



South Orange County Beach Coalition

Inaugural Meeting
September 15, 2025
OC Sailing & Events Center



Land Acknowledgement

Orange County is within the unceded traditional territory of the Acjachemen and Tongva Peoples. The Acjachemen share territory with their relatives and neighbors: Tongva to the north and south to Newport Beach as well as the Luiseño to the east and south.

These native peoples are still here and remain as Nations with international relationships. With this acknowledgment, we pay respect to and honor the original traditional stewards of what is now known as Orange County, the Acjachemen and Tongva past, present, and future.

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Welcome and Introductions

Name

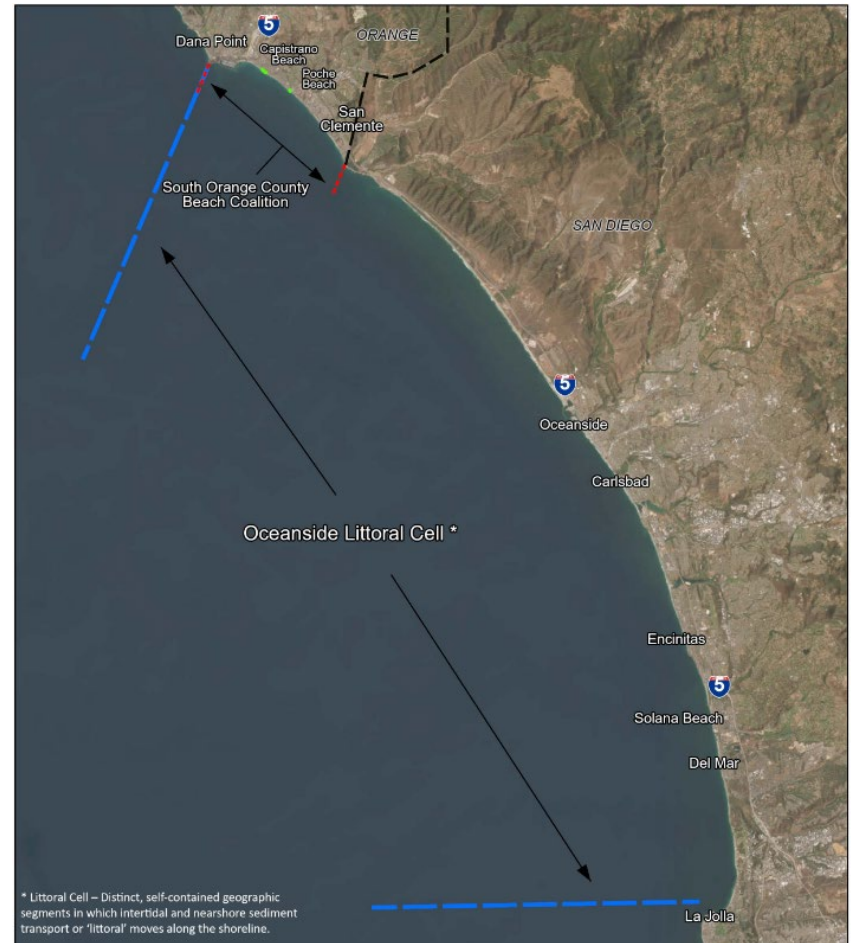
Agency Affiliation/Role

What do you love about
the beach?

Oceanside Littoral Cell

Littoral Cell:

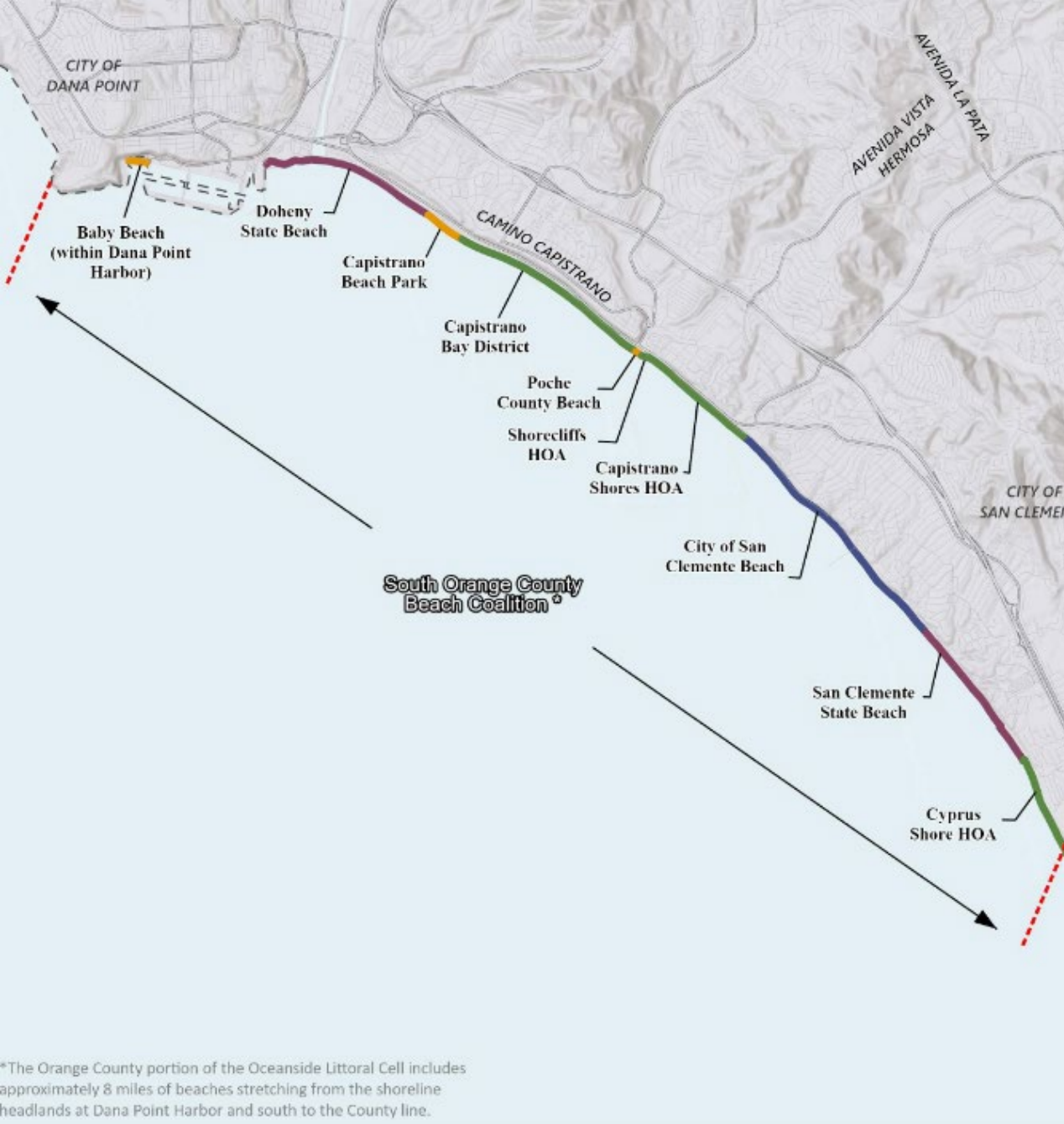
A distinct, self-contained geographic segment in which intertidal and nearshore sediment transport or 'littoral' moves along the shoreline.



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Vision

Restore, protect, and preserve sandy public beaches and the critical infrastructure located along the coastline of south Orange County.

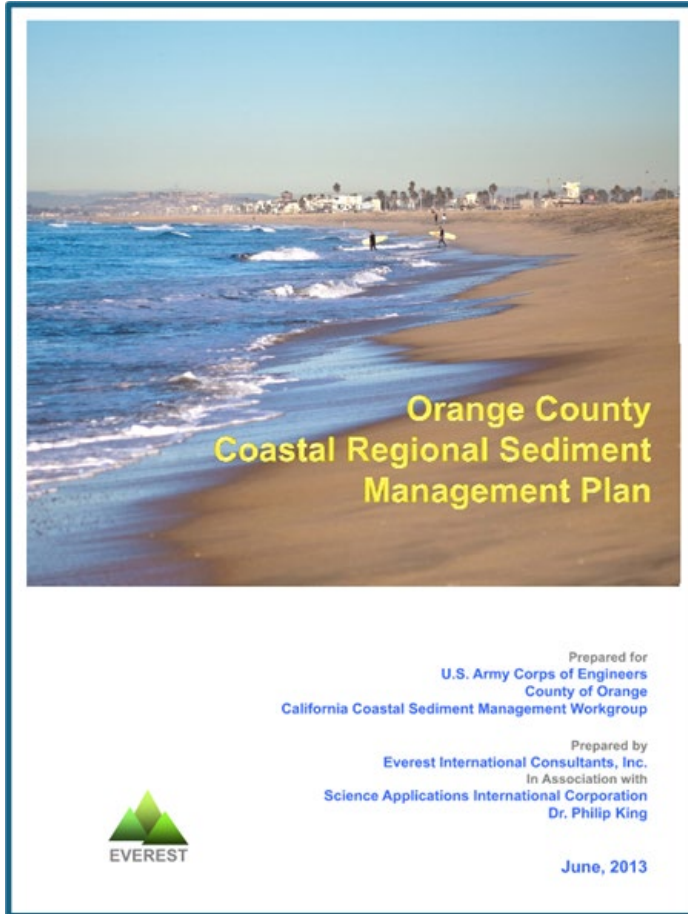
Mission

Foster greater cooperation toward the maintenance and enhancement of beaches. Decrease jurisdictional silos and increase collaboration for coastal resilience.

*The Orange County portion of the Oceanside Littoral Cell includes approximately 8 miles of beaches stretching from the shoreline headlands at Dana Point Harbor and south to the County line.

Goals/Objectives

- Increase **collaboration across jurisdictions, agencies, and stakeholders** for coastal resiliency projects along the Oceanside Littoral Cell.
- Identify **green, grey, and hybrid solutions** to retain sand and minimize coastal erosion. (i.e., groins, living shorelines, etc.)
- Support **regional projects** to mitigate the impacts of sea level rise and decrease coastal erosion through joint funding applications, agreements, and partnerships.
- Increase efficiency of taxpayer dollars and **decrease the individual financial burden** for jurisdictions and agencies.
- **Collect, share and analyze relevant data** and recommend activities to enhance coastal resiliency.
- Develop a **sand replenishment maintenance plan** and implementation strategy.



2013 Orange County Coastal Regional Sediment Management Plan



- California Coastal Sediment Management Working Group, USACE, and County of Orange developed.
- Plan forms a state-wide approach with other Department of Boating and Waterway regional plans throughout the State of California.
- Identifies strategies to manage sediment for the region.
- Assigns high, medium, and low priorities for pursuing those activities.

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2013 Orange County Coastal Regional Sediment Management Plan

Identified and prioritized activities to:

1. Monitor feedback to inform better decision making and improve the **Plan Performance**.
2. Conduct **Construction Activities**.
3. Improve **Governance & Regulations** to facilitate implementation.

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State of the Coast: Plan Performance

High	Medium	Low
Initiate Outreach & Education	High Fines Sediment Nourishment Pilot Study	Sea Level Rise Beach Sustainability Study
Improved Monitoring and Performance Evaluation		Sand Retention Feasibility Study
Data Gaps and Database		Update the Plan
		Update Sediment Budget for Laguna Beach Littoral Cell
		Study large grain size impacts at East Beach, Seal Beach
		Update Sediment Transport Studies for Southern California

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State of the Coast: Construction

High	Medium	Low
San Clemente Shoreline Project	Establish a Funding Stream to Accommodate Incremental Regional Sediment Management Costs	Orange County Dredge Ownership
Dana Point Harbor Dredging and Nearby Nourishment		Huntington Harbour Dredging with Beach or Nearshore Placement
Surfside-Sunset Beach Nourishment		
Newport Harbor & Bay Dredging & Beach Nourishment		
Bolsa Chica Maintenance Dredging and Huntington Cliffs Nourishment		
Santa Ana River and Huntington Beach Wetlands Dredging		
East Beach, Seal Beach Maintenance		
Prado Dam Bypassing to Santa Ana River		

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State of the Coast: Governance and Regulations

High	Medium	Low
Develop a Governance Structure	Establish a Dedicated Fund and Process for Implementing Coastal Regional Sediment Management	Investigate Methods to Assess and Mitigate for Upstream sand Mining
Establish County Position to Implement the Plan		
Develop a Pilot SCOUP within Orange County		

2023/2024: Beneficial Sand Re-Use

South Orange County has benefited from sand nourishment from the Santa Ana River at the following sites:

1. Capistrano/Doheny Beaches
45,000 CY 2023
2. Capistrano Beach
20,000 CY 2024
3. North Beach San Clemente
30,000 CY 2024



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2024: Northern Capistrano Bight Shoreline Dynamics Investigation



- Daniel T. Kahl, Jochen E. Schubert, and Brett F. Sanders research for Department of Civil and Environmental Engineering at University of California, Irvine
- Characterizes the spatial and temporal dimensions of beach loss in the area, infers what factors contribute to beach loss, and suggests steps to manage beach loss moving forward.
- Considers historical aerial imagery, satellite imagery, drone imagery, cross-shore transect data, wave data, and patterns of development.

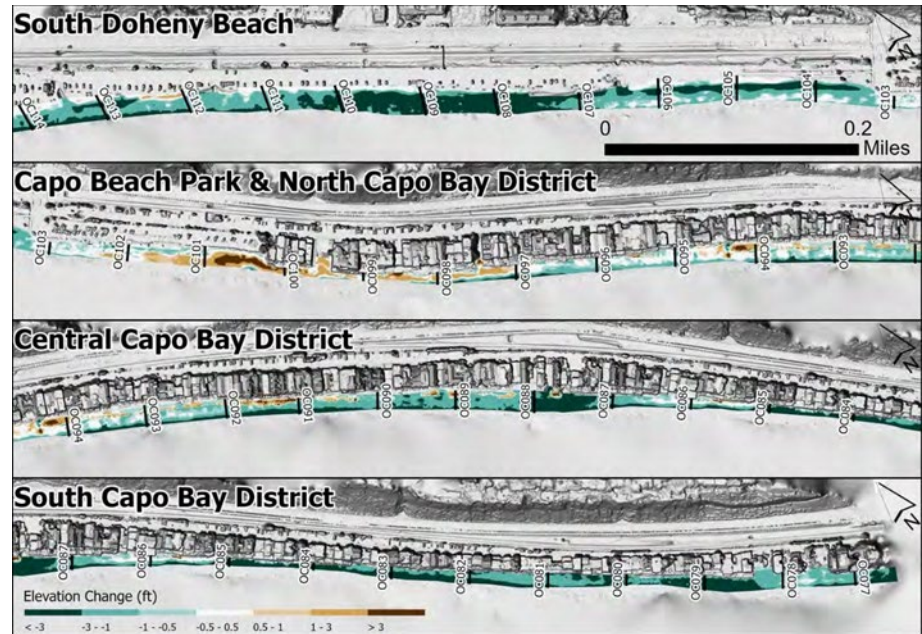


Figure 6.12. Cumulative elevation change between August 2023 and April 2024.

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2024: Northern Capistrano Bight Shoreline Dynamics Investigation



- Increasing amounts of shoreline retreat can be expected as a consequence of increasing amounts of sea level rise. Armoring will help to reduce the amount of shoreline retreat but may also degrade coastal habitats and reduce the availability and accessibility of beaches to the public.
- Beach nourishment should not be taken here to be a simple remedy to the negative impacts of armoring. Ideally, sufficient sand is placed to effectively bury coastal armoring and therefore limit its influence on nearshore hydrodynamics... Beach nourishment is also costly, - largely because of the high costs of transportation.
- Historical aerial imagery, satellite imagery, and drone imagery validate downcoast movement of sand with westerly wave action. This implies that Doheny State Beach has been acting as a “feeder beach” whose erosion supplies sand to downcoast beaches-most likely since the 1970s.

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New Projects Since the 2013 RSMP

- SANDAG Regional Beach Sand Project III
- Southern California Sand Collaborative (SCSC)
- Offshore Sand Source Investigation – City of San Clemente



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2024: South Orange County Regional Coastal Resilience Strategic Plan



June 2024
South Orange County Regional Coastal Resilience Project

South Orange County Regional Coastal Resilience Strategic Plan



1. Recommends creation a governance structure: “Formation of a regional, multijurisdictional, multiagency collaborative to implement a regional coastal resiliency program focused on public beach restoration through comprehensive and coordinated efforts.”
2. Identifies regional collaborative priorities:
 - a. Regional beach nourishment program
 - b. Potential sand sources
 - c. Prioritization of future projects
 1. Retention Structures
 2. Watershed analysis
3. Economic analysis: costs and benefits

2025-2030 Anticipated Projects

- Sand nourishment – OCTA
 - Off-shore sand source study – City of San Clemente
 - Beneficial re-use of sand from Prado Dam – OCWD
- San Clemente Sand Nourishment – USACE
- Dana Point Harbor Breakwater Project - USACE
- RBSP III - SANDAG
- Southern California Sand Collaborative – BEACON, LA County Harbors & Beaches, and SANDAG
- Capistrano/Doheny Nature-Based Shoreline – OC Parks



Beach Coalition: Action Plan/Next Steps

- Memorandum of Understanding (MOU)
 - Voting Members
 - Advising Partners
- Board of Supervisors item tentatively identified for October 28, 2025
- Advisory (vs. regulatory) body
- Monthly meetings for first six months, then quarterly meetings thereafter.



Future Discussion Topics

- Sediment movement through the littoral cell
- Beach attendance and access
- Sea level rise
- Identify Coalition guiding principles, policies, and initiatives
- Cost-benefit analysis of identified sand sources
- Dedicated fund approaches
- Economics of beaches
- Monitoring approaches: Satellite imagery, bathymetry, USGS shore profile surveys, transect surveys, Surfline cameras, CoastSnap, etc.
- Watershed/Sediment shed studies
- Physical, ecological, social, and cultural resource monitoring
- Others?



Discussion/Feedback



Thank you!

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