

CCC WEBINAR

DRAFT POLICY GUIDANCE

FOR RESIDENTIAL ADAPTATION



Photo Credit: M. Matella



OVERVIEW

Draft document available on CCC

August Agenda

<https://www.coastal.ca.gov/meetings/agenda/#/2017/8>

- Background
- Process
- Policy Guidance content
- Request for comments
- Next steps



Photo Credit: Lauren Garske-Garcia



BACKGROUND

- NOAA Project of Special Merit Grant
- A Next Step of Coastal Commission Sea Level Rise Policy Guidance, adopted August 2015
- Meets Strategic Plan Goals



CALIFORNIA COASTAL COMMISSION SEA LEVEL RISE POLICY GUIDANCE

*Interpretive Guidelines for Addressing
Sea Level Rise in Local Coastal Programs
and Coastal Development Permits*



Sunset Beach, Photo by Mario Fernandez



Chula Vista, Photo by Lisa Cox



San Francisco, Photo by Mike Baird



Arcata, Photo by Humboldt Baykeeper

UNANIMOUSLY ADOPTED – AUGUST 12, 2015



THE CHALLENGE

Sea Level Rise + Armor
=
Narrowing and eventual
loss of coastal resources

- Beaches
- Dunes
- Coastal wetlands
- Visual resources
- Other shoreline and recreation areas



GOALS

Provide assistance for local governments to update Local Coastal Programs (LCPs) to address sea level rise for residential development

Final Product

Adopted policy guidance to assist local governments in planning for sea level rise adaptation for resilient shoreline residential development

PROCESS

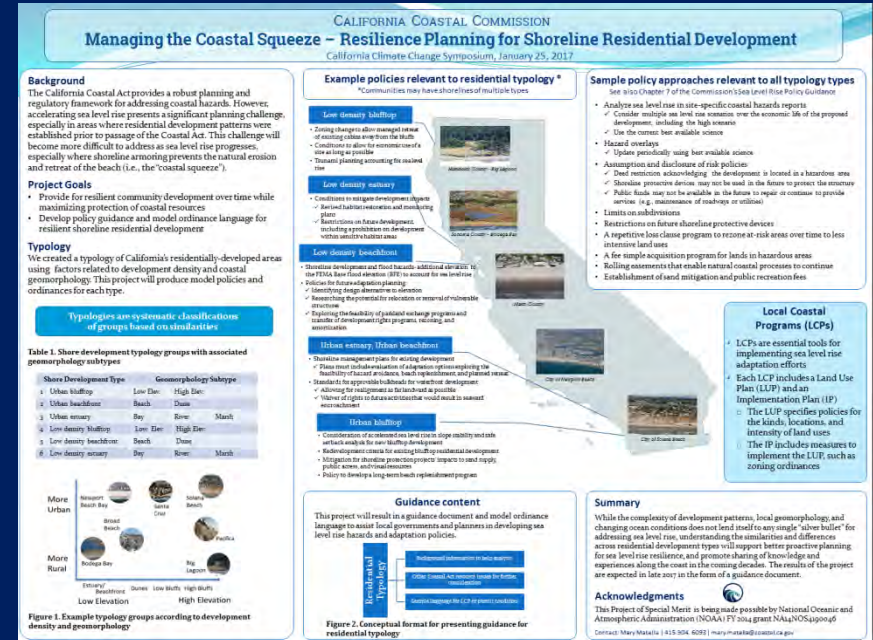
- Statewide assessment of existing shoreline residential areas
 - ❑ Mapping and inventory
 - ❑ Existing LCP planning documents
- Typology to describe the residential development and hazards
- Coastal Commission Sea Level Rise Team and a Steering Committee of internal staff members
 - ❑ Coastal Act policy analysis
 - ❑ Model policy language



INPUT OPPORTUNITIES

➤ Communication with interested stakeholders through conferences and several years of working with LCP grantees

➤ In the next 8 weeks, we expect the majority of opportunities to come with continued work with local governments and interested stakeholders in shaping the draft policy guidance



HOW TO USE THIS GUIDANCE

Interpretive guidelines

Not regulations

This Guidance is advisory and not a regulatory document or legal standard of review.

A menu of options

Not a checklist

Not all of the content will be applicable to all jurisdictions

Policy examples to modify

Not a substitute for consultation

Model policies need customization for application to individual LCPs.

DOCUMENT ORGANIZATION

Application guide

Sections 1-6

1. Background
2. Policy Recommendations for all hazardous areas
3. Strategies for specific areas
4. Legal considerations
5. Implementing Adaptation Strategies
6. Case Studies

Model Language

Section 7

MODEL POLICIES

- A. Understanding Sea Level Rise
- B. Avoid the hazards
- C. Design for hazards
- D. Move development away
- E. Move hazards away
- F. Building Barriers
- G. Community Scale Adaptation

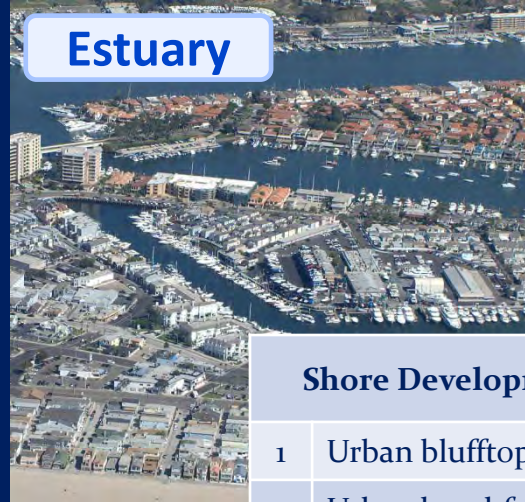
RESIDENTIAL TYPOLOGY

Bluff



Typologies are systematic classifications of groups based on similarities

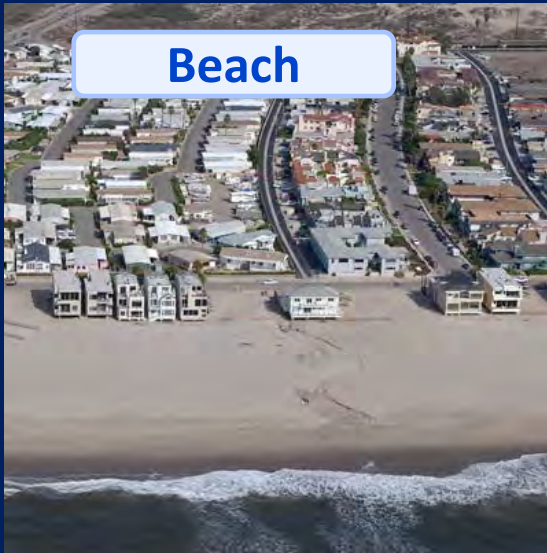
Estuary



Geomorphic Setting

Development Density

Beach



Shore Development Type		Geomorphology Subtype		
1	Urban blufftop	Low Elev.	High Elev.	
2	Urban beachfront	Beach	Dune	
3	Urban estuary	Bay	River	Marsh
4	Low density blufftop	Low Elev.	High Elev.	
5	Low density beachfront	Beach	Dune	
6	Low density estuary	Bay	River	Marsh

Photo Credit: Coastal Records Project

POLICIES FOR ALL TYPES

Best Available Science

Risk Disclosure

Avoid Hazards through
Siting & Design

Redevelopment
Regulation

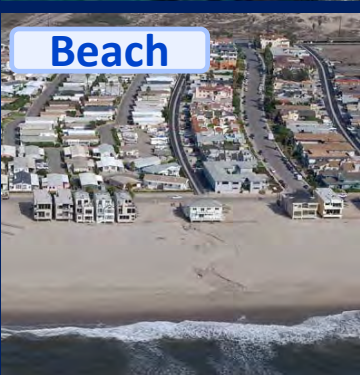


POLICIES FOR SPECIFIC TYPES

Bluff



Beach



Estuary



Mapping, Technical Reports, Disclosure

Avoid Hazard Areas

Adaptive Design

Moving Development away from Hazards

Moving Hazards away from Development

Building Barriers to Protect from Hazards

Community Scale Adaptation Planning

Photos: Coastal Records Project

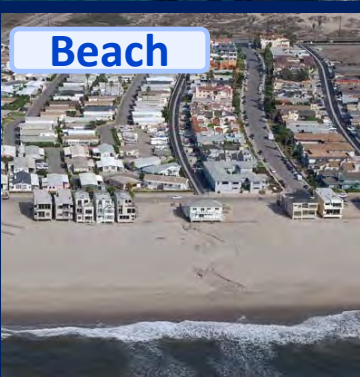
EXAMPLES FOR SPECIFIC TYPES

Bluff



Determining Bluff Setbacks
Bluff Face Development
Minor Bluff Development in Hazardous Areas

Beach



Beach Replenishment
Beach Management Plan

Estuary



Habitat Buffers
Flood Hazard Mitigation
Bulkheads for Waterfront Development

Photos: Coastal Records Project

LEGAL CONSIDERATIONS

Relevant Coastal Act Policies

Public Trust

- Background
- CCC and Local Government Public Trust Authority and Duties
- Sea Level Rise Adaptation

General Principles of Takings Law

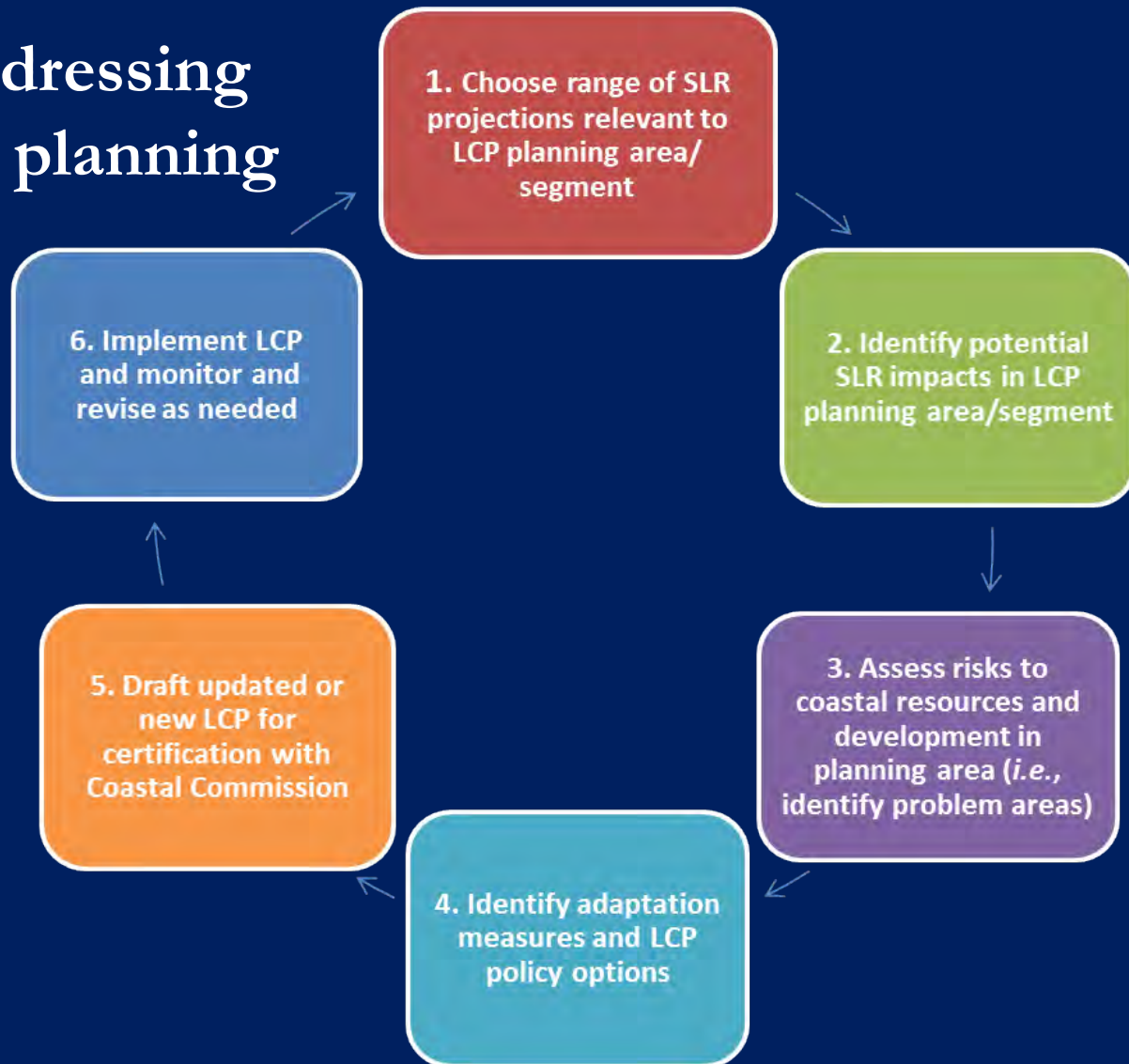
Addressing Takings Concerns



Solana Beach | M. Matella

IMPLEMENTATION

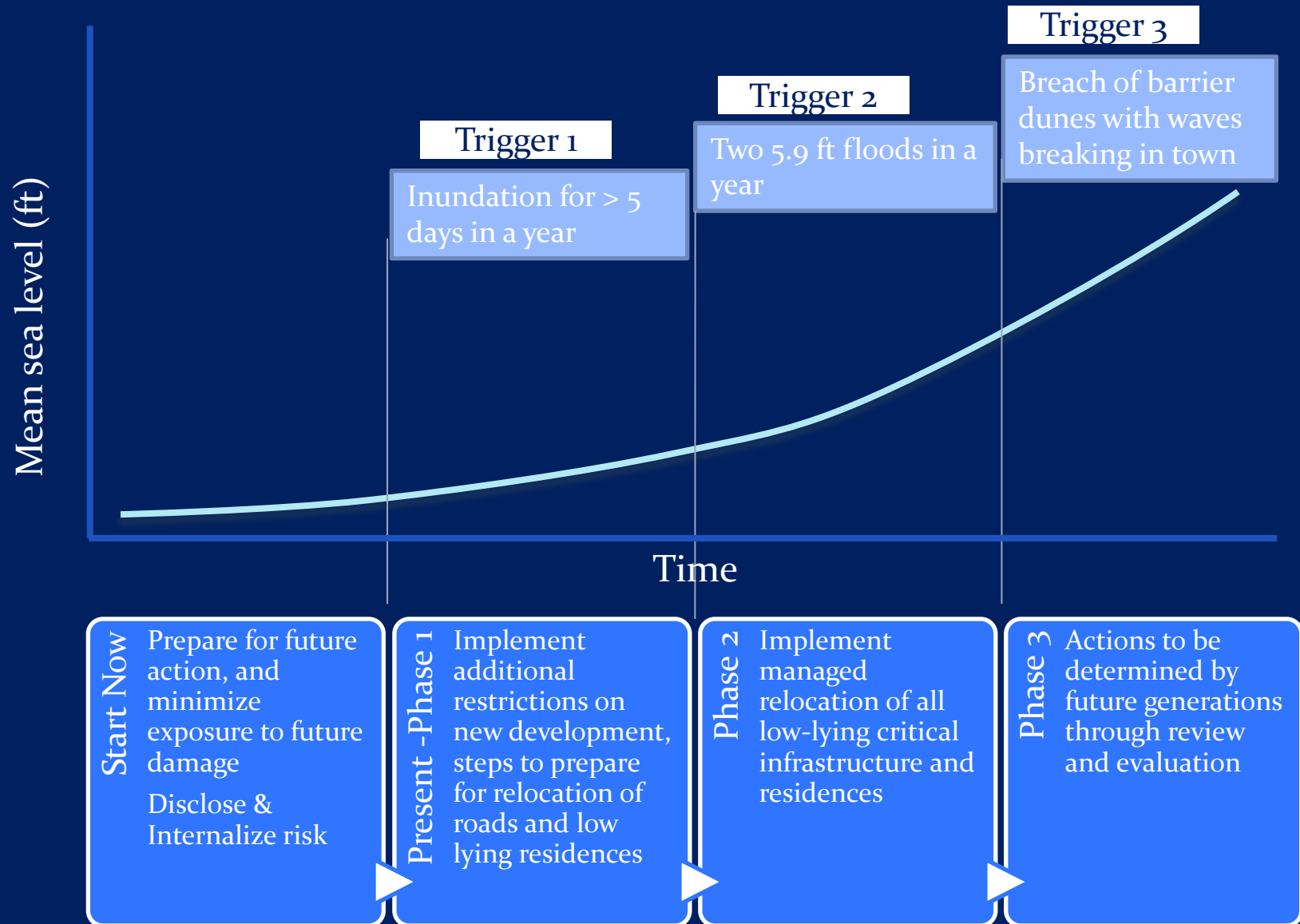
Steps for Addressing SLR in LCP planning



PROJECT LEVEL IMPLEMENTATION

Step for Addressing SLR in LCPs		Applicable Residential Adaptation Policy #	
Step 1	Determine a range of sea level rise projections	A.1 Identifying and Using Best Available Science A.2 Identifying Planning Horizon	
Step 2	Identify potential physical sea level rise impacts	A.3 Mapping Coastal Hazards A.4 Site-specific Coastal Hazards Report Required A.5 Coastal Hazards Report Contents	
Step 3	Assess potential risks from sea level rise to coastal resources and development	G.1 Management of Sea Level Rise Hazards G.2 Adaptation Plan	
Step 4	Identify adaptation measures and LCP policy options	B.1-4 New Development B.5-6 Setbacks B.7-8 Redevelopment B.9 Land Division C.1 Adaptive Design D.1-3 Managed Retreat E1-4 Moving Hazards away from Development	F.1-10 Shoreline Armoring G.1-2 Developing Adaptation Planning Information G.5-8 Community Scale: Beach and Dune/Bluff/River Adaptation G.10 Transfer of Development Rights
Step 5	Draft updated or new LCP for certification with CCC		
Step 6	Implement the LCP and monitor and re-evaluate strategies as needed	A.3 Mapping Coastal Hazards G.3-4 Sea Level Rise Overlay Zones G.7-9 Trigger-Based Adaptation Approaches	

ADAPTATION PATHWAY EXAMPLE



Example based on: Barnett, et al. (2014). A local coastal adaptation pathway. *Nature Climate Change*, 4(12), 1103.

CASE STUDIES



Newport Beach



Broad Beach



Solana Beach



Bodega Bay



Stinson Beach



Big Lagoon

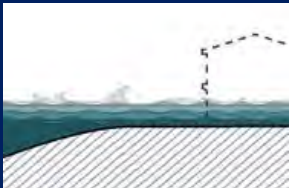


MODEL POLICY LANGUAGE

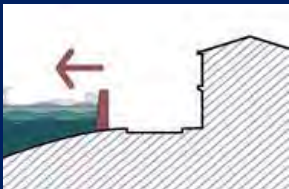
A. Understanding sea level rise hazards



B. Avoid siting new development or perpetuating redevelopment in hazard areas



C. Design for the hazard



D. Moving development away from hazards

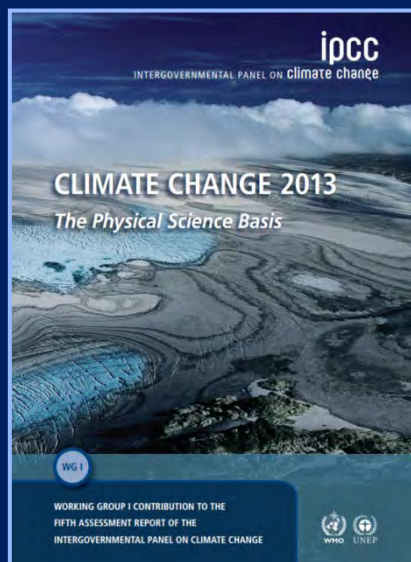
E. Moving hazards away from development

F. Building barriers to protect from hazards

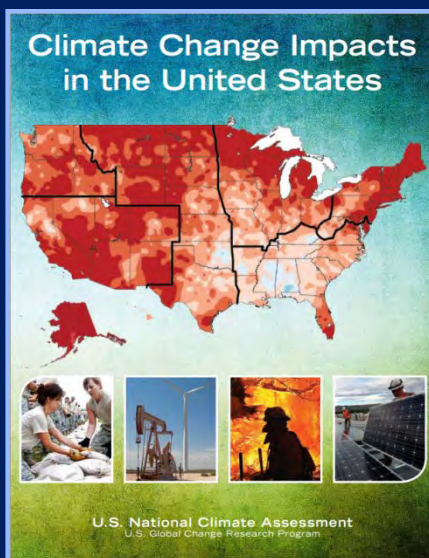
G. Community Scale Adaptation Planning

MODEL POLICY LANGUAGE

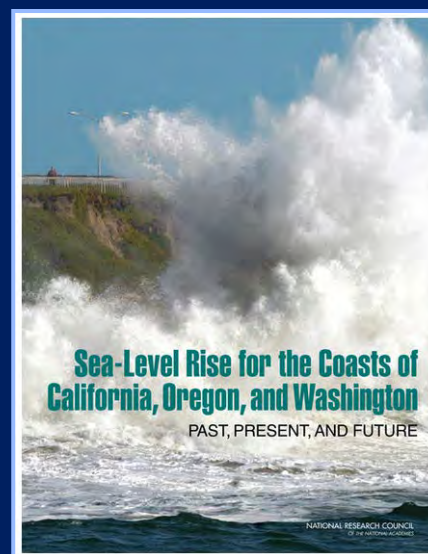
A. Understanding sea level rise hazards



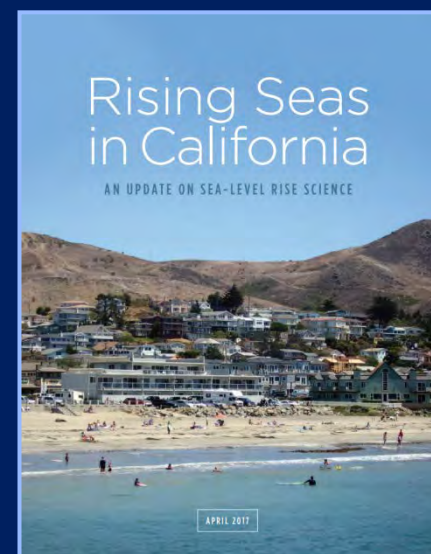
IPCC 5th
Assessment
Report (2013)



US National Climate
Assessment (2014)



NRC Report
(2012)



Rising Seas
(2017)

MODEL POLICY LANGUAGE

B. Avoid siting new development or perpetuating redevelopment in hazard areas



Oceanside | M. Matella

MODEL POLICY LANGUAGE

C. Design for the hazard



King Salmon | M. Matella

MODEL POLICY LANGUAGE

D. Moving development away from hazards



Photo by L Ewing

Pacifica

MODEL POLICY LANGUAGE

E. Moving hazards away from development



Beach nourishment in Oceanside | M. Matella

MODEL POLICY LANGUAGE

F. Building barriers to protect from hazards



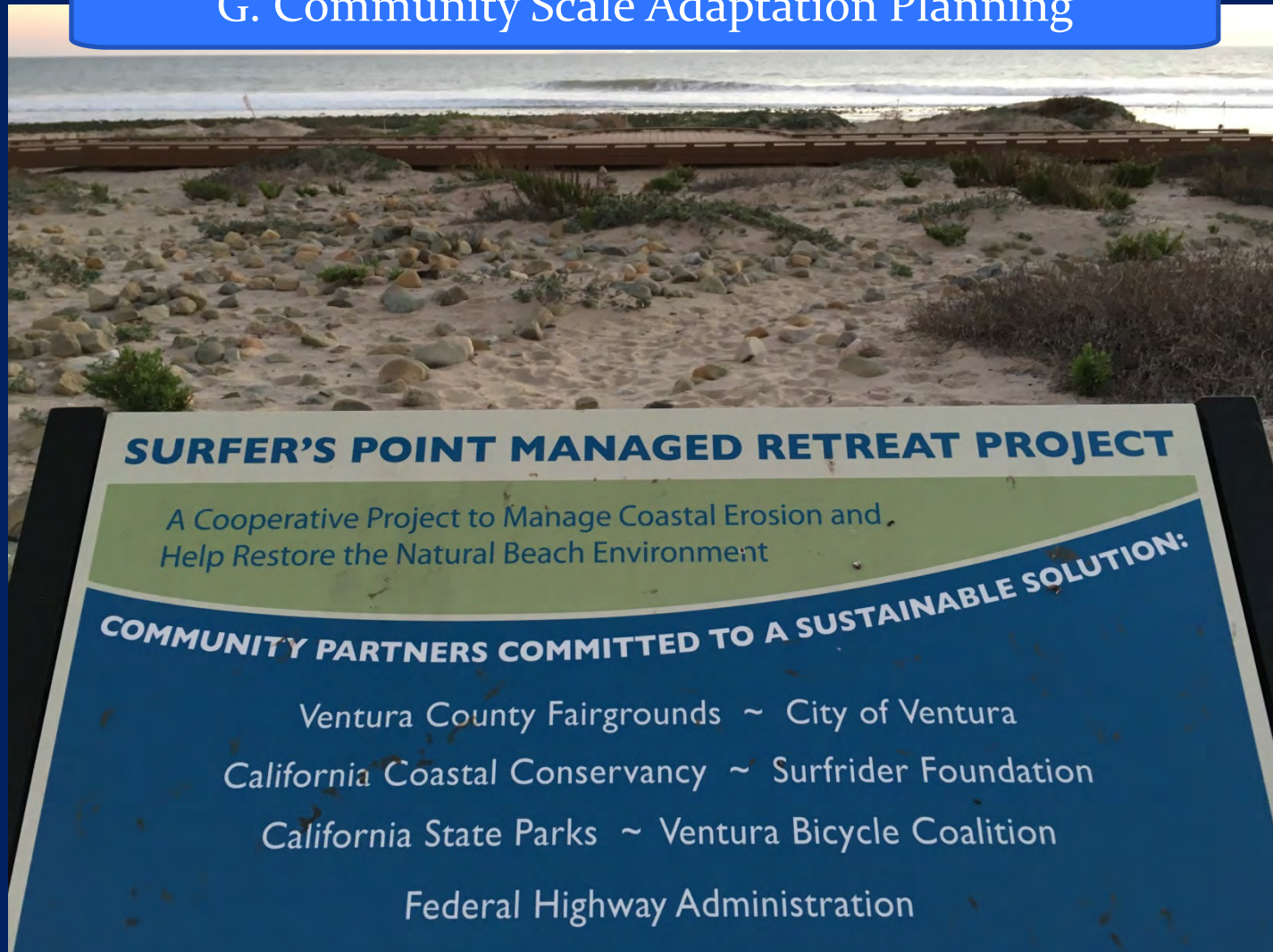
Del Mar | G. Buhr



Oceanside | M. Matella

MODEL POLICY LANGUAGE

G. Community Scale Adaptation Planning



COMMUNITY SCALE ADAPTATION

G.8 Beach Management Plan



Cowells Beach, Santa Cruz | Coastal Records Project

NEED TO CUSTOMIZE

Bay



Bluff



Dune



Land Use Plan and Implementation Plan Language

Anticipated groundwater changes
Wetland migration

Setbacks

- For shoreline migration – MHTL
- From bluffs – setback lines

Dune migration
Sand supply

Coastal Records Project

KEY POINTS

Updating LCPs to address sea level rise is an important Coastal Commission priority

This guidance is intended to assist local governments

- Proactive adaptation
- Internalizing risk
- Phased approaches
- Protecting public trust lands
- Maximize public participation
- Start Now

NEXT STEPS

Comment period (July 28 – September 15)

Comments may be submitted by email to
ResidentialAdaptation@coastal.ca.gov

Presentation at August hearing

Final Draft anticipated for fall 2017 hearing
for adoption



THANK YOU

Send comments to:

ResidentialAdaptation@coastal.ca.gov

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Pleasure Point | Kelsey Ducklow