

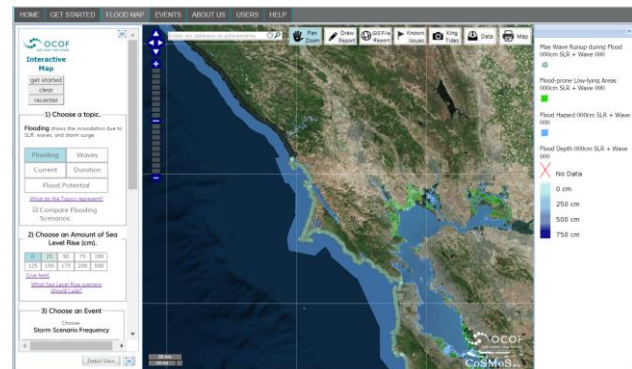
# Planning for Sea Level Rise and Storm Hazards along the California Coast

## Preparing for Tomorrow's Coast

Climate change will increase sea levels, shoreline erosion, and alter the frequency and intensity of coastal flooding in many regions of the California coast. To protect communities and ecosystems, managers and planners need locally relevant tools that help them understand vulnerabilities and plan for action.



Our Coast, Our Future is a collaborative, user-driven approach to provide coastal decision-makers with locally relevant, online maps and tools to help understand, visualize, and anticipate vulnerabilities to sea level rise and storms.



## Supporting Coastal Planning

The following products are available through the Our Coast, Our Future website:

- Seamless Digital Elevation Model (DEM) at 2 meter horizontal resolution
- Combination of 40 different sea level rise and storm scenarios, plus a King Tide scenario for San Francisco Bay, using the USGS Coastal Storm Modeling System (CoSMoS)
- Interactive flood map including flood extent, depth, duration, wave heights, current velocity, minimum and maximum flood potential, as well as the option to compare scenarios
- Online and downloadable data access tailored to users information needs
- Information on how and where products have been used, as well as links to end-users to promote sharing of lessons learned
- FAQs and video tutorials including general project information, geographic coverage, data used, model development, and how to use the flood map
- New features and products will be available with the roll out in Southern California (see Expanding Geography and New Features)

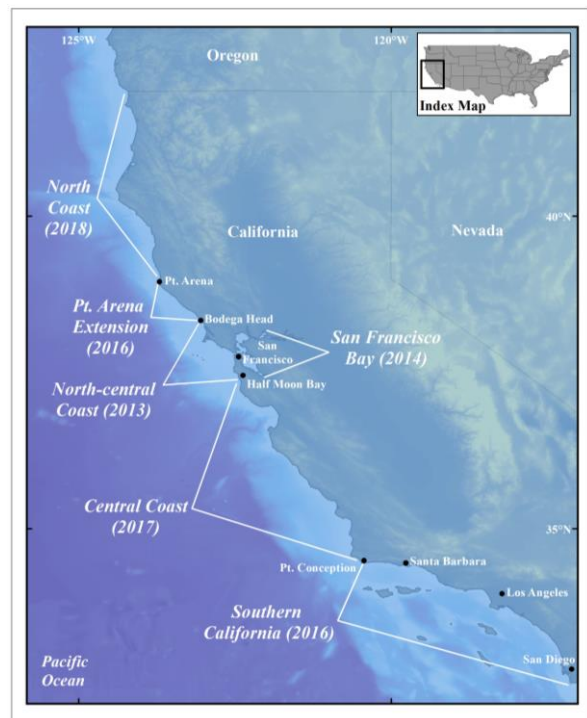
## User-driven Approach

The following objectives outline our collaborative approach:

- Model effects of future climate projections on total water level (wave run-up, wave set-up, storm surge, seasonal effects, tides, and sea level rise), accounting for vertical land motion, levees, major river discharge, and wind waves.
- Continuously improve modeling as state-of-the-science advances.
- Provide an interactive flood map and associated tools at a scale relevant to planning and management through a collaborative product development process.
- Develop products in accessible, user-friendly formats that can be easily applied to coastal vulnerability assessments and local planning efforts.
- Provide outreach, training, and in-depth technical assistance on the use of products.



San Francisco Embarcadero. Credit: Sergio Ruiz



Planned roll out of the Our Coast, Our Future tool.

## Expanding Geography and New Features

Products are currently available for San Francisco Bay and the outer coast from Half Moon Bay north to Point Arena.

Products will be available for Southern California in late 2016, the Central Coast in 2017, and the North Coast in 2018.

New modeling components, such as shoreline evolution, are being integrated beginning in Southern California.

## Project Partners

Project expansion is led by USGS and Point Blue Conservation Science, in partnership with:

