Webinar Agenda

• Brief overview of ARCCA
• Presentations: Resilience Planning in Response to SB-379
• Q&A Panel Discussion
• Closing Remarks
Questions:

At any point during the webinar, you can submit a question through the Zoom control panel. All questions will be read aloud and answered during Q&A as long as time permits.

You can also use the ‘hand raising’ feature to be unmuted and ask a question during Q&A.
A network of leading regional collaboratives from across California that work together to advance adaptation statewide and increase local capacity to build community resilience.

Knowledge Exchange
Collaborative Formation
State Engagement

www.ARCCAcalifornia.org
ARCCA Members

Coordinator
Local Government Commission
Leaders for Livable Communities

State Liaison

Affiliates

- Buro Happold Engineering
- California ReLeaf
- Climate Resolve
- CSU Office of the Chancellor
- The 427
- Climate Solutions
- CADMUS
- Geotown Climate Center
- Harris & Associates
- Geos Institute
- Institute for Sustainable Communities
- Berkeley Lab
- Union of Concerned Scientists
Featured Presenters

Erik de Kok
Governor’s Office of Planning and Research

Julia Kim
Local Government Commission

Moderator

Aaron Pfannenstiel
Atlas Planning Solutions
Climate Adaptation Requirements in General Plans

Thursday, October 3, 2019
ARCCA SB 379 Webinar
Climate change adaptation is now required in safety elements of all general plans

- Safety element already required general plan element, must address natural hazards and public safety.

- SB 379 (Jackson, 2015) added climate change adaptation and resilience to safety element requirements in Gov’t Code Section 65302(g)(4)

- Other general plan elements may also be appropriate
What is required?

A. A **vulnerability assessment** that identifies the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts, including (but not limited to) an assessment of how climate change may affect the risks identified in the safety element.

B. **Adaptation and resilience goals, policies, and objectives** based on the findings of the vulnerability assessment.

C. Feasible **implementation measures** designed to carry out the goals, policies, and objectives.
Adaptation Planning Process

1. Exposure
   - What climate change effects will a community experience?

2. Sensitivity
   - What aspects of a community (people, structures, and functions) will be affected?

3. Potential Impacts
   - How will climate change affect the points of sensitivity?

4. Adaptive Capacity
   - What is currently being done to address the impacts?

5. Risk & Onset
   - How likely are the impacts and how quickly will they occur?

6. Prioritize Adaptive Needs
   - Which impacts require actions to address them?

7. Identify Strategies
   - Which strategies should be pursued to address adaptation needs?

8. Evaluate & Prioritize
   - Which strategies should be implemented first?

9. Phase & Implement
   - How can the strategies be funded, staffed, and monitored?

Timeline for Implementation

SB 379: climate adaptation updates to safety element shall occur:
• Upon the next revision of a Local Hazard Mitigation Plan (LHMP) on or after 1/1/2017; or,
• On or before 1/1/2022, if a jurisdiction has not adopted a LHMP

SB 1035 (Jackson) 2017 – Adaptation updates concurrent with LHMP and Housing Element revision cycles:
• Added Gov’t Code 65302(5): climate adaptation updates must be incorporated into Safety Element upon adoption of each housing element revision or LHMP update, but no less than every eight years.
• Must identify new information related to flood, fire hazards and climate adaptation and resilience that was not available during the previous revision
Data requirements: Vulnerability

• Assets, resources and populations that are sensitive to various climate change impacts;
  – Local, regional, state data (MPOs, LAFCOs, Counties, etc)
  – CalEnviroScreen – disadvantaged communities
  – Critical facilities
• Current status of climate change preparedness;
• Historical data on natural events and hazards;
• Vulnerability maps and areas that have repetitive loss;
• Existing and planned development in at-risk areas;
• Protection of public health, safety, and the environment.
Goals, Policies, Implementation

• How will the jurisdiction reduce risk with new land use decisions?
• Where are at-risk and resilient critical facilities?
• How can buildings and development be made resilient?
• How will the jurisdiction formalize working with local, regional, state, and federal agencies?
• What are the natural infrastructure options that are to be prioritized?
• How will adaptation measures be incorporated into proposed development?
Adaptation Planning Resources

- State of CA General Plan Guidelines (OPR 2017):
  - Chapter 4: Required Elements
    - Safety Element
    - Environmental Justice
  - Chapter 3: Community Engagement and Outreach
  - Chapter 5: Equitable and Resilience Communities
  - Chapter 6: Healthy Communities
Adaptation Planning Resources

Adaptation Planning Guide (APG), 2012

- Governor Office of Emergency Services (OES), OPR, and others
- Update in progress!

Cal-Adapt (cal-adapt.org)

- Online tool for viewing and obtaining downscaled climate change data and related datasets
- UC Berkeley Geospatial Innovation Facility, funded by CA Energy Commission
Adaptation Planning Resources

California’s 4th Climate Change Assessment

• [http://www.climateassessment.ca.gov/](http://www.climateassessment.ca.gov/)

Adaptation Clearinghouse

• [https://resilientca.org](https://resilientca.org)
• Managed by OPR under the Integrated Climate Action and Resilience Program (ICARP)
On the Ground Implementation

OK to use existing plans

- Examples: climate vulnerability assessment, climate adaptation plan, climate action plan, or LHMP may be used.
- Incorporation existing plan by reference, or direct incorporation of content, or both are all acceptable. Key point is consistency with requirements.

AB 2140 (Hancock, 2006): LHMP -> Safety Element

- LHMPs may be adopted with Safety Element updates
  - Eligibility for post-disaster incentives from CA Disaster Assistance Act (covers local share of the 25% non-federal portion of grant-funded projects)
- Opportunity for alignment of SB 379 requirements at the same time as LHMP and Safety element updates

Leverage State funding opportunities:

- Caltrans SB 1 – Adaptation Planning Grants
- Governor’s Office of Emergency Services (OES) / FEMA
- Others
Thank You!

SB 379 Survey – OPR Wants to Hear from You:
https://www.surveymonkey.com/r/T9YLVVK
(Friday, October 4 deadline for responses)

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RESILIENCE PLANNING IN RESPONSE TO SB-379
WHY ARE WE HERE?

• Our communities are facing greater challenges

• Hazard events are larger and more devastating than before
OHH, AND THIS?
THE ROUTES TO COMPLIANCE

General Plan
- Land Use
- Circulation
- Conservation
- Open Space
- Noise
- Housing
- Safety

Housing

Safety

SB 1035
HOW DOES IT ALL FIT TOGETHER?
WHAT IS A SAFETY ELEMENT?

Govt Code 65302 (g) (1) - Protection of the Community From Unreasonable Risks Associated With:

- Seismically induced surface rupture
- Ground Shaking
- Flooding
- Tsunami, Seiche, and Dam Failure
- Subsidence
- Liquefaction
- Ground Failure
- Wildland and Urban Fires
- Slope Instability (Mudslides and Landslides)
- Military Installations
- Peakload Water Supply Requirements
- Min. Road Widths & Clearances Around Structures
- Evacuation Routes
IT’S NOT GETTING SIMPLER

Housing Element
- Housing Element
- Changing Legislation (A Lot!)
- Changing State Priorities
- Changing Community Needs

Safety Element
- (2017) SB 379 Climate Change
- (2014) SB 1241 Cal Fire Review
- (2007) AB 162 CVFPP
- (2006) AB 2140 LHMP

(2018) SB 1035 [Housing + Safety Elements]
Resilience Planning Connections

- Emergency Operations Plan
- Local Hazard Mitigation Plan
- General Plan Safety Element
- Safety Element
- SB 379
- LHMP
- EOP

Short Timeline

High Specificity

Long Timeline

Low Specificity
RESILIENT MAMMOTH LAKES

Innovative Funding
- CPAW
- Caltrans SB 1
- FEMA HMGP

Great Timing

(2018) SB 1035 [Housing + Safety Elements]
CAPITOLA, CA

Significant Flood in 2011 caused over $17M in damages
CAPITOLA, CA

City was in the process of updating the General Plan (Pre SB-379)

Initiated an LHMP during the update, that identified future mitigation projects and addressed climate change (2012)
HUNTINGTON BEACH, CA

- 2004 ($3.7 M Hazard Mitigation Improvements)
- 2007 ($7M Seismic retrofit of City Hall)
- 2016 ($6M Pump Station Upgrade)
- 2018 ($2M Seismic pipeline replacement)

The Power of Hazard Mitigation
Goal HAZ-2: Coastal environments accommodate coastal changes and reduce coastal development impacts.

Policies

A. Promote appropriate land uses and development patterns within potential sea level rise areas identified in the Sea Level Rise Hazard Area established in Figure HAZ-6.

B. Implement priority measures to reduce and mitigate sea level rise impacts to property and infrastructure outlined in the Coastal Resiliency Program.

C. Promote land use changes and development patterns that conserve coastal resources and minimize bluff and coastal erosion.

D. Continue to support beach sand replenishment projects located north of the planning area that will support sand deposition on beaches in the planning area.

E. Provide information to property owners about the risks associated with coastal erosion and flooding and encourage them to take adequate steps to prepare for these risks.

F. Provide sufficient warning and evacuation assistance to community members impacted by coastal flooding events.

G. Increase the City’s understanding and funding for public improvements with respect to potential vulnerabilities and impacts to infrastructure associated with changes in sea level elevation.

H. Monitor potential ocean surf line hazards.

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<thead>
<tr>
<th>Reference Code</th>
<th>Description</th>
<th>General Plan Update</th>
<th>Local Coastal Program Update</th>
<th>Shoreline Management Plan</th>
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<tbody>
<tr>
<td>ERC-P.31</td>
<td>Coastal Access and Recreation: Continue to provide a high degree of access to the coast, and identify opportunities to equitably improve coastal access for all community members using varied modes of transportation.</td>
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<td>HAZ-P.15</td>
<td>Shore Stabilization and Beach Management</td>
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<tr>
<td>A.3</td>
<td>Prepare a shoreline management plan</td>
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<td>A.21</td>
<td>Monitor existing shoreline protection structures</td>
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<td>A.22c</td>
<td>Re-assess impacts and need for existing armoring over time</td>
<td>●</td>
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FOOD FOR THOUGHT

Risk Assessments

- SB 379
- LHMP
- AWIA
- EOP

Plan Integration

- Safety Element
- SB 379
- LHMP
- EOP
STRIVE FOR IMPROVEMENT

Ladder of Resilience

Tier 3
- Climate Adaptation Plan
- Loss Avoidance Studies
- Implementation Actions/Strategies

Tier 2
- Building Code
- Local Hazard Mitigation Plan
- Overlay Zones/Districts

Tier 1
- Zoning Code
- Basic Education/Outreach
- Comprehensive Plan
QUESTIONS?

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Thank you!