

# PREPARING FOR SEA LEVEL RISE IN SAN MATEO COUNTY



FLOODS, DROUGHTS, RISING SEAS! // MARCH 30, 2018

# OVERVIEW

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- Sea Change SMC Initiative
- Vulnerability Assessment
- Next Steps



# A THRIVING COMMUNITY



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# SEA CHANGE

SAN MATEO COUNTY

A decorative wavy line in a teal color, positioned below the word "SEA CHANGE" and above the words "SAN MATEO COUNTY".A decorative footer at the bottom of the page consisting of three horizontal wavy bands in shades of teal and blue.



# PARTNERSHIPS & COLLABORATION

## Stakeholder groups advised process

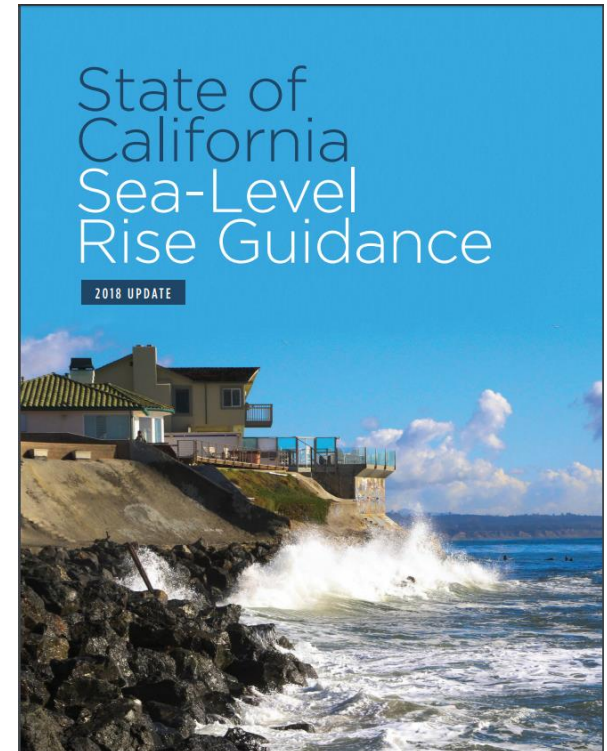


- San Mateo County Cities
- Special Districts
- State and Federal Agencies
- Business
- Community Groups
- Research Organizations
- Community-Based Organizations
- High Schools and Youth Groups
- Other Bay Area Counties and Cities
- Plus 1000's of Community Members

# STATE ADOPTED SCIENCE

## State of California Sea Level Rise Guidance

Year	Full Range	Likely Range
<b>2030</b>	4 to 10 in	4 – 6 in
<b>2050</b>	7 to 23 in	7 inches – 13 in
<b>2100</b>	12 to 83 in	12 – 40 in
<b>2100 (high-end)</b>	10 feet	



*Prepared by Ocean Protection Council (March 2018)*

# FUTURE IMPACTS



Erosion

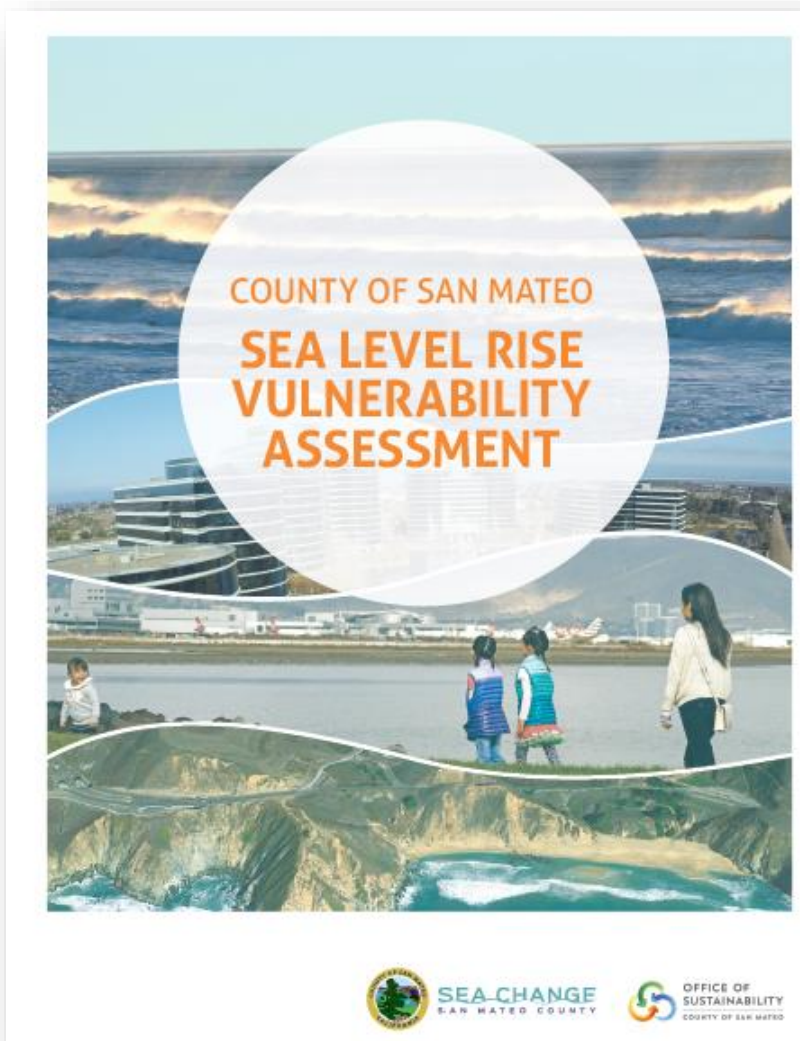


Permanent  
inundation



Temporary  
flooding

# FINAL VULNERABILITY ASSESSMENT



**ASSESS  
VULNERABILITY**



**PROVIDE  
ACTIONABLE  
RESULTS**



**BUILD AWARENESS**



**FACILITATE  
COLLABORATION**

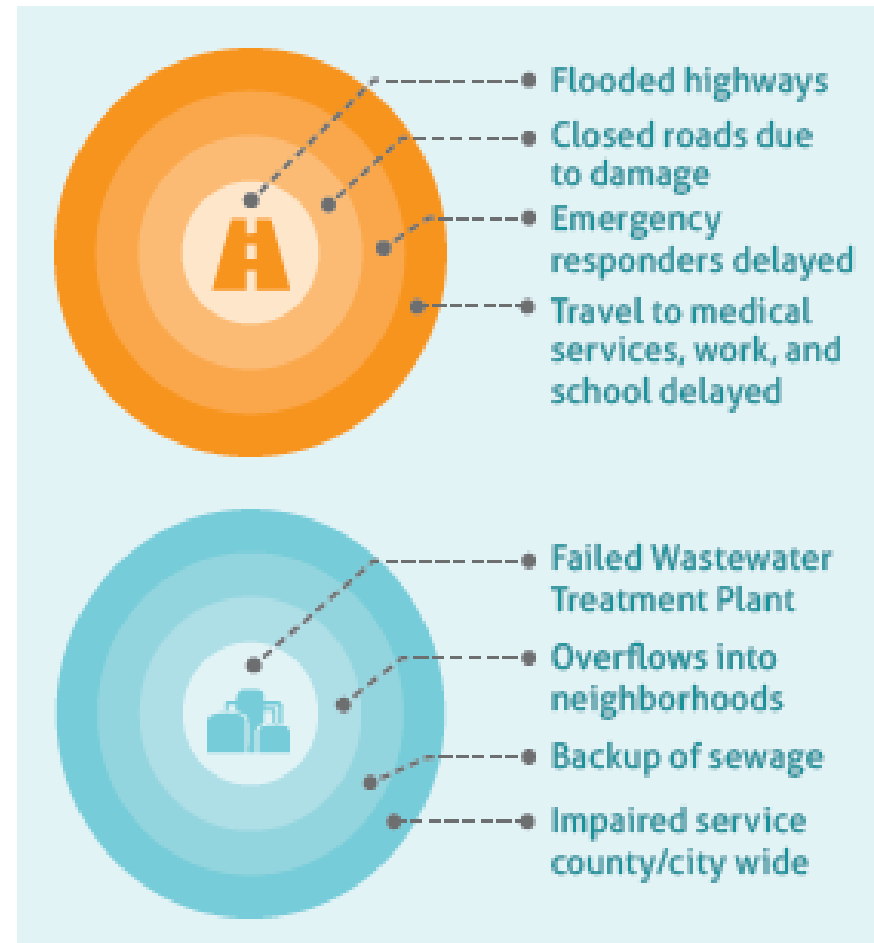


# VULNERABILITY AND IMPACTS



# RISING SEAS AFFECTS US ALL

- Regional and community wide dependency on networked infrastructure
- Community-level risks and impacts



# PHASE II: RESILIENCE PLANNING

## GOALS:

- Share information
- Be a resource
- Identify and promote collaboration opportunities

## STRATEGIES:

- Technical Assistance
- Policy Toolkit/ Model Ordinances
- Coordination across County departments, cities, counties, region

# PLANNING FOR THE FUTURE

## Assess

- Vulnerability of South Coast and key County Facilities
- Wetlands assessment

## Plan

- Framework for local action on preparedness and adaptation
- Menu of adaptation strategies

## Implement/Engage

- Update plans and policies to address sea level rise
- Youth and public engagement
- Project concepts and funding strategies



# BREAKOUT SESSION QUESTIONS

- What does it look like for San Mateo County to be prepared and successfully adapted to sea level rise and storm events?
- What are 1-2 actions needed to achieve this?

**BUILDING A FRAMEWORK FOR LOCAL ACTION on Sea Level Rise Preparedness and Adaptation IN SAN MATEO COUNTY**

Project Partners: San Mateo County Office of Sustainability  
Natural Capital Project, Stanford University  
San Francisco Estuary Institute

**natural capital PROJECT SFEI**

**1 DEVELOP GUIDING PRINCIPLES**

Building Principles highlighting shared values and priorities for the planning process is a first step in developing a framework for local action. The framework will identify a set of guiding principles that will inform the development of the framework for local action.

**2 IDENTIFY DISCRETE PLANNING UNITS**

The framework will identify discrete planning units that will be used to develop the framework for local action. The framework will identify discrete planning units that will be used to develop the framework for local action.

**3 IDENTIFY OPTIONS FOR SEA LEVEL RISE ADAPTATION**

The framework will identify options for sea level rise adaptation that will be used to develop the framework for local action. The framework will identify options for sea level rise adaptation that will be used to develop the framework for local action.

**4 DEVELOP STRATEGIES FOR THE FUTURE**

The framework will develop strategies for the future that will be used to develop the framework for local action. The framework will develop strategies for the future that will be used to develop the framework for local action.

**5 EVALUATE THE TRADE-OFFS OF DIFFERENT ADAPTATION STRATEGIES**

The framework will evaluate the trade-offs of different adaptation strategies that will be used to develop the framework for local action. The framework will evaluate the trade-offs of different adaptation strategies that will be used to develop the framework for local action.

**PROJECT DESCRIPTION**

San Mateo County's Sea Change program is a first step in the Planning Phase of the climate preparedness action plan. As part of this phase, the County would like to develop a sustainable, science-based framework for local action on sea-level rise preparedness and adaptation. San Mateo County has partnered with the San Francisco Estuary Institute and the National Capital Project of Stanford University to develop framework that provides guidance and a standard process for San Mateo County cities to explore and evaluate different future visions for their Bay shoreline. Exploring the use of nature-based strategies for sea-level rise adaptation is a priority for San Mateo County, and this work will focus specifically on identifying the feasibility of nature-based strategies along the Bayshore and in developing methods for evaluating the trade-offs of hardened vs. natural (and hybrid) approaches to shoreline protection.

**TIMELINE**

**FUNDING**

**NEED MORE INFORMATION?**

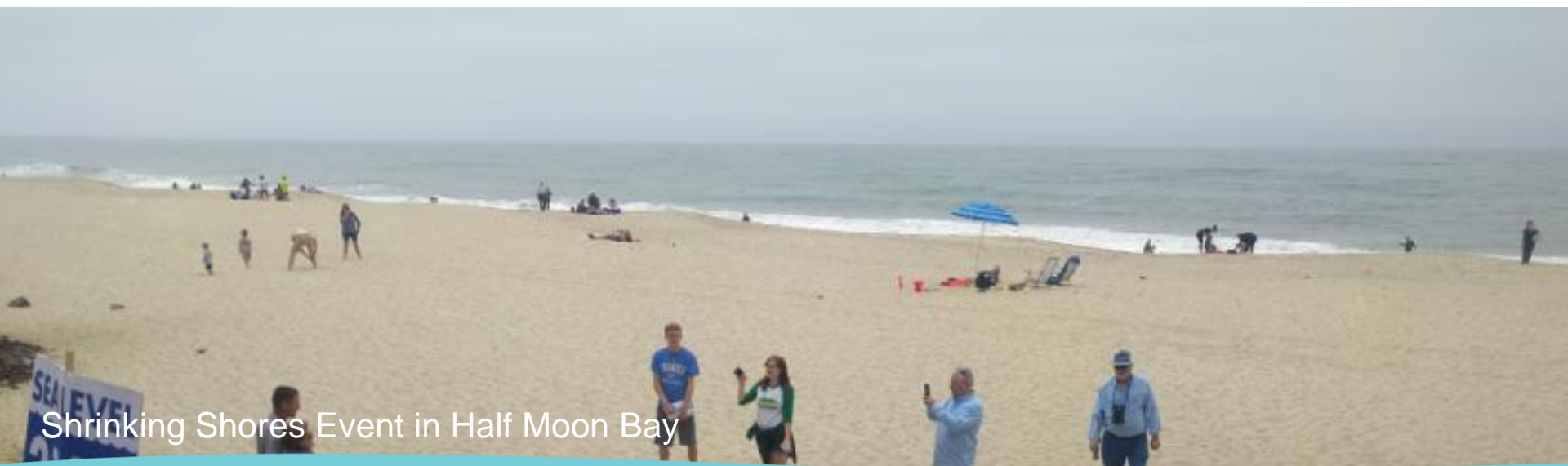
# THANK YOU!

Visit [www.seachangesmc.com](http://www.seachangesmc.com) to learn more!

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Shrinking Shores Event in Half Moon Bay