State Support & Regional Action for Climate Adaptation in the SF Bay

Funding, Technical Guidance, and Resources
City of San Rafael - Climate Action Plan
Community Forum
January 16th, 2020
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Outline

I. The State Coastal Conservancy
II. State Guidance
III. Regional Action
IV. Projects and Local Examples
V. Personal and Social Resilience
Mission

… acts with others to preserve, protect and restore the resources of the California Coast, ocean and San Francisco Bay area
The State’s Climate Plan: Safeguarding California

- A roadmap for state government action to build climate change resiliency.
- State government’s current and planned efforts to address climate impacts
- **Vision:** “All Californians thrive in the face of a changing climate.”

Safeguarding California Plan: 2018 Update
California’s Climate Adaptation Strategy | January 2018
The State’s Latest Climate Science Document: California’s 4th Assessment

<table>
<thead>
<tr>
<th>CLIMATE IMPACT</th>
<th>DIRECTION</th>
<th>SCIENTIFIC CONFIDENCE FOR FUTURE CHANGE</th>
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</thead>
<tbody>
<tr>
<td>TEMPERATURE</td>
<td>WARMING ⬤</td>
<td>Very High</td>
</tr>
<tr>
<td>SEA LEVELS</td>
<td>RISING ⬤</td>
<td>Very High</td>
</tr>
<tr>
<td>SNOWPACK</td>
<td>DECLINING ⬇</td>
<td>Very High</td>
</tr>
<tr>
<td>HEAVY PRECIPITATION EVENTS</td>
<td>INCREASING ⬆</td>
<td>Medium-High</td>
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<tr>
<td>DROUGHT</td>
<td>INCREASING ⬆</td>
<td>Medium High</td>
</tr>
<tr>
<td>AREA BURNED BY WILDFIRE</td>
<td>INCREASING ⬆</td>
<td>Medium High</td>
</tr>
<tr>
<td>-------------</td>
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<td>------</td>
</tr>
<tr>
<td>Low emissions</td>
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<tr>
<td>0.5% probability sea-level rise meets or exceeds...</td>
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<td>1.3</td>
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<tr>
<td>Extreme sea-level rise risk</td>
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<td>1.3</td>
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</table>

The State’s Sea Level Rise Guidance Document

State of California
Sea-Level Rise Guidance

2016 UPDATE
Recent Climate Legislation: AB65 and SB576

- Both create our **Climate Ready Program** in statute
  - For Prop 68 Climate $, **prioritize projects:**
    - (1) that use **natural infrastructure**;
    - (2) provide **multiple public benefits**;
    - (3) that are **based in a variety of ecosystems** along the coastline
  - Defines “**natural infrastructure**”
  - Requires SCC to **provide information to OPR** for climate adaptation projects
  - Authorizes (but doesn’t require) SCC to **provide technical assistance to coastal communities** in planning and implementing projects that incorporate natural infrastructure
Regional Climate Adaptation Planning

- Bay Conservation and Development Commission (BCDC) Regional Shoreline Adaptation Strategy (RSAS):
  - Kicking off now with Leadership Group meeting on Jan 28
- Metropolitan Transportation Commission (MTC) Plan Bay Area 2050:
  - Regional Working Group Meetings (RAWGS) to give input; Next is Feb 11 at 9:30a
Climate Adaptation Examples in the SF Bay Area
Living Shorelines Examples and Definition

- Shoreline protection via restoration design
- Suite of techniques/habitat types

- Minimize coastal erosion
- Maintain coastal processes
- Natural habitat for plants, wildlife, & people
Nature-Based Adaptation, “Green Infrastructure”, “Living Shorelines”

Sfbaylivingshorelines.org
Impacts on Humans

- 20-50% of people impacted by extreme weather events can experience severe: Anxiety, Depression, PTSD, Higher suicide rates, etc.
- Climate impacts include impacts on humans (not just buildings, or habitats)
- Not just physical (getting wet, smelling smoke), but psychological, spiritual, social impacts (getting stressed, systemic racism and oppressions aggravated, social support disrupted, health inequities magnified)
- More impacts, less recovery time
- Seeing, experiencing, and worrying about climate change (migration, loss of place, etc.)
Personal/Community Resilience & Adaptation

**Adaptations for Humans**
- Become trauma-informed
- Overcome “fight or flight” (regulate your amygdala)
- Build on strengths
- Think and act in healthy ways (even in unhealthy conditions)
- Use adversities as transformational catalysts to find new meaning, direction, hope

Slide Content Provided By: Bob Doppelt, International Transformational Resilience Coalition
Personal & Community Resilience Resources

- International Transformational Resilience Coalition: http://www.theresourceinnovationgroup.org/intl-tr-coalition/
- The Good Grief Network Resources: https://www.goodgriefnetwork.org/resources/
- (Personal Resilience Exercise to take home)
Thank you!
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Transforming Marin City's Urban Wetland  $150,000
Audubon CA, ShoreUp Marin City

Community Resilience Pilot Project  $150,000
MarinLink, Marin City People’s Plan

Reef Design Innovations for Living Shorelines  $200,000
SFSU's Estuary and Ocean Science Center
Conservation Corps North Bay
Lower Corte Madera Creek Channel Concrete Removal  $200,000
Friends of Corte Madera Creek Watershed

Marin County Parks and Recreation

Evolving Shorelines