

# Smart Coast California Resources

Municipal Collective - Marta Golding Brown

Technical Consultant Update

Coastal Planner Compendium

*Marta Golding Brown, MPA*

*CEO, Smart Coast California*

# Smart Coast California Municipal Collective

*Marta Golding Brown, MPA*

*Co-Founder & CEO, Smart Coast California*

# Municipal Collective

Sharing resources and engaging in collaborative problem-solving

- Insight to coastal communities Local Coastal Program status and Sea Level Rise Plans including an engagement list and timeline.
- Invitations to periodic virtual meetings with members
- Access to the Coastal Planning Compendium including updates

# Smart Coast California Technical Consultant Efforts

*Don Schmitz, AICP President and Principal Planner,  
Schmitz and Associates*

*Lynette Cervantes, AICP, Special Project Manager*



# SCHMITZ & ASSOCIATES, INC

Providers of Land Use Planning for a Better Community



Don Schmitz, AICP, MA  
Scott Hoeft, MURP, MA  
Lynette Cervantes, AICP  
Adrienne Coryell  
Adrien Thein Sandler  
Ben Suber, MPP, MS  
Mehra Ardeshiri, MPA  
Lauren Winters  
Diana Springer

President and Principal-in-Charge  
Director of Planning  
Special Project Manager  
Assistant Planner  
Associate Planner  
GIS Manager  
Associate Planner  
Planning Intern  
Executive Assistant

# Statewide Coastal Planning



<https://www.calcities.org/get-involved/coastal-cities-group>

- Monitor LCPA activity in coastal jurisdictions
- Review & analyze published policy documents
- Track pilot coastal resiliency projects
- Assist with statewide Policy Summit



# Critical Engagement

KEY	
Gray	LCPA deemed "complete" by CCC and set for hearing or awaiting scheduling
Orange	Item was completed by local jurisdiction but withdrawn from Coastal Commission agenda prior to hearing
Red	Item scheduled for local hearing with date set, anticipated soon, or in important progress stage - high monitoring priority
Yellow	Item in process but no hearing date set - identified as medium monitoring priority
Green	Item in process with no hearing date anticipated - identified as low monitoring priority

1	Carlsbad	On Oct 12, 2021 the City Council approved the City of Carlsbad Local Coastal Program Land Use Plan. In December 2021, the city submitted the Local Coastal Program LUP update to the California Coastal Commission for its review and approval. The city will begin drafting the Local Coastal Program IP for sea level rise after the Coastal Commission approves the policies. As of May 2023, the City received the first round of CCC Staff's comments on the LCPA, and is currently reviewing them and preparing responses. CCC review is anticipated to be completed by August 2023, prior to a certification hearing.
1	Pacifica	The City submitted the LCLUP to the CCC on June 12, 2020. On August 12, 2022, the LCPA application was finally "complete" and accepted as filed. CCC staff recommended approval with significant modifications, but provided the staff report to the City only 12 days before the March 8, 2023 certification hearing. Therefore, Pacifica requested a postponement to no earlier than the July 2023 CCC hearing in order to have adequate time to address the suggested modifications and prepare for the hearing. The CCC's deadline for action on the LCPA is December 22, 2023. The proposed LCLUP is in line with all SCCa policies.
1	Manhattan Beach	February through June of 2021, the City conducted nine public meetings (six workshops and three focus groups) on sea level rise, coastal adaptation strategies, the dune restoration pilot project, and climate action and adaptation strategies, building off previously published SLRVA and Adaptation Plan. City's LUP-LCP SLR Update adopted by City Council on May 3, 2022. CCC has extended their review deadline to late 2023.
<b>LCPA NEARING COMPLETION/HEARINGS PENDING</b>		
1	Santa Cruz	Released Draft LCPA Dec. 20, 2021, and accepted comments until January 18, 2022. Public comment period may be re-opened. LCPA Hearings not yet scheduled at Planning Commission or City Council because: although the update was developed in consultation with CCC staff, CCC then requested significant but unclear changes, which delayed the City resuming progress on the LCPA until late 2022. A revised draft was anticipated for March 2023; however, other local planning priorities (especially the Housing Element) have taken over limited staff time. The LCPA update work is moving very slowly, with no 2023 timeline set yet. West Cliff Drive Adaptation and Management Plan is currently being reviewed by CCC but hearing date uncertain.
1	Arcata	The City of Arcata published a Draft LCPA Local Coastal Element and presented it to its City Council on February 22, 2022. The Draft Local Coastal Element has many components that align with SCCa policies; however, it does include the 1977 date defining existing development. SCCa has engaged with staff and is providing support in the certification process. In February 2023 the City secured a grant from the CCC to draft the corresponding Implementation Plan, and will release the Request for Proposals to complete that work in early summer 2023. The full LCPA (Local Coastal Element plus Implementation Plan) is anticipated to be submitted for certification by early 2024. On March 28, 2023, the Planning Commission and City Council held a joint panel discussion on SLR Planning for the LCPA.
2	Santa Cruz County	Santa Cruz County Board of Supervisors unanimously approved LCPA on September 15, 2020. County and Coastal Commission Staff agreed to proceed with LCPA (LUP and IP) without Coastal Hazards Section (Safety Element) and approved the LCPA at the Feb 11, 2022 CCC meeting. On September 20, 2022, BOS voted not to withdraw LCPA from certification hearing. County presented its LCPA at the October 14, 2022 CCC hearing, but ineffectually. CCC denied the LCPA, particularly over the issues of "existing structures" and the proposed Shoreline Protection Exception Area.
2	Marin County	The CCC certified the LCP less the environmental hazards section and the County BOS adopted a resolution to place those elements into effect in July 2021. The Draft Safety Element which addresses coastal hazards was published in December 2022 and approved by the Board of Supervisors January 24, 2023. The Safety Element has not yet been submitted for Coastal Commission certification.
2	Pismo Beach	General Plan was anticipated to reach Planning Commission hearing in early 2022, but is under continued delay from the end of 2021. The City is working diligently on the update to the General Plan/Local Coastal Program by holding public workshops in which the Planning Commission and City Council review and provide feedback on draft elements. The city has continued holding public workshops through early 2023, roughly every 6-8 weeks, with the most recent special joint Planning Commission / City Council workshop held on April 27, 2023. The city will publish the revised final draft versions of the LCPA elements after concluding public workshops, dates not yet certain. The LCPA will then be open for public comment prior to local adoption hearings at the Planning Commission and City Council.
2	Imperial Beach	City received substantial comments on 2019 draft LUP/IP. A subsequent lack of funding delayed progress. On August 17 2022, the revised draft LCP (LUP + IP) was published. City Council directed planning staff to gather public input, after which the LCPA will be heard for local adoption. At August 17, 2022 City Council hearing, councilmembers expressed frustration at the protracted CCC review process, the fact that years of time and money are invested in LCP updates only to be rejected by CCC, and that planning staff have other priorities they need to work on besides LCPAs. Therefore, similar to Eureka, the city has chosen to proceed with local adoption without CCC's pre-review in order to update their LCP more efficiently. City staff continues work in the local review and adoption process.

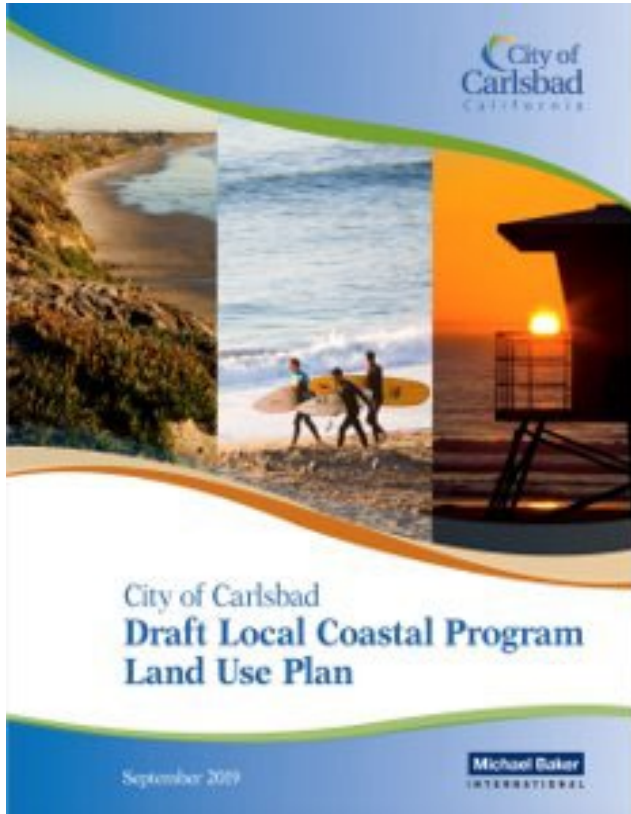
# Coastal Planner Compendium

## Statewide Status of LCPAs Addressing Sea Level Rise-(November 2018-January 2023)

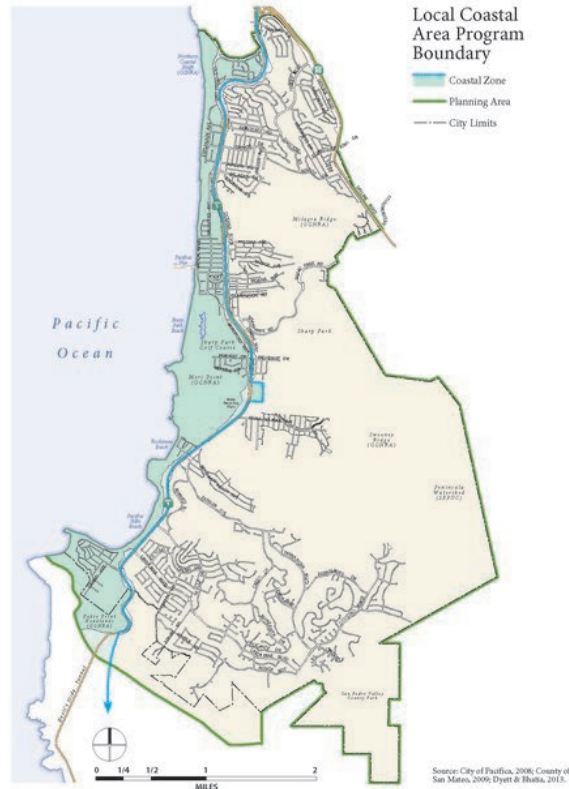
<b>Certified</b>	<p>Half Moon Bay (2021) - Morro Bay (2021) - Pacific Grove (2020)  San Diego County (2021) - San Francisco (2018) - Santa Monica (2020) -  Santa Barbara - Solana Beach - Newport Beach</p>
<b>Submitted</b> (and deemed complete by CCC)	<p>Carlsbad (2021) - Pacifica (2022) - Manhattan Beach (2022)</p>
<b>Published Draft</b>	<p>Arcata (2022) - Imperial Beach (2022)  Marin County (2022) - City of Santa Cruz (2021) - Sonoma County (2022)</p>
<b>Withdrawn</b>	<p>Del Mar (2021) - San Clemente (2020) - Santa Barbara County (2021)</p>
<b>Denied</b>	<p>Santa Cruz County (2022)</p>
<b>LCPA (and/or) Adaptation Studies in Progress</b> (Including, but not limited to)	<p><u>Avalon</u> - Carpinteria - Coronado - Eureka - Goleta - Grover Beach  Humboldt <u>County</u> - Huntington Beach - Laguna Beach - Long Beach  Los Angeles (<u>Venice</u>) - Malibu - Marina - City of Monterey  Monterey <u>County</u> - Newport Beach - Oceanside - Oxnard - Pismo Beach  San Luis Obispo County - City of Santa Barbara - Seal Beach  City of <u>Ventura</u> - Ventura County</p>



# LCPA's ready for Coastal Commission Certification Hearing, 2023



Carlsbad



Pacifica

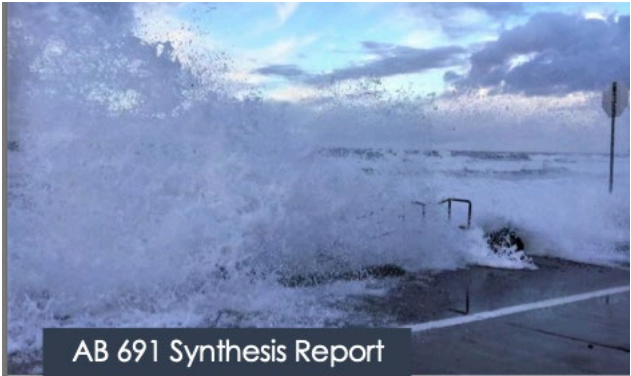


Manhattan Beach

<https://www.planpacifica.org/local-coastal-program#:~:text=Protect%20and%20Restore%20Environmentally%20Sensitive,%2C%20and%20where%20feasible%2C%20restored>

<https://www.manhattanbeach.gov/home/showpublisheddocument/48276/637708394401200000>

# Document Review and Policy Analysis



## AB 691 Synthesis Report

Proactively Planning for Sea Level Rise  
Impacts on Granted Public Trust Lands

California State Lands Commission  
100 Howe Avenue, Suite 100 South  
Sacramento, CA 95825

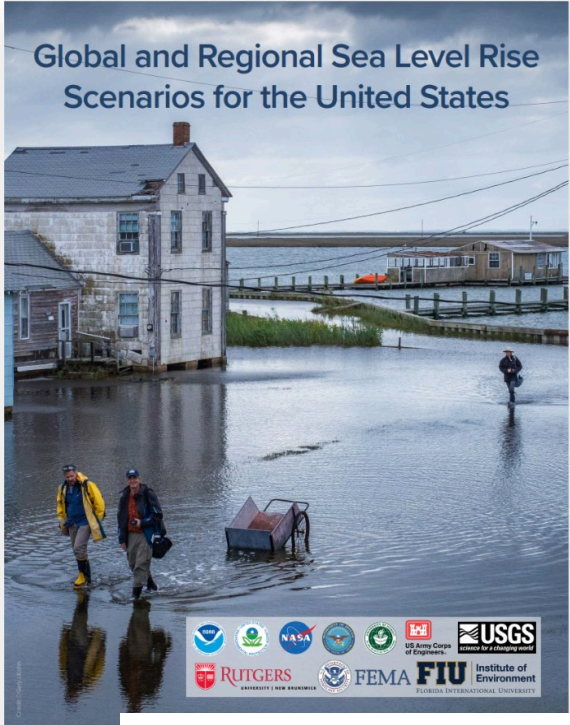
Integral Consulting Inc.  
200 Washington Street, Suite 201  
Santa Cruz, CA 95060

August 2022



## Case Studies of Natural Shoreline Infrastructure in Coastal California

A COMPONENT OF IDENTIFICATION OF NATURAL  
INFRASTRUCTURE OPTIONS FOR ADAPTING TO SEA LEVEL RISE



## Global and Regional Sea Level Rise Scenarios for the United States



## APPLICATION GUIDE for the 2022 Sea Level Rise Technical Report

- <https://slcprdwordpressstorage.blob.core.windows.net/wordpressdata/2022/08/AB691-Synthesis-Report.pdf>
- <https://coastalresilience.org/case-studies-of-natural-shoreline-infrastructure-in-coastal-california/>
- <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf>



*Introducing:*  
The Smart Coast California  
Coastal Planner Compendium

- Statewide compendium of coastal policies and SLR planning resources
- Offered as a planning coordination tool for coastal stakeholders



# SLR Projections

incorporated by Jurisdictions

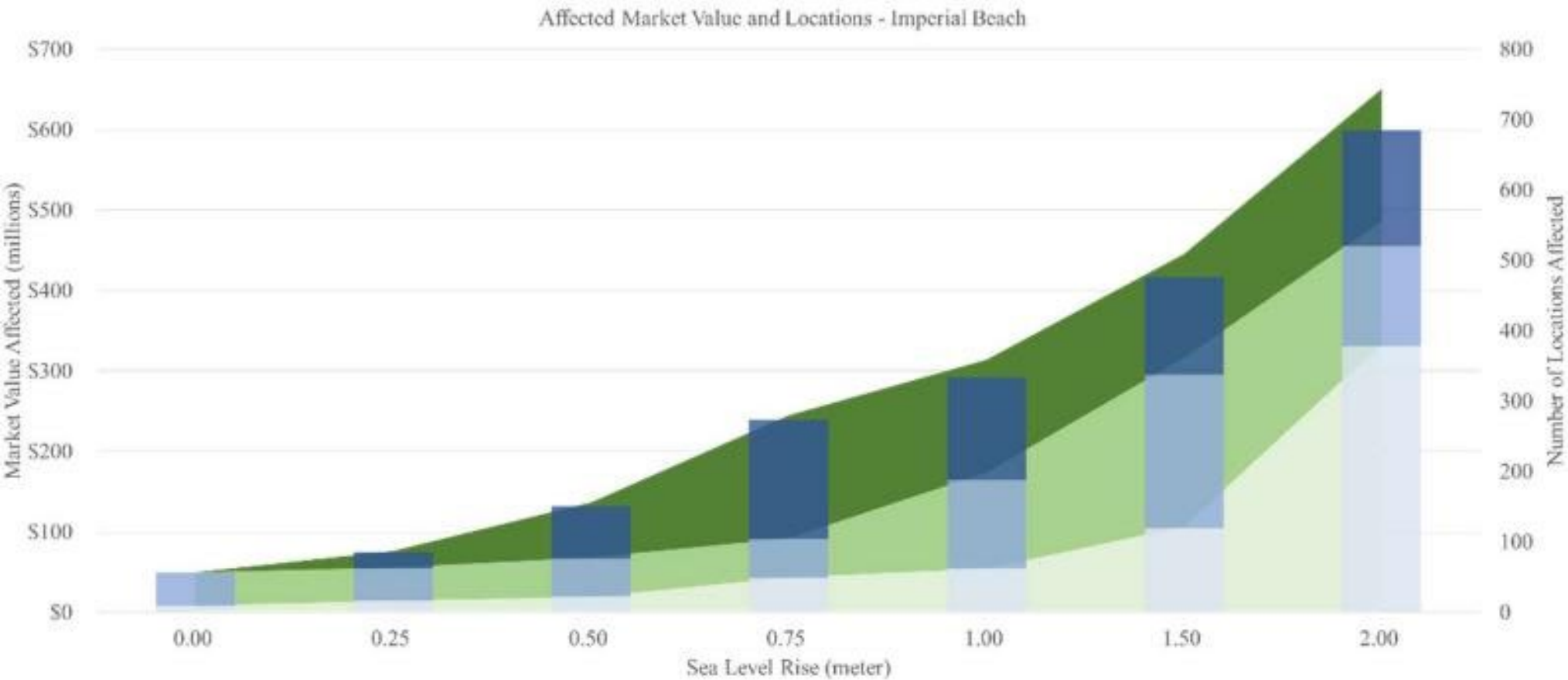
SLR Projection Scenario	Low Projections	Medium Projections	Medium-High Projections	High Projections	Range Projections, Tiered Response
<a href="#">Definition</a>	As low as ~12 inches of SLR by 2100	up to ~52 inches of SLR by 2100	Up to ~77 inches of SLR by 2100	up to ~83 inches of SLR by 2100	Plans around triggers and impacts, not specific projections

Jurisdictions	Arcata	Avalon	Capitola	Carlsbad	Coronado	Crescent City	Dana Point	Del Mar	Eureka	Goleta	Half Moon Bay	Hermosa Beach	Humboldt County	Huntington Beach	Long Beach
Low Projections															
Medium Projections															
Medium-High Projections			✓			✓	✓	✓						✓	
High Projections	✓	✓							✓	✓			✓		✓
Range Projections, Tiered Response				✓	✓						✓	✓			

# Summary of locally proposed/adopted adaptation policies

JURISDICTIONS	Arcata 2021 Draft LCPA LUP/LIP	Carlsbad 2019 LCPA LUP	Coronado 2022 SLR Adaptation Plan	Crescent City 2011 LCP LUP	Del Mar 2018 LCPA LUP/LIP	Half Moon Bay 2020 LCPA LUP	Humboldt County 2022 Bay Area Plan Studies	Imperial Beach 2022 Draft LCPA LUP	Manhattan Beach 2022 Draft LCPA LUP	Marin County 2022 Draft Safety Element	Marina 2019 Draft LUP/IP	Morro Bay 2021 LCPA LUP	Newport Beach 2018 LCP Coastal LUP/LIP	Oceanside Beach 2021 Beach Sand Feasibility Study	Pacifica 2020 LCPA LUP	Pismo Beach 2020 Draft LCPA LUP/LIP	San Diego 2021 Draft Port Master Plan	Santa Barbara County 2021 LCPA LUP/LIP	City of Santa Cruz 2021 Draft LCPA LUP	Santa Cruz County 2020 Draft LCPA LUP/LIP 2021	Sonoma County 2021 Draft LCPA
Tiered Response	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nature-Based Adaptation	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓
Managed Retreat not Mandatory / Protection Permitted	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Existing Development Defined Inclusively		✓		✓	✓								✓		✓			✓		✓	
Protection against Regulatory Takings / Just Compensation	✓	✓	✓			✓				✓		✓	✓	✓	✓	✓				✓	

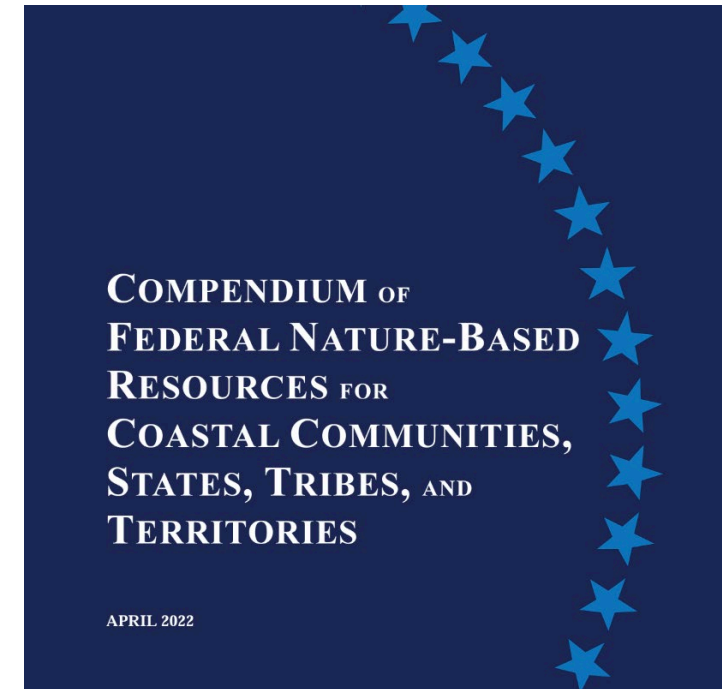
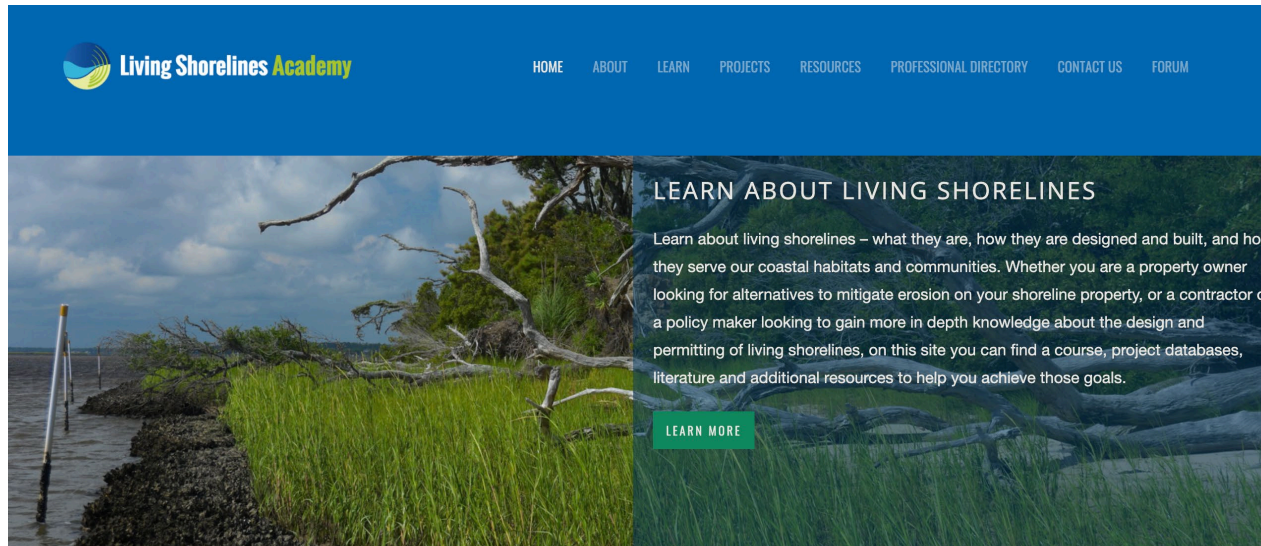
# Milliman Findings



The affected market value of a 0.5-meter sea level rise with a 100-year storm event would be \$137 million

*"Rising Seas in California: An Update on Sea-Level Rise Science," California Ocean Protection Council Science Advisory Team Working Group, 2017.*

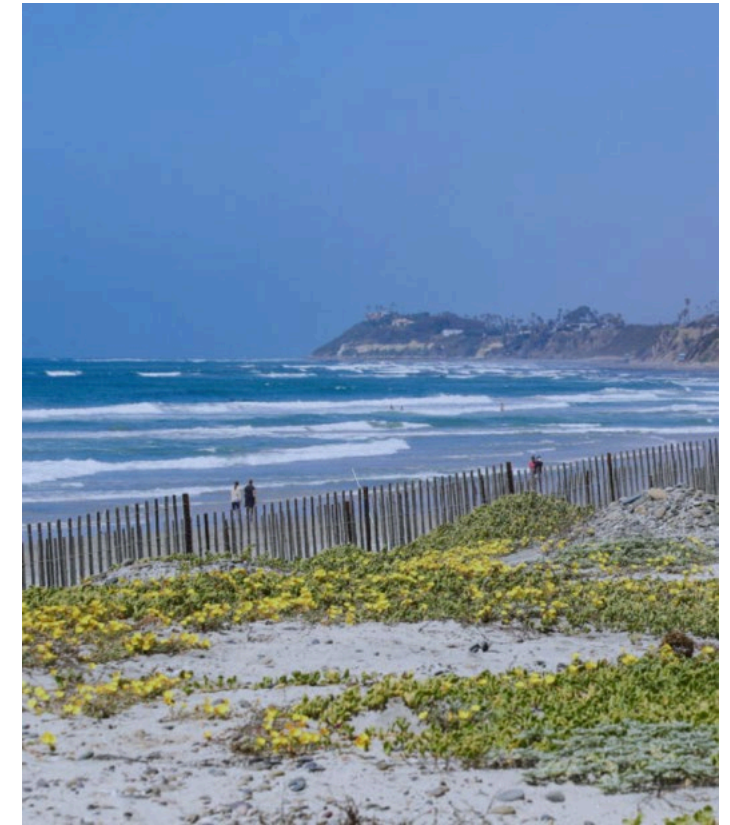
# Compendium: Resources



<https://www.livingshorelinesacademy.org>

<https://www.noaa.gov/sites/default/files/2022-04/Nature-based-Solutions-Compendium.pdf>

# Nature-Based and Hybrid Adaptation



Cardiff Living Shoreline

Source: Dune Science Network



# Surfer's Point Ventura, California



▲ **Figure 15:** Successful construction and vegetation of dunes, 2014. Photo credit: Louis White.

March 2016



November 2017



<https://coastalresilience.org/case-studies-of-natural-shoreline-infrastructure-in-coastal-california/>  
ESA as cited in *Stinson Beach Nature Based Adaptation Study*

# Port of San Diego- Chula Vista Bayfront Reef Balls

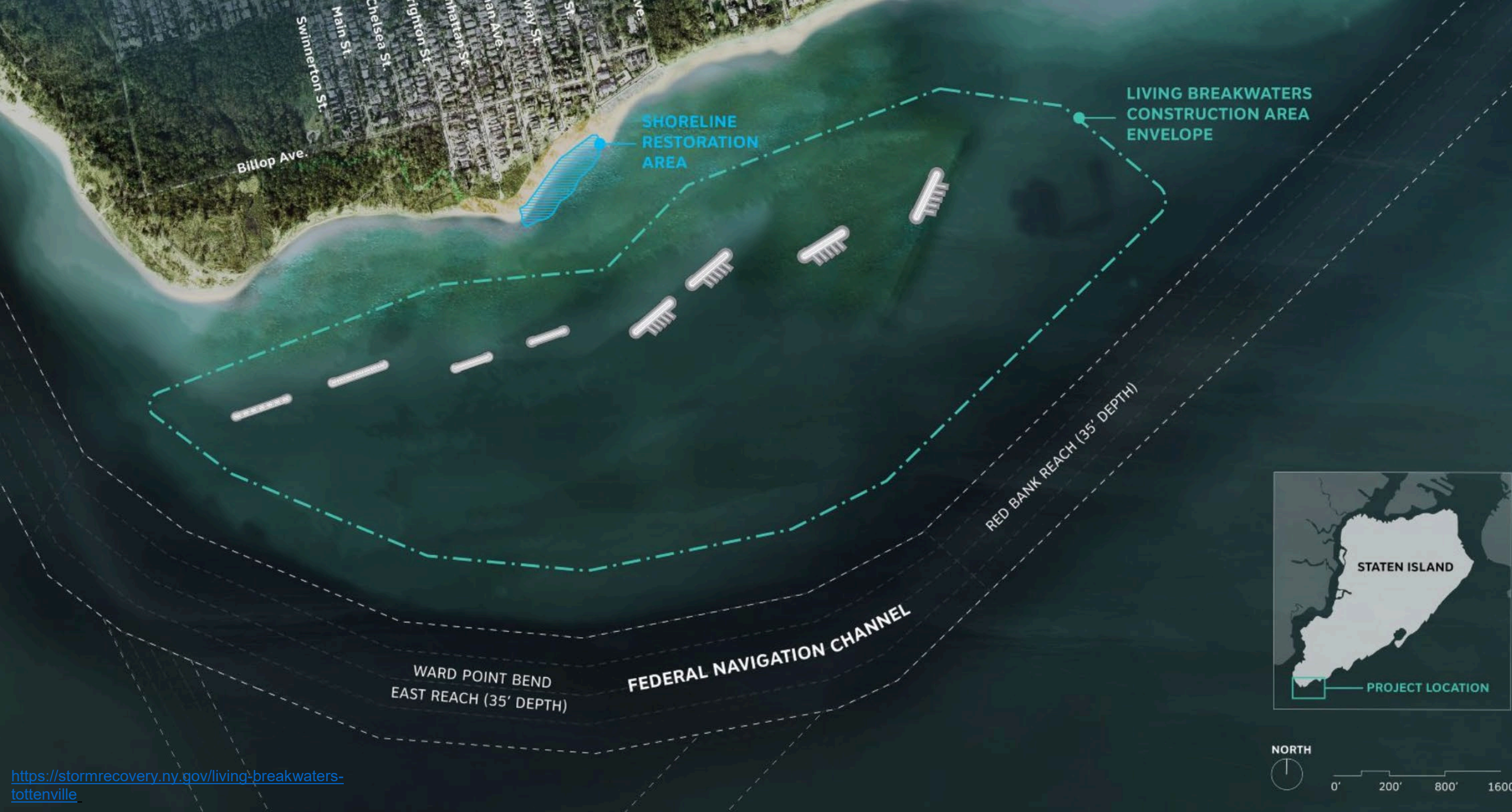


Source: Port of San Diego  
<https://www.10news.com/news/local-news/san-diego-news/port-of-san-diego-installing-300-reef-balls-as-pilot-oyster-living-shoreline-begins>

# Hybrid Coastal Resiliency Solutions

## Living Breakwaters Tottenville, Staten Island





<https://stormrecovery.ny.gov/living-breakwaters-tottenville>

# BEHIND THE RENDERING...

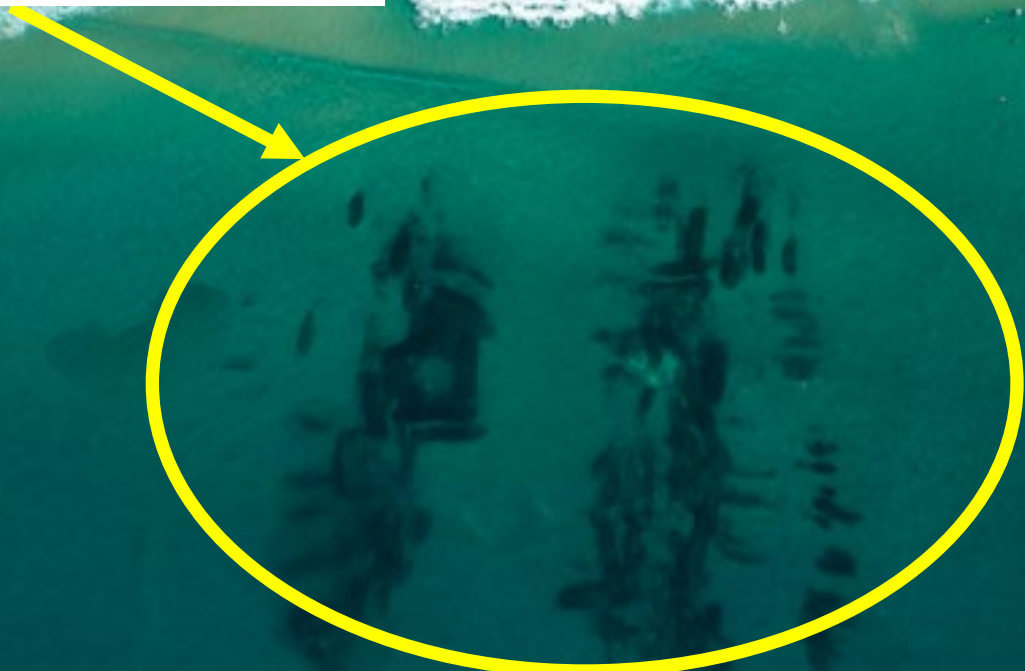


# Global: Narrowneck Reef on the Gold Coast, Australia

- Primary purpose - widen the beach and dunes along Surfer's Paradise, Main and Narrowneck Beaches to accommodate storm erosion and sea level rise
- Secondary purpose to create artificial surfing reef



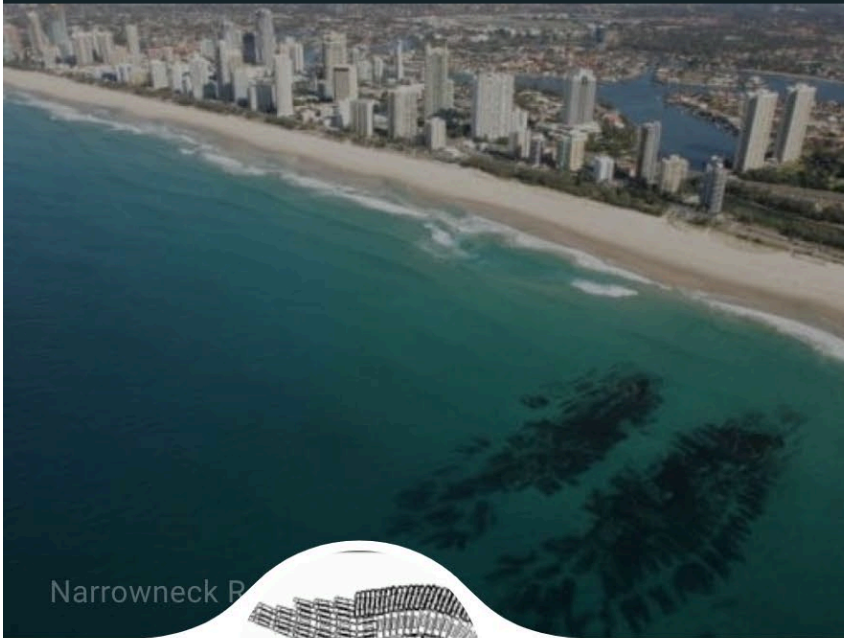
Geotextile and sand reef  
constructed in 1999/2000






Source: Gold Coast City Council  
[https://www.youtube.com/watch?v=-dv4n1YoLsY&ab\\_channel=cityofgoldcoast](https://www.youtube.com/watch?v=-dv4n1YoLsY&ab_channel=cityofgoldcoast)





Narrowneck Reef


Narrowneck 02/11/10

 Tour this Spot



## Narrowneck

Massive Sandbag Reef in Surfers Paradise

 Favorite

 Share


Source: <https://raisedwaterresearch.com/spot/artificial-reef/australia/queensland/palm-beach-reef/>



## Palm Beach Reef

Successfully improving surf on the Goldie

[Favorite](#) [Share](#)

 Tour this Spot

Source: <https://raisedwaterresearch.com/spot/artificial-reef/australia/queensland/palm-beach-reef/>

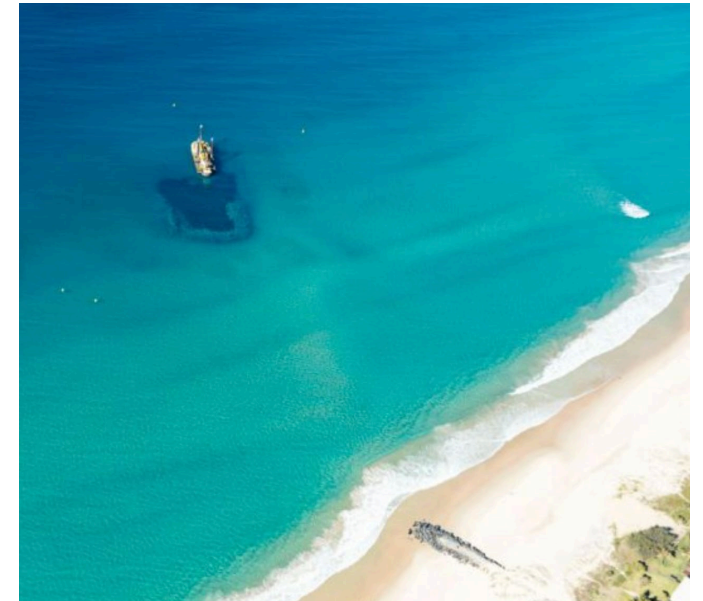
# Palm Beach Artificial Reef

Gold Coast Australia



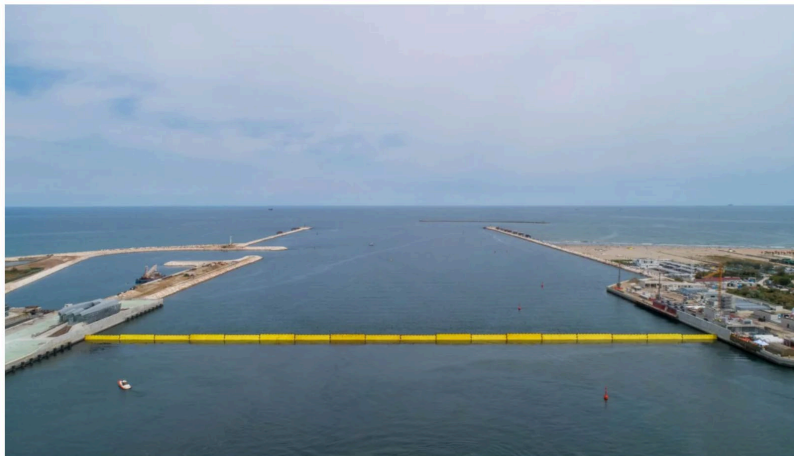
Source:

<https://raisedwaterresearch.com/spot/artificial-reef/australia/queensland/palm-beach-reef/>



# Global

## Mose: Venice, Italy

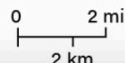


The barriers at the Treporti inlet are split in two by an artificial island HQ.

Consorzio Venezia Nuova

Chioggia •

Source: <https://www.mosevenezia.eu/project/?lang=en>



## Rotterdam, Netherlands The Maeslant Barrier

<https://www.rijkswaterstaat.nl/en/about-us/gems-of-rijkswaterstaat/maeslant-barrier>

# Appendices

- A. Definitions
- B. Functioning Artificial Reefs and Living Breakwaters,  
Nature-Based Adaptation Measures
- C. Sea Level Rise Projections and Best Available Science
- D. Local Planning Department Contact List



Smart Coast  
California

Thank You