



Rising Seas & Protecting the Public Trust

Long Beach | Sept. 25, 2018

PREVENTION FIRST

California State
Lands Commission



California State Lands Commission



The Commission's jurisdiction over sovereign lands is rooted in the **Public Trust Doctrine**. Tide and submerged lands and the beds of lakes, streams, and other navigable waterways are held in trust by the State of California for the benefit of the people of California.

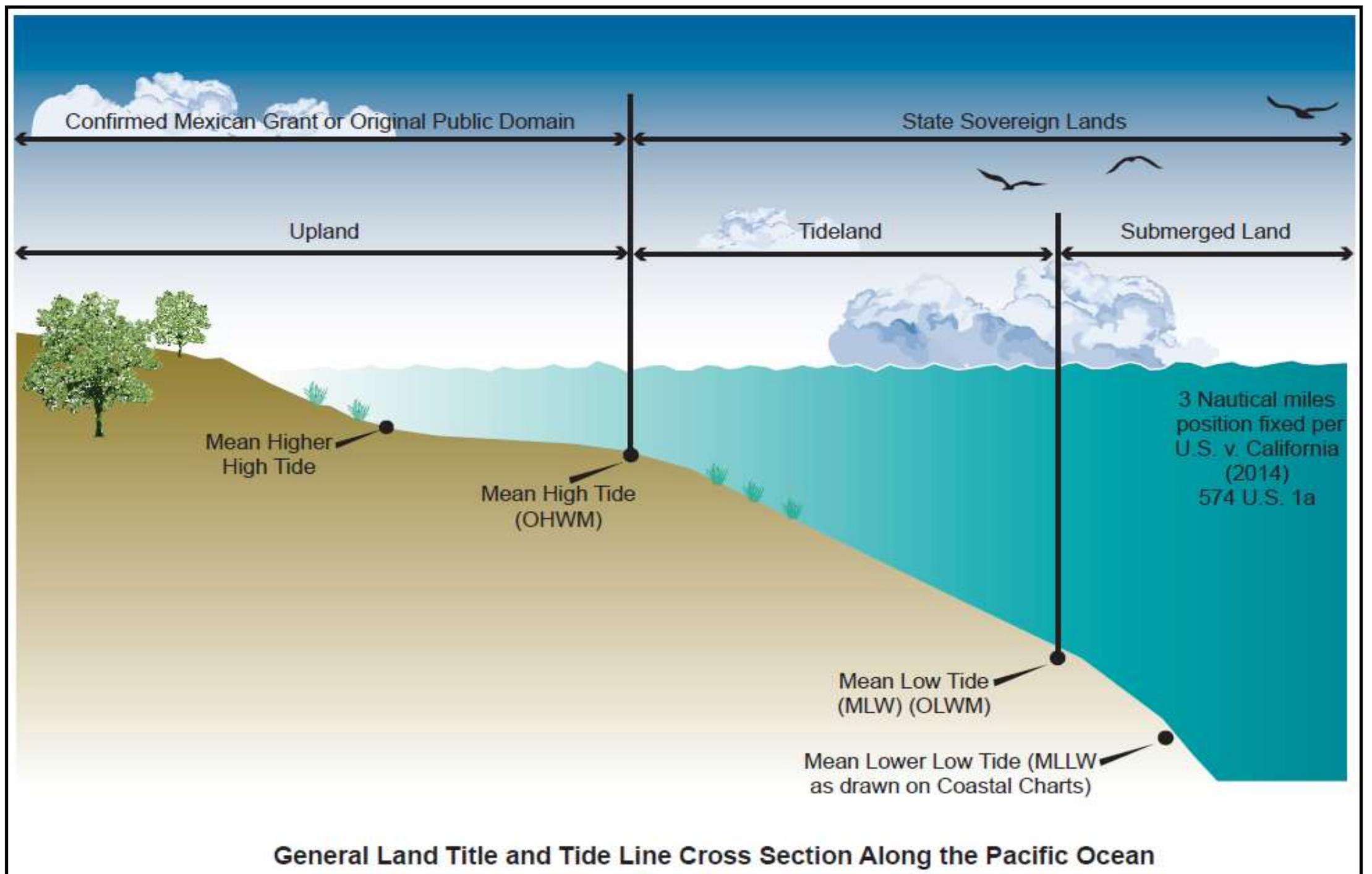
- 4 million acres
- 120 rivers and sloughs
- 40 lakes
- Thousands of miles of non-coastal shorelines
- **1100 miles of coastline**
- **3 nautical miles offshore**

California State Lands Commission

What We Do

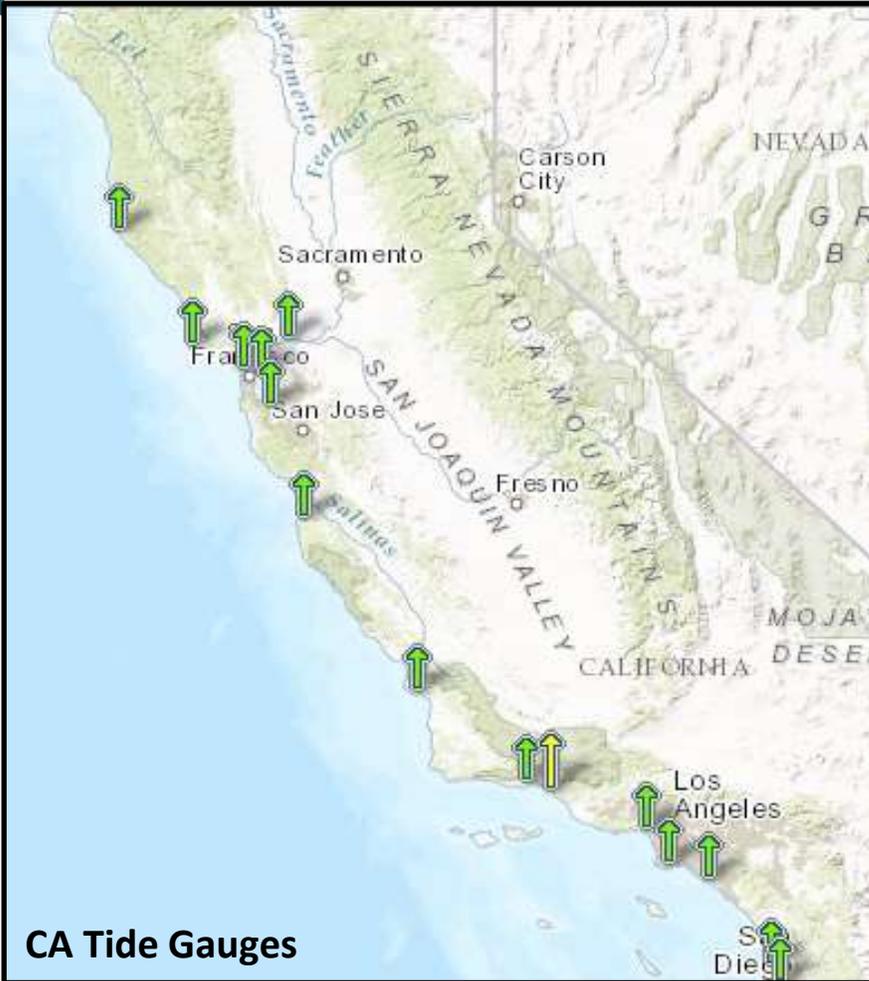
- Issue leases to use public trust lands
- Oversee marine oil terminals
- Oil spill prevention
- Regulate marine invasive species

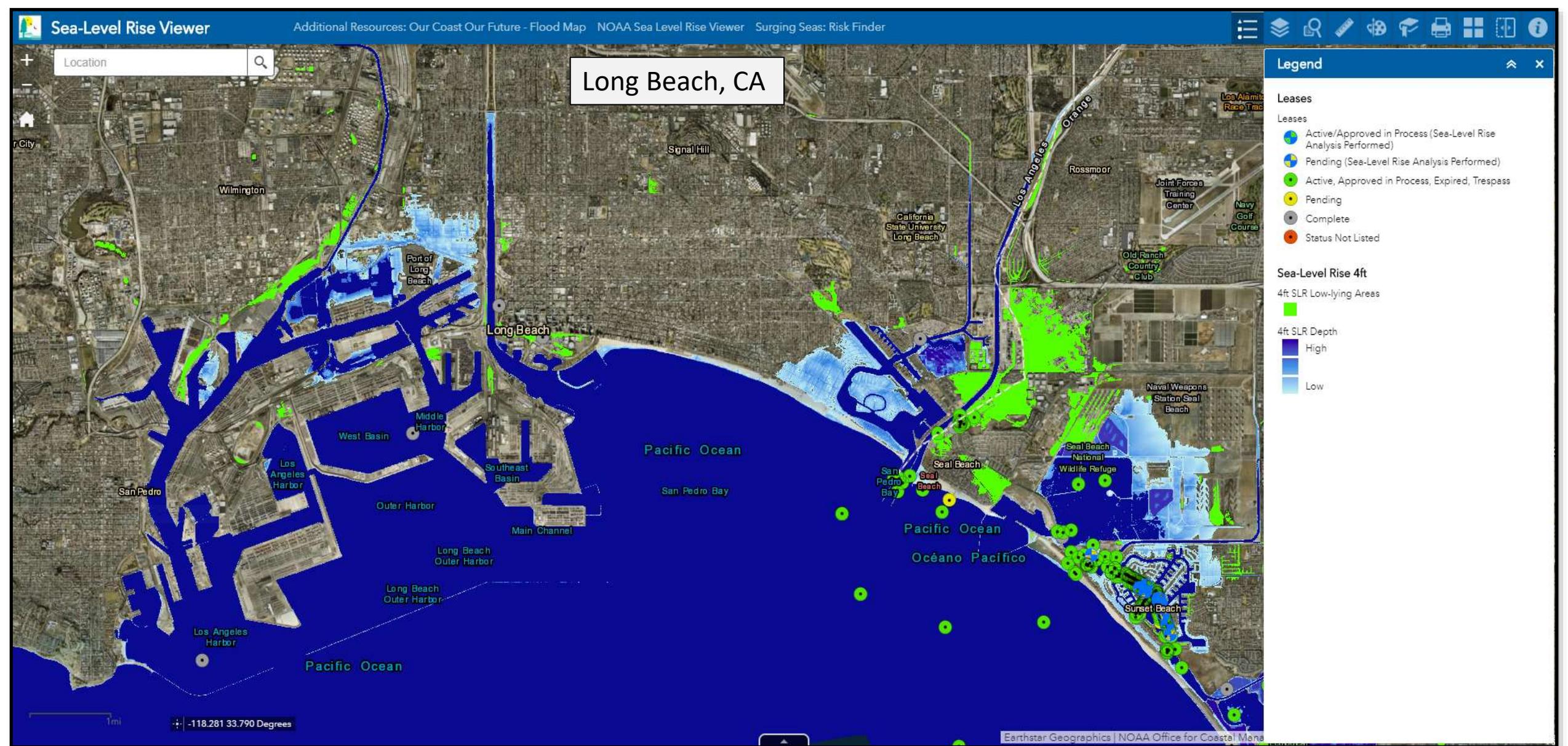




California's Changing Coast

- Sea-level rise is *already occurring*
- CA coastal resources including ports, natural habitats, beaches, wetlands, public access, and recreation are extremely vulnerable
- 2017 State Sea-Level Rise Science report reflects potential for accelerated pace and extreme scenario





Low risk aversion scenario:
4 ft by 2130

Med-high risk aversion scenario:
4 ft by 2080

H++ scenario:
4 ft after 2060

Efforts to Address Sea-Level Rise

Partner With Grantees – AB 691

- AB 691 (Muratsuchi, 2013)
 - Sea-level rise assessments for granted lands w/ revenues > \$250k/year
 - Submissions due July 1, 2019
- Protect and adapt Public Trust lands, assets, & resources
- Develop recommendations to support local implementation efforts



NON-INTERVENTION



Eroding bluff in Pacifica, CA (Photo credit: Eric Cheng)

SHORT-TERM

PROTECT

HARD APPROACH

- Breakwater
- Caisson
- Groin
- Revetment
- Bulkhead
- Seawall

SOFT APPROACH

- Emergency beach nourishment

MID-TERM

PROTECT & ACCOMMODATE

SOFT APPROACH

- Systematic beach nourishment



Dauphin Island East End beach nourishment, AL (Photo credit: Bret M. Webb)

LONG-TERM

ACCOMMODATE & RELOCATE

SOFT APPROACH

- Edging
- Sills
- Vegetation only
- Horizontal levees
- Berms

PHASED RETREAT



Edging project in New Smyrna Beach, FL (Photo credit: Florida Living Shorelines)



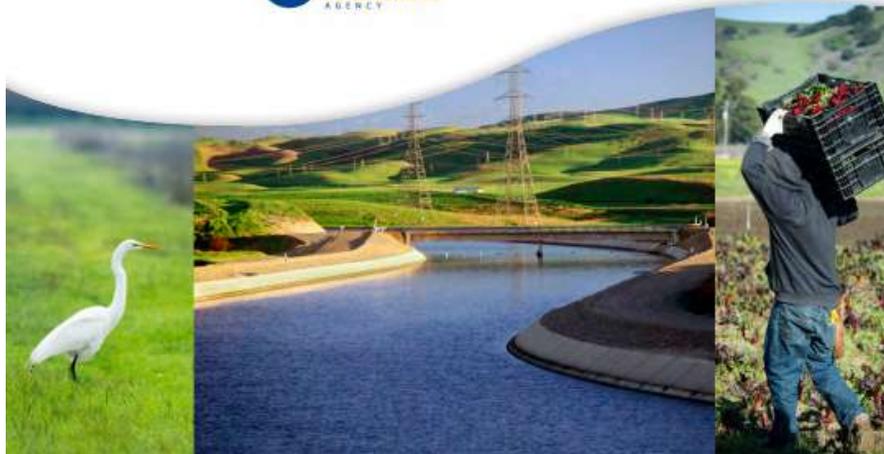
Seawall in Venture, CA (Photo credit: UCSD)

Efforts to Address Sea-Level Rise



Safeguarding California Plan:
2018 Update

California's Climate Adaptation Strategy | January 2018



www.slc.ca.gov

THANK YOU

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