



AdaptLA: Building Coastal Resilience in Southern California

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USC Sea Grant – The Urban Ocean Program



10 Million by the Sea:

- Water Quality
- Coastal Management
- Sea Level Rise & Coastal Impacts
- Aquaculture/Seafood
- Maritime Affairs
- Education & Science Literacy

How are coastal communities meeting these challenges?

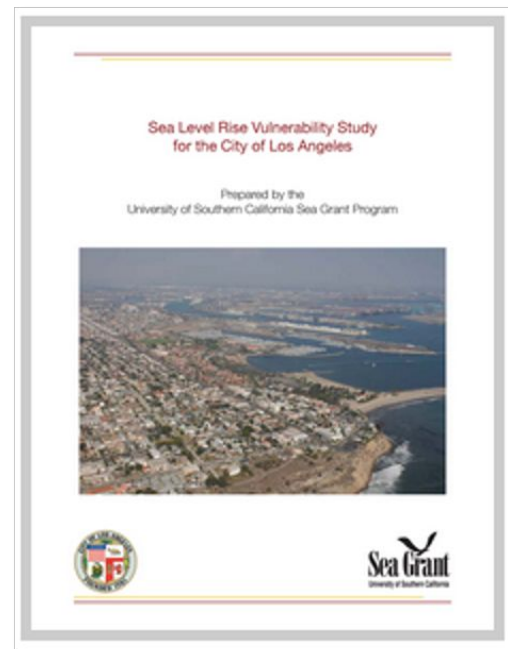
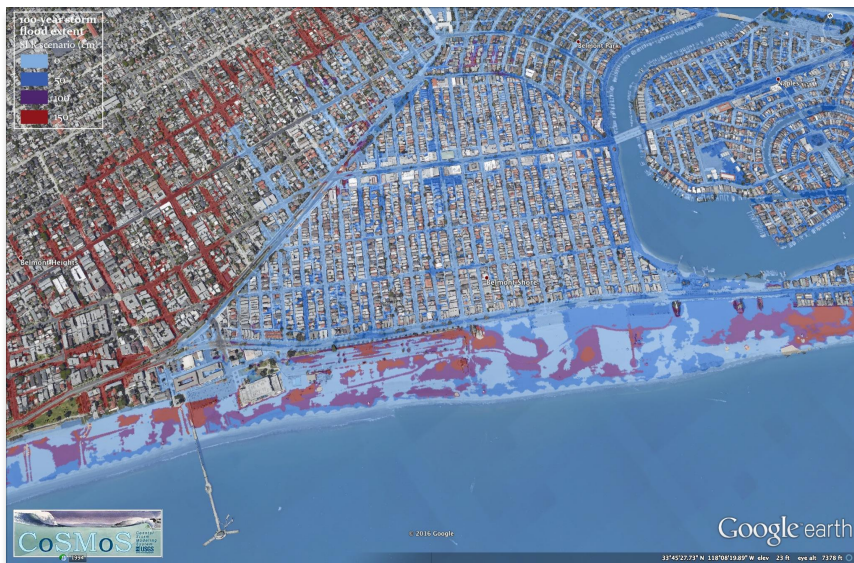
Sea Level Rise and Coastal Impacts

- Southern California coastal jurisdiction face unprecedented changes from sea level rise and changing coastlines
- Hazards for infrastructure and social vulnerabilities
 - Impacts on coastal utilities (power plants, water treatment facilities)
 - Impacts to recreational amenities (beaches, harbors, piers)
 - Impacts to Southern California economy (tourism, maritime ports)
 - Impacts on vulnerable and underserved populations



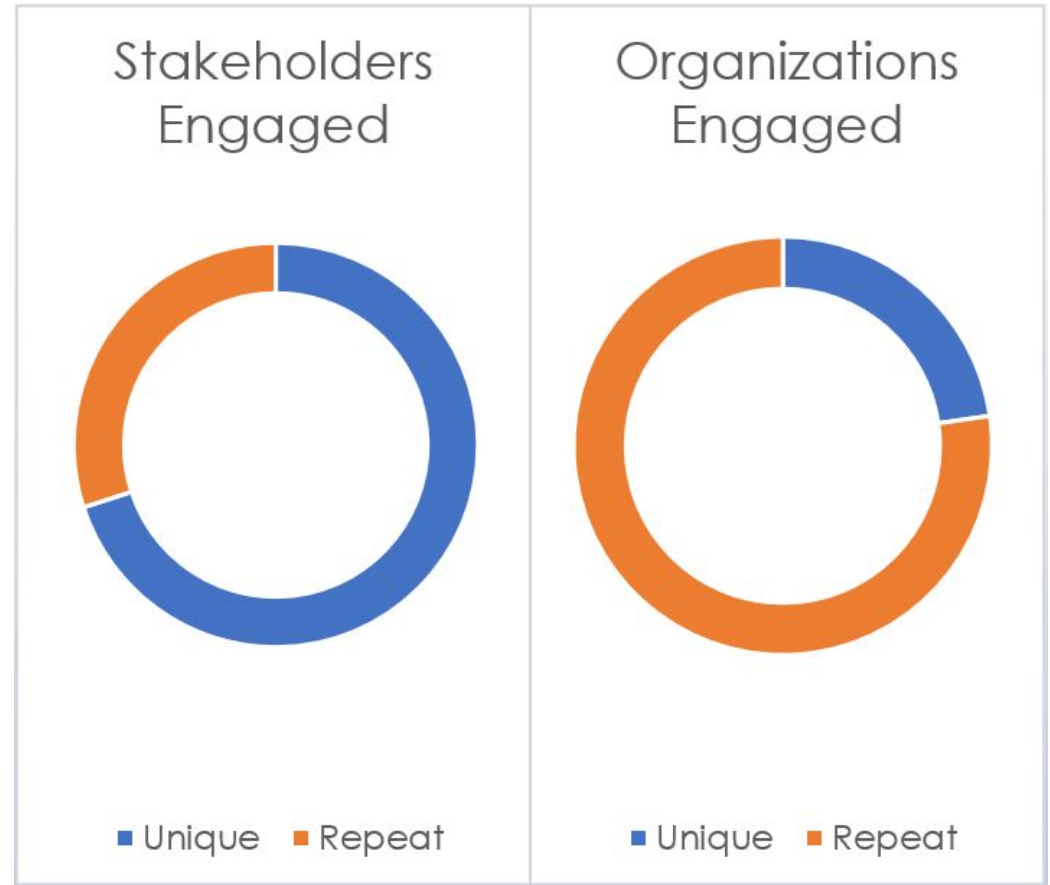
How Boundary Organizations Can Help

- Link scientific understanding with public policy and management
 - Ensure understanding of scientific principles, research, and applications
- Participation from both worlds – science and policy
 - Provide resources to scientific and practitioner communities



A Place-Based Advantage

- Mutually understood geographies □ continuity and consistency over time
- Established and engaged stakeholder base
- Partner with other boundary organizations
- Resilient to political cycles



What is at Risk Along the Coast?



Assessments - Vulnerability and Needs

- City of LA SLR Vulnerability Assessment (2013)
 - Infrastructure/social vulnerability/ demographics
 - Proved necessity for regional approach
- California Coastal Adaptation Assessments (2005, 2011, 2016)
 - Primary needs: funding, knowledge
 - Coastal erosion increasingly urgent
 - New survey underway 2023



Regional AdaptLA

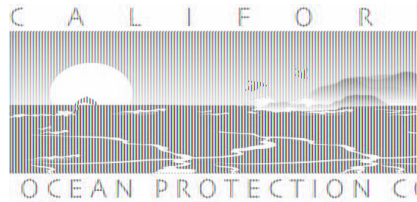
Project managed by USC Sea Grant

Partners – LARC, Heal the Bay, SMBRC

Environmental Science Associates (ESA)

Terra Costa Group

Funding from OPC, Coastal Commission and Coastal Conservancy



AdaptLA: Methodologies

“Best of the best” coastal impact models for L.A. region

- USGS CoSMoS 3.0
- Shoreline and beach change

Comprehensive Planning

- Science-based
- Participatory and stakeholder supported

Capacity-Building and Outreach

- Trainings/Workshops
- Webinar series
- Public outreach

Participatory Science



AdaptLA: Stakeholder Expectations

We asked – what do you hope/expect to gain from working with this collaborative?

- Scientific information
- Planning Guidance
- Communication
- Networking & Collaboration



AdaptLA Members



Political Leaders
City Councils
Sustainability Depts
Wastewater Treatment
Emergency Managers
Private Industry
Consultants
Public Utilities
Public Works
Harbor Depts
Planning Depts
Park Managers

NGOs
Academia
Educators
State Agencies
Federal Agencies
MPOs, JPAs, COGs
Museums, Aquariums
Community Organizations
Professional Associations
Regional Organizations
Neighborhood Councils
Social Justice Organizations

AdaptLA Projects

Effects of Sea Level Rise: Groundwater and Adaptation in Santa Monica Bay



Effects of Sea Level Rise: Marshes on the Margin, Developing Tidal Wetlands Adaptation Strategies in Southern California

Community Engagement

Grassroots/community-based action can foster dialogue and inspire **novel approaches**

Place-based boundary organizations help **establish trust** among stakeholders

Helps... “**interpret academic findings** and helps people digest the information, particularly for those who are not specialized and will benefit.”

Adaptive management can help communities move forward without “perfect” information



Lessons

- Place-based boundary organizations are effective in **establishing trust among stakeholders**
- Importance of **state/federal support** – data, knowledge, tools, funding – in advancing community resilience
 - Sea Grant's role in facilitating the link between local experiences and federal roles
- **Multi-party partnerships** are an essential part of building the fabric of community resilience – regional collaboration and initiatives
- Funding may fluctuate but partnerships remain. Partnerships create **opportunities and authorities** that extend beyond individual projects.

Moving Forward

Need significant and sustained funding to continue making progress in California; even modest investments made at the right time can be very impactful.

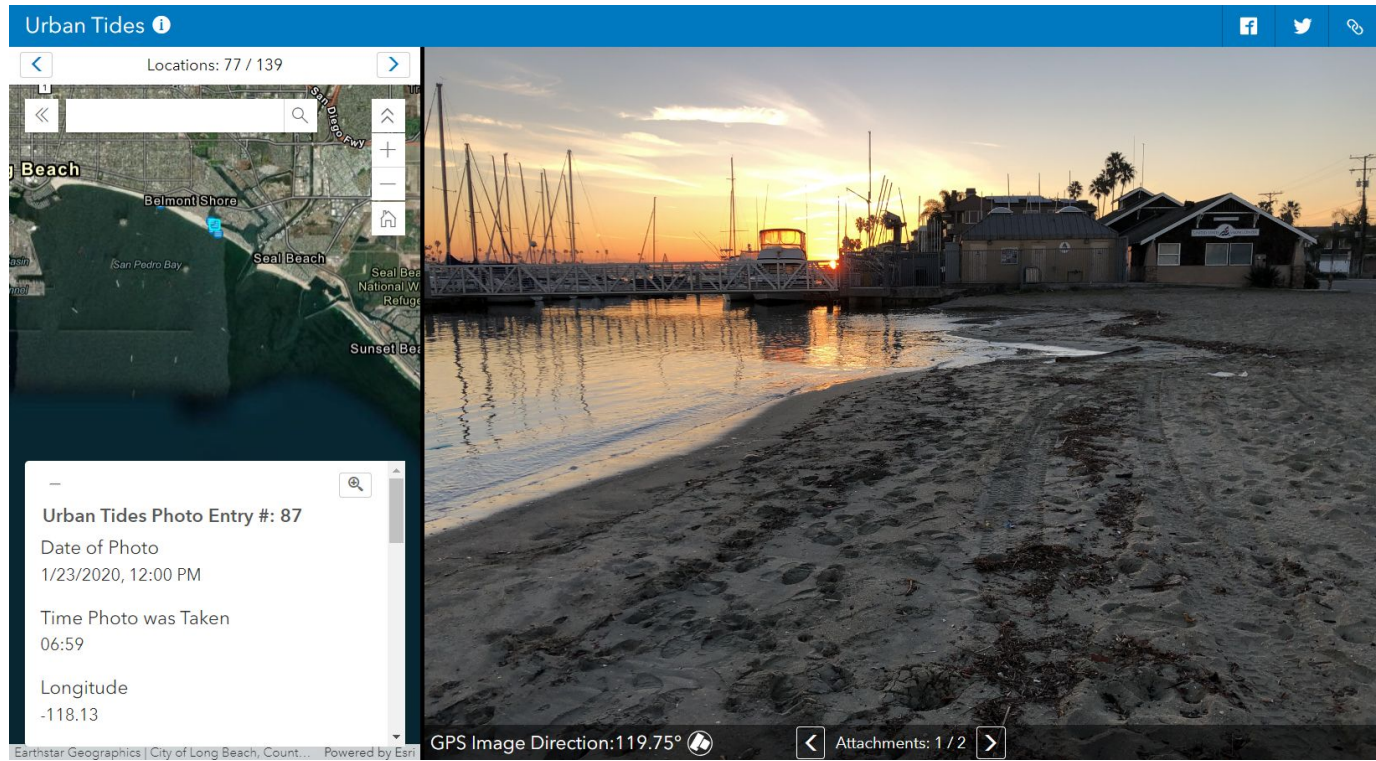
Need mandates at state or federal level directing local communities to plan and adapt for climate risk, with corresponding funding to support action, stymies progress at the community level

Need consistent and effective ways to empower communities to utilize available information and start implementing adaptation plans and activities

***“The coast is never saved.
The coast is always being saved.”
Peter Douglas***

Moving Forward

Community science for improved monitoring of flood impacts

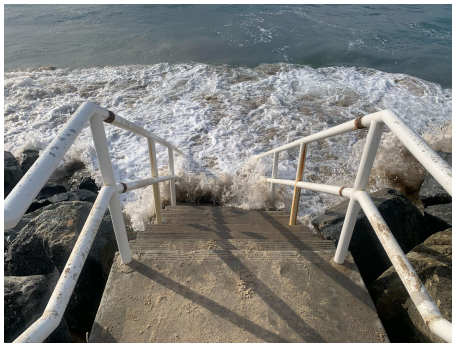


What (else) can we do?

Monitor beaches and dynamics

Utilize local knowledge to create an understanding of shared values

Ensure policies are in place to promote the preservation of resources



Thank you!

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