

San Francisco Littoral Cell

Coastal Regional Sediment Management

...one of several plans of the California Coastal Sediment Master Plan



Coastal RSM Plan Overview

This CRSMP, which comprises the Pacific shoreline and surroundings of San Francisco, Daly City, and Pacifica (Figure ES-1), focuses on coastal stretches where mitigating existing and expected future coastal erosion and other co-objectives – e.g., ecology, recreation, and protection of property and infrastructure – is or will be crucial for their survival.

Regional sediment management (RSM) is an approach to solving or minimizing shoreline and watershed problems caused by human modifications.

The statewide California Coastal Sediment Master Plan, which is led by the Coastal Sediment Management Workgroup, endeavors to protect, enhance, and restore California's coastal beaches and watersheds through federal, state, and local cooperative efforts.

This Coastal Regional Sediment Management Plan (CRSMP) spans the coastline from the Golden Gate Bridge southward to Pedro Point in Pacifica. Although, consensus on a specific plan of action was not reached, this CRSMP can serve as a foundation for additional development of local and regional plans to mitigate coastal erosion hazards.

The purpose of this CRSMP is to provide sufficient information for local and regional coastal decision makers to develop policies and execute management projects for the future vitality of beaches and other coastal locations. Completed tasks include:

- Stakeholder outreach and coordination to ensure that local issues are addressed
- Collecting pertinent data related to economic (e.g., tourism, beach use, potential funding streams, etc.), sediment (potential sources, needs, locations, quantities, dredging statistics), and environmental (critical species and habitats) concerns
- Including the data in a GIS database for ease of use by coastal decision makers
- Identifying and recommending techniques to enhance governance issues related to Plan implementation

San Francisco Littoral Cell
locations of regional concern:

Coastal RSM Activities



San Francisco Littoral Cell RSM Concerns

The Pacific coastline of San Francisco and northern San Mateo Counties – the SFLC (Figure 1) – periodically experiences severe coastal erosion from terrestrial and marine processes, placing shoreline ecosystems and 150 years of coastal development at risk. Because an integrated approach to ameliorate future erosion is critical to maximizing the use of limited funds and minimize negative impacts to neighboring communities, this CRSMP can greatly address the concerns of the coastal communities of San Francisco, Daly City, and Pacifica by:

- Describing the present state of the coast
- Describing the extent of beach erosion within the littoral cell over several decades with respect to infrastructure, recreation, public safety, public coastal access, and habitat
- Describing established coastal-engineering responses that planners can consider when developing coastal protection and restoration projects
- Evaluating effects of sea level rise
- Building partnerships between local and regional bodies to develop regional management of sediment resources and establish a process to address beach erosion



Habitat Constraints

The coastal habitats considered for the littoral cell are based on the potentially significant biological effects of natural physical processes closely linked with shoreline retreat. Also included is the backshore zone that would be affected by engineered shoreline structures or soft engineering adaptations. The ecologically significant natural physical processes affecting terrestrial coastal communities include slope processes (e.g., erosion, slope failure); sand transport; wave overwash; and seawater flooding of lowland, wetland, or aquatic backshore habitats.



Local Sponsor

Instead of a local sponsor, there is a Coordinating Network that is open to all interested local jurisdictions and agencies. The focus of the Network is on joint problem solving. Sediment-management efforts are likely to take place at the level of individual jurisdictions and agencies in the CRSMP area, but there will be advantages for these entities through coordination for key purposes.

Federal/State Sponsor



The U.S. Army Corps of Engineers and the California Natural Resources Agency established the California Coastal Sediment Management Workgroup (CSMW) in 1999 to develop regional approaches to protecting, enhancing and restoring California's coastal beaches and watersheds through federal, state, and local cooperative efforts.

For more information, see [TBD](#) or go to the CSMW website at https://dbw.parks.ca.gov/?page_id=29339