

Resilience Planning in Response to SB-379



ARCCA

Alliance of Regional Collaboratives
for Climate Adaptation

Learning Session Webinar

October 3, 2019 | 1:00 – 2:00 PM

Webinar Agenda

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

Webinar Logistics

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.

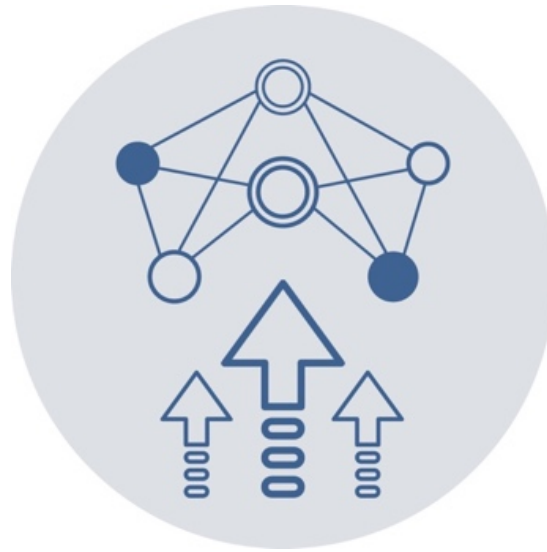


About ARCCA

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

ARCCA Members



Coordinator



Local Government Commission
Leaders for Livable Communities

State Liaison



Affiliates

**BUROHAPPOLD
ENGINEERING**



CSU The California State University
OFFICE OF THE CHANCELLOR



CADMUS

**GEORGETOWN
CLIMATE CENTER**



Harris & Associates

**GEOS
INSTITUTE**



**Union of
Concerned
Scientists**

Featured Presenters

Moderator



Julia Kim
Local Government
Commission



Erik de Kok
Governor's Office of Planning and Research

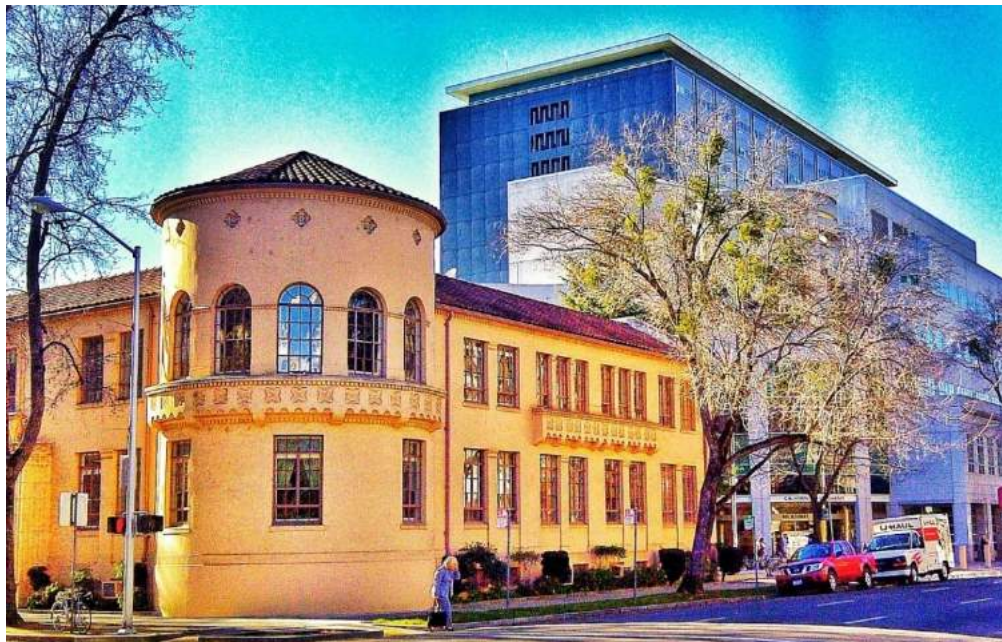


Aaron Pfannenstiel
Atlas Planning Solutions





Climate Adaptation Requirements in General Plans



Thursday, October 3, 2019
ARCCA SB 379 Webinar



Safety Element - Adaptation

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



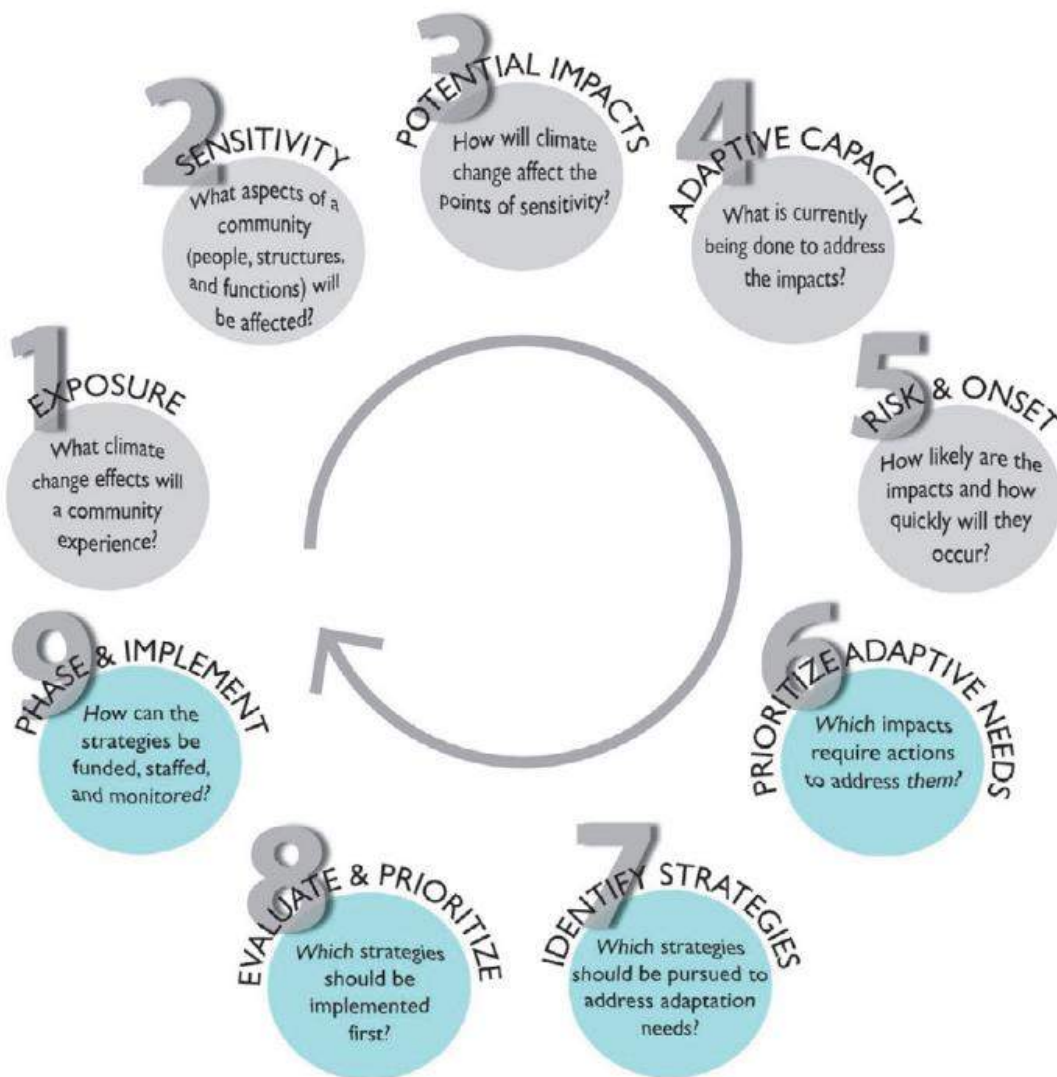
Safety Element - Adaptation

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





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.



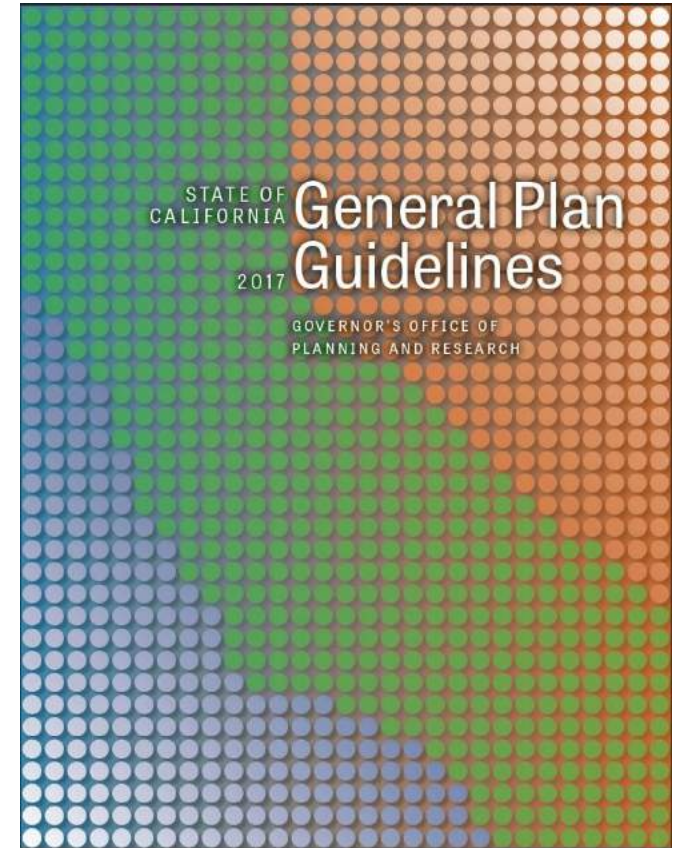
Goals, Policies, Implementation

- 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

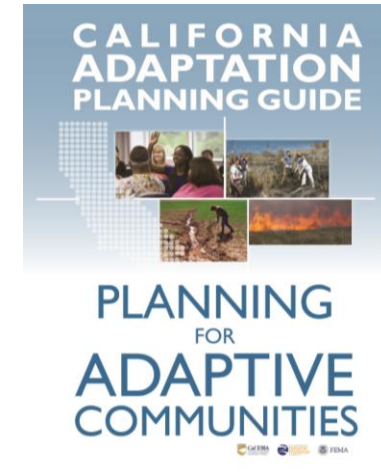




Adaptation Planning Resources

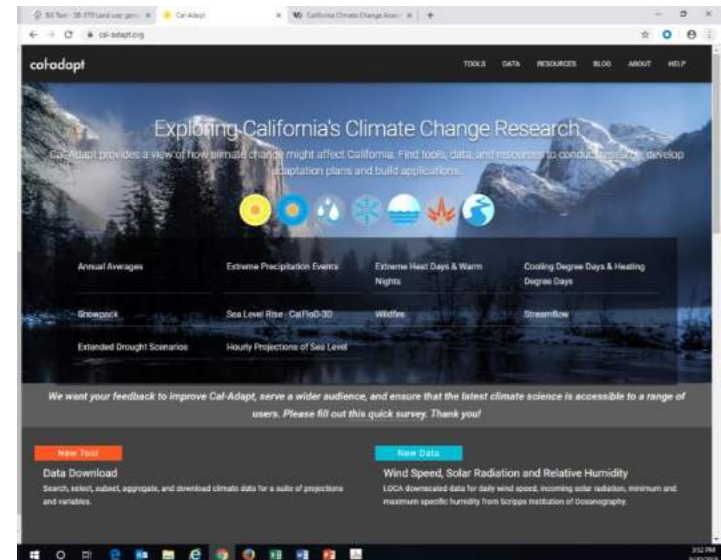
Adaptation Planning Guide (APG), 2012

- 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/>



Adaptation Clearinghouse

- <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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NAVIGATING A COMPLEX WORLD

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?



Legislation

THE ROUTES TO COMPLIANCE

General Plan

Land Use

Circulation

Conservation

Open Space

Noise

Housing

Safety

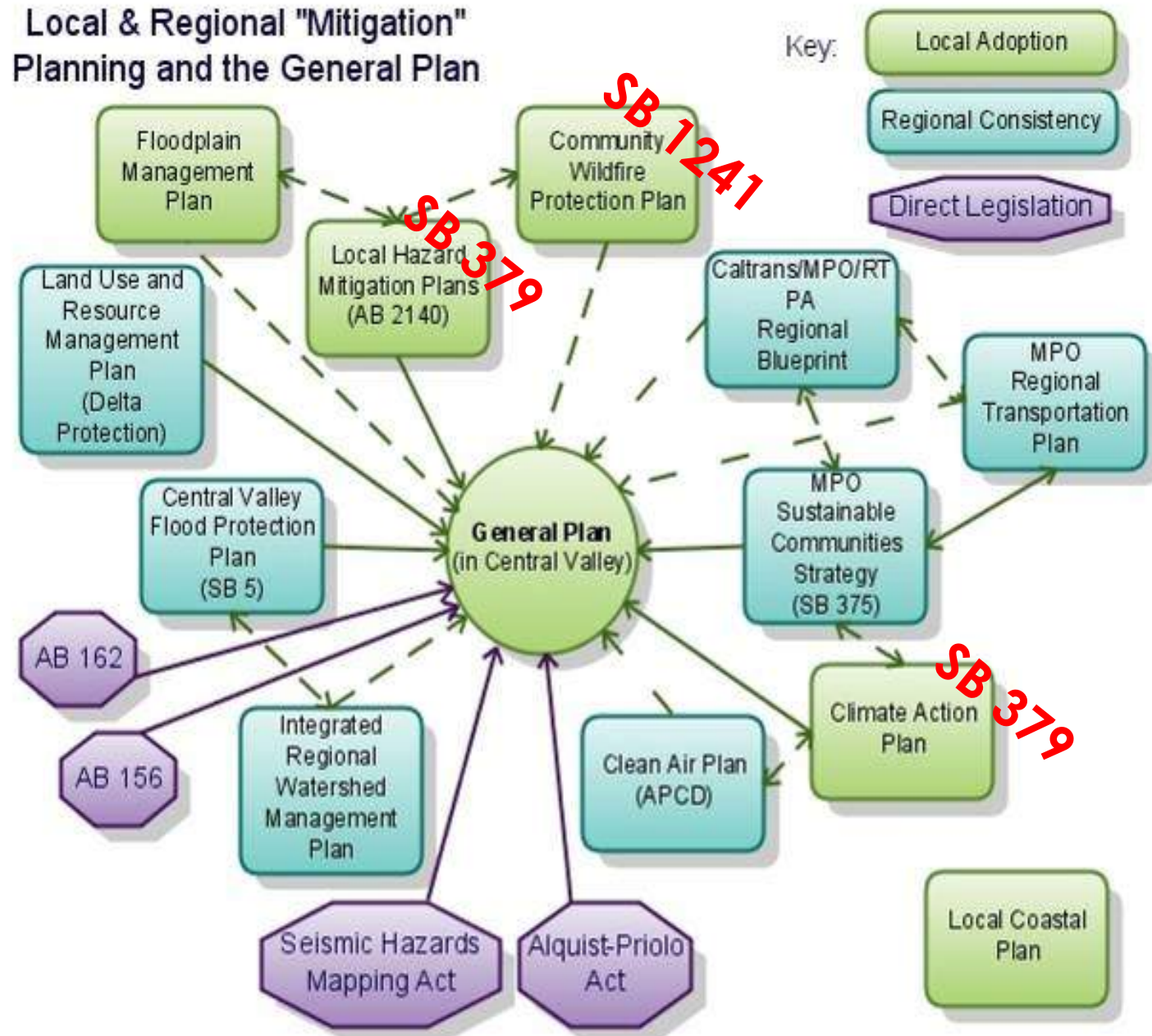
Housing

SB 1035

Safety

HOW DOES IT
ALL FIT
TOGETHER?

Local & Regional "Mitigation" Planning and the General Plan



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

Safety
Element

Housing Element

(2017) SB 379 Climate
Change

Changing Legislation
(A Lot!)

(2014) SB 1241 Cal Fire
Review

Changing State Priorities

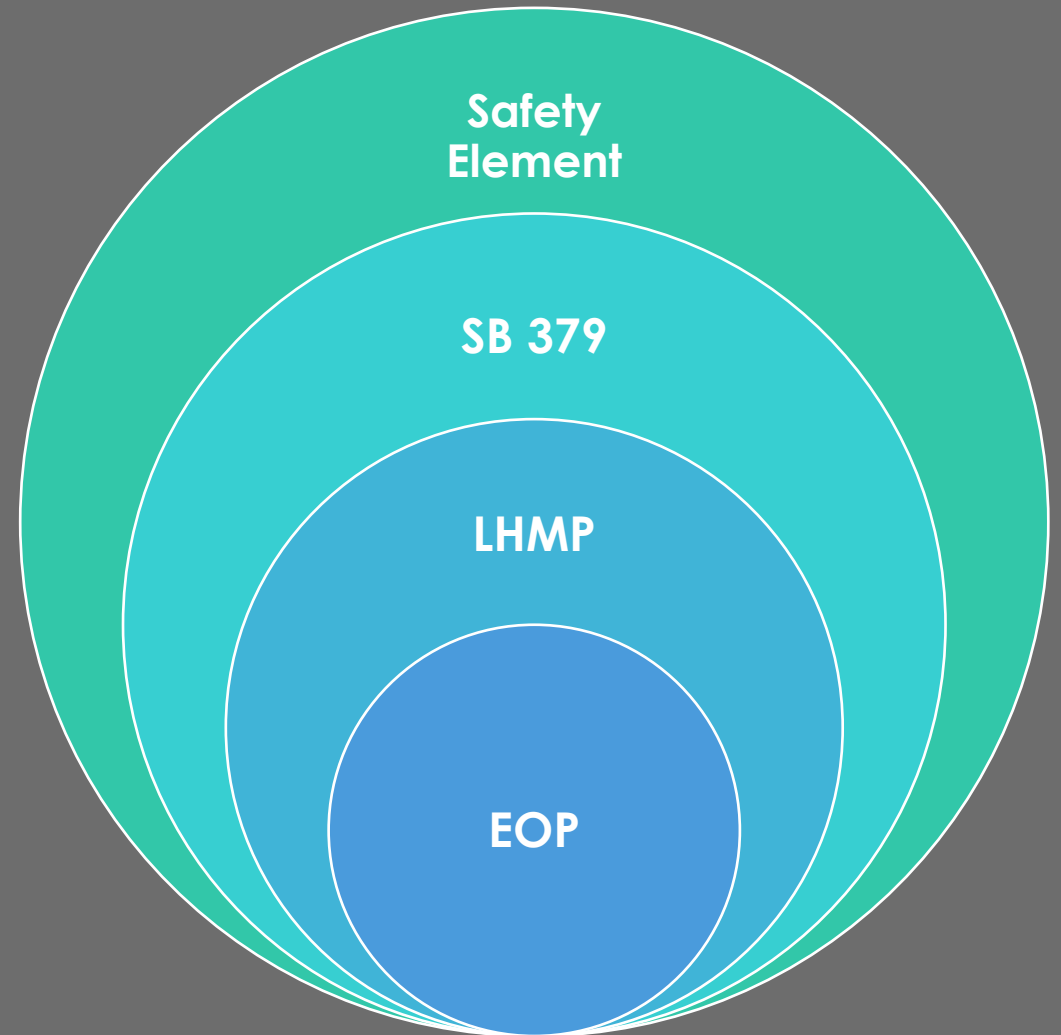
(2007) AB 162 CVFPP

Changing Community
Needs

(2006) AB 2140 LHMP

(2018) SB 1035 [Housing + Safety Elements]

Resilience Planning Connections



RESILIENT MAMMOTH LAKES

Innovative Funding

- CPAW
- Caltrans SB 1
- FEMA HMGP

Great Timing

Housing Element

Housing Element

Changing Legislation (A Lot!)

Community Housing Action Plan

Changing Community Needs

Safety Element

SB 1241 Cal FIRE Review/Coordination

Mono County MJHMP

SB 379 Vulnerability Assessment

CPAW

(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)

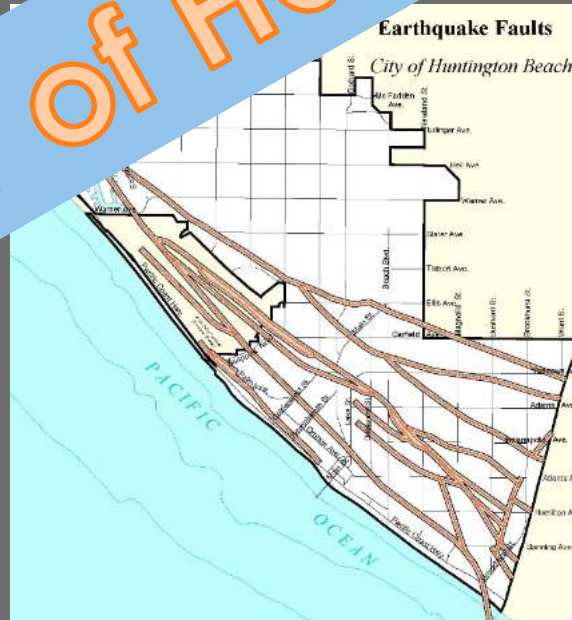
Initiated an LHMP during the update, that identified future mitigation projects and addressed climate change (2012)



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



HUNTINGTON BEACH GENERAL PLAN UPDATE (2017)

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.



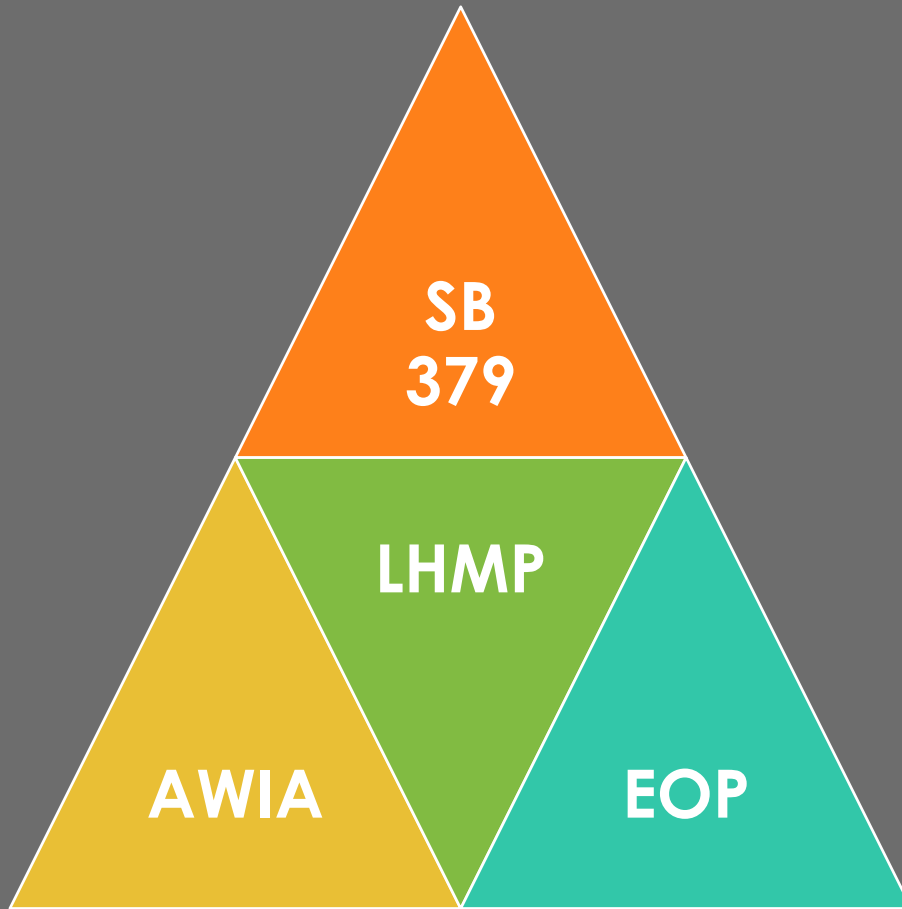
Potential Sea Level Rise Hazard Areas (2050)

Figure HAZ-6

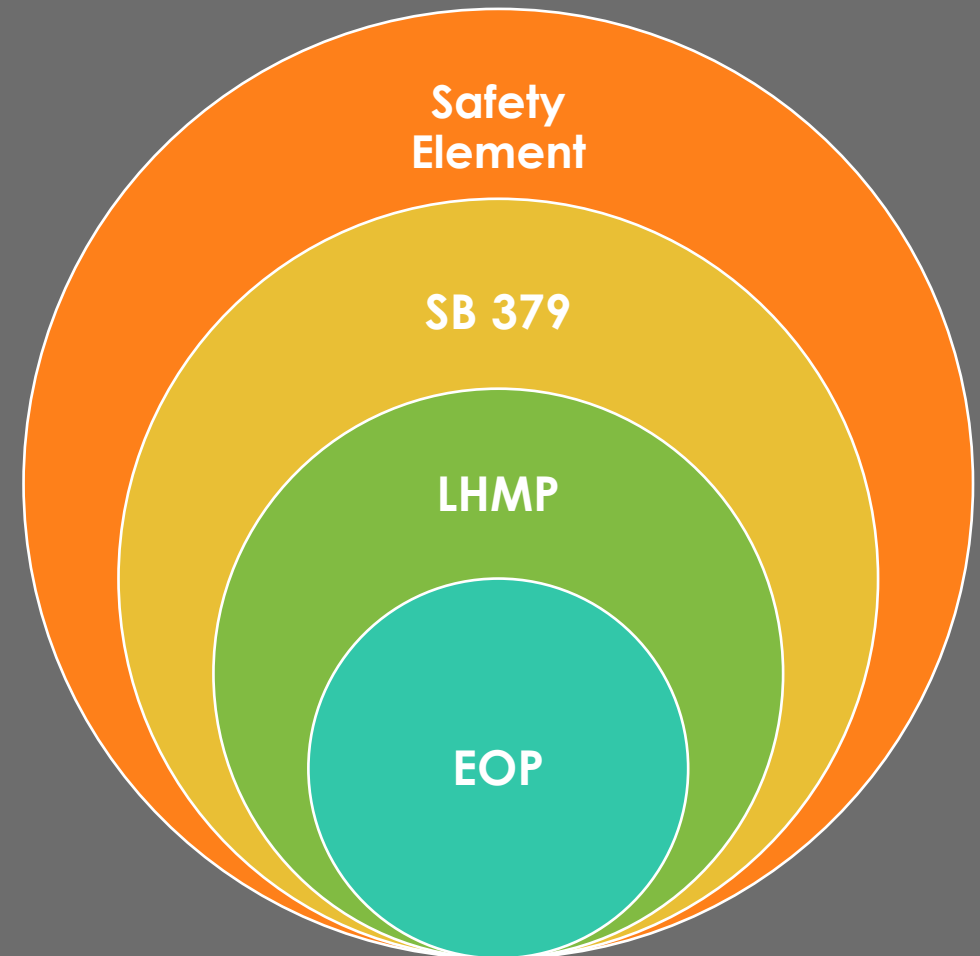
Reference Code	Description	Implementing Plan		
		General Plan Update	Local Coastal Program Update	Shoreline Management Plan
ERC-P.31	Coastal Access and Recreation: Continue to provide a high degree of access to the coast, and identify opportunities to equitably improve coastal access for all community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

FOOD FOR THOUGHT

Risk Assessments



Plan Integration



STRIVE FOR IMPROVEMENT

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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“OK, that’s five votes in favor of saving the historic old hotel, and one vote for stomping it to bits and eating everyone inside!”



NAVIGATING A COMPLEX WORLD

Q&A Panel Discussion

Moderator



Julia Kim
Local Government
Commission



Erik de Kok
Governor's Office of Planning and Research



Aaron Pfannenstiel
Atlas Planning Solutions

Thank you!



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ARCCAcalfornia.org