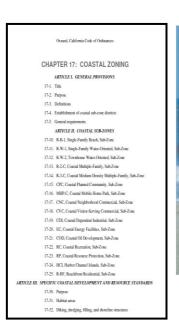


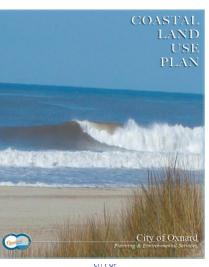
# LOCAL COASTAL PLAN UPDATE

July 16, 2021
SEA LEVEL RISE/ADAPTATION STRATEGY
BEACON

# Oxnard's Local Coastal Program (LCP)

- ▶ 1972, voters approve Proposition 20 "Coastal Zone Conservation Act"
- ▶ 1976, Legislature adopts Coastal Act, funding to develop LCPs.
- ▶ 1982, Oxnard adopts Coastal Land Use Plan (land uses and 95 policies).
- ▶ 1986, Oxnard adopts Chapter 17, Coastal Zoning Ordinance.
- Various amendments over 30 years.
- Four Planning Areas:
  - 1. McGrath/Mandalay Beach
  - 2. Oxnard Shores
  - 3. Channel Islands Harbor
  - 4. Ormond Beach







# Need for LCP Update:

- Most all developments completed or approved
- Several LCP policies outdated
- 3. Consistency with goals and policies in the 2030 General Plan
- 4. Ormond Beach Wetland Restoration planning initiated, Halaco closed, Once-through Cooling (OTC) phasing out
- McGrath State Beach Planning
- Coastal Commission SLR Policy Guidance adopted August 2015
- Coastal Commission Draft Residential Adaptation Policy Guidance released July 2017

# Completed Tasks

- Reviewed current LCP and 2030 General Plan for consistency.
- Mapped Environmentally Sensitive Habitat Areas (ESHA).
- Mapped Coastal Hazards with SLR incorporated.
- Completed Tsunami and Drainage Vulnerability.
- Draft Vulnerability Assessment and Fiscal Impact Report.
- Draft Adaptation Strategy Report.
- Coordination with Coastal Commission, Agencies, Technical Stakeholders, etc.
- Public Outreach:
  - General public and interest groups
  - Technical Advisory Committee



# Coastal Hazards Review





## Definition of Hazards



**Erosion**when the land is worn away by water, wind, or ice





Coastal Storm Flood when flooding occurs in eroded areas



Coastal Storm Wave when water levels rise & waves reach further inland

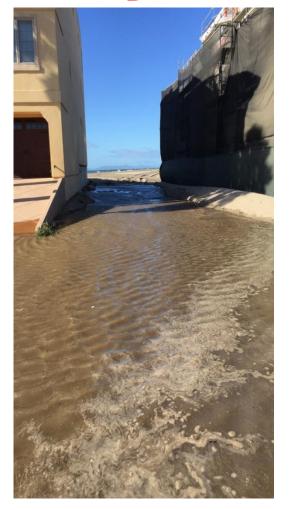




**Tidal inundation**when the tide rises & water covers land normally dry

# Oxnard Shores – December 11, 2015

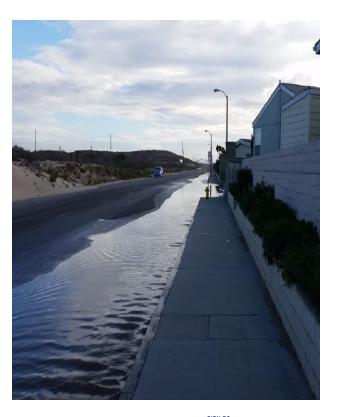
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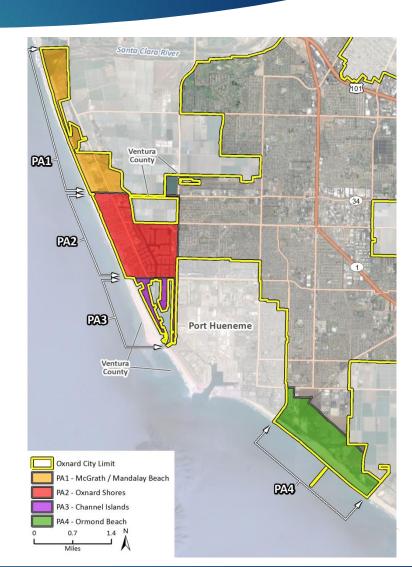
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## Coastal Hazards increase with SLR

- Used TNC Coastal Resilience Modeling.
- http://Maps.coastalresilience.org
- Four Coastal Hazards modeled plus combination of all Coastal Hazards:
  - Combined Hazards
  - Relative Risk
- By Four Planning Areas
- SLR Projections: 2030, 2060, and 2100.



## Coastal Hazard Maps with Sea Level Rise

Sea Level Rise: 2030, 2060, and 2100

Table 2. Sea Level Rise Scenario elevations by planning horizon

Year	Low SLR (inches)	Moderate SLR (inches)	High SLR* (inches)
2030	2.3	5.2	8.0
2060	7.4	16.1	25.3
2100	17.1	36.5	58.1

<sup>\*</sup> The NRC 2012 High scenario for the South of Cape Mendocino is 2030- 11.8 inches, 2100- 65.5 inches



# Vulnerability Assessment Review

- Evaluated impacts of coastal hazards.
- Included both public and private property.
- Market value of land and replacement cost value of structures were used (USD 2017).
  - Ventura County Property Tax data for each parcel.
  - ▶ Replacement costs estimated per square foot using FEMA's Hazard Guidance.
  - Depth of flooding based on FEMA guidelines with SLR added.
- In process of being finalized with Coastal Commission.



# Vulnerability Summary

- Erosion biggest threat to all sectors
  - Except
    - ► Commercial land and Channel Island Harbor -Tidal Inundation.
    - ► Halaco Superfund Site Coastal Storm Flooding.
- No large damage to commercial and municipal properties due to coastal hazards.
- Coastal hazards are projected to impact 415 acres of publiclyaccessible beach at McGrath State Beach and Oxnard Shores.
- Residential Land losses are estimated to total more than \$300 million by 2030 due to erosion.



## 8 Sectors Evaluated

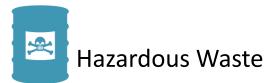










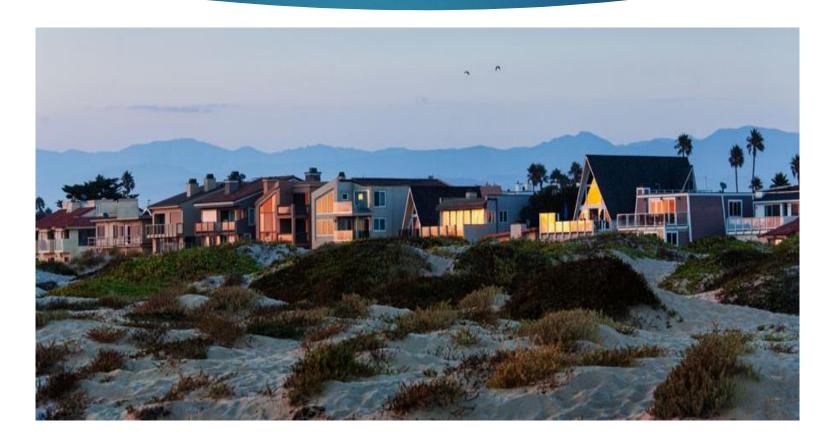






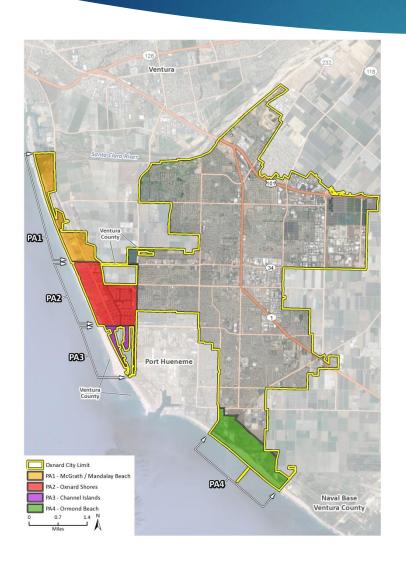


# Adaptation Strategy Results





# Organization by Planning Area



- ▶ PA 1 − McGrath-Mandalay
- PA 2 Oxnard Shores
- PA 3 Channel Islands Harbor
- ► PA 4 Ormond Beach

Each Planning Area has geography and land uses that requires a different mix of adaptations.

Adaptations need to 'work' together, and coordinate with State, County, Port Hueneme, Harbor District, and U.S. Navy.



# What are SLR/LCP Adaptation choices?



#### **ACCOMMODATION**

Modify existing developments or design new developments.



#### **GREEN PROTECT**

Dunes and other natural features reduce storm damage potential.



#### HARD PROTECT

Armoring with rocks, seawalls, groins, dikes, and other hard infrastructure.



Relocate or remove existing development.

# PA 1 McGrath-Mandalay

## **Adaptation Strategies**



#### Managed Retreat

- Relocation of McGrath State Beach facilities to higher ground within the park.
- Consistent with Oxnard's 2030 General Plan policies (ER-3.1, SC-2.4, CD-21.3, ICS-17.1, and SH-3.5)
- Remove Mandalay Generating Station after 2020, no replacement power plant.
- SCE McGrath Peaker removal after 25 year permit expires.



Source: vcstar



## PA 2 Oxnard Shores

## **Adaptation Strategies**



#### **Green Protect**

Create dunes from 5<sup>th</sup> Street south.



#### Accommodation

Modifications of stormwater drainage/pump system.



#### **Hard Protect**

Build a seawall from 5<sup>th</sup> Street south.



#### Managed Retreat

Removal of public and private development in Oxnard Shores.



## PA 3 Channel Islands Harbor

## **Adaptation Strategies**



#### **Green Protect**

Dune Construction along Hollywood Beach shoreline.



#### **Hard Protect**

New Seawall and/or revetment from Channel Islands Blvd to Channel Island Harbor entrance.



#### Accommodation

Elevate Channel Islands Harbor.



#### Managed Retreat

Removal of development in the Channel Islands Harbor.



## PA 4 Ormond Beach

## **Adaptation Strategies**



#### **Green Protect**

- Implement Ormond Beach Restoration and Access Plan.
- Design wetlands to protect existing industrial development.



### Managed Retreat

- Remove OBGS and Halaco slag pile.
- Relocate Water Treatment plant out.



Source: californiabeaches.com



## PA 4 Ormond Beach

## **Adaptation Strategies**



#### **Green Protect**

- Implement Ormond Beach Restoration and Access Plan.
  - Costs being estimated by the State Coastal Conservancy, Oxnard, and TNC.
  - Benefits would mostly be ecological and not quantified in the analysis.



#### Managed Retreat

- Remove OBGS and Halaco slag pile.
  - Costs being estimated by EPA.
- Relocate Water Treatment plant out
  - Estimated cost \$428,480,000 to \$642,720,000.
  - Would require substantial upgrades to stay in current location.



## Building Barriers To Protect From Hazards

- Only for waterway communities in Planning Areas 2 & 3
- Shoreline Protective Devices (SPD)
  - Are allowed when required to serve coastal-dependent uses or protect existing principal structures (i.e., development that existed as of January 1, 1977, when the Coastal Act took effect).
- Design adaptation for waterway communities (Seabridge and Mandalay Bay)
   and Channel Islands Harbor
  - Engineering-specific accommodation.
  - Shall be sited and designed to avoid coastal resource impacts to the maximum extent feasible.
- No Future Shoreline Armoring along coastline
  - Property owners shall be required to waive any rights to future shoreline protection.
  - Beach nourishment and dune restoration will provide SLR protection.

## Issues

- SLR Guidance designed as a "one size fits all" approach
  - Require local approach
- Coastal Commission's SLR Policies Politically Infeasible
  - Seek greater local control of land use decisions
  - Shorter planning horizons
- Lack of confidence in science
  - Probabilities of science occurring when State predicts it will
- Public Participation
  - Primarily coastal residents
  - Absentee property owners

# **Alternative Adaptation Approach**

- December 2020 City Council Committee directed staff to consider Hybrid option after meeting with Oxnard Shores Community
- Hybrid option- adaptation approach that uses strategies from multiple categories as a flexible pathway to address SLR for balancing economic, environmental, and safety goals over time
  - Triggered by event
    - First event: rebuild
    - Second event: relocate
    - Previously mentioned adaptation strategies implemented

# Regional Collaboration Needs

- Common SLR and shoreline monitoring parameters and data for regional jurisdictions
- Joint regional principles for adaptation
- Regional coordination
- Joint funding, studies, and projects
- Coordinated messaging to State and Federal legislature and agencies on needs
  - Greater local control

# LCP Policy Next Steps

- Continue coordination with Coastal Commission
- Continue Public Outreach
  - Technical Advisory Committee
  - Public Stakeholders
  - Meetings with various Agencies
     (Ventura County, Navy, Public Works, etc.)
- Coordinating SLR Policy Conformance with Coastal Commission (Coastal Land Use Plan)
- Develop Local Implementation Plan (LIP)
  - Zoning ordinances required to implement the LUP.





## Thank You

- ▶ All final documents available on Oxnard LCP website.
- https://www.oxnard.org/city-department/community-development/planning/localcoastal-program-update/
- Any questions or comments email

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