



Coastal Issues Committee Annual Meeting

FMA Conference
Reno, NV
September 6, 2018

Slide 1 of 11

CIC Agenda

- Welcome and Introductions
- Committee Objectives & Mission
- Agency Updates
 - NOAA Presentation
- Roundtable Discussion
- Stuff you should know...

Adjourn

Ocean Swell

Nuisance Flooding

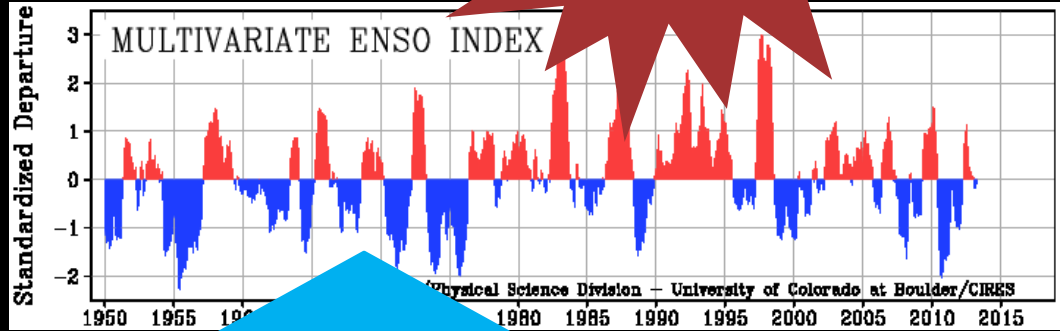


Wind Waves

AR
Pineapple Express

Emergency Management

El Nino



La Nina

PDO

Outreach

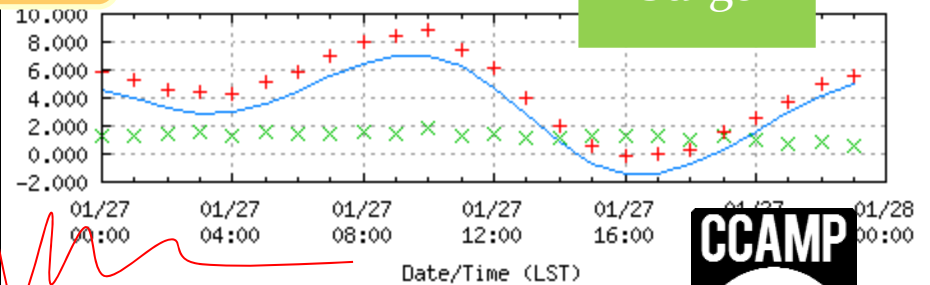
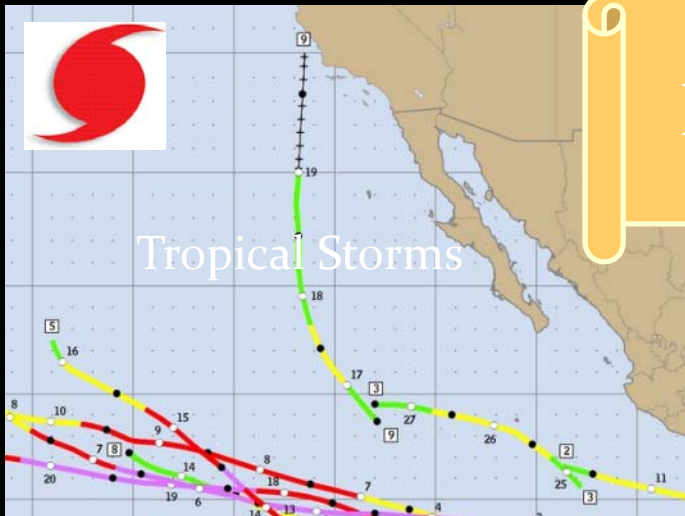
Extratropical Storms

Stillwater Level

King Tides

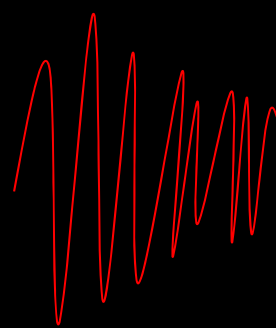
Shoreline Change

Storm Surge



SLR

Tsunami



Committee Objectives

FMA CIC Objectives / Mission:

1. Improve coastal floodplain management and planning in CA & HI
2. Foster communication and dialogue on critical coastal flood risk issues
3. Strengthen working relationships among the professionals engaged in managing and/or protecting coastal floodplains and resources
4. Represent FMA on coastal issues
5. Report to FMA Board of Directors

Our Mission

The primary mission of the Coastal Issues Committee is to develop and promote education, policies, and activities aimed at reducing the costs and impacts of coastal flooding, and protecting and preserving the natural and beneficial functions of coastal floodplains, associated coastal ecosystems, and the services they provide.

Roundtable Update

Agency Updates:

1. Federal
 2. State
 3. Local
- Academia
 - Private
 - ASFPM Coastal Issues Committee
 - Others

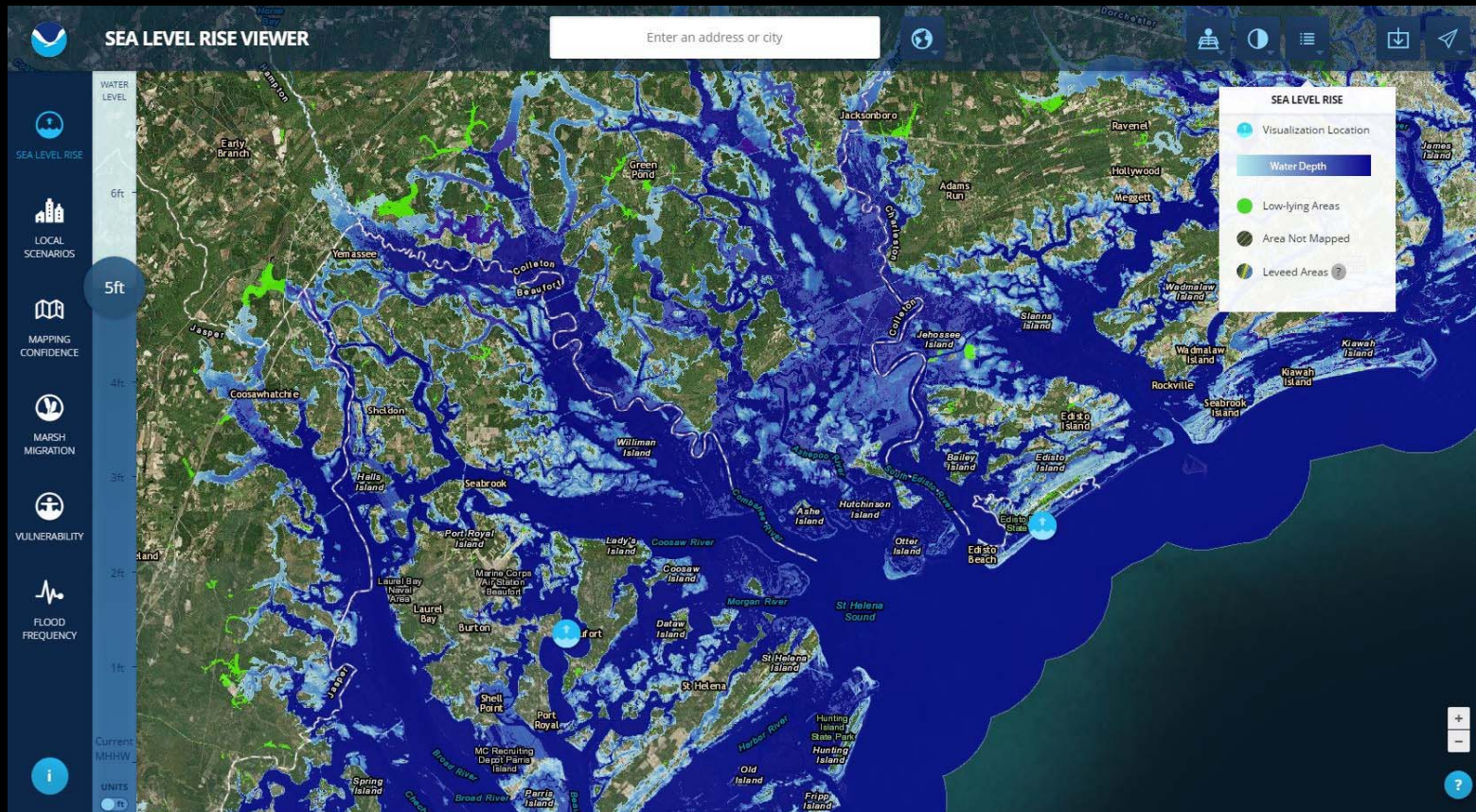
Pods you should know...

- Coastal News Today launched the [American Shoreline Podcast Network](#), which will feature expert practitioners from all over the coastal spectrum.
- *NOAA: Three podcasts, combined: Making Waves, Diving Deeper, or Ocean Shorts podcasts*
<https://oceanservice.noaa.gov/podcast/>
- Coastal Coalition – Tidal Flooding Talk
<https://www.youtube.com/channel/UCe87gUcUNvRPnOo4okT2MXg> [east coast]

Sites you should know...

- Sea Level Rise Viewer

<https://coast.noaa.gov/digitalcoast/tools/slr.html>



Sites you should know...

- FEMA - Coastal Flood Risks: Achieving Resilience Together
<https://www.fema.gov/coastal-flood-risks-achieving-resilience-together>

The Coastal Flood Risk Analysis and Mapping Process

FEMA identifies coastal flood hazards, assesses flood risks, and provides accurate flood risk data to help drive communities toward mitigation actions and achieve greater resilience. As part of the coastal mapping process, FEMA conducts flood hazard analysis and mapping studies to produce FIRMs (Flood Insurance Rate Maps). These Flood maps are used to administer the National Flood Insurance Program and they provide information to communities for the adoption and enforcement of floodplain management measures to help mitigate the effects of flooding.

While each coastal study and Region is unique, the coastal flood hazard analysis and mapping process generally includes the following steps:

- 1 DEFINE BASE TOPOGRAPHY**
 FEMA collaborates with local, State, and Federal governments to identify all available topographical data in the study area, and may also collect new data if no existing information is available. FEMA encourages communities to share new or updated topographic information as it becomes available to ensure maps have the most up-to-date data to support mitigation decisions.
- 2 EVALUATE WATER LEVELS AND STORM SURGE**
 In order to identify coastal flood hazards, FEMA analyzes sea level, tides, wave setup, and storm surge. Storm surge is the water that is pushed toward the shore by strong winds during a storm. Wave setup is the increase in water level caused by the onshore movement of water due to waves breaking.
- 3 DEFINE CROSS-SHORE TRANSECTS AND IDENTIFY THE PRIMARY FRONTAL DUNE**
 Engineers and surveyors divide the shoreline into segments and represent each segment with a cross-shore transect to characterize the study area's topography, development, and land use. The Primary Frontal Dune (PFD), defined as a continuous or nearly continuous ridge of sand with relatively steep seaward and landward slopes immediately landward of and adjacent to the beach, is identified for each shoreline segment.

- 4 EVALUATE STORM-INDUCED EROSION AND SHORE PROTECTION STRUCTURES**
 FEMA evaluates natural features, such as dunes and bluffs, and man-made features, such as seawalls, revetments (rock armoring), and beach nourishment for their ability to protect upland areas from flood hazards. Man-made dunes that are well-established with long-standing vegetative cover are included in the erosion analysis.
- 5 WAVE HAZARD MODELING**
 During a flood, waves ride on elevated water levels and can impact buildings located on land that is normally high and dry. FEMA conducts wave hazard modeling to evaluate the risks from overland wave propagation, runup, and overtopping and to determine base flood elevations (BFEs).
- 6 COASTAL FLOOD HAZARD MAPPING**
 Results of the coastal flood hazard assessment are used to create flood maps. The maps include flood zone designations that indicate areas at high-risk for flooding, e.g., Zone VE and Zone AE. Zone VE indicates a coastal high hazard area where wave action and/or high-velocity water can cause structural damage during severe storms. Zone VE is also assigned to areas identified as the Primary Frontal Dune. Zone AE is mapped for inundated areas with less hazardous wave action. Each zone has a base flood elevation (BFE), which is the elevation to which floodwater is anticipated to rise during the 1-percent-annual-chance flood. The Limit of Moderate Wave Action (LMWA) may also be mapped to indicate the inland limit of waves 1.5 feet or greater for floodplain management purposes.
- 7 FIS AND FIRM PRODUCTION**
 Once the coastal flood hazard analysis and mapping process is completed, a Flood map, or FIRM, is created by merging the coastal mapping with any inland riverine floodplain mapping and overlaying the flood zones on a base map that shows roads and other features to help with location identification. During this step, FEMA also prepares the Flood Insurance Study (FIS) report, which describes the study area, summarizes the engineering methods, and presents results from the study.

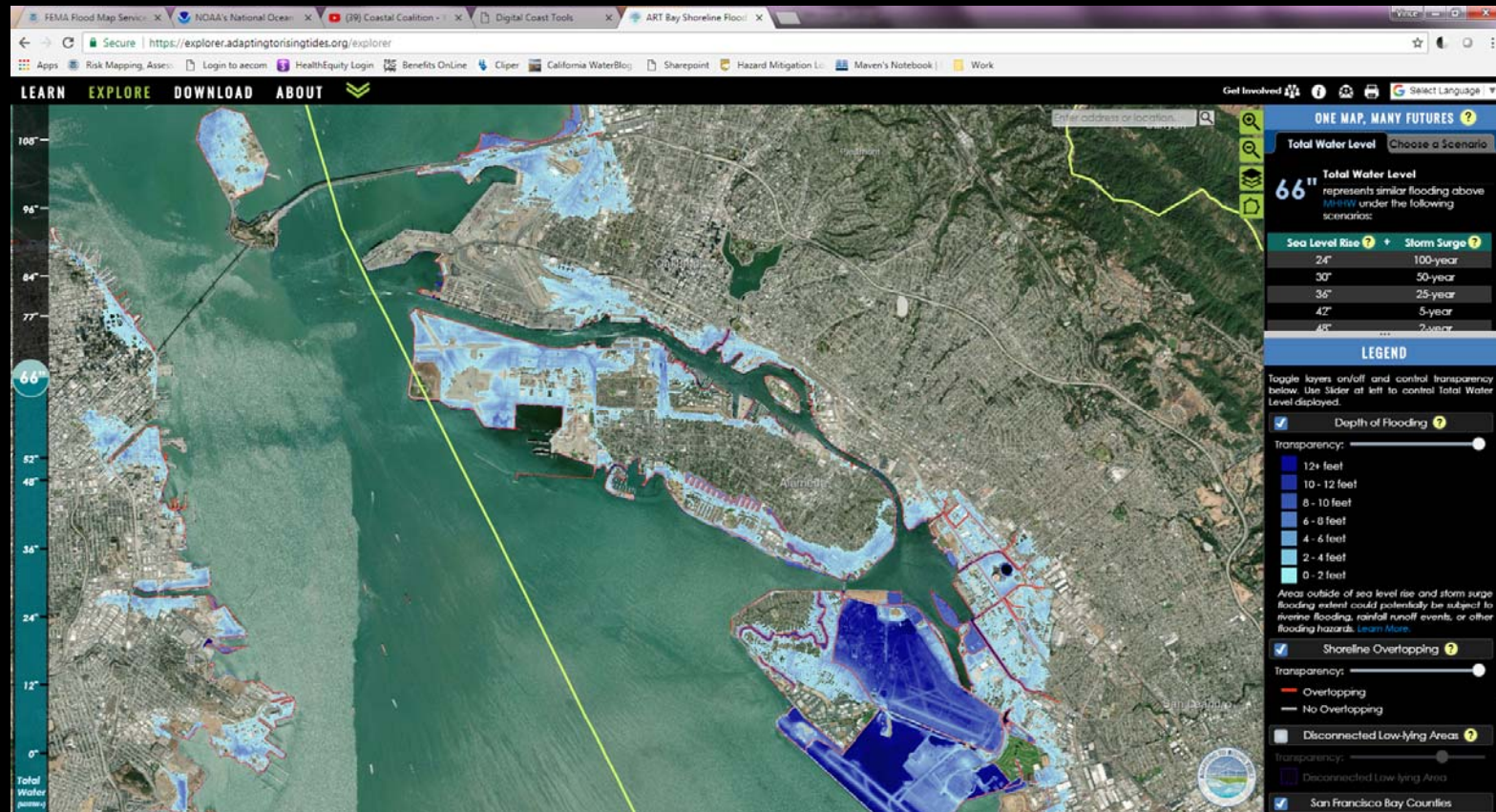


To access the effective FIRM for your community online, visit FEMA's Map Service Center. For more information, please call 1-877-336-2627 or email FEMAmapspecialists@riskmaps.gov

Coastal Flood Risk Analysis and Mapping Process InfoGraphic

Sites you should know...

- Adapting to Rising Tides Bay Area Flood Explorer
<https://explorer.adaptingtorisingtides.org/home>



Closing

- Open Discussion
- Planning for San Diego 2019
- Identify a new Coastal Issues Committee Chair
- Adjourn