



SURFSIDE–SUNSET BEACH SAND REPLENISHMENT PROJECT (Stage 14)

Public Works Department
September 2, 2025

BACKGROUND – Surfside-Sunset Beach Nourishment

- San Gabriel River to Newport Bay (Surfside Sunset Beach Nourishment Project)
 - mitigation project, designed as remediation for beach erosion damage largely incident to Federal flood control, navigation, and defense projects,
 - Mitigation/beach nourishment until justification for next cycle/stage.
- Restores 17 miles of coastline from the San Gabriel River to Newport Bay Harbor entrance
- Replenishes ~1.8 million cubic yards of sand every five to seven years.
- Congress authorized this project via the Rivers and Harbors Act of 1962.
- To date, 13 Stages completed, and most recent stage (Stage 13) completed in February 2024.



BENEFITS & NEED

Coastal Resilience

- Natural sand replenishment prevented by engineered structures

Dams Levees
Jetties Beach Groins
Concrete Lined Channels

- Economy
 - Tourism
 - Property Values
 - Recreation





Beach erosion at Surfside Colony, 1953



High tides cause flooding on Pacific Coast Highway at Bolsa Chica State Beach in Huntington Beach, CA, on Tuesday, January 24, 2023. (Photo by Jeff Gritchen, Orange County Register/SCNG)

PROJECT DETAILS

- US Army Corps of Engineers administers the project for the regional working group.

Regional Group

Huntington Beach

Seal Beach

Newport Beach

County of Orange

CA State Parks

Surfside Stormwater Protection Division

- Sand is recovered from two off-shore sites and pumped from barges to the beach (Surfside).
- Sand migrates southward via wave action replenishing starved beaches.



SAND COLLECTOR

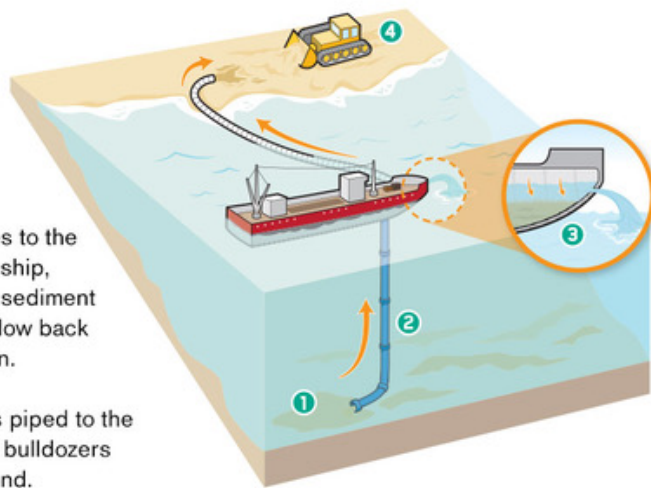
Large ships called *dredgers* are designed to dig or suck up sediment from the bottom of a body of water. They're used to harvest offshore sand for beach nourishment.

1. A vacuum-like device scrapes over the seabed, sucking up sand and seawater.

2. The mixture is pumped into a large container on the ship.

3. Sand settles to the bottom of the ship, allowing finer sediment and water to flow back in to the ocean.

4. The sand is piped to the beach, where bulldozers spread it around.



Sand is pumped from a ship two miles offshore in Sunset Beach as part of the sand replenishment project. (James Carbone)

FUNDING & SCHEDULE

- Stage 14 FY (2028-29)
 - Dependent on USACE (Federal Funding)
 - \$68M
 - 67% Federal funding
 - 33% Local funding based on linear feet of coastline
 - Huntington Beach = \$1.2M
 - Newport Beach
 - CA State Parks
 - Seal Beach
 - County of Orange
 - Surfside Stormwater Protection Division



NEXT STEPS

- Ongoing collaboration with local partners
- Capital Improvement Project – Fund Stage 14 planning and implementation
- Appeal to local, state, and federal representatives for project prioritization and funding



Local dignitaries shovel sand at the groundbreaking ceremony for the Surfside-Sunset Beach sand replenishment project in Seal Beach on Wednesday. (James Carbone)



Questions?

