



STATE OF THE COAST 2025

SANDAG

*Shoreline Preservation
Working Group*

Coastal Frontiers Corporation
December 4, 2025

Photo: Oceanside, October 6, 2025

OVERVIEW

➤ Shoreline Monitoring Program

- Measure Changes in Shorezone
- City Programs
 - *Oceanside*
 - *Carlsbad*
 - *Encinitas*
 - *Solana Beach*
- Beach Profile Surveys
 - 67 sites in Fall 2025
 - 44 sites w/ data back to Fall 2000

➤ Findings

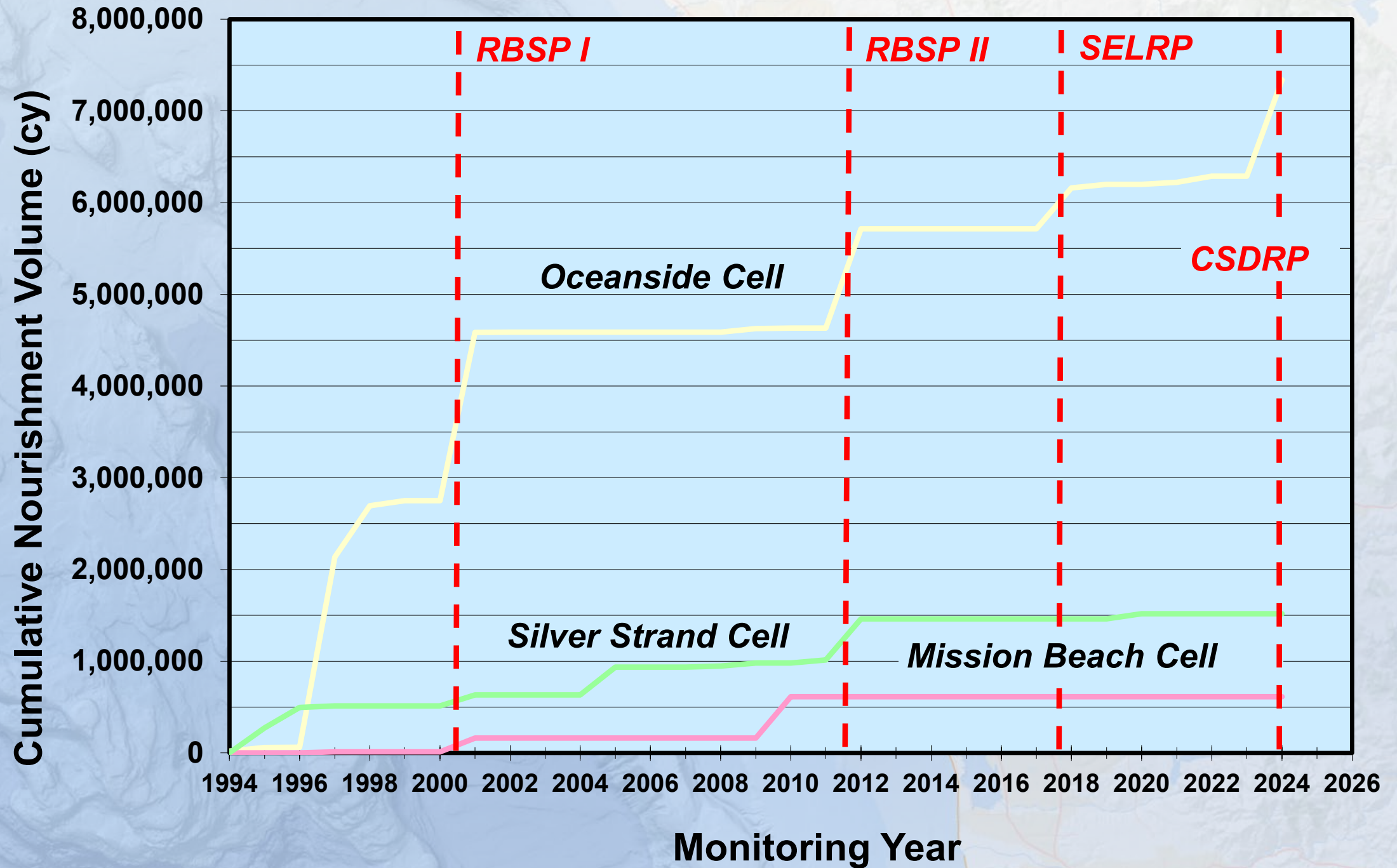
- Regional Changes
- Post-RBSP I Outcome by Sub-Reach



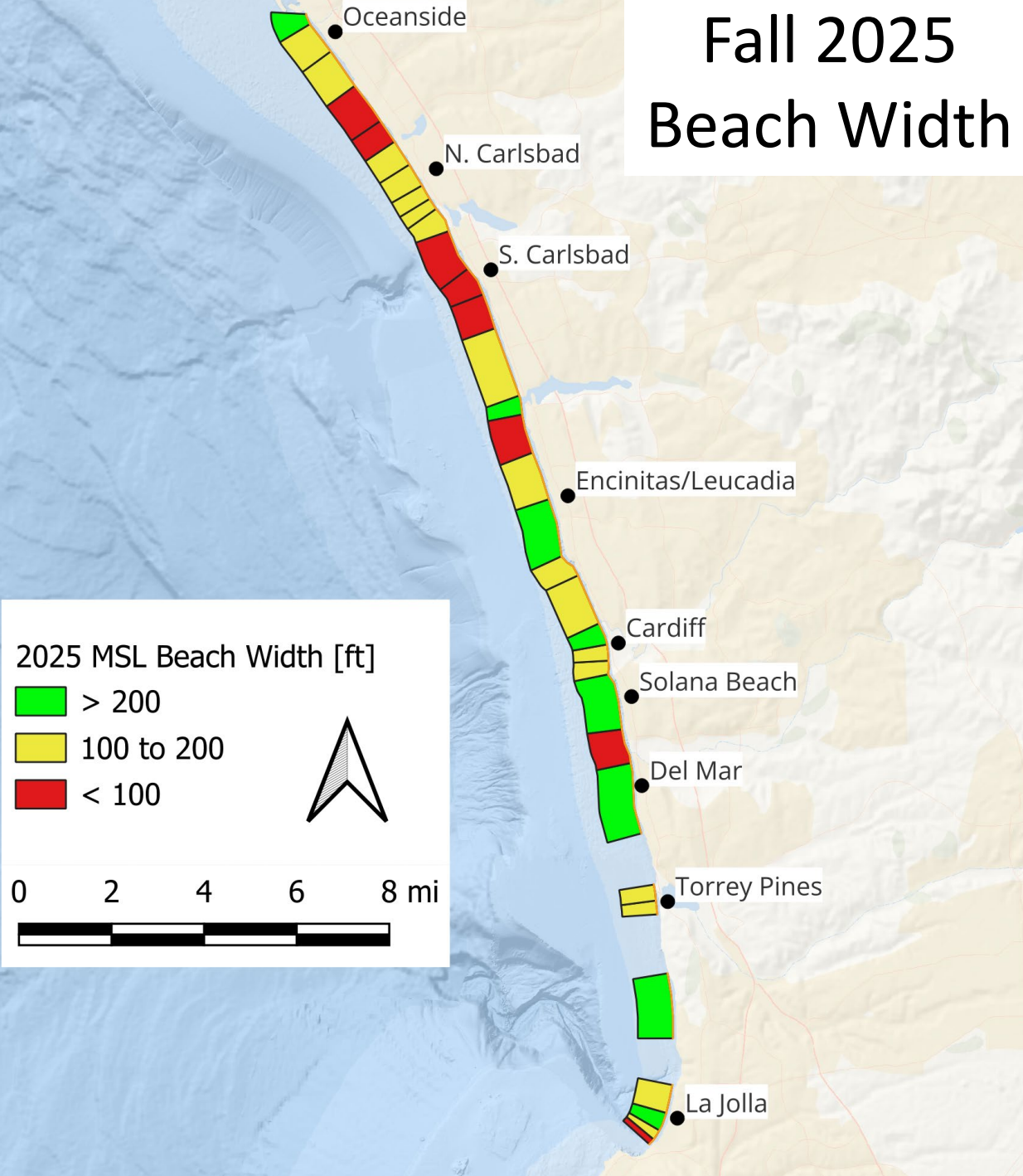
Oceanside Cell

Mission Beach Cell

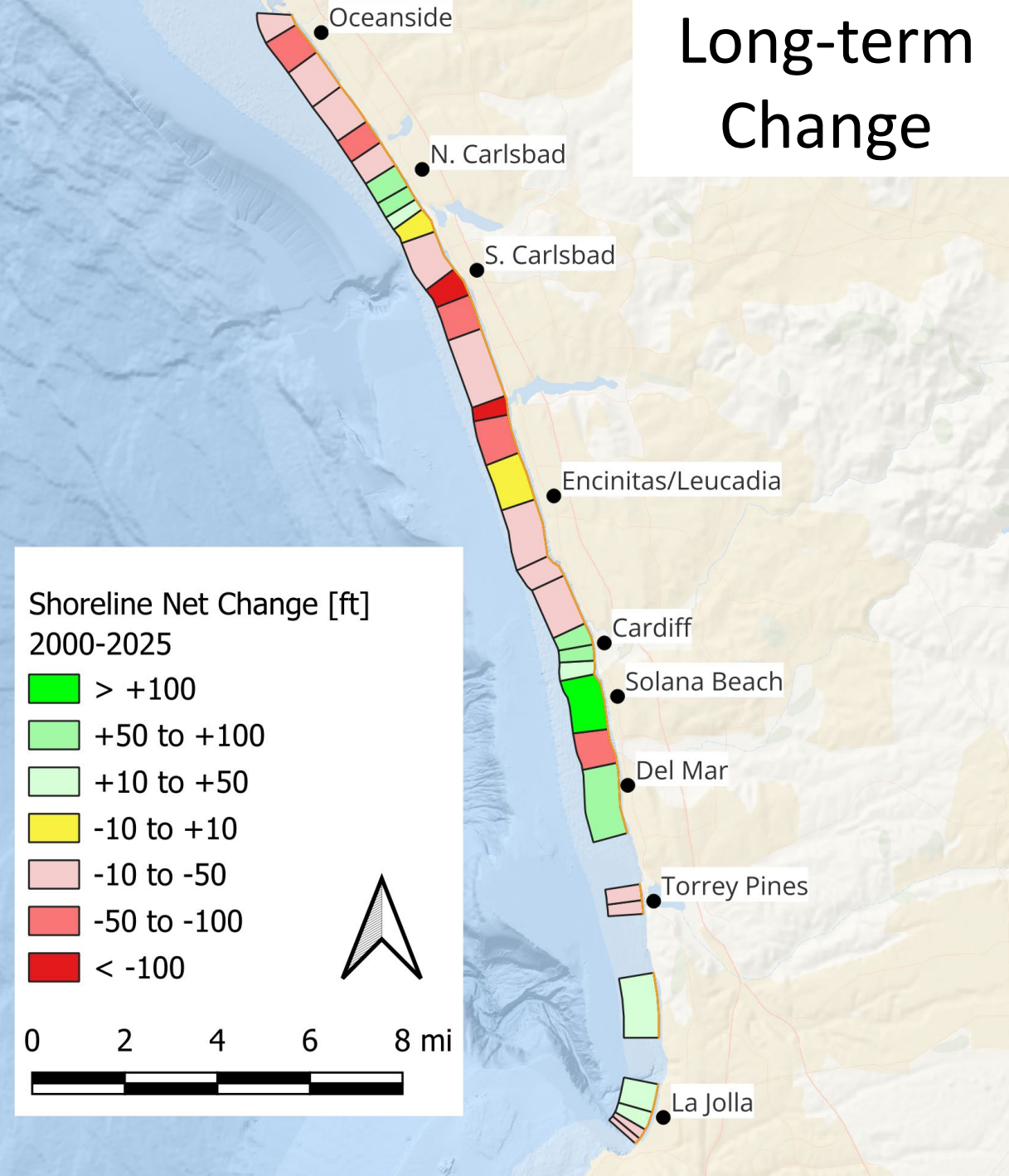
Silver Strand Cell



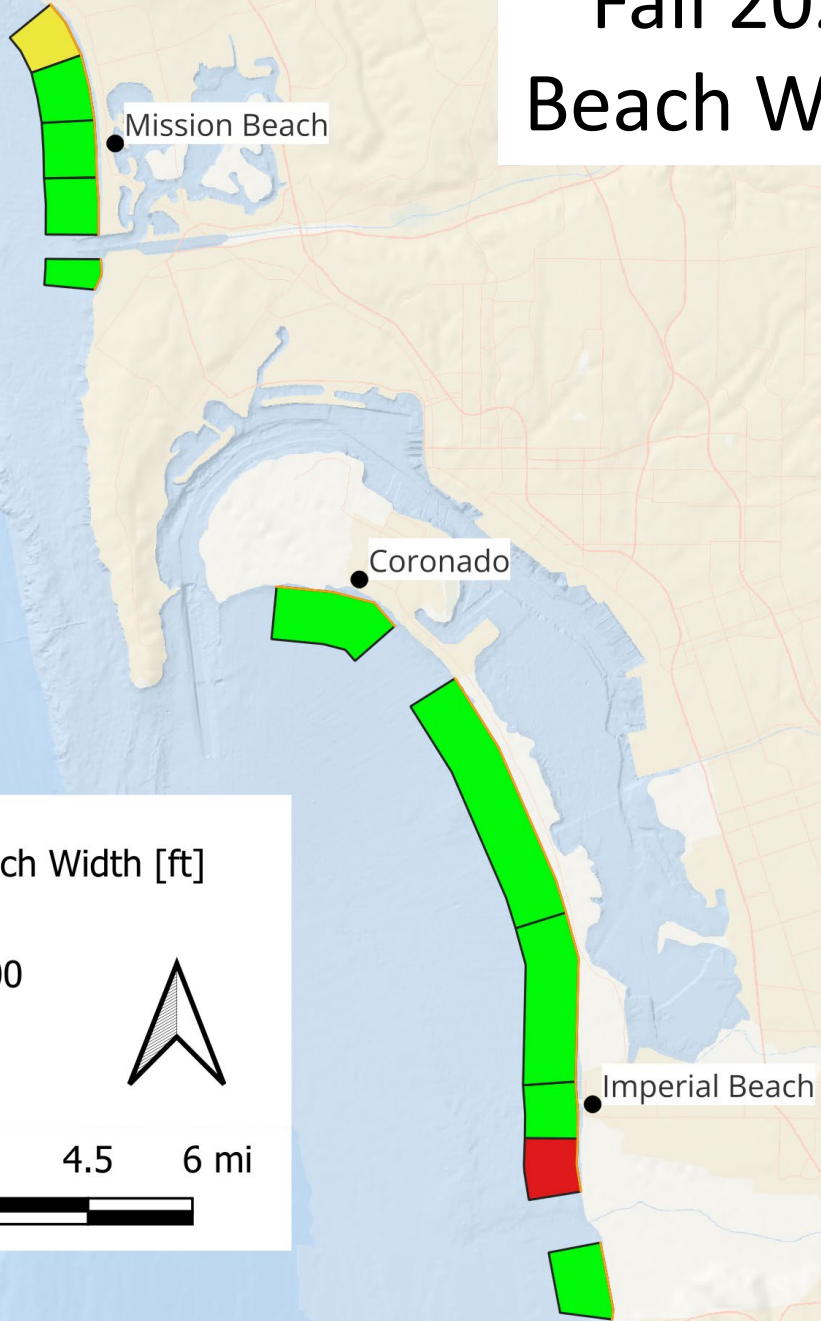
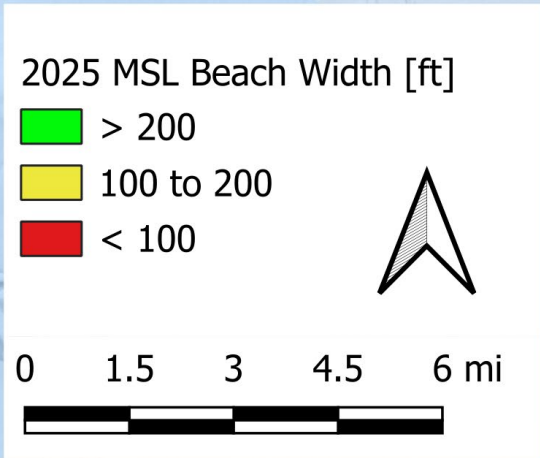
Fall 2025 Beach Width



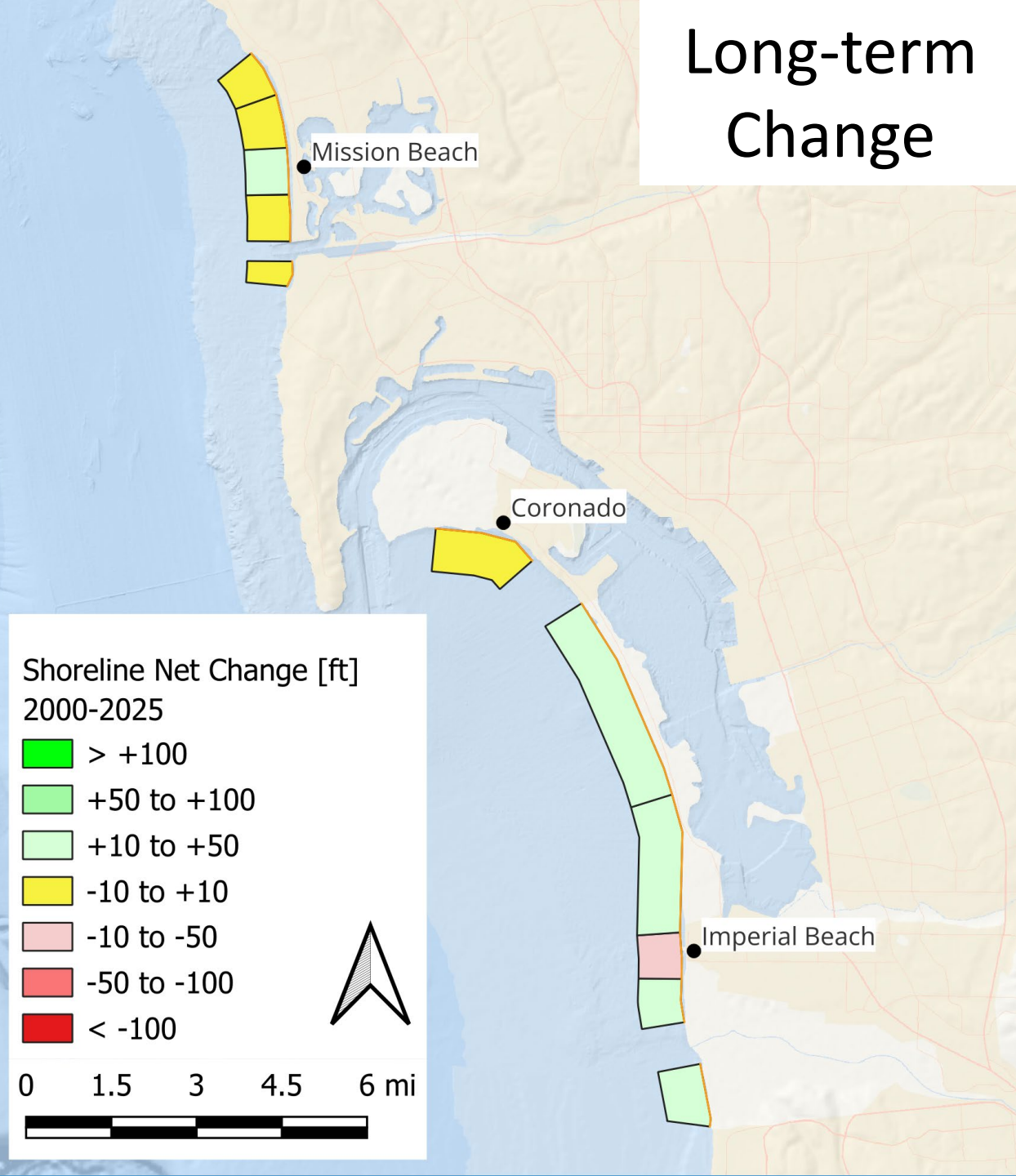
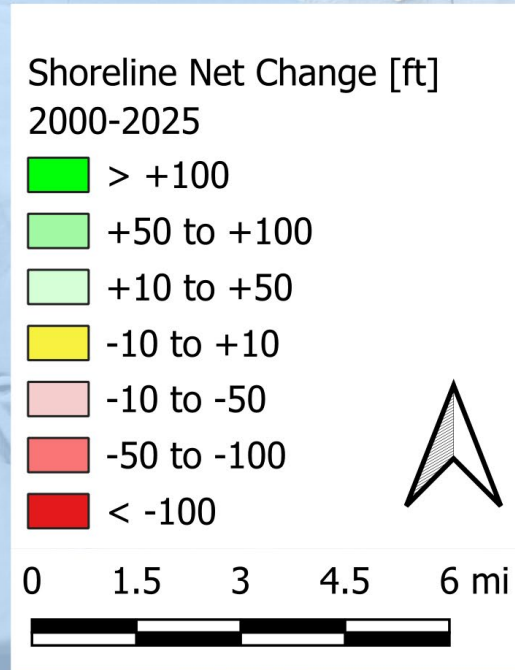
Long-term Change



Fall 2025 Beach Width

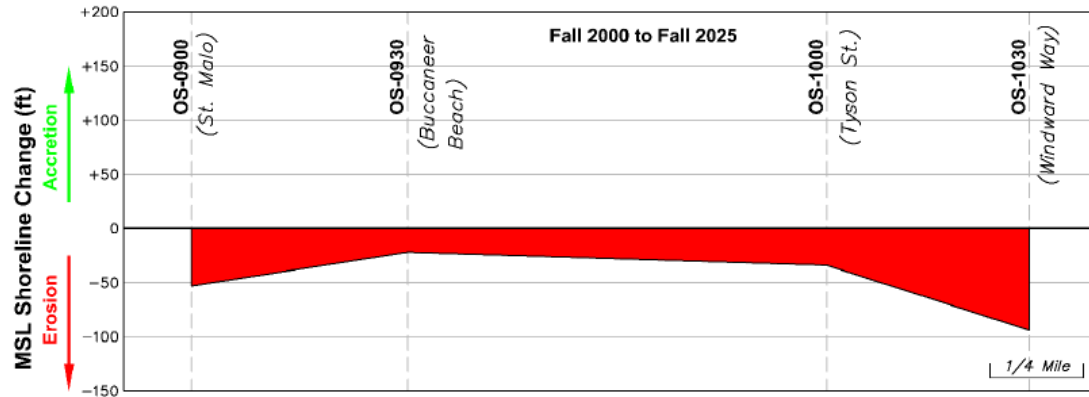


Long-term Change

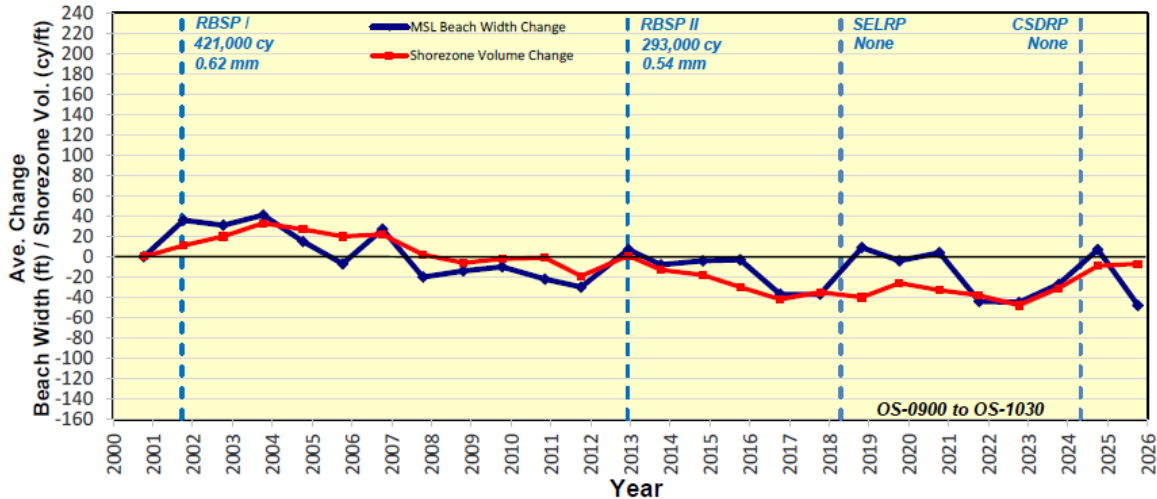


Oceanside Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: -48 ft
Shorezone Vol: -7 cy/ft

Trend: Fall 2000 to Fall 2025

MSL Beach Width: -2.0 ft/yr
Shorezone Vol: -2.4 cy/ft/yr

Transect OS-1000 (October 6, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
OS-1030	159	-68	-33	-101	-94
OS-1000	148	-82	42	-40	-34
OS-0930	52	-56	23	-33	-22
OS-0900	3	-55	0	-55	-53

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
OS-1030	-76	-73
OS-1000	-7	-32
OS-0930	-1	0
OS-0900	2	-16

SandSnap, OS-1000



Spring 2025

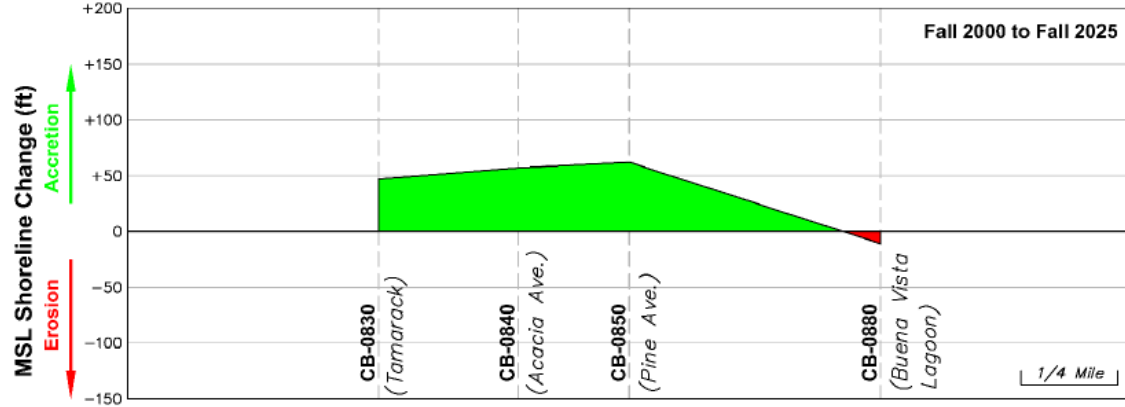
Sample ID: 10002505
D₅₀: 0.36 mm
Desc.: Medium Sand

Fall 2025

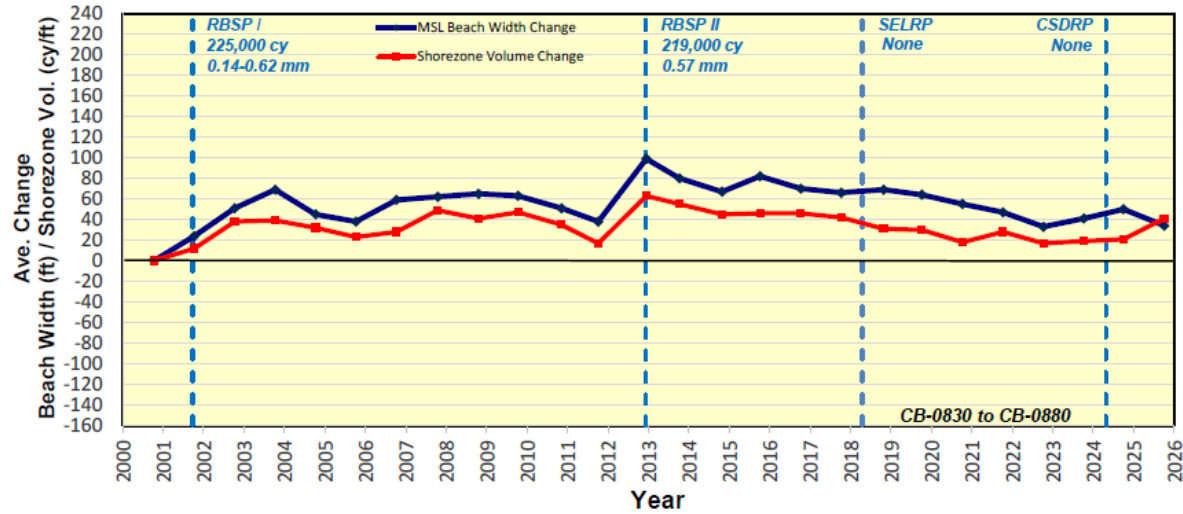
Sample ID: 10002510
D₅₀: 0.24 mm
Desc.: Fine Sand

North Carlsbad Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



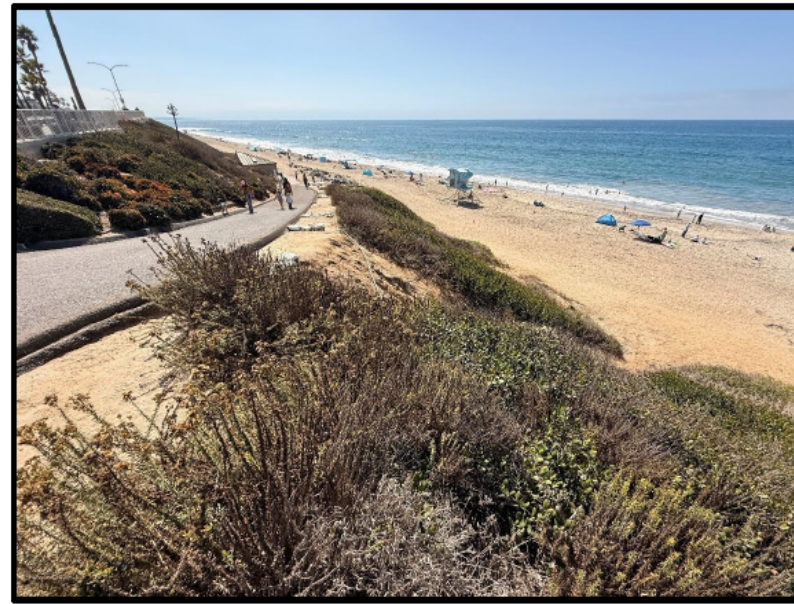
Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +34 ft
Shorezone Vol: +41 cy/ft

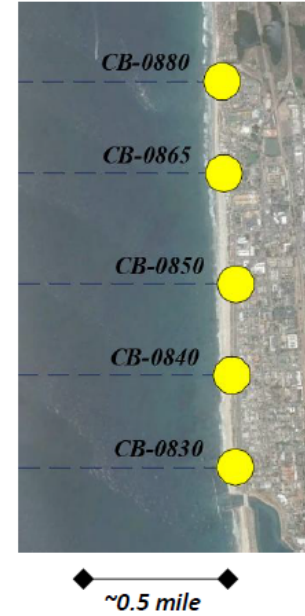
Trend: Fall 2000 to Fall 2025

MSL Beach Width: +0.4 ft/yr
Shorezone Vol: +0.1 cy/ft/yr

Transect CB-0850 (October 6, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
CB-0880	109	-37	-2	-39	-11
CB-0865	163	-42	53	11	-
CB-0850	175	-10	9	-1	62
CB-0840	140	45	-37	8	57
CB-0830	144	10	-39	-29	47

Shorezone Volume Summary

Transect	Annual Change (cy/ft) Fall 24-Fall 25	Post-RBSP I (cy/ft) Fall 00-Fall 25
	CB-0880	-2
CB-0865	16	-
CB-0850	9	34
CB-0840	7	44
CB-0830	-22	26

SandSnap, CB-0850



Spring 2025

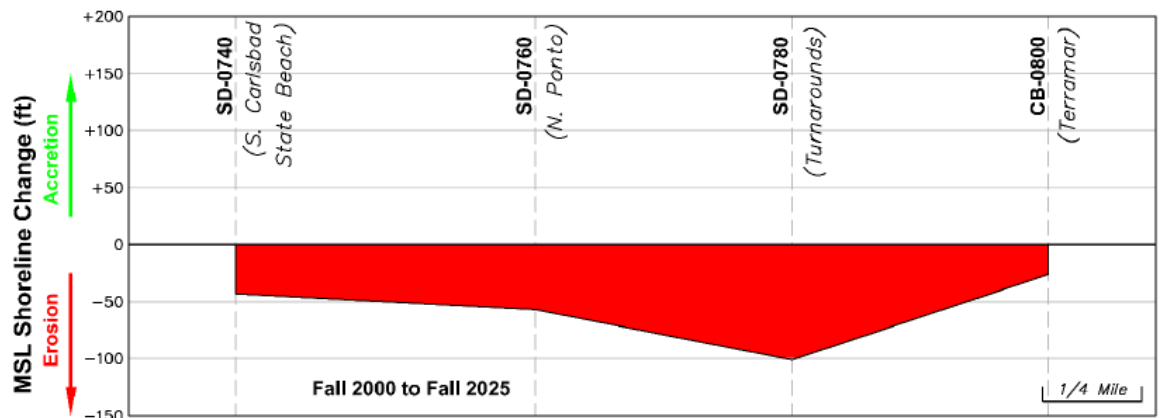
Sample ID: 08502505
D₅₀: 0.31 mm
Desc.: Medium Sand

Fall 2025

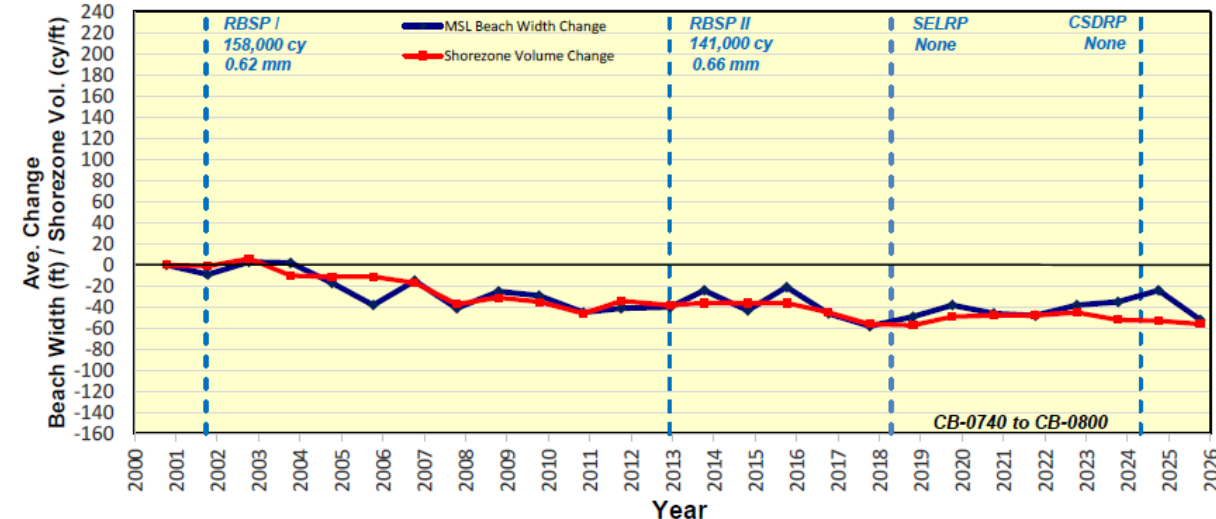
SandSnap photo upload rejection

South Carlsbad Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: -52 ft
Shorezone Vol: -56 cy/ft

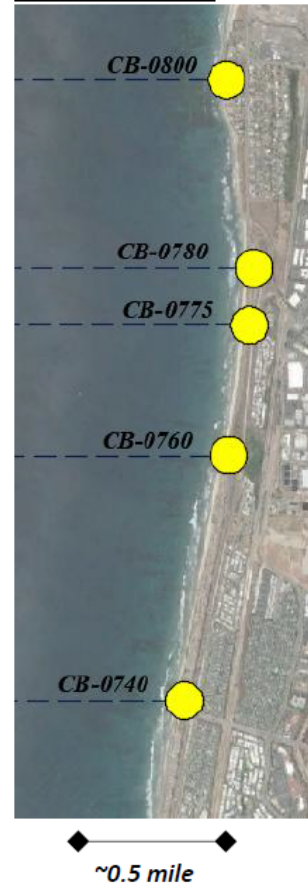
Trend: Fall 2000 to Fall 2025

MSL Beach Width: -1.6 ft/yr
Shorezone Vol: -2.2 cy/ft/yr

Transect CB-0760 (October 7, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
CB-0800	10	-18	1	-17	-26
CB-0780	72	-68	27	-41	-101
CB-0775	94	-52	34	-18	-
CB-0760	82	-37	-11	-48	-57
CB-0740	107	-26	33	21	-23

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
CB-0800	-25	-11
CB-0780	24	-119
CB-0775	8	-
CB-0760	-18	-88
CB-0740	6	-37

SandSnap, CB-0760

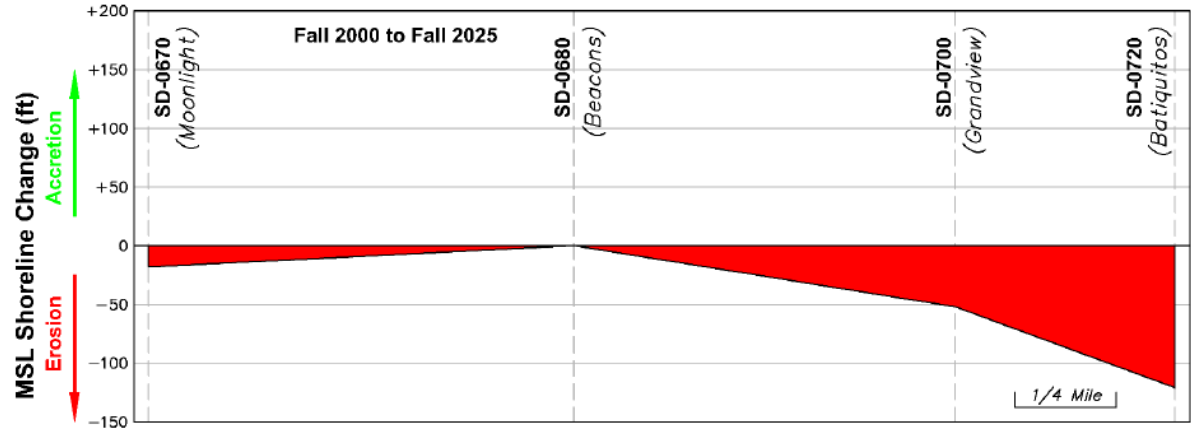


Spring 2025
Sample ID: 07602505
D₅₀: 0.26 mm
Desc.: Medium Sand

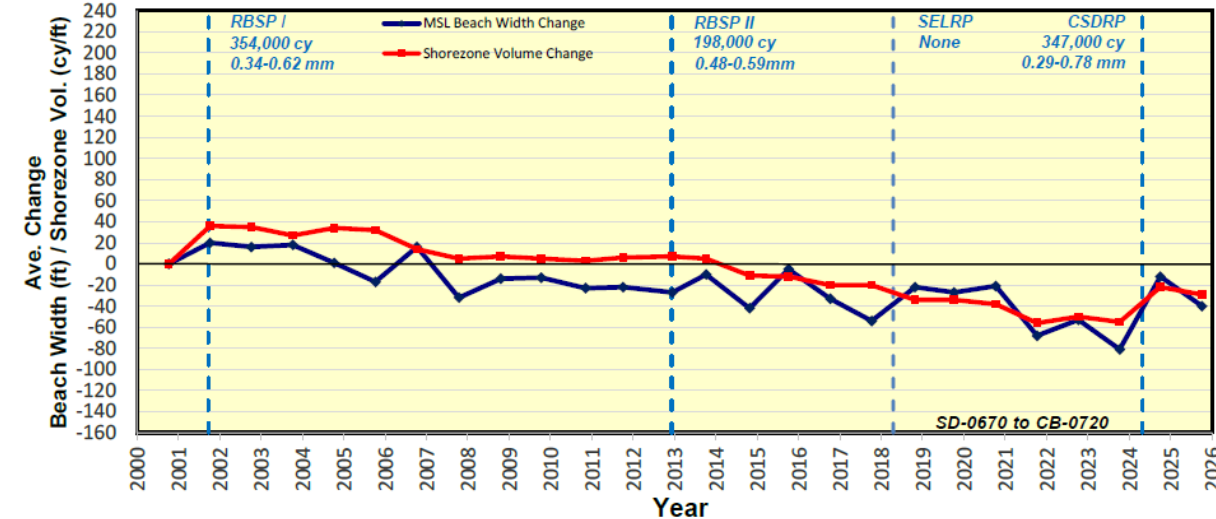
Fall 2025
Sample ID: 07602510
D₅₀: 0.33 mm
Desc.: Medium Sand

Encinitas/Leucadia Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: -40 ft
Shorezone Vol: -29 cy/ft

Trend: Fall 2000 to Fall 2025

MSL Beach Width: -2.5 ft/yr
Shorezone Vol: -3.3 cy/ft/yr

Transect SD-0680 (October 8, 2025)



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
CB-0720	254	-57	38	-19	-121
SD-0710	83	-84	43	-41	-
SD-0700	38	-45	-13	-58	-52
SD-0695	63	-8	-14	-22	-
SD-0690	46	-19	-12	-31	-
SD-0680	144	-65	59	-6	0
SD-0675	111	-61	16	-45	-
SD-0670	209	-75	41	-34	-18

Shorezone Volume Summary

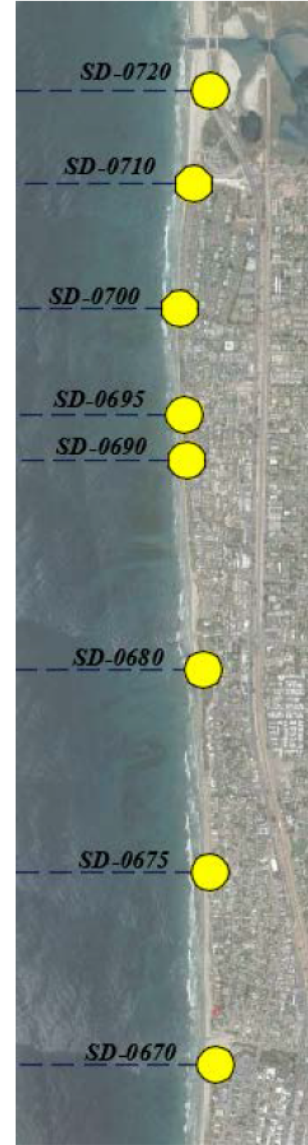
Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
CB-0720	-21	-111
SD-0710	-2	-
SD-0700	2	-3
SD-0695	7	-
SD-0690	-5	-
SD-0680	16	12
SD-0675	-7	-
SD-0670	-25	-31

SandSnap, SD-0680

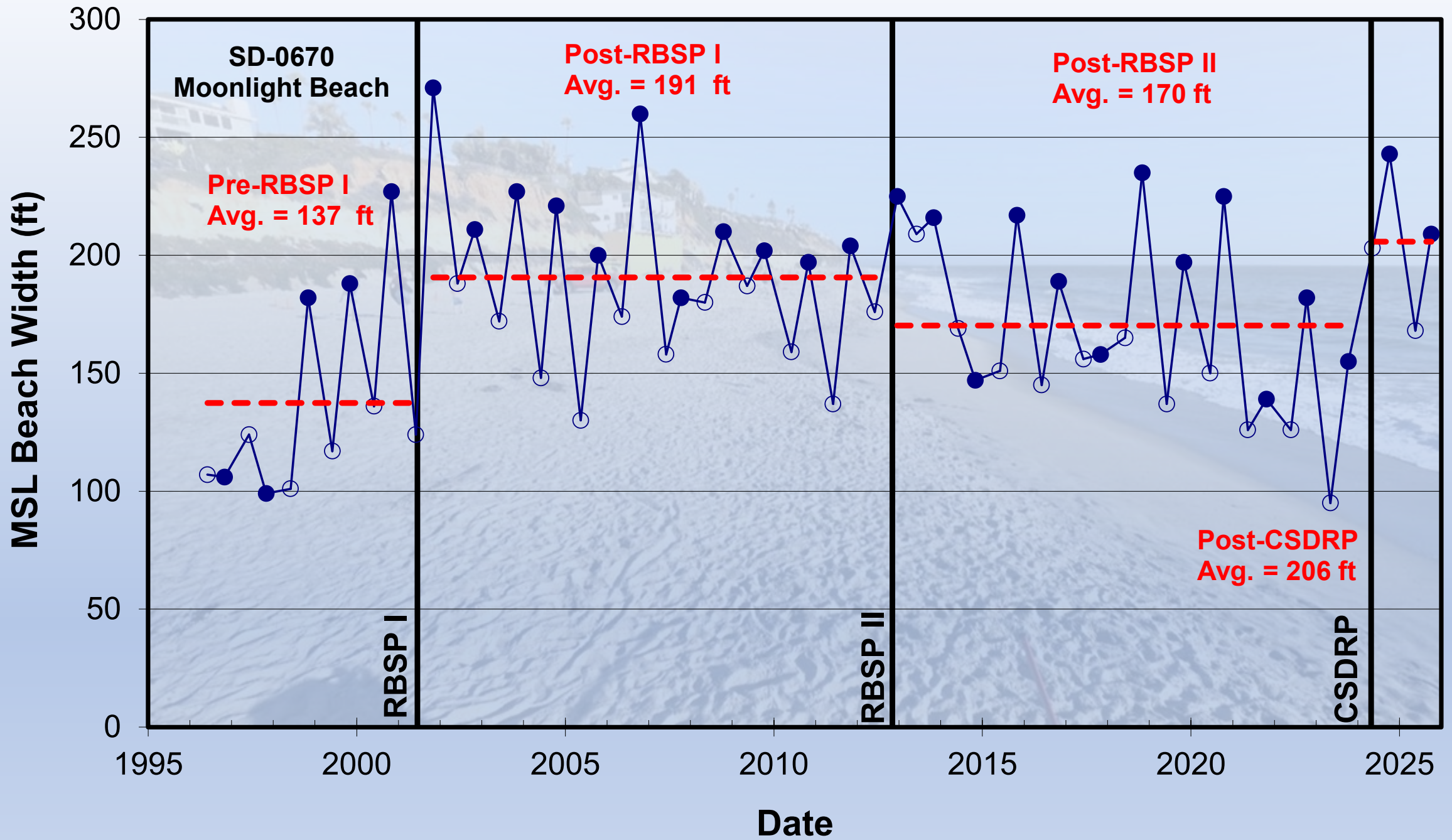


Spring 2025
Sample ID: 06802505
D₅₀: 0.35 mm
Desc.: Medium Sand
Fall 2025
Sample ID: 06802510
D₅₀: 0.29 mm
Desc.: Medium Sand

Location Map

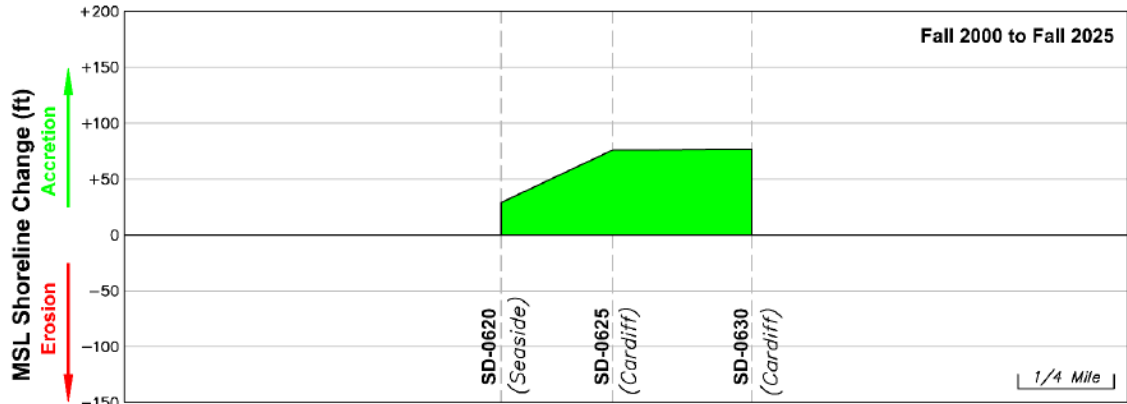


~0.5 mile

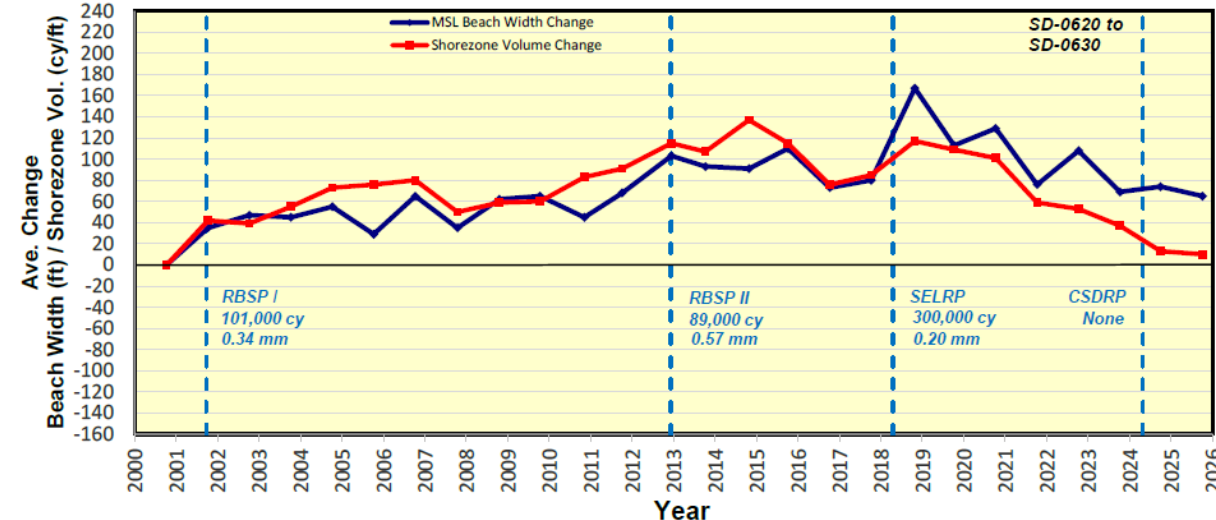


Cardiff Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +65 ft
Shorezone Vol: +10 cy/ft

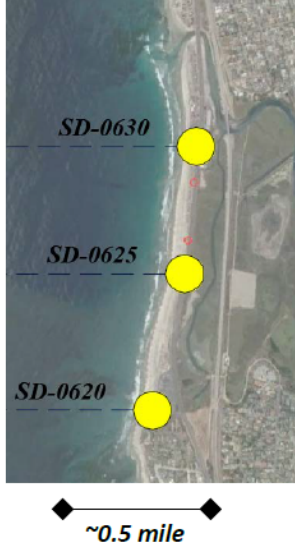
Trend: Fall 2000 to Fall 2025

MSL Beach Width: +3.0 ft/yr
Shorezone Vol: +0.5 cy/ft/yr

Transect SD-0630 (October 8, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
SD-0630	209	-89	93	4	77
SD-0625	182	-66	44	-22	76
SD-0620	128	-15	1	-14	29

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
SD-0630	1	0
SD-0625	-19	24
SD-0620	11	8

SandSnap, SD-0630

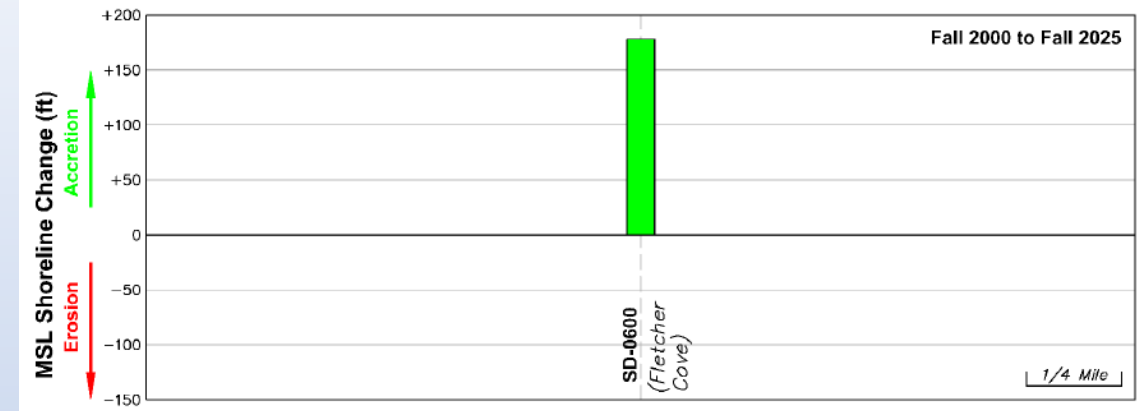


Spring 2025
Sample ID: 06302505
D₅₀: 0.19 mm
Desc.: Fine Sand

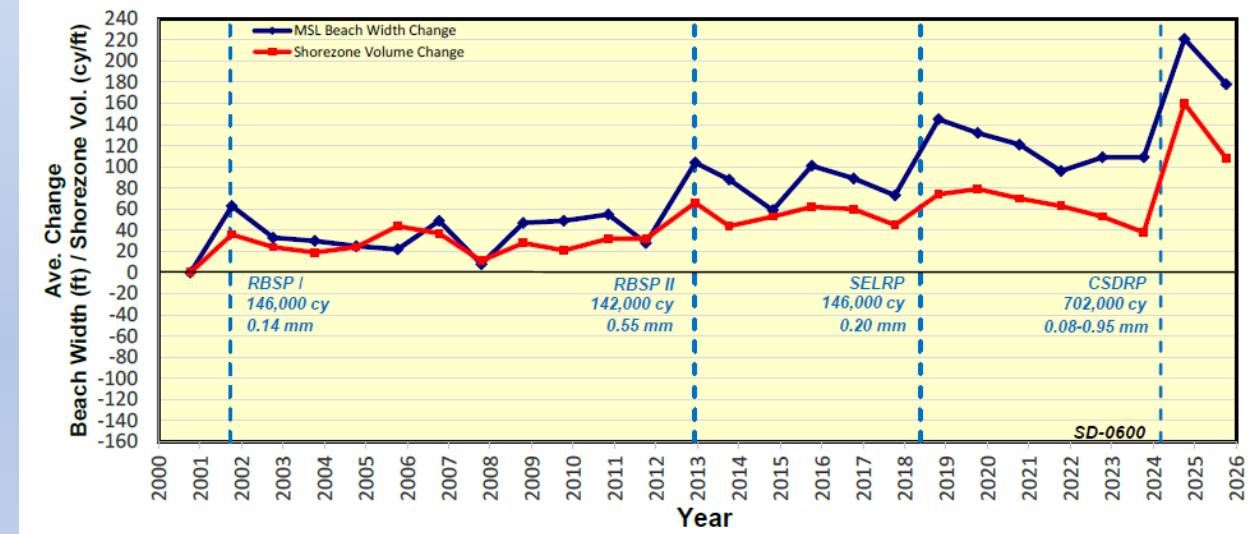
Fall 2025
Sample ID: 06302510
D₅₀: 0.27 mm
Desc.: Medium Sand

Solana Beach Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +178 ft

Shorezone Vol: +108 cy/ft

Trend: Fall 2000 to Fall 2025

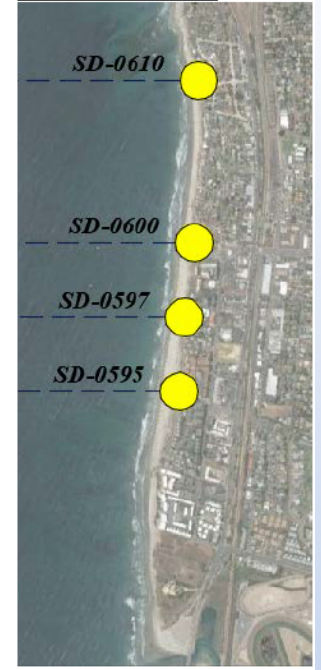
MSL Beach Width: +5.9 ft/yr

Shorezone Vol: +3.2 cy/ft/yr

Transect SD-0600 (October 8, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
SD-0610	260	-103	83	-20	-
SD-0600	286	-61	18	-43	178
SD-0597	235	-52	18	-34	-
SD-0595	253	-27	2	-25	-

Shorezone Volume Summary

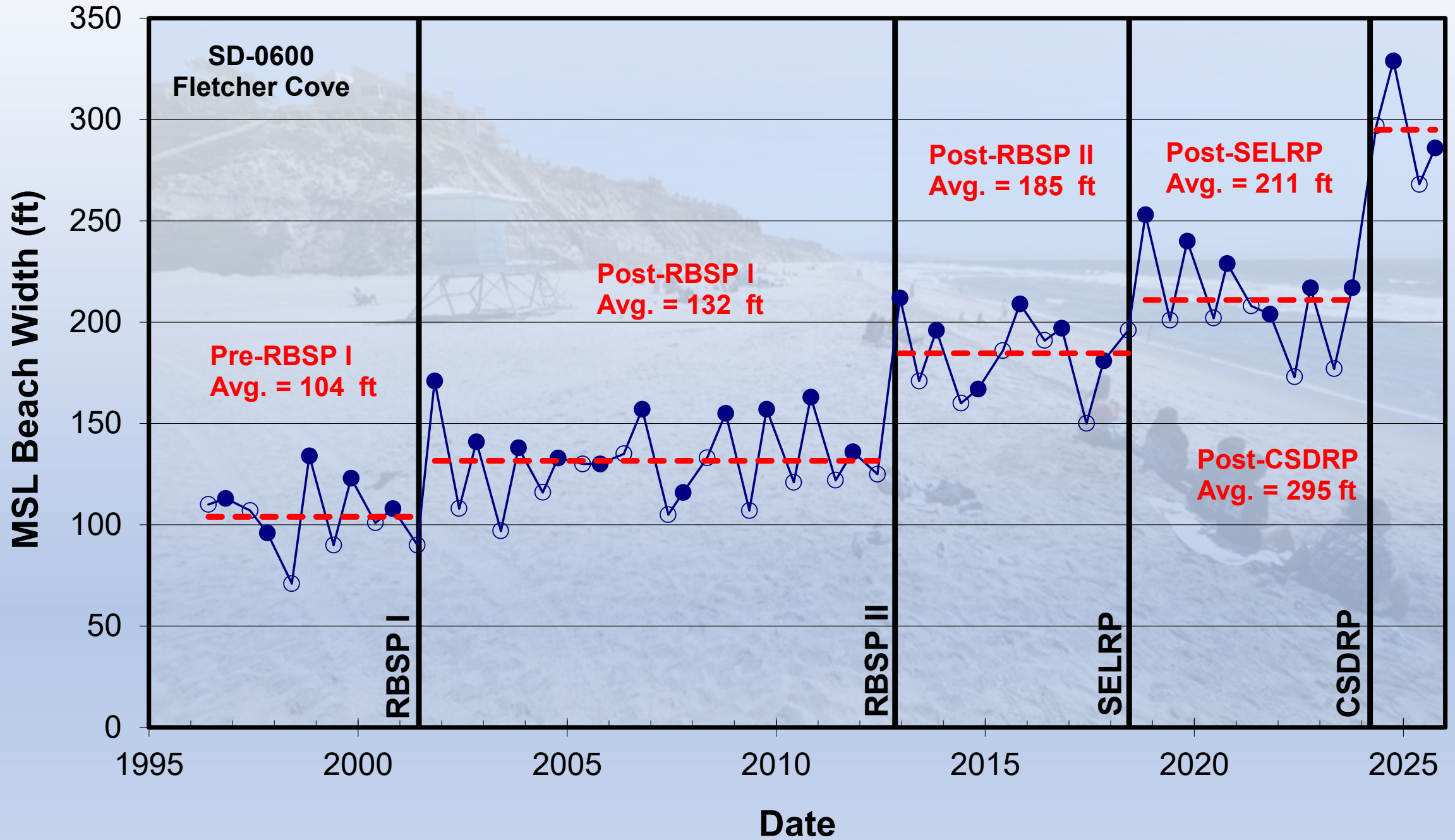
Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
SD-0610	-12	-
SD-0600	-52	108
SD-0597	-18	-
SD-0595	-15	-

SandSnap, SD-0600



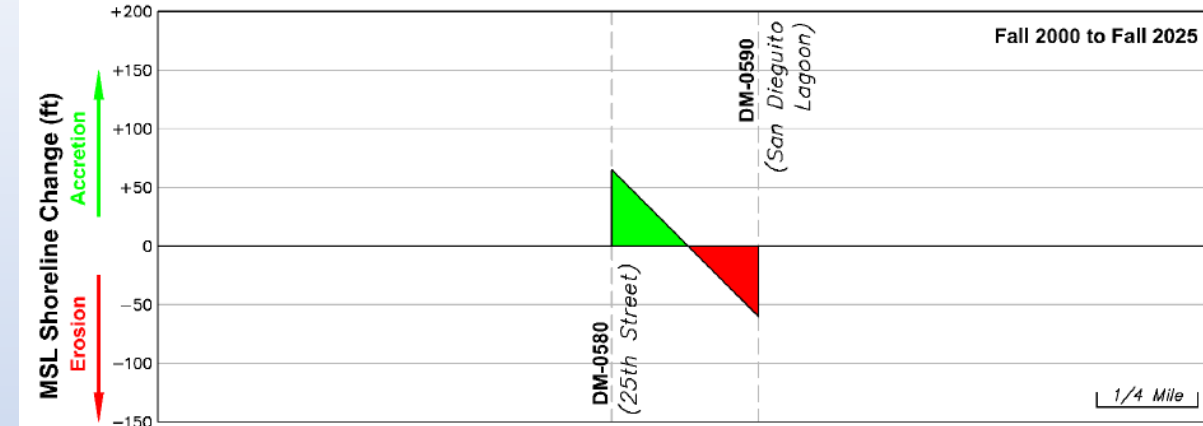
Spring 2025
 Sample ID: 06002505
 D₅₀: 0.29 mm
 Desc.: Medium Sand

Fall 2025
 Sample ID: 06002510
 D₅₀: 0.45 mm
 Desc.: Medium Sand

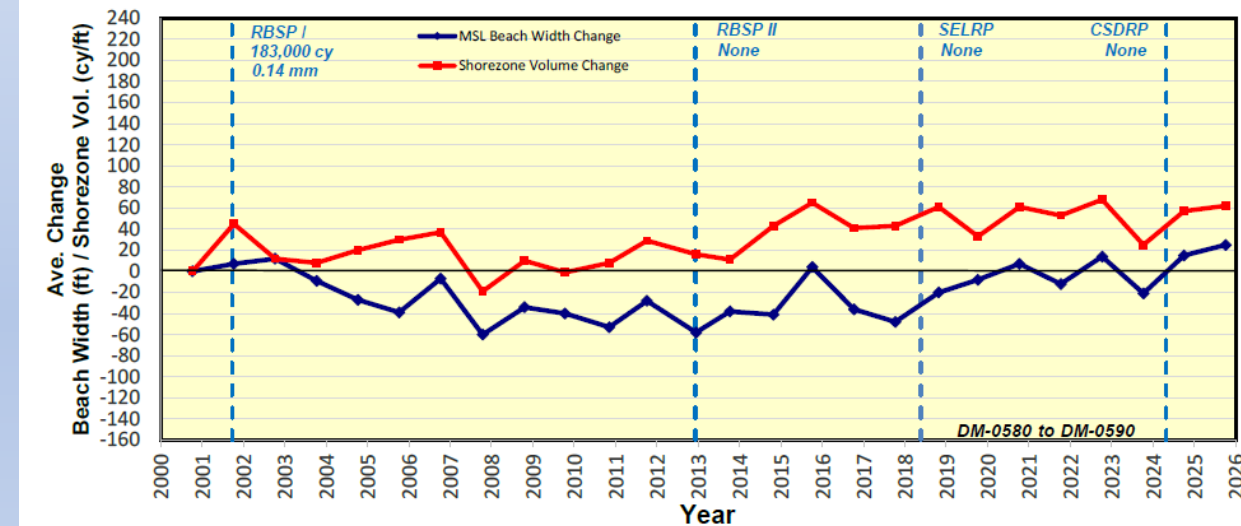


Del Mar Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +25 ft
Shorezone Vol: +62 cy/ft

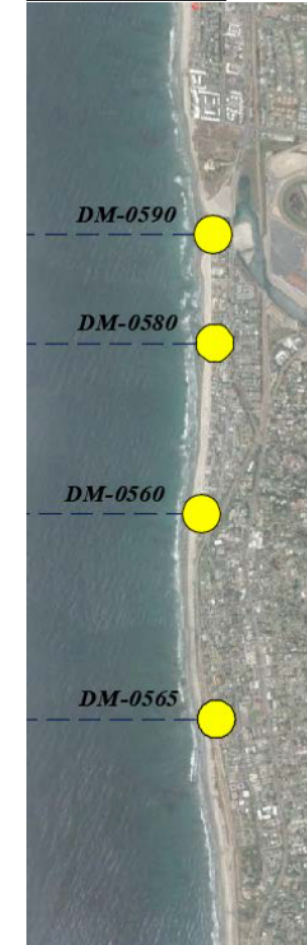
Trend: Fall 2000 to Fall 2025

MSL Beach Width: +0.7 ft/yr
Shorezone Vol: +2.1 cy/ft/yr

Transect DM-0580 (October 8, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
DM-0590	57	229	-177	52	-60
DM-0580	280	-111	100	-11	65
DM-0560	213	-27	10	-17	-
DM-0565	131	-64	70	6	-

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
DM-0590	42	59
DM-0580	-12	63
DM-0560	-18	-
DM-0565	17	-

SandSnap, DM-0580



Spring 2025

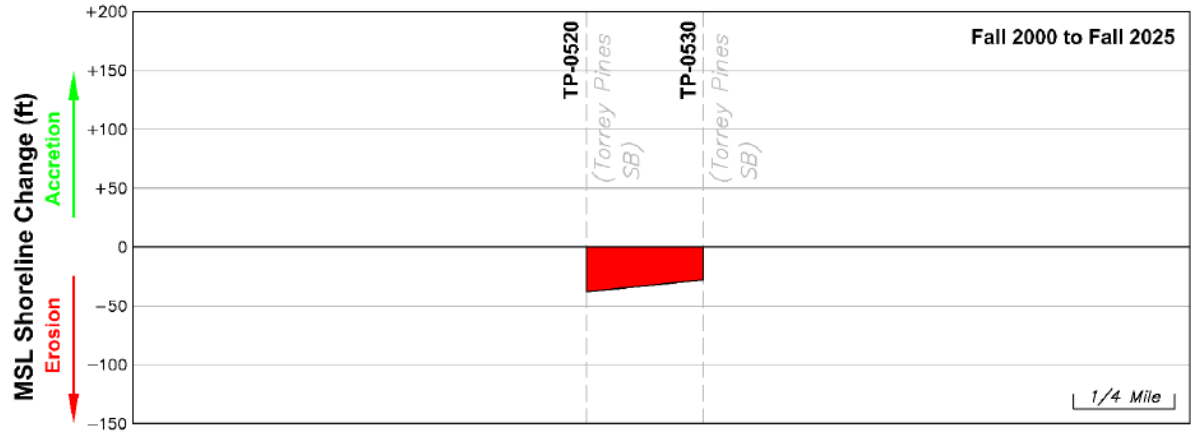
Sample ID: 05802505
D₅₀: 1.60 mm
Desc.: Very Coarse Sand

Fall 2025

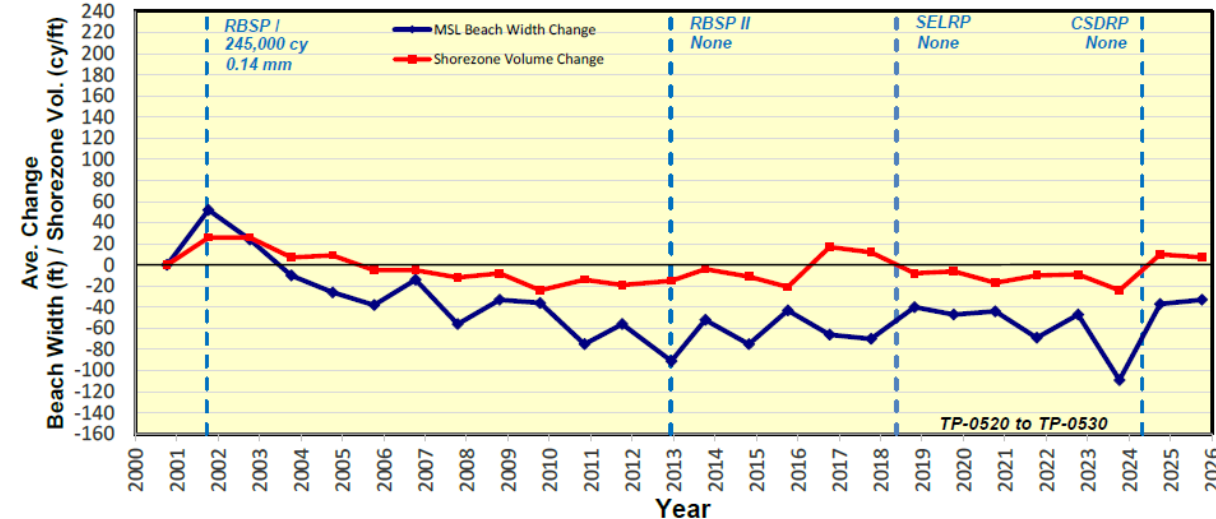
Sample ID: 05802510
D₅₀: 0.18 mm
Desc.: Fine Sand

Torrey Pines Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: -33 ft
Shorezone Vol: +7 cy/ft

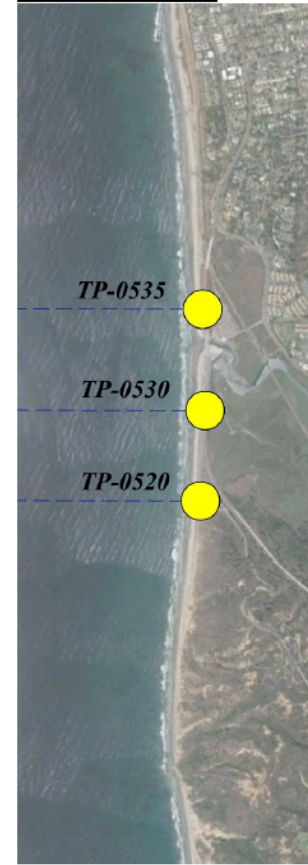
Trend: Fall 2000 to Fall 2025

MSL Beach Width: -2.7 ft/yr
Shorezone Vol: -0.5 cy/ft/yr

Transect TP-0530 (October 8, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
TP-0530	182	-42	51	9	-28
TP-0520	149	-64	63	-1	-38

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
TP-0530	5	40
TP-0520	-14	-35

SandSnap, TP-0530

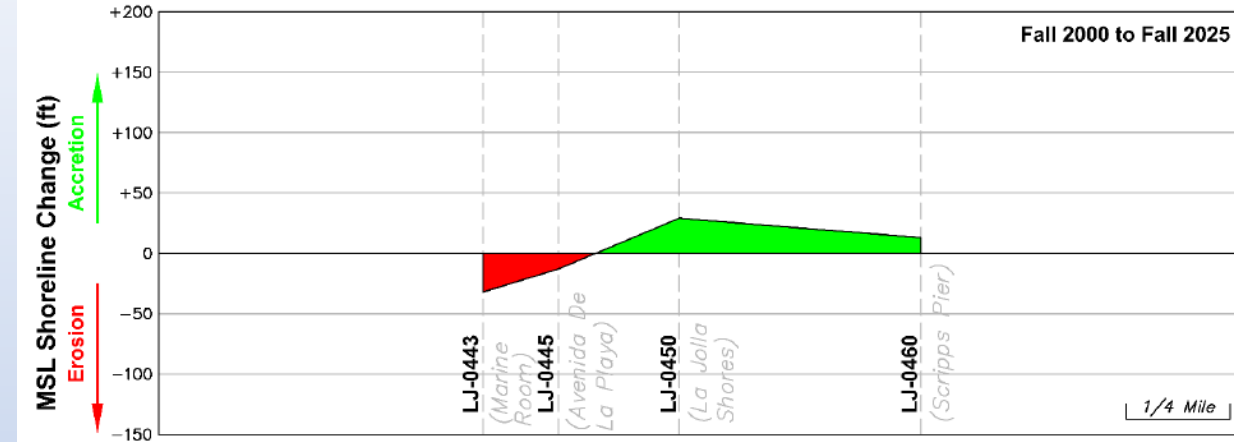


Spring 2025
Sample ID: 05302505
D₅₀: 0.25 mm
Desc.: Fine Sand

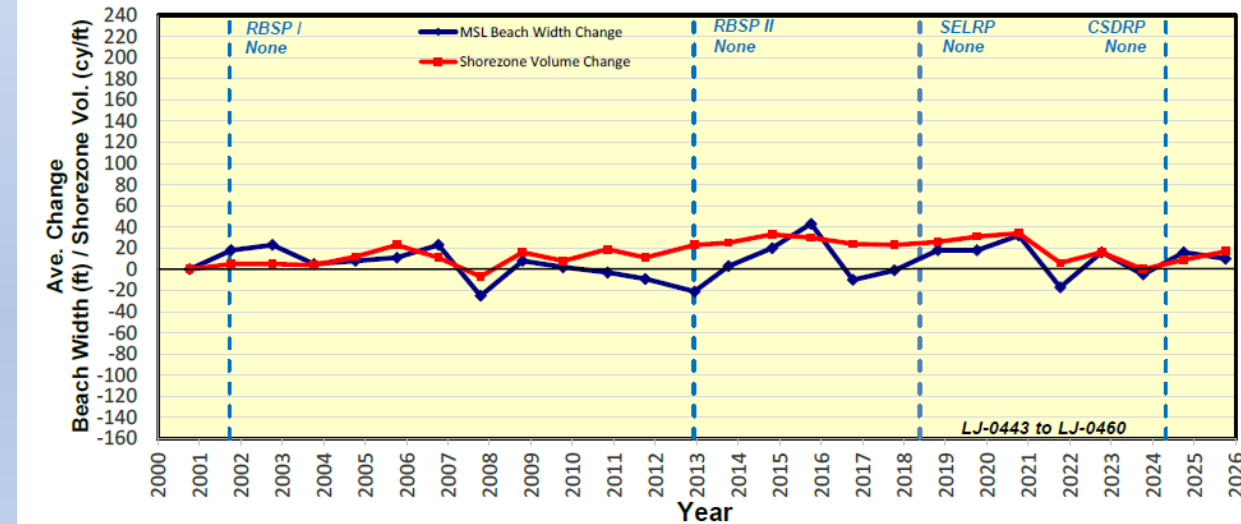
Fall 2025
Sample ID: 05302510
D₅₀: 0.15 mm
Desc.: Fine Sand

La Jolla Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



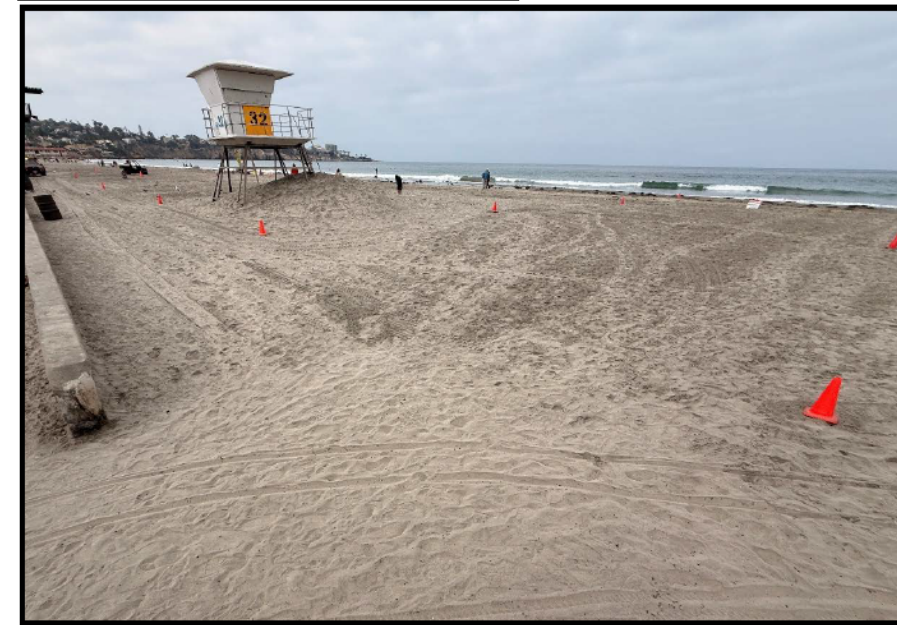
Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +10 ft
Shorezone Vol: +17 cy/ft

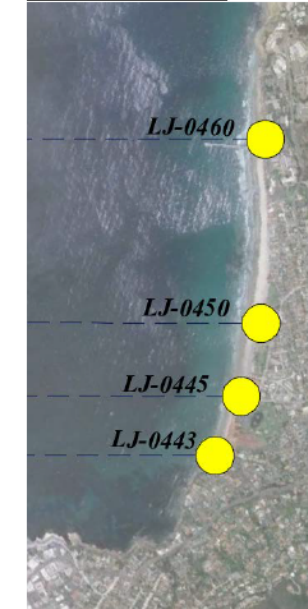
Trend: Fall 2000 to Fall 2025

MSL Beach Width: +0.1 ft/yr
Shorezone Vol: +0.6 cy/ft/yr

Transect LJ-0450 (October 8, 2025)



Location Map



~0.5 mile

MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
LJ-0460	197	-101	90	-11	13
LJ-0450	308	-54	64	10	29
LJ-0445	188	-35	17	-18	-13
LJ-0443	86	-53	37	-16	-32

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
LJ-0460	12	-1
LJ-0450	13	32
LJ-0445	2	-1
LJ-0443	-7	-6

SandSnap, LJ-0450



Spring 2025

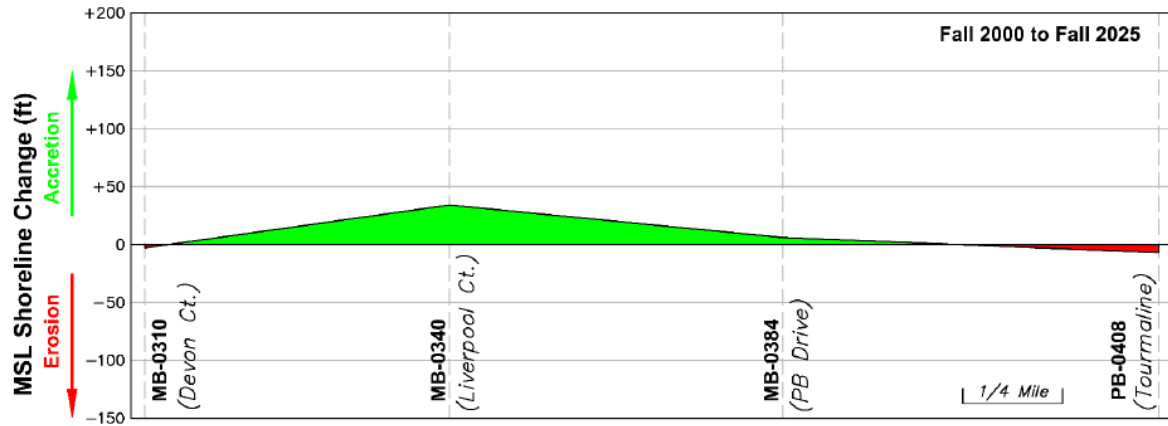
Sample ID: 04502505
D₅₀: 0.29 mm
Desc.: Medium Sand

Fall 2025

Sample ID: 04502510
D₅₀: 0.21 mm
Desc.: Fine Sand

Mission Beach Sub-Reach

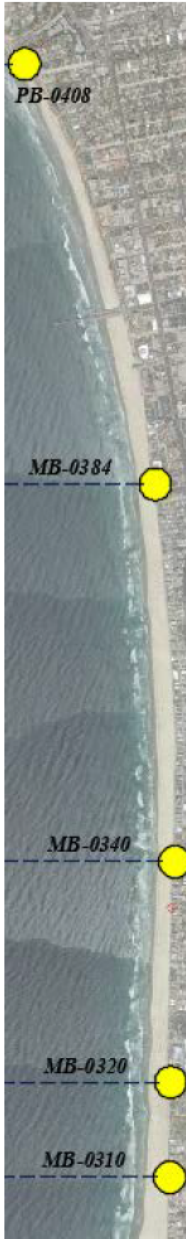
Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



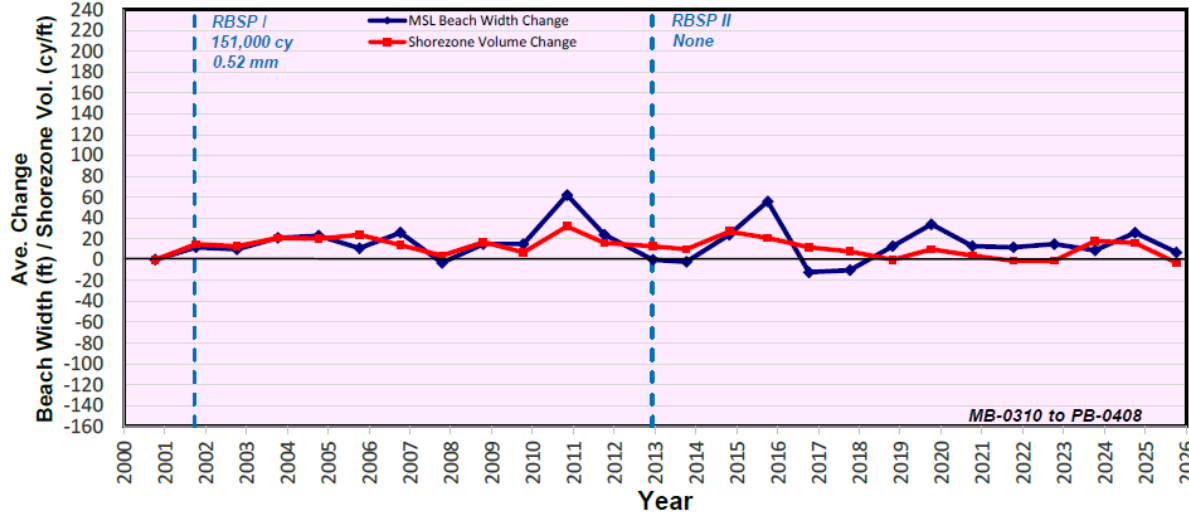
Transect MB-0340 (October 9, 2025)



Location Map



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +7 ft
Shorezone Vol: -3 cy/ft

Trend: Fall 2000 to Fall 2025

MSL Beach Width: 0.0 ft/yr
Shorezone Vol: -0.4 cy/ft/yr

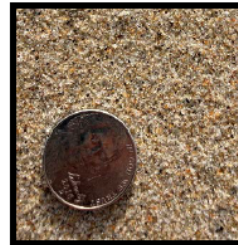
MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I Change (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
PB-0408	184	-52	35	-17	-7
MB-0384	250	-34	15	-19	6
MB-0340	228	-62	40	-22	34
MB-0320	249	-70	65	-5	-
MB-0310	287	-53	35	-18	-3

Shorezone Volume Summary

Transect	Annual Change (cy/ft) Fall 24-Fall 25	Post-RBSP I Change (cy/ft) Fall 00-Fall 25
	PB-0408	12
MB-0384	-48	8
MB-0340	-18	40
MB-0320	5	-
MB-0310	-18	-59

SandSnap, MB-0340



Spring 2025

Sample ID: 03402505
D₅₀: 0.23 mm

Desc.: Fine Sand

Fall 2025

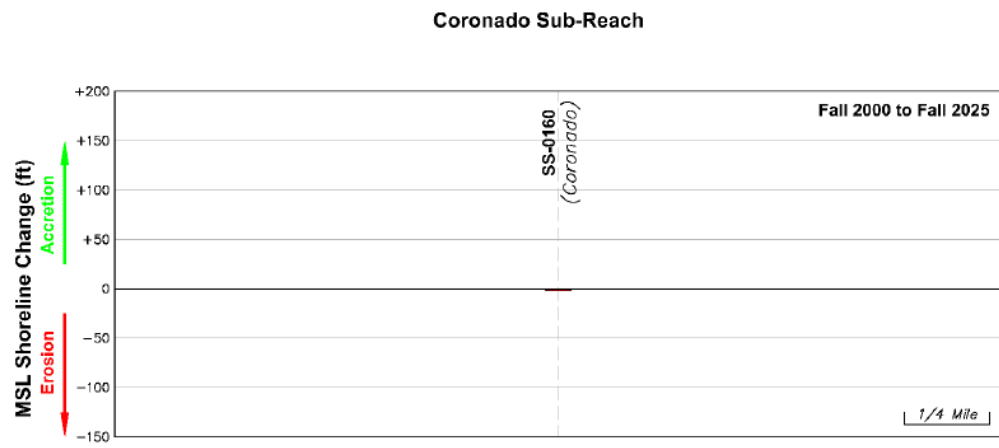
Sample ID: 03402510
D₅₀: 0.26 mm

Desc.: Fine Sand

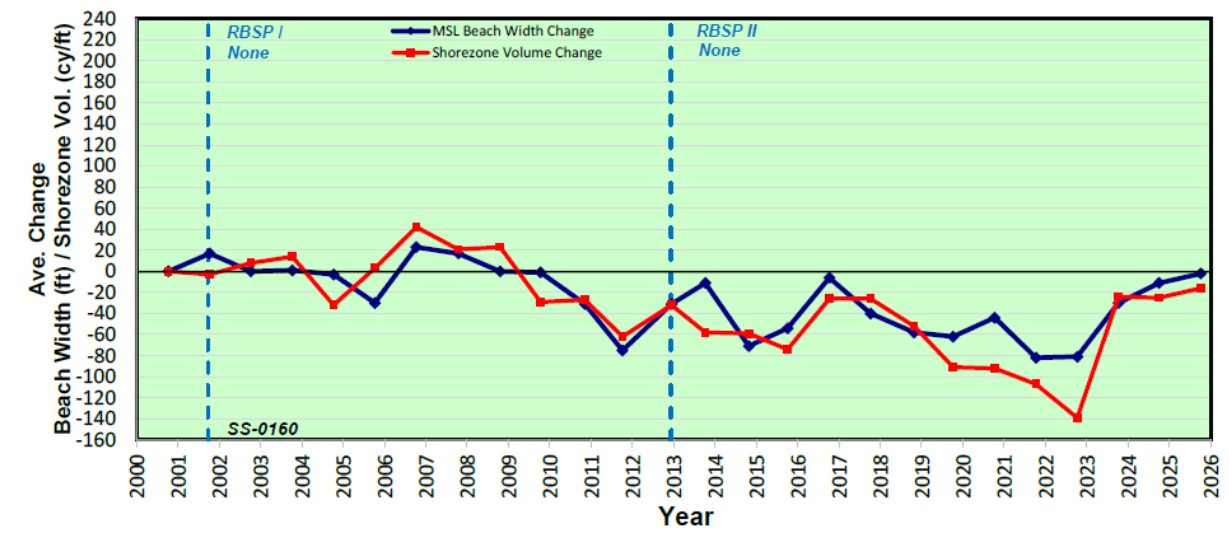
~0.5 mile

Coronado Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: -2 ft
Shorezone Vol: -16 cy/ft

Trend: Fall 2000 to Fall 2025

MSL Beach Width: -2.3 ft/yr
Shorezone Vol: -3.6 cy/ft/yr

Transect SS-0160 (October 7, 2025)



Location Map



~1 mile

MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
SS-0160	765	30	-21	9	-2

Shorezone Volume Summary

Transect	Annual Change (cy/ft) Fall 24-Fall 25	Post-RBSP I (cy/ft) Fall 00-Fall 25
SS-0160	9	-16

SandSnap, SS-0160



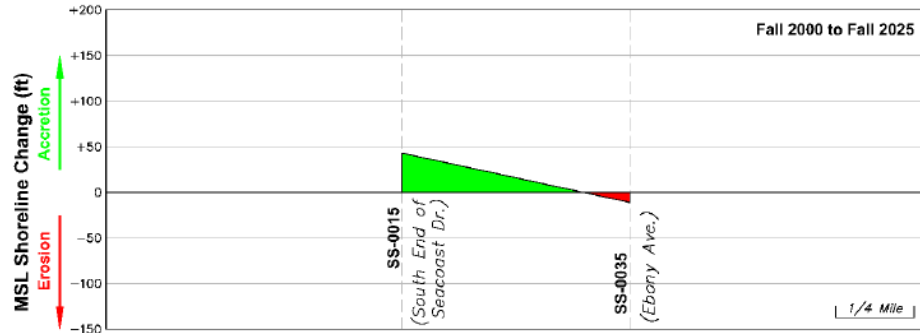
Spring 2025
Sample ID: 01602505
D₅₀: 0.34 mm
Desc.: Medium Sand

Fall 2025
Sample ID: 01602510
D₅₀: 0.34 mm
Desc.: Medium Sand

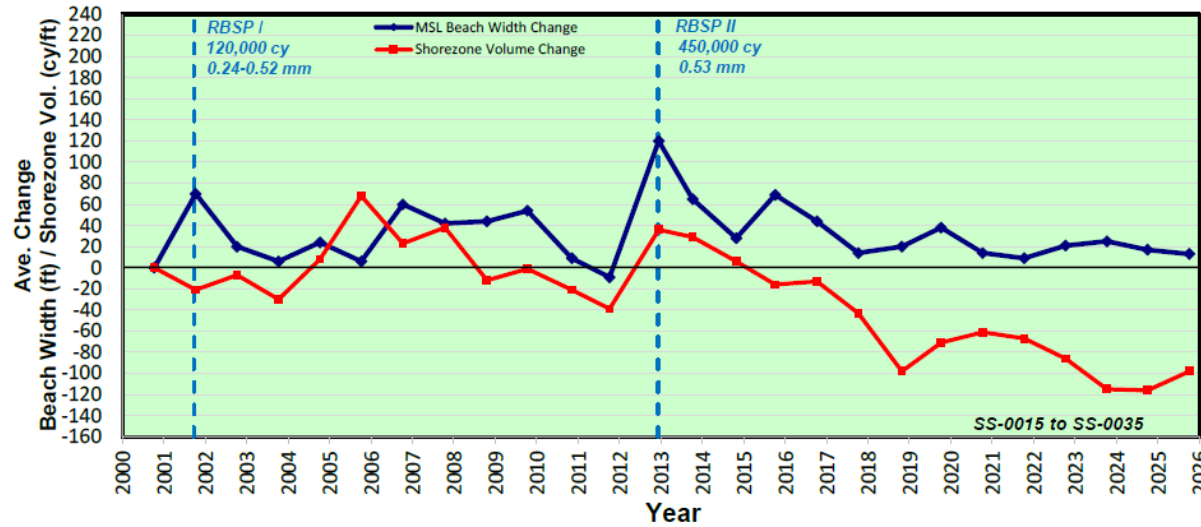
Imperial Beach Sub-Reach

Post-RBSP I MSL Shoreline Change (Fall 2000 to Fall 2025)

Imperial Beach Sub-Reach



Average MSL Beach Width and Shorezone Volume Change Relative to Pre-RBSP I Condition



Net Change: Fall 2000 to Fall 2025

MSL Beach Width: +13 ft
Shorezone Vol: -98 cy/ft

Trend: Fall 2000 to Fall 2025

MSL Beach Width: -0.4 ft/yr
Shorezone Vol: -4.8 cy/ft/yr

Transect SS-0035 (October 7, 2025)



Location Map



MSL Beach Width Summary

Transect	Fall 2025 Beach Width (ft)	Seasonal Change (ft)		Annual Change (ft) Fall 24-Fall 25	Post-RBSP I (ft) Fall 00-Fall 25
		Winter (Fall 24-Spr. 25)	Summer (Spr. 25-Fall 25)		
SS-0050	257	-114	68	-46	-
SS-0035	207	-91	56	-35	-11
SS-0025	233	-123	126	3	-
SS-0015	36	-12	39	27	43

Shorezone Volume Summary

Transect	Annual Change (cy/ft)	Post-RBSP I (cy/ft)
	Fall 24-Fall 25	Fall 00-Fall 25
SS-0050	-10	-
SS-0035	0	-129
SS-0025	0	-
SS-0015	36	-68

SandSnap, SS-0035



Spring 2025

Sample ID: 00352505
D₅₀: 0.32 mm
Desc.: Medium Sand

Fall 2025

Sample ID: 00352510
D₅₀: 0.32 mm
Desc.: Medium Sand

Summary

Sub-Reach	Fall 2025 Ave. MSL Beach Width	Shoreline Change Trend Fall 2000 to Fall 2025	
Oceanside	96 ft	-2.0 ft/yr	Eroding
N. Carlsbad	141 ft	+0.4 ft/yr	Stable
S. Carlsbad	74 ft	-1.6 ft/yr	Eroding
Leucadia/Encinitas	162 ft	-2.5 ft/yr	Eroding
Cardiff	180 ft	+3.0 ft/yr	Accreting
Solana Beach	286 ft	+5.9 ft/yr	Accreting
Del Mar	209 ft	+0.7 ft/yr	Stable
Torrey Pines	167 ft	-2.7 ft/yr	Eroding
La Jolla	219 ft	+0.1 ft/yr	Stable
Mission Beach	237 ft	0.0 ft/yr	Stable
Coronado	765 ft	-2.3 ft/yr	Eroding
Imperial Beach	122 ft	-0.4 ft/yr	Stable



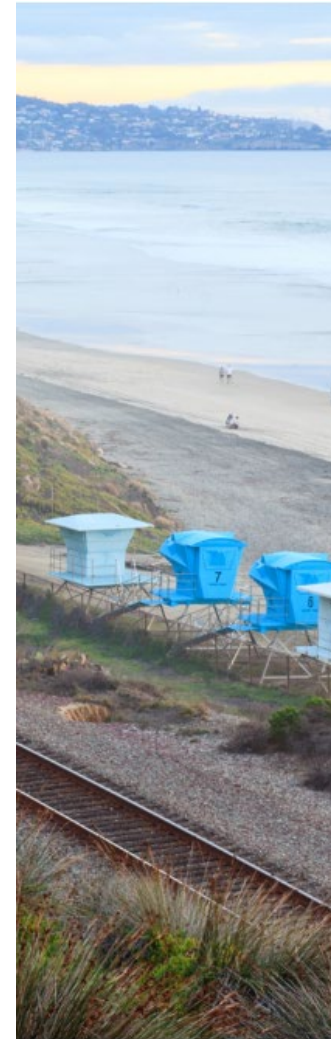
DRAFT Regional Shoreline Monitoring Program Open Data Portal Dashboard

What is Open Data Portal (ODP)?

- **Open Data:** information that can be freely used and shared
- **Open Data Portal:** a platform that lets the public view, download, analyze, and explore data

Benefits of Open Data Portal for Our Communities

- **Improve Transparency** through data sharing
- **Maximize Accessibility** for communities at all levels
- **Promote Diversified Content** on topics that matter to our region



W I N N E R

**San Diego Association of
Governments, California
(SANDAG)**

ACHIEVEMENTS

Built a centralized data catalog with unique data assets searchable to all end users

Facilitated review of sustainable development efforts across its 19 local jurisdictions

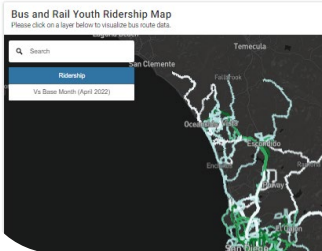
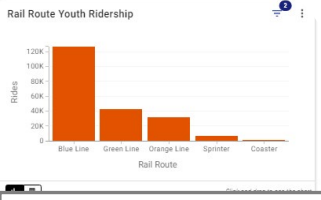
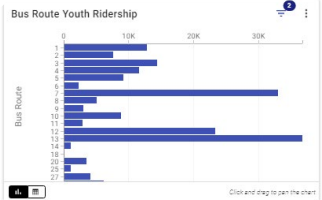
Provided a reputable hub for publishing original analysis and research

Solution
Data & Insights

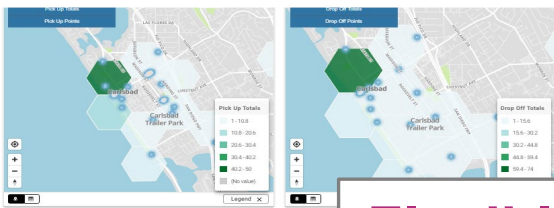


Diversified Content on ODP

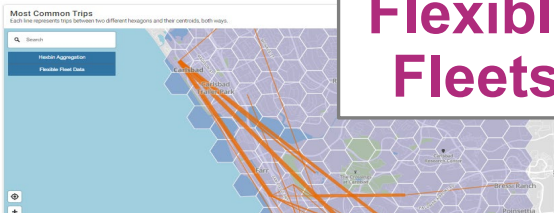
Applications and Featured Stories



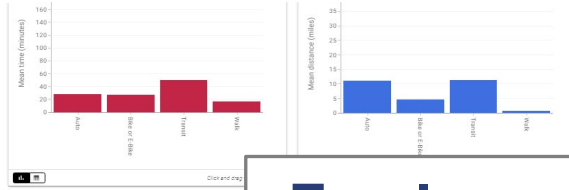
Youth Opportunity Pass



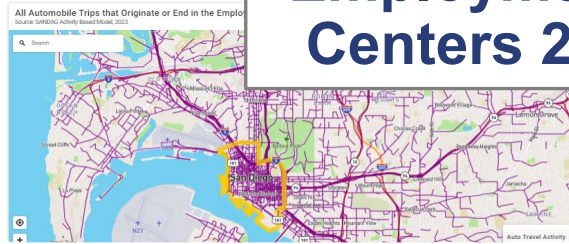
Flexible Fleets



Unique Data & Original Research



Employment Centers 2.0



Census, Estimates, and Forecasts

[Catalog](#)

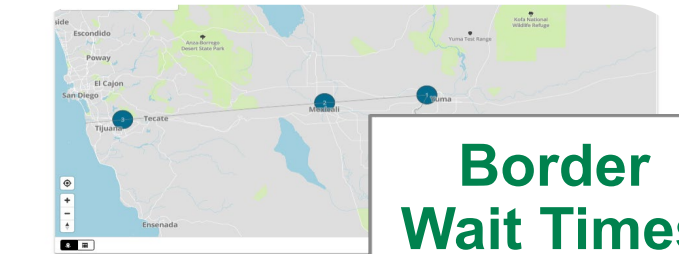
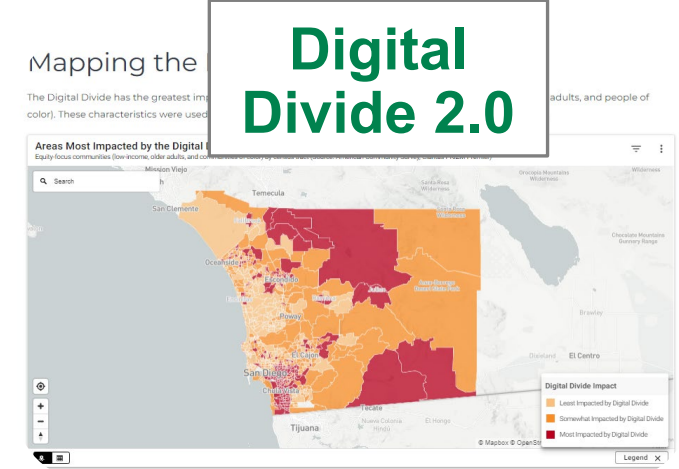
[Data Visualizations](#)

History of regional data

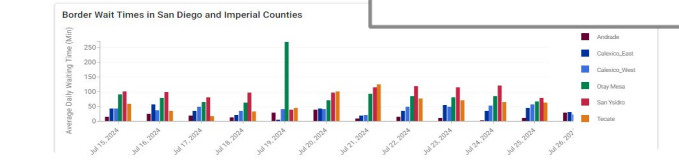
Current and previous regional [estimates](#) and [forecasts](#)



Connecting Our Communities



Border Wait Times



The background of the slide is a semi-transparent aerial map of a coastal region, showing a large bay or estuary on the left side and a network of roads and waterways across the land. The map is tinted with a purple and blue gradient.

Showcasing 2024 Annual Shoreline Monitoring Report

Next Steps

- Shoreline Preservation Working Group members and their staff will have 60-day to review the draft dashboard to provide feedback.
- Email feedback to Courtney Becker at Courtney.Becker@sandag.org.
- Finalize 2024 Shoreline Monitoring Data then integrate historical data and photograph monitoring to dashboard.

Stay connected with SANDAG



Project Manager: Courtney Becker



Email: courtney.becker@sandag.org

Phone: (619) 619-6942



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SANDAG.org



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