

# Envisioning Future Impacts through King Tides and Storms



AdaptLA Webinar Series  
Webinar #1 | January 12, 2015

# Welcome!

- About USC Sea Grant & AdaptLA
- Overview on the California King Tides Project
- King Tides in L.A.
- Announcement of Urban Tides Photo & Video Contest
- Discussion

# About USC SG & AdaptLA

Juliette Hart | USC Sea Grant

# USC Sea Grant – The Urban Ocean Program



- Fund research
- Community outreach & education
- Technical assistance to local/regional government

## If 10 Million by Sea...

- Climate Change Science & Planning
- Coastal Ecosystem Science
- Coastal Management
- Maritime Affairs

# Regional AdaptLA



- Grant led by City of Santa Monica, but includes 11 coastal jurisdictions and L.A. County
- Project partners - LARC, Heal the Bay, Santa Monica Bay Restoration Commission
- Funding from - Ocean Protection Council, Coastal Commission and Coastal Conservancy



# Regional AdaptLA: Project Scope

- “Best of the best” coastal impact models for L.A. region
  - Coastal Storms Modeling System 3.0 (USGS)
  - Impacts to our Beaches (TerraCosta Consulting Group)
  - Shoreline Change (ESA/Revell Coastal)
- Capacity-Building & Stakeholder Engagement
  - Trainings/Workshops
  - Webinar series
  - Public outreach



# AdaptLA: Vulnerability Assessment Training

November 2014



# Overview on CA King Tides Project

Marina Psaros | Coravai, LLC



# The King Tides Project: Snap the Shore, See the Future

Marina Psaros, Coravai  
Twitter: @marinapsaros

# In the Beginning...

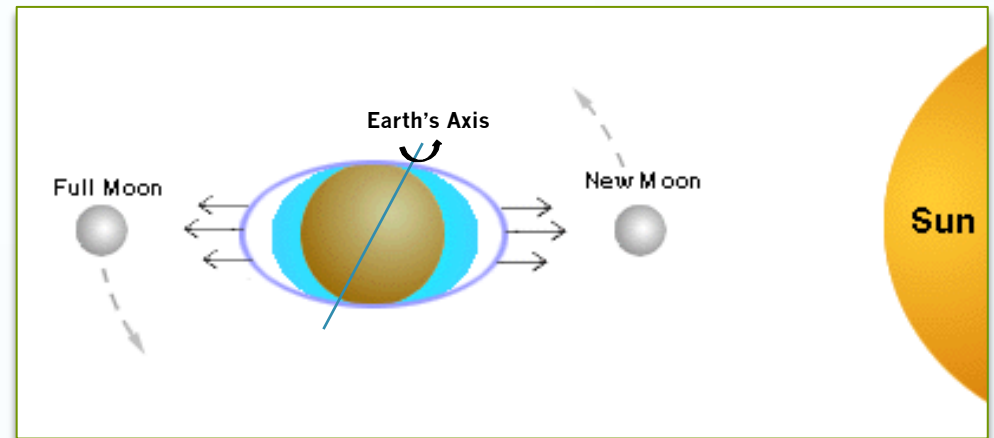
## Driving questions:

How do we get everyday people thinking about climate change? How can we communicate sea level rise risk?



# What are King Tides?

Happen in summer and winter when the sun and the moon align to exert the greatest gravitational pull on the earth



In California, the annual king tide today = daily high tide in ca. 2050

**...a preview of how SLR will impact your community**

# What is the King Tides Project?

- A global network of local initiatives
- De-politicized public outreach
- Puts photographer at center of their own experience
- Digital storytelling, community mapping, and citizen science



**...a tool to engage everyday citizens  
in science and planning**

# How the Media Covers the Project



**Most extreme tides of the season**  
SHAFFER GRUBB • U-T



The Boston Globe



HalfMoonBayPatch

King Tides Threaten to Flood Coastal Homes



Los Angeles Times

MercuryNews.com

Beaches Disappear Under King Tides This Week



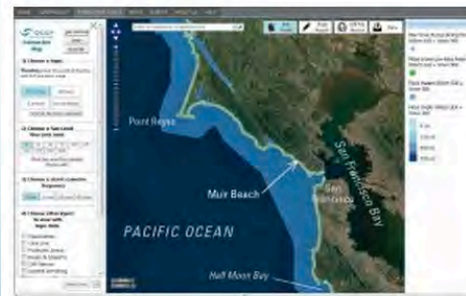
# How Scientists Engage With the Project

- “Crowdsourcing” data more quickly and efficiently than they can gather it themselves



- Comparing their models’ predictions of flooding against pictures of reality

## Featured Project – [Bay Area Residents Help Scientists Make Sea Level Rise Models Better](#)



In January, we partnered with USGS and the Our Coast, Our Future project to collect king tide photos from specific locations around the Bay Area. The pictures people took are helping scientists better understand which areas are most at risk of flooding and future sea level rise. Researchers are comparing photos of the high tide against computer simulations of flooding to see how well these simulations match reality. This was a fun,

easy way for everyday people to provide important information that will help future sea level rise adaptation planning efforts in the Bay Area. For the original announcement, [click here](#).

# How Artists Engage With the Project



**EAST BAYSIDE KING TIDE PARTY**

Image: Caitlin Fuchalski

**CALL FOR PARTICIPATION**  
Witness, Photograph, Collect Data, Do Interventions!

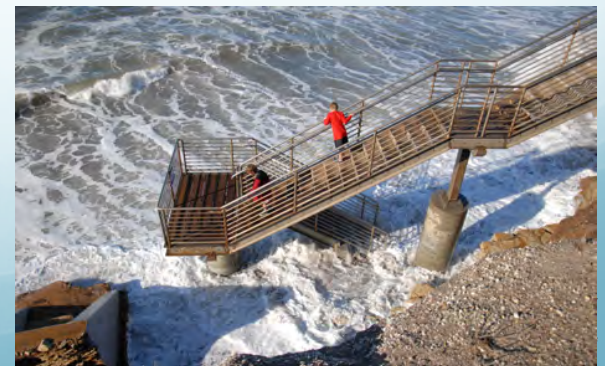
**EAST BAYSIDE KING TIDE PARTY**  
Wednesday, December 4th, 2013  
10:30 a.m. - Gather at Zero Station, 222 Anderson Street  
11:20 a.m. - 1:00 p.m. Witness King Tide Flood at Cove Street and Marginal Way

This event is being organized by USM faculty and students in cooperation with the East Bayside Neighborhood Organization and Zero Station Gallery.  
Make your contact: Jan Pirbeck [jap@maine.edu](mailto:jap@maine.edu) or Chris Wright [christopherwright@gmail.com](mailto:christopherwright@gmail.com)

**UNIVERSITY OF SOUTHERN MAINE**  
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# How Planners Engage With the Project

- Building a hyperlocal catalogue of at-risk places and people
- Tracking changes over time
- Helping communities understand flood risk and explore adaptation options





# How Teachers Engage With the Project

- Using NGSS-compliant curriculum for classroom and field-based learning
- Engaging students in hands-on research that has a direct impact on their communities



# Thank you!

Next king tides: Jan 19 – 21, 2015

Visit <http://california.kingtides.net> for media FAQ, tips, and more

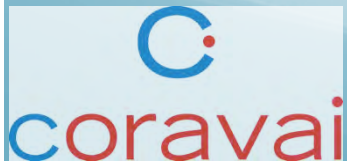
Marina Psaros

King Tides Project Global Director

[marina@kingtides.net](mailto:marina@kingtides.net)

415.839.8571

Twitter: @marinapsaros



# King Tides in L.A.

Juliette Hart | USC Sea Grant

# SLR & King Tides Curriculum

- Curriculum for teachers in partnership w/Coravai
- Resources include:
  - Lesson Plan
  - SLR 101 Presentation
  - Educator Resource Links
  - Maps of vulnerable areas in L.A. that link to management needs

<http://dornsife.usc.edu/uscseagrant/king-tides/>



**Lesson: Sea Level Rise and King Tides**

The purpose of this lesson is to increase student understanding of sea level rise impacts on our coastline and to increase student contributions to community citizen science efforts on sea level rise education.

The image shows a circular inset of a beach scene with a person walking. A yellow banner with the lesson title is overlaid on the top left of the circle. To the right of the circle is a text box with the lesson's purpose.

# King Tides & Planning

- Hyperlocal catalogue of at-risk places and people
- Opportunity to guide yourselves & citizens to areas of concern
- Opportunity to engage skeptical constituents
- Utilize curriculum L.A.-based maps to start the effort...

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  - Malibu (Broad Beach | Pier, Colony and Lagoon)
  - PCH (Pacific Palisades/Santa Monica)
  - Venice & Marina del Rey
  - Redondo Beach
  - Cabrillo Beach & San Pedro
  - Harbor Area
  - S. Long Beach | N. Seal Beach

# Urban Tides Photo & Video Contest

Holly Rindge | USC Sea Grant

# Urban Tides Photo & Video Contest

Capture the Future of Our Urban Ocean!

- Contest Dates: January 12 – February 26, 2015
- Regions: Los Angeles and Orange Counties
- 3 Categories to Enter:
  - Individual Photograph
  - Photo Essay (3-6 images)
  - Video (up to 3 minutes)





# Urban Tides Are Rising

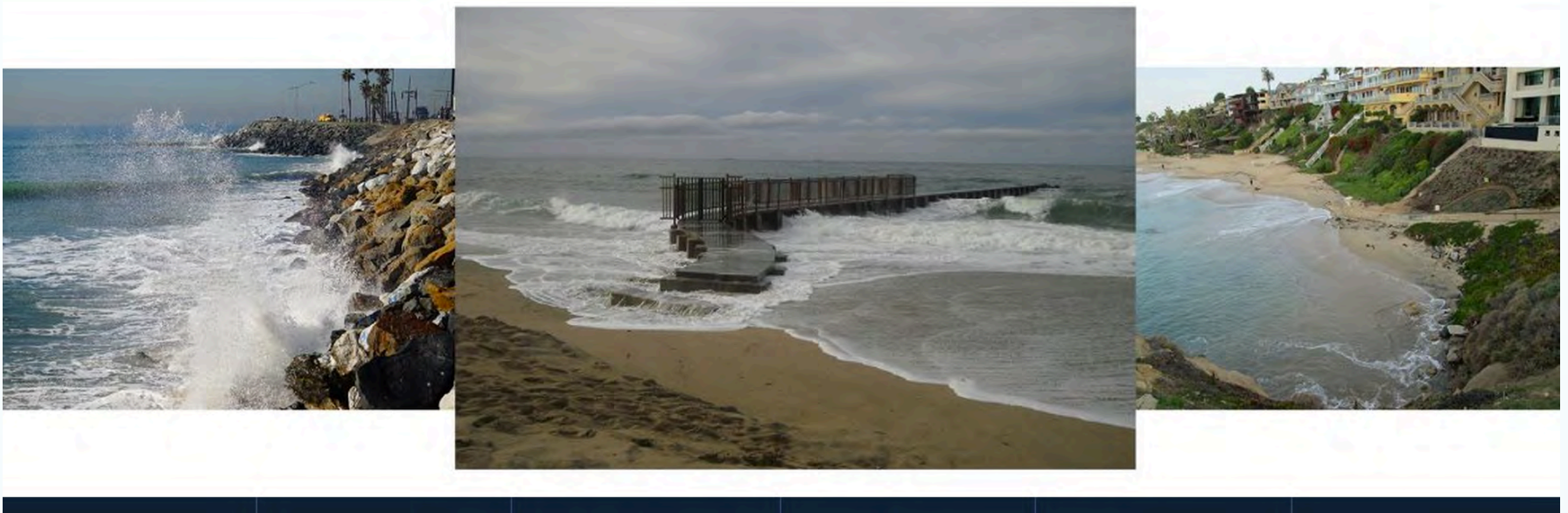
- Great opportunities for images and videos during King Tides on January 19, 20, 21 & February 17, 18, 19.
- Images and videos will be shared broadly with community members and local governments.
  - Digital displays at the Aquarium of the Pacific, Cabrillo Marine Aquarium, and Santa Monica Pier Aquarium
  - Regional AdaptLA workshops and webinars
- Follow the contest on social media!
  - #UrbanTidesPhotos
  - #UrbanTidesVideos





<https://vimeo.com/116300699>

For contest rules and submission guidelines visit:  
<http://dornsife.usc.edu/uscseagrant/urban-tides-contest>



Thank you!



Questions?