County of Santa Barbara Coastal Resiliency Project

Board of Supervisors Hearing

March 13, 2018





Project Overview

Coastal Hazard Modeling & Mapping

Local Coastal Program Amendment

Vulnerability Assessment

Adaptation Strategies





Why Coastal Resiliency Now?

- State Guidance / Proposed Legislation
- Provide predictability for Coastal Development Permits
- Grant funding available
- Preparation versus reaction

What is the Coastal Resiliency Project?

It is an opportunity to:

- Assess potential coastal hazards and vulnerabilities from future sea level rise
- Set new policies for development

It is not:

- Directly related to capital improvement or County facility planning
- A detailed adaptation plan
- A coastal sediment management or habitat plan



Coastal Hazards

Erosion Hazards

short- and long-term dune and cliff erosion

Coastal & Fluvial Flooding

from storm events

Wave Runup (Uprush)

wave uprush above still water level

Rising Tides

inundation during monthly high tides and 100-year high tide



Source: Santa Barbara County



Source: Santa Barbara County



Source: Santa Barbara Channelkeeper



Vulnerability Assessment Methodology

Coastal Assets



Sea Level Rise & Coastal Hazards Vulnerability Assessment



July 2017

Sea Level Rise Hazards

+

Vulnerabilities









Sea Level Rise Scenarios

Sea Level Projections for Santa Barbara County (inches).

Based on NRC 2012 projections in reference to year 2000 and modified for local conditions.

Time Period	Low SLR	Medium SLR	High SLR
By 2030	0.04	3.5	10.2
By 2060	2.8	11.8	27.2
By 2100	10.6	30.7	60.2

+ Existing Conditions (2010)





Coastal Hazards Screening Map

All draft Coastal Hazard Screening Maps available online at:

http://longrange.sbcountyplanning.org/programs/coastalresiliencyproject/coastalresiliency.php

Sectors

- 1. Hazardous Materials & Minerals
- 2. Roads & Public Transportation
- 3. Land Use
- 4. Public Facilities
- 5. Public Access & Recreation
- 6. Environmentally Sensitive Habitat
- 7. Wastewater
- 8. Water Supply



Land Use



Acres of land by classification, number of structures by land use



800 residential and 80 commercial buildings are vulnerable by the year 2100, assuming that no adaptation measures are implemented.

Public Facilities



Schools, police stations, fire stations, emergency medical facilities

- No police or emergency medical facilities
- *By 2100:* Summerland Fire Station #2





Positive Results

- Gaviota oil and gas terminal not at risk
- No police stations or hospitals at risk
- Only one public facility vulnerable
- Few hazardous material sites
- Creation of an online sea level rise hazard mapping tool













Coastal Resilience Online Mapping Tool

Sea level rise mapping tool available at http://maps.coastalresilience.org/california/#

Stakeholder and Public Outreach

- Technical Stakeholder Group Meetings
- Coastal Commission Staff Consultation
- Public Workshops & Meetings
 - Two workshops
 - Beach demonstration event
 - Presentations to local groups













Types of Adaptation Strategies

- Do nothing (react when needed)
- Accommodate (design for the hazard)
- Move away from hazardous area
- Avoid developing in hazardous areas
- Construct "green" or "soft" protection
- Build barriers ("hard" protection)









Policy Development

Goal: Create new and enhance existing coastal development and adaptation policies

No changes to zoning or land use designations
Use existing policies whenever possible
Provide predictability to permit applicants



Update Hazard Policies

- Hazards within the Coastal Zone
- Bluff and Beach Erosion, Coastline Protection
- Geologic Hazards
- Flood Hazards
- Update Public Recreation Policies
 Mitigation of impacts to public access areas
- Resilient new public access facilities



Example of Hazard Policy Change

Policy 3-4

In areas of nNew development (including additions, foundations, structural support and redevelopment), above ground structures, shall be set back a sufficient distance from the bluff edge to be safe from the threat of bluff erosion and slope instability, factoring in the effects of sea level rise, without the use of a shoreline protective device, over the anticipated economic life of the development (minimum of 75 years for single family residences and commercial structures) for a minimum of 75 years, unless such standard will make a lot unbuildable, in which case a standard of 50 years shall be used; otherwise determined on a case-by-case basis for public infrastructure...

Example of Public Access Policy Change

Policy 7-1

- The County shall take all necessary steps to protect and defend the public's constitutionally guaranteed rights of access to and along the shoreline. At a minimum, County actions shall include:
- a. Initiating legal action to acquire easements to beaches and access corridors for which prescriptive rights exist consistent with the availability of staff and funds;
- b. Accepting offers of dedication which will increase opportunities for public access and recreation consistent with the County's ability to assume liability and maintenance costs;
- c. Actively seeking other public or private agencies to accept offers of dedications, having them assume liability and maintenance responsibilities, and allowing such agencies to initiate legal action to pursue beach access<u>; and</u>

<u>d. Working with landowners to pursue new public accessways if</u> <u>existing easements or corridors are lost or inaccessible due to sea</u> <u>level rise.</u>



Update Other Policy Areas

Examples:

- Sediment Management
 - Collaborate with regional agencies on sediment management plans
- Real Estate Disclosure
 - Notify future property owners of potential hazards
- Coordination with other agencies
 - Caltrans, Railroads, BEACON, etc.



Example of New Policy

Policy XX

 Prior to issuance of a Coastal Development Permit for new development or redevelopment in areas shown on the Coastal Hazards Screening Map, property owners shall record a Notice to Property Owner (NTPO). The NTPO must notify current and future property owners of current and potential hazards associated with anticipated sea level rise, including accelerated coastal bluff retreat, erosion, wave run up, and flooding/inundation and the results of any site-specific analysis thereof.

Planning Commission Comments

- County Planning Commission support for:
 - Policies that give permit applicants more certainty
 - Solutions that protect the coastline, including armoring
 - Flexible building design options
- Montecito Planning Commission support for:
 - Preference for natural, "green" protection over "hard" barriers
 - Conservative "high" sea level rise scenarios important to consider in addition to "medium" scenarios
 - Adaptation planning for all hazards

Coastal Commission Staff Consultation

- Waive rights to future shoreline protective devices
- Monitoring plan for protective devices, leading to removal
- Shoreline management plans for recreational areas
- Property owners near public trust lands should repeatedly demonstrate they own legal title
- New private staircases / accessways on bluffs shall be for public use
 21.200



Next Steps

- Return individually to MPC and CPC for recommendations
 - Anticipated Spring 2018
- Board of Supervisors adoption
 Anticipated Summer/Fall 2018

Coastal Commission Certification
 Anticipated Summer/Fall 2019



Recommendation

- a) Receive a staff briefing on the Coastal Resiliency Project, including the "Sea Level Rise and Coastal Hazards Vulnerability Assessment" and draft Local Coastal Program (LCP) policies.
- b) Provide initial comments and direction to staff regarding potential amendments to the LCP.
- c) Direct staff to return to the Board with proposed LCP amendments for the Board's consideration after incorporating any comments and direction received from the Board and recommendations by the County Planning Commission.
- d) Determine that the briefing, comments, and direction to staff do not constitute a project and are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Sections 15060(c)(3) and 15378(b)(2), included as Attachment 1.