CITY OF SOLANA BEACH COASTAL STORM DAMAGE REDUCTION PROJECT

Project Update









PROJECT OVERVIEW

- Project is a partnership between City + State + Federal Agencies
- Project planning, environmental and permitting phase 20 years
- One of the first entirely new federal beach sand projects in California
- USACE Project will create a new, 150-foot wide beach sand berm
- Volume of sand dredged is approximately 700,000 cubic yards
- Project footprint is approximately 7,200 feet long

PROJECT OVERVIEW

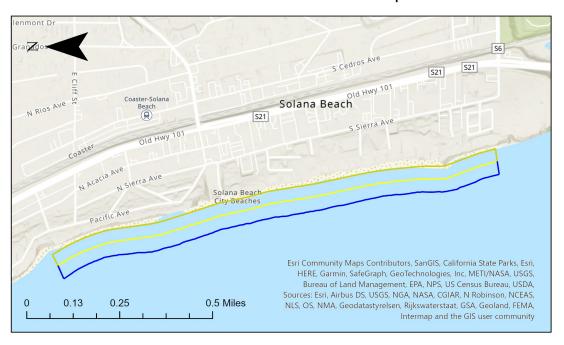
- Sand will be placed from Tide Park stairs to southern City limits
- Sand source is borrow site SO-5 (offshore San Dieguito River mouth)
- Sand renourishment events approximately every 10 years
- Renourishment volume is 290,000 cubic yards
- Final renourishment event would occur in 2074 (e.g., in 50 years)

PROJECT FOOTPRINT

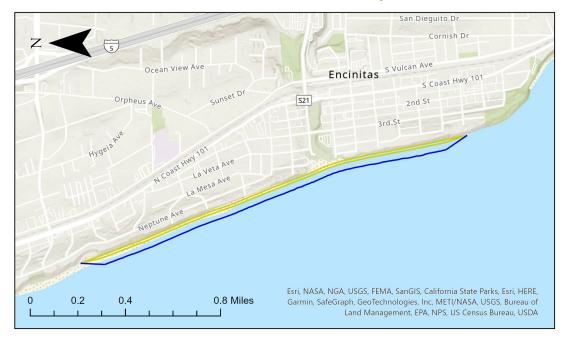


SOLANA BEACH & ENCINITAS NOURISHMENT FOOTPRINTS

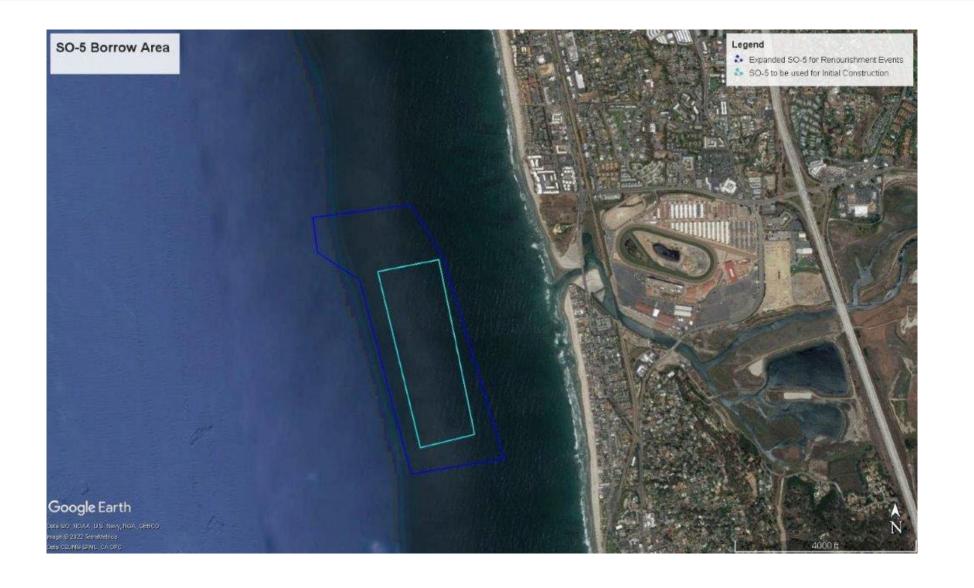
Solana Beach Nourishment Footprint



Encinitas Nourishment Footprint



SO-5 OFFSHORE SAND SOURCE



PROPOSED PROJECT PHASING

Proposed

Pipeline Installation

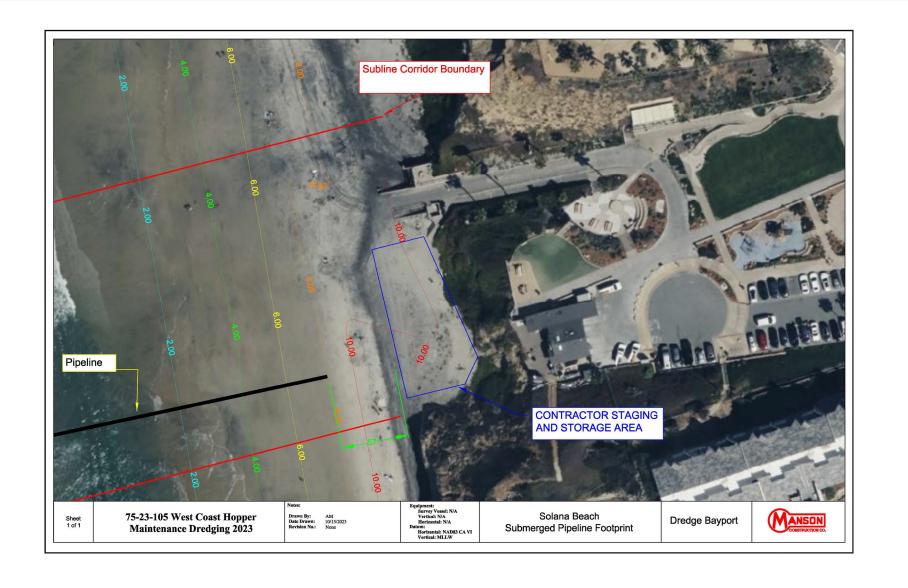
December 4, 2023

Project Construction December 2023 or January 2024 Construction will last approximately 60 days

Dredging will occur 24 hours a day / 7 days a week Shore equipment operates 12 hours/day, 7 days week

Post-construction demob: February / March 2024

SOLANA BEACH SUBMERGED PIPELINE FOOTPRINT LOCATION



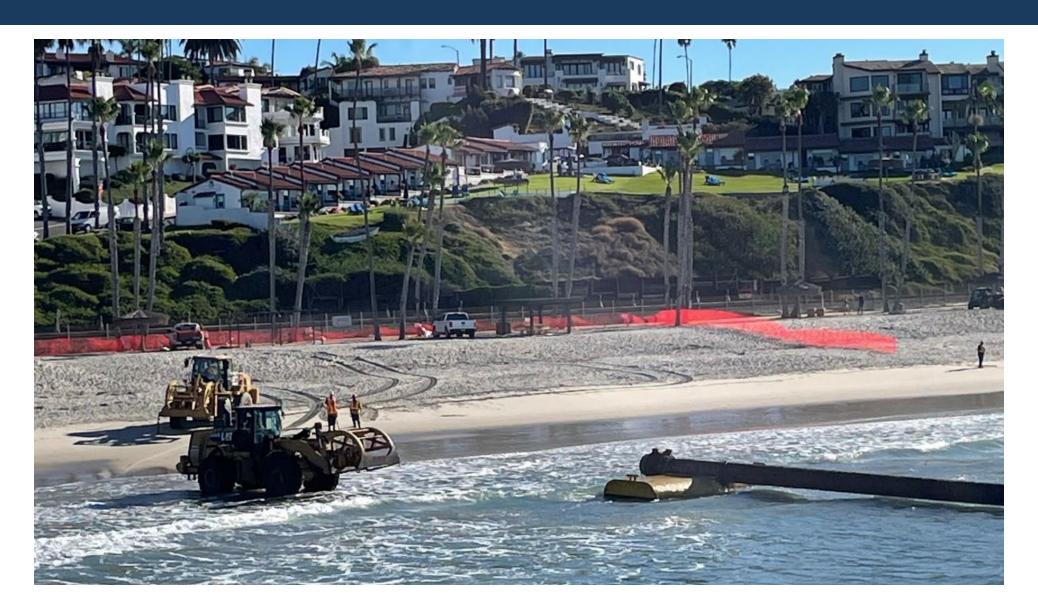


PIPELINE LANDING: 1 DAY PROCESS



PIPELINE LANDING (SUBLINE INSTALL)

DREDGE PIPE SUBLINE BEING "LANDED" IN SAN CLEMENTE: 11/21/23

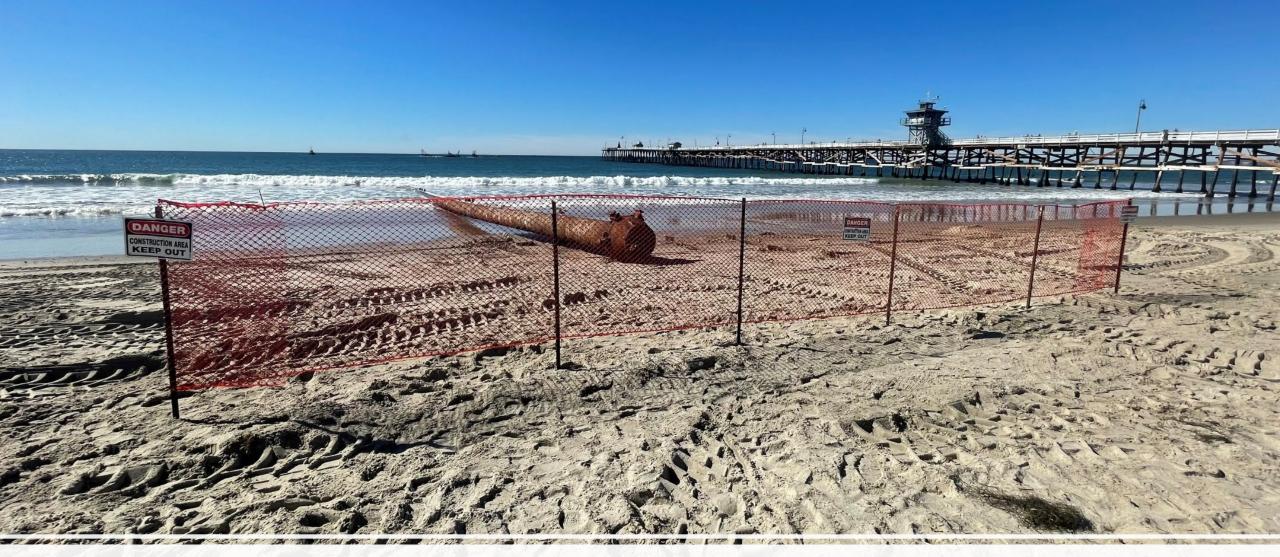


DREDGE PIPELINE BEING PULLED ASHORE





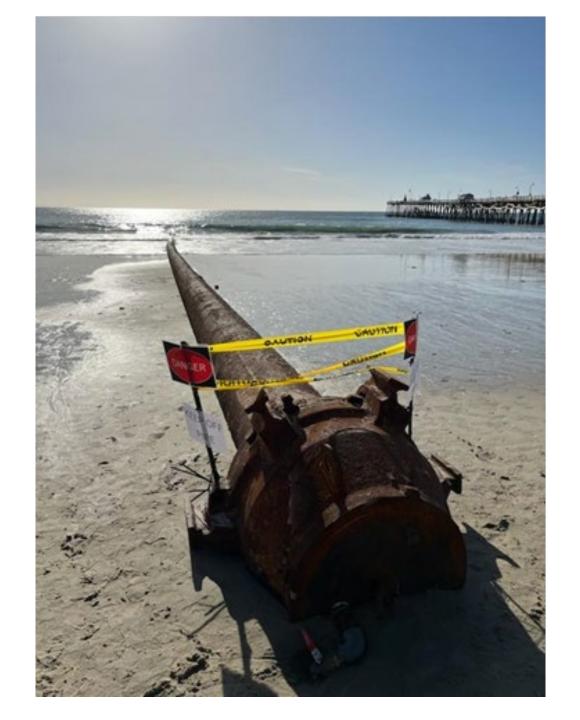
TEMPORARY BEACH CLOSURE



SAN CLEMENTE SUBLINE INSTALL: 11/21/23

Dredge "subline"
placed
on the beach
prior to start of
construction phase.

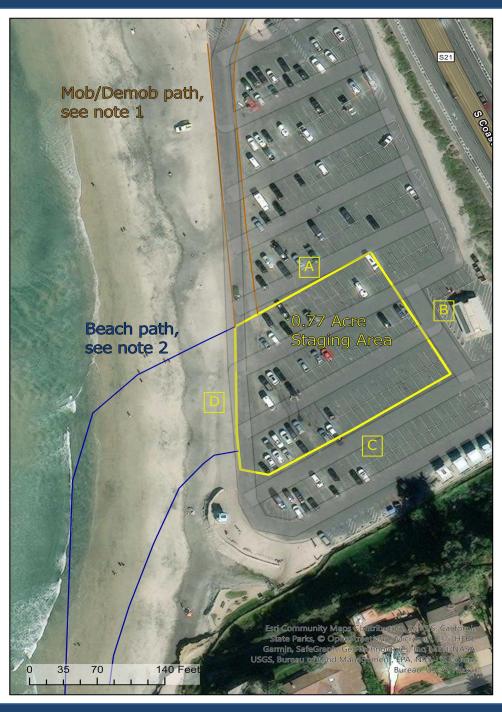
Proposed to occur on 12/4/23 with City concurrence



EXAMPLE:

EQUIPMENT STORAGE AT CARDIFF STATE PARKS PARKING LOT







Notes:

- 1. Approximate mobilization/ demobilization path (orange) will be utilized at the beginning and end of construction.
- 2. Approximate beach path (blue) will be utilized periodically by equipment transiting to the Solana Beach construction area.
- S. Cardiff Staging Area Approximate Dimensions:
- A 165 feet
- B 165 feet
- C 230 feet
- D 175 feet



STATE PARKS

SEASIDE PARKING LOT STAGING AREA





Fletcher Cove Staging Area Approximate Dimensions:

- A 50 feet
- B 130 feet
- C 60 feet
- D 130 feet



FLETCHER COVE STAGING AREA



EXAMPLE: CONSTRUCTION PHASE

EXAMPLE: CONSTRUCTION PHASE



PUBLIC SAFETY PROGRAM



Public signs to be posted at multiple locations



Equipment moving along beach will have spotters at all times



Temporary construction fencing around dredge discharge area



No public access in active sand placement areas

PROJECT FUNDED BY

Bipartisan Infrastructure Law

AMERICA

& Contractor Signage

72" Design and Construction **West Coast Hopper** Supervised by: **Maintenance Dredging 2023** San Clemente, CA Sponsored by: **US Army Corps** of Engineers 48" Portland, San Francisco. & Los Angeles Districts Contractor: Manson Construction Co. U.S. ARMY Seattle, Washington

Safety is a Job Requirement

West Coast Hopper Maintenance Dredging 2023
Manson Construction Co. Seattle, Washington

This project started
Days since last lost time accident
Total lost time injuries

48"

OUTREACH & COMMUNICATIONS

- Public Outreach & Communications
 - Public signs to be posted by City, USACE & Contractor
 - Beach access limitations during active construction phase
 - Temporary beach closures in work zone to protect public safety
 - Project information & construction schedule communicated:
 - ✓ @ Council Meetings
 - ✓ Press Releases & E-Blasts, QR Code
 - ✓ Dedicated Project Website
 - ✓ Social Media posts
 - ✓ Public Noticing onsite

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Sand Placement and Area Closures

Solana Beach













January - March 2024

The U.S. Army Corps of Engineers is working closely with the Cities of Encinitas and Solana Beach in a joint effort to reduce bluff and beach erosion along this stretch of coast.

Over 700,000 cubic yards of sand will be dredged from a borrow area approximately 3,500 feet offshore of the San Dieguito Lagoon, then pumped ashore using a submerged pipeline extending onto the beach near Fletcher Cove. The sand will then be pumped along the beach and shaped into a berm by earthmoving equipment.

During construction, beach access will be restricted to protect public safety. In addition, portions of the South Cardiff Seaside parking lot and Fletcher Cove Beach will be closed for project staging.

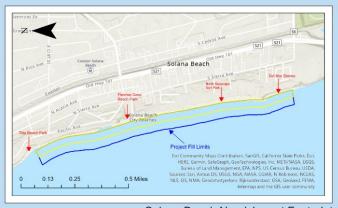
Project Contacts:

Manson Construction:

USACE Contacts:

City of Solana Beach Contacts:





Solana Beach Nourishment Footprint

STAFF RECOMMENDATION

That the City Council receive this Update Report and consider and provide direction to:

- Allow USACE & Contractor to install dredge subline 12/4/23
- Prepare for project mobilization as early as 12/11/23
- Prepare for sand placement as early as 12/15/23
- Staff will continue to keep the public & Council informed

QUESTIONS?