

**Multi-Jurisdictional
Hazard Mitigation Plan:
City of Encinitas Annex
San Diego County, California
2023**



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1. SECTION ONE: Determine the Planning Area and Resources

1.1. Planning Area: City of Encinitas

The City of Encinitas is a coastal community 25 miles north of the City of San Diego, located along six miles of Pacific coastline. Approximately 21.4 square miles, Encinitas is characterized by coastal beaches, cliffs, flat topped coastal areas, steep mesa bluffs, and inland valleys. Encinitas is bordered by Carlsbad to the north, Solana Beach to the south and the community of Rancho Santa Fe to the east. With its pristine beaches and rolling hills, famous botanic garden, and vibrant downtown business district, the City of Encinitas attracts visitors from all over the world. There is also a championship 18-hole par-72 golf course with panoramic ocean views.

Encinitas has a semi-arid Mediterranean climate and averages 260 sunny days per year. Winters are mild with periodic rain. Frost is rare along the coast, but sometimes occurs in inland valleys in December and January. Summer is almost rain free, but sometimes overcast and cool with fog off the Pacific. While most days have mild and pleasant temperatures, hot dry Santa Ana winds bring high temperatures on a few days each year, mostly but not exclusively in the fall.

Incorporated in 1986, the City encompasses the communities of Old Encinitas, New Encinitas, Olivenhain, Leucadia, and Cardiff-By-The-Sea. The Los Angeles/San Diego (LOSSAN) rail passes through the City, and other transit corridors traversing the City include Interstate 5, El Camino Real and Coast Highway 101. The City is a general law city and is governed by a Mayor and four district represented City Council members, under the Council-Manager form of government. The City employs approximately 250 full-time employees (including San Dieguito Water District employees) and 70 part-time seasonal employees. Law enforcement services is provided through a contract with the San Diego County Sheriff's Department.

The City's estimated population is 62,289 with a median income of \$113,075. Based on January 2021 Estimate Census Data (California Department of Finance), within the City limits are 26,760 housing units, of which 77% are single family dwelling type units.

1.2. Community Rating System Requirements

The Community Rating System (CRS) is a FEMA program and rewards communities that go beyond the minimum standards for floodplain management under the National Flood Insurance Program (NFIP). Communities can potentially improve their Community Rating System and lower NFIP premiums by developing a CRS Plan.

SECTION ONE | Determine the Planning Area and Resources

For more information on the National Flood Insurance Program, see <http://www.fema.gov/national-flood-insurance-program>.

Community Rating System (CRS) Planning Steps	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
Step 1. Organize	Task 1: Determine the Planning Area and Resources Task 2: Build the Planning Team 44 CFR 201.6(c)(1)
Step 2. Involve the public	Task 3: Create an Outreach Strategy 44 CFR 201.6(b)(1)
Step 3. Coordinate	Task 4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Step 4. Assess the hazard	Task 5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
Step 5. Assess the problem	
Step 6. Set goals	Task 6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i) 44 CFR 201.6(c)(3)(ii) 44 CFR 201.6(c)(3)(iii)
Step 7. Review possible activities	
Step 8. Draft an action plan	
Step 9. Adopt the plan	Task 8: Review and Adopt the Plan 44 CFR 201.6(c)(5)
Step 10. Implement, evaluate, revise	Task 7: Keep the Plan Current Task 9: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

TABLE 1: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 1.1 DESCRIBES THE CRS REQUIREMENTS MET BY THE SAN DIEGO COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN.

Any jurisdiction or special district may participate in the hazard mitigation planning process. However, to request FEMA approval, each of the local jurisdictions must meet all requirements of 44 CFR §201.6. In addition to the requirement for participation in the process, the Federal regulation specifies the following requirements for multi-jurisdictional plans:

- The risk assessment must assess each jurisdiction’s risk where they may vary from the risks facing the entire planning area. (44 CFR §201.6(c)(2)(iii))
- There must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. (44 CFR §201.6(c)(3)(iv))
- Each jurisdiction requesting approval of the plan must document that it has been formally adopted. (44 CFR §201.6(c)(5))

The hazard mitigation plan must clearly list the jurisdictions that participated in the plan and are seeking plan approval. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan and annexes meet all requirements.

2. SECTION TWO: Build the Planning Team

2.1. Planning Participants

City Manager's Office:

Pat Piatt, Senior Management Analyst (no longer with City)

Julie Taber, Public Information Officer

David VanPelt, IT Supervisor/GIS

Development Services:

Jennifer Gates, Principal Planner (no longer with City)

Melinda Dacey, Planner IV

Scott Vurbeff, Environmental Project Manager (no longer with City)

Nick Koutoufidis, Senior Planner – Environmental

Fire Department:

Corina Jimenez, Senior Management Analyst

Lois Yum, Management Analyst

Hans Schmidt, Fire Marshal

Infrastructure & Sustainability:

Jill Bankston, City Engineer

Matt Widelski, Principal Engineer

Leia Cabrera, Senior Engineer

Jayne Timberlake, Program Administrator (no longer with City)

Todd Mierau, Program Administrator

Crystal Najera, Sustainability Manager

Park, Recreation, and Cultural Arts

Annette Saul, Parks Operation Manager (no longer with City)

David Norgard, Parks Operation Manager

Public Works:

Bill Wilson, Senior Management Analyst (no longer with City)

Erik Steenblock, Environmental Project Manager

San Dieguito Water District:

Blair Knoll, Senior Engineer (no longer with City)

Christina Olson, Senior Engineer

2.2. Planning Process

The Fire Department Senior Management Analyst attended the Hazard Mitigation Working Group (HMWG) meetings hosted by the San Diego County Office of Emergency Services. A few internal meetings were held virtually. Most communication amongst the local planning group (LPG) involved email distributions and email responses.

Majority of documents were uploaded in the City's OneDrive site. Departments populated their information and the Senior Management Analyst consolidated and finalized the documents.

Citywide hazard mitigation goals were agreed upon by the LPG for the final goals. These documents were then uploaded in the County's SharePoint site for the submission process.

See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan's* Section Two for details about the county-wide Planning Process.

3. SECTION THREE: Create an Outreach Strategy

See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan's* Section Three for details about the county-wide outreach strategy.

4. SECTION FOUR: Review Community Capabilities

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities, and must be included in a hazard mitigation plan by the planning team.

The planning team also may identify additional types of capabilities relevant to mitigation planning.

4.1. Capability Assessment

The primary types of capabilities for reducing long-term vulnerability through mitigation planning are:

- Planning and regulatory
- Administrative and technical
- Financial
- Education and outreach

4.1.1. Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards.

Overall, this jurisdiction can expand upon these capabilities by creating and applying an updated five-year Multi-Jurisdictional Hazard Mitigation Plan Cycle and Work Plan along with the addition of more funding opportunities for applicable staff, research, plan developments/projects, and applicable resources/expenses.

Please indicate which of the following your jurisdiction has in place:

Plans	Yes/No Year	Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	Yes Encinitas General Plan
Capital Improvements Plan	Yes Annually	Yes No Yes

SECTION FOUR | Review Community Capabilities

Economic Development Plan	Yes	No
Local Emergency Operations Plan	Yes 2022	Yes
Continuity of Operations Plan	Yes 2012	No Both City and SDWD have COOP plans.
Transportation Plan	Yes	No Yes Yes It addresses circulation.
Stormwater Management Plan	Yes 2016	Yes No Yes Encinitas JURMP
Community Wildfire Protection Plan	No	
M. Real estate disclosure requirements	No	
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Yes 2018	Climate Action Plan (Updated November 2020)
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	Yes	Yes Version/Year: 2022 California Building Standards Code; Title 24 2021 International Fire Code; 2022 California Fire Code
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	Score:
Fire department ISO rating	Yes	Rating: 2/2X
Site plan review requirements	Yes	Yes The fire department and other departments review site plans for code compliance.
Land Use Planning and Ordinances	Yes/No	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?

SECTION FOUR | Review Community Capabilities

Zoning ordinance	Yes	Yes
Subdivision ordinance	Yes	Yes
Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Yes	Yes The City has adopted the CalFire VHFHSZ maps and utilizes CBC Chapter 7A for building requirements within these zones. The City has various ordinances and municipal codes that require the special requirements.
Growth management ordinances (also called “smart growth” or anti-sprawl programs)	No	The City no longer has any Growth Management Ordinances.
Flood insurance rate maps	Yes	Yes Municipal Code 30.34.040
Acquisition of land for open space and public recreation uses	No	
Other		

TABLE 2: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

4.1.2. Administrative and Technical

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. For smaller jurisdictions without local staff resources, if there are public resources at the next higher-level government that can provide technical assistance, indicate so in your comments:

Administration	Yes/No	Describe capability Is coordination effective?
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Development Services Department has land development review planners and civil engineers who love each other very much.
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	The City and San Dieguito Water District have staff that are registered professional engineers and a contract geotechnical engineer available to assist in disasters.
Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Yes	City staff has registered professional engineers and a geotechnical engineer available to assist in disasters.
Mitigation Planning Committee	No	.

SECTION FOUR | Review Community Capabilities

Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Yes	The Fire Department utilizes a vegetation abatement company to mitigate fire hazards within the city. The Public Works is responsible for assuring trees in right of way are maintained and drainage systems are clear.
Mutual aid agreements	Yes	San Dieguito Water District has two mutual aid agreement, CalWarn & San Diego County Water Authority. The Public Works Department is part of the Countywide Public Works MOA. The Fire Department is part of several MOAs.
Staff	Yes/No FT/PT1	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official	No	Yes Contracted through Development Services.
Floodplain Administrator	Yes PT-1*	Yes No No *Part of other duties as assigned to full-time position.
Emergency Manager	Yes PT-2*	Yes Yes No *Part of other duties as assigned to full-time positions.
Surveyors	N	Yes Contracted through Development Services on an as needed basis.
Staff with education or expertise to assess the community's vulnerability to hazards	Yes	Yes
Community Planner	Yes FT-3	Yes
Scientists familiar with the hazards of the community	No	Yes Contracted through Development Services on an as needed basis.
Civil Engineer	Yes FT-8	Yes Five in Development Services and three in San Dieguito Water District.
Personnel skilled in GIS and/or HAZUS	Yes FT-3	Yes
Grant writers	Yes	Yes

SECTION FOUR | Review Community Capabilities

		The City employees multiple Management Analyst that are experienced in Grant Writing and have been successful in securing multiple grants in the past.
Other	Yes FT-2	Encinitas employs a fulltime Coastal Zone Program Manager and Climate Action Plan Program Administrator
Technical	Yes/No	Describe capability Has capability been used to assess/mitigate risk in the past?
Warning systems/services (Reverse 911, outdoor warning signals)	Yes	AlertSanDiego for Reverse 911 operations. Wireless Emergency Alerts (WEA) for emergency notifications. Traffic message boards with ability to be posted throughout City. All, but WEA, have been used to mitigate risks from hazards in the past.
Hazard data and information	Yes	Previous regional hazard data and information has been used to identify and mitigate risks in the past.
Grant writing	Yes	Personnel from various departments are assigned to writing grants for their departments. These are other duties as assigned to full-time positions. A contractor is also used through City Manager's Office on an as needed basis.
Hazus analysis	Yes	FEMA Hazus Program has been used to identify and mitigate risks in the past. GIS Division and Development Services department use this data.
Other		

TABLE 3:FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.3. Financial

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation:

Funding Resource	Access/ Eligibility (Yes/No)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Community Development Block Grants (CDBG)	Yes	Yes, for sidewalks and curbs. Not likely for the types of hazards the City faces and the areas where the funds can be used.
Capital improvements project funding	Yes	Yes. Yes

SECTION FOUR | Review Community Capabilities

Authority to levy taxes for specific purposes	Yes Vote Required	Previous mitigation measures and available for future mitigation actions if needed.
Fees for water, sewer, gas, or electric service	Yes	Previous mitigation measures and available for future mitigations actions if needed.
Impact fees for homebuyers or developers for new developments/homes	Yes	Departments collect impact fees based on a fee schedule that applies to new construction. Funding could be applied to past and future mitigation actions if needed.
Incur debt through general obligation bonds	Yes	Previous mitigation measures and available for future mitigation actions if needed.
Incur debt through special tax and revenue bonds	Yes Vote Required	Previous mitigation measures and available for future mitigation actions if needed.
Incur debt through private activity bonds	Yes	Previous mitigation measures and available for future mitigation actions if needed.

TABLE 4: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.4. Education and Outreach

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information:

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	Community Emergency Response Team (CERT). Olivenhain Fire Safe Council: Works in conjunction with the fire department to provide guidance and resources to residents on the mitigation of fire hazards within Olivenhain. Green Block Leader Program: Resident volunteers trained by City staff to provide environmental education to community networks.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Fire safety public education is provided by Fire Department. Produced a series of videos on various safety topics as well as fire safety presentations throughout the year for different civic groups. SDWD provides public education and workshops on water wise use and landscape. Other City Departments provide community educational programs.

SECTION FOUR | Review Community Capabilities

Natural disaster or safety related school programs	Yes	The Fire Department offers disaster and safety programs to local schools as requested.
StormReady certification	Yes	The City complies with requirements related to the StormReady certification. No.
Firewise Communities certification	No	
Public-private partnership initiatives addressing disaster-related issues	No	
Other	Yes	SDWD participates in turf removal and conversion to recycled water rebates.

TABLE 5: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.2. Safe Growth Audit

Identify gaps in your community’s growth guidance instruments and improvements that could be made to reduce vulnerability to future development:

Comprehensive Plan	Yes	No
Land Use		
1. Does the future land-use map clearly identify natural hazard areas?	X	
See Public Safety Element of City’s General Plan		
2. Do the land-use policies discourage development or redevelopment within natural hazard areas?	X	
See Public Safety Element of City’s General Plan		
3. Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?	X	
The City’s sixth cycle Housing Element has adequate sites for our RHNA numbers.		
Transportation		
1. Does the transportation plan limit access to hazard areas?		X

SECTION FOUR | Review Community Capabilities

2. Is transportation policy used to guide growth to safe locations?		X
3. Are movement systems designed to function under disaster conditions (e.g., evacuation)?	X	

TABLE 6: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA.

Comprehensive Plan (continued)	Yes	No
Environmental Management		
1. Are environmental systems that protect development from hazards identified and mapped?	X	
2. Do environmental policies maintain and restore protective ecosystems?	X	
3. Do environmental policies provide incentives to development that is located outside protective ecosystems?		X
Public Safety		
1. Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?		X

SECTION FOUR | Review Community Capabilities

2. Is safety explicitly included in the plan’s growth and development policies?	X	
3. Does the monitoring and implementation section of the plan cover safe growth objectives?		X

TABLE 7: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Zoning Ordinance	Yes	No
1. Does the zoning ordinance conform to the comprehensive plan in terms of discouraging development or redevelopment within natural hazard areas?	X	
2. Does the ordinance contain natural hazard overlay zones that set conditions for land use within such zones?	X	
3. Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?	X	
Through General Plan consistency analysis and under CEQA process.		
4. Does the ordinance prohibit development within, or filling of, wetlands, floodways, and floodplains?	X	
Subdivision Regulations	Yes	No
1. Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?	X	
2. Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources?	X	

SECTION FOUR | Review Community Capabilities

3. Do the regulations allow density transfers where hazard areas exist?		X

TABLE 8: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Capital Improvement Program and Infrastructure Policies	Yes	No
1. Does the capital improvement program limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?		X
2. Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?		X
3. Does the capital improvement program provide funding for hazard mitigation projects identified in the FEMA Mitigation Plan?		X
Other	Yes	No
1. Do small area or corridor plans recognize the need to avoid or mitigation natural hazards?	X	
2. Does the building code contain provisions to strengthen or elevate construction to withstand hazard forces?	X	
3. Do economic development or redevelopment strategies include provisions for mitigation natural hazards?		X
4. Is there an adopted evacuation and shelter plan to deal with emergencies from natural hazards?	X	

TABLE 9: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Questions were adapted from Godschalk, David R. Practice Safe Growth Audits, Zoning Practice, Issue Number 10, October 2009, American Planning Association.

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4.2.1. Growth and Development

The City of Encinitas incorporated in 1986, encompassing the communities of Old Encinitas, New Encinitas, Olivenhain, Leucadia, and Cardiff-By-The-Sea. Below is the change in population since incorporation:

Year	Population	Change	% Change
1987*	50,500	---	---
1990	55,406	4,906	9.9%
2000	57,955	2,549	4.4%
2010	59,518	1,563	2.7%
2020	61,346	1,828	3.1%

Source: US Census Bureau, California Department of Finance E-1 Report (2020)

*City of Encinitas incorporated in October 1986

The City of Encinitas is primarily land locked due to boundaries with other jurisdictions. These development constraints have led to increased infill development with the City. New development does not extend City boundaries, it is re-utilizing existing real estate within the City limits.

4.2.2. Development since 2018 Plan

Development Services tracked total building permits issued since the 2018 plan. A summary of this development is shown in table below:

Property Use	2018	2019	2020	2021
Residential	1,894	1,932	2,074	2,452
Commercial	213	192	153	148
Total	2,107	2,124	2,227	2,600

Source: City of Encinitas Development Services Department and Geographic Information Systems Division

Development is also tracked if built in the identified hazard areas, which includes the 1% annual chance floodplain and the high and very high fire hazard severity zone (VHFHSZ). All development in the identified hazard areas were completed in accordance with all current and applicable development codes and standards and should be adequately protected. Thus, with the exception of more people living in the area potentially exposed to natural hazards, this growth should not cause a significant change in vulnerability of the City to identified priority hazards. A summary of development in hazard zones since 2018 is shown in the table below:

Property Use	Flood Zone	VHFHSZ
Residential	42	1,528
Non-Residential	5	42
Total	47	1,570

Source: City of Encinitas Development Services Department and Geographic Information Systems Division

4.3. National Flood Insurance Program (NFIP)

The City of Encinitas is an active participant in the National Flood Insurance Program (NFIP). As a participant in the NFIP, a community develops capabilities for conducting flood mitigation activities. The hazard mitigation plan must describe each jurisdiction’s participation in the NFIP. Participating communities must describe their continued compliance with NFIP requirements. The mitigation plan must do more than state that the community will continue to comply with the NFIP. Each jurisdiction must describe their floodplain management program and address how they will continue to comply with the NFIP requirements. The local floodplain administrator is often the primary source for this information.

Jurisdictions where FEMA has issued a floodplain map but are currently not participating in the NFIP may meet this requirement by describing the reasons why the community does not participate. Plan updates must meet the same requirements and document any change in floodplain management programs.

NFIP Topic	Source of Information	Comments
Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	115 policies Premiums: \$67,064 Coverage = \$36,278,100
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	FEMA NFIP or Insurance Specialist	40 claims Total = \$309,204 2 claims for substantial damage
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	Approximately 100
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	There is no flood risk in areas of the City without this coverage.
Staff Resources		
Is the Community FPA or NFIP Coordinator certified?	Community FPA	The Public Works Director is the City’s Floodplain Manager. The City is currently recruiting for that position.
Is floodplain management an auxiliary function?	Community FPA	Auxiliary function
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	See Muni Code 23.40: Floodplain Management Regulations. City staff review permits for work within the floodplain and perform inspections of work within or near floodplains. Code compliance officers address any illegal building or fill in the floodplain.

SECTION FOUR | Review Community Capabilities

What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	None identified.
Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	Yes
Are there any outstanding compliance issues (i.e., current violations)?		No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		2017
Is a CAV or CAC scheduled or needed?		Not currently

TABLE 10: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA.

NFIP Topic	Source of Information	Comments
Regulation		
When did the community enter the NFIP?	Community Status Book http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book	Emergency Entry in 1987, regular entry in 1988
Are the FIRMs digital or paper?	Community FPA	Digital
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Yes, new Floodplain Management Regulations were adopted in 2019 in consultation with FEMA.
Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP Flood Insurance Manual http://www.fema.gov/flood-insurance-manual Community FPA, FEMA CRS Coordinator, ISO representative	City planners review all proposed developments to determine whether they may impact the floodplain/ floodway. If they are, any proposed structures need to meet minimum elevation standards. And then perform a HEC-RAS analysis to determine if there are any impacts to the floodplain. The project must prepare and submit a CLOMR to FEMA for approval before the site can be developed if there's a floodplain impact, or complete a No Rise Certificate if there is no impact. If structures are built in/adjacent to a floodplain, the City will notify the developer

SECTION FOUR | Review Community Capabilities

		and provide information on flood insurance options. If a CLOMR is submitted, once the project is complete, the as-builts are modeled and a LOMR is sent to FEMA.
Community Rating System (CRS)		
Does the community participate in CRS?	Community FPA, State, FEMA NFIP	NO
What is the community's CRS Class Ranking?	Flood Insurance Manual http://www.fema.gov/flood-insurance-manual	N/A
What categories and activities provide CRS points and how can the class be improved?		N/A
Does the plan include CRS planning requirements	Community FPA, FEMA CRS Coordinator, ISO representative	N/A

TABLE 11: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA CONTINUED.

5. SECTION FIVE: Conduct a Risk Assessment

The planning team conducts a risk assessment to determine the potential impacts of hazards to the people, economy, and built and natural environments of the community. The risk assessment provides the foundation for the rest of the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards.

In addition to informing the mitigation strategy, the risk assessment also can be used to establish emergency preparedness and response priorities, for land use and comprehensive planning, and for decision making by elected officials, city and county departments, businesses, and organizations in the community.

5.1. Hazards Summary

Summarize hazard description information and identify which hazards are most significant to the planning area:

The City of Encinitas is exposed to several hazards and has the potential to be impacted to varying degrees from natural, technological, or man-made disasters. The City of Encinitas continues to work with local planning group to determine its exposure and loss potential to identified hazards in the City.

Through the hazard mitigation planning process, eight natural hazards were selected for inclusion in the 2023 Plan, based on the historical record and expertise of the Local Hazard Mitigation Planning Team members, as having the greatest potential for Medium or High impact on the jurisdiction. The City has identified earthquake, wildfire, dam failure, coastal erosion/bluff failures/landslides, and flooding/storm surges, as the top hazards for the City.

Earthquake:

Probability of Future Event – Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.

Overall Significance – High (The criteria consistently falls in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of the Earth's tectonic plates. The effects of an earthquake can be felt far beyond the site of its occurrence. They usually occur without warning and, after just a few seconds, can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. Ground motion is the vibration or shaking of the ground during an earthquake.

SECTION FIVE | Conduct a Risk Assessment

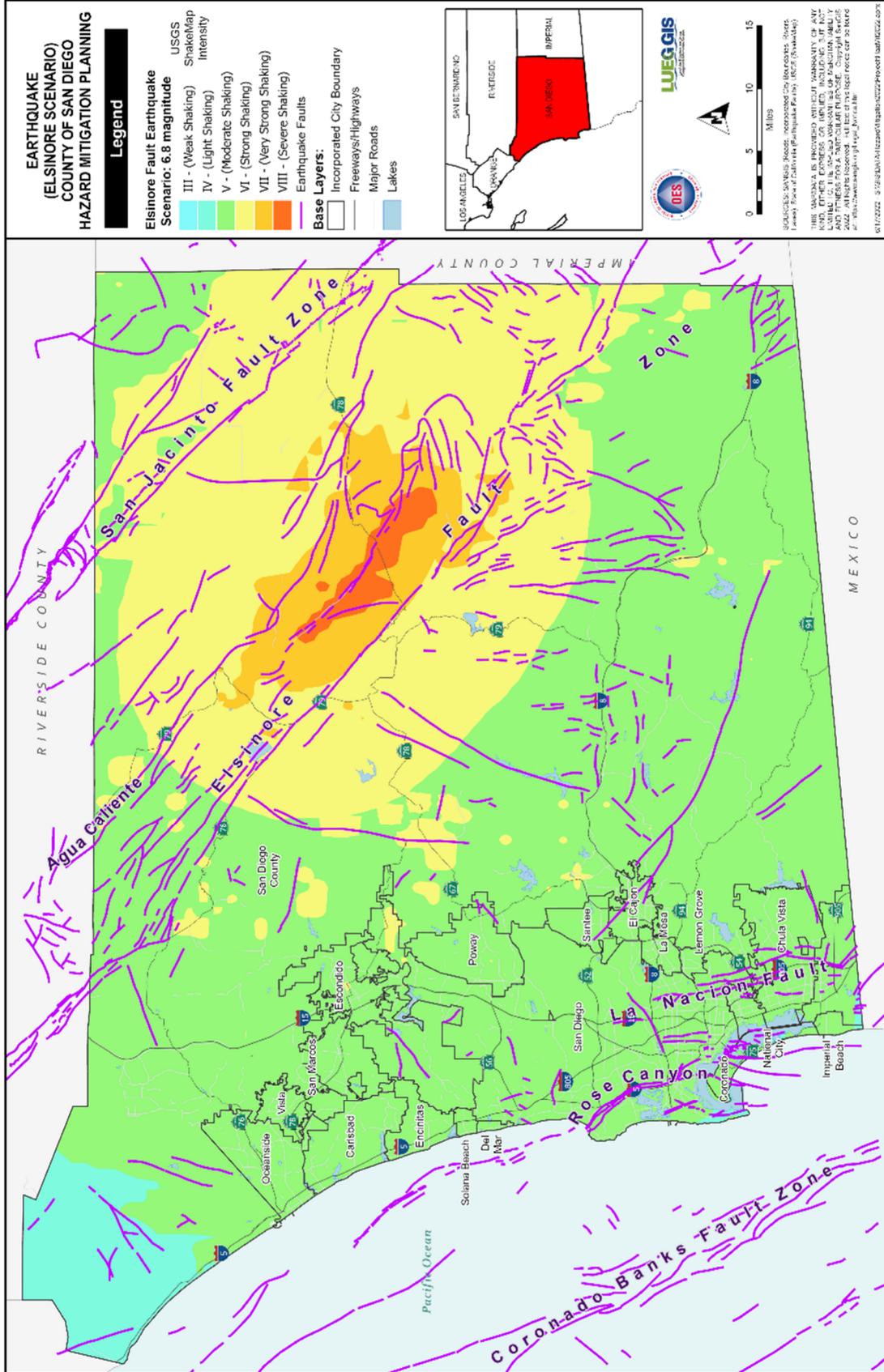
When a fault ruptures, seismic waves radiate, causing the ground to vibrate. The severity of the vibration increases with the amount of energy released and decreases with distance from the causative fault or epicenter. Soft soils can further amplify ground motions. The severity of these effects is dependent on the amount of energy released from the fault or epicenter. One way to express an earthquake's severity is to compare its acceleration to the normal acceleration due to gravity. The acceleration due to gravity is often called "g". A 100% g earthquake is very severe.

More damage tends to occur from earthquakes when ground acceleration is rapid. Peak ground acceleration (PGA) is a measure of the strength of ground movement. PGA measures the rate in change of motion relative to the established rate of acceleration due to gravity (980 cm/sec/sec). PGA is used to project the risk of damage from future earthquakes by showing earthquake ground motions that have a specified probability (10%, 5%, or 2%) of being exceeded in 50 years. These ground motion values are used for reference in construction design for earthquake resistance. The ground motion values can also be used to assess relative hazard between sites, when making economic and safety decisions.

On November 22, 1800, a 6.5 magnitude earthquake occurred on the Rose Canyon fault offshore from Oceanside. It cracked adobe walls at the missions of San Diego de Alcalá and San Juan Capistrano. Other notable local earthquakes include a magnitude 6.0 earthquake centered on the Rose Canyon or Coronado Band faults on May 27, 1862, and a magnitude 5.4 earthquake centered off the coast of Oceanside on the Coronado Bank Fault on July 13, 1986. The geographic extent of this hazard is citywide. A greater percentage of the city's population is potentially exposed to this hazard relative to other hazards, and potential losses from an earthquake would be comparatively larger in most cases.

The Rose Canyon Fault lies offshore (2.5 miles west of the City at its closest point) and is capable of generating a magnitude 6.2 to 7.2 earthquake that could potentially damage dwellings and infrastructure throughout the City. A magnitude 6.9 earthquake on the Rose Canyon Fault could potentially result in a peak ground acceleration of .40 within downtown Encinitas and the Coast Highway 101 corridor. These areas of the City are more likely to suffer heavier damage and greater human losses than other parts of the city because of the presence of older buildings (including 19 unreinforced masonry buildings and 27 two-story, multi-unit buildings constructed prior to 1976), a relatively higher population density and softer soils susceptible to liquefaction, lurch cracking, lateral spreading, and local subsidence.

SECTION FIVE | Conduct a Risk Assessment



Wildfire:

Probability of Future Event – Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.

Overall Significance – High (The criteria consistently falls in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

A wildfire is an uncontrolled fire spreading through vegetative fuels and exposing or possibly consuming structures. They often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees fuel wildfires.

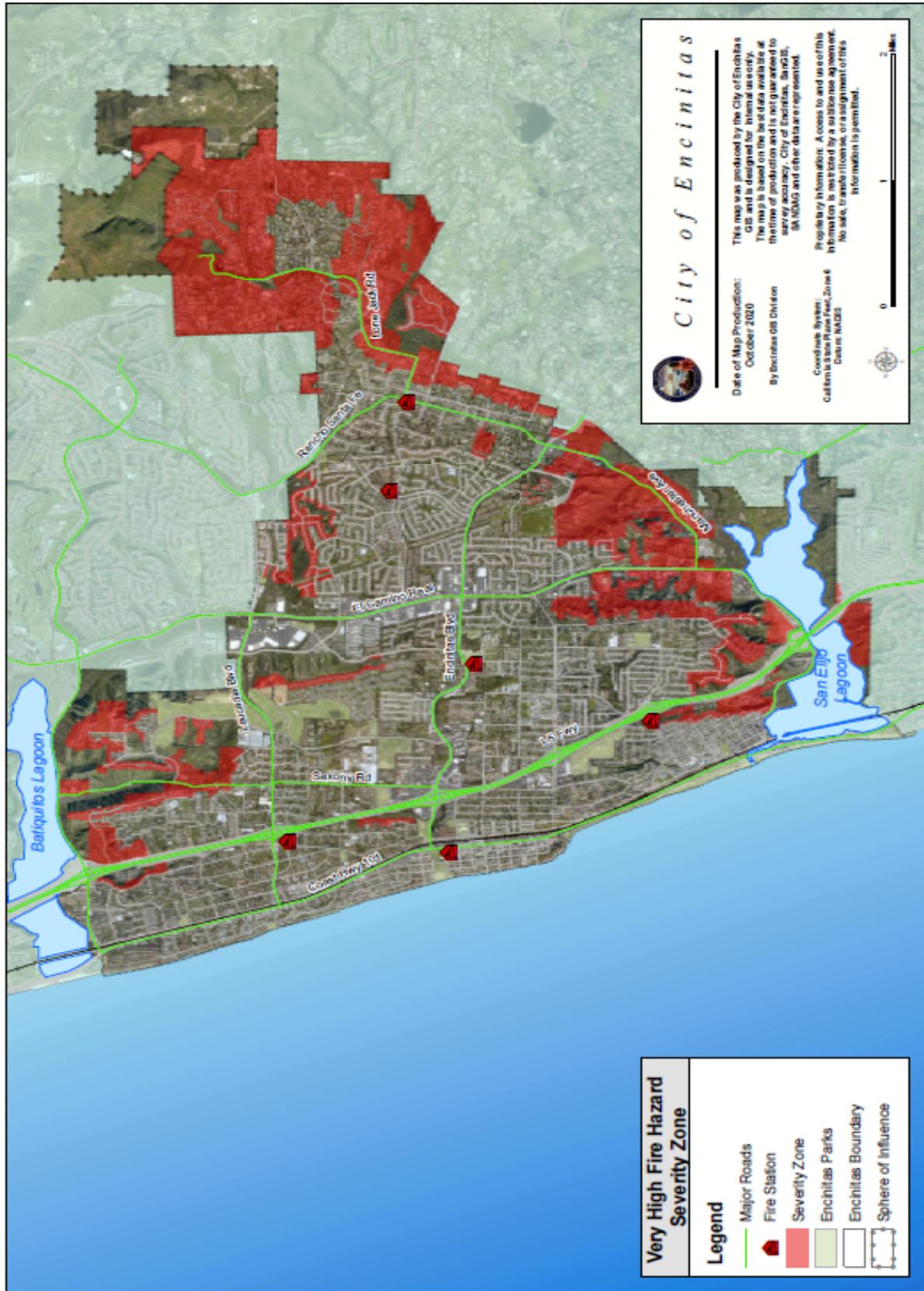
A wildfire is in a wildland area in which development is essentially nonexistent—except for roads, railroads, power lines and similar facilities. An Urban-Wildland/Urban Interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels. Significant development in San Diego County is located along canyon ridges at the wildland/urban interface. Areas that have experienced prolonged droughts or are excessively dry are at risk of wildfires.

People start more than 80 percent of wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior.

The continuity of fuels, expressed in both horizontal and vertical components is also a determinant of wildfire potential and behavior. Topography is important because it affects the movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Weather affects the probability of wildfire and has a significant effect on its behavior. Temperature, humidity, and wind (both short and long term) affect the severity and duration of wildfires.

A significant number of Encinitas residents live within the wildland-urban interface. The geographic extent of this hazard includes the following areas of the City, for the most part: 1) Saxony Canyon; 2) South El Camino Real/Crest Drive; and 3) Olivenhain. Properties in these and other smaller areas are susceptible to wildfire because they are situated near open space and canyons containing heavy fuel loads. Reoccurring periods of low precipitation have increased the risk of wildfires in the region. A greater percentage of the population is potentially exposed to wildfires and potential losses from this hazard are comparatively larger than those associated with a dam failure, flooding, coastal bluff failures or hazardous materials incidents. Recent wildfire events in Encinitas include the Harmony Grove Fire in 1996, which resulted in the loss of three homes and evacuation and sheltering of hundreds of residents.

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Dam Failure:

Probability of Future Event – Occasional (1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.

Overall Significance – Medium (The criteria falls mostly in the middle ranges of classifications and the event’s impact on the planning area are noticeable, but no devastating. This rating is sometimes used for hazards with a high extent rating, but very low probability rating.

Dam failures can result in severe flood events. When a dam fails, a large quantity of water is suddenly released with a great potential to cause human casualties, economic loss, lifeline disruption, and environmental damage. A dam failure is usually the result of age, poor design, or structural damage caused by a major event such as an earthquake or flood.

Geologists estimate that a magnitude 7.5 earthquake from the Elsinore Fault 11 miles east of Lake Wohlford could result in a failure of its hydraulic fill dam. The geographic extent of this hazard is limited to the persons and properties within the inundation path surrounding Escondido Creek and San Elijo Lagoon. The dam inundation path is larger than the Escondido Creek 100-year floodway and a greater number of persons and properties are exposed to this hazard compared to coastal bluff failures and flooding. Major arterials within the inundation path include El Camino Del Norte, Rancho Santa Fe Road, Manchester Avenue and Coast Highway 101. The failure of Wohlford Dam (1895) and Dixon Reservoir Dam (1970) could possibly threaten City facilities and infrastructure (including the San Elijo Water Reclamation Facility, Cardiff and Olivenhain sewer pump stations and the San Dieguito Water District 36” high pressure supply line) and educational facilities (Mira Costa College) located in and adjacent to the inundation path. Although exposure to loss of property is significant, the potential for loss of life is limited because of the length of time before flood wave arrival (approximately 1 ½ hours) allowing for aggressive warning and evacuation measures to be initiated by the city.

The Olivenhain Dam (2003) is a concrete gravity dam located on a tributary of Escondido Creek, just west of Lake Hodges, holding 24,000-acre feet. Stanley Mahr Reservoir (1981) is a small, earth filled embankment dam located on a tributary of Encinitas Creek in San Marcos with a capacity of approximately 200-acre feet. A failure of Mahr Reservoir in Carlsbad would produce flooding along Encinitas Creek (which flows into Batiquitos Lagoon) in the northern portion of the city. Emergency Action Plans have been developed for these dams and are maintained by the Office of Emergency Services. The risk of failure of both dams is relatively low due to their age and construction and existing surveillance and inspection measures.

Coastal Erosion/Bluff Failures/Landslides:

Probability of Future Event – Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.

Overall Significance – Medium (The criteria falls mostly in the middle ranges of classifications and the event’s impact on the planning area are noticeable, but no devastating. This rating is sometimes used for hazards with a high extent rating, but very low probability rating.

Landslides occur when masses of rock, earth, or debris move down a slope, including rock falls, deep failure of slopes, and shallow debris flows. Landslides are influenced by human activity (mining and construction of buildings, railroads, and highways) and natural factors (geology, precipitation, and topography). Frequently they accompany other natural hazards such as floods, earthquakes, and volcanic eruptions. Although landslides sometimes occur during earthquake activity, earthquakes are rarely their primary cause.

The most common cause of a landslide is an increase in the down slope gravitational stress applied to slope materials (oversteepening). This may be produced either by natural processes or by man’s activities. Undercutting of a valley wall by stream erosion or of a sea cliff by wave erosion are ways in which slopes may be naturally oversteeped.

Other ways include excessive rainfall or irrigation on a cliff or slope. Another type of soil failure is slope wash, the erosion of slopes by surface-water runoff. The intensity of slope wash is dependent on the discharge and velocity of surface runoff and on the resistance of surface materials to erosion. Surface runoff and velocity is greatly increased in urban and suburban areas due to the presence of roads, parking lots, and buildings, which have zero filtration capacities and provide generally smooth surfaces that do not slow down runoff.

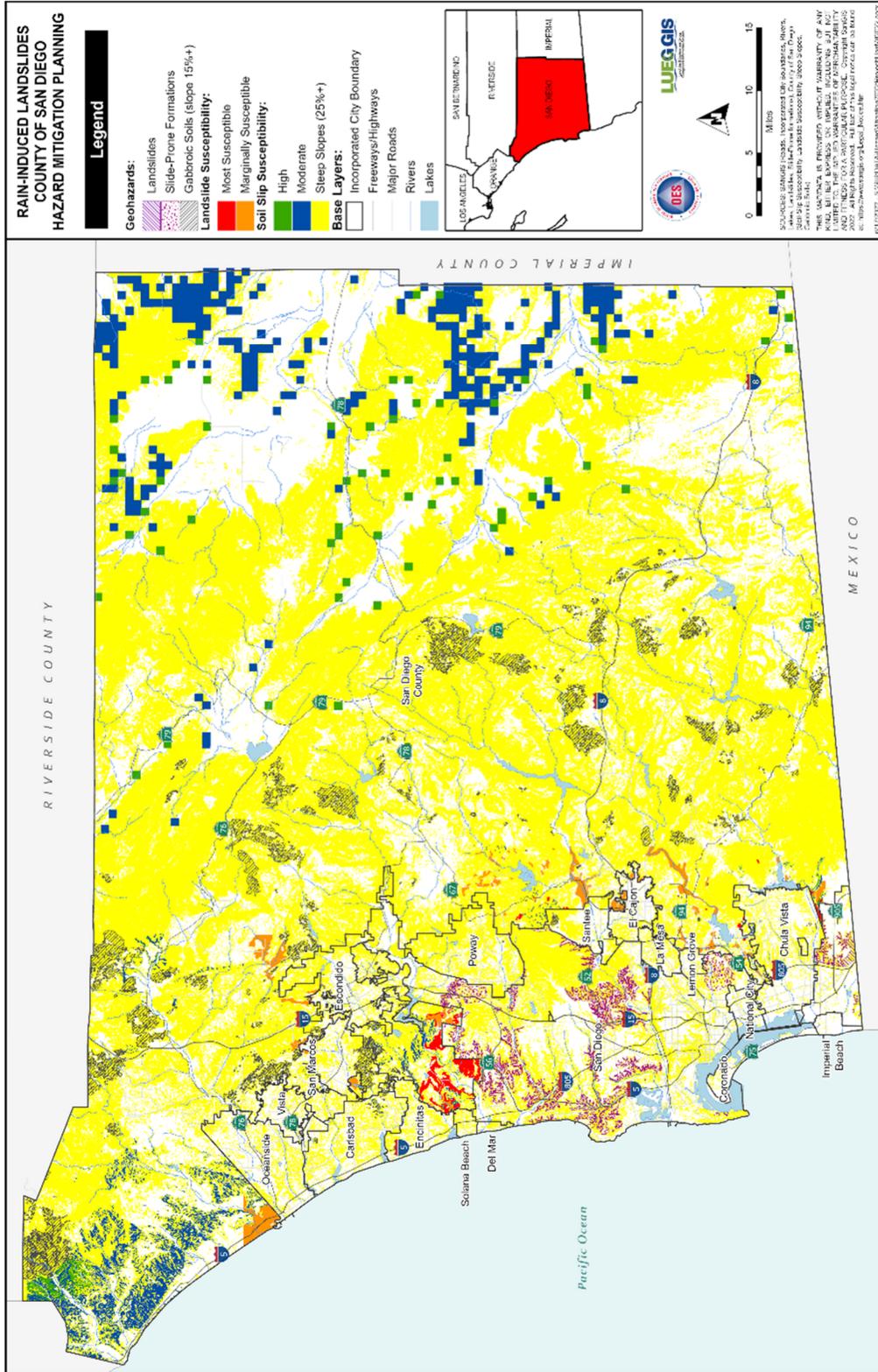
Mudflows are another type of soil failure and are defined as flows or rivers of liquid mud down a hillside. They occur when water accumulates under the ground, usually following long and heavy rainfalls. If there is no brush, tree, or ground cover to hold the soil, mud will form and flow down-slope.

Geographic extent of the hazard is limited primarily to the Encinitas coastal sandstone bluffs. After the El Nino storms of 1982-1983, Encinitas beaches were stripped of vertical sand up to 20 feet deep putting the coastal bluffs and homes in jeopardy of collapsing into the sea. Furthermore, the shoreline segments at Moonlight Beach and Cardiff-by-the-Sea are extremely vulnerable to coastal inundation from potential future sea level rise. In 2000, unstable cliffs at Beacon’s Beach in Encinitas caused a landslide that killed a woman sitting on the beach, and another bluff failure occurred at Grandview Beach in 2019 that killed three women. The recreational bicycle path along the seaside of Highway 101 was undermined in 2010.

Erosion studies have been conducted for Encinitas, Solana Beach and Del Mar. Various degrees of coastal bluff erosion occur annually and coastal bluff failures have resulted in limited loss of life. As a result, negotiations with the California Coastal Commission are underway to develop a comprehensive coastal bluff policy towards coastal bluff top development. A smaller percentage

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of the population is exposed to this hazard relative to earthquakes, wildfires and dam failures and the potential for losses is comparatively less.



Flooding/Storm Surges:

Probability of Future Event – Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.

Overall Significance – Medium (The criteria falls mostly in the middle ranges of classifications and the event’s impact on the planning area are noticeable, but no devastating. This rating is sometimes used for hazards with a high extent rating, but very low probability rating.

A flood occurs when excess water from snowmelt, rainfall, or storm surge accumulates and overflows onto a river’s bank or to adjacent floodplains. Floodplains are lowlands adjacent to rivers, lakes, and oceans that are subject to recurring floods. Most injuries and deaths from flood occur when people are swept away by flood currents, and property damage typically occurs as a result of inundation by sediment-filled water.

Several factors determine the severity of floods, including rainfall intensity and duration. A large amount of rainfall over a short time span can result in flash flood conditions. A sudden thunderstorm or heavy rain, dam failure, or sudden spills can cause flash flooding. The National Weather Service’s definition of a flash flood is a flood occurring in a watershed where the time of travel of the peak of flow from one end of the watershed to the other is less than six hours.

There are no watersheds in San Diego County that have a longer response time than six hours. In this county, flash floods range from the stereotypical wall of water to a gradually rising stream. The central and eastern portions of San Diego County are most susceptible to flash floods where mountain canyons, dry creek beds, and high deserts are the prevailing terrain.

The geographic extent of this hazard is limited to 1) Encinitas coastline, particularly “Restaurant Row” in Cardiff (south of San Elijo State Beach Campgrounds); 2) Escondido, Encinitas, and Cottonwood Creeks; and 3) low-lying areas of Leucadia and Old Encinitas. The City has experienced some property-related losses resulting from localized flooding in Leucadia and coastal flooding in Cardiff, but not loss of life. Winter storms in 1997, 2005-2006 and 2010-2011 resulted in significant damage and required emergency protective measures, debris removal and reconstruction of infrastructure. The associated recovery costs (FEMA public assistance) for the 2005-06 event was over \$500,000.

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Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Avalanche	Negligible	Weak	Unlikely	Low
Dam Failure	Significant	Moderate	Occasional	Medium
Drought	Significant	Moderate	Occasional	Low
Earthquake	Significant	Severe	Likely	High
Erosion	Limited	Extreme	Likely	Medium
Expansive Soils	Negligible	Weak	Unlikely	Low
Extreme Cold	Negligible	Weak	Unlikely	Low
Extreme Heat	Significant	Moderate	Likely	Low
Flood	Limited	Moderate	Likely	Medium
Hail	Negligible	Weak	Occasional	Low
Hurricane	Negligible	Moderate	Unlikely	Low
Landslide	Limited	Moderate	Likely	Medium
Lightning	Limited	Moderate	Occasional	Low
Sea Level Rise	Limited	Extreme	Occasional	Low
Severe Wind	Significant	Moderate	Occasional	Low
Severe Winter Weather	Significant	Moderate	Occasional	Low
Storm Surge	Limited	Moderate	Likely	Medium
Subsidence	Negligible	Weak	Unlikely	Low
Tornado	Negligible	Moderate	Unlikely	Low
Tsunami	Limited	Extreme	Unlikely	Low
Wildfire	Extensive	Severe	Likely	High

TABLE 12: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Definitions for Classifications

Location (Geographic Area Affected)

- **Negligible:** Less than 10 percent of planning area or isolated single-point occurrences
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences
- **Extensive:** 75 to 100 percent of planning area or consistent single-point occurrences

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Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- **Weak:** Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months
- **Extreme:** Extreme classification on scientific scale, immediate onset, or extended duration of event, resulting in catastrophic damage and uninhabitable conditions

Hazard	Scale / Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index ³	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
Earthquake	Modified Mercalli Scale ⁴	I to IV	V to VII	VII	IX to XII
	Richter Magnitude ⁵	2, 3	4, 5	6	7, 8
Hurricane Wind	Saffir-Simpson Hurricane Wind Scale ⁶	1	2	3	4, 5
Tornado	Fujita Tornado Damage Scale ⁷	F0	F1, F2	F3	F4, F5

Probability of Future Events

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- **Occasional:** 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Overall Significance

- **Low:** Two or more criteria fall in lower classifications, or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
 - **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
 - **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.
- Cumulative meteorological drought and wet conditions: <http://ncdc.noaa.gov/>
- Earthquake intensity and effect on population and structures: <http://earthquake.usgs.gov>
- Earthquake magnitude as a logarithmic scale, measured by a seismograph: <http://earthquake.usgs.gov>

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- Hurricane rating based on sustained wind speed: <http://nhc.noaa.gov>
- Tornado rating based on wind speed and associated damage: <http://spc.noaa.gov>

Critical Facility Type	Jurisdiction Name	Counts
EMERGENCY – FIRE	ENCINITAS	6
EMERGENCY – EOC	ENCINITAS	2
EMERGENCY – SHERIFF	ENCINITAS	1
EMERGENCY – EVACUATION CENTER	ENCINITAS	1

5.2 Potential Hazard Exposure and Loss Estimates

The City of Encinitas reviewed a set of jurisdictional-level hazard maps and data provided by the County of San Diego, including detailed critical facility information and localized potential hazard exposure/loss estimates related to residential, commercial, and critical asset/facilities to identify the top hazards threatening their city. Potential hazard exposure/loss estimates are summarized in Table 5.2.

TABLE 5.2: SUMMARY OF POTENTIAL HAZARD-RELATED EXPOSURE/LOSS IN ENCINITAS

Hazard Type	Residential			Commercial		Critical Facilities	
	Exposed Population	Number of Residential Buildings	Potential Exposure Loss for Residential Buildings	Number of Commercial Buildings	Potential Exposure Loss for Commercial Buildings	Number of Critical Facilities	Potential Exposure for Critical Facilities
Coastal Storm	958	108*	35,367,000*	4*	1,310,000*	0	0
Sea Level Rise							
Coastal Flooding	316	1	388,600	3	907,050	1	6,670,000
Mean Higher High Water	0	1	388,600	0	0	0	0
Dam Failure	1,026	309	120,077,400	106	32,049,100	5	32,400,000
Earthquake (Loss)							
(Annualized Loss - Includes shaking, liquefaction, and landslide components)	854	480	186,433,984	308	93,123,800	9	65,770,340
100 Year	0	0	0	0	0	0	0
500 Year	0	0	0	0	0	0	0
Rose Canyon M6.9 Scenario	59,322	19,547	7,594,009,500	3,192	965,101,200	46	953,604,950
Floods (Loss)							
100 Year	661	32	12,435,200	6	1,814,100	5	32,400,000
500 Year	681	44	17,098,400	10	3,023,500	5	32,400,000
Rain-Induced Landslide							
High Risk	158	4	1,554,000	0	0	0	0
Moderate Risk	60	4	1,554,000	0	0	0	0

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Tsunami	2,536	3	1,165,800	10	3,023,500	2	12,390
Wildfire/Structure Fire							
**Very High Fire Hazard	11,633	3,801	1,476,688,500	179	54,120,650	6	238,439,700

Data provided by the County of San Diego

* Coast Storm Data consistent with the Encinitas – Solana Beach Coastal Storm Damage Reduction Project

** Wildfire dataset provided by the City of Encinitas for Very High Fire Hazard Severity Zone

6. SECTION SIX: Develop a Mitigation Strategy

The mitigation strategy serves as the long-term blueprint for reducing potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process.

The mitigation strategy is made up of three main required components: mitigation goals, mitigation actions, and an action plan for implementation. These provide the framework to identify, prioritize, and implement actions to reduce risk to hazards.

Mitigation goals are general guidelines that explain what the community wants to achieve with the plan. They are usually broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.

Mitigation actions are specific projects and activities that help achieve the goals.

The action plan describes how the mitigation actions will be implemented, including how those actions will be prioritized, administered, and incorporated into the community's existing planning mechanisms. In a multi-jurisdictional plan, each jurisdiction must have an action plan specific to that jurisdiction and its vulnerabilities.

Although not required, some communities choose to develop **objectives** to help define or organize mitigation actions. Objectives are broader than specific actions, but are measurable, unlike goals. Objectives connect goals with the actual mitigation actions.

6.1. Mitigation Action Evaluation

Use this worksheet to help evaluate and prioritize each mitigation action being considered by the planning team. For each action, evaluate the potential benefits and/or likelihood of successful implementation for the criteria defined below.

Rank each of the criteria with a -1, 0 or 1 using the following scale:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

Example Evaluation Criteria:

- **Life Safety** – How effective will the action be at protecting lives and preventing injuries?
- **Property Protection** – How significant will the action be at eliminating or reducing damage to structures and infrastructure?

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- **Technical** – Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.
- **Political** – Is there overall public support for the mitigation action? Is there the political will to support it?
- **Legal** – Does the community have the authority to implement the action?
- **Environmental** – What are the potential environmental impacts of the action? Will it comply with environmental regulations?
- **Social** – Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?
- **Administrative** – Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
- **Local Champion** – Is there a strong advocate for the action or project among local departments and agencies that will support the action’s implementation?
- **Other Community Objectives** – Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of the comprehensive plan?

Mitigation Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	Total Score
Local Plans and Regulations											
Goal #1: Promote disaster-resistant existing and future development and infrastructure.											
Objective #1: Evaluate and update the general plan and zoning ordinances to further promote resistance to the effects of disasters upon development and infrastructure.											
Update the General Plan and evaluate the effectiveness of the goals that have been developed in the Public Safety Element portion that minimize the risks associated with natural and man-made hazards.	1	1	1	1	1	1	0	1	1	1	9
Review and update FEMA maps regarding flood risk and establish standards based on the 50- and 100-year storm.	1	1	1	0	0	0	0	1	0	0	4
Update databases / Geographic Information System (GIS), with particular attention to maintaining hazard overlay layers and	0	1	1	0	1	0	0	1	0	1	5

SECTION SIX | Develop a Mitigation Strategy

mapping risk for various hazards.											
Objective #2: Encourage and facilitate the adoption of building codes and construction requirements that protect renovated existing assets and new development in hazard areas.											
Observe and apply measures to reduce seismic structural risk through building and construction codes.	1	1	1	1	0	0	0	0	1	1	6
Require a minimum flow of water for fire protection.	1	1	1	0	1	0	0	1	0	0	5
Review and update as necessary codes for building structures in High and Very High Fire Hazard Severity Zones.	1	1	1	1	1	0	0	1	1	1	8
Objective #3: Discourage future development that exacerbates hazardous conditions and protect and restore natural buffers.											
Continue to review the Floodplain, Coastal Bluff, and Hillside/Inland Bluff Overlay Zones when new development is proposed for additional required structural measures.	1	1	1	1	1	1	0	1	1	1	9
Require development projects comply with the California Environmental quality Act (CEQA) and other environment reviews.	1	0	1	1	1	1	0	1	1	1	8
Evaluate and update City's Open Space Management Plan that preserves environmentally significant portions of parcels. Participate in the North County Multiple Habitat Conservation Program.	0	-1	1	1	1	1	0	1	0	1	5
Total Score	7	6	9	6	7	4	0	8	5	7	59
Structure and Infrastructure Projects											
Goal #2: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure due to: GEOLIGICAL HAZARDS, INCLUDING EARTHQUAKE, LIQUEFACTION, AND LANDSLIDES.											

SECTION SIX | Develop a Mitigation Strategy

Objective #1: Develop a comprehensive approach to reducing the possibility of damage and losses due to geologic hazards.

Conduct routine seismic safety surveys/assessments of City facilities to ensure that heavy furniture and equipment are properly secured.	1	1	1	0	1	0	0	1	0	0	5
Work with the Chamber of Commerce and Mainstreet Association representatives to educate business owners about potential safety risks of unreinforced masonry buildings and help to identify low-cost options to retrofit unreinforced masonry buildings.	1	1	1	1	1	0	0	0	0	0	5
Contingent on funding from San Diego Gas and Electric, continue to underground existing overhead electrical lines.	1	1	1	1	1	1	0	0	1	1	8

Objective #2: Protect existing assets with the highest relative vulnerability to the effect of geological hazards.

As funding permits, seismically upgrade (retrofit) or reconstruct Fire Station #1 (originally constructed in 1957) to meet existing building codes.	1	1	1	1	1	0	0	1	1	1	8
As funding permits, rehabilitate South Coast Highway 101 bridge (constructed in 1932).	1	1	0	0	1	1	0	1	1	1	7
Train staff on using rapid visual screening to quickly inspect City facilities and identify damage or potential seismic structural and non-structural weaknesses after an earthquake event.	1	1	1	1	1	0	0	1	1	0	7
Total Score	6	6	5	4	6	2	0	4	4	3	40

Goal #3: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure due to: WILDFIRES/STRUCTURAL FIRES.

SECTION SIX | Develop a Mitigation Strategy

Objective #1: Develop a comprehensive approach to reducing the possibility of damage and losses due to wildfires/structural fires.

Pursue an Insurance Service Organization (ISO) rating of 1 (current rating is 2/2x).	1	1	1	1	1	0	0	0	1	1	7
Update the San Dieguito Water District Master Plan with particular attention to fire system upgrades (i.e. hydrants adequately spaced, sufficient water flow).	1	1	1	0	1	1	0	1	1	1	8
Evaluate existing emergency resources (i.e. brush trucks, water tenders) and, if necessary and funding is available, purchase additional resources.	1	1	1	1	1	0	0	1	1	1	8

Objective #2: Protect existing assets with the highest relative vulnerability to the effects of wildfires/structural fires.

Comply with California Assembly Bill 38 by inspecting, upon request, real properties located in the High and Very High Fire Hazard Severity Zone for compliance with defensible space requirements.	1	1	1	1	1	0	0	0	0	0	5
Support efforts by the special districts to implement mitigation measures (i.e. landscape maintenance, weed abatement, brush removal) necessary to protect treatment and reservoir facilities.	1	1	1	1	0	0	0	0	0	0	4

Objective #3: Coordinate with and support existing efforts by federal, state, local governments, utility providers, and other organizations to mitigate wildfires/structural fires.

Train with other agencies and support efforts to locate additional firefighting aircraft within San Diego County.	1	1	1	0	0	0	0	1	1	1	6
Support San Elijo Lagoon Conservancy and California Conservation	1	1	1	1	0	1	0	0	1	1	7

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Corps efforts to clear non-native vegetation and thin brush near Escondido Creek.											
Work with San Diego Gas and Electric to have a camera and weather station installed in the Olivenhain area.	1	1	1	0	0	0	0	0	0	0	3
Objective #4: Maintain improved wildfire defensible space strategies.											
Provide vegetation management recommendations to developments or homeowners associations bordering open space or in Very High Fire Hazard Severity Zones.	1	1	1	0	1	1	0	0	1	1	7
Enforce City's weed abatement policy.	1	1	1	1	1	0	0	0	1	1	7
Require and maintain setbacks, easements, and accesses that are necessary to assure emergency services can function with available equipment.	1	1	1	1	1	0	0	1	1	0	7
Total Score	11	11	11	7	7	3	0	4	8	7	69
Goal #4: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure due to: FLOODING/DAM FAILURES.											
Objective #1: Develop a comprehensive approach to reducing the possibility of damage and losses due to flooding/dam failures.											
Provide public support by maintaining pumping equipment and vacuum trucks and by providing supplies of sand and sandbags for residents.	1	1	1	1	1	0	0	1	1	1	8
Participate in the National Flood Insurance Program (NFIP) and requirements to review applications for conformance with NFIP standards.	0	1	1	1	1	0	0	1	0	1	6
Establish and implement standards based on the 50- and 100-year storm,	1	1	1	1	1	0	0	1	0	1	7

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for flood control drainage improvements.											
Objective #2: Protect existing assets with the highest relative vulnerability to the effects of flooding/dam failures.											
Complete drainage improvements in conjunction with the North Highway 101 streetscape project.	0	1	1	1	1	1	0	0	1	1	7
Implement comprehensive Leucadia Drainage Project (100-year storm drain system), as funding permits.	0	1	1	1	1	0	0	0	1	1	6
Objective #3: Coordinate with and support existing efforts of local jurisdictions to update the flooding/dam failure plans that affect Encinitas.											
Participate in dam failure tabletop and functional disaster exercises with other local jurisdictions.	1	0	1	0	1	1	0	1	0	0	5
Ensure the City has adequate information from dam owners and California Dam and Safety Board so that areas subject to inundation can be identified.	1	0	1	1	0	0	0	1	0	0	4
Work with County Office of Emergency Services to maintain an early warning system to minimize/mitigate inundation hazards to critical facilities and vulnerable populations.	1	1	1	1	1	0	0	1	1	0	7
Total Score	5	6	8	7	7	2	0	6	4	5	50
Goal #5: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure due to: COASTAL EROSION AND BLUFF FAILURE/STORM SURGE/Tsunami/SEA LEVEL RISE.											
Objective #1: Develop a comprehensive approach to reducing the possibility of damage and losses due to costal erosion/coastal bluff failures/storm surge/tsunami/sea level rise.											
Develop and adopt a comprehensive plan, based on the Beach Bluff Erosion Technical Report and U.S. Army Corps of Engineers shoreline study, to address the	1	1	1	0	0	1	-1	-1	0	1	3

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coastal bluff recession and shoreline erosion problem in the City.											
Support and encourage sand replenishment on Encinitas shoreline.	1	1	1	1	1	1	1	1	1	1	10
Update the coastal hazard map and GIS database of all coastal data, including existing structures, infrastructure, location and size of bluff failures, and sea walls throughout the City.	1	1	1	1	1	1	0	1	0	0	7
Objective #2: Protect existing assets with the highest relative vulnerability to the effects of costal erosion/coastal bluff failures/storm surge/tsunami/sea level rise.											
Develop a long-term plan to protect Highway 101 south of Chesterfield Avenue (including bridge), Manchester Avenue, and sewer pump station from sea level rise, storm surge, and coastal erosion.	1	1	1	1	1	1	0	0	0	1	7
Add storm protection rip-rap on South Coast Highway 101 in Cardiff-by-the-Sea to protect east side of road (adjacent to San Elijo Lagoon).	1	1	-1	-1	-1	-1	0	-1	0	0	-3
Implement mitigation measures to stabilize the bluff and protect Beacon's beach public access, as funding permits.	1	1	1	1	1	0	0	-1	0	0	4
Objective #3: Coordinate with and support existing efforts by federal, state, local governments, utility providers and other organizations to mitigate costal erosion/coastal bluff failures/storm surge/tsunami/sea level rise.											
Work with California Geological Survey, California Governor's Office of Emergency Services, and the National Weather Service to update the tsunami hazard area maps.	1	1	1	0	1	0	0	0	0	0	4
Coordinate with U.S. Army Corps of Engineers	0	1	1	1	1	1	0	1	1	0	7

SECTION SIX | Develop a Mitigation Strategy

to implement a shoreline preservation strategy.											
Identify Federal and State funding to minimize/mitigate hazards to critical facilities and vulnerable population.	1	1	1	0	0	0	0	1	0	0	4
Support regional efforts to model sea level rise, conduct vulnerability and risk assessments, and develop adaptation plans that identify effective accommodation, protection, and retreat strategies.	1	1	1	1	1	0	0	1	1	0	7
Total Score	9	10	8	5	6	4	0	2	3	3	50

Goal #6: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure due to: CLIMATE CHANGE/SEVERE WEATHER , INCLUDING HEAT AND DROUGHT.

Objective #1: Address future conditions resulting from climate change and mitigate future environmental impacts through adaptation strategies and sustainability efforts.

Update the Climate Action Plan every five years consistent with local, regional, and State regulations (City Council Resolution 2020-98).	1	1	1	1	1	1	1	1	1	1	10
Review and update the Environmental Policy (Council Policy C025) every five years and promote environmental management practices throughout all city departments and services.	0	1	1	1	1	1	1	1	1	0	8
Consider options that mandate certain energy efficient construction standards for new construction, as well as options that incentivize the retrofit of existing structures (“Green Building Codes”).	0	0	1	1	1	1	0	1	1	1	7

Objective #2: Develop a comprehensive approach to reducing the possibility of damage and losses due to climate change/severe weather, including heat and drought.

SECTION SIX | Develop a Mitigation Strategy

Participate in National Weather Service StormReady Program.	1	1	1	0	1	0	0	0	0	0	4
Utilize public facilities, including the Community Center and Library, as “cool zone” sites on days when weather conditions are excessively hot.	1	0	1	1	1	0	1	1	1	1	8
Promote water conservation as a means to mitigate future drought conditions (Municipal Code 23.26). Including criteria for drought-related actions and updating of San Dieguito Water District (SDWD) Drought Response Plan.	0	0	1	1	1	1	1	1	1	1	8
Objective #3: Protect existing assets with the highest relative vulnerability to the effects of climate change/severe weather, including heat and drought.											
Continue use of reclaimed water for landscaping at City parks and facilities, where available.	0	0	1	1	1	1	0	1	1	1	7
Ensure that City facilities are equipped with emergency standby generators.	1	1	1	0	1	0	0	1	0	0	5
Implement water efficiency upgrades at municipal buildings, parks, and publicly owned facilities.	0	0	1	1	1	1	0	1	1	1	7
Objective #4: Increase public awareness and knowledge of damages and losses due to climate change through community awareness.											
Provide information on climate change/severe weather and mitigation strategies on the City’s	1	1	1	1	1	0	0	1	1	0	7

SECTION SIX | Develop a Mitigation Strategy

website and vial social media platform.											
Provide outreach materials to residences within the City for water conservation in coordination with the water districts.	0	0	1	1	1	1	1	1	1	1	8
Total Score	5	5	11	9	11	7	5	10	9	7	79

Natural Systems Protection

The City of Encinitas has no mitigation actions related to natural systems protection.

Education and Awareness Programs

Goal #7: Promote public understanding and support for effective hazard mitigation.

Objective #1: Educate the public to increase their awareness of hazards and ways to mitigate damage.

Work with Senior Commission and local care facilities to educate Encinitas seniors and providers about the benefits of mitigation practices.	1	1	1	0	1	0	1	1	0	0	6
Increase awareness among at-risk and special needs population of warning systems used during emergencies.	1	1	1	0	1	0	1	0	0	0	5

Objective #2: Provide public education, outreach, and messaging activities regarding disaster preparedness.

Continue public education efforts to publicize and adopt the appropriate mitigation efforts.	1	1	1	1	1	0	0	1	1	0	7
Provide information on hazards and mitigation strategies on the City's web site and via social media platforms.	1	1	1	1	1	0	0	1	1	0	7
Conduct workshops/seminars that educate residents	0	1	1	1	1	0	0	1	1	0	6

SECTION SIX | Develop a Mitigation Strategy

on the City's top hazards.											
Objective #3: Maintain Community Emergency Response Team (CERT) program.											
Conduct 2 CERT academies per year.	1	1	1	1	1	0	0	1	1	1	8
Include CERT volunteers in disaster exercises.	1	1	1	1	1	0	0	1	1	1	8
Total Score	6	7	7	5	7	0	2	6	5	2	47
Goal #8: Improve hazard mitigation coordination and communication with federal, state, local and tribal governments.											
Objective #1: Establish and maintain close working relationships with state agencies and local governments.											
Maintain partnerships in mitigation and disaster planning.	1	1	1	1	1	0	0	1	0	0	6
Explore opportunities for additional funding through cooperative efforts.	0	0	1	0	0	0	0	1	0	0	2
Objective #2: Improve the City's capability and efficiency at administering pre- and post-disaster mitigation.											
Provide emergency management training opportunities for staff.	1	1	1	1	1	0	0	1	0	0	6
Participate in regional training and exercise programs.	1	1	1	1	1	0	0	1	0	0	6
Total Score	3	3	4	3	3	0	0	4	0	0	20

TABLE 13: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

6.2. Mitigation Action Implementation

For more information on potential funding sources and grants, please see the *County of San Diego Multi-Jurisdictional Hazard Mitigation Base Plan, Section 6.2*. A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan’s mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process. This annex details the following mitigation action implementations:

Jurisdiction:	City of Encinitas Priority Action #1
Hazard Addressed:	ALL HAZARDS
Mitigation Action/Project Title:	Goal #1: Promote disaster-resistant existing and future development and infrastructure. Objective #2: Evaluate and update the general plan and zoning ordinances to further promote resistance to the effects of disasters upon development and infrastructure. Action: <u>Integrate local Hazard Mitigation Plan into Safety Element of General Plan.</u>
Background/Issue:	The City of Encinitas would like to maintain a commitment to hazard mitigation activities and documentation to best serve the community. Each jurisdiction must adopt a local hazard mitigation plan (LHMP) in accordance with the Federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation. The City of Encinitas is part of the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), which was created in 2004, and is updated every 5 years.
Ideas for Integration:	<ul style="list-style-type: none"> • Include other City departments on the planning team when updating the MJHMP. • Updated Safety Element of General Plan to include the MJHMP. • Updated databases/geographic information system (GIS) to identify and maintain hazard overlay layers and mapping risk for various hazards.
Responsible Agency:	Fire Department
Partners:	Other City Departments County Office of Emergency Services California Office of Emergency Services FEMA Public Input
Potential Funding:	General Fund
Cost Estimate:	NONE.
Benefits: (Losses Avoided)	Keeping Encinitas’ plans compliant and strengthening resources in the community to better mitigate disasters. Incorporating the adopted MJHMP into the Safety Element of the General Plan will help the city maximize the cost recovery potential following a disaster and help with obtaining federal grants.
Timeline:	2023-2028 (Ongoing)
Priority:	High
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #2</h3>
Hazard Addressed:	WILDFIRES/STRUCTURAL FIRES
Mitigation Action/Project Title:	<p>Goal #1: Promote disaster-resistant existing and future development and infrastructure. Objective #2: Encourage and facilitate the adoption of building codes and construction requirements that protect renovated existing assets and new development in hazard areas. Action: <u>Review and update as necessary codes for building structures in High and Very High Fire Hazard Severity Zones (VHFHSZ).</u></p>
Background/Issue:	The City of Encinitas would like to maintain a commitment to hazard mitigation activities and documentation to best serve the community. In 2009, the City adopted a map identifying areas in the (VHFHSZ) within the City. Stricter requirements in structure design, landscaping, and fire safety standards were outlined for structures being built in the VHFHSZ.
Ideas for Integration:	<ul style="list-style-type: none"> • Observe and apply measures to reduce structural risk through building and construction codes. • Require a minimum flow of water for fire protection. • Review and update as necessary codes for building structures in VHFHSZ. • Review VHFHSZ map and updated as necessary.
Responsible Agency:	Fire Department
Partners:	Development Services Water Districts Cal FIRE California Building Standards Commission Olivenhain Fire Safe Council
Potential Funding:	General Fund; Enterprise Fund
Cost Estimate:	NONE. Costs would be on developers for upgrades.
Benefits: (Losses Avoided)	Keeping Encinitas' plans compliant and strengthening resources in the community to better mitigate disasters. Reduced risk of loss of life and property from catastrophic wildfire in developed communities within the VHFHSZ.
Timeline:	2023-2028 (Ongoing)
Priority:	Medium
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #3</h3>
Hazard Addressed:	GEOLIGICAL HAZARDS, INCLUDING EARTHQUAKE, LIQUEFACTION, AND LANDSLIDES.
Mitigation Action/Project Title:	<p>Goal #2: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure.</p> <p>Objective #2: Protect existing assets with the highest relative vulnerability to the effect of geological hazards.</p> <p>Action: <u>Rehabilitate the Highway 101 bridge.</u></p>
Background/Issue:	<p>The City of Encinitas is at risk for damage and losses due to geological hazards, including earthquake, liquefaction, and landslides. A Seismic Vulnerability Study was completed, and the report concluded that the bridge (constructed in 1932) is susceptible to failure/collapse during a significant seismic event or tidal influx due to strong storms. Initial submittal request to the State was for replacement of the bridge. The State’s feedback was that the project is eligible for rehabilitation, not replacement. Caltrans also approved for rehabilitation only.</p>
Ideas for Integration:	<ul style="list-style-type: none"> • Initial submittal for replacement of the bridge was approved for rehabilitation. • Submit funding request to State for rehabilitation of bridge.
Responsible Agency:	Engineering Department
Partners:	FEMA State of California Caltrans Consultants
Potential Funding:	General Fund; Grant Funding; State Funding
Cost Estimate:	\$5,000,000
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to geological hazards, including earthquakes.
Timeline:	2023-2024
Priority:	High
Worksheet Completed by:	Leia Cabrera/Engineering Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<p>City of Encinitas Priority Action #4</p>
Hazard Addressed:	<p>WILDFIRES/STRUCTURAL FIRES</p>
Mitigation Action/Project Title:	<p>Goal #3: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure. Objective #1: Develop a comprehensive approach to reducing the possibility of damage and losses due to wildfires/structural fires. Action: Pursue an Insurance Service Organization (ISO) rating of 1 (current rating 2/2x).</p>
Background/Issue:	<p>The City of Encinitas is at risk for damage and losses due to wildfires and structural fires. In 2016, the City obtained a rating from the Insurance Service Organization of 2/2x. Within the analysis was additional information that could help to lower the City’s rating. Obtaining an ISO rating of 1 would help to reduce insurance premiums for property owners.</p>
Ideas for Integration:	<ul style="list-style-type: none"> • Review last ISO analysis and recommendations. • Work with the Insurance Service Organization to update the City’s information. • Obtain required information from other public entities to update data.
Responsible Agency:	Fire Department
Partners:	<p>Development Services San Dieguito Water District Olivenhain Municipal Water District Other Local Entities</p>
Potential Funding:	General Fund for any recommendations to the Department upgrades.
Cost Estimate:	NONE. No costs for ISO analysis.
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to wildfires/structural fires. Reduction in insurance premiums for property owners.
Timeline:	2022-2024
Priority:	High
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #5</h3>
Hazard Addressed:	FLOODING
Mitigation Action/Project Title:	<p>Goal #4: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure.</p> <p>Objective #2: Protect existing assets with the highest relative vulnerability to the effects of flooding.</p> <p>Action: <u>Complete drainage improvements in conjunction with the North Coast Highway 101 streetscape project.</u></p>
Background/Issue:	The coastal community of Leucadia has a chronic history of rainwater flooding. This occurs primarily in the vicinity of its main north-south route of North Coast Highway 101. The City has approved a streetscape project, which includes improvement to the drainage along this corridor.
Ideas for Integration:	<ul style="list-style-type: none"> • Conduct study of North Coast Highway 101 drainage improvements. • Integrate the study into the streetscape project. • Design the streetscape project to include improvements to the drainage areas. • Develop the street scape project.
Responsible Agency:	Engineering Department
Partners:	<p>North County Transit District</p> <p>Contractors</p> <p>Consultants</p> <p>Regulatory Agencies</p>
Potential Funding:	General Fund, Grant Funds
Cost Estimate:	\$40,000,000
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to flooding.
Timeline:	2022-2026
Priority:	High
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #6</h3>
Hazard Addressed:	DAM FAILURES
Mitigation Action/Project Title:	<p>Goal #4: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure.</p> <p>Objective #3: Coordinate with and support existing efforts of local jurisdictions to update and exercise the dam failure plans that affect Encinitas.</p> <p>Action: <u>Participate in dam failure tabletop and functional disaster exercises with other local jurisdictions.</u></p>
Background/Issue:	The City of Encinitas is at risk for damage and losses due to dam failures. There are several dams that in the event of a failure could result in damage to property and structures within the City. It is the responsibility of the dam owners to have an emergency action plan, which is shared and practiced with affected jurisdictions.
Ideas for Integration:	<ul style="list-style-type: none"> • Ensure the City has adequate information from dam owners and the California Dam and Safety Board identifying areas subject to inundation. • Participate in dam failure tabletop and functional disaster exercises with other local jurisdictions. • Work with County Office of Emergency Services to maintain an early warning system to minimize/mitigate inundation hazards to critical facilities and vulnerable populations.
Responsible Agency:	Fire Department
Partners:	County Office of Emergency Services Dam Owners
Potential Funding:	N/A
Cost Estimate:	NONE
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to dam failures. Cooperative training among various allied jurisdictions and stakeholders.
Timeline:	2023-2028 (Ongoing)
Priority:	Medium
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #7</h3>
Hazard Addressed:	COASTAL EROSION/BLUFF FAILURE/STORM SURGE
Mitigation Action/Project Title:	<p>Goal #5: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure.</p> <p>Objective #2: Protect existing assets with the highest relative vulnerability to the effects of coastal erosion/coastal bluff failures/storm surge/tsunami/sea level rise.</p> <p>Action: <u>Implement mitigation measures to stabilize the bluff and protect Beacon’s beach public access, as funding permits.</u></p>
Background/Issue:	The City of Encinitas is at risk for damage and losses due to coastal erosion and bluff failure. Over the years, Beacon’s beach bluff has been slowly eroding due to an unstable historic bluff landslide. Bluff erosion is also increasing due to storm and wave activity. Studies have been made and a design on the parking lot shift from the slope has been completed. The project is now under review by regulatory agencies.
Ideas for Integration:	<ul style="list-style-type: none"> • Receive approval from regulatory agencies for the project to shift the parking lot away from the slop. • Award construction contract for the project. • Complete construction.
Responsible Agency:	Engineering Department
Partners:	Parks and Recreation Department State Parks State Coastal Commission Regulatory Agencies Contractors Consultants
Potential Funding:	General Fund
Cost Estimate:	\$1,500,000
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to coastal erosion and bluff failure. This project will relieve pressure on the slope by moving parking lot.
Timeline:	2022-2024
Priority:	High
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #8</h3>
Hazard Addressed:	CLIMATE CHANGE/SEVERE WEATHER , INCLUDING HEAT AND DROUGHT
Mitigation Action/Project Title:	<p>Goal #6: Reduce the possibility of damage and losses to people, existing assets, and critical facilities/infrastructure.</p> <p>Objective #1: Address future conditions resulting from climate change and mitigate future environmental impacts through adaptation strategies and sustainability efforts.</p> <p>Action: <u>Update the Climate Action Plan</u></p>
Background/Issue:	The City of Encinitas is at risk for damage and losses due to climate change and severe weather, including heat and drought. The City has a Climate Action Plan (CAP) that serves as a guiding document and outlines a course of action for community and municipal operations to reduce greenhouse gas (GHG) emissions and lessen the potential impacts of climate change within the jurisdiction. The CAP is updated every 5 years.
Ideas for Integration:	<ul style="list-style-type: none"> • Review current CAP measures. • Update greenhouse gas emissions inventory. • Work with other Departments to update information/measures. • Incorporate updates with other adopted City plans (i.e. Housing Element, Transportation Plan).
Responsible Agency:	Development Services
Partners:	Other City Departments
Potential Funding:	General Fund
Cost Estimate:	NONE.
Benefits: (Losses Avoided)	Reducing the possibility of damage and losses to existing assets, including people and critical infrastructure, due to climate change and severe weather, including heat and drought.
Timeline:	2022-2024
Priority:	Medium
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #9</h3>
Hazard Addressed:	ALL HAZARDS
Mitigation Action/Project Title:	<p>Goal #7: Promote public understanding and support for effective hazard mitigation.</p> <p>Objective #2: Provide public education, outreach, and messaging activities regarding disaster preparedness.</p> <p>Action: <u>Public Education efforts to publicize and adopt appropriate mitigation efforts and understandings.</u></p>
Background/Issue:	The City of Encinitas has the desire to increase public understanding and support for effective hazard mitigation planning. The City is a participating jurisdiction to the San Diego County Multi-Jurisdictional Hazard Mitigation Plan Update. Each jurisdiction plays a key role in public outreach/education efforts to communicate potential risk and vulnerability in the community to the effects of natural hazards.
Ideas for Integration:	<ul style="list-style-type: none"> • Provide information on hazards and mitigation strategies on the City’s website and via social media platforms. • Conduct workshops/seminars that educate residents on the City’s top hazards in conjunction with the County of San Diego.
Responsible Agency:	Fire Department
Partners:	Other City Departments County Office of Emergency Services Olivenhain Fire Safe Council
Potential Funding:	General Fund
Cost Estimate:	\$10,000
Benefits: (Losses Avoided)	Increase public knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damage.
Timeline:	2023-2028 (Ongoing)
Priority:	Medium
Worksheet Completed by:	Corina Jimenez/Fire Department

SECTION SIX | Develop a Mitigation Strategy

Jurisdiction:	<h2>City of Encinitas</h2> <h3>Priority Action #10</h3>
Hazard Addressed:	ALL HAZARDS
Mitigation Action/Project Title:	<p>Goal #8: Improve hazard mitigation coordination and communication with federal, state, local and tribal governments.</p> <p>Objective #2: Improve the City’s capability and efficiency at administering pre- and post-disaster mitigation.</p> <p>Action: <u>Emergency management preparedness to support emergency incidents.</u></p>
Background/Issue:	It is the responsibility of each City to establish and maintain a comprehensive approach to emergency management to mitigate the effects of hazardous events. Each City has the primary responsibility for preparedness and response activities within its jurisdiction. The City has an emergency operations plan that was updated in 2021 and outlines the City’s response before, during, and after an emergency. In order to comply with the National Incident Management System (NIMS), a EOP should be exercised and evaluated.
Ideas for Integration:	<ul style="list-style-type: none"> • Review and updated City’s Emergency Operations Plan (EOP). • Provide emergency management training opportunities to City staff. • Participate in regional training and exercise programs. • Update Emergency Operations Center (EOC) position checklists. • Update technology in EOC to include additional monitors, portable tablets, and upgraded radios.
Responsible Agency:	Fire Department
Partners:	Other City Departments County Office of Emergency Services
Potential Funding:	General Fund; Grant Funding
Cost Estimate:	\$15,000
Benefits: (Losses Avoided)	Improve hazard mitigation coordination and communication with federal, state, local and tribal governments. Realistic training for City staff. Cooperative training among other jurisdictions. More effective response saves lives and reduces property damage.
Timeline:	2023-2028 (Ongoing)
Priority:	Medium
Worksheet Completed by:	Corina Jimenez/Fire Department

7. SECTION SEVEN: Keep the Plan Current

Hazard Mitigation Plan maintenance is the process the planning team establishes to track the plan's implementation progress and to inform the plan update. The plan must include a description of the method and schedule for monitoring, evaluating, and updating it within a 5-year cycle. These procedures help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program in your community.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into community officials' daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

Hazard Mitigation Plan updates provide the opportunity to consider how well the procedures established in the previously approved plan worked and revise them as needed. This annex is part of the most recent *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* update. The plan was last updated in 2018. See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* for more information.

This section of the 2023 Plan describes the formal process that will ensure the Plan remains an active and relevant document. The Plan maintenance process includes a schedule for monitoring and evaluating the Plan annually and producing a Plan revision every five years. This section describes how the jurisdiction will integrate public participation throughout the plan maintenance process.

7.1. Mitigation Action Progress

Plan monitoring means tracking the implementation of the Plan over time. The Plan must identify how, when, and by whom the plan will be monitored.

This version of the Multi-Jurisdictional Hazard Mitigation Plan was revised over the past five years to reflect changes in development, progress in local mitigation efforts, and changes in priorities. Generally, hazard priorities remained unchanged, though some hazards' (such as Climate Change, Drought, and Extreme Heat) prevalence and/or probability of occurrence increased and, therefore, needed an updated Vulnerability Assessment.

All Hazard Profiles were researched for more modern content, data, and details.

This Plan's Goals, Objectives, and Actions were updated from the last version to reflect current priorities within existing plans such as the City's General Plan Safety Element.

SECTION SEVEN | Keep the Plan Current

The 2020 COVID-19 Pandemic negatively affected overall progress on the 2018 plan and actions' progress, but did not negatively impact the community's vulnerability because the plan was created in tandem with existing local plans/procedures and thus aided in local government responses and actions to keep communities and assets safe.

Below are progress reports for the ten priority mitigation actions listed in the 2018 Plan:

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #1: Beacon's Beach Bluff Stabilization.	
Responsible Department	Engineering Department	
Contact Name	Matt Widelski	
Contact Phone/Email	760-633-2867 mwidelski@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● Project completed ● Project canceled ● Project on schedule ● Anticipated completion date: <u>Fall 2023</u> ● Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Native Planting on the bluff was completed.**
- **Design began on project to shift parking away from slope hinge to reduce pressure on slope.**

2. What obstacles, problems, or delays did the project encounter?

- **Parking Shift project encountered some negative feedback from the community due to the reduction in parking spaces.**
- **Project requires coordination and approval from State Parks and State Coastal Commission.**
- **In May 2022, portion of the bluff collapsed and resulted in temporary closure of beach access.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **Yes, project is still relevant.**
- **No, project should not be revised.**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #2: Highway 101 Bridge Replacement Rehabilitation	
Responsible Department	Engineering Department	
Contact Name	Leia Cabrera	
Contact Phone/Email	760-633-2775 lcabrera@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● Project completed ● Project canceled ● Project on schedule ● Anticipated completion date: _____ ● Project delayed Explain <u>Replacement to Rehabilitation</u> 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?
 - City submitted a funding request to the State to replace this bridge.
 - State feedback was that this project is eligible for rehabilitation instead of replacement.

2. What obstacles, problems, or delays did the project encounter?
 - Caltrans approved a rehabilitation instead of replacement.
 - State funding has not yet been obligated.

3. If uncompleted, is the project still relevant? Should the project be changed or revised?
 - Yes, project is still relevant.
 - Project changed to rehabilitation of bridge.

4. Other comments
 - N/A

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #3: Coastal Storm Damage Reduction (Beach Nourishment)	
Responsible Department	Development Services Department	
Contact Name	Todd Mierau	
Contact Phone/Email	760-633-2693 tmierau@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> <input type="radio"/> Project completed <input type="radio"/> Project canceled <input checked="" type="radio"/> Project on schedule <input checked="" type="radio"/> Anticipated completion date: <u>By end of Spring early Summer of 2023 for first nourishment. Renourishments will take place every five years over the next 50 years.</u> <input type="radio"/> Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Pre-construction planning, pre-construction monitoring, and pre-construction coordination between the stakeholders partied to the project.**
- **A draft Project Partnership Agreement (PPA) has been created for review and approval by all stakeholders.**

2. What obstacles, problems, or delays did the project encounter?

- **Working through the Project Partnership Agreement (PPA) with all parties involved.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **Project is in the monitoring phase of pre-construction.**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #4: Moonlight Beach Marine Safety Center Reconstruction	
Responsible Department	Engineering Department; Fire and Marine Safety Department	
Contact Name	Corina Jimenez	
Contact Phone/Email	760-633-2806 cjimen@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● Project completed ● Project canceled ● Project on schedule ● Anticipated completion date: _____ ● Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Rebuilt the Marine Safety Headquarters, which replaced the existing +55-year-old building.**

2. What obstacles, problems, or delays did the project encounter?

- **There were many change orders and delays due to winter storms of 2017.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **N/A**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #5: Cottonwood Creek Outfall Replacement	
Responsible Department	Engineering Department	
Contact Name	Matt Widelski	
Contact Phone/Email	760-633-2862 mwidelski@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● Project completed ● <u>Project canceled</u> ● Project on schedule ● Anticipated completion date: <u>Ongoing</u> ● Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?
 - **A design has been completed to line these CMP to extend their useful life.**
 - **City sought and received funding from the State for this lining project.**
2. What obstacles, problems, or delays did the project encounter?
 - **Permitting and coordination with other municipality and agencies.**
3. If uncompleted, is the project still relevant? Should the project be changed or revised?
 - **Project is still relevant.**
 - **Project may be revised to show lining of the CMP.**
4. Other comments
 - **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #6: El Camino Channel Drainage Improvement	
Responsible Department	Engineering Department	
Contact Name	Matt Widelski	
Contact Phone/Email	760-633-2862 mwidelski@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> <input type="radio"/> Project completed <input type="radio"/> Project canceled <input checked="" type="radio"/> Project on schedule <input checked="" type="radio"/> Anticipated completion date: February 2022 _____ <input type="radio"/> Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Project was completed.**
- **Working on final agency approval of mitigation.**

2. What obstacles, problems, or delays did the project encounter?

- **Need to complete Jurisdictional Delineation Report for ACOE.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **Project work is complete, reporting is wrapping up.**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #7: Upgrade to Next Generation Regional Communication System (RCS)	
Responsible Department	City Manager's Office; Fire and Marine Safety Department	
Contact Name	Corina Jimenez	
Contact Phone/Email	760-633-2806 cjimen@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● Project completed ● Project canceled ● Project on schedule ● Anticipated completion date: <u>Ongoing</u> ● Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **All existing 800 MHz radios within the City were replaced with compatible radios to the upgraded regional communication system.**

2. What obstacles, problems, or delays did the project encounter?

- **Due to the high cost of replacing all the radios at one time, the purchase of the replacement radios was spread over a 5-year period.**
- **Secured grant funds to offset some of the cost of the radio replacements over the 5-year period.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **N/A**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #8: Climate Action Plan Measure Review & Update	
Responsible Department	Development Services Department	
Contact Name	Crystal Najera	
Contact Phone/Email	760-943-2285 cnajera@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> ● <u>Project completed</u> ● Project canceled ● Project on schedule ● Anticipated completion date: _____ ● Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- The City updates its Climate Action Plan (CAP) every 5 years, which includes measure review and update.
- The City’s CAP was updated and adopted by Council in January 2018.
- This was a major update of the CAP including development of a greenhouse gas emissions inventory and projection, establishment of 2020 and 2030 emissions reduction targets, and establishment of CAP Measures aimed at reducing greenhouse gas emissions.
- In 2020, the City completed an interim update to ensure that the CAP was consistent with the recently adopted Housing Element and Active Transportation Plan.
- Another 5-year update was initiated in May 2022 and is anticipated to be complete in late 2023.

2. What obstacles, problems, or delays did the project encounter?

- **None.**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **This s an ongoing project. The CAP will continually be updated every 5 years.**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #9: Leucadia 100 Year Storm Drainage System Improvements	
Responsible Department	Engineering Department	
Contact Name	Matt Widelski	
Contact Phone/Email	760-633-2862 mwidelski@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> <input type="radio"/> Project completed <input type="radio"/> Project canceled <input checked="" type="radio"/> Project on schedule <input checked="" type="radio"/> Anticipated completion date: <u>TBD depending on funding</u> <input type="radio"/> Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Completed drainage design for 60” pipe on North Coast Highway 101.**
- **Completed drainage concept plan for Vulcan Avenue.**
- **Requested funding for the northern portion of North Coast Highway 101 drainage improvements.**

2. What obstacles, problems, or delays did the project encounter?

- **Funding challenges (~\$50M).**

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **Yes, project is still relevant.**
- **No, the project shouldn’t be changed.**

4. Other comments

- **N/A**

Mitigation Action Progress Report Form

Progress Report Period	From Date: October 2018	To Date: March 2022
Action/Project Title	Priority Action #10: Cardiff-by-the-Sea Dune Restoration Project	
Responsible Department	Development Services Department	
Contact Name	Todd Mierau	
Contact Phone/Email	760-633-2693 tmierau@encinitasca.gov	
Project Status	<ul style="list-style-type: none"> <input type="radio"/> Project completed <input type="radio"/> Project canceled <input checked="" type="radio"/> Project on schedule <input checked="" type="radio"/> Anticipated completion date: <u>Project is constructed and in fourth year of monitoring.</u> <input type="radio"/> Project delayed Explain _____ 	

Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

- **Monitoring of the dune system has occurred for this reporting period. This includes visual monitoring of the dune system, biological monitoring of the dune biology, ecology, associated native species and the conservation measures identified for the project.**

2. What obstacles, problems, or delays did the project encounter?

- N/A

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

- **Project is constructed. Project has been in monitoring phase for past four years.**

4. Other comments

- N/A

7.2. Plan Update Evaluation

Plan Section	Considerations	Explanation
Planning Process	Should new jurisdictions and/or districts be invited to participate in future plan updates?	Yes, as new businesses and/or community sector organizations form during the next project period.
	Have any internal or external agencies been invaluable to the mitigation strategy?	County of San Diego Office of Emergency Services (OES) has provided great detail on how to update the plan and keep on track.
	Can any procedures (e.g., meeting announcements, plan updates) be done differently or more efficiently?	Continue to conduct meetings virtually. Annex template given out earlier in the timeline.
	Has the Planning Team undertaken any public outreach activities?	Posted survey provided by County OES on social media sites.
	How can public participation be improved?	Provide survey earlier in the process.
	Have there been any changes in public support and/or decision-maker priorities related to hazard mitigation?	None at this time.
Capability Assessment	Have jurisdictions adopted new policies, plans, regulations, or reports that could be incorporated into this plan?	City completed an extensive update to the Emergency Operations Plan and Olivenhain Evacuation Plan.
	Are there different or additional administrative, human, technical, and financial resources available for mitigation planning?	None at this time.
	Are there different or new education and outreach programs and resources available for mitigation activities?	No. Continue to use County OES as a resource for materials and the Community Emergency Response Team (CERT) to provide education and outreach to the community.
	Has NFIP participation changed in the participating jurisdictions?	No.
Risk Assessment	Has a natural and/or technical or human-caused disaster occurred?	Yes. The City continues to experience bluff failures along our coastline. In 2019, a bluff failure occurred killing three women. Also, COVID-19, a worldwide pandemic, affected the community of Encinitas.
	Should the list of hazards addressed in the plan be modified?	All hazards listed in this plan have been addressed and goals have been modified to address the need.

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	Are there new data sources and/or additional maps and studies available? If so, what are they and what have they revealed? Should the information be incorporated into future plan updates?	Nothing new. The maintenance and updates of GIS database is ongoing.
	Do any new critical facilities or infrastructure need to be added to the asset lists?	None at this time.
	Have any changes in development trends occurred that could create additional risks?	None at this time.
	Are there repetitive losses and/or severe repetitive losses to document?	Yes. 1-Residential According to the 2022 FEMA Repetitive Loss Summary Report, the City of Encinitas has 1 Repetitive Loss residential property, and no Severe Repetitive Loss properties.

TABLE 14: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 7.2 DATA.

Plan Section	Considerations	Explanation
Mitigation Strategy	Is the mitigation strategy being implemented as anticipated? Were the cost and timeline estimates accurate?	Mitigation strategies are implemented as needed when funding becomes available.
	Should new mitigation actions be added to the Action Plan? Should existing mitigation actions be revised or eliminated from the plan?	Mitigation actions were updated for the 2022 plan and will be updated in the next version.
	Are there new obstacles that were not anticipated in the plan that will need to be considered in the next plan update?	None at this time.
	Are there new funding sources to consider?	Grants
	Have elements of the plan been incorporated into other planning mechanisms?	Yes
Plan Maintenance Procedures	Was the plan monitored and evaluated as anticipated?	Yes
	What are needed improvements to the procedures?	None at this time.

TABLE 15: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 7.2 DATA CONTINUED.

7.3. Plan Maintenance, Monitoring, Evaluation, & Updates

Hazard Mitigation Plan maintenance is the process the Planning Team establishes to track the plan's implementation progress and to inform the plan update. The plan must include a description of the method and schedule for monitoring, evaluating, and updating it within a 5-year cycle. These procedures help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program in your community.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into community officials' daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

7.3.1. Plan Monitoring

Plan monitoring means tracking the implementation of the plan over time. The plan must identify how, when, and by whom the plan will be monitored.

The Hazard Mitigation Planning Group (HMPG) participants listed in Section 2 of this plan will be responsible for monitoring the plan annually for updates to jurisdictional goals, objectives, and action items. If needed, these participants will coordinate through the Fire Department and County Office of Emergency Services (OES) to integrate these updates into the plan. The plan will be monitored annually for updates.

Status of this plan's Mitigation Goals, Objectives, and Actions are tracked annually by County OES via a five-year cycle project plan and charter created by County OES. Every year, County OES will ask planning participants named in Section 2 of this plan to report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and strategies that should be revised.

7.3.2. Plan Evaluation

The plan is evaluated by the County Office of Emergency Services (County OES) and by each participating jurisdiction annually to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. This includes re-evaluation by Hazard Mitigation Planning Group (HMPG) leads (or their select jurisdictional representative) based upon the initial STAPLEE criteria used to draft goals, objectives, and action items for each jurisdiction. County OES and city representatives also review the goals and action items to determine their relevance to changing situations in the county, as well as changes in State or Federal regulations and policy.

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County OES and jurisdictional representatives review the risk assessment portion of the plan to determine if this information should be updated or modified, given any new available data. The coordinating organizations responsible for the various action items will report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised.

Any updates or changes necessary will be forwarded by planning participants to County OES for inclusion in further updates to the plan. The HMPG and each Local Mitigation Planning Team meet annually to discuss the status of this Plan.

7.3.3. Plan Updates

Since this plan's original adoption in 2005, the Hazard Mitigation Planning Group (HMPG) has participated in an annual review. This process was continued after the adoption of the 2010 plan. The review details all mitigation actions that were deferred, begun, continued, or completed during that calendar year. In the past five years, there has been considerable progress made with the successful completion of most action items developed by the participating jurisdictions. Section 7.1 details the status of the action items from the 2018 plan.

This review process has been effective in identifying gaps and shortfalls in funding, support, and other resources. It has also allowed for the re-prioritization of specific actions as circumstances change. It allows each participating jurisdiction to maintain the plan as a living document. This review process has enabled the HMPG to improve the document by eliminating actions that have been completed, adding new actions that have been identified since the plan's adoption and reprioritizing other actions to reflect new priorities and/or constraints. The negative side of this review process is that it is time consuming, pulling staff away from their day-to-day responsibilities.

The County Office of Emergency Services (County OES) will continue to be the responsible agency for updates to the plan, and responsible for monitoring the plan for updates on an annual basis. All HMPG participants will continue to be responsible to provide County OES with jurisdictional-level updates to the plan annually or when/if necessary, as described above.

Status of this plan's Mitigation Goals, Objectives, and Actions are tracked annually by County OES via a five-year cycle project plan and charter created by County OES. Every year, County OES will ask planning participants named in Section 2 of this plan to report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and strategies that should be revised.

Every five years, the plan will be updated and submitted to existing authorities outlined in Section 1 of this plan and Cal OES and FEMA for review.

7.3.4. Implementation Through Existing Programs and Other Planning Mechanisms

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County and local jurisdictions have implemented many of the recommended action items through existing programs and procedures. Participants use this plan as a baseline of information on the natural hazards impacting their jurisdictions. They have also been able to refer to existing institutions, plans, policies, and ordinances defined for each jurisdiction (e.g., General Plan, Comprehensive Plan). Participants are incorporating past and current Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) into their General Plans and/or Comprehensive Plans as those plans require review and revision.

As described in this plan’s capability assessment, the City already implements policies and programs to reduce losses of life and property from hazards. This plan builds upon the momentum developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through these other program mechanisms. The following existing mechanisms include:

Existing Plan/Programs	Integration
Encinitas General Plan & Safety Element -2022	<p>This specific update of the plan required incorporation of updates into the City’s Safety Element (lead by Development Services) to demonstrate progress of local hazard mitigation efforts. Plan leads met as needed to collaborate on cohesive updates.</p> <p>The MJHMP update reflects changes to the hazards facing Encinitas and the programs that have been put in place to help minimize or eliminate these hazards. A key function of the Safety Element is the integration of the MJHMP updates to ensure compliance with the California Government Code.</p>
Encinitas Emergency Operations Plan - 2022	Hazard information from the MJHMP update was incorporated into the 2022 City of Encinitas Emergency Operations Plan (EOP) update. All high significance hazards identified in the MJHMP update were addressed in the 2022 EOP update.
Encinitas Climate Action Plan – 2020	The Climate Action Plan incorporates and references data from the MJHMP “Summary of Potential Hazard-Related Exposure/Loss in Encinitas” table into its Section 5.1 – Climate Change Effects and Vulnerability Assessment.
Olivenhain Evacuation Plan – 2021	The designated hazard area in the evacuation plan references the Very High Fire Hazard Severity Zone from the Risk Assessment of the MJHMP.
Capital Improvement Plans and Budgets	Capital Improvement Plan projects will identify hazards referenced in the MJHMP when appropriate.
Public Information and Outreach/Communication Plans	The City’s ongoing public education and outreach efforts should reflect the hazards and vulnerabilities described in this Plan

HMPG members involved in these other planning mechanisms will be responsible for integrating the findings and recommendations of this MJHMP with these other plans, programs, etc., as

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appropriate. As described in this section, incorporation into existing planning mechanisms will be done through the routine action of:

- Monitoring other planning/program agendas.
- Attending other planning/program meetings.
- Participating in other planning processes.
- Monitoring community budget meetings for other community program opportunities.

7.3.5. Response Plans

Several other operational or functional response plans are also influenced by information contained in this plan. These plans include but are not limited to:

General Plan, Safety Element and Emergency Operations Plan, County Emergency Operations Plan Annex Q – Evacuation: A review of the vulnerability and estimated losses detailed in the hazard profiles can help identify evacuation routes and locations, and their capacity, safety, and viability in different emergency scenarios.

These plans inform this plan by helping the Planning Group evaluate the impacts of multiple or cascading hazards, so that evacuees are not relocated into an area that puts them at risk from other hazards.

7.3.6. Continued Public Involvement

The 2018 plan was posted on the Hazard Mitigation page of the San Diego County Office of Emergency Services (County OES) and the City of Encinitas webpage, and the public has always been encouraged to comment on the plan online. Once approved, this revised plan will be posted on the Hazard Mitigation webpage of the County OES and City of Encinitas website.

The participating jurisdictions and special districts continue to be dedicated to involving the public directly in the review process and updates of the plan. A maintenance committee made up of a representative from County OES and a representative from each participating jurisdiction is responsible for monitoring, evaluating, and updating the plan as described above. During all phases of plan maintenance, the public will have the opportunity to provide feedback.

A press release requesting public comments is also issued for each update, and after each evaluation. County OES and the City of Encinitas also uses social media (Facebook, Twitter, etc.) to notify the public of any changes they should be aware of. These notifications direct people to the Hazard Mitigation webpage, where the public can review proposed changes.

County OES will continue to be responsible for publicizing any changes to the plan and maintaining public involvement.