Committee Meeting #1

CITY OF MANHATTAN BEACH

LOCAL HAZARD MITIGATION PLAN (LHMP)

Tuesday, November 28, 2023
9:30 AM – 11:30 AM
City of Manhattan Beach City Council Chambers &
Virtual (Zoom)

Attendance

If you have been designated a member of the **hazard mitigation planning committee**, please type your name, title and organization in the chat!

Agenda

- **Welcome and Administration**
- **Education**
  - What is Hazard Mitigation?
  - Regulatory Requirements
  - Mitigation Projects and Grants
  - Vulnerability and Impacts
- **Hazards of Prime Concern**
  - Climate Change Impacts
  - Previous Occurrences
  - Discussion
- **Next Steps and Action Items**

Ground Rules

- Please keep all comments respectful and relevant to the discussion topics
- Discussions will be captured in meeting minutes and your feedback will be incorporated and documented in the hazard mitigation plan
- This meeting is being recorded
- Feel free to use the chat throughout the meeting to share questions or thoughts

Welcome and Introductions

- **City of Manhattan Beach**
  - Amanda MacLennan – LHMP Project Manager, Manhattan Beach Emergency Preparedness Administrator
- **CONSTANT ASSOCIATES**
  - Dylan Yates – Project Manager
  - Monica Machacek-Chiapello – Deputy Project Manager
  - Michelle Klein – Project Support
  - Mona Bontty – Project Sponsor

Public Comment

Hazard Mitigation Planning Committee

The participation of a **Hazard Mitigation Planning Committee** is crucial in the hazard mitigation planning process.

This committee plays several key roles that ensure the effectiveness, comprehensiveness, and community relevance of the plan.

Hazard Mitigation Planning Committee

The **Hazard Mitigation Planning Committee** is composed of a diverse group of stakeholders, each bringing critical insights and expertise to the planning process.

The purpose of the planning committee is to ensure:

- Broad representation from institutions that serve Manhattan Beach
- Technical and sector-specific expertise
- Collaborative engagement among community and industry leaders
- Organizations who serve vulnerable populations

Hazard Mitigation Planning Committee Meetings

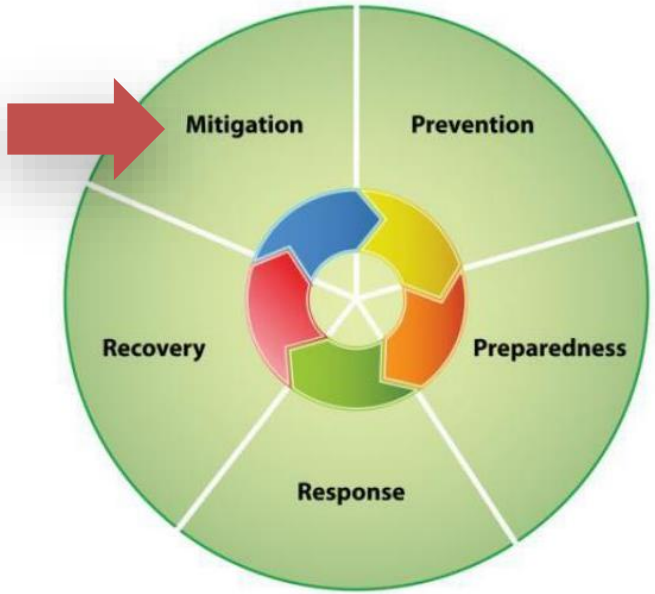
Committee Meeting #1	Committee Meeting #2	Committee Meeting #3	Committee Meeting #4
November 28 • HMP Education • Identifying Hazards of Prime Concern	**December 12** • In Depth Review of Previous Occurrence Data • Risk Assessment and Analysis	**January 9** • Vulnerability and Impacts Discussion	**January 30** • Mitigation Projects and Actions • Next Steps Discussion

What is Hazard Mitigation?

Phases of Emergency Management

Five Phases of Emergency Management

- Prevention
- Preparedness
- Response
- Recovery
- Mitigation



What is Hazard Mitigation?

Any action taken to permanently eliminate or significantly reduce the long-term risk to human life and property from hazards and their effects.

A Regulatory Process

These components provide a comprehensive regulatory framework for effective hazard mitigation planning, ensuring preparedness and resilience against potential disasters.

A plan is required to be eligible for Hazard Mitigation Assistance Grant Programs.

Vulnerability, Impact and Risk

Vulnerability is a description of which assets, including structures, systems, populations (people, including the socially vulnerable) and other assets as defined by the community, within locations identified to be hazard prone, and are at risk from the effects of the identified hazard(s).

Impacts are the consequences or effects of each hazard on the participant's assets identified in the vulnerability assessment.

Risk, for the purpose of hazard mitigation planning, is the potential for damage or loss created by the interaction of natural hazards with assets, such as buildings, infrastructure, or natural and cultural resources.

Vulnerable Assets

According to FEMA, **assets** are defined as:

People (including underserved communities and socially vulnerable populations).	**Structures** (including facilities, *community lifelines and critical infrastructure).	**Systems** (including networks and capabilities).	**Natural, historic, and cultural resources.**	**Activities that have value to the community.**

Social Vulnerability

Social vulnerability refers to a community's capacity to prepare for and respond to the stress and impacts of hazardous events ranging from natural disasters, such as earthquakes or disease outbreaks, to human-caused threats, such as toxic chemical spills.

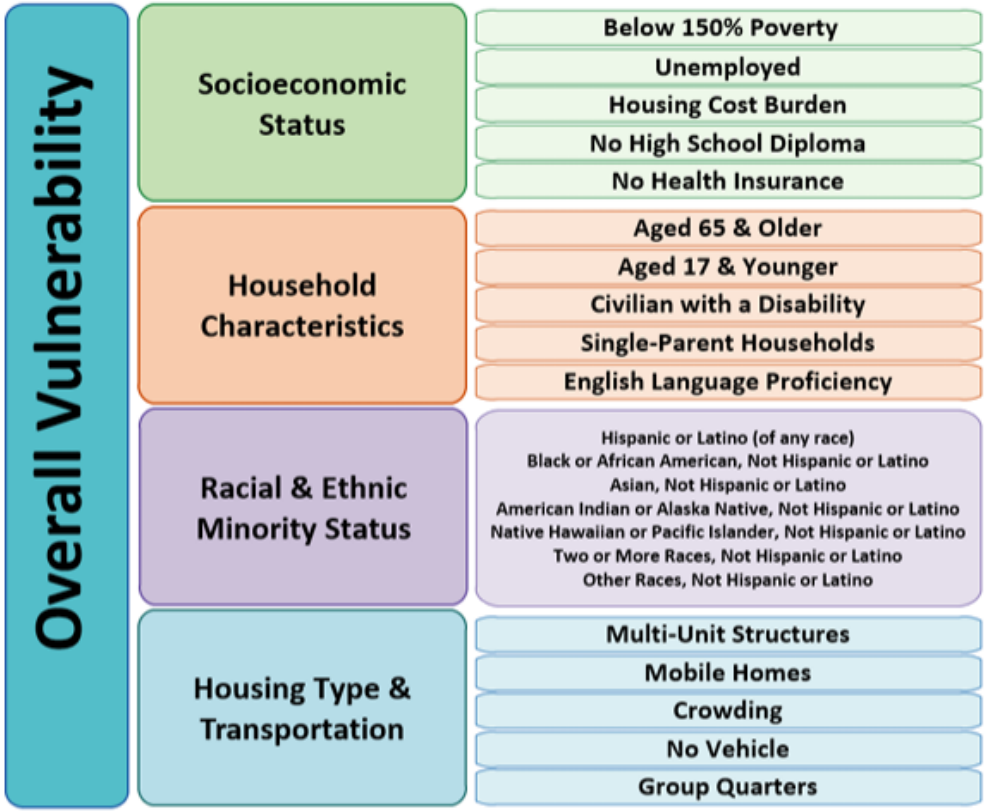
The Center for Disease Control and Prevention (CDC) has developed a **Social Vulnerability Index (SVI)** to measure the resilience of communities when confronted by external stresses such as natural or human-caused disasters or disease outbreaks.

Required Outreach and Inclusion

Socially Vulnerable and Underserved Community Outreach is required.

- Individuals with Access and Functional Needs
- LGBTQ+ Community
- Homeless Individuals
- Immigrant populations especially non-English speaking

Required Outreach and Inclusion



Eligible Mitigation Projects

For this process, the focus is **natural hazards** only. FEMA will not consider man-made or technical hazards.

Eligible actions (projects) are those that **permanently reduce or eliminate long term impacts**.

Examples of eligible actions include **generators, landslide detection, flood reduction strategies, and earthquake retrofitting.**

Examples of things **not considered** are sandbagging, emergency evacuation signs, firefighter education, clearing out a clogged culvert.

Mitigation Projects and Action Examples

Manhattan Beach Dune Restoration

Goal 1: Increase the resiliency of the shoreline through the restoration of sandy beach and foredune habitat

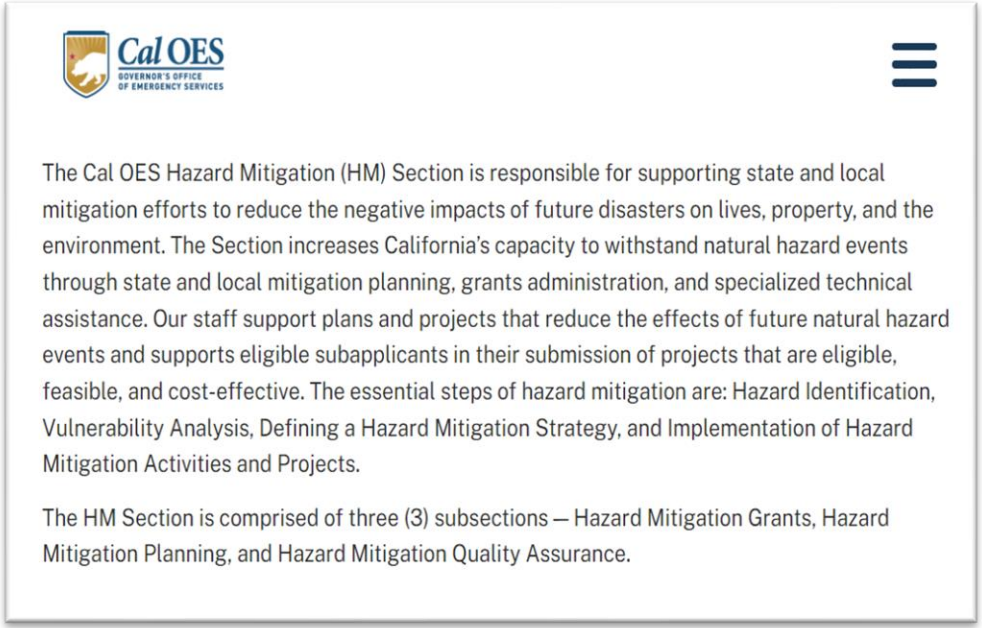
Goal 2: Implement soft-scape protection measures against sea level rise and coastal storms

Goal 3: Increase engagement of the community through enhanced beach experiences, outreach and education

Hazard Mitigation Assistance Grants

GRANT PROGRAM INFORMATION			
	Projects Eligible for:	**Timeframe**	**Grant Match**
Hazard Mitigation Grant Program	All Natural Hazards	After a Presidential Disaster Declaration	75% Fed (25% non-Fed; 12.5% state, 12.5% local)
BRIC (Building Resilient Infrastructure and Communities)	All Natural Hazards	Annual through congressional appropriations; competed nationwide.	75% Fed (25% non-Fed; NO STATE MATCH)
Flood Mitigation Assistance (FMA)	Flooding	Annual through congressional appropriations; competed nationwide.	75% Fed (25% non-Fed; NO STATE MATCH)
Severe Repetitive Loss (part of FMA)	Flooding	Annual through congressional appropriations; competed nationwide.	100% Fed
Notes: There may be opportunities for 90/10 split such as Repetitive Loss properties. Matches may include funds or in-kind matches. Please contact TEMA's grant specialist for more details. BRIC replaced the Pre-Disaster Mitigation Grant in FY 2020.			

Cal OES and Hazard Mitigation



Cal OES
GOVERNOR'S OFFICE OF EMERGENCY SERVICES

The Cal OES Hazard Mitigation (HM) Section is responsible for supporting state and local mitigation efforts to reduce the negative impacts of future disasters on lives, property, and the environment. The Section increases California's capacity to withstand natural hazard events through state and local mitigation planning, grants administration, and specialized technical assistance. Our staff support plans and projects that reduce the effects of future natural hazard events and supports eligible subapplicants in their submission of projects that are eligible, feasible, and cost-effective. The essential steps of hazard mitigation are: Hazard Identification, Vulnerability Analysis, Defining a Hazard Mitigation Strategy, and Implementation of Hazard Mitigation Activities and Projects.

The HM Section is comprised of three (3) subsections — Hazard Mitigation Grants, Hazard Mitigation Planning, and Hazard Mitigation Quality Assurance.

For more information on grant applications and processes:

- Hazard Mitigation | California Governor's Office of Emergency Services

Cal OES Grant Options

- Hazard Mitigation Grant Program (HMGP) – Section 404
- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- Prepare California – This program is intended for communities that are the most socially vulnerable and at the highest risk for future natural hazard events.
- California Wildfire Mitigation Program
- 406 Mitigation Funding – Also known as Public Assistance available during Recovery.

Review of 2019 vs 2024 Plan Goals

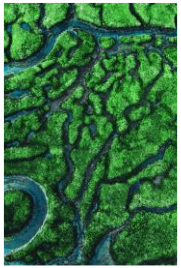
	Hazard Mitigation Goals 2024	
Goals from the 2019 Plan	Goal 1	Protect life, property, and reduce injuries from natural hazards.
	Goal 2	Improve public understanding, support, and need for hazard mitigation measures.
	Goal 3	Balance natural resource management and land use planning with natural hazard mitigation to protect life, property, and environment.
	Goal 4	Strengthen partnerships and collaboration to implement hazard mitigation activities.
	Goal 5	Coordinate and integrate natural hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
2024 Added Goal	Goal 6	Highlight the importance of mitigation planning to reduce the susceptibility of assets (people, structures, systems, natural, historic, and cultural resources, and activities that have value to the community).

Climate Change Impacts

Climate Change Impacts

Drought Risk: Manhattan Beach faces extreme drought risk, exacerbated by climate change. The area has experienced significant drought periods, with increasing water stress projected through 2050.

Heat Risk: There's an expected increase in the number of the hottest days in Manhattan Beach, with projections indicating a rise in days above 85.3°F per year by 2050. This increase in heat waves is a direct impact of climate change.



Flood Risk: Manhattan Beach faces a significant flood risk, with a notable percentage of buildings at risk of flooding, including high tide, surface, and riverine flooding. Climate change is increasing both inland and coastal flooding risks due to sea level rise and more extreme precipitation.

Wildfire Risk: The risk of wildfires in Manhattan Beach is high on the most dangerous fire weather days, a risk expected to increase through 2050. Climate change contributes to this by creating hotter, drier conditions conducive to fire spread.

Climate Change

Climate Change risks reflect both direct and indirect impacts, and are divided into three risk categories: **Health, Social & Economic, and Extreme Events**.

- **Health risk** domain associated with climate change included health projections of climate-related infectious disease and morbidity and mortality related to temperature, disasters, and pollution.

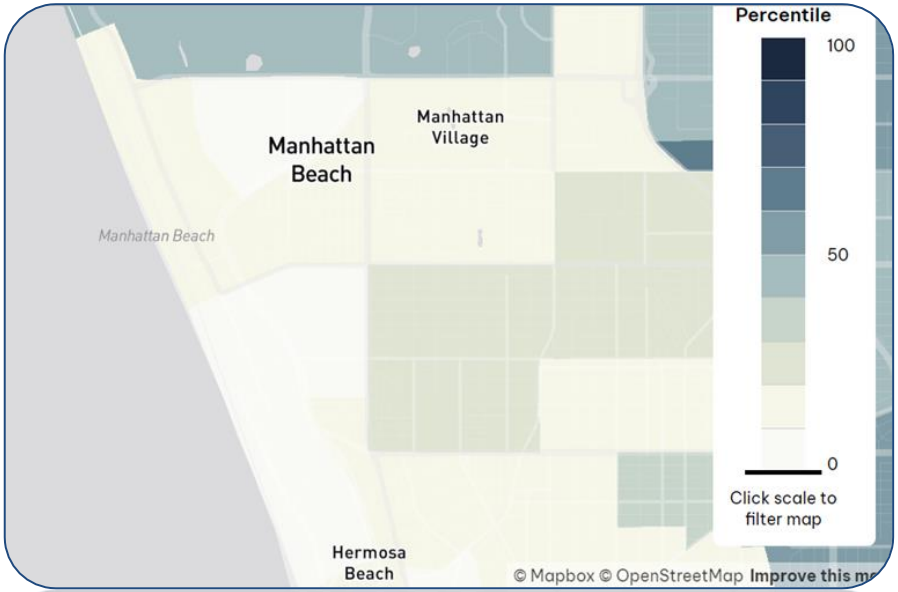
- **Social & Economic risk** domain of climate change include indicators reflecting exacerbation of social stressors, property impacts, economic and productivity losses, energy transition, and greenhouse gas emissions.

- **Extreme Events risk** domain encompasses increased frequency and/or severity of natural disasters and weather extremes.

Climate Change Vulnerability

Areas shaded in blue represent a **higher level of vulnerability** to the impacts of climate change on environmental, social, economic, and infrastructure stability.

Source: https://map.climatevulnerabilityindex.org/map/cvi_overall/usa?mapBoundaries=Tract&mapFilter=0&reportBoundaries=Tract&geoContext=State



Hazards of Prime Concern Discussion

Hazards of Prime Concern 2019 vs 2024

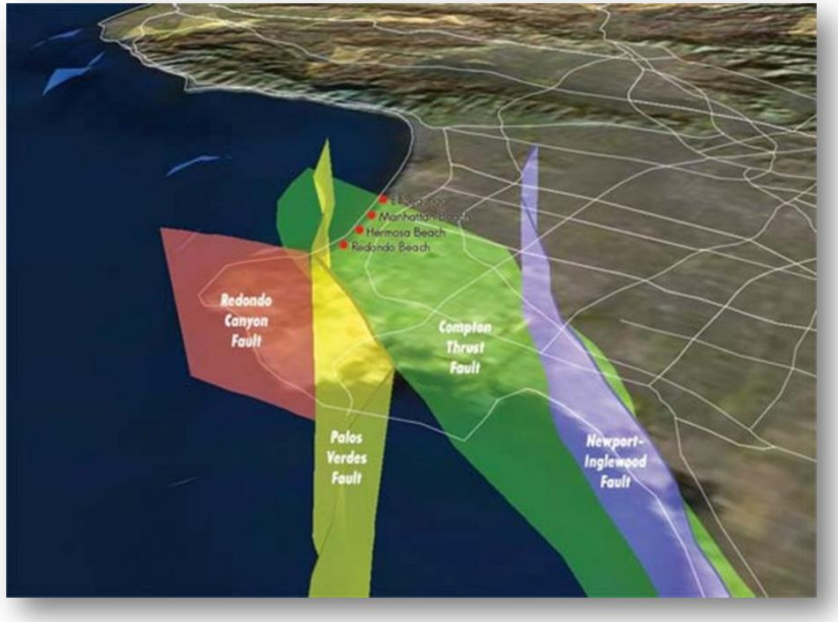
Hazards from 2019 plan:

- Earthquake
- Landslide
- Tsunami
- Drought
- Hailstorms
- High Wind
- Wildfire
- Dense Fog
- Thunderstorm
- Flood

Recommended Hazards for 2024 plan:

- Geological Hazards (Earthquake, Landslide)
- Coastal Hazards (Tsunami, Daily tides, King tides, El Nino, Beach and coastal erosion)
- Drought
- Wildfire
- Inland Flooding
- Wind

Hazards we recommend are not profiled: Hail, Thunderstorms, Dense Fog (based on a lack of previous occurrence data and adequate mitigation projects)



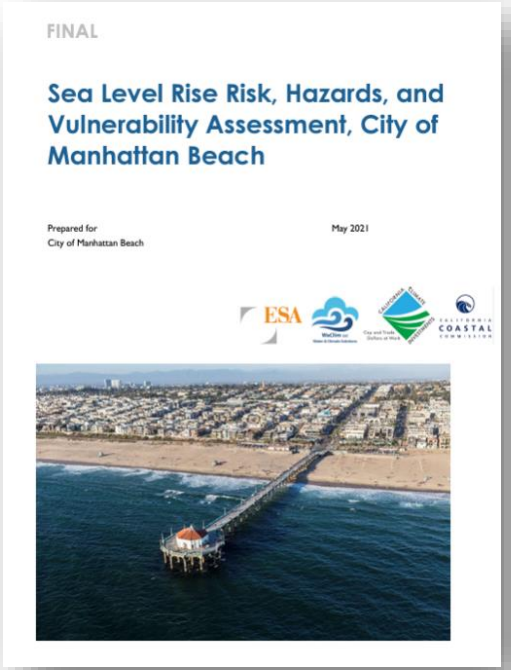
Geological Hazards - Earthquake, Landslide

- Manhattan Beach and the wider Los Angeles area have experienced significant earthquakes in the past. While the region has strict building codes and preparedness measures in place to mitigate earthquake risks, there is still a potential for substantial damage in the event of a major earthquake.
- Sand Dune Park Landslide Risk

Coastal Hazards

Costal Hazards
- Daily tides
- King tides
- El Nino
- Beach and coastal erosion
- Tsunami

Climate Change is a significant contributor to future impacts.



Drought

According to the Manhattan Beach Urban Water Management Plan, the City recently experienced a **five consecutive year drought** within its service area from CY 2011-2015.

According to the Los Angeles County Hazard Mitigation Plan (2020), Los Angeles County and the rest of southern California will experience more severe drought impacts as a result of warming temperatures.

February 3, 2015
(Released Thursday, Feb. 5, 2015)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	100.00	95.83
Last Week 01-29-2015	0.00	100.00	100.00	100.00	100.00	95.83
3 Months Ago 11-06-2014	0.00	100.00	100.00	100.00	100.00	95.83
Start of Calendar Year 12-31-2014	0.00	100.00	100.00	100.00	100.00	95.83
Start of Water Year 10-02-2014	0.00	100.00	100.00	100.00	100.00	95.83
One Year Ago 02-06-2014	0.00	100.00	100.00	99.81	87.02	18.25

ntensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

he Drought Monitor focuses on broad-scale conditions.
ocal conditions may vary. For more information on the
rought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

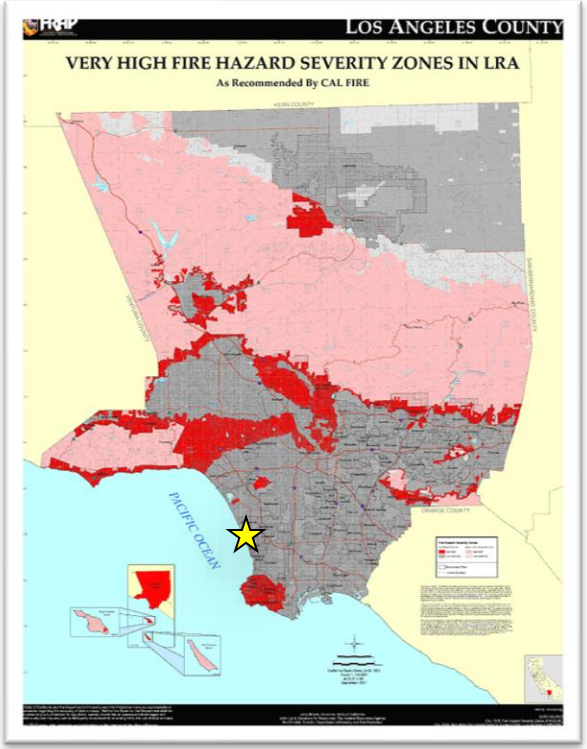
uthor:
rian Fuchs
lational Drought Mitigation Center

droughtmonitor.unl.edu

Wildfire

Since 2017, according to the NOAA/NCEI database **11 wildfire events** have occurred within Los Angeles county, resulting in 3 deaths and 24 injured.

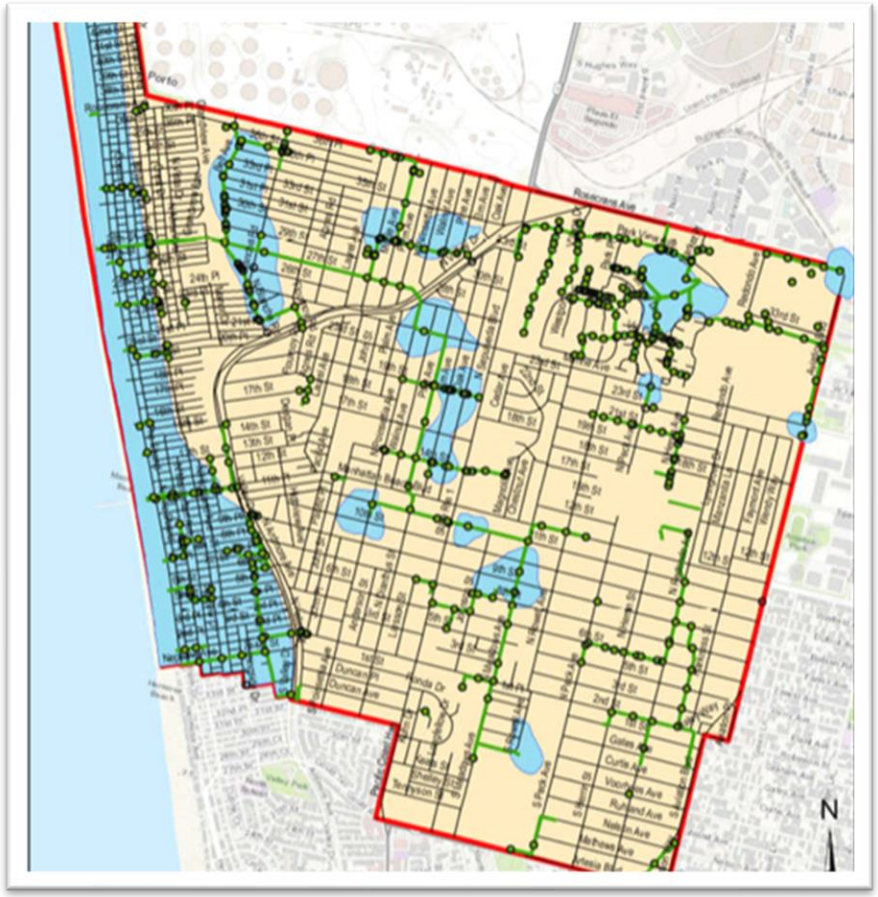
Climate change is having a serious impact on the prevalence of wildfires in California. The changes in climate are creating warmer, drier seasons, which are the ideal conditions for fires to burn.



Inland Flooding

Occurs when there's a general and temporary condition of partial or complete inundation of normally dry land area due to various factors like, heavy rainfall, storm surges, or rapid accumulation of surface waters.

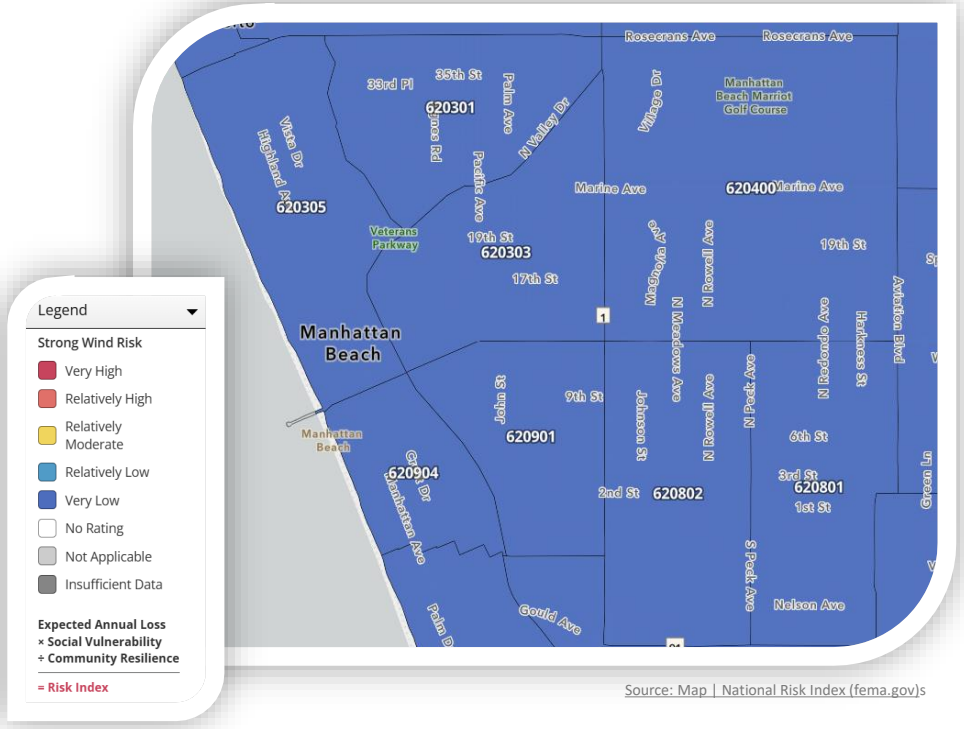
Image shows **stormwater** drainage system and reported flooding during a storm in 2004.



Wind

Wind events have led to significant property damage, power outages, injuries, and, in some cases, loss of life in Los Angeles County.

Overall, the strong wind risk is **very low** in Manhattan Beach according to the FEMA National Risk Index.



Source: Map | National Risk Index (fema.gov)s

5-Minute Break

Hazards of Prime Concern Discussion

Based on the information provided, do you agree that these **hazards** present a risk to Manhattan Beach assets? Why or why not?

Geological Hazards (Earthquake, Landslide)	Coastal Hazards (Daily tides, King tides, El Nino, Beach and Coastal Erosion, Tsunami)	Drought	High Wind	Wildfire	Inland Flooding

Are there any hazards you believe should be profiled in your hazard mitigation plan that have **not** been mentioned?

Next Steps

Committee Meeting #2

Date: December 12
Time: 9:30 AM – 11:30 AM

Topics:

- Risk Analysis and Assessment Discussion
  - Identification of hazards, review historical data, discuss probability and impacts, review mapping and modeling, conduct risk ranking.
- Vulnerability and Impacts Assessment Discussion
  - Discuss community vulnerabilities, critical infrastructure and facilities, economic and environmental impacts, hazards-specific vulnerabilities, and equity considerations.

Personal and Professional Experiences Survey

Survey Timeline: November 29 – December 10

Audience: Committee Members

Intent: This survey aims to capture the personal and professional experiences of each hazard from members of the hazard mitigation planning committee. This information will be used to assess the risk and impacts of natural hazards in Manhattan Beach in the plan.

How to complete: Please be on the lookout for a link to complete this survey via email on November 29·

Public Survey

Survey Timeline: November 30 – January 30

Audience: General Public

Intent: Gather information and insights from residents and individuals associated with the City of Manhattan Beach regarding their awareness, concerns, and preparedness related to various natural hazard events.

The survey aims to assess the community's level of understanding of these hazards, their impact on properties, and the measures taken to mitigate risks. Additionally, the survey seeks input on the types of mitigation projects and policies that local government should focus on to strengthen the community's resilience to natural hazards.

How to complete: Please be on the lookout for a survey link which will be posted to the City website on November 30.

Action Items

CONSTANT ASSOCIATES

- Prepare for Committee Meeting #2 on 12/12/23
- Incorporating feedback into 2024 Local Hazard Mitigation Plan (LHMP)

City of Manhattan Beach:

- Disseminate meeting minutes and materials following this meeting
- Disseminate the public survey

Committee Members:

- Complete Personal and Professional Experiences Survey
- Attend Committee Meeting #2 on 12/12/23

Members of the Public:

- Complete Public Survey
- Attend Committee Meeting #2 on 12/12/23

Questions or Comments?

Thank You

Amanda MacLennan (amaclennan@manhattanbeach.gov)
Dylan Yates (dylan.yates@constantassociates.com)
Monica Machacek-Chiapello (monica@constantassociates.com)
Michelle Klein (michelle.klein@constantassociates.com)