

SLR Impacts on Rail Line Infrastructure in San Clemente

Smart Coast California Virtual Stakeholder Meeting, June 14, 2023

Cecilia Gallardo-Daly, Community Development Director







San Clemente Coastal Zone

- Coastal Zone extends inland to I-5
- Approximately 15% of the land area of the City
- Includes 5 miles of coastline in the City
- 20+ acres of public beaches
- 15 public beach access ways





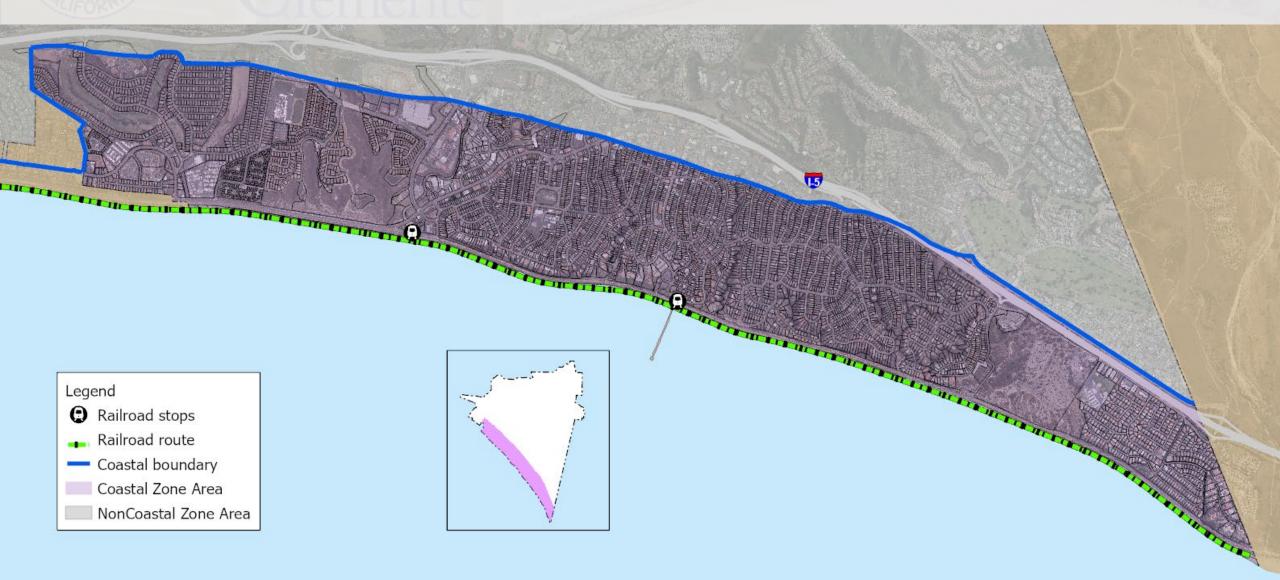


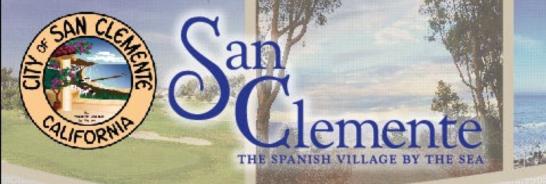
San Clemente Coastal Zone

- LOSSAN rail corridor runs along City coastline
- Railroad sits atop a revetment
- Coastal bluff backed shoreline
- Owned by Orange County Transportation Agency (OCTA)
- Passenger & heavy rail service
- Designated as a Strategic Rail Corridor Network



San Clemente Coastal Zone









Coastal Hazards & Infrastructure

- LOSSAN rail corridor affected by the loss of the sandy beach and bluff erosion
- Ancient landslides along City coastline are being reactivated by loss of sandy beach
- Sandy beach functions as a natural buffer from wave energy
- Results in damage to the LOSSAN rail corridor
- Increased maintenance and emergency repairs
- Rail service disruptions and delays







Cyprus Shores

- September 2021 landslide
- Disruption to commuter service and supply chain dependent heavy rail service
- Rip Rap and Track Stabilization
 Projects
- Passenger rail service resumed April 2023















Casa Romantica - June 5, 2023



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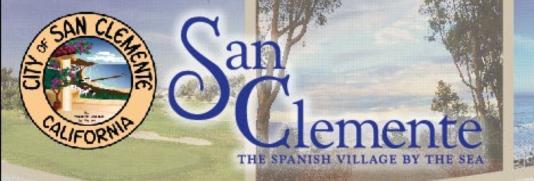




OCTA: Rail Protection

- South Coast Rail Infrastructure Feasibility Study
- Keeping rail corridor in place
- Alternative Concepts Analysis
- Near term 0 10 years
- Mid Range 10-30 years
- City is a key stakeholder





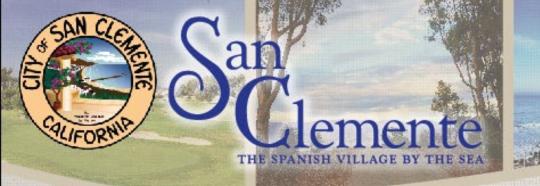




OCTA: Rail Line Relocation

- OCTA will embark on a future corridor study
- 30+ year long term planning horizon
- Alternative alignments
- Not decision documents, but feasibility studies









Thank you for your time!

