

# RE:BEACH

## OCEANSIDE

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RE:BEACH City Project Manager  
City of Oceanside



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## RE:BEACH BACKGROUND

### Phase 1 Beach Sand Feasibility Study (2020 – 2021)

- Preliminary Engineering Evaluation
  - Identified deficiencies in current coastal management
  - Determined suite of conceptual ideas to lessen beach erosion
- Recommendations
  - High-quality source of sand and beach nourishment program
  - Piloting of a sand retention structure(s) should be considered along with a sand nourishment program

### Phase 2 Sand Nourishment and Retention Pilot Project (2023-2026)

- Community and Stakeholder Engagement
- Baseline Monitoring Development
- Engineering, Analysis and Design of a Pilot Project
  - Preliminary design through a Design Competition (RE:BEACH Oceanside)
  - Final design and engineering
  - Plans and specifications
- Environmental Compliance and Permitting



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## RE:BEACH OBJECTIVES

### Primary Goals

- Restore sandy beaches in Oceanside with an innovative, multi-benefit project
- Increase efficiency and extend the benefits of sand management efforts



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## RE:BEACH COMPONENTS

### Jury and Advisory Panel

- Voting Members
  - Coastal Management
  - Permitting Viability
  - Surf Resource Preservation
  - Nearshore Marines
  - Coastal Cities Representatives
  - Community Representatives
- Non-voting Members
  - State Agencies
    - California Coastal Commission
    - California Coastal Conservancy
  - Non-governmental
    - Surfrider Foundation
    - Buena Vista Lagoon Audubon Society
  - Federal Agency

### Design Criteria

- Boundary to the scope of design
- Objectives/performance standards for design solutions to be measured against
- Criteria assessed
  - Physical
  - Environmental
  - Financial
  - Social
  - Regional

### Solicitation and Design Teams Selection

- 36 target and solicited firms
  - 6 teams formed
  - 3 Design Team Finalists

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# RE:BEACH OUTREACH

## Public Workshops

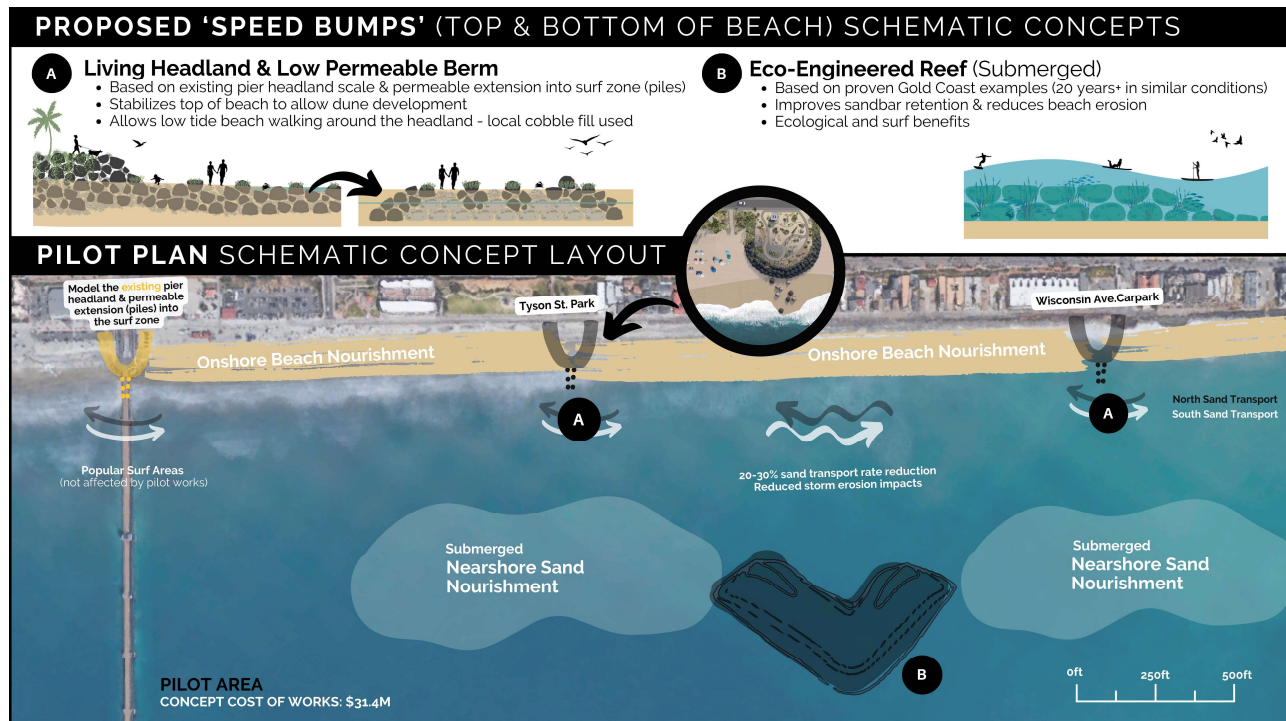


## Regional and Local Meetings and Events

Meetings	Date	Events/Conferences/Summits	Date
Oceanside Coastal Neighborhood Association	March 2023	Smart Coast Cities Summit	May 2023
Oceanside Chamber of Commerce	March 2023, November 2023	San Diego Regional Climate Collaborative	November 2023*
SANDAG Sediment Management Technical Task Force	September 2023	Headwaters to Ocean Conference	November 2023
Coastal Cities Meeting	October 2023, January 2024	Oceanside High School, Oceanography class	December 2023*
Visit Oceanside	November 2023	Beach Ecology Coalition	January 2024

\*Additional future outreach meetings are already scheduled with the SDRCC and El Camino High School for February and March 2024.

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# BEACH USABILITY

## SCHEMATIC CONCEPT LAYOUT



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## NEXT STEPS: YEAR 1 + 2

### Year 1:

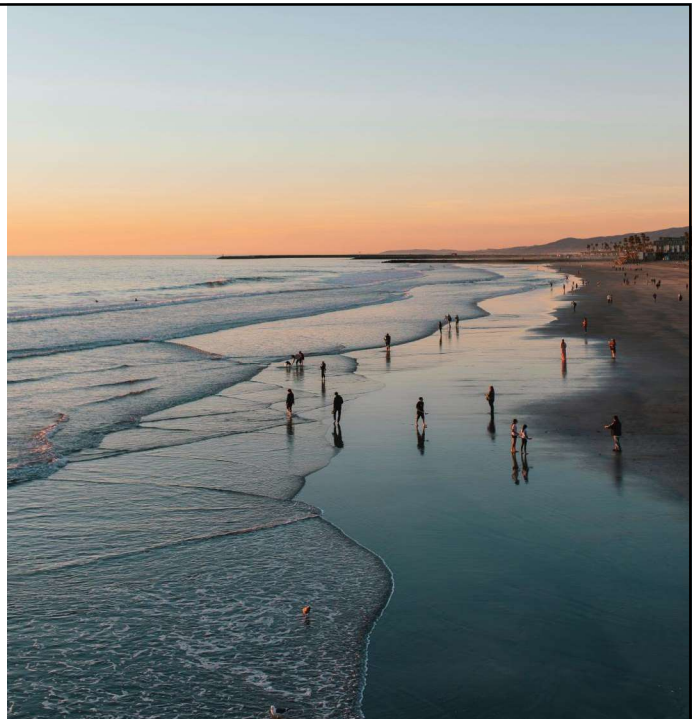
- Pilot Siting
- Evaluate & Refine Pilot System
- Modeling
- Develop Beach Nourishment Program
- Adaptive Management Plan
- Outreach

### Year 2:

- Final Engineering
- Environmental Compliance and Permitting
- Outreach

### GOAL:

Shovel-ready Project in 2026



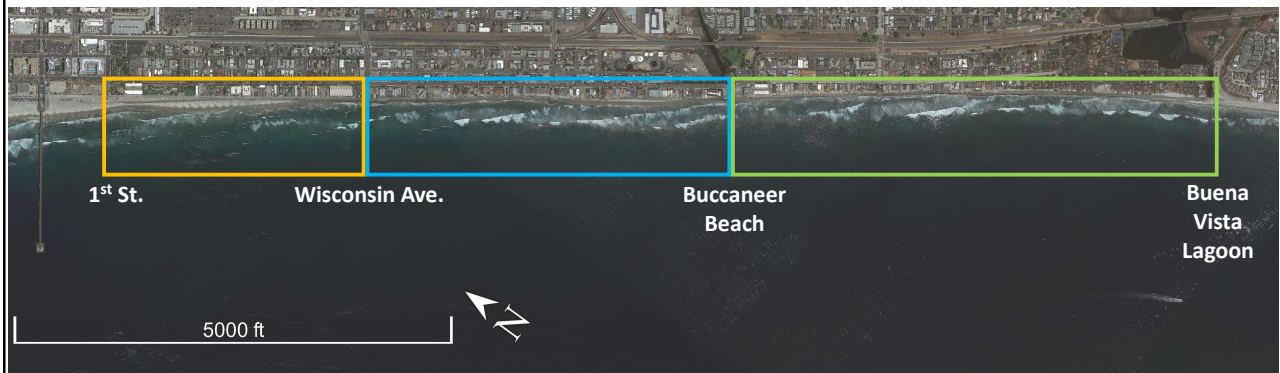
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## PILOT LOCATION

- Segment 1. 1<sup>st</sup> St. to Wisconsin Ave.
- Segment 2. Wisconsin to Buccaneer Beach
- Segment 3. Buccaneer Beach to Buena Vista Lagoon

### Key study considerations:

- Land ownership
- Ability to manage sand within and around pilot location
- Constructability and maintenance
- Potential for impacts to: biological resources, surf resources, or adjacent beaches



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## EVALUATE AND REFINE PILOT PROJECT

### **Refine Major Design Elements**

- Shoreline stabilization system details
- Landscape features

### **Sharpen Cost Estimate**

- Need to refine estimate considering constructability, materials, escalation, etc.
- Initial estimates, for comparison purposes
  - Cost range \$30-50M

### **Expand Baseline Monitoring**

- Surf conditions
- Beach attendance refinement

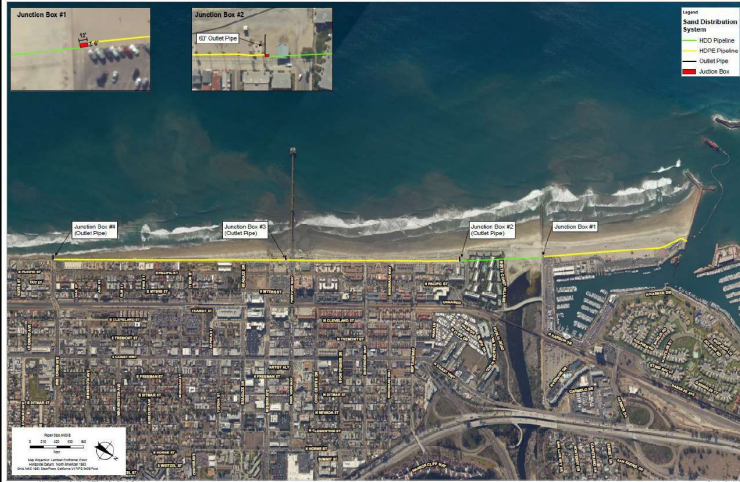


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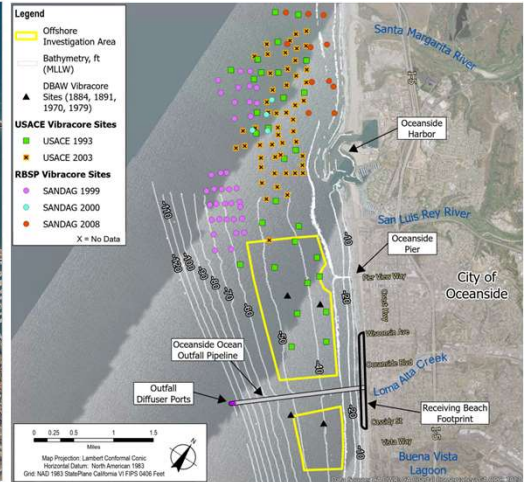


# DEVELOP BEACH NOURISHMENT PROGRAM

## Sand Delivery System

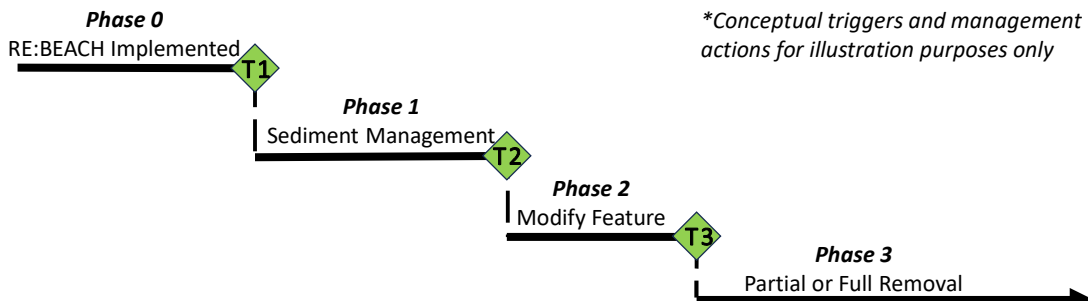


## Offshore Investigation



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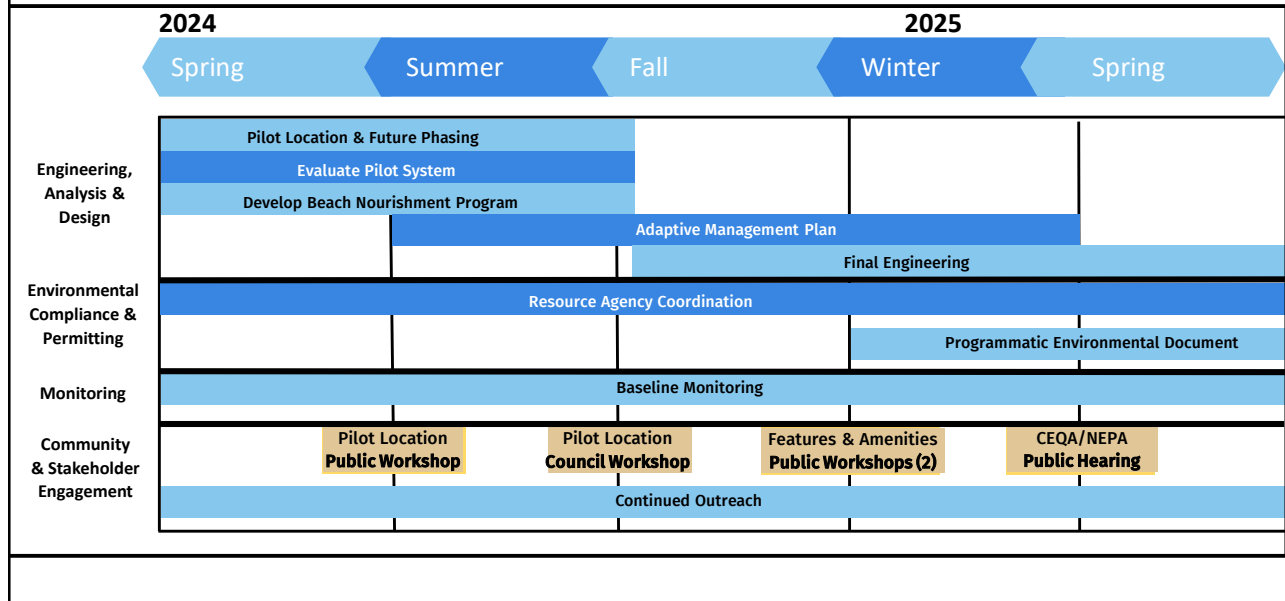
# CONCEPTUAL ADAPTIVE MANAGEMENT APPROACH



	Trigger	Action
T1	Measured reduction of beach width >Xft (over X years)	Add sediment downcoast of RE:BEACH feature; Analyze shorezone volume changes
T2	Shorezone volume significantly decreased beyond natural variability	Shrink, enlarge, change angle/orientation of feature, consider adding sediment downcoast once or programmatically
T2	Measured increase of beach width >Xft (over X years)	
T3	Persistent erosion (over X years) exceeds standard deviation from natural variability	Removal of some or all fixed aspects of feature
T3	Accretion and retention exceeds Xft of beach width (over X years)	Consider partial removal, fixed bypass system, and other modifications

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# PROJECT TIMELINE



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## BIG THANK YOU!

### Project Team

- GHD
  - Brian Leslie, Senior Coastal Scientist
  - Nick Sadrpour, Senior Coastal Scientist
- Resilient Cities Catalyst (RCC)
  - Sam Carter, Founder/Principal
- International Coastal Management (ICM)
  - Aaron Salyer, Principal and Director

### Competition Finalists

- Deltares/MVRDV
- SCAPE/ESA



[www.rebeach.org](http://www.rebeach.org)



### Project Collaborators

- SANDAG and SPWG Chair, Dwight Worden
- All Jury Members
  - California Coastal Commission
  - Oceanside Boardrider's Club
  - Surfrider
- Save Oceanside Sand
  - Beach surveys
  - Education and outreach
- San Diego Regional Climate Collaborative (SDRCC)

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