O.C. SAND COMPATIBILITY OPPORTUNISTIC USE PROGRAM (OCSCOUP) OR OPPORTUNISTIC BEACH NOURISHMENT IN O.C.

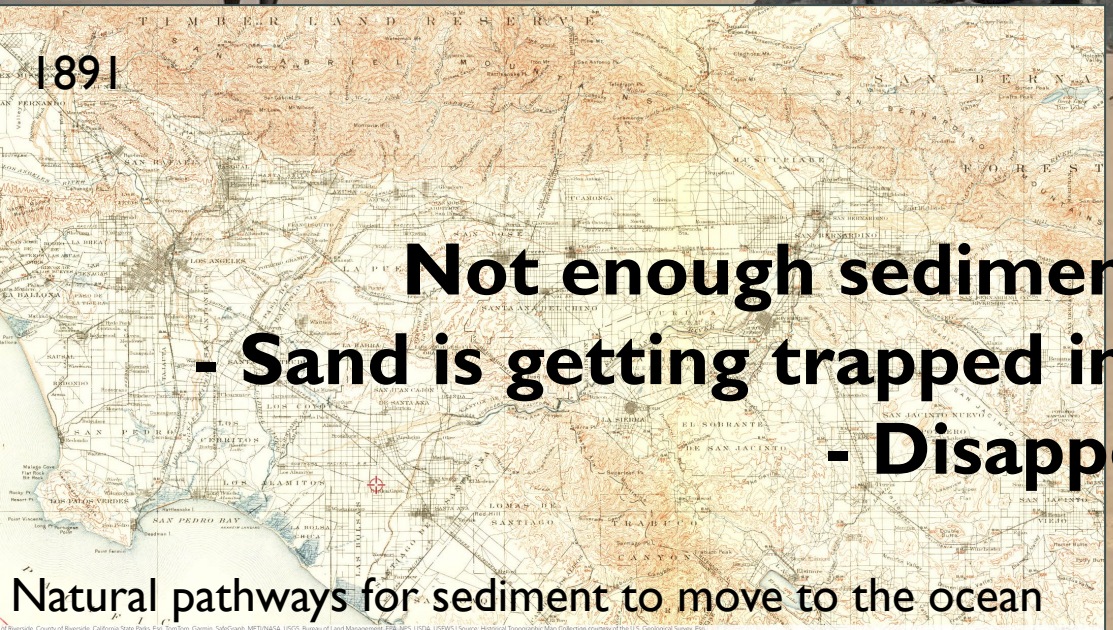
Giles Matthews, Regulatory Permitting Manager, OCPW

February 18, 2026

WHAT IS THE PROBLEM?

- Many of the beaches along the O.C. coastline are suffering from erosion.
- Beaches were naturally replenished from sediments derived from rivers and streams (as well as from coastal erosion and the ocean).
- Large scale modification of waterways and the coast has largely cut off the natural sediment supply by:

- Stabilizing channels in rock and concrete
- Urbanization locks in natural sediment runoff
- Constructing dams and basins
- Development on the back beach



Natural pathways for sediment to move to the ocean

Large-scale Urbanization, leading to loss of natural pathways for sediment to move to the ocean

Not enough sediment is making it to the coast!

- Sand is getting trapped in basins, dams and flood channels

- Disappearing Beaches

WHAT IS A SCOUP?

- A SCOUP creates the framework for regulatory permits to place beach quality sand on beaches, providing preauthorized protocols, safeguards, and other environmental clearances.
- Originally conceived in 1993 by San Diego Association of Governments (SANDAG)
- SANDAG Recommended Policy and Action to promote use of available sand sources for beach nourishment.

15,000 cubic yards of sand from flood control maintenance of Santa Ana River was placed on Crystal Cove State Beach for emergency protection of Park infrastructure.

WHAT IS THE O.C. SCOUP?

THE O.C. SCOUP & How Does it Differ From Other SCOUPs

- In O.C. we have regular sediment removal from OC Flood facilities with Beach Quality Sand, but no regulatory approvals to place sand beneficially on OC Beaches, e.g. maintenance of San Diego Creek (200,000 + cyds sand)
- OCPW does not own any beaches in O.C.

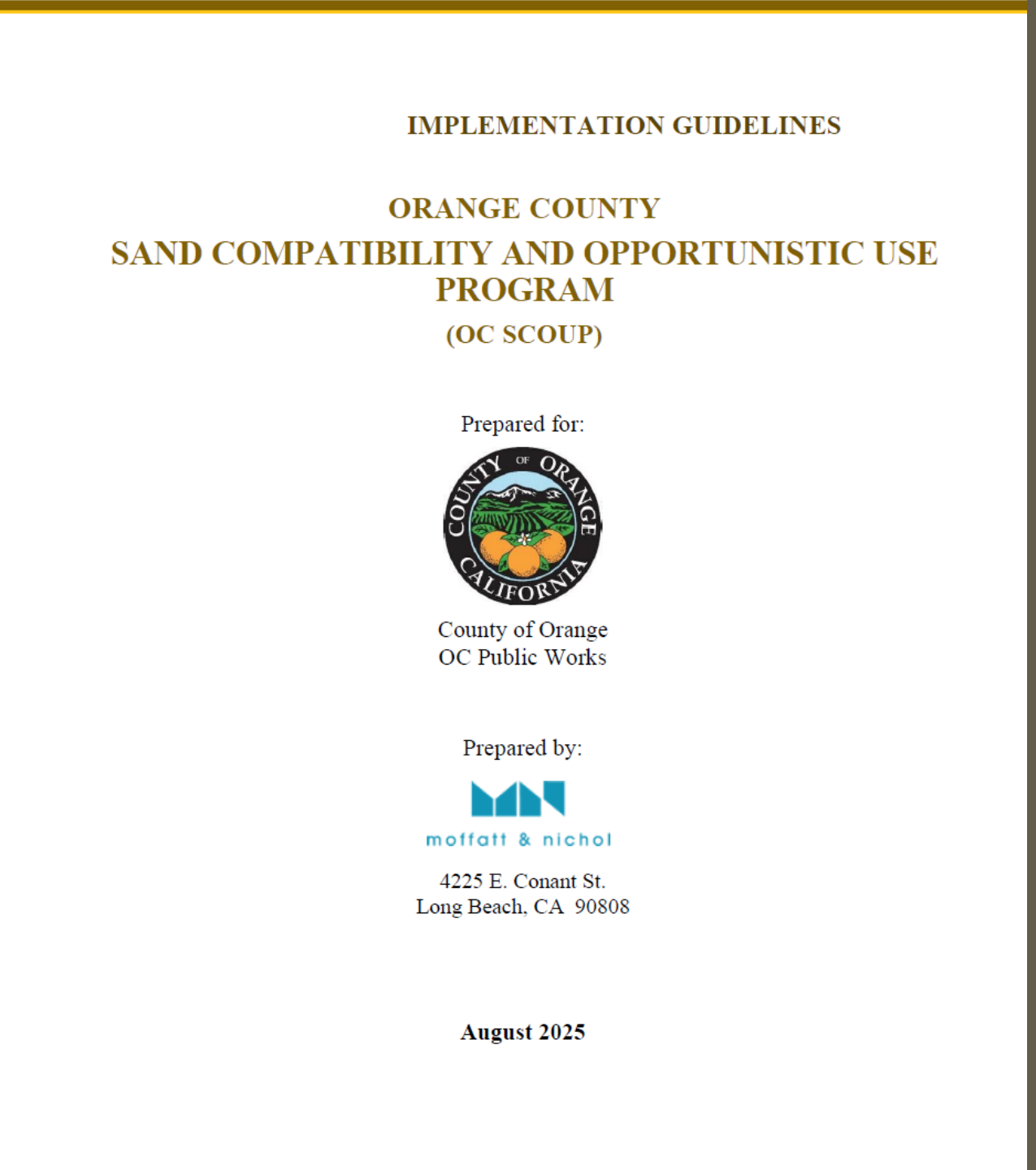
There was a disconnect between those who have sand (OCPW) and those that need sand in O.C. (Beach Cities, State Parks, O.C. Parks) resulting in no-one securing the necessary regulatory permitting

OCPW decided it needed to fix this problem

- The O.C. SCOUP aims to plug that hole by providing all regulatory approvals* to place sand on all beaches in Orange County that can benefit from sand placement.
- Removes the major hurdle of securing regulatory approval on an individual basis – can take years!
- **It will be the first SCOUP that covers virtually an entire County coastline & involves multiple entities!**

* Army Corps 404, SWQBC 401, Coastal Commission CDP, Cal. State Lands Commission Agreements

San Diego Creek, 2019


IMPLEMENTATION GUIDELINES

ORANGE COUNTY

SAND COMPATIBILITY AND OPPORTUNISTIC USE PROGRAM

(OC SCOUP)

Prepared for:

County of Orange
OC Public Works

Prepared by:

moffatt & nichol

4225 E. Conant St.
Long Beach, CA 90808

August 2025

SCOUP Implementation Guidelines

By Moffatt & Nichol

Outline of Guidelines:

- Defines purpose and need
- Sand placement design options
- Potential receiver sites
- Indicative maximum placement volumes, per site
- Some potential source sites
- Monitoring requirements
- Process for identifying & prioritizing sites
- Costs and funding

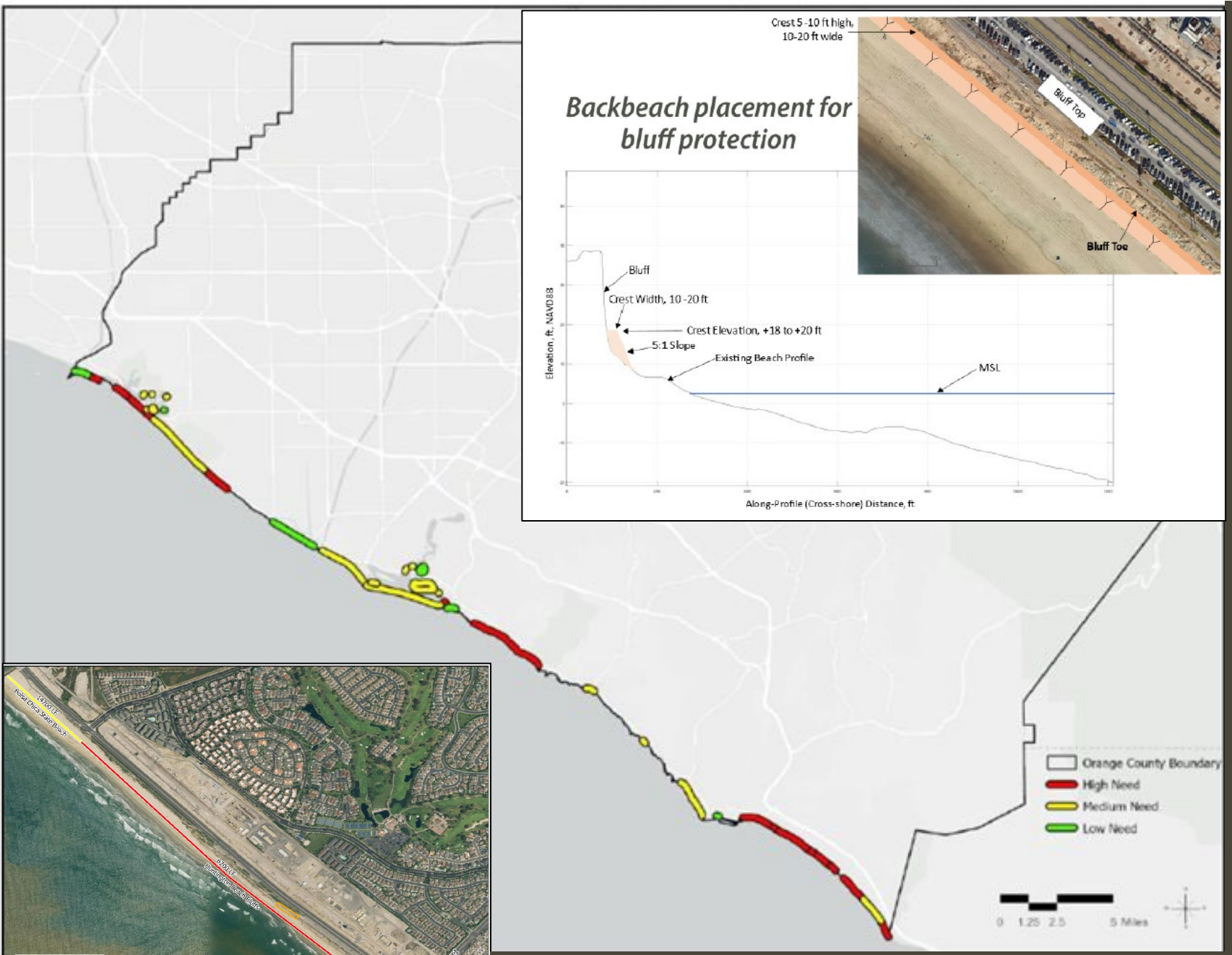
- Basis for CEQA MND & Permit Applications
- A Living Document – Will be updated as we learn.

FUNDAMENTAL AIMS OF THE OC SCOUP GUIDELINES

- Previous SCOUP efforts have struggled to implement projects due to the financial and logistical burdens imposed by the stringent regulatory requirements.
- The OC SCOUP aims "*to create an agreeable framework that conforms with regulatory requirements and also mitigates previous burdens in a way that may ultimately become the new standard for future SCOUP programs*"

Some major differences from other SCOUPs:

- Wide range and large number of potential beach receiver sites to maximize program flexibility and opportunistic use;
- Monitoring intended to be practical and actionable, e.g., identifying monitoring for the purposes of identifying any needed remediation or adaptive management actions;
- Less stringent criteria of sediment grain size; and
- A more efficient approval process that lays out requirements for individual placement sites



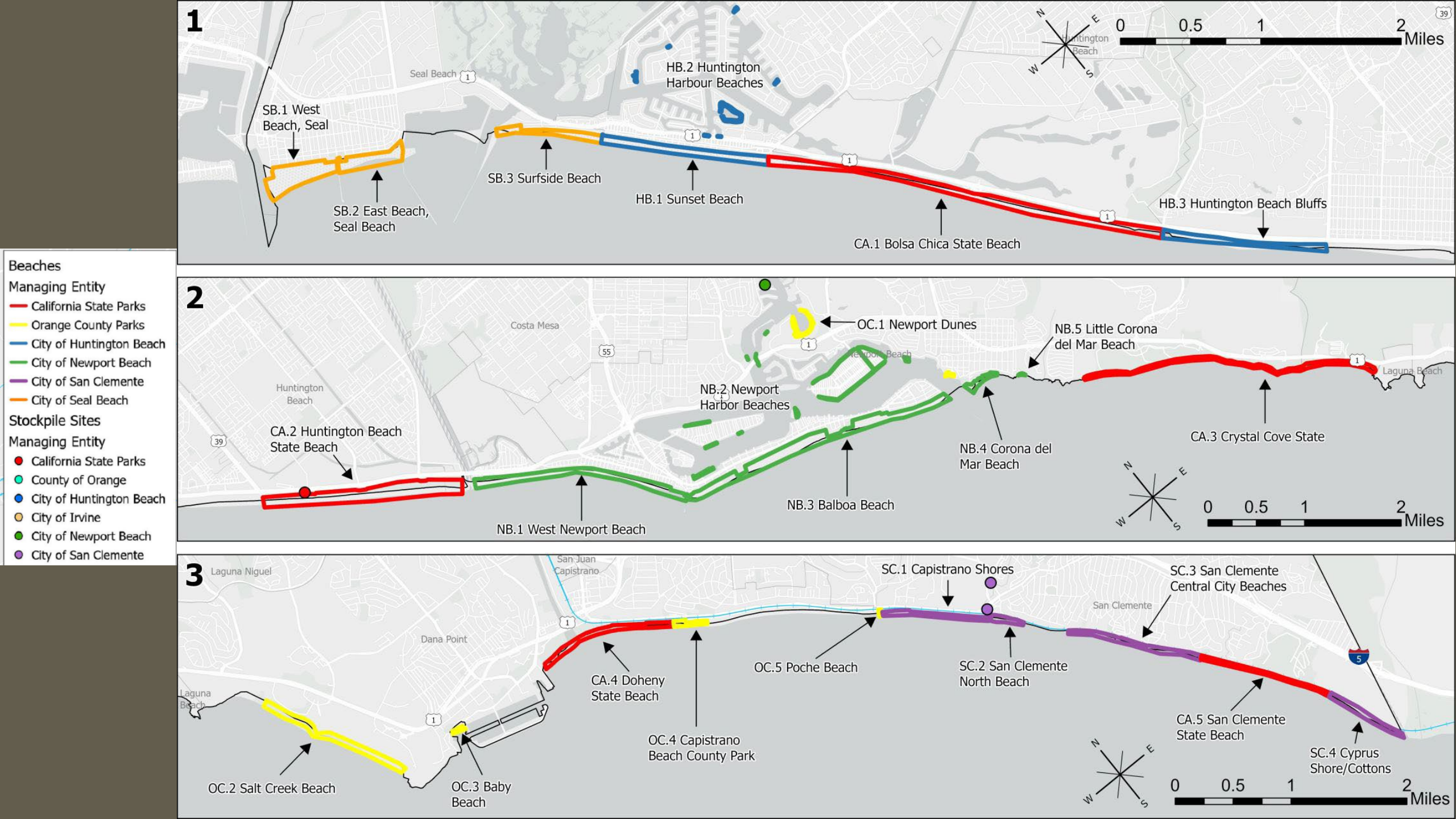
SCOUP RECEIVER SITES

Most beaches in OC proposed.

Some Marine Protected Areas may be restricted.

Details provided for each beach include:

- Facilities and resources
- High, Medium, and Low Need
- Maximum fill volume per year and per event
- Range of Design Profiles for Placement
- Transport options (road, rail)
- Monitoring requirements


Beaches
Managing Entity
California State Parks
Orange County Parks
City of Huntington Beach
City of Newport Beach
City of San Clemente
City of Seal Beach
Stockpile Sites
Managing Entity
California State Parks
County of Orange
City of Huntington Beach
City of Irvine
City of Newport Beach
City of San Clemente
1
Seal Beach
SB.1 West Beach, Seal
SB.2 East Beach, Seal Beach
SB.3 Surfside Beach
HB.2 Huntington Harbour Beaches
HB.1 Sunset Beach
CA.1 Bolsa Chica State Beach
HB.3 Huntington Beach Bluffs
Huntington Beach
0 0.5 1 2 Miles
2
Costa Mesa
Huntington Beach
Newport Beach
Laguna Beach
OC.1 Newport Dunes
NB.5 Little Corona del Mar Beach
NB.2 Newport Harbor Beaches
CA.2 Huntington Beach State Beach
NB.4 Corona del Mar Beach
CA.3 Crystal Cove State
NB.3 Balboa Beach
NB.1 West Newport Beach
0 0.5 1 2 Miles
3
Laguna Niguel
San Juan Capistrano
Dana Point
Laguna Beach
San Clemente
SC.1 Capistrano Shores
SC.3 San Clemente Central City Beaches
CA.4 Doheny State Beach
OC.5 Poche Beach
SC.2 San Clemente North Beach
CA.5 San Clemente State Beach
SC.4 Cyprus Shore/Cottons
OC.4 Capistrano Beach County Park
OC.2 Salt Creek Beach
OC.3 Baby Beach
0 0.5 1 2 Miles

SAND PLACEMENT DESIGN OPTIONS

- Where and how to place sand on the beach, depends on specific need:
  - On the dry beach as a beach berm
  - On the dry beach as a dyke
  - Below the mean high tide line
  - On the back beach as a dune
  - On the back beach as a cliff/bluff stabilization

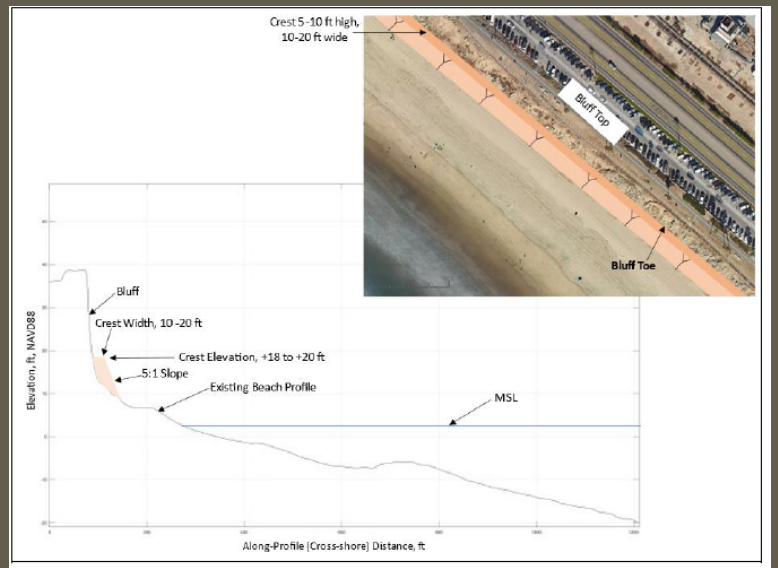


Figure 2-5 Backbeach Bluff/Cliff Stabilization Design Plan View and Cross Section

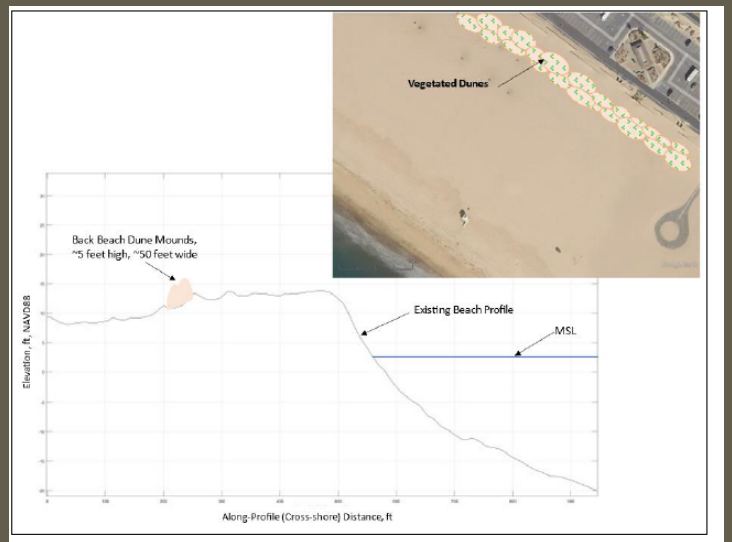


Figure 2-4 Backbeach Dunes Design Plan View and Cross Section

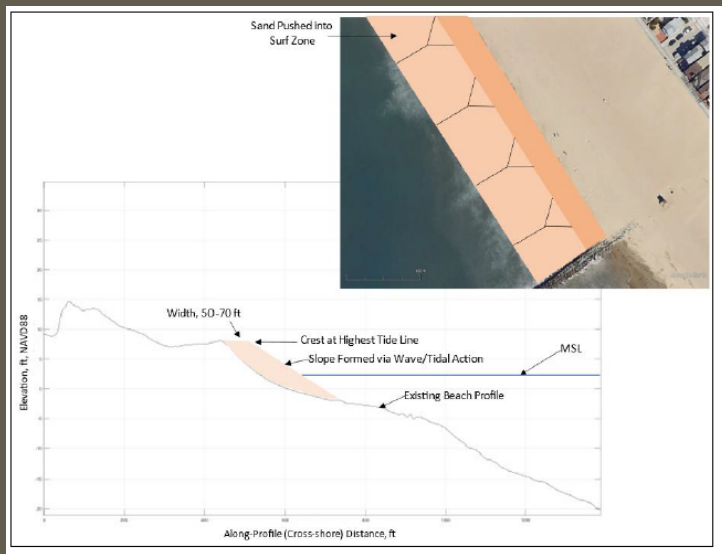


Figure 2-3 Below Mean High Tide Line Design Plan View and Cross Section

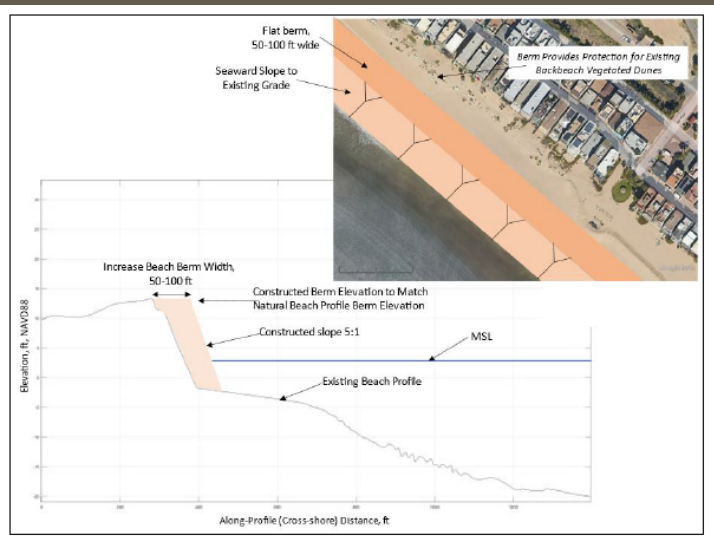
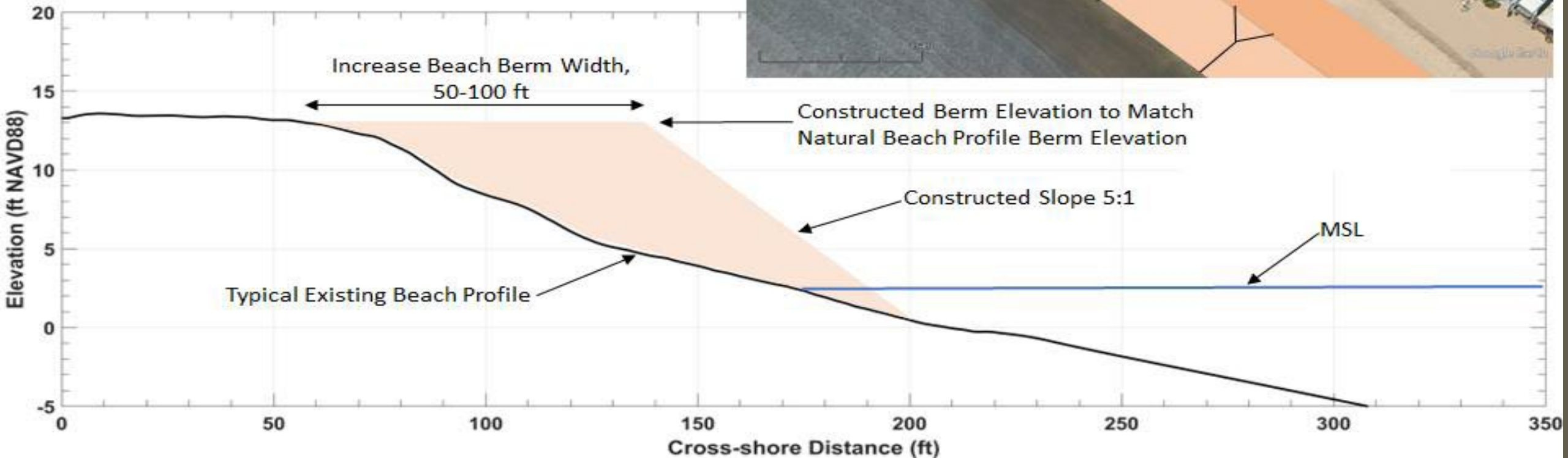


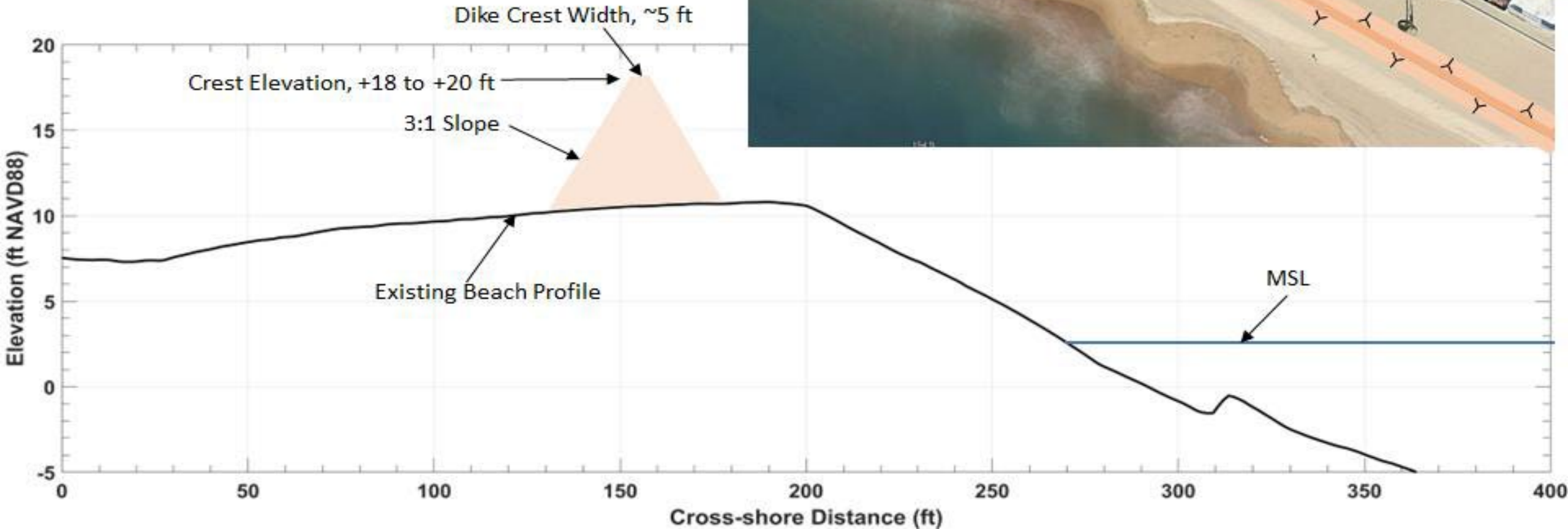
Figure 2-1 Beach Berm Design Plan View and Cross Section

BEACH BERM

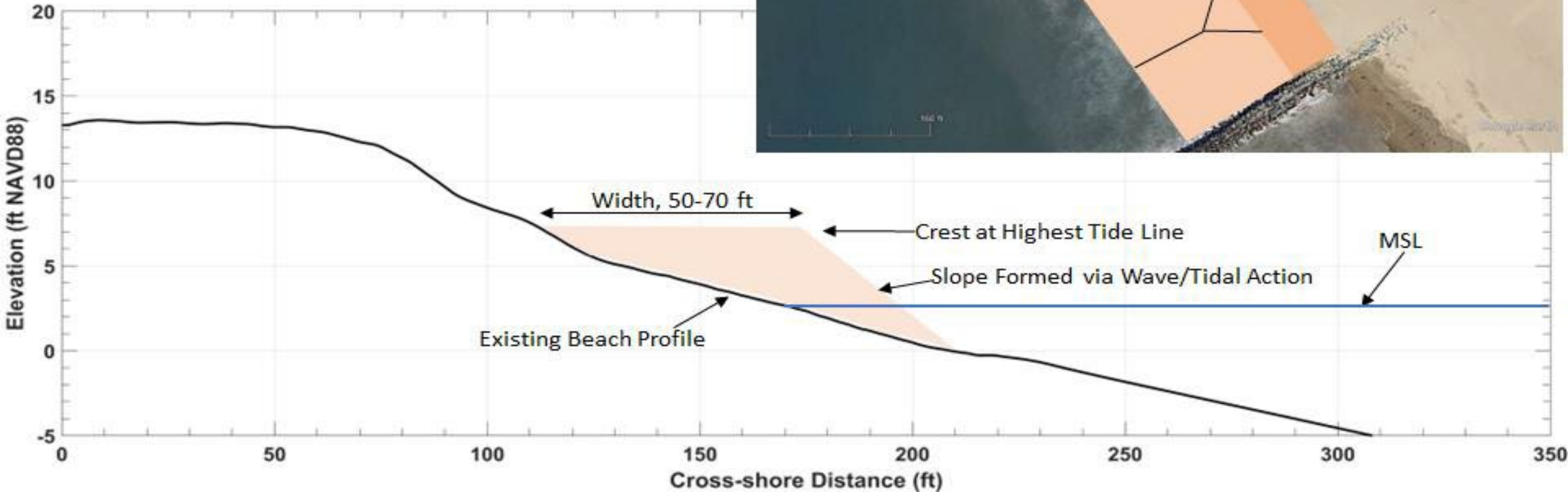

Flat berm,
50-100 ft wide
Seaward Slope to
Existing Grade
Berm Provides Protection for Existing
Backbeach Vegetated Dunes


Increase Beach Berm Width,
50-100 ft
Constructed Berm Elevation to Match
Natural Beach Profile Berm Elevation
Constructed Slope 5:1
MSL
Typical Existing Beach Profile
Elevation (ft NAVD88)
20
15
10
5
0
-5
0
50
100
150
200
250
300
350
Cross-shore Distance (ft)

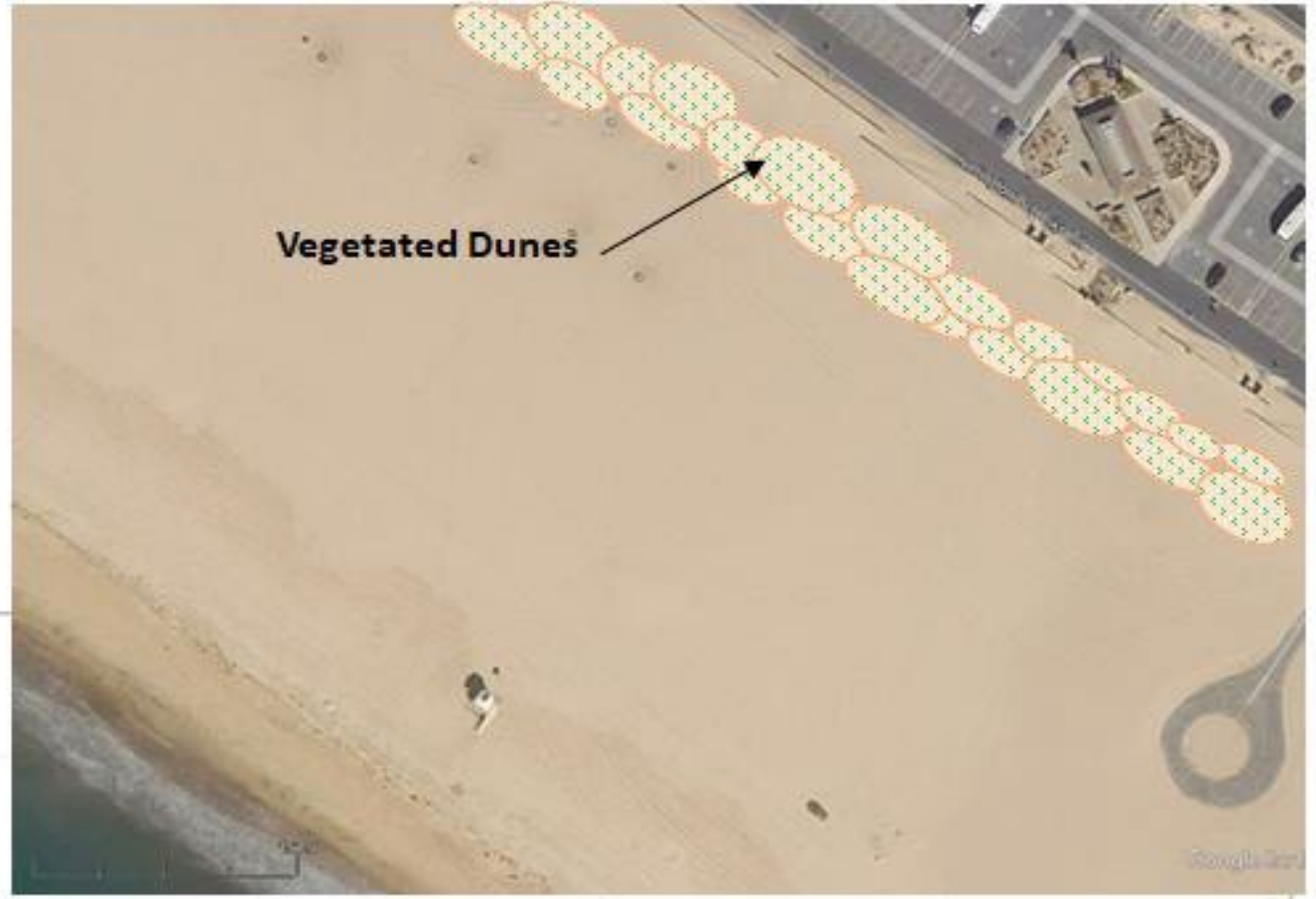
BACK BEACH STORM DYKE

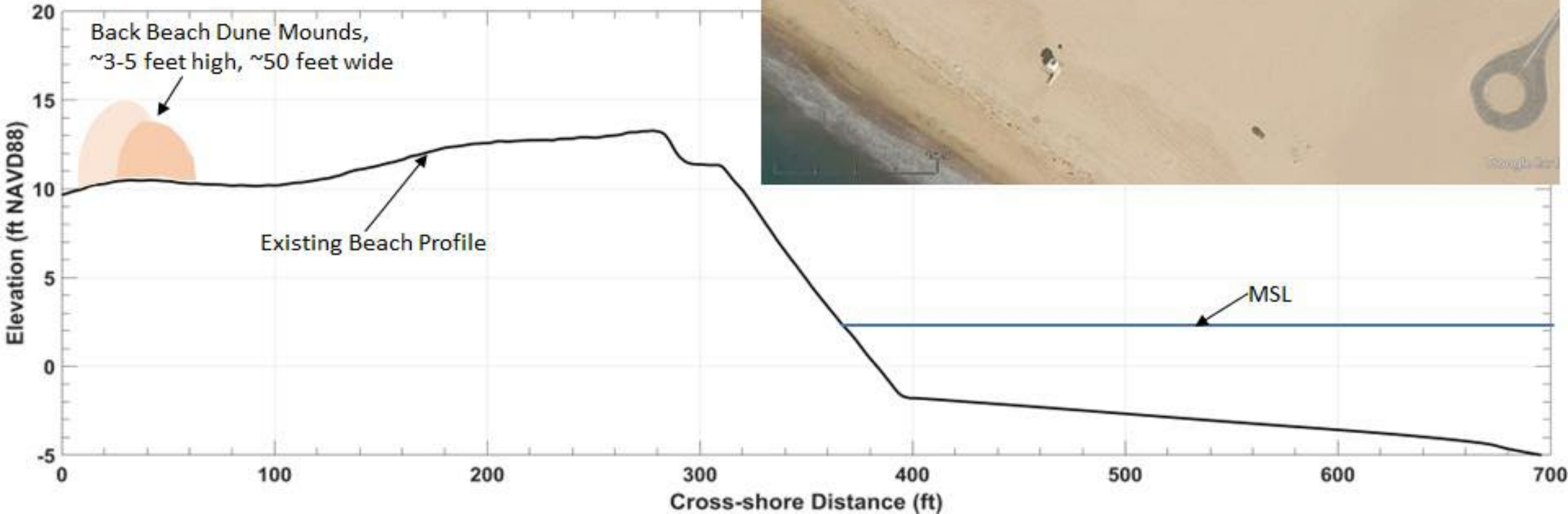


BELOW MEAN HIGH TIDE LINE

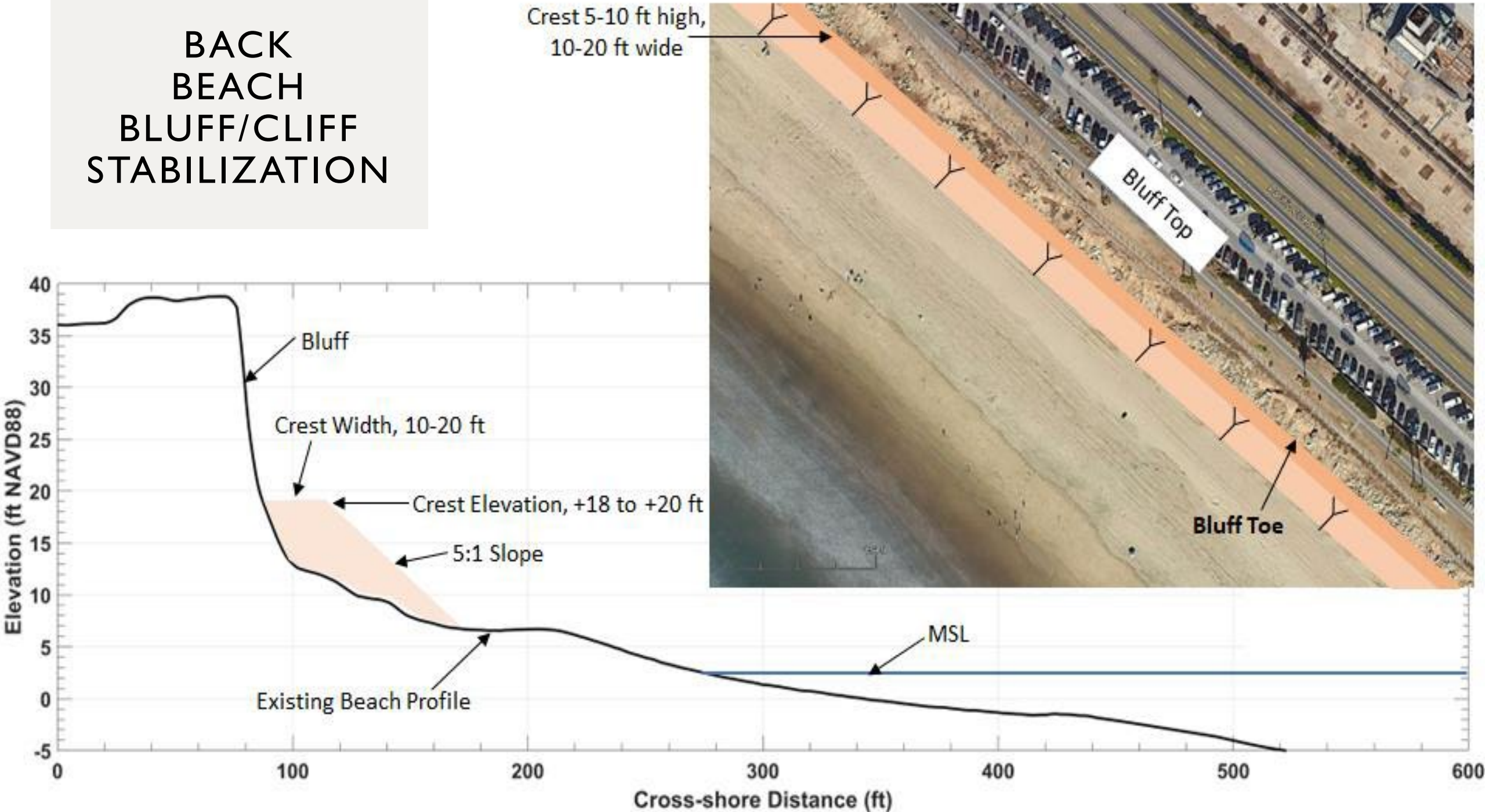


BACK BEACH DUNES





BACK BEACH BLUFF/CLIFF STABILIZATION



		Biological Monitoring**							Physical Monitoring**			
Beach Receiver Site Name	Per Event Volume* (cy)	Grunion	Calif Least Tern	Western Snowy Plover	Rocky Reef***	Surfgrass	Eelgrass	Kelp	Turbidity	Surfing Conditions	Beach Profiles	Tidal Inlet
Doheny State Beach	≤25K	S	N	S	Y	N	N	N	N	N	N	N
	25K-75K	S	N	S	Y	N	N	N	Y	N	N	N
	>75K	S	N	S	Y	N	N	Y	Y	Y	Y	N
Capistrano Beach County Park	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	S	N	N	N	N	N	N	Y	N	N	N
	>75K	S	N	N	Y	N	N	Y	Y	Y	Y	N
Poche Beach	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	>75K	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Capistrano Shores	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	S	N	N	N	N	N	N	Y	N	N	N
	>75K	S	N	N	Y	N	N	Y	Y	Y	Y	N
San Clemente North Beach	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	S	N	N	N	N	N	N	Y	N	N	N
	>75K	S	N	N	Y	N	N	Y	Y	Y	Y	N
San Clemente Central City Beaches	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	S	N	N	Y	Y	N	N	Y	N	N	N
	>75K	S	N	N	Y	Y	N	Y	Y	Y	Y	N
San Clemente State Beach	≤25K	S	N	N	N	N	N	N	N	N	N	N
	25K-75K	S	N	N	N	N	N	N	Y	N	N	N
	>75K	S	N	N	Y	N	N	Y	Y	Y	Y	N
Cyprus Shore/ Cottons	≤25K	S	N	S	Y	N	N	N	N	N	N	N
	25K-75K	S	N	S	Y	N	N	N	Y	N	N	N
	>75K	S	N	S	Y	N	N	Y	Y	Y	Y	N

Y	Monitoring Required
N	Monitoring Not Required
S	Monitoring Requirement Dependent on Seasonality of Project

[1]Grunion monitoring is only necessary between March1st - August 31st

[2]Least Tern monitoring is only necessary between April 1st - September 15th

[3]Snowy Plover monitoring is only necessary between March1st - August 31st

[4]Nearshore Monitoring only required when sand is placed below the MHTL.

[5]Turbiditiy monitoring is only required when sand is placed below the MHTL. Monitoring may not be necessary for medium projects if maximum fines of source sediment is less than or equal to 10% of maximum fines found at receiver site

[6]Surf monitoring is only required when sand is placed at a popular surf beach and material is coarser than material at the receiver site

Table 5-2. Grunion (G), Least Tern (T), and/or Snowy Plover (P) Monitoring Required Based on Timing of Sand Placement

Beach Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept*	Oct	Nov	Dec
West Beach, Seal Beach	Y-P	Y-P	N	N	N	N	N	N	N	Y-P	Y-P	Y-P
East Beach, Seal Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Surfside Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Sunset Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Huntington Harbour Beaches	N	N	N	N	N	N	N	N	N	N	N	N
Bolsa Chica State Beach	Y-P	Y-P	Y-G,P	Y-G,P	Y-G,P	Y-G,P	Y-G,P	Y-G,P	Y-P	Y-P	Y-P	Y-P
Huntington Beach Bluffs	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Huntington Beach State Beach	Y-P	Y-P	Y-G,P	Y-G,T,P	Y-G,T,P	Y-G,T,P	Y-G,T,P	Y-G,T,P	Y-T,P	Y-P	Y-P	Y-P
West Newport Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Balboa Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Newport Harbor Beaches	N	N	N	N	N	N	N	N	N	N	N	N
Newport Dunes	N	N	N	N	N	N	N	N	N	N	N	N
Corona Del Mar State Beach	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
Little Corona Del Mar State Beach	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
Crystal Cove State Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Salt Creek Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Baby Beach	N	N	N	N	N	N	N	N	N	N	N	N
Doheny State Beach	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P
Capistrano Beach County Park	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
Poche Beach	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
Capistrano Shores	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
San Clemente North Beach	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
San Clemente Central City Beaches	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
San Clemente State Beach	N	N	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	N	N	N
Cyprus Shore/Cottons	Y-P	Y-P	Y-G	Y-G	Y-G	Y-G	Y-G	Y-G	N	Y-P	Y-P	Y-P

Y	Monitoring Potentially Required
N	Monitoring Not Required

** through September 15th for Least Terns and through September 30th for Snowy Plovers.*

TYPICAL SITE OVERVIEW

3.17.2 Biological and Surfing Resources

Within MPA?	If within MPA, Is Sediment Placement Allowed?	Onshore Sensitive Species Present	Nearshore Sensitive Habitat Present	Recreational Surfing Present (and Rating*)	Coarse Sediment/ Cobble Naturally Present?
No	N/A	Grunion Western Snowy Plover (overwintering)	Rocky reef Kelp	Yes (4)	Yes

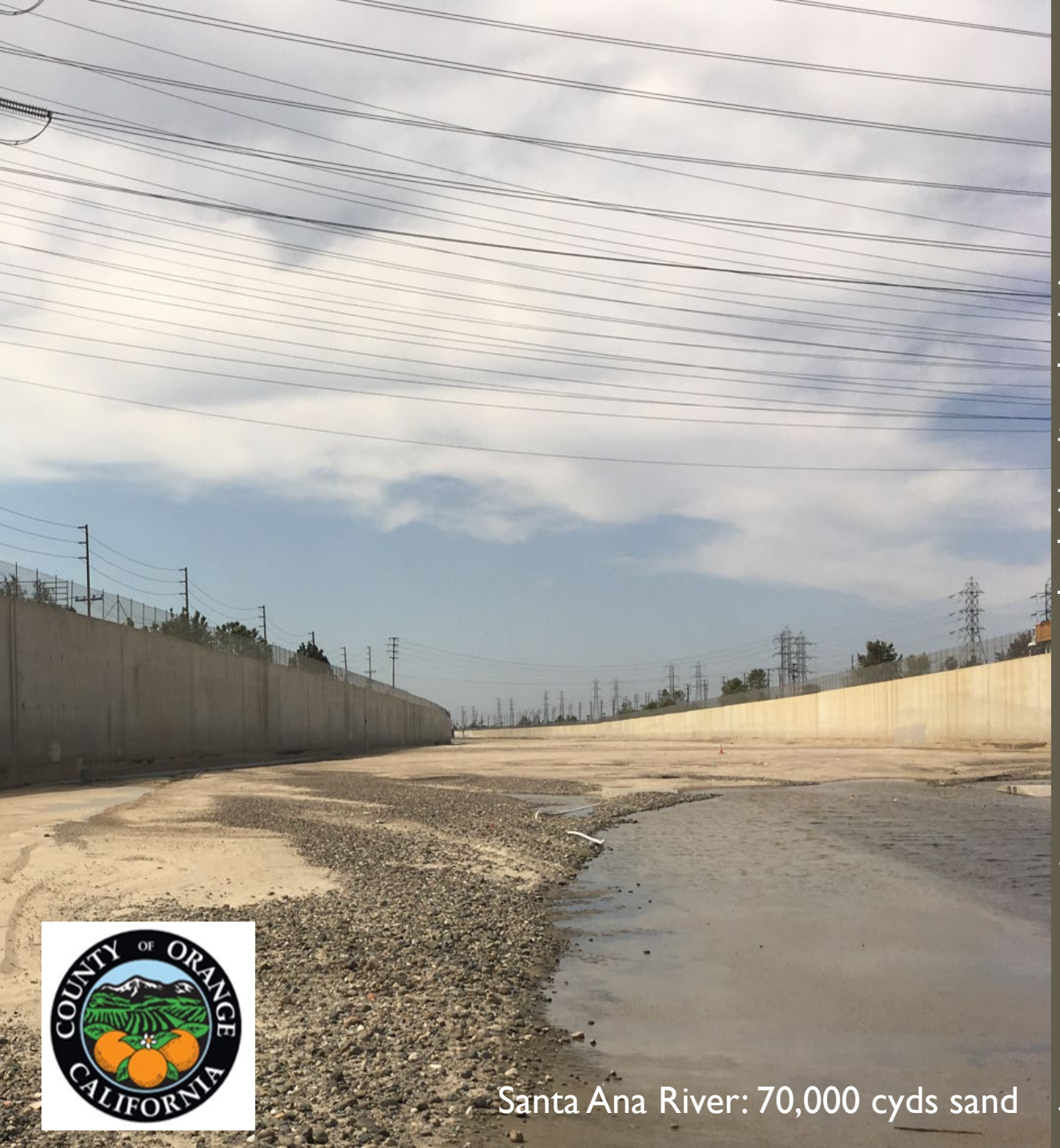
3.17.3 Previous Nourishment Projects

Year	Approximate Volume (cubic yards)	Sand Source	Project Owner
1964	94,000	San Juan Creek	Unknown
1966	842,000	Camp Pendleton	USACE
1969	365,000	San Juan Creek	Unknown
1970	125,000	Dana Point Harbor construction	USACE
2023	25,000	Santa Ana River	County of Orange and CA State Parks

3.17.4 Opportunistic Beach Fill Quantity

Typical Fill Volume per Event (cubic yards)	Maximum Fill Volume per Year (cubic yards)
100,000	300,000

- Doheny State Beach



Santa Ana River: 70,000 cyds sand

WHAT THE SCOUP IS NOT

The SCOUP does not require OCPW to deliver sand to O.C. beaches

SCOUP does not make OCPW financially responsible for delivering or placing sand on O.C. beaches

The SCOUP would not place the full regulatory burden on the County

WHAT THE SCOUP WOULD DO

Secure permits to place sand on O.C. beaches

Establish a standardized mechanism to allow County/City/State to place sand on beaches in need

Put in place series of minimization/mitigation measures to be followed to protect environmental resources

SCOUP PROGRESS & ANTICIPATED TIMELINES

Current Progress:

Implementation Guidelines – Completed

CEQA – In final review – Anticipate 30 Day Public Review in mid-March

RGP (Regional General Permit). Submitted – in Public Comment Period

State Waterboard, CCC & Cal. State Lands Permitting - Submitted in review

- GOALS:
- Finalizing CEQA – Spring 2026
- Secure all Permits – Fall 2026
- Start using SCOUP – Late Fall 2026 / Early-mid 2027

Prado Dam - OCWD

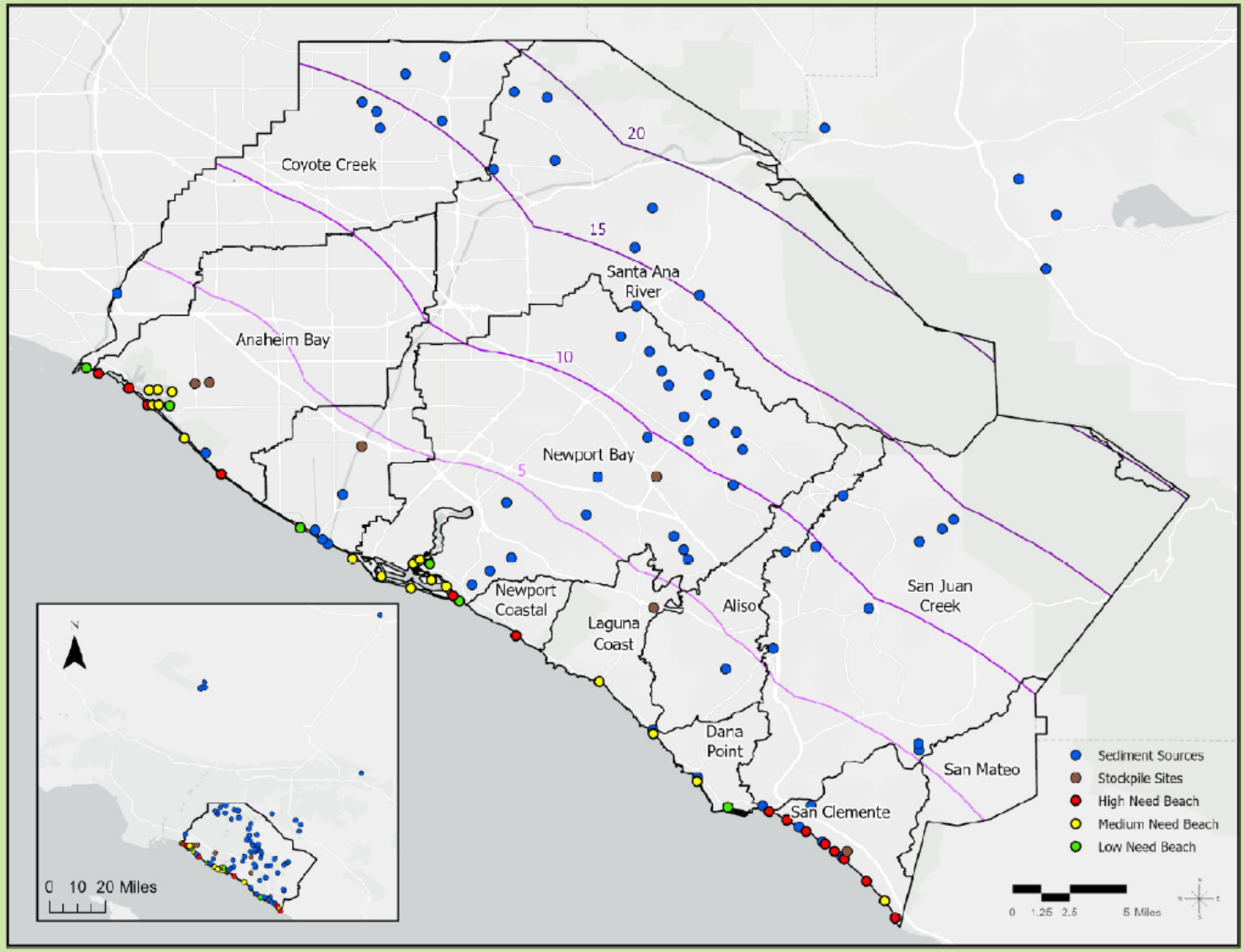
- 30,000 CY/year (potl. for more)

(125,000 CY over 5 years)

Santa Ana River - OCPW

- 15,000 CY per year

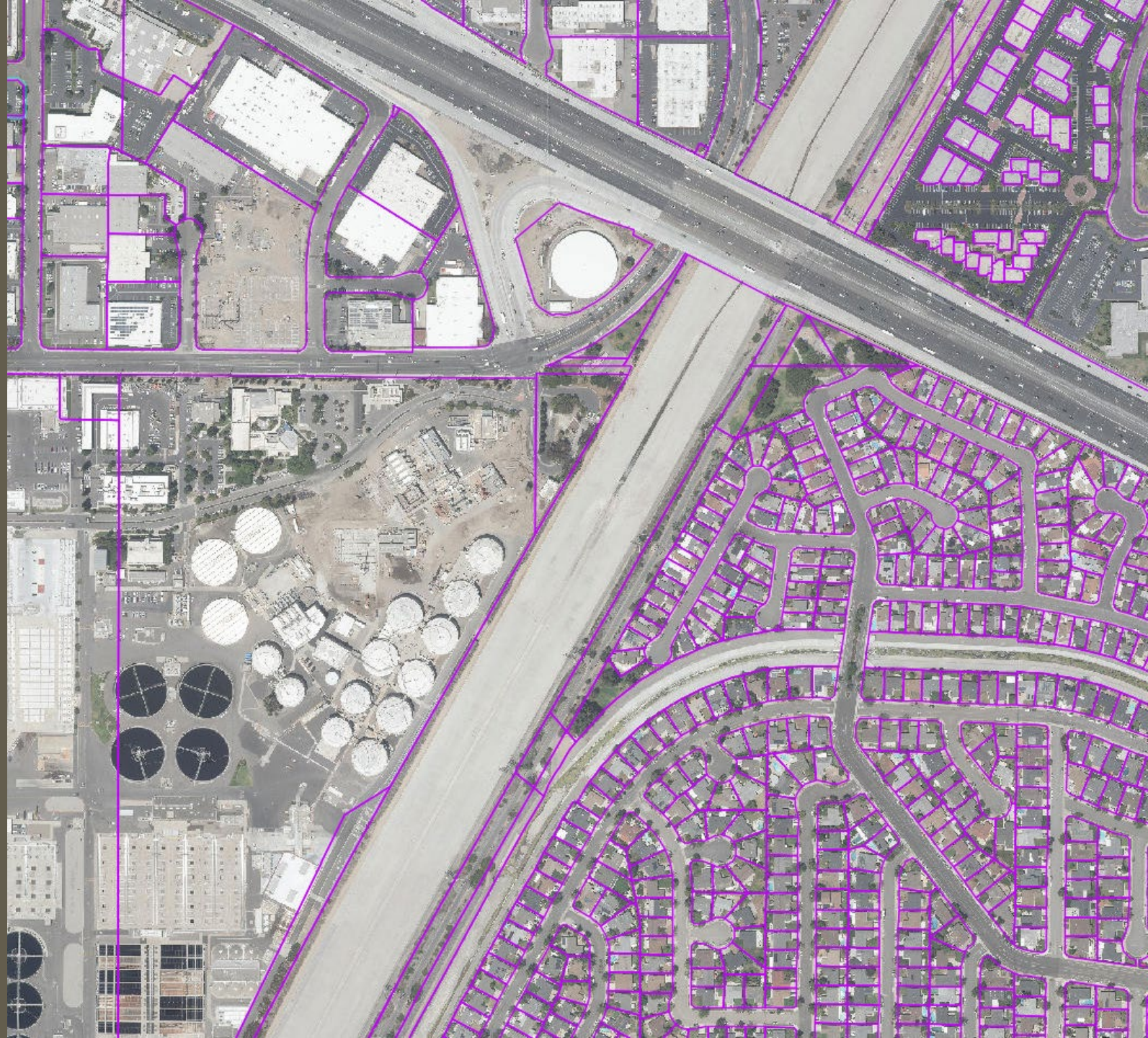
Potential source sites and stockpile locations



SCOUP SOURCE SITES

POTENTIAL SOURCE SITES

- Santa Ana River
- 15,000- 70,000 CY per year, depending upon rain and discharge from Prado Dam
- Typically a great source of sand



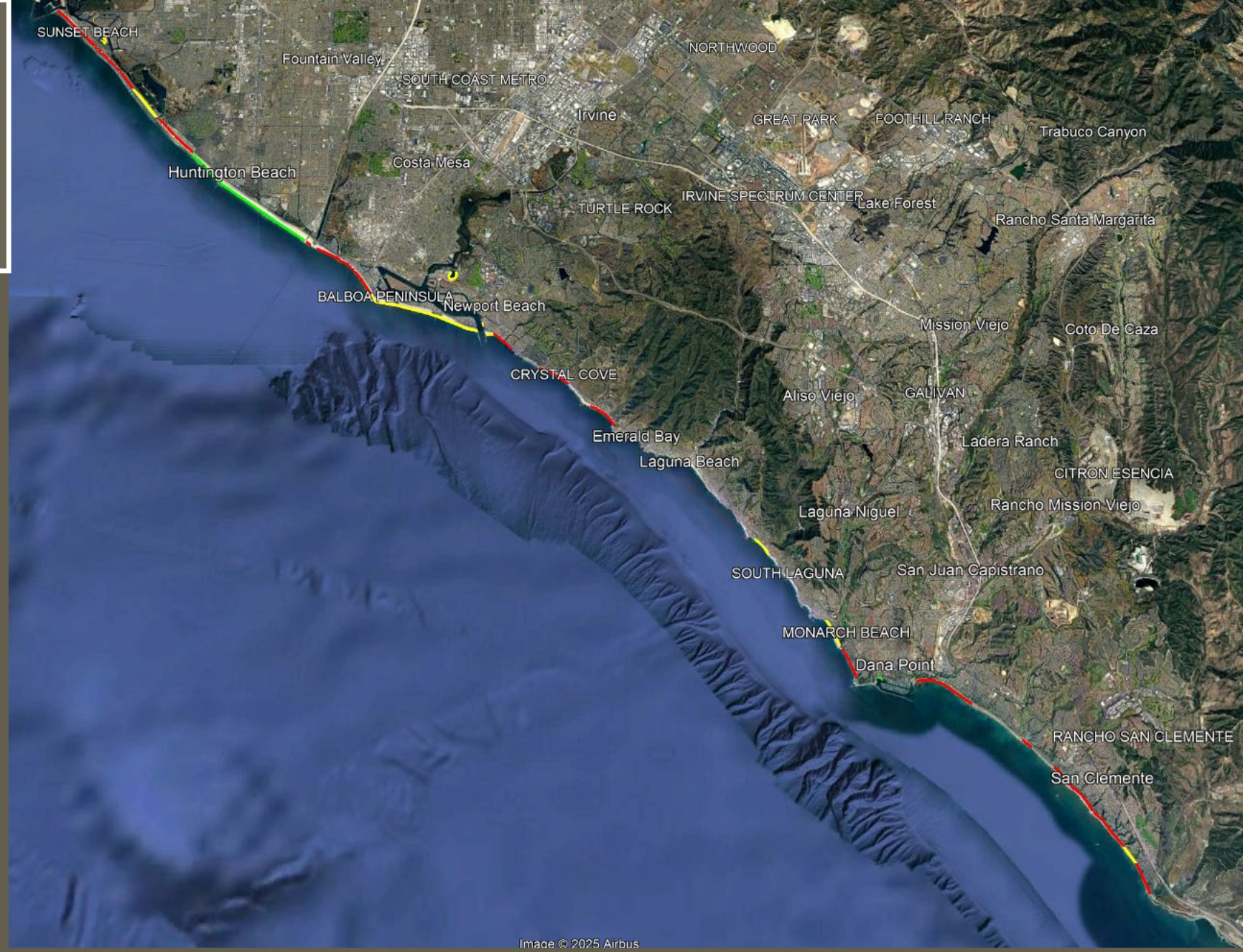
POTENTIAL SOURCE SITES

- Foothill Basins
- 20,000 - 40,0000 CY per year
- Other County and non-County sources, TBD.
- Sand quality variable
- May be more suitable for bluff protection, dune creation or placement in the swash zone

IDENTIFYING AND PRIORITIZING RECEIVER SITES

Based on:

- Need
- Proximity to source (is receiver site within the natural Littoral Cell of the source?)
- Resource for underserved communities?
- Proximity to source and/or stockpile site
- Is receiver site a "Sand Engine" where sand is naturally dispersed to other beaches in need
- Ability to fund



FUNDING AND TIMING

Funding

- Receiver sites must arrange for funding
- Grant funding options

Timing – if opportunistic sand becomes available:

- Without SCOUP *12-24 months* - Pursue individual permits, obtain biological studies as well as sand composition and chemical testing results for the source and receiver sites. Opportunity lost before permits issued. **NO SAND ON BEACH, CONTINUED LOSS OF BEACHES**
- With SCOUP Sand could be placed on beach within *1-2 months* - test sand and ensure compliance with permits. **BEACH NOURISHMENT OCCURS**

QUESTIONS?