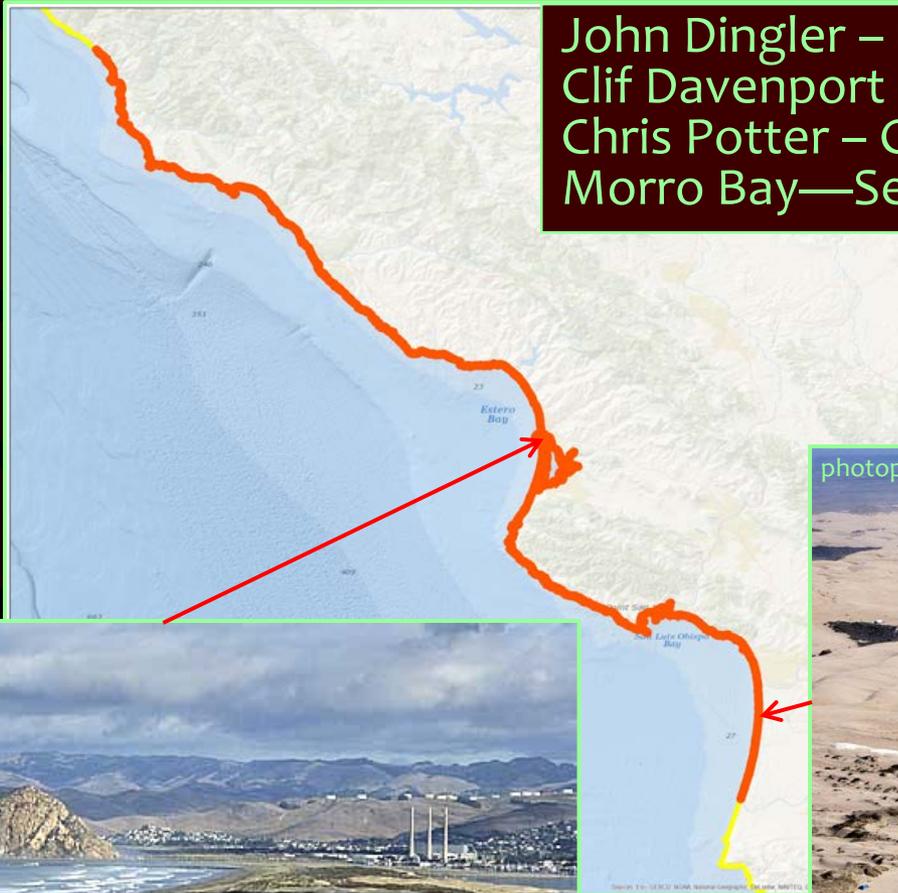


Coastal Sediment Management Workgroup Coastal Regional Sediment Management Plan San Luis Obispo County

John Dingler – USACE San Francisco District
Clif Davenport – CA Geological Survey
Chris Potter – CA Natural Resources Agency
Morro Bay—September 19, 2013



Coastal Sediment Management Workgroup

Mission

Conserve, restore, and protect California's coastal resources by developing and facilitating regional approaches to managing sediment imbalances.

Goals

- Reduce shoreline erosion and coastal storm damages*
- Restore and protect beaches and coastal habitats by restoring the natural sediment supply from rivers, impoundments, and other sources to the coast*
- Optimize the use of sediment from ports, harbors, and other opportunistic sources*



Coastal Sediment Management Workgroup

Federal Participation

- USACE - South Pacific Division (co-chair)
- USACE - Los Angeles District
- USACE - San Francisco District
- U.S. Geological Survey
- U.S. Environmental Protection Agency
- Bureau of Ocean Energy Management, (formerly MMS)
- National Oceanic Atmospheric Administration
- National Ocean Service
- USACE-ERDC
- USACE-IWR

A collaborative taskforce of state, federal, regional, and local entities

- Initiated in late 1999
- MOU South Pacific Division & State Natural Resources Agency: RSM
- Leverage State & Federal Funds
- Collaborate on Coastal Sediments Activities
- Prepare a Adaptive Sediment Master Plan
- Restore Beach and Coastal Health
- Share information, including common data bank

State Participation

- Natural Resources Agency (co-chair)
- Dept. of Boating & Waterways
- Coastal Commission
- Coastal Conservancy
- Parks & Recreation
- State Lands Commission
- California Geological Survey
- Dept. of Transportation
- Dept. of Fish and Wildlife
- SF Bay Conservation and Development Commission
- State Water Resources Control Board

Advisory

- CAL COAST (LOCAL AGENCIES)
- CMANC (PORTS & HARBORS)

Implementation Assistance

- Regional Planning JPAs



California Sediment Master Plan Strategies for Implementing Regional Sediment Management Plans Along the California Coast



Coastal Sediment Master Plan

www.dbw.ca.gov/csmw/default.aspx

THE CALIFORNIA COASTAL SEDIMENT MASTER PLAN

Status Report

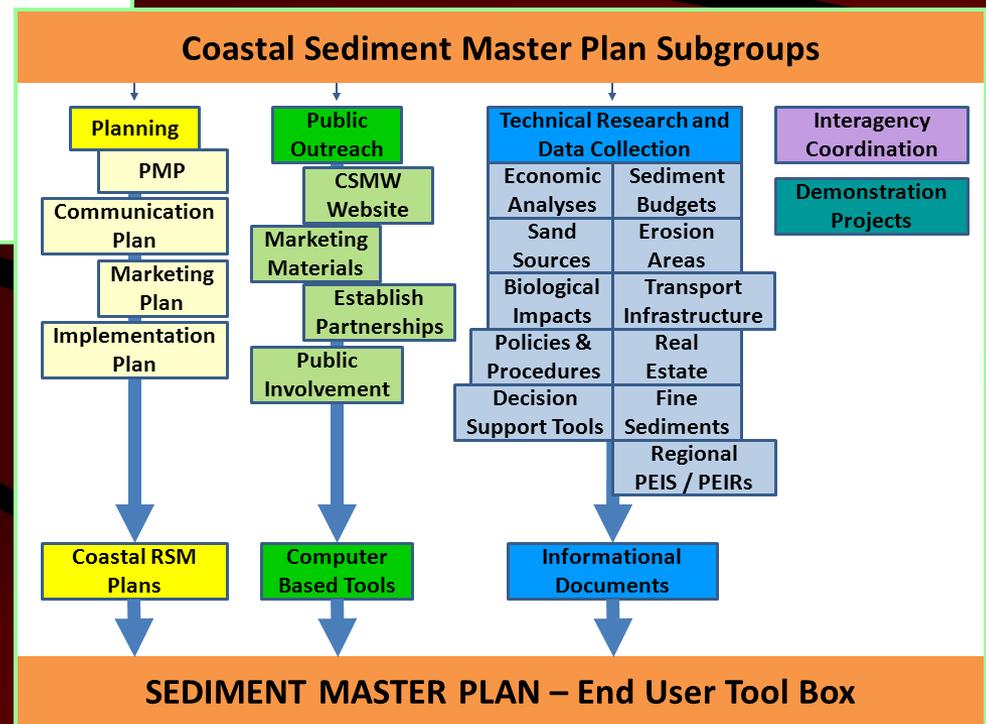
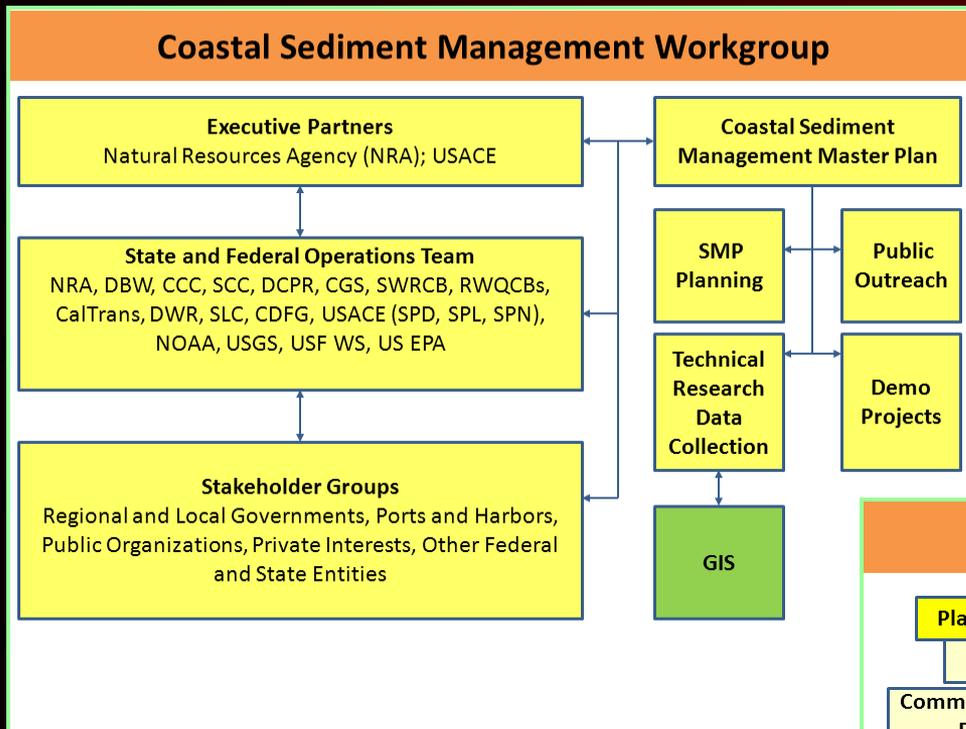


PREPARED BY
California Coastal Sediment Management Workgroup
May 2012

<http://www.dbw.ca.gov/csmw/default.aspx>



Coastal Sediment Master Plan

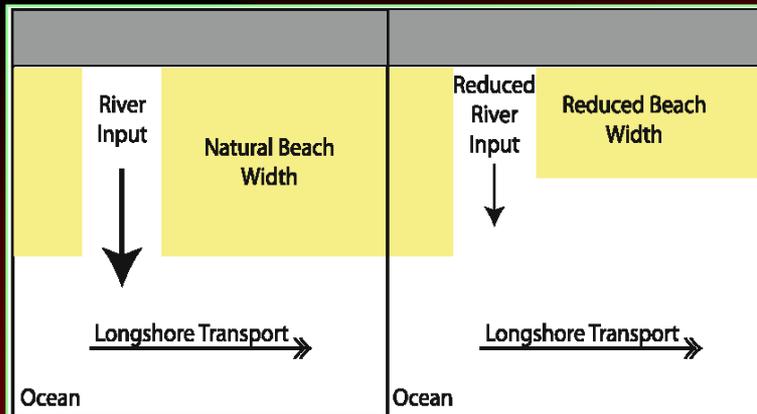
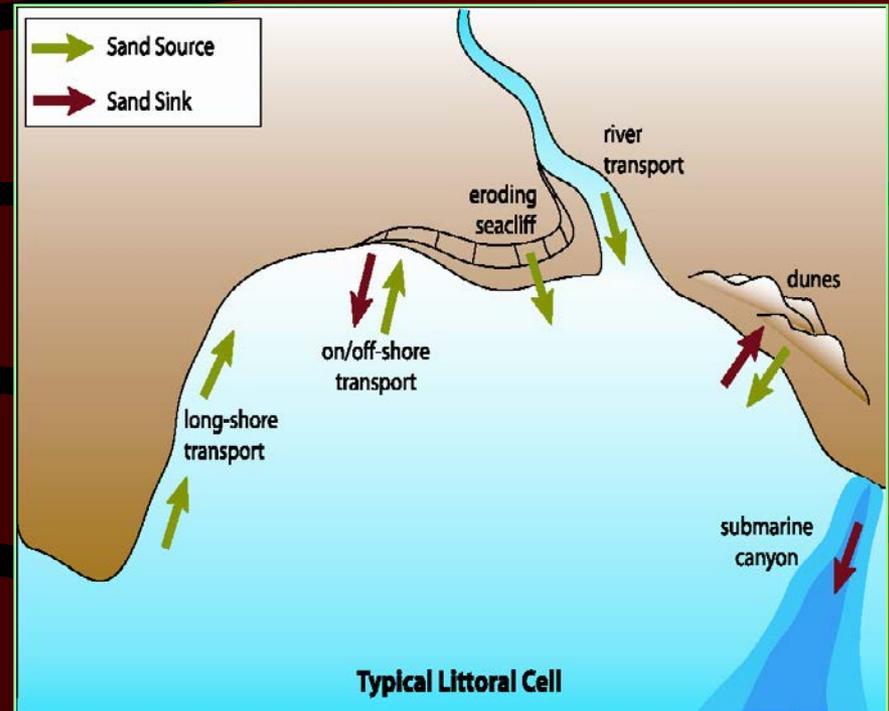
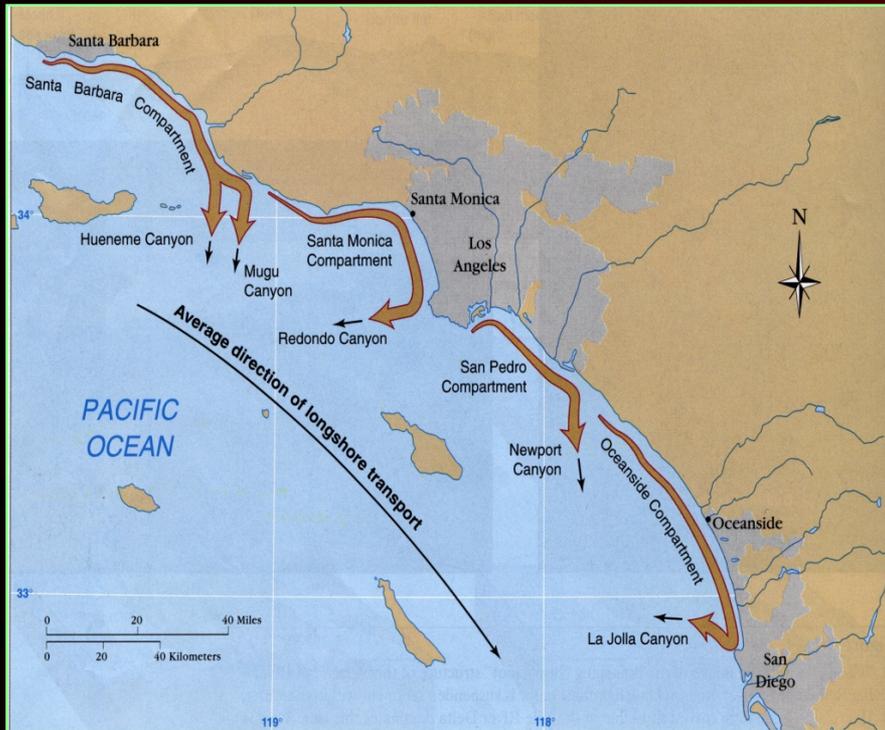


Decreased Sediment Supply

- Dams, Debris basins
- Channelized rivers
- Coastal Armoring
- Sand & Gravel Mining
- Wetlands, harbors



Littoral Cells and Beach Width



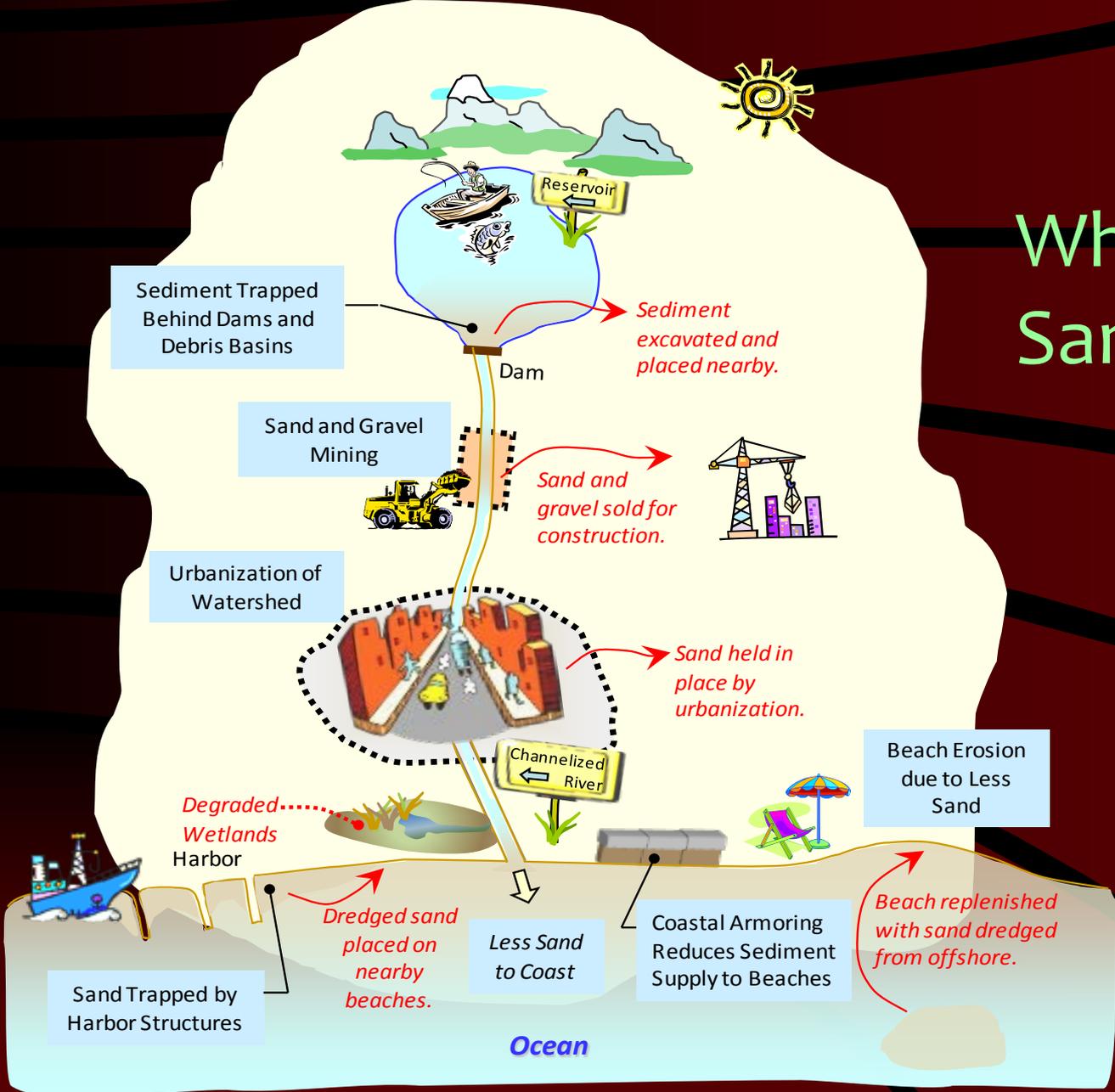
Sources of Sand	Sinks for Sand	Balance
Longshore Transport in	Longshore Transport out	Accretion
River Inputs	Offshore Transport	Erosion
Seacliff or Bluff Erosion	Dune Growth	Equilibrium
Gully Erosion	Sand Mining	
Onshore Transport	Submarine Canyons	
Dune Erosion		
Beach Nourishment		

Source- Patsch, 2007

California Littoral Cells

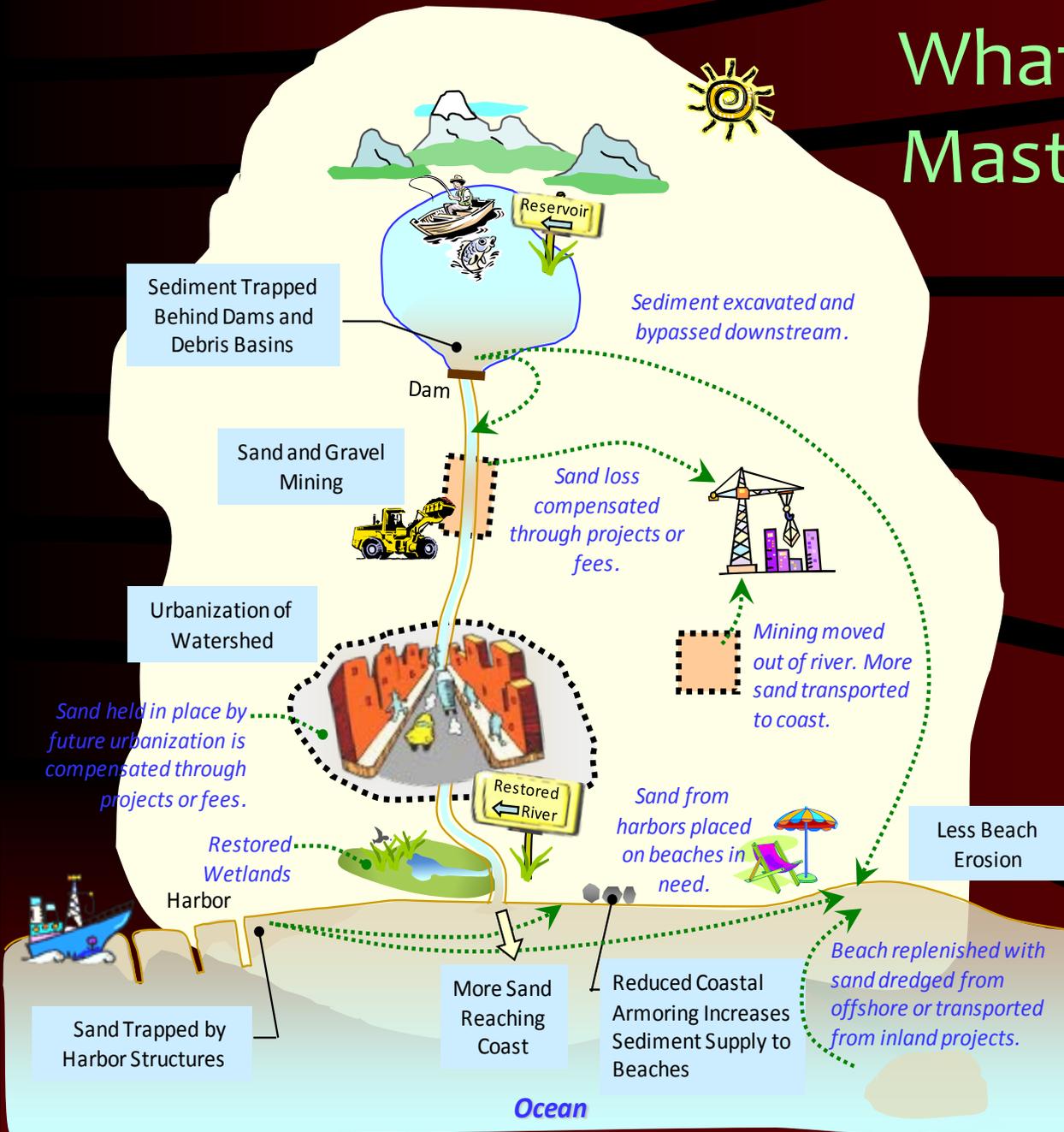


Where's the Sand going?



Existing Sediment (Sand) Management

What the Sediment Master Plan Will Do



- Improve beach conditions and reduce erosion attributed to human causes
- Improve wetland quality
- Improve water quality
- Improve the use of federal and state agency resources and the formulation of regional solutions
- Optimize project execution by programmatically assessing environmental impacts of regional coastal projects
- Holistically integrate discrete solutions into comprehensive regional solutions

SMP On-Going Activities & Products

- Analysis of Impacts and Recommended Mitigation for Critical Species and Habitats: *Guide for Environmental Documentation*
- Beach Nourishment Reference Guide: *Guidance for local coastal stakeholders*
- Beaches, Littoral Drift, and Littoral Cells: *Understanding California's Shoreline and Beach Nourishment*
- Biological Impacts analysis and Recommendations
- California Beach Restoration Strategy
- Coastal Sediment References Database
- Coastal RSM Plans and Environmental Documents
- Coastal Sediment Benefit Analysis Tool (CSBAT)
- Conceptual Plan to Capture/Reuse Coastal Sediments Lost to Submarine Canyons
- CSMW Website
- Development of Sand Budgets for California's Major Littoral Cells
- California Beach Erosion Assessment Survey

- GIS User's Survey
- Initial Data Inventory and Collection - GIS Database
- Mud Budget Final Report- Fine Grained Sediment Sources, Transport and Sinks: Phases 1 and 2
- Policies, Procedures and Regulations Analysis
- Public Outreach including Multiple Workshops
- Sand Compatibility and Opportunistic Use Program (SCOUP) – Guidance for upland opportunistic regional programs
- Sand Lost from Dams
- SMP Brochure and Project Sheets
- SMP Baseline and Status Reports
- The Economics of Regional Sediment Management in Ventura and Santa Barbara Counties
- WebMapper tool
- West Coast Shoreline Risk and Uncertainty Workshop and Technical Note

Informational Document- SCOUP

Develop protocols to facilitate compatibility comparisons for potential sources and receiver sites and assess regional approaches for reuse of upland sands



**FINAL SAND COMPATIBILITY AND
OPPORTUNISTIC USE PROGRAM PLAN**

prepared for:

SANDAG
401 B Street
Suite 800
San Diego, CA 92101-4231

prepared by:

MOFFATT & NICHOL
3780 Kilroy Airport Way,
Suite 600
Long Beach, CA 90806

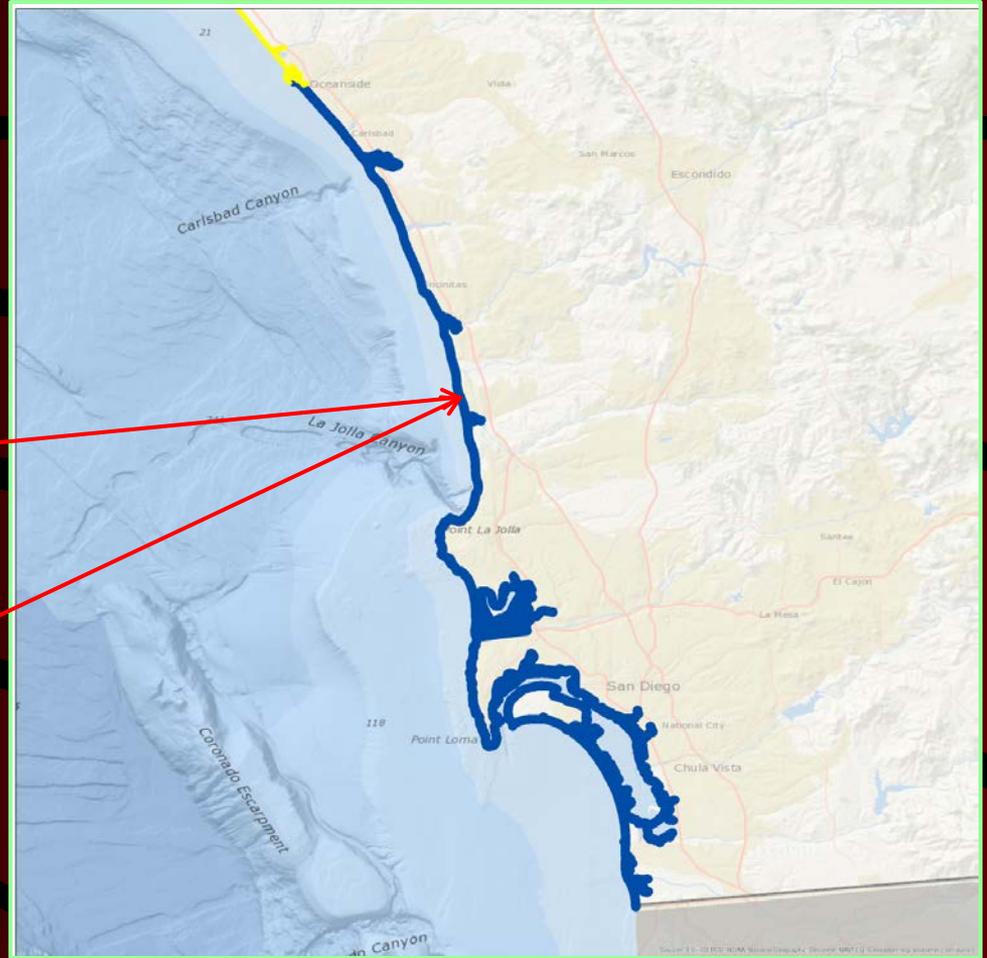


Coastal RSM Plan Development

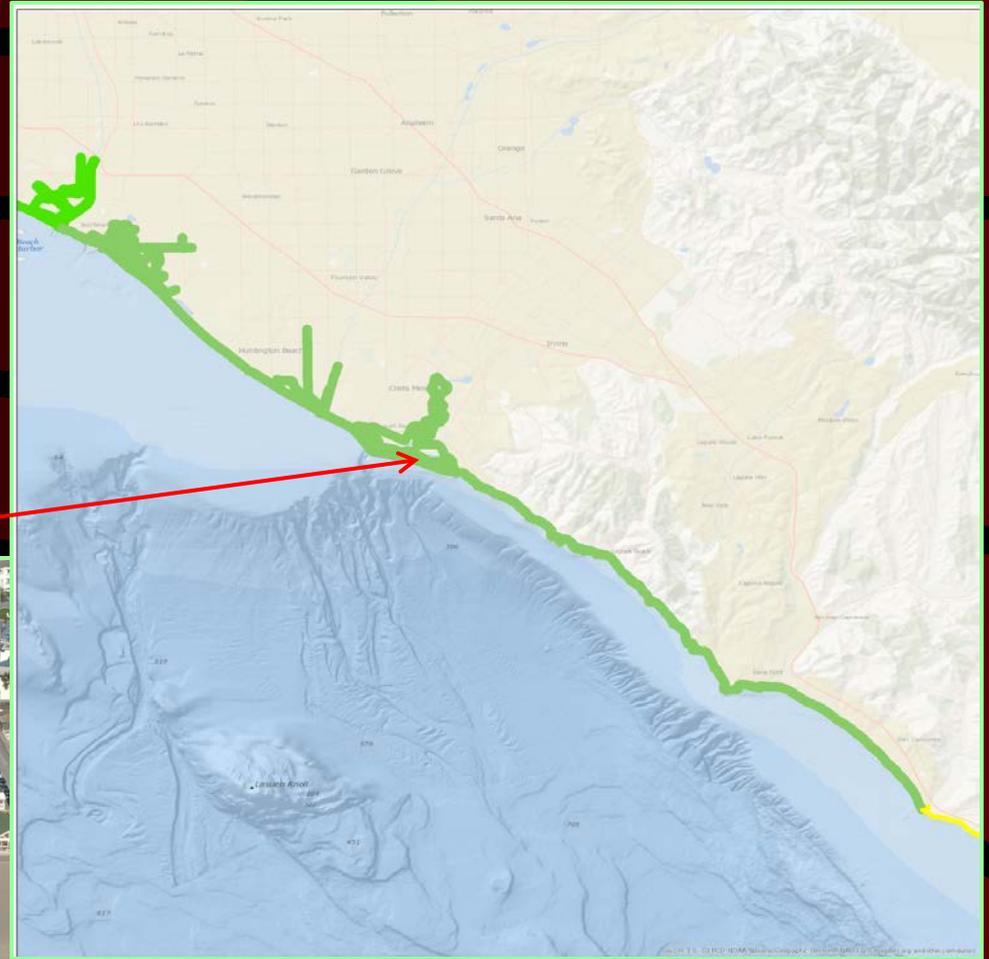


- Formulate and seed regional consensus-driven sediment management policy and guidance
- Restore and maintain coastal beaches and other critical areas of sediment deficit
- Reduce the proliferation of protective shoreline structures
- Sustain recreation and tourism
- Enhance public safety and access
- Restore coastal sandy habitats
- Funded through CSMW members CNRA or USACE

SANDAG



Orange County



(Source: Adelman and Adelman 2002–2010).

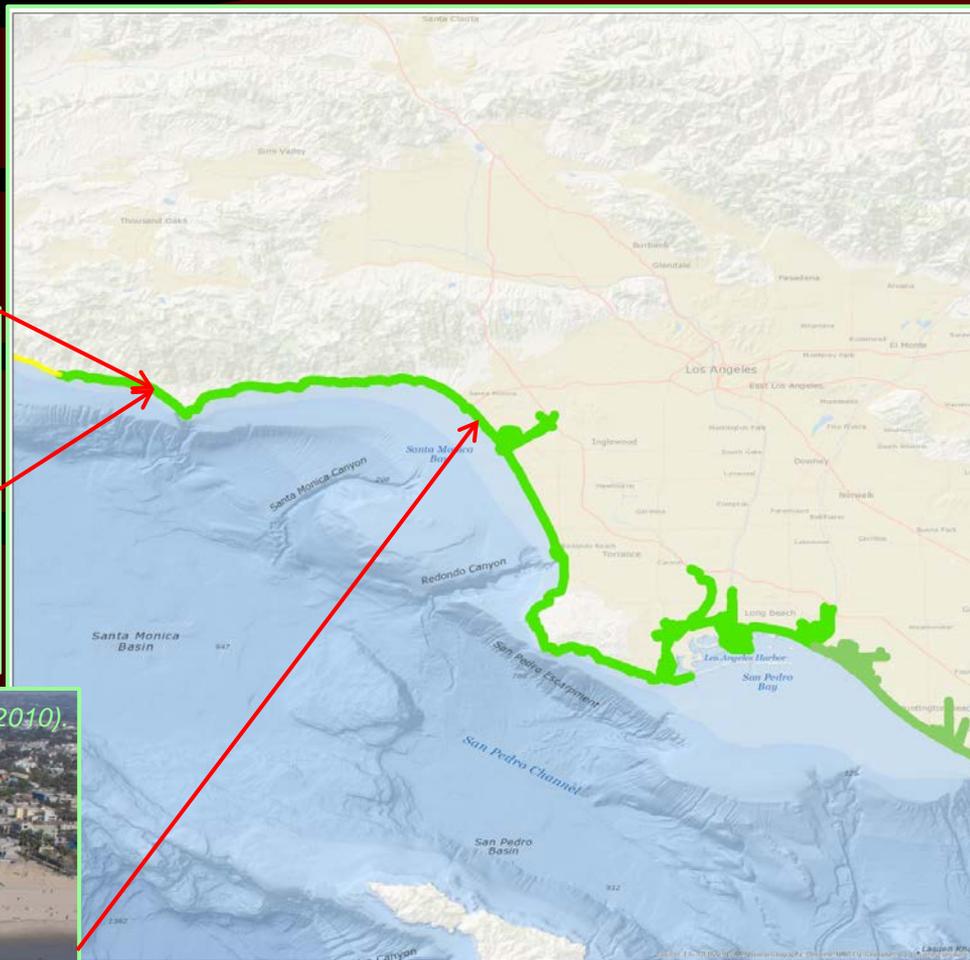
Los Angeles County

(Source: Ken Hively / LA Times)

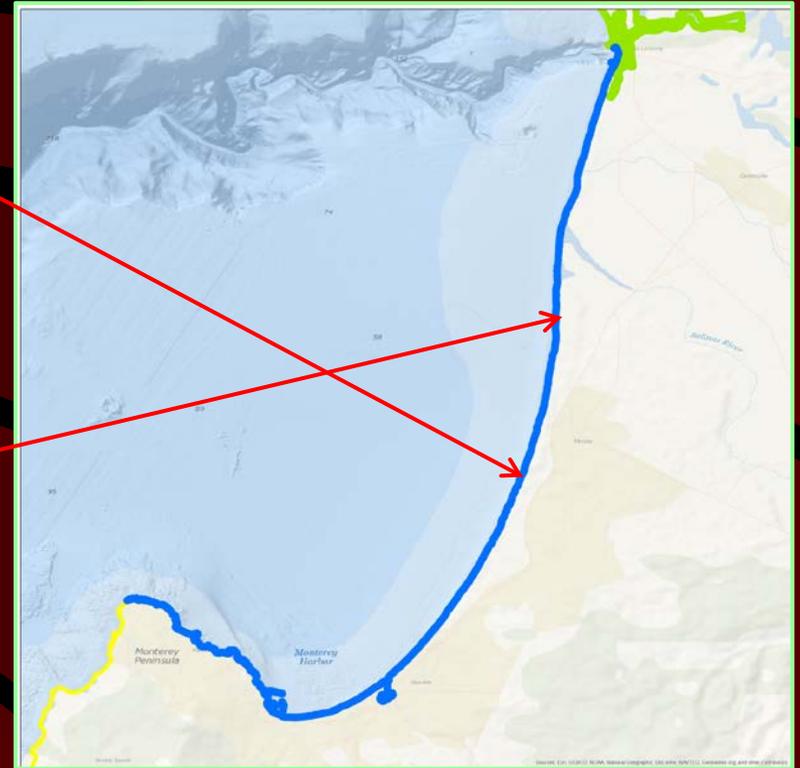


(Source: Hans Laert / Malibu Surfside News)

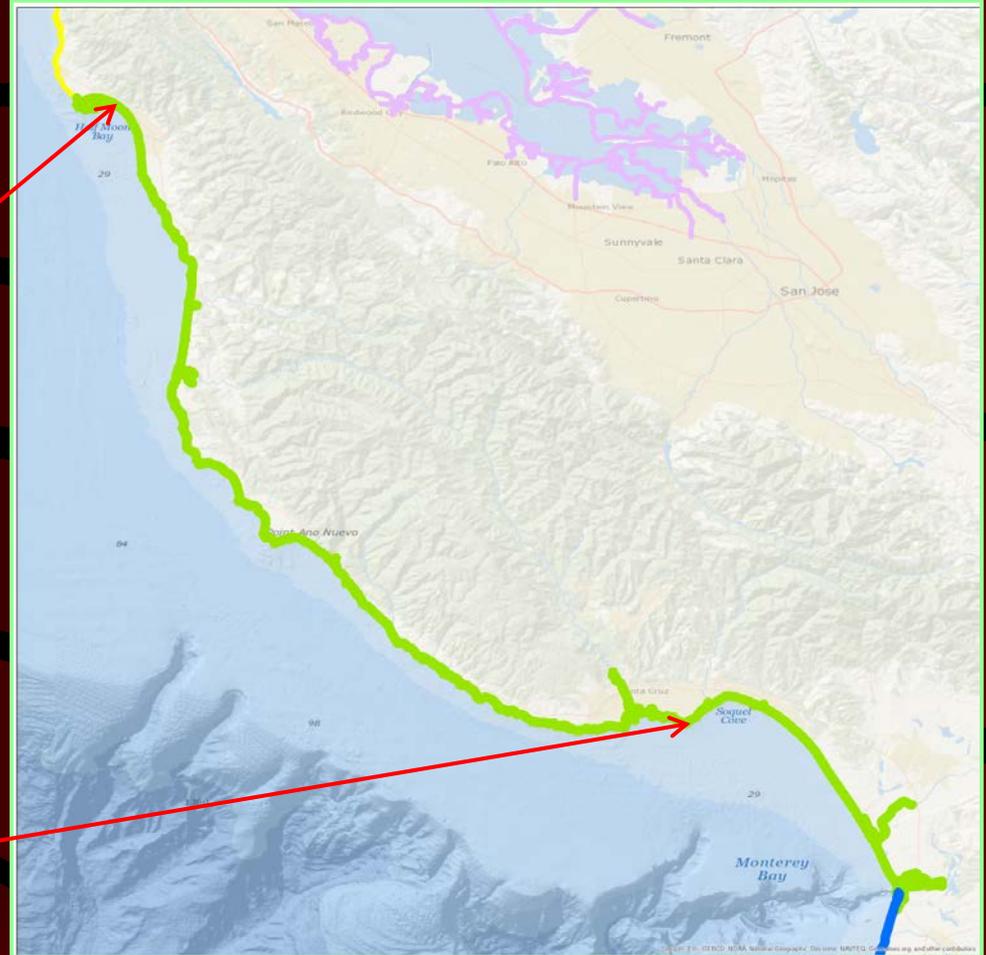
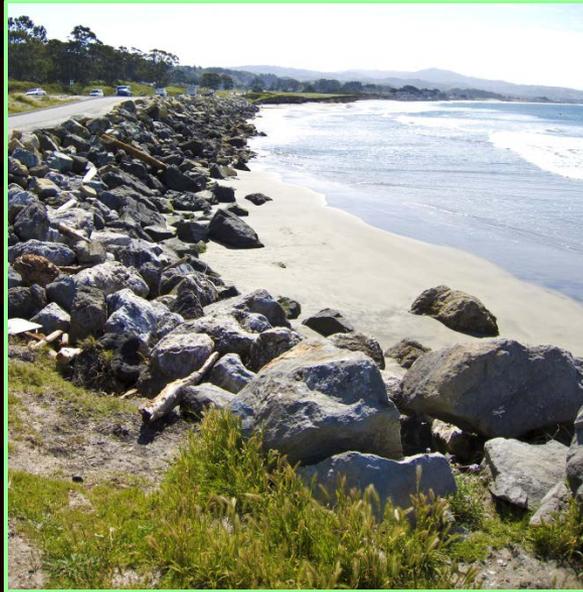
(Source: Adelman and Adelman 2002-2010)



Southern Monterey Bay

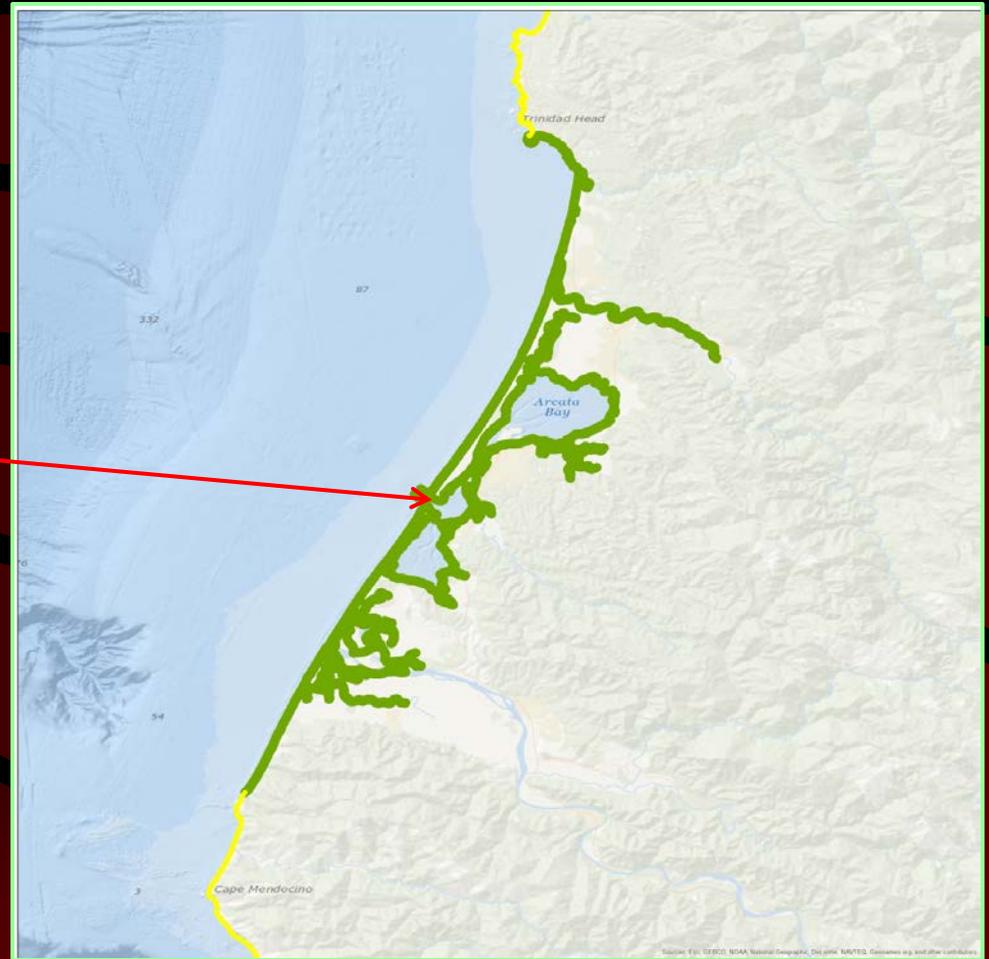
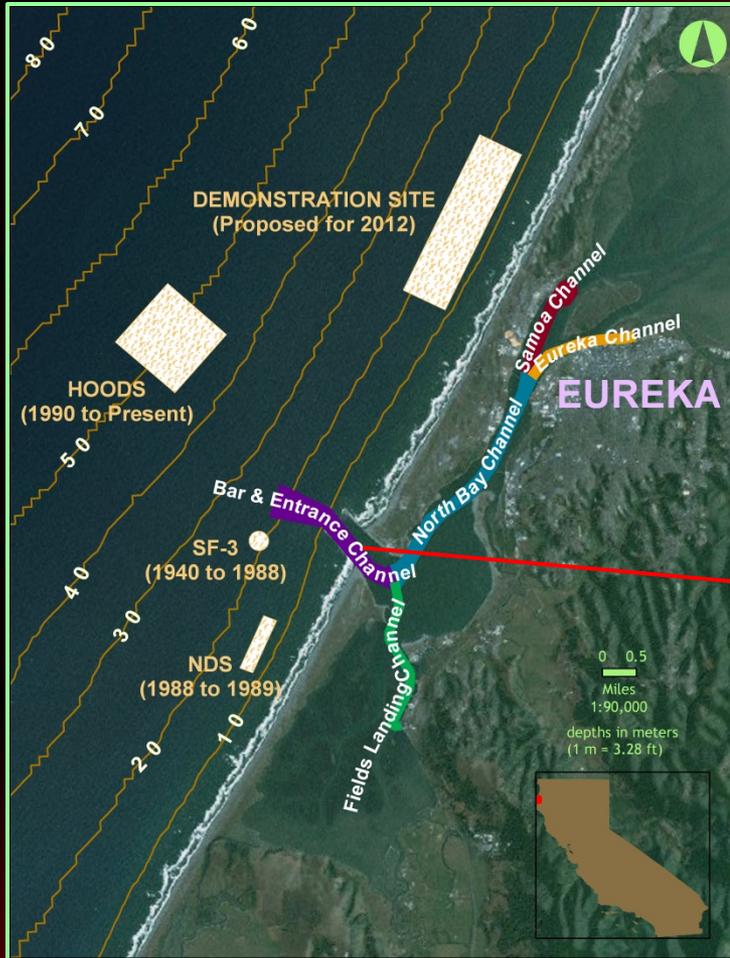


Santa Cruz Littoral Cell



(Source: Gary Griggs / Santa Cruz Sentinel, 2010)

Eureka Littoral Cell



San Luis Obispo County CRSMP Purpose

To develop a coastal regional sediment management plan (CRSMP) that provides sufficient information for decision makers to develop policies or execute management sub-plans for the future vitality of San Luis Obispo County beaches and shoreline areas.

