EXPLORING SEA LEVEL RISE SOLUTIONS
MEETING PURPOSE

- **Share** research on potential adaptation opportunities and measures
- **Better** understand local goals and priorities
- **Explore** potential adaptation measures
- **Hear** updates from local and regional partners
AGENDA

• Welcome and Background
• Visioning Exercise
• Vulnerabilities and Opportunities Presentation
• Guiding Principles & Adaptation Measures Discussion
• Updates and Announcements
HANDOUTS

• Agenda
• Headline Creation + Adaptation Measures
  Exercise
• Guiding Principles
• Adaptation Measure Description Cards
• Maps + Posters
• Meeting Evaluation
PARTNERSHIPS & COLLABORATION

- 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
# Rising Seas

## State of California Sea-Level Rise Guidance

<table>
<thead>
<tr>
<th>Year</th>
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<tbody>
<tr>
<td>2030</td>
<td>0.5 feet</td>
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<td>1 foot</td>
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<td>2050</td>
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<td>1.9 feet</td>
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<td>2100</td>
<td>2.4 – 3.4 feet</td>
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<td>10.2 feet</td>
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*Prepared by Ocean Protection Council (April 2018)*
RECENT FLOODING
FINAL VULNERABILITY ASSESSMENT

ASSESS VULNERABILITY

PROVIDE ACTIONABLE RESULTS

BUILD AWARENESS

FACILITATE COLLABORATION
PLANNING FOR THE FUTURE

• Action at multiple geographic scales

  – Understand risks
  – Menu of shoreline adaptation strategies
  – Integrate into policy, plans and operations
  – Prioritize projects and solutions
  – Coordination across communities
CURRENT EFFORTS

- Colma/ San Bruno Creek/ Navigable Slough Flood Resilience
- South San Francisco Resilient By Design Project
- SFO shoreline study
- Coyote Point Eastern Promenade Project
- San Mateo Levee + Wasterwater Plant Upgrade
- Foster City Levee project
- South Bay Salt Pond restoration
- SAFER Bay project

Pacifica erosion control & LCP update
- Plan Princeton Update
- Surfers Beach Sand Replenishment
- Mirada Road Project
- Half Moon Bay LCP update
- Belmont Creek Flood Resilience
- Bay Front Canal & Watershed Resilience
- South Bay Resilient By Design Project
## PLANNING FOR THE FUTURE

### Climate Change Preparedness Action Plan

<table>
<thead>
<tr>
<th>Assess</th>
<th>Plan</th>
<th>Implement/Engage</th>
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| • Vulnerability of South Coast and key County Facilities  
  • Wetlands assessment  
  • Heat, Wildfire and Precipitation impacts | • Sea Level Rise Planning Toolkit: Strategies and Policy Templates  
  • Online Climate Impacts Viewer  
  • Adaptation Pilot Projects  
  • Technical Assistance | • Climate Collaborative  
  • Communication Toolkit  
  • Plans and policies updates  
  • Youth and public engagement  
  • Project support |

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Sea Change  
San Mateo County
SEA LEVEL RISE TOOLKIT

- Framework for Local Action
- Menu of Adaptation Strategies
- Policy and Planning Templates
- Implementation Guidance
PLANNING TOOLKIT

• Framework for Local Action
  – Vision & Guiding Principles
  – Criteria to support decision making

• Menu of Adaptation Strategies
  – Non-regulatory measures
    • Hard and nature-based shoreline strategies
  – Regulatory and policy tools
MENU OF STRATEGIES

• Research partners:
  – Natural Capital Project at Stanford
  – San Francisco Estuary Institute

• Funded by Moore Foundation
MENU OF STRATEGIES

• Identification of Operational Landscape Units (OLU’s) + nature based strategies
• Explore feasibility of strategies
• Evaluate pro/cons of alternative strategies
TIMELINE

MARCH-JULY
Identification of OLU’s and adaptation measures

SEPTEMBER
Discussion on vision, guiding principles and adaptation measures

OCTOBER
Feedback on alternative scenario analysis

NOV/DEC
Alternative visions/scenarios for inclusion in Toolkit
VISION FOR THE FUTURE
GUIDING PRINCIPLES

- Serve as a foundation for future efforts
- Unify towards collective goals and vision
  - SeaChange SMC Stakeholder Mtgs
  - Stanford Student research projects
  - Stakeholder Interviews

SeaChange SMC Stakeholder Mtg, May 30
FUTURE PLANNING
FUTURE SCENARIOS

scenario

noun: scenario; plural noun: scenarios

- a written outline of a movie, novel, or stage work giving details of the plot and individual scenes.
  "imagine the scenarios for four short stories"
  synonyms: plot, outline, synopsis, storyline, framework; More

- a postulated sequence or development of events.
  "a possible scenario is that he was attacked after opening the front door"
  synonyms: sequence of events, course of events, chain of events, series of developments,

situation
  "every possible scenario must be explored"

- a setting, in particular for a work of art or literature.
  "the scenario is World War II"
  synonyms: setting, background, context, scene, milieu
  "this film has a more contemporary scenario"

Origin

LATIN  ITALIAN

scena  scenario

scene  late 19th century

late 19th century: from Italian, from Latin scena 'scene.'
STORYTELLING

Accelerated innovation

Abandonment and renewal

Today

Connected communities

Nested watershed
ECOSYSTEM SERVICES

Pollination

Coastal protection

Food, fuel, fiber

Clean water

Recreation
SUCCESSFUL SCENARIOS

- Plausible
- Distinct
- Vision, storyline, or narrative
- Quantitative pieces
HOW ARE SCENARIOS USEFUL?

• Imagination
• Conversation
• Analysis
ANALYSIS
## SEA-LEVEL RISE

Prepared by Ocean Protection Council (April 2018)

![Map of sea-level rise predictions](image)

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SEA-LEVEL RISE
INTRODUCTIONS

• Who is at your table?
  – Your name
  – What community or organization are you connected to?
A large storm event occurs at the same time as a King Tide. What does the local newspaper paper say? The headline needs to be positive and talk about sea level rise. (2 minutes)
"SOUTH BAY SPONGES SAVE THE DAY"
Create another headline with the word “nature” or “natural” in it. It still needs to be positive and mention sea-level rise.
(90 sec)
Create a headline that mentions a socially vulnerable community (still positive) (90 sec)
GROUP SHARE

Share a headline or two with the whole group!
TAKE A BREAK!
GROUP DISCUSSION

• Review and provide feedback on the Guiding Principles (10 mins)

• Explore and discuss feasibility of adaptation measures (45 mins)
GUIDING PRINCIPLES QUESTIONS

• Are these the right set of principles for all of us to work together to advance sea level rise preparedness planning and implementation in San Mateo County? Do you have any suggested modifications or additions?

• How do you see yourself using these in your work/community?
1. Which adaptation measures seem most compelling to you across the different reaches in this area and why?

2. How might some of those adaptation measures help provide benefits of most value to your community within this reach/OLU?
NEXT STEPS

• **Evaluate** pro/cons of alternative adaptation scenarios (NatCap)
• **Provide** input on Guiding principles
• **Provide** feedback on alternative scenario analysis
  – Save the Date: **October 30th, 2018**
• **Help** develop and refine future vision scenarios (Nov/Dec)
THANK YOU!

Visit our website to learn more: www.seachangesmc.com
Join our newsletter: www.seachangesmc.com/get-involved/
Join us on social media: www.facebook.com/groups/SeaChangeSMC

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