms and sea-level rise. Second, the project will accelerate ecological recovery and long-term resilience by re- establishing native riparian, scrub, and floodplain vegetation, suppressing invasive species, and supporting hydrologic processes that will improve habitat quality for fish and other wildlife. Third, the work will ensure that this public investment remains accountable and scalable by monitoring ecological performance and documenting hydrologic and geomorphic outcomes so that future restoration phases and regulatory compliance will be informed by measured results.

### PROJECT ACTIVITIES

To achieve these objectives, the team will carry out a coordinated suite of post-construction restoration and management actions. Native seed, cuttings, and container plants sourced from the lower Carmel River watershed will be propagated and installed across priority areas, supported by temporary drip irrigation systems and protection from browsing animals to ensure initial establishment.

### ADAPTATION STRATEGY

#### Flood Risk Reduction



### PARTNERS



Big Sur Land Trust



County of Monterey



Esselen Tribe of Monterey County



Ohlone Costanoan Esselen Nation (OCEN)



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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Crews will conduct invasive plant removal, mulch installation, and maintenance activities such as irrigation, weed suppression, and protection repairs to safeguard young plantings. In parallel, annual monitoring will document plant survival, vegetation cover, hydrologic and geomorphic function, flood conveyance performance, and wildlife use, with results to be compiled in annual reports. In areas reserved for future construction phases, interim vegetation management will be implemented to control weeds and prevent ecological decline, ensuring that the full project area will advance toward flood safety and ecological functionality.

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