Santee
CALIFORNIA

City of Santee

Hazard Mitigation Plan 2023

Section One: Determine the Planning Area and Resources

1.1 Planning Area: City of Santee

"Sunny climate, good schools, small-town friendliness"—Santee prides itself on having a lean government that responds to its community's' concerns. Collectively, these are among the key attributes of the city. Santee is ideally located between the Pacific Ocean and the mountains of the Cleveland National Forest, and had a population of 60, 037 people in 2020. While Santee is considered part of the East County Region, the city is only 18 freeway miles from San Diego's premier beaches. Santee is connected to the coastline by State Route 52, a six-lane freeway that connects Interstate 5 in La Jolla to State Route 67. State Route 125 also intersects with State Route 52, forming a transportation hub in the heart of Santee. Since the expansion of the San Diego Trolley, Santee community members can ride the Trolley to Mission Valley, Downtown San Diego and as far as the U.S./Mexico Border.

Santee lies 18 miles northeast of Downtown San Diego and is bordered on the east and west by slopes and rugged mountains. The San Diego River runs through this community, which was once a dairy farming area. It is now a residential area that has experienced phenomenal growth since the 1970's.

Water services are provided by Padre Dam Municipal Water District. The Santee School District and Grossmont Union High School District oversee K-12 grade education. Elementary and middle school students attend one of the nine available schools, while high school students attend Santana or West Hills High School. Higher education facilities include San Diego Christian College, a 4-year private accredited college located in Town Center. Nearby are San Diego State University and Grossmont Community College. [1] [2]

1.2 Development Over Time

The City of Santee experienced a population increase of 2,000 people (3.3%) since the implementation of the 2018 Hazard Mitigation Plan. With the population change, the Local Planning Group (LPG) identified an increase in vulnerability to our jurisdiction since the previous plan was approved. The LPG considered the changes to community development and adjusted the goals, objectives, actions/priority action within this plan to meet the needs of the community.

The City also completed several community park projects, which included Weston and Mast Park. The City is currently finalizing the creation of a Joint Powers Agreement (JPA) with Lakeside Fire Protect District to improve emergency medical services delivery. The City also funded for the development of a comprehensive long-range plan for fire and emergency services, which will be completed in early 2023. These solutions are expected to help prevent an increase of community hazard vulnerabilities

[1] https://www.cityofsanteeca.gov/our-city/about-santee-new

[2] https://www.santeesd.net/schools/district_school_sites

1.3 Plan Integration and Implementation

The City of Santee continually integrates the Safety and Land Use Elements of the City's General Plan into this Local Hazard Mitigation Plan, including prioritized hazards and actions. After this annex was approved then adopted in 2018, members of the Local Planning Group (LPG) conducted annual assessments that included review of data, adoption of codes, and status of the plan's priorities, goals, objectives, and actions. The process of tracking this long-term integration plan was documented and discussed by members of the LPG, then disseminated through the appropriate department directors or their representatives.

Upon approval and adoption of this plan version, the Local Planning Team will continue to collaborate with other City Department representatives to assist with this plan's informing of and implementation into the City's departmental priorities reflected in this plan's goals, objectives, and actions (such as fire mitigation activities and public outreach/education). Additionally, this plan will also be used to inform the next update of the City's General Plan, especially related to the Safety Element (which has purpose to reduce loss of life, injuries, and damage resulting from natural and human-caused public safety hazards) and the Land Use Element (which is intended to guide the ultimate pattern of development in the community, specifies location/type/amount of housing/commercial services/industrial uses/parks/public facilities/open space that will comprise the City at buildout. [3] [4]

1.4 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. **The City of Santee is an NFIP Participant and has 1 repetitive loss nonresidential property. See Table 14 in the San Diego County's Base Plan.**

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

National Flood Insurance Program (NFIP)

The City of Santee is a participant in FEMA's National Flood Insurance Program (NFIP) (Since 1982). This program provides flood insurance for structures located within the floodplain areas in the city and as designated by FEMA. Santee manages the permitting of any proposed developments and improvements within the floodplain areas per the FEMA guidelines and requirements, State of California Department of Water Resources Model Floodplain Management Ordinance, and keeps up to date copies of the Flood Insurance Rate Maps (FIRM). These maps are used to assist constituents in answering their questions regarding the 100-year flood elevations and boundaries within the floodplain areas. Any proposed changes to these maps are processed by the City through FEMA.

[3] https://www.cityofsanteeca.gov/services/development-services/planning-and-zoning-services/general-plan

[4] https://www.cityofsanteeca.gov/home/showpublisheddocument/7191/636336569667170000

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	Total premium + Federal Policy Fee of $34,525 *60 policies with a total coverage of $18,095,000 *as of 2023
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	*1 claim totaling $36,556.64 *as of 2010
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	It is unknown the total number of structures in the SFHA.
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	The City is not aware of any areas with limited NFIP policy coverage.
Repetitive Loss Properties Identified by the County of San Diego	2022 FEMA Repetitive Loss Summary Report	Santee has 1 Repetitive Loss property (non-residential)
Staff Resources		
Is the Community FPA or NFIP Coordinator certified?	Community FPA	No
Is floodplain management an auxiliary function?	Community FPA	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	Permit Review, GIS, MT-1 and MT-2 support

What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	N/A
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)?		August 10, 2010
Is a CAV or CAC scheduled or needed?		No

TABLE 1: 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 Report https://www.fema.gov/cis/CA.html	9/7/1982
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	Exceeds, City requires 1' freeboard for development in the SFHA and requires any drainage modeling of the San Diego River to use a base flood of 45,000 CFS.
Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP	Development permits are reviewed by the Department of Development Services to verify whether or not project is within the FEMA SFHA. Additional conditions of approval and/or building permits requirements are added
	Flood Insurance Manual http://www.fema.gov/	

	flood-insurance-manual	as needed
	Community FPA, FEMA CRS Coordinator, ISO representative	

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 2: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA CONTINUED.

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 is 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.

Table 1

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)

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

Section Two: Build the Planning Team

2.1 Planning Participants and Process

The planning process began in the summer months of 2021 and concluded June of 2022 with the coordination of monthly team meetings for select individuals tasked with updating the City of Santee's Hazard Mitigation Plan. In addition to internal meetings, representatives from the Local Planning Group (LPG) attended monthly meetings hosted by the County of San Diego Office of Emergency Services (County OES) personnel. One-on-one meetings with San Diego County OES staff were coordinated as needed throughout the updating process. The LPG primarily focused on reviewing the current Hazard Mitigation Plan and assessing the needs for the proposed Hazard Mitigation Plan. The Santee LPG members included:

- Justin Matsushita, Deputy Fire Chief – Operations/Emergency Manager
- John Garlow, Fire Chief
- Dustyn Garhartt, Fire Captain/Emergency Management Assistant
- DeVerna Rogers, Planning Chief
- Steve Miller, Senior Civil Engineer
- Carl Schmitz, Principal Civil Engineer
- Sam Rensberry, Public Services Manager
- Matt Hermeyer**,** IT Analyst

Once this plan was developed, City staff submitted the plan to Cal OES and FEMA for approval. Once approved, City staff will present the plan to the Santee City Council for adoption.

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.

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 Existing Institutions, Plans, Policies, and Ordinances

The following is a summary of existing departments in Santee and their responsibilities related to hazard mitigation planning and implementation, as well as existing planning documents and regulations related to mitigation efforts within the community (Table 2). The administrative and technical capabilities of Santee, as shown in the table below, provides an identification of the staff, personnel, and department resources available to implement the actions identified in the mitigation section of the Plan.

Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land development and land management practices, engineers trained in construction practices related to building and infrastructure, planners, and engineers with an understanding of natural or manmade hazards, floodplain managers, surveyors, personnel with GIS skills, and scientists familiar with hazards in the community.

Table 2

City of Santee Department Breakdown				
Fire	**Planning/Building**	**Engineering**	**Public Services**	**County Sheriff**
- Administration	- General Plan	- Flooding	- Flood control	- Enforcement
- Fire prevention	-Zoning ordinances	- Grading	- Infrastructure maintenance	- Investigation
- Emergency medical services	- Development standards	- Geotechnical review	- Emergency response	- Security
- Suppression	- Building codes	- Transportation	- Traffic control	- Traffic control
- Code enforcement	- Development review process	- Structural evaluation		- Emergency response
- Emergency management	- Structure evaluation			

4.2 Capabilities Assessment

The Local Planning Group (LPG) identified current capabilities available for implementing hazard mitigation activities. The Capability Assessment (Assessment) portion of the jurisdictional mitigation plan identifies administrative, technical, legal, and fiscal capabilities. This includes a summary of departments and their responsibilities associated with hazard mitigation planning, as well as codes, ordinances, and plans already in place. The second part of the Assessment provides Santee's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items.

To expand and enhance all capabilities, the City of Santee staff shall continuously engage in evaluating existing plans, policies, ordinances, and programs to ensure they align with the current mitigation needs of the jurisdiction. The City should also continue to research and apply to local, state, and federal grants as appropriate to fund staff, resources (e.g., technology), and programs (e.g., community outreach and education) that reduce the planning area population's vulnerability to hazards and their effects.

Table 3

City of Santee: Administrative & Technical Capacity		
Staff/Personnel Resource	**Y/N**	**Department/Agency and Position**
A. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Development Services staff
B. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Development Services staff
C. Planners/Engineer(s) with an understanding of natural and/or manmade hazards	Y	Development Services staff
D. Floodplain manager	Y	Development Services – City Engineer
E. Surveyors	Y	Development Services – Consultant staff
F. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Fire staff, Development Services, Community Services
G. Personnel skilled in GIS and/or HAZUS	Y	Development Services and IT staff (GIS support)
H. Scientists familiar with community hazards	Y	Fire staff and Development Services staff
I. Emergency manager	Y	Fire staff
J. Grant writers	Y	Development Services, Community Services, Fire
K. Staff with FEMA Integrated Emergency Management training	Y	Fire staff and Development Services staff
How can these capabilities be expanded and improved to reduce risk?		
The City of Santee continuously experiences staff turnover and shifting of responsibilities within the organization. Providing relevant and recurring training to staff involved in our Emergency Operations Center would decrease our vulnerabilities and enhance the services our staff provides.		

The legal and regulatory capabilities of Santee are shown in Table 4, which presents the existing ordinances and codes that affect the physical or built environment of Santee. Examples of legal and/or regulatory capabilities can include: The City's building codes, zoning ordinances, subdivision ordnances, special purpose ordinances, growth management ordinances, site plan review, general plans, capital improvement plans, economic development plans, emergency response plans, and real estate disclosure plans.

Other jurisdictions involved in the planning process include:

- San Diego County
- San Diego Gas & Electric
- Padre Dam Municipal Water District
- San Diego River Conservancy
- Heartland Fire & Rescue
- Gillespie Field
- Marine Corps Air Station Miramar

Table 4

City of Santee: Legal & Regulatory Capabilities		
Regulatory Tools (ordinances, codes, plans)	**Local Authority (Y/N)**	**Does State Prohibit (Y/N)**
A. Building code	Y	N
B. Zoning ordinance	Y	N
C. Subdivision ordinance or regulations	Y	N
D. Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Y	N
E. Growth management ordinances (also called "smart growth" or anti-sprawl programs)	Y	N
F. Site plan review requirements	Y	N
G. General or comprehensive plan	Y	N
H. A capital improvements plan	Y	N
I. An economic development plan	Y	N
J. An emergency response plan	Y	N
K. A post-disaster recovery plan	Y	N
L. A post-disaster recovery ordinance	Y	N
M. Real estate disclosure requirements	Y	N
How can these capabilities be expanded and improved to reduce risk?		
Involvement of personnel from multiple departments in the reviewing and updating of existing policies, plans, and procedures will increase familiarity and enhance operational services within our city and surrounding jurisdictions.		

Table 5 shows specific financial and budgetary tools available to Santee, such as community development block grants; capital improvements project funding; authority to levy taxes for specific purposes; fees for water, sewer, gas, or electric services; impact fees for homebuyers or developers for new development; ability to incur debt through general obligations bonds, and withholding spending in hazard-prone areas.

Table 5

City of Santee: Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use (Yes/No)**
A. Community Development Block Grants (CDBG)	Yes, in qualified areas
B. Capital improvements project funding	Yes
C. Authority to levy taxes for specific purposes	Yes – with voter approval
D. Fees for water, sewer, gas, or electric service	No
E. Impact fees for homebuyers or developers for new developments/homes	Yes
F. Incur debt through general obligation bonds	Yes – with voter approval
G. Incur debt through special tax and revenue bonds	Yes – voter approval required in most instances
H. Incur debt through private activity bonds	Yes
I. Withhold spending in hazard-prone areas	Yes
How can these capabilities be expanded and improved to reduce risk?	
Improved staffing levels to take advantage of access to consultants and to increase capacity to consider, create, submit, and implement grant funded programs. This may include a position dedicated to grant submission and management for the City of Santee.	

Table 5.1 identifies education, outreach programs, and methods already in place that could be used to implement mitigation activities and communicate hazard-related information:

Table 5.1

City Of Santee: Education and Outreach Capability	
Program/Organization	**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.	The City of Santee has partnered with and provided ongoing training for East County CERT for over 15 years. The City of Santee has been assisting with the onboarding of the CERT program, which is utilized in 3 additional surrounding jurisdictions.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	The City of Santee has several community educational programs in many of its department. Our Communication Outreach & Risk Reduction team is designed to lead our public related to many topics benefiting our citizens health, safety and security. Those programs cover a range of community education topics from community CPR, brush abatement and large-scale emergency preparedness.
Natural disaster or safety related school programs	Both our Fire and local Law Enforcement have several safety programs for local schools, that focus on drug and alcohol prevention, fire prevention, and educational outreach to public schools.
Fire Prevention Programs	Santee is currently involved in a youth fire starters program offers information and free resources to help families with resources need to prevent intentional and accidental fires.
Public-private partnership initiatives addressing disaster-related issues	Continued coordination and partnership developments for disaster response and mitigation is primarily focused through our Fire Department. They have established relationships with multiple non-profit relief agencies such as the Red Cross. Planning and coordination with private industry to include San Diego Gas and Electric's Community Fire Safety Programs.
How can these capabilities be expanded and improved to reduce risk?	
Based on the capability assessment, the City of Santee has existing regulatory, administrative/technical, fiscal mechanisms in place that help to mitigate hazards. In addition to these existing capabilities, there are opportunities for the City to expand or improve on these policies and programs to further protect the community. The City can also expand their outreach capabilities related to hazard mitigation plans. Specific enhancements may include continued public involvement through social media and public engagement focused on project successes related to our hazard mitigation strategy. Analysis of current focus for outreach efforts to ensure equality of messaging and identify/better understand potential gaps in education and outreach to a diverse population intermingled by advocacy and special interest groups.	

4.3 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	2019	2020	2021	2022
Residential	186	245	306	219
Commercial	32	34	54	45
Total	**218**	**279**	**360**	**264**

Source: City of Santee 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 2019 is shown in the table below:

Property Use	Flood Zone	VHFHSZ
Residential	21	228
Non-Residential	30	27
Total	**51**	**255**

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

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.

Risk Assessment requires the collection and analysis of hazard-related data to enable local jurisdictions to identify and prioritize appropriate mitigation actions that will reduce losses from potential hazards.

When the plan revision process began in 2019, the Local Planning Group (LPG) conducted a complete review of the hazards identified in the original plan and first update to determine if the hazards were still valid and should be kept as a target for mitigation measures or removed from the priority list. The LPG also reassessed hazards that were not considered for mitigation actions in 2018 to determine if that decision was still applicable or if they should be moved to the active list. Finally, the LPG examined potential or emerging hazards, including climate change, to see if any should be included on the active list.

5.1 Hazards Summary

The City of Santee reviewed a set of jurisdictional-level hazard maps, including detailed critical facility information and localized potential hazard exposure/loss estimates, to help identify the top hazards threatening their jurisdiction. In addition, Local Planning Groups (LPGs) were supplied with exposure/loss estimates for Santee that are summarized in the table below:

Probability of Future Hazard Event (FEMA definitions)

Highly likely =	
Likely =	
Occasional =	

Table 6

Summary of Potential Hazard-Related Exposure/Loss in Santee

		Residential		Commercial		Critical Facilities	
Hazard Type	**Exposed Population**	**# Residential Buildings**	**Potential Exposure/ Loss for Residential Buildings (x$1,000)**	**# Commercial Buildings**	**Potential Exposure/ Loss for Commercial Buildings (x$1,000)**	**# Critical Facilities**	**Potential Exposure for Critical Facilities (x$1,000)**
Wildfire / Structure Fire							
Fire regime II & IV	45,353	16,283	4,583,665	5,307	1,857,498	130	247,681
Public Health Emergencies							
	0**	0**	0**	0**	0**	0**	0**
Extreme Weather Due to Climate Change							
	0**	0**	0**	0**	0**	0**	0**
Large Utility Outage / Disruptions							
	0**	0**	0**	0**	0**	0**	0**
Dam Inundation							
	24,193	10,034	3,899,212	1,084	327,747	64	787,310
Earthquake (Annualized Loss - Includes shaking, liquefaction and landslide components)							
	106*	116*	78,341*	92*	50,196*	0	0
Flood (Loss)							
100 Year	1,279	40	108,419	13	3,931	12	80,040
500 Year	2,846	751	195,465	217	65,609	18	116,438
Human Caused Events							
	0**	0**	0**	0**	0**	0**	0**
Rain-Induced Landslide							
High Risk	7,644	2,047	795,260	75	22,676	3	66,990
Moderate Risk	0	0	0	0	0	0	0
Tsunami	0	0	0	0	0	0	0
Hazardous Materials Release							
	0**	0**	0**	0**	0**	0**	0**
Aircraft Incidents							
	0**	0**	0**	0**	0**	0**	0**

* Represents annualized earthquake value under three earthquake scenarios (shake only, liquefaction only, and landslide only).

**** No FEMA data available at the time the Hazard Mitigation Plan was finalized.**

5.2 Priority Hazards and Profiles

After reviewing the localized hazard maps and exposure/loss table above, the following hazards were identified by the Santee LPG as their top nine. Rationale for including each of these hazards is included:

1. Wildfire:

Local Significance

Wildfire probability depends on local weather conditions; outdoor activities such as camping, debris burning, and construction; and the degree of public cooperation with fire prevention measures. Wildfires can result in widespread damage to property and loss of life. The northern portion of the City contains undeveloped, difficult to access, hilly terrain, with homes intermixed throughout, or near undeveloped land. In addition, the City is bisected by a large area of dense, highly combustible vegetation located adjacent to the San Diego River and Forrester Creek corridor. These areas, and the adjacent undeveloped areas within the City, have been subject to multiple fires in the past. In 2021 alone, fire department personnel responded to 89 fire-related incidents in the San Diego River Corridor. Minimizing the loss of life and property in the Wildland- Urban Interface (WUI) continues to be a major focal point of ongoing mitigation efforts. Wildfires continue to threaten vulnerable residents and businesses throughout the City of Santee.

Nature of Hazard

A structure fire hazard is one where there is a risk of a fire starting in an urban setting and spreading uncontrollably from one building to another across several city blocks, or within high-rise buildings.

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.

San Diego County's topography consists of a semi-arid coastal plain and rolling highlands which, when fueled by shrub overgrowth, occasional Santa Ana winds and high temperatures, creates an ever-present threat of wildland fire. Extreme weather conditions such as high temperature, low humidity, and/or winds of extraordinary force may cause an ordinary fire to expand into one of massive proportions.

Large fires would have several indirect effects beyond those that a smaller, more localized fire would create. These may include air quality and health issues, road closures, business closures, and others that increase the potential losses that can occur from this hazard. Modeling for a larger type of fire would be difficult, but the consequences of the three largest San Diego fires this century (October, 2003, October 2007 and May 2014) should be used as a guide for fire planning and mitigation.

Disaster History

San Diego County's third worst wildfire in history, known as the Laguna Fire, destroyed thousands of acres in the backcountry in September of 1970. The fire resulted in the loss or destruction of 383 homes and 1,200 other structures.

In October 2003, the second-worse wild-land fire in the history of San Diego County destroyed 332,766 acres of land, 3,239 structures and 17 deaths at a cost of approximately $450M.

San Diego County's worst wildfire occurred in October 2007. At the height of the firestorm there were seven fires burning within the County. The fires destroyed 369,000 acres (13% of the County), 2,670 structures, 239 vehicles, and two commercial properties. There were 10 civilian deaths, 23 civilian injuries and 10 firefighter injuries. The cost of fire exceeded $1.5 billion.

Wildland fires prompted seven (7) Proclaimed States of Emergency, and Urban/Intermix Fires prompted four (4) Proclaimed States of Emergency in the County of San Diego between 1950-2020.

Hazard Impacts

Hazard impacts can include but are not limited to increased flooding risk over burn scar areas, environmental impacts/damage, air quality impacts, loss of resources such as utilities, asset/structure damage and/or total loss, injury, and death.

Location & Extent/Probability of Occurrence & Magnitude

The wildfire maps use the CAL Fire Resource Assessment Program data for Fire Hazard Severity Zones:

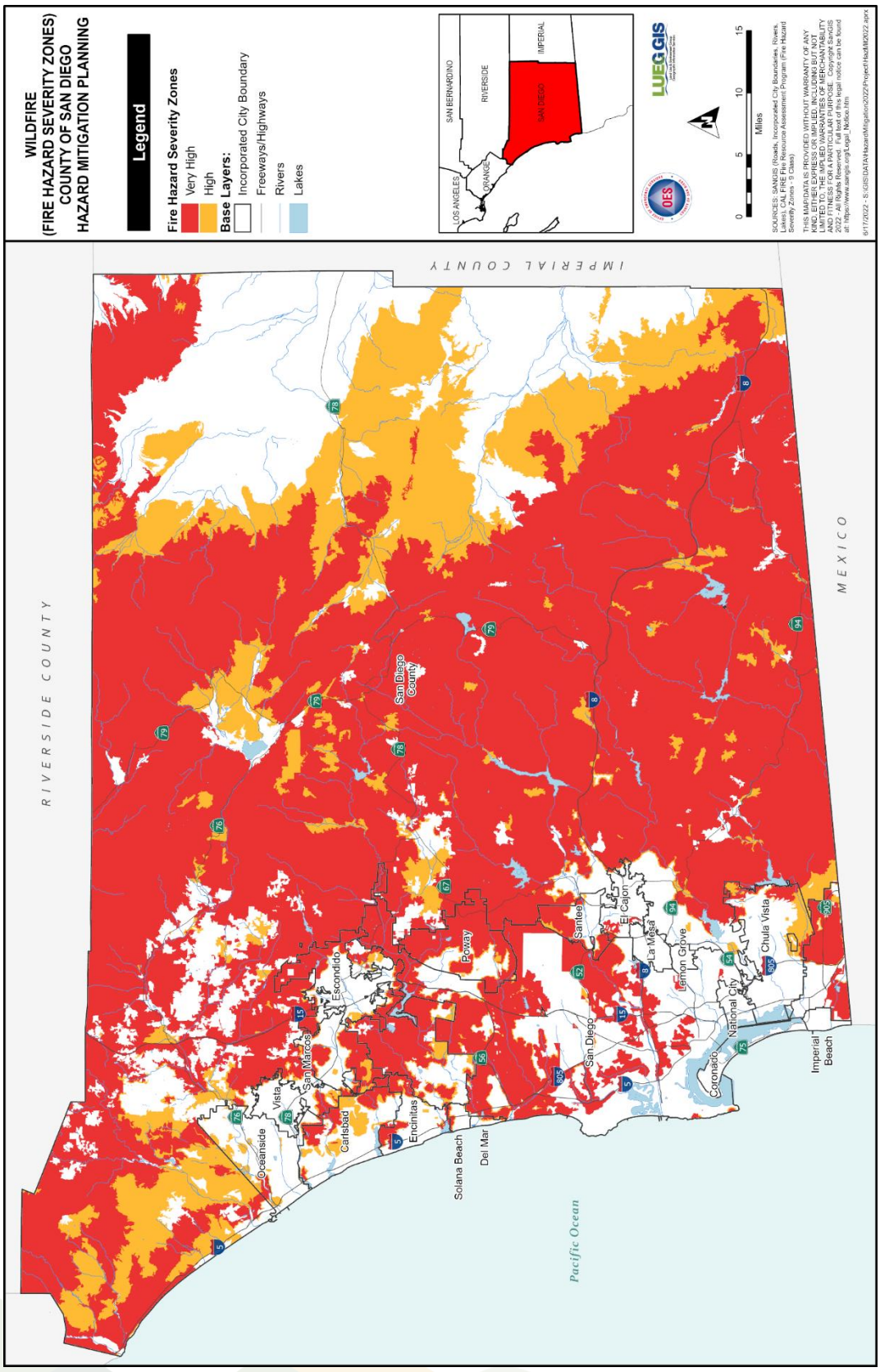


Figure 1: CAL FIRE Fire Hazard Severity Zones (High and Very High)

Under current climate conditions, the wildfire threat to property, lives, and ecosystems in the San Diego region is very high. With hotter temperatures and possibly fewer rainy days in the coming decades, vegetation could become drier. As a result, it is likely that San Diego region will see an increase in the frequency and intensity of fires, making the region more vulnerable to devastating fires like the ones seen in 2003 and 2007. The fire season could also become longer and less predictable, making firefighting efforts more costly.

Building density is also a factor in potential building loss during a wildfire. A recent study in the Ecological Society of America's publication Ecological Applications indicates that the area of the building clusters, the number of buildings in the cluster and building dispersion all contribute to the potential for building loss. While all three factors had a positive influence on the number of structures lost, larger building structures were most strongly associated with building loss. The most likely reason being that more buildings are exposed. Two other top factors were the number of buildings in the cluster and the distance to the nearest building. In the Mediterranean California model the closer the buildings were to each other the less likely they were to be affected.

An increase in wildfire also impacts public health. Fire-related injuries and death are likely to increase as wildfires occur more frequently. Wildfires can also be a significant contributor to air pollution. Wildfire smoke contains numerous toxic and hazardous pollutants that are dangerous to breath and can worsen lung disease and other respiratory conditions.

Probability of Future Events is Highly Likely (90 to 100 percent probability of occurrence in the next year (citywide and/or regionwide) or a recurrence interval of less than 1 year) and Overall Significance is 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).

From May to October of each year, San Diego County faces a severe wildfire threat. Fires will continue to occur on an almost annual basis in the San Diego County Area. The threat of wildfire and potential losses consistently increase as human development and population increase in the wildland urban interface area in the County. According to the Cal Fire Redbook, there have been 1,113 wildfires recorded for San Diego County between 2015 and 2021. Based on climate and weather in San Diego County and the fuels, topography, past fire history, and the Cal Fire Redbook which indicates an average of 159 wildfires per year, it is highly likely that wildfires will continue to occur within the planning area in the future.

2. Public Health Emergencies:

Local Significance and Nature of Hazard

A Public Health Emergency can take different forms, ranging from regional outbreak to worldwide pandemics. Infectious diseases continue to be a major cause of illness, death, and disability around the word, with new diseases being discovered on a regular basis.

Disaster History

According to San Diego County Health, over 11,000 people in the City of Santee have tested positive for Covid-19, with more variants being identified.

Hazard Impacts

Public Health Emergencies threaten the health of people in the community, while also negatively impacting community business operations. Access and Functional Needs (AFN) populations, including the elderly, those with disabilities, and those with pre-existing medical conditions, will be particularly vulnerable to these health emergencies.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from regionwide to worldwide. The Local Planning Team determined this hazard's **Probability of Future Events is Highly Likely (90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year) and Overall Significance is 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).**

3. Extreme Weather Due to Climate Change:

Local Significance

Extreme weather due to climate change is defined, for the purposes of this plan as hazardous conditions resulting from the compounding effects of climate change and natural events such as drought, storms, extreme heat, extreme cold, and severe wind.

A drought is a period of unusually constant dry weather that persists long enough to cause deficiencies in water supply (surface or underground). High temperatures, high winds, and low humidity can worsen drought conditions and also make areas more susceptible to wildfire. In addition, human actions and demands for water resources can accelerate drought-related impacts.

Extreme heat and extreme cold constitute different conditions in different parts of the country. Extreme cold can range from near freezing temperatures in the southern United States to temperatures well below zero in the northern states. Similarly, extreme heat is typically recognized as the condition where temperatures consistently stay ten degrees or more above a region's average high temperature for an extended period.

Severe wind can occur alone, such as during straightline wind events and derechos, or it can accompany other natural hazards, including hurricanes and severe thunderstorms.

Disaster History

The City of Santee experiences different types of severe weather throughout the year, including high winds and historic drought conditions. High winds from Santa Ana conditions have been documented to increase fire behavior, damage trees and homes, and detrimentally impact utility lines and other critical infrastructure. Local vulnerability is further increased when combined with continued drought and high temperatures.

Hazard Impacts

Droughts are slow-onset hazards, but, over time, they can severely affect crops, municipal water supplies, recreational resources, and wildlife. If drought conditions extend over a number of years, the direct and indirect economic impacts can be significant.

Severe wind will typically cause the greatest damage to structures of light construction, particularly manufactured homes. Severe wind also poses a threat to lives, property, and vital utilities primarily due to the effects of flying debris or downed trees and power lines.

Fatalities can result from extreme temperatures, as they can push the human body beyond its limits (hyperthermia and hypothermia).

Populations with Access and Functional Needs (AFN), including the older adults, people with disabilities, and people with pre-existing medical conditions, will be particularly vulnerable during these extreme weather events.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Highly Likely (90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year) and Overall Significance is 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).**

4. Large Utility Outage/Disruption:

Local Significance and Disaster History

In 2011 San Diego County experienced a large-scale power outage that affected more than 7 million residents, visitors, and businesses, including those within the community of Santee. Public Safety Power Shutoffs (PSPS) and rolling blackouts have become the norm in Southern California

Hazard Impacts

Utility outages, whether planned or unplanned, may have devastating effects on those who depend on power to operate lifesaving equipment. Additionally, business and governmental operations can be significantly impacted by disruptions in lifeline services such as gas and electricity. Hazard impacts can include loss of revenue and/or resources (such as food and medication), medical impacts from loss of power needed to power medical equipment, and potentially affected transportation that relies on electricity.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Highly Likely (90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year) and Overall Significance is 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).**

5. Flooding/Dam Inundation:

Local Significance and Disaster History

A flood is the partial or complete inundation of normally dry land. The various types of flooding include riverine flooding, coastal flooding, and shallow flooding. The City is bisected by the San Diego River that has a significant flow volume and floodway/floodplain. The City of Santee is downstream of two dams (Chet Harritt & San Vicente), creating a vulnerability to major flood inundation in instances of dam failure.

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. At the time of this plan's publication, there were not any reported dam failures in the planning area within the past five years

When significant rainfall occurs, the potential for Swift Water Rescue incidents increases. The Santee Fire Department has responded to several incidents that have resulted in recovery efforts of victims. The impact of such an incident would be to the residents within the flood zone. Additionally, public owned and commercial structures are also threatened in the most vulnerable areas.

Hazard Impacts

Common impacts of flooding include damage to personal property, buildings, and infrastructure; bridge and road closures; service disruptions; and injuries or even fatalities. Impacts of flooding due to dam failure would be similar and/or identical.

Water released by a failed dam generates tremendous energy and can cause a flood that is catastrophic to life and property. A catastrophic dam failure could challenge local response capabilities and require evacuations to save lives. Impacts to life safety will depend on the warning time and the resources available to notify and evacuate the public. Major loss of life could result as well as potentially catastrophic effects to roads, bridges, and homes. Electric generating facilities and transmission lines could also be damaged and affect life support systems in communities outside the immediate hazard area. Associated water supply, water quality and health concerns could also be an issue. Factors that influence the potential severity of a full or partial dam failure are the amount of water impounded; the density, type, and value of development and infrastructure located downstream; and the speed of failure.

A major dam failure could have a devastating impact on the San Diego County Planning Area. Dam failure flooding presents a threat to life and property, including buildings, their contents, and their use. Large flood events can affect crops and livestock as well as lifeline critical utilities (e.g., water, sewerage, and power), transportation, jobs, tourism, the environment, and the local and regional economies.

Flooding, including that from dam failure, causes many impacts to agricultural production, including water contamination, damage to crops, loss of livestock, increased susceptibility of livestock to disease, flooded farm machinery, and environmental damage to and from agricultural chemicals.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years) and Overall Significance is 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.). The figure below displays the locations and extent of dam failure hazard areas for the County of San Diego, including Santee:**

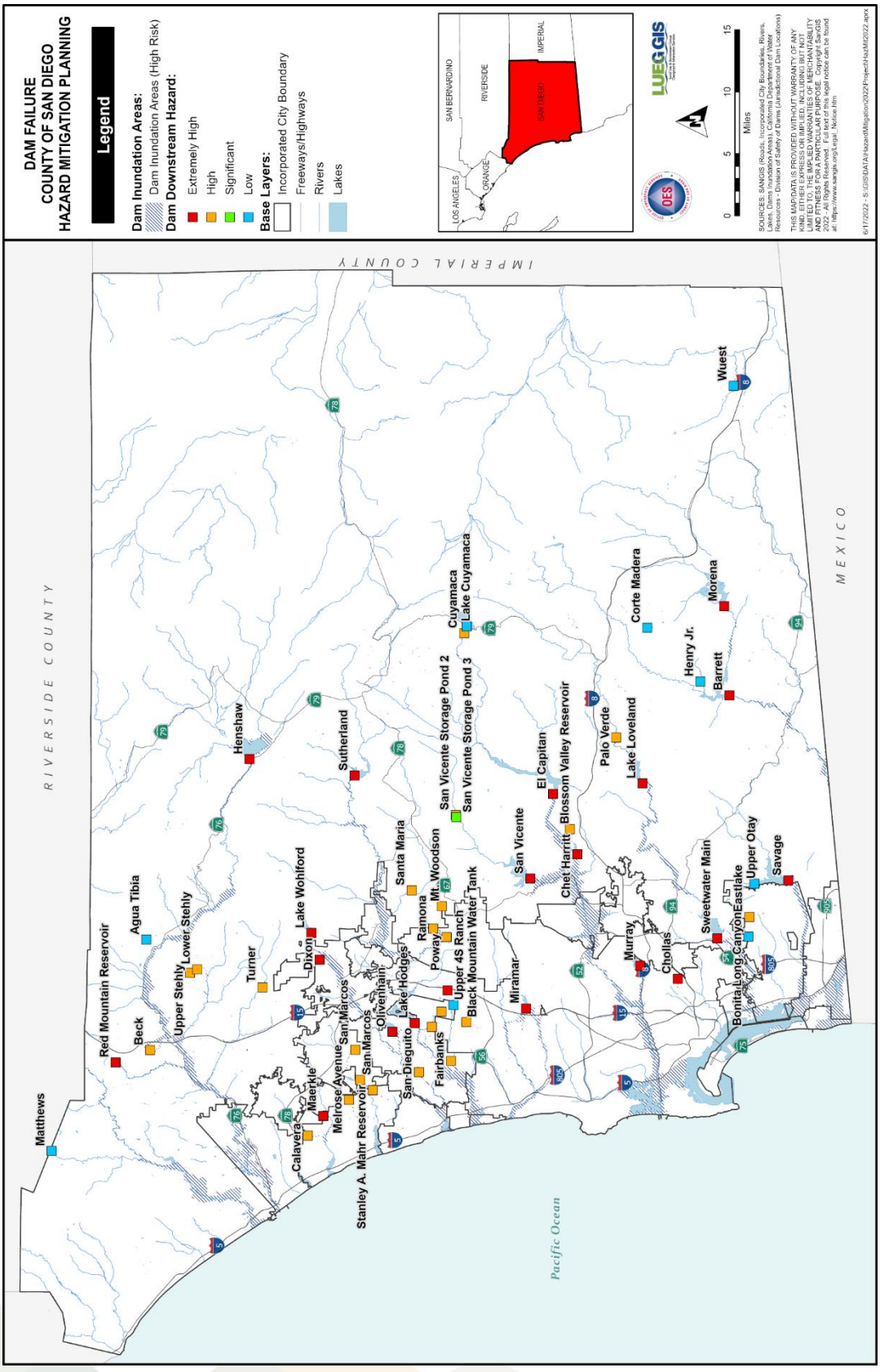


Figure 2: Map of San Diego County Dam Inundation Areas

Dam inundation map data was used to profile dam failure risk levels. These maps were created by agencies that own and operate dams. The County Office of Emergency Services (County OES) obtained this data from SanGIS, a local GIS data repository. The dam inundation map layers show areas that would be flooded in the event of a dam failure. If an area lies within a dam inundation zone, it was considered at high risk. A dam is characterized as high hazard if it stores more than 1,000 acre-feet of water, is higher than 150 feet tall, has potential for downstream property damage, and potential for downstream evacuation. Ratings are set by FEMA and confirmed with site visits by engineers. A simple way to define high risk of dam failure is if failure of the dam is likely to result in loss of human life. Most dams in the County are greater than 50 years old and are characterized by increased hazard potential due to downstream development and increased risk due to structural deterioration in inadequate spillway capacity (Unified San Diego County Emergency Services Organization Operational Area Emergency Plan, 2014).

Climate Change Considerations

The most extreme events are going to become more extreme regarding climate change effects. These events are primarily atmospheric rivers and will become more so in the future based on global climate models (Gershunov et al., 2019). The increase in extreme precipitation will increase the risk of dam failure.

The highest priority mitigation actions to reduce Climate Change impacts on this hazard should include conducting dam safety and emergency spill operations.

6. Earthquake:

Local Significance and Disaster History

An earthquake is a sudden release of energy that creates a movement in the earth's crust. There are numerous ancient landslides within the City that may result in the partial or complete loss of homes. The San Diego River floodplain consists of alluvial soils that are subject to liquefaction during seismic events. Additionally, the City is within 10 miles of a significant earthquake fault.

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.

Another tool used to describe earthquake intensity is the Richter scale. The Richter scale was devised as a means of rating earthquake strength and is an indirect measure of seismic energy released. The scale is logarithmic with each one-point increase corresponding to a 10-fold increase in the amplitude of the seismic shock waves generated by the earthquake. In terms of actual energy released, however, each one-point increase on the Richter scale corresponds to about a 32-fold increase in energy released. Therefore, a magnitude (M) 7 earthquake is 100 times (10 X 10) more powerful than a M5 earthquake and releases 1,024 times (32 X 32) the energy. An earthquake generates different types of seismic shock waves that travel outward from the focus or point of rupture on a fault. Seismic waves that travel through the earth's crust are called body waves and are divided into primary (P) and secondary (S) waves. Because P waves move faster (1.7 times) than S waves they arrive at the seismograph first. By measuring the time delay between arrival of the P and S waves and knowing the distance to the epicenter, seismologists can compute the Richter scale magnitude for the earthquake.

The Modified Mercalli Scale (MMI) is another means for rating earthquakes, but one that attempts to quantify intensity of ground shaking. Intensity under this scale is a function of distance from the epicenter (the closer to the epicenter the greater the intensity), ground acceleration, duration of ground shaking, and degree of structural damage. This rates the level of severity of an earthquake by the amount of damage and perceived shaking, as displayed in the table below:

Table 7: MODIFIED MERCALLI SCALE

MMI Value	Description of Shaking Severity	Summary Damage Description Used on 1995 Maps	Full Description
I.			Not felt
II.			Felt by persons at rest, on upper floors, or favorably placed.
III.			Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV.			Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motorcars rock. Windows, dishes, doors rattle. In the upper range of IV, wooden walls and frame creak.
V.	Light	Pictures Move	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clock stop, start, change rate.
VI.	Moderate	Objects Fall	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked.
VII.	Strong	Nonstructural Damage	Difficult to stand. Noticed by drivers of motorcars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roofline. Fall of plaster, loose bricks, stones, tiles, cornices. Some cracks in masonry C. Small slides and caving in along sand or gravel banks. Concrete irrigation ditches damaged.
VIII.	Very Strong	Moderate Damage	Steering of motorcars affected. Damage to masonry C, partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, and elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Cracks in wet ground and on steep slopes.
IX.	Very Violent	Extreme Damage	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land.
X.			Rails bent greatly. Underground pipelines completely out of services.
XI.			Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air.

Several major active faults exist in San Diego County, including the Rose Canyon, La Nacion, Elsinore, San Jacinto, Coronado Bank and San Clemente Fault Zones. The Rose Canyon Fault Zone is part of the Newport-Inglewood fault zone, which originates to the north in Los Angeles, and the Vallecitos and San Miguel Fault Systems to the south in Baja California.

The Rose Canyon Fault extends inland from La Jolla Cove, south through Rose Canyon, along the east side of Mission Bay, and out into San Diego Bay. The Rose Canyon Fault is considered the greatest potential threat to San Diego as a region, due to its proximity to areas of high population. The La Nacion Fault Zone is located near National City and Chula Vista. The Elsinore Fault Zone is a branch of the San Andreas Fault System. It originates near downtown Los Angeles and enters San Diego County through the communities of Rainbow and Pala; it then travels in a southeasterly direction through Lake Henshaw, Santa Ysabel, Julian; then down into Anza-Borrego Desert State Park at Agua Caliente Springs, ending at Ocotillo, approximately 40 miles east of downtown.

The San Jacinto Fault is also a branch of the San Andreas Fault System. This fault branches off from the major fault as it passes through the San Bernardino Mountains. Traveling southeasterly, the fault passes through Clark Valley, Borrego Springs, Ocotillo Wells, and then east toward El Centro in Imperial County. This fault is the most active large fault within County of San Diego. The Coronado Bank fault is located about 10 miles offshore. The San Clemente Fault lies about 40 miles off La Jolla and is the largest offshore fault at 110 miles or more in length (Unified San Diego County Emergency Services Organization Operational Area Emergency Plan, 2014).

Hazard Impacts

The hazard impact would depend on the magnitude of the earthquake, but could affect all residents and structures in Santee. Populations with Access and Functional Needs (AFN), including the older adults, people with disabilities, and people with pre-existing medical conditions, will be particularly vulnerable in disaster events, including earthquakes. Most earthquake-related property damage and deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the extent and duration of the shaking. Other damaging earthquake effects include landslides, the down-slope movement of soil and rock (in mountain regions and along hillsides), and liquefaction.

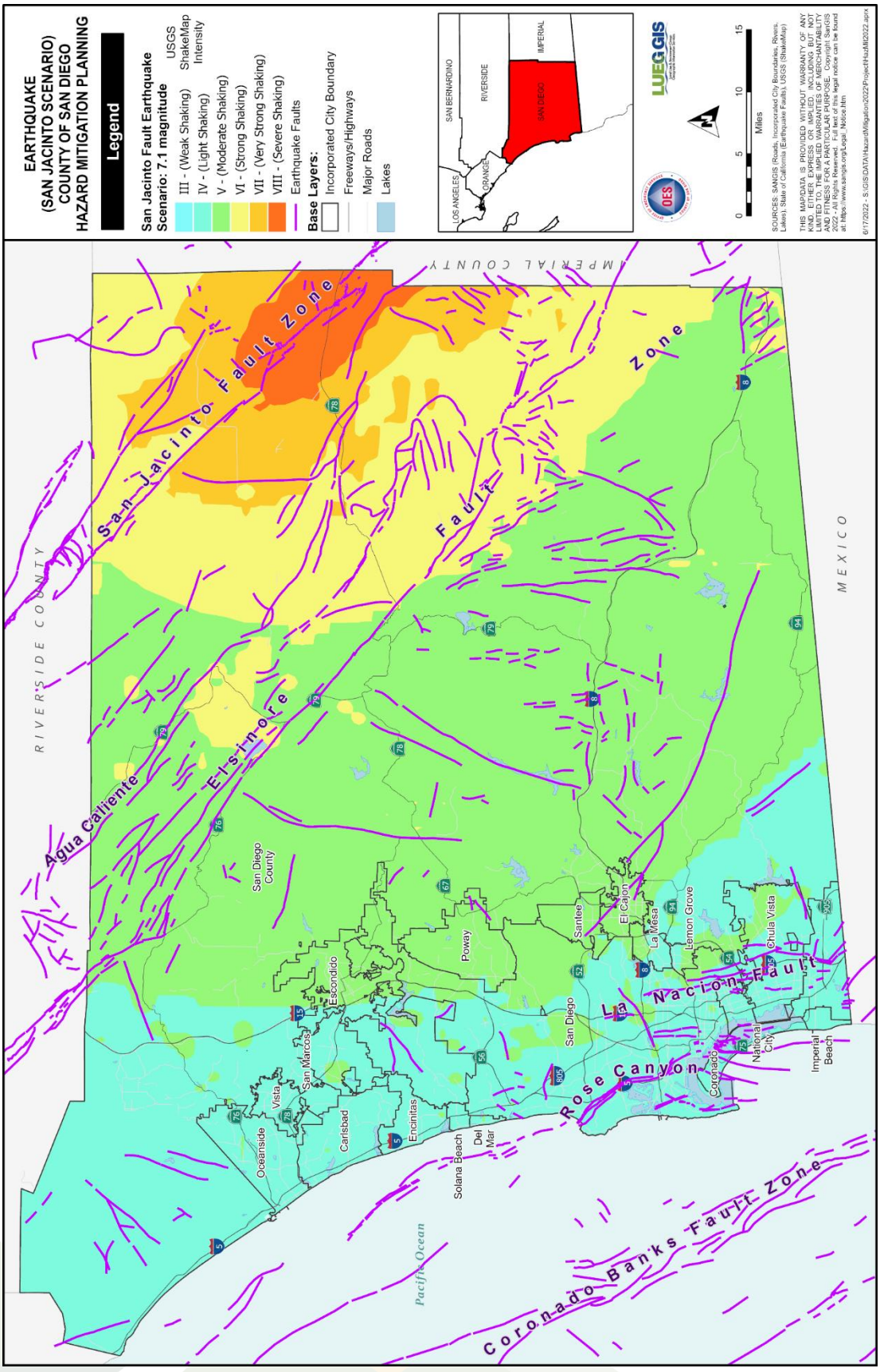
The effects of an earthquake can also be felt far beyond the site of its occurrence. They usually occur without warning and, after just a few seconds, can cause massive damage and extensive casualties. After a major seismic event it is possible that San Diego County, including Santee, could experience damage to transportation infrastructure, that would disrupt the flow of goods and services. A majority of the community members within the City are potentially exposed to the direct and indirect impacts of a major earthquake. Indirect impacts can include but are not limited to, business interruptions, road closures, loss of utilities, and transportation disruptions. Direct impacts can include, but are not limited to, minor or major structure damage, downed trees, and injury or loss of life.

Environmental problems can additionally result as a secondary hazard after a major earthquake. Earthquake induced landslides could cause damage to the surrounding habitat, and water quality can be affected if moving earth comes in contact with a water source. Facilities holding hazardous materials are of particular

concern. During a major earthquake, structures storing these materials could rupture and leak into the surrounding area or an adjacent waterway, having a disastrous effect on the environment.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years) and Overall Significance is 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.). The figures below display the location and extent of the profiled earthquake hazard areas for San Diego County, including Santee:**


EARTHQUAKE
(SAN JACINTO SCENARIO)
COUNTY OF SAN DIEGO
HAZARD MITIGATION PLANNING
Legend
San Jacinto Fault Earthquake
Scenario: 7.1 magnitude
USGS ShakeMap Intensity
III - (Weak Shaking)
IV - (Light Shaking)
V - (Moderate Shaking)
VI - (Strong Shaking)
VII - (Very Strong Shaking)
VIII - (Severe Shaking)
Base Layers:
Earthquake Faults
Incorporated City Boundary
Freeways/Highways
Major Roads
Lakes
SAN BERNARDINO
RIVERSIDE
IMPERIAL
LOS ANGELES
ORANGE
SAN DIEGO
LUEGGIS
OES
N
0 5 10 15
Miles
SOURCES: SANGIS (Roads, Incorporated City Boundaries, Rivers, Lakes), State of California (Earthquake Faults), USGS (ShakeMap)
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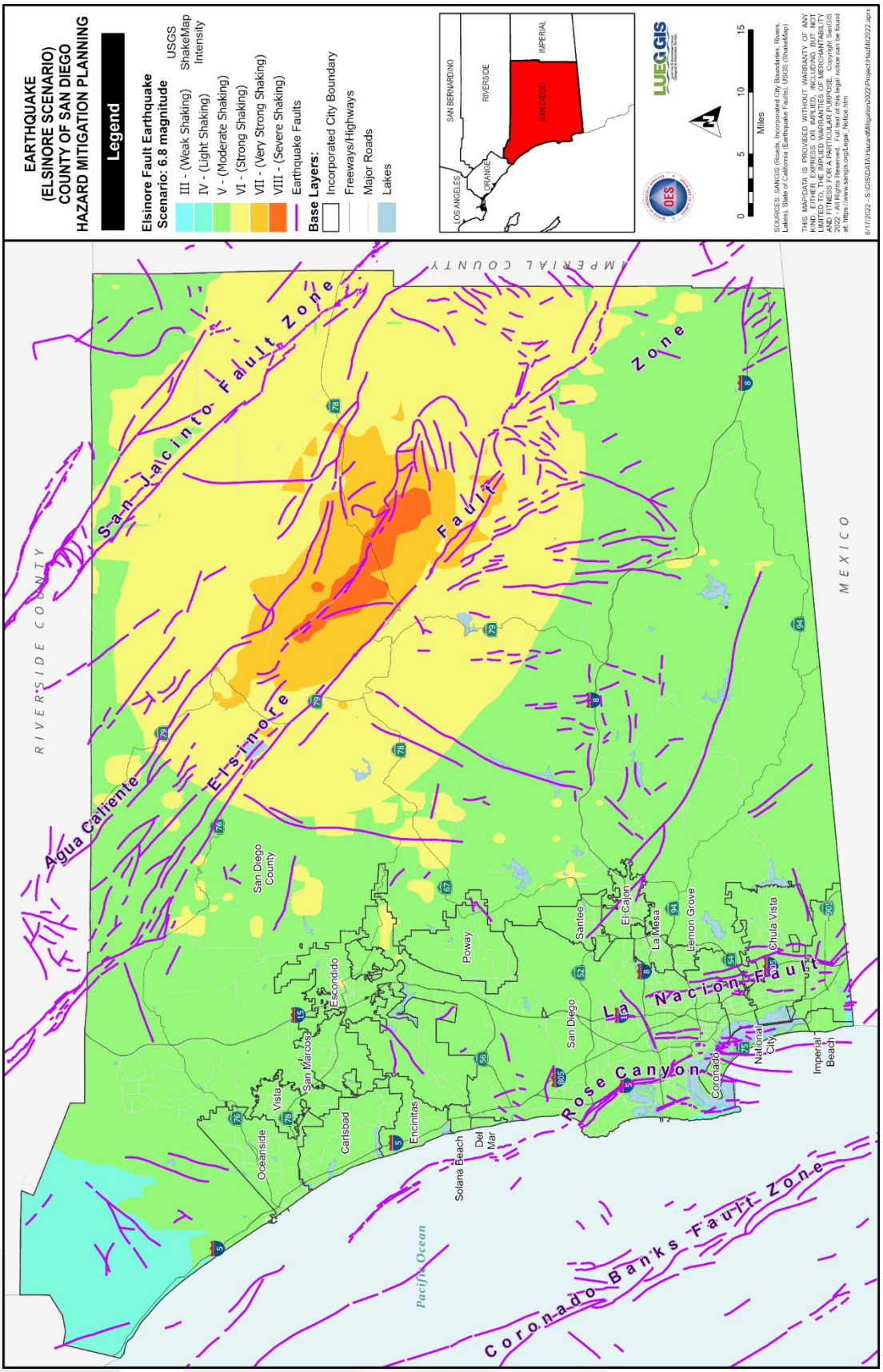
RIVERSIDE COUNTY
IMPERIAL COUNTY
MEXICO
San Jacinto Fault Zone
Elsinore Fault Zone
Agua Caliente
San Diego County
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
Santee
El Cajon
La Mesa
Lemon Grove
Chula Vista
San Diego
La Nacion Fault
Rose Canyon
Coronado
National City
Imperial Beach
Pacific Ocean
Coronado Banks Fault Zone


EARTHQUAKE
(ELSINORE SCENARIO)
COUNTY OF SAN DIEGO
HAZARD MITIGATION PLANNING
Legend
Elsinore Fault Earthquake
Scenario: 6.8 magnitude
USGS ShakeMap Intensity
III - (Weak Shaking)
IV - (Light Shaking)
V - (Moderate Shaking)
VI - (Strong Shaking)
VII - (Very Strong Shaking)
VIII - (Severe Shaking)
Earthquake Faults
Base Layers:
Incorporated City Boundary
Freeways/Highways
Major Roads
Lakes
LOS ANGELES
ORANGE
SAN BERNARDINO
RIVERSIDE
SAN DIEGO
IMPERIAL
LUEGGIS
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SOURCES: SANGIS (Roads, Incorporated City Boundaries, Rivers, Lakes), State of California (Earthquake Faults), USGS (ShakeMap)
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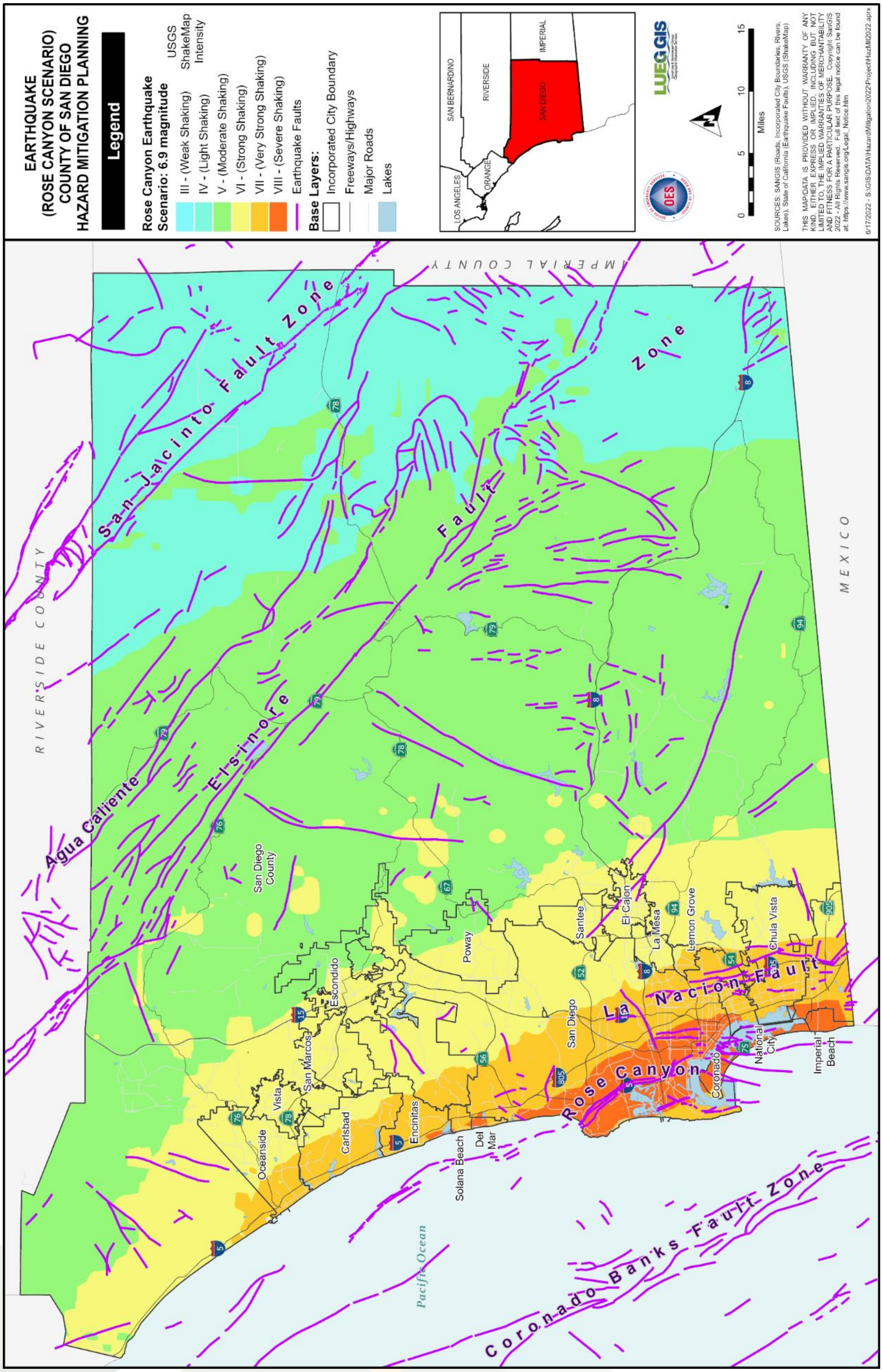
6/17/2022 - S:\GIS\DATA\Hazard\Mitigation2022\Project\HazMit2022.aprx
RIVERSIDE COUNTY
IMPERIAL COUNTY
MEXICO
San Jacinto Fault Zone
Elsinore Fault Zone
Agua Caliente
San Diego County
Escondido
San Marcos
Vista
Carlsbad
Oceanside
Encinitas
Solana Beach
Del Mar
Poway
Santee
El Cajon
La Mesa
Lemon Grove
Spring Valley
Chula Vista
San Diego
La Nacion Fault
Rose Canyon
Coronado
National City
Imperial Beach
Pacific Ocean
Coronado Banks Fault Zone


EARTHQUAKE
(ROSE CANYON SCENARIO)
COUNTY OF SAN DIEGO
HAZARD MITIGATION PLANNING
Legend
Rose Canyon Earthquake Scenario: 6.9 magnitude
USGS ShakeMap Intensity
III - (Weak Shaking)
IV - (Light Shaking)
V - (Moderate Shaking)
VI - (Strong Shaking)
VII - (Very Strong Shaking)
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Earthquake Faults
Base Layers:
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Freeways/Highways
Major Roads
Lakes
SAN BERNARDINO
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LOS ANGELES
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OES
LUEG GIS
0 5 10 15
Miles
SOURCES: SANGIS (Roads, Incorporated City Boundaries, Rivers, Lakes), State of California (Earthquake Faults), USGS (ShakeMap)
RIVERSIDE COUNTY
IMPERIAL COUNTY
MEXICO
San Jacinto Fault Zone
Elsinore Fault Zone
Agua Caliente
La Nacion Fault
Rose Canyon
Coronado Banks Fault Zone
Pacific Ocean
San Diego County
Oceanside
Vista
San Marcos
Escondido
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Encinitas
Solana Beach
Del Mar
Poway
San Diego
Santee
El Cajon
La Mesa
Lemon Grove
Chula Vista
National City
Coronado
Imperial Beach

This is based on a United States Geological Survey (USGS) earthquake model that shows probabilistic peak ground acceleration for every location in San Diego County. Since 1984, earthquake activity in San Diego County has increased twofold over the preceding 50 years (Demere, SDNHM website 2003). All buildings that have been built in recent decades must adhere to building codes that require them to be able to withstand earthquake magnitudes that create a PGA of 0.4 or greater. Ongoing field and laboratory studies suggest the following maximum likely magnitudes for local faults: San Jacinto (M6.4 to 7.3), Elsinore (M6.5 to 7.3), Rose Canyon (M6.2 to 7.0), La Nacion (M6.2 to 6.6), Coronado Bank (M6.0 to 7.7), and San Clemente (M6.6 to 7.7) (Demere, SDNHM website 2003).

Data used to profile earthquake hazard included probabilistic PGA data from USGS and a Scenario Earthquake Shake map for Rose Canyon from the California Integrated Seismic Network (CISN). From these data, the Hazard Mitigation Planning Group (HMPG) determined that risk level for earthquake is determined to be high if an area lies within a 0.3 or greater PGA designation. Earthquakes were modeled using HAZUS-MH, which uses base information to derive probabilistic peak ground accelerations much like the PGA map from USGS that was used for the profiling process.

Climate Change Considerations

Not applicable.

7. Human Caused Events:

Local Significance

Human caused events, for the purposes of this plan, can include events such as terrorism, crime, civil unrest, and accidental hazards. Terrorism and crime can create vulnerabilities impacting facilities within the City. Civil unrest in the City has impacted the community, business operations, and government services. Cyber-attacks continue to be a major threat globally, and the City of Santee is not immune to criminal activities seeking to cripple governmental operations. Continuous focus must be directed towards hardening our technological infrastructure through enhanced software and firmware security. Additionally, the City must continue mitigation efforts against foreign and domestic terrorist attacks.

Human-caused hazards are distinct from natural hazards because they result directly from the actions of people. Two types of human-caused hazards can be identified as technological hazards and terrorism.

Technological hazards refer to incidents that can arise from human activities such as the manufacture, storage, transport, and use of hazardous materials, which include toxic chemicals, radioactive materials, and infectious substances. Technological hazards are assumed to be accidental and their consequences unintended. This will be covered in the next hazard profile.

Terrorism, on the other hand, encompasses intentional, criminal, and malicious acts involving weapons of mass destruction (WMDs) or conventional weapons. WMDs can involve the deployment of chemical, biological, radiological, nuclear, and explosive (CBRNE) weapons. Conventional weapons and techniques include the use of arson, incendiary explosives, armed attacks, intentional hazardous materials release, and cyber-terrorism (attack via computer).

Terrorism

Following serious international and domestic terrorist incidents during the 1990's and early 2000's, people across the United States have paid increased attention to the potential for deliberate, harmful terrorist actions by individuals or groups with political, social, cultural, and religious motives. There is no single, universally accepted definition of terrorism, and it can be interpreted in a variety of ways. However, terrorism is defined in the Code of Federal Regulations as "…the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives" (28 CFR, Section 0.85). The Federal Bureau of Investigation (FBI) further characterizes terrorism as either domestic or international, depending on the origin, base, and objectives of the terrorist organization. However, the origin of the terrorist or person causing the hazard is far less relevant to mitigation planning than the hazard itself and its consequences. Terrorists utilize a wide variety of agents and delivery systems.

Disaster History

Terrorism

While San Diego County has not experienced any high-profile attacks by groups or individuals associated with international terrorist organizations, the region has been the site of several incidents with domestic origins. Most notable is the August 1, 2003 arson attack on a mixed-use housing and office development under construction in the University City neighborhood. The blaze, which officials estimate caused around $50 million in damage, was allegedly set by the Earth Liberation Front, a radical environmentalist group.

San Diego County has been linked to the 9/11 attacks in New York City and on the Pentagon; two of the confirmed hijackers of the commercial aircraft used in the attacks took flight school lessons while living in San Diego.

San Diego County has received numerous bomb threats to schools, government buildings, religious sites, and commercial facilities over the years. While most bomb threats are hoaxes, authorities have been required to mobilize resources and activate emergency procedures on a regular basis in response.

Other Human-Caused Disasters

On September 25th, 1978, the City of San Diego was the scene of one of the worst air disasters in the United States. A mid-air collision between a Cessna 172 and a Pacific Southwest Airlines (PSA) Boeing 727 caused both planes to crash into the North Park neighborhood below. A total of 144 lives were lost including 7 people on the ground. More than 20 residences were damaged or destroyed.

In 1984, a shooter opened fire in a San Ysidro McDonald's restaurant, killing 21 people. This event was not considered an act of terrorism as no political or social objectives were associated with this event.

In 2019, a shooter opened fire at the Chabad of Poway Synagogue, which killed one person and injured three other people. The same shooter was also linked to a 2019 fire set to the Dar-ul-Arqam Mosque (also known as the Islamic Center of Escondido) in Escondido.[5] The shooter pleaded guilty on July 20, 2021, to murder and multiple charges of attempted murder, with added hate crime classifications in connection with the Chabad of Poway Synagogue shooting and pleaded guilty to a charge of arson in connection with Dar-ul-Arqam Mosque in Escondido. [6]

Hazard Impacts

This hazard's impacts vary according to type, magnitude, location, availability of resources and many other factors that are situationally dependent. Overall, hazard impacts may include, but are not limited to injury, death, environmental/resource impacts, and structure/asset losses.

[5] https://www.cbs8.com/article/news/crime/accused-chabad-of-poway-synagogue-shooter-pleads-guilty/509-4c8b3421-71e5-45e4-b1da-eac4dfe24f55.

[6] https://www.nbcsandiego.com/news/local/poway-synagogue-shooter-to-be-sentenced-in-state-court/2731560/.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Likely (10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years) and Overall Significance is 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.).**

Climate Change Considerations

Not applicable.

8. Hazardous Materials Release:

Local Significance

The three freeways that run through the City of Santee act as a major arterial system for the over-the-road transport of hazardous materials. The City is also home to numerous industrial facilities that utilize, process, and create hazardous material during their respective daily operations. A hazardous material release has the potential for detrimental impacts to the health of Santee residents, wildlife, and the environment, in general.

Disaster History

Technological hazards refer to incidents that can arise from human activities such as the manufacture, storage, transport, and use of hazardous materials, which include toxic chemicals, radioactive materials, and infectious substances. Technological hazards are assumed to be accidental and their consequences unintended.

Technological hazards involving hazardous material releases can occur at facilities (fixed site) or along transportation routes (off-site). They can occur because of human carelessness, technological failure, intentional acts, and natural hazards. When caused by natural hazards, these incidents are known as secondary hazards, whereas intentional acts are terrorism. Hazardous materials releases, depending on the substance involved and type of release, can directly cause injuries and death and contaminate air, water, and soils. While the probability of a major release at any facility or at any point along a known transportation corridor is relatively low, the consequences of releases of these materials can be very serious.

Some hazardous materials present a radiation risk. Radiation is any form of energy propagated as rays, waves or energetic particles that travel through the air or a material medium. Radioactive materials are composed of atoms that are unstable. An unstable atom gives off its excess energy until it becomes stable. The energy emitted is radiation. The process by which an atom changes from an unstable state to a more stable state by emitting radiation is called radioactive decay or radioactivity.

Radiological materials have many uses in San Diego County including:

- by doctors to detect and treat serious diseases,
- by educational institutions and companies for research,
- by the military to power large ships and submarines.

With the decommissioning of San Onofre Nuclear Generating Station (SONGS), radiological materials are no longer used to generate commercial electric power within San Diego County. However, the stored spent fuel that remains on site does pose a hazard.

Radioactive materials, if handled improperly, or radiation accidentally released into the environment, can be dangerous because of the harmful effects of certain types of radiation on the body. The longer a person is exposed to radiation and the closer the person is to the radiation, the greater the risk. Although radiation cannot be detected by the senses (sight, smell, etc.), it is easily detected by scientists with sophisticated instruments that can detect even the smallest levels of radiation. Under extreme circumstances an accident or

intentional explosion involving radiological materials can cause very serious problems. Consequences may include death, severe health risks to the public, damage to the environment, and extraordinary loss of, or damage to, property.

Overall, hazardous materials can include toxic chemicals, radioactive materials, infectious substances, and hazardous wastes. The State of California defines a hazardous material as a substance that is toxic, ignitable, or flammable, or reactive and/or corrosive. An extremely hazardous material is defined as a substance that shows high acute or chronic toxicity, carcinogenicity, bio-accumulative properties, persistence in the environment, or is water reactive (California Code of Regulations, Title 22). "Hazardous waste," a subset of hazardous materials, is material that is to be abandoned, discarded, or recycled, and includes chemical, radioactive, and biohazardous waste (including medical waste). An accidental hazardous material release can occur wherever hazardous materials are manufactured, stored, transported, or used. Such releases can affect nearby populations and contaminate critical or sensitive environmental areas.

Facilities that use, manufacture, or store hazardous materials in California must comply with several state and federal regulations. The Superfund Amendments and Reauthorization Act (SARA Title III), which was enacted in 1986 as a legislative response to airborne releases of methylisocyanate at Union Carbide plants in Bhopal, India and in Institute, West Virginia. SARA Title III, also known as the Emergency Planning and Community-Right-To-Know Act (EPCRA), directs businesses that handle, store, or manufacture hazardous materials in specified amounts to develop emergency response plans and report releases of toxic chemicals. Additionally, Section 312 of Title III requires businesses to submit an annual inventory report of hazardous materials to a state-administering agency.

The California legislature passed Assembly Bill 2185 in 1987, incorporating the provisions of SARA Title III into a state program. The community right-to-know requirements keep communities abreast of the presence and release of hazardous wastes at individual facilities.

Hazardous materials spills and releases in San Diego County have occurred as a result of clandestine drug manufacturing; spills from commercial, military and recreational vessels on the region's waterways; traffic accidents; sewer breaks and overflows; and various accidents/incidents related to the manufacture, use, and storage of hazardous materials by County industrial, commercial and government facilities. Although the emergency response history for San Diego County chronicles various hazardous materials releases, the incidents do not necessarily indicate the degree of exposure to the public.

There has not been significant exposure to the San Diego County public due to human-caused releases of chemical or biological agents, although there have been several smaller-scale incidents. Chemical spills and releases from transportation and industrial accidents have resulted in short-term chemical exposure to individuals in the vicinity of the release. Bacterial levels can increase significantly especially near storm drain, river, and lagoon outlets, during and after rainstorms. Elevated bacterial levels may continue for a period of up to 3 days depending upon the intensity of rainfall and volume of runoff. Waters contaminated by urban runoff may contain human pathogens (bacteria, viruses, or protozoa) that can cause illnesses.

San Diego County experienced its first significant E. coli bacteria outbreak in 10 years after patrons ate tainted food at restaurants in 2003. In 1992 and 1993 a similar outbreak occurred in San Diego County, which resulted in one death. Additionally, in the early 1980s a hepatitis outbreak associated with poor food handling

techniques resulting in the closure of a major restaurant in Mission Valley and the implementation of a food-handler certification program by the San Diego County Health Department.

The only known release of radiological agents in the County was the result of an accident at San Onofre Nuclear Generating Station (SONGS). In 1981, an accidental "ignition" of hydrogen gases in a holding tank of the San Onofre Nuclear Generating Station (SONGS) caused an explosion - which bent the bolts of an inspection hatch on the tank, allowing radioactive gases in the tank to escape into a radioactive waste room. From there, the radioactive material was released into the atmosphere. The plant was shut down for several weeks following the event (W.I.S.E. Vol.3 No.4 p.18). This incident occurred during the plant's operation of its Unit 1 generator, which has since been decommissioned. No serious injuries occurred.

On February 3, 2001, another accident occurred at SONGS when a circuit breaker fault caused a fire that resulted in a loss of offsite power. Published reports suggest that rolling blackouts during the same week in California were partially due to the shutdown of the SONGS reactors in response to the 3-hour fire. Although no radiation was released and no nuclear safety issues were involved, the federal Nuclear Regulatory Commission sent a Special Inspection Team to the plant site to investigate the accident.

Hazard Impacts

This hazard's impacts vary according to type, magnitude, location, availability of resources and many other factors that are situationally dependent. Overall, hazard impacts may include, but are not limited to injury, death, environmental/resource impacts, and structure/asset losses.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Occasional (1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.) and Overall Significance is 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.).**

9. Aircraft Incidents:

Local Significance and Disaster History

Aircraft incidents, for the purposes of this plan, can include aircraft emergency landings and crashes (mid-air, on land, and/or in water). The City of El Cajon has one operating airport (Gillespie Field), which is on the southeast boarder of Santee. Gillespie Field had over 150,000 operational counts in 2021. Flight paths and landing zones of the adjacent general aviation airport and nearby military airfield pass over the City. The increased air traffic over the City has resulted in several incidents with aircrafts making emergency and/or crash landings. The most recent incident occurred in 2021, which resulted in 2 deaths, fire, and property damage.[7]

Hazard Impacts

Incidents resulting from this hazard have resulted in/can result in future property damage, fire, injuries, and deaths.

Location & Extent/Probability of Occurrence & Magnitude

Location impact can range from citywide to regionwide. The Local Planning Team determined this hazard's **Probability of Future Events is Occasional (1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.) and Overall Significance is 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.).**

[7] https://www.10news.com/news/local-news/authorities-plane-down-in-area-near-santana-high-school-in-santee

5.3 Hazard Omission Rationale

During the initial evaluation, the Hazard Mitigation Planning Group (HMPG) determined certain hazards were not included in the original plan's profiling step because they were not prevalent hazards within San Diego County, were found to pose only minor or very minor threats to San Diego County compared to the other hazards (status had not changed), and would, therefore, not be included in this revision.

Only hazards that received a High or Medium ranking in Section 5.1 (other than CBRNE threats due to their potentially serious impacts) were considered in this mitigation planning process.

Though Pandemic Disease received a "High" Overall Significance rating (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.), the HMPG determined this hazard's "Occasional" Probability of Future Events rating (1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.), and input from HAZUS Data Evaluations, Vulnerability Assessments, Hazard Seminar Series, Subject Matter Experts and the public did not necessitate this hazard to be included in this plan's final list of prioritized hazards.

The table below gives a brief description of remaining, omitted hazards and the reason for their exclusion:

Table 8

Hazard	Description	Reason for Exclusion
Avalanche	A mass of snow moving down a slope. There are two basic elements to a slide; a steep, snow-covered slope and a trigger	Snowfall in County mountains not significant; poses very minor threat compared to other hazards
Expansive soils	Expansive soils shrink when dry and swell when wet. This movement can exert enough pressure to crack sidewalks, driveways, basement floors, pipelines and even foundations	Presents a minor threat to limited portions of the County
Hailstorm	Can occur during thunderstorms that bring heavy rains, strong winds, hail, lightning, and tornadoes	Occurs during severe thunderstorms; most likely to occur in the central and southern states; no historical record of this hazard in the region.
Land subsidence	Occurs when large amounts of ground water have been withdrawn from certain types of rocks, such as fine-grained sediments. The rock compacts because the water is partly responsible for holding the ground up. When the water is withdrawn, the rocks fall in on themselves.	Soils in the County are mostly granitic. Presents a minor threat to limited parts of the county. No historical record of this hazard in the region.
Tornado	A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm (or sometimes because of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris.	Less than one tornado event occurs in the entire State of California in any given year; poses very minor threat compared to other hazards. No historical record of this hazard in the region.
Volcano	A volcano is a mountain that is built up by an accumulation of lava, ash flows, and airborne ash and dust. When pressure from gases and the molten rock within the volcano becomes strong enough to cause an explosion, eruptions occur	No active volcanoes in San Diego County. No historical record of this hazard in the region.
Windstorm	A storm with winds that have reached a constant speed of 74 miles per hour or more	Maximum sustained wind speed recorded in the region is less than 60 miles per hour and would not be expected to cause major damage or injury.

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 Plan Evaluation

The City of Santee's goals and objectives were developed by comparing the existing 2018 Annex to updated City priorities, considering the risk assessment findings, localized hazard identification and loss/exposure estimates, and an analysis of the jurisdiction's current capabilities assessment. These updated goals, objectives and actions (and the action plan as a whole) were developed to represent a vision of long-term hazard reduction or enhancement of capabilities in the planning area. To help in further development of these goals and objectives, the Local Planning Group (LPG) compiled and reviewed current jurisdictional sources including the City's planning documents, codes, and ordinances. In addition, City representatives met with consultant staff and/or the County Office of Emergency Services (County OES) to specifically discuss these hazard-related items as they relate to the overall Multi-Jurisdictional Hazard Mitigation Plan.

A whole community survey was posted on the County Office of Emergency Services website to receive feedback related to priority hazards and these preliminary goals, objectives, and actions. An email address was provided for the public to submit comments and suggestions. This email address was checked daily for public input.

6.2 Mitigation Action Implementation

The following sections present the City of Santee's hazard-related goals, objectives and actions as prepared by the City of Santee's LPG in conjunction with the Hazard Mitigation Working Group, locally elected officials, and the local community.

6.2.1 Goals

The City of Santee has developed the following 9 Goals for their Hazard Mitigation Plan. For each goal, one or more objectives have been identified that provide strategies to attain the goal. Where appropriate, the City has identified a range of specific actions to achieve the objective and goal.

The objective is to reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and State-owned facilities, due to the following:

Goal 1.	Wildfires
Goal 2.	Public Health Emergencies
Goal 3.	Flooding/Dam Failure
Goal 4.	Earthquakes/Geological Hazards
Goal 5.	Aircraft Incidents
Goal 6.	Extreme Weather Due to Climate Change
Goal 7.	Hazardous Materials Release
Goal 8.	Human Caused Events
Goal 9.	Large Utility Outages/Disruptions

6.2.2 Objectives and Actions

The City of Santee' Local Planning Group (LPG) developed the following broad list of objectives and actions to assist in the implementation of each of their 9 identified goals. The City of Santee developed objectives to assist in achieving their hazard mitigation goals. For each of these objectives, specific actions were developed that would assist in their implementation. A discussion of the prioritization and implementation of the action items is provided in Section 6.3 of this plan.

Santee's LPG will monitor, evaluate and update the plan as needed, with an annual review implemented for all goals. Every 5-year cycle, the entire document will be reviewed, updated and adopted by Santee City Council.

Coordinating Department/Organization:

CM = City Manager

CSD = Community Services Department

DDS = Department of Development Services

Fire = Santee Fire Department

EOC = Emergency Operations Center personnel

IT = Information Technology personnel

PIO = Public Information Officer

PSD = Public Services Division

Action Prioritization
Action established, no additional funding needed
Action established, seeking additional funding: (HMGP, BRIC, HMA, Local Grants, City Budget)

Hazard Mitigation Action Items

Goal 1: Wildfire		Project Status	Coordinating Department/ Organization
Objective 1.A: Mitigate the risk to assets existing within or adjacent to identified areas of Santee's wildland urban interface (WUI) areas			
Action 1.A.1	Partner with County, State and Federal agencies to fund wildfire mitigation efforts.	Ongoing	Fire, DDS, CM
Action 1.A.2	Create defensible space through hazardous vegetation fuel reduction.	Ongoing	DDS
Action 1.A.3	Maintain, improve and/or create emergency access in WUI areas that is adequate to allow entry as well as maneuvering of emergency vehicles.	Ongoing	DDS
***Funding Source**: The City has submitted for the 2022 HMGP for Hazardous Fuels Reduction and the creation of Defensible Space (1.A.2, 1.A.3)*			

Goal 1: Wildfire		Project Status	Coordinating Department/ Organization
Objective 1.B: Promote future development projects that limit hazardous wildfire conditions			
Action 1.B.1	Conduct professional studies to evaluate specific hazards in hazard prone areas via the CEQA review process and conformance of the Sustainable Santee Plan.	Ongoing	DDS
Action 1.B.2	Identify alternative site design criteria for new development to mitigate hazards to the maximum extent possible.	Ongoing	DDS
Action 1.B.3	Maintain accurate records of known local hazards to assist in the identification of future potential hazards.	Ongoing	DDS
Action 1.B.4	Support State legislation that would provide tax incentives to encourage the repair or demolition of structures that could be considered fire hazards.	Ongoing	CM
Objective 1.C: Provide services to reduce hazardous fuels/debris from identified WUI areas			
Action 1.C.1	Work with community partners and local law enforcement to provide support services to those experiencing homelessness.	Ongoing	CM
Action 1.C.2	Remove hazardous debris and trash with community partner and staff support	Ongoing	DDS
Action 1.C.3	Hold public monthly Community Oriented Policing Committee (COMPOC) meetings to discuss potential hazards and identify solutions.	Ongoing	CM
***Funding Source**: The City is currently partnering with local non-profit organizations and the County of San Diego to identify potential funding opportunities including local grants (1.C.1). The City has submitted for the 2022 HMGP for Hazardous Fuels Reduction and the creation of Defensible Space (1.C.2)*			
Objective 1.D: Educate the public about wildfire mitigation to increase community awareness as well as opportunities for local support/action			
Action 1.D.1	Continue to participate in regional public education efforts concerning wildfire awareness and preparation.	Ongoing	Fire
Action 1.D.2	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness	Ongoing	PIO
***Funding Source**: The City is exploring funding opportunities through local grant opportunities and continued allocation of funds identified in the annual city budget (1.D.1). Additional future funding opportunities will be explored through HMGP, BRIC and HMA.*			

Goal 2: Public Health Emergencies		Project Status	Coordinating Department/ Organization
Objective 2.A: Mitigate the risk of public health emergencies within Santee's access and functional needs population			
Action 2.A.1	Coordinate with County, State and Federal partners/agencies to provide outreach/support services to those experiencing homelessness.	Ongoing	CM
Action 2.A.2	Provide education and resources through local channels, including the Santee Fire Department, the faith-based community and other service-focused groups.	Ongoing	Fire, PIO
Objective 2.B: Educate the public on environmental health hazards and deploy safety measures to mitigate the risk of illness			
Action 2.B.1	Partner with San Diego County Department of Environmental Health to mitigate public health hazards related to insects, parasites, rodents and other disease carrying vectors.	Ongoing	DDS
Action 2.B.2	Provide Household Hazardous Waste education regarding the proper disposal of household chemicals and other byproducts.	Ongoing	DDS, PSD
Action 2.B.3	Operate public awareness programs as needed, to address potential public health safety issues.	Ongoing	Fire, PIO
Action 2.B.4	Maintain open communication with Padre Dam Municipal Water District regarding water-borne public health hazards.	Ongoing	DDS, CM
Action 2.B.5	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness.	Ongoing	PIO
Objective 2.C: Mitigate the risk of public health emergencies among city staff and contractors			
Action 2.C.1	Train staff and participate in regional exercises to ensure the effective management of emergency operations under the National Incident Management System (NIMS).	Ongoing	Fire, EOC
Action 2.C.2	Maintain appropriate levels of personal protective equipment (PPE) and sanitation supplies for all city staff and contractors.	Ongoing	Fire, EOC
Action 2.C.3	Provide teleworking options for city staff who may have been exposed a public health hazard.	Ongoing	HR
Action 2.C.4	Implement citywide continuity of operations (COOP) as needed.	Ongoing	CM

Goal 3: Flooding/Dam Inundation		Project Status	Coordinating Department/ Organization
Objective 3.A: Mitigate injuries, loss of life and property damage due to flooding/dam failure			
Action 3.A.1	Inspect and remove vegetation that could hinder waterflow of the waterways located within Santee city limits.	Ongoing	DDS, PSD
Action 3.A.2	Maintain drainage ways and flood control facilities.	Ongoing	PSD
Action 3.A.3	Maintain open communication with agencies managing reservoirs and/or lakes which could potentially impact Santee in a flooding and/or dam failure event.	Ongoing	DDS, CM
Action 3.A.4	Maintain a Santee specific flooding/dam failure Emergency Operations Plan that addresses the potential of the San Diego River to bisect resources in such an emergency.	Ongoing	Fire, EOC
***Funding Source**: The City is continuously seeking partnership opportunities with local non-profit organizations. The City has submitted for the 2022 HMGP for Hazardous Fuels Reduction and the creation of Defensible Space (3.A.1, 3.A.2)*			
Objective 3.B: Educate the public and city staff about flood/dam failure hazards to increase community awareness as well as opportunities for local support/action			
Action 3.B.1	Educate city staff on dam inundation areas.	Ongoing	Fire, HR
Action 3.B.2	Promote Swiftwater Rescue Training for the local community.	Ongoing	Fire, PIO
Action 3.B.3	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness.	Ongoing	PIO

Goal 4: Earthquakes/Geological Hazards		Project Status	Coordinating Department/ Organization
Objective 4.A: Mitigate the risk of injury, loss of life and property damage related to earthquakes/geological hazards			
Action 4.A.1	Geological/seismic hazard regulations, identified in Santee's General Plan and the California Building Code, are observed for all new and existing development.	Ongoing	DDS
Action 4.A.2	Maintain a comprehensive Geographic Information System (GIS) mapping system of all geological hazards in and around the City of Santee.	Ongoing	DDS, IT
Objective 4.B: Educate the public about earthquake/geological hazards to increase community awareness as well as opportunities for local support/action			
Action 4.B.1	Train staff and participate in local and regional exercises (ie: Great Shakeout) to ensure the effective management of emergency operations under the National Incident Management System (NIMS).	Ongoing	Fire, EOC
Action 4.B.2	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness of earthquake risks and mitigation activities in homes.	Ongoing	PIO
Action 4.B.3	Provide informational documents/regulations to developers and residents as needed for construction projects in Santee.	Ongoing	DDS

Goal 5: Aircraft Incidents		Project Status	Coordinating Department/ Organization
Objective 5.A: Mitigate the risk of injury, loss of life and property damage resulting from aircraft related incidents			
Action 5.A.1	Maintain communication with regional air stations, airfields and airports which could potentially impact Santee in an aircraft related incident.	Ongoing	CM
Action 5.A.2	Coordinate with regional airports regarding any future development which may impact the City of Santee in an aircraft related incident.	Ongoing	DDS
Action 5.A.3	Aircraft related regulations, such as high fly zones and runway protection zones, are included in Santee's municipal code and reviewed by San Diego County and the Federal Aviation Administration.	Ongoing	Legal
Objective 5.B: Educate the public and city staff about aircraft hazards to increase community awareness as well as opportunities for local support/action			
Action 5.B.1	Train staff and participate in local and regional exercises to ensure local response is in line with local air station, airfield and airport response protocols.	Ongoing	Fire, EOC
Action 5.B.2	Leverage Santee's public information tools including SanteeTV, City website and social media platforms to educate public and increase awareness.	Ongoing	PIO

Goal 6: Extreme Weather Due to Climate Change		Project Status	Coordinating Department/ Organization
Objective 6.A: Mitigate the risk of injury, loss of life and property damage related to extreme weather conditions due to climate change			
Action 6.A.1	Ensure cool zones throughout the City of Santee are available during extreme heat events.	Ongoing	Fire
Action 6.A.2	Implement Santee's Urban Heat Management Plan designed to reduce heat related to development (ie: reduce asphalt where possible, install cool rooves, etc.)	Ongoing	DDS
Action 6.A.3	Add trees to increase shade and reduce island heat effect.	Ongoing	DDS
Action 6.A.4	Coordinate with necessary jurisdictions to mitigate the impact of wind events and ensure public safety.	Ongoing	Fire
Action 6.A.5	Perform preventative maintenance and inspections of existing storm drains, inlets, outlets and channels.	Ongoing	DDS, PSD
Action 6.A.6	Require that drainage facilities are designed to convey 100-year flood levels.	Ongoing	DDS
***Funding Source**: The City is exploring funding opportunities through local grant opportunities and continued allocation of funds identified in the annual city budget (6.A.2). Additional future funding opportunities will be explored through HMGP, BRIC and HMA with the prioritization of addressing socially vulnerable geographic areas identified through a Social Vulnerability Index (SoVI).*			
Objective 6.B: Protect existing assets with the highest relative vulnerability to the effects of extreme weather conditions due to climate change			
Action 6.B.1	Provide public access to sandbags for flood protection.	Ongoing	PSD
Action 6.B.2	Provide 24-hour support from public services and other non-safety personnel during extreme weather events.	Ongoing	PSD
Objective 6.C: Educate the public and city staff about the potential for extreme weather events, to increase awareness as well as opportunities for local support/action			
Action 6.C.1	Train city staff on OSHA requirements related to mitigating the impacts of extreme weather.	Ongoing	HR
Action 6.C.2	Train city staff how to respond to extreme weather events.	Ongoing	Fire, EOC
Action 6.C.3	Participate in regional emergency training operation efforts.	Ongoing	EOC

Goal 7: Hazardous Materials Release		Project Status	Coordinating Department/ Organization
Objective 7.A: Monitor hazardous sites through encroachment, building and grading permit processes and conduct necessary evaluations			
Action 7.A.1	Keep current Hazard Mitigation Plans on file with the City of Santee for jurisdictions operating within city limits who could potential be involved in a hazardous materials release.	Ongoing	Fire
Action 7.A.2	Ensure correct permitting for storm drain rehabilitation, demolition and other potentially hazardous activities.	Ongoing	DDS
Action 7.A.3	Ensure CalTrans maintains a safe transportation fleet within the City of Santee.	Ongoing	DDS
Action 7.A.4	Ensure old water lines/ACP pipe is disposed of per County, State and Federal health requirements.	Ongoing	DDS
Action 7.A.5	Any excavation near existing hazardous plumes must be verified with the California State Geo-tracker before work begins.	Ongoing	DDS
Objective 7.B: Educate the public about hazardous materials release to increase community awareness as well as opportunities for local support/action			
Action 7.B.1	Train staff and participate in local and regional exercises to ensure the effective management of emergency operations under the National Incident Management System (NIMS).	Ongoing	Fire, EOC
Action 7.B.2	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness.	Ongoing	PIO

Goal 8: Human Caused Events		Project Status	Coordinating Department/ Organization
Objective 8.A: Mitigate the risk of injury, loss of life and property damage related to human caused events			
Action 8.A.1	Employ strong cyber security protocols to mitigate the possibility of a cyber- attack.	Ongoing	IT
Action 8.A.2	Development within the City of Santee must comply with the Wildland Urban Interface guidelines.	Ongoing	DDS
Action 8.A.3	Respond to reports of vandalism/destruction of property within Santee city limits.	Ongoing	PSD
Action 8.A.4	Implement traffic control plans as needed to ensure public safety.	Ongoing	PSD
Action 8.A.5	All City of Santee large public events has both Sheriff and Fire personnel onsite to mitigate the potential for a terrorist attack.	Ongoing	CSD
Action 8.A.6	Maintain an official active shooter protocol and response plan.	Ongoing	CSD
***Funding Source**: The City maintains a commitment to updating and adopting "Building and Construction" codes that meet or exceed industry standards related to wildland fire protection and mitigation strategies (8.A.2). The City will continue to explore grant funding opportunities through Federal, State, or Local programs (e.g., HMGP, HMA, BRIC)*			
Objective 8.B: Educate the public about human caused events to increase community awareness as well as opportunities for local support/action			
Action 8.B.1	Train staff on active shooter protocol to mitigate injuries and loss of life to both staff and the public.	Ongoing	HR
Action 8.B.2	Train staff and participate in local and regional exercises to ensure the effective management of emergency operations under the National Incident Management System (NIMS).	Ongoing	Fire, EOC
Action 8.B.3	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness.	Ongoing	PIO

Goal 9: Large Utility Outages/Disruptions		Project Status	Coordinating Department/ Organization
Objective 9.A: Mitigate the risk of injury, loss of life and property damage related large utility outages/disruptions			
Action 9.A.1	Coordinate with utility agencies operating within the City of Santee to ensure critical facilities are maintained to mitigate outages.	Ongoing	DDS
Action 9.A.2	Emergency contract in place with City of Santee fleet fueling provider to supply fuel to emergency vehicles in the event of an outage.	Ongoing	Fire
Action 9.A.3	Maintain City of Santee Emergency Operations Center generators (Buildings 5, 7, 8)	Ongoing	Fire, PSD
Action 9.A.4	Coordinate with the Red Cross for shelter stand-ups as needed to mitigate the impact of an outage on the public.	Ongoing	EOC
Action 9.A.5	Implement upgrades to the City of Santee Operations Center for increased storage capacity for both gasoline and diesel fuel.	Planning	DDS
***Funding Source**: The City will continue to explore grant funding opportunities through Federal, State, or Local programs (e.g., HMGP, HMA, BRIC) that align with critical infrastructure resilience (9.A.5)*			
Objective 9.B: Educate the public and city staff about the potential for large utility outages, to increase awareness as well as opportunities for local support/action			
Action 9.B.1	Train staff and participate in local and regional exercises to ensure the effective management of emergency operations under the National Incident Management System (NIMS).	Ongoing	Fire, EOC
Action 9.B.2	Provide emergency preparedness resources to the public and city staff.	Ongoing	PIO
Action 9.B.3	Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness.	Ongoing	PIO

6.3 Prioritization and Implementation of Action Items

The Disaster Mitigation Action of 2000 (at 44 CFR Parts 201 and 206) requires the development of an action plan that not only includes prioritized actions but one that includes information on how the prioritized actions will be implemented. Implementation consists of identifying who is responsible for which action, what kind of funding mechanisms and other resources are available or will be pursued, and when the action will be completed.

Once the comprehensive list of jurisdictional goals, objectives, and action items listed above was developed, the proposed mitigation actions were prioritized. This step resulted in a list of acceptable and realistic actions that address the hazards identified in each jurisdiction. This prioritized list of action items was formed by personnel in the LPG weighing STAPLEE criteria. The prioritized actions below reflect consolidation of 2018 priority actions. See Section 7 of this plan for more information.

The top 9 prioritized mitigation actions as well as an implementation strategy for each are:

ACTION ITEM #1: Create defensible space through hazardous vegetation fuel reduction.
Hazard(s) Mitigated: Wildfire
Coordinating Individual/Organization: Fire Marshal, and selected members of the Department of Development Services (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #2: Coordinate with County, State and Federal partners/agencies to provide outreach/support services to those experiencing homelessness.
Hazard(s) Mitigated: Public Health Emergency
Coordinating Individual/Organization: City Manager, Director of Life and Safety (Fire Chief), Santee Operations Chief, San Diego County Sheriffs
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Timeline: Ongoing; 2023-2028

ACTION ITEM #3: Inspect and remove vegetation that could hinder waterflow of the waterways located within Santee city limits.
Hazard(s) Mitigated: Flooding/Dam Inundation
Coordinating Individual/Organization: Community Services Department, Selected members of the Fire Department (specific project driven), Emergency Management Team, Volunteer groups
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #4: Leverage Santee's public information tools including SanteeTV, city website and social media platforms to educate public and increase awareness of earthquake risks and mitigation activities in homes.
Hazard(s) Mitigated: Earthquake
Coordinating Individual/Organization: Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven), Santee Marketing Team.
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #5: Coordinate with regional airports regarding any future development which may impact the City of Santee in an aircraft related incident.
Hazard(s) Mitigated: Aircraft Incidents
Coordinating Individual/Organization: Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #6: Implement Santee's Urban Heat Management Plan designed to reduce heat related to development (ie: reduce asphalt where possible, install cool rooves, etc.)
Hazard(s) Mitigated: Extreme Weather Due To Climate Change
Coordinating Individual/Organization: Department of Development Services, Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #7: Ensure correct permitting for storm drain rehabilitation, demolition and other potentially hazardous activities.
Hazard(s) Mitigated: All Hazards
Coordinating Individual/Organization: Department of Development Services, Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #8: Train staff and participate in local and regional exercises to ensure the effective management of emergency operations under the National Incident Management System (NIMS).
Hazard(s) Mitigated: All Hazards
Coordinating Individual/Organization: Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: Ongoing; 2023-2028

ACTION ITEM #9: Coordinate with utility agencies operating within the City of Santee to ensure critical facilities are maintained to mitigate outages.
Hazard(s) Mitigated: Large Utility Outages/Disruptions
Coordinating Individual/Organization: Emergency Manager, Emergency Management Team, Selected members of the Fire Department (specific project driven)
Potential Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs, Public Utility partnerships
Implementation Timeline: Ongoing; 2023-2028

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 and this annex were last updated in 2018. See the San Diego County Multi-Jurisdictional Hazard Mitigation Base Plan for more information.

7.1. Incorporation into Existing Planning Mechanisms

Another important implementation mechanism that is highly effective and low-cost is incorporation of the 2022 Hazard Mitigation Plan updates into other City plans and operations, where appropriate and feasible. Where possible, the Santee Planning Team will use existing plans and/or programs to implement hazard mitigation actions. The City already implements policies and programs to reduce losses to life and property from hazards. The 2022 Plan update builds upon the momentum developed through previous City planning efforts and mitigation programs and recommends implementing actions, where possible, through these other plans and programs. These existing plans and programs include:

- City of Santee General Plan
- Emergency Operations Plan
- Continuity of Operations Plan
- Recovery Plan

The Santee Team involved in implementing these plans and programs will be responsible for integrating the findings and recommendations of this 2022 Plan, update those documents and programs, as appropriate. Incorporation into existing plans will be done through the routine actions of:

- Monitoring other planning/program items going before the City Council;
- Attending other planning/program meetings;
- Participating in Executive Team meetings; and
- Participating in the development of the City's two-year budget process.

The successful implementation of this mitigation strategy will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community. Efforts should continuously be made to monitor the progress of mitigation actions implemented

through these other planning mechanisms and, where appropriate, their priority actions should be incorporated into the updates of this hazard mitigation plan.

7.2 Existing Planning Integration

The information on hazards, risk, vulnerability and mitigation contained in this hazard mitigation plan is based on the best data available to our team. Plan integration is the incorporation of this information into other relevant planning mechanisms, such as general planning and capital facilities planning. It includes the integration of natural hazard information and mitigation policies, principles and actions into local planning mechanisms and vice versa. Additionally, plan integration is achieved though the involvement of key staff and community officials in collaboratively planning for hazard mitigation.

In the performance period since adoption of the previous hazard mitigation plan, the City of Santee made progress on integrating hazard mitigation goals, objectives and actions into other planning initiatives. The following plans and programs currently integrate components of the hazard mitigation strategy:

• **Capital Improvement Plan**—The Capital Improvement Plan includes projects that can help mitigate potential hazards. The City will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement

• **Emergency Management Plans—**Emergency Management plans related to Emergency Operations, Continuity of Operations, and Post-Disaster Recovery will be continuously updated by the Emergency Management Team. Portions of the LHMP with the associated mapping will be considered for inclusion into the next updates of the various plans.

After approval and regional adoption of the 2018 Multi-Jurisdictional Hazard Mitigation Plan and Santee's Annex, Santee's Local Planning Group (LPG) monitored, evaluated, and update the 2018 plan as needed, with an annual review implemented for all goals. Plan implementation for documents such as Santee's General Plan and existing plans/policies was also reviewed and incorporated into this plan's update.

Every 5-year cycle, this document will be reviewed, updated, and adopted by Santee City Council.

Most of the 2018 priority actions were consolidated into this plan and will therefore be marked as "Ongoing". The list below reflects the 2018 plan's progress:

Action Item #1: City will work to ensure that all proposed and future development satisfies the minimum structural fire protection standards contained in the adopted edition of the Uniform Fire and Building Codes. Where it is deemed appropriate, the City shall enhance the minimum standards to provide optimum protection.
Coordinating Individual/Organization: Fire Marshal, and selected members of the Department of Development Services (specific project driven)
Progress: The City of Santee budgeted to staff a Fire Inspector positions to assist with code enforcement and building inspections. The department has been able to inspect all state mandated inspections since establishing this position.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #2: The City will continue to aggressively enforce the existing weed abatement law, and modify and enhance where necessary, modifying fuel types and providing a defensible space around all structures
Coordinating Individual/Organization: Fire Marshal and selected members of the Department of Development Services (specific project driven)
Progress: Not considered complete as this is an ongoing priority for the City, and the City is also working to continue public outreach and education. The City of Santee has put tremendous effort into notifying the community of potential safety issues. The City funded a Marketing Manager to promote various items our general public to seek information. This newly funded position has received national recognition for its efforts. The Fire Department continues to partner with this program to provide information pertaining to public safety.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #3: City will continue to maintain active membership and participation in both the San Diego County Mutual Aid Agreement, and the State of California Master Mutual Aid Agreement, and maintain a separate agreement with the U.S. Forest Service, to ensure adequate resources are available in the City for any future anticipated wildland incidents.
Coordinating Individual/Organization: Fire Department Operations
Progress: The City continues to maintain an automatic aid agreement with surrounding agencies. In addition, the City of Santee has established a JPA with Lakeside Fire Protection District to provide a more compressive EMS service to the local area that will go into effect January 2023.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #4: City will continue to perform preventative maintenance and inspection of existing storm drains, inlets, outlets, and channels; continue to require that drainage facilities are designed to convey the 100-year storm predictions; and continue to require new construction to adequately convey all water from structures and construction sites.
Coordinating Individual/Organization: Public Services Manager, selected members of the Department of Development Services (specific project driven)
Progress: The City of Santee completed the Santee Lakes Storm Drain Crossing and conducted the City Corrugated Pipes Survey. The has conducted pipeline replacement or re-lining per City Replacement Plan
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #5: City will continue to work with the County of San Diego Office of Emergency Services to maintain and update dam failure inundation maps; continue to maintain a dam failure action plan as part of the City's Disaster Preparedness Plan; and continue to include a dam failure scenario in City Emergency Operations Center exercises.
Coordinating Individual/Organization: Fire Department Operations
Progress: The City of Santee has participated with County of San Diego OES to conduct drills, establish hazard mitigation plans, and coordinated operational planning during the COVID-19 pandemic. The City of Santee will continue to participate with the County OES personnel for the foreseeable future.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #6: City will continue to implement the City's geologic/seismic hazard regulations and review related procedures identified in the City's General Plan; and continue to ensure that any proposed projects in areas identified as seismically and/or geologically hazardous, shall demonstrate through appropriate geologic studies and investigations that either the unfavorable conditions do not exist in the specific area in question or that they may be avoided and/or mitigated through proper site planning, design and construction.
Coordinating Individual/Organization: Fire Marshal, Public Services Manager, and selected members of the Department of Development Services
(specific project driven)
Progress: The geologic and seismic hazards review is conducted for each building permit issued in the City. City engineering, planning, and building staff are trained on the geologic/seismic hazards map so that all Department of Development Services staff is aware of the hazards so they can be evaluated for all building permits and City construction projects.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #7: Continue the California Environmental Quality Act level review on all new projects that require all significant effects of a proposed project, including geologic and soil conditions, to be identified and discussed, and identified significant effects are adequately mitigated; continue to require that all geotechnical studies of critical facilities should be performed in accordance with "Guidelines to Geologic Seismic Reports," California Division of Mines and Geology (CDMG), Notes Number 37 and "Recommended Guidelines for Determining the Maximum Credible and the Maximum Probable Earthquakes," CDMG Notes Number 43.
Coordinating Individual/Organization: Fire Marshal and selected members of the Department of Development Services (specific project driven)
Progress: The geologic and seismic hazards review is conducted for each building permit issued in the City. City engineering, planning, and building staff are trained on the geologic/seismic hazards map so that all Department of Development Services staff is aware of the hazards so they can be evaluated for all building permits and City construction projects.
Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs
Implementation Timeline: On-going

Action Item #8: The City will continue to utilize existing and evolving geologic, geophysical and engineering knowledge to distinguish and delineate those areas that are particularly susceptible to damage from seismic and other geologic conditions; and continue to require retrofits to existing building construction as part of any major renovations.
Coordinating Individual/Organization: Fire Marshal, Public Services Manager and selected members of the Department of Development Services (specific project driven)
Progress: The geologic and seismic hazards review is conducted for each building permit issued in the City. City engineering, planning, and building staff are trained on the geologic/seismic hazards map so that all Department of Development Services staff is aware of the hazards so they can be evaluated for all building permits and City construction projects.
Funding Sources: City of Santee Fire Department adopted budget, City of Santee Department of Development Services adopted budget, City of Santee adopted budget, General Fund, and various grant sources as they become available to the City
Implementation Timeline: On-going

Action Item #9: Continue to use the City's Development Review Ordinance procedures and the Uniform Fire Code to regulate and limit the manufacture, storage, and/or use of hazardous materials within the City; continue to participate as a member of the San Diego County Joint Powers Authority utilizing the Hazardous Materials Response Team to mitigate hazardous materials incidents; and continue to use the San Diego County Hazardous Waste Management Plan as the primary planning document for providing overall policy on hazardous waste management within the City.
Coordinating Individual/Organization: Fire Marshal, Fire Operations, and selected members of the Department of Development Services (specific project driven)
Progress: The City of Santee has participated with County of San Diego OES to conduct drills, establish hazard mitigation plans, and coordinated operational planning. The City of Santee will continue to participate with the County OES personnel for the foreseeable future.
Potential Funding Sources: City of Santee Fire Department adopted budget, City of Santee Department of Development Services adopted budget, City of Santee adopted budget, General Fund
Implementation Timeline: On-going

Action Item #10: Continue to coordinate and support existing efforts to mitigate other manmade hazards within the City, cooperating and sharing information with other agencies including but not limited to the Department of Homeland Security, California, Department of Public Safety, San Diego County Office of Emergency Services, San Diego County Department of Water Resources, Bureau of Reclamation, California Department of Justice, California Department of Transportation, the Federal Aviation Administration, and the Department of Defense

Coordinating Individual/Organization: Fire Department Operations, San Diego County Sheriff's Office, Public Services Manager, and selected members of the Department of Development Services (specific project driven)

Progress: The City of Santee has participated with County of San Diego OES to conduct drills, establish hazard mitigation plans, and coordinated operational planning. The City of Santee will continue to participate with the County OES personnel for the foreseeable future. The City of Santee has also utilized Public Works personnel to assistant with items identified by City personnel with emergency operations. The includes utilizing personnel of the Emergency Operations Center during the COVID-19 pandemic, Wildland fire cleanup, flooding emergencies, and many more operational needs. This service has continued to be valuable to the City and Emergency personnel. The City of Santee also hosts over 30 events a year at various locations within the City of Santee. The Santee Fire Department attends many of these events to discuss numerous informative topics such as, Fire Prevention, Hands Only CPR, and Disaster Preparedness. The City of Santee is also highly involved in CERT, where our personnel teach classes, conduct drills, and promote community involvement. Last, the City of Santee has put tremendous effort into notifying the community of potential safety issues. The City funded a Marketing Manager to promote various items to the general public seeking information. This newly funded position has received national recognition for its efforts. The Fire Department continues to partner with this program to provide information pertaining to public safety.

Funding Source: City of Santee adopted budget, General fund reserves, Grant funding from local, state, or federal programs

Implementation Timeline: On-going