CITY OF PERRIS

LOCAL HAZARD MITIGATION 2023

DEVELOPMENT SERVICES | BUILDING & SAFETY DIVISION

CONTACT INFORMATION

CITY OF PERRIS

Name: VERONICA ARANA
Title: BUILDING & SAFETY MANAGER
Address: 135 NORTH "D" STREET
City, State and Zip: PERRIS, CA. 92570
Direct Contact: 951-943-5003 EXT. 227
Email: varana@cityofperris.org

PLAN ADOPTION/RESOLUTION

The City of Perris will present a mitigation plan to the County of Riverside Emergency Management Department (EMD) for review. This proposal will then be forwarded to the California Governor's Office of Emergency Services (CAL OES) for further examination. Upon review by CAL OES, the draft will be sent to the Federal Emergency Management Agency (FEMA) for authorization. After the plan is green-lighted by FEMA, the City of Perris will obtain an "Approval Pending Adoption" letter. Then, the plan will be presented to the local governing bodies for adoption. Once the plan has been incorporated, the City of Perris will affix the signed resolution into the plan. This will guarantee that the plan is lawfully binding and must be followed. The City of Perris is dedicated to providing an optimal plan to guarantee the protection and well-being of its citizens.

EXECUTIVE SUMMARY

This local hazard mitigation plan is intended to identify and assess risks from natural and man-made hazards in the County, and to set goals to reduce or eliminate the long-term risk to people and property.

The plan was prepared to meet the requirements of the Disaster Mitigation Act of 2000, and to potentially qualify for funding through FEMA's Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The City of Perris is committed to developing and maintaining a disaster-mitigation strategy that will include all jurisdictions, special districts, businesses, and community organizations.

The plan follows a methodology presented by FEMA and CAL OES, which includes meetings with the Operational Area Planning Committee (OAPC) coordinated by the Riverside County Emergency Management Department (EMD).

The plan identifies vulnerabilities, provides recommendations for prioritized mitigation actions, evaluates resources and identifies mitigation shortcomings, provides future mitigation planning, and maintains existing plans.

Upon FEMA approval, the plan will be implemented.

PAGE BLANK INTENTIONALLY

TABLE OF CONTENT

SECTION 1.0 - COMMUNITY PROFILE

1.1 CITY MAP

1.2 GEOGRAPHY AND CLIMATE DESCRIPTION

The City of Perris is within the Inland Empire metropolitan area in the County of Riverside. It is approximately 34.1 square miles or 20,096 acres. The City of Perris borders the City of Moreno Valley and March Air Reserve Base on the north, the City of Menifee on the

south, unincorporated areas such as Mead Valley, Good Hope and Meadowbrook on the west, and Nuevo on the east. The Burlington Northern Railroad, Santa Fe Railway Railroad, Metrolink Burlington Northern Railroad, Santa Fe Railway Railroad and Metrolink run through the center of the city. A major highway, State Highway 215 also runs directly through the City of Perris. State Highway 74 runs through 4th Street and connects to State Highway 215. Lake Perris State Recreation Area is located northeast of the City of Perris. Perris Valley Airport, a privately owned airport can be found approximately 2.2 miles away from the city center on Goetz Road.

The City of Perris' climate can be described as sunny, mild Mediterranean climate. On average, Perris gets only 10 inches of rain per year. The humidity is quite low all year. The July high temperatures average 97 degrees, while January low temperatures average 35 degrees. There are 275 sunny days per year.

1.3 BRIEF HISTORY

The City of Perris became an incorporated city in 1911. The California Southern Railroad connected through the city in the 1880s to build a rail connection between the present-day cities of Barstow and San Diego. This is how the City of Perris began to form. While the railroad had played an important part in establishing the new town, the people turned to agriculture for their future development. Due to the limited groundwater, dry grain farming was the main crop before water was brought to the valley by the Eastern Municipal Water District in the early 1950's. Alfalfa, the King potato (which would produce two crops a year), and still later, sugar beets became the mainstay of farming in the Perris Valley.

With the construction of Lake Perris in the late 60's and early 70's - Perris once again became attractive - this time as a recreational area. In addition to the lake's activities, Perris' hot air ballooning, Orange Empire Railway Museum, and skydiving activities attract international recognition.

Lake Perris Dam is an earth-fill reservoir located in Riverside County, California. It was constructed in 1973 and is operated by the California Department of Water Resources. The purpose of the dam is to help control flooding, store water, and generate hydroelectric power. The dam is a major recreational spot, offering activities such as camping, fishing, boating, and bird watching. It is also part of the Perris Valley Stormwater Capture Project, which helps capture and store water during periods of heavy rain. Lake Perris is an important part of the local economy, providing jobs and recreation opportunities to the surrounding area.

The Orange Empire Railway Museum in Perris, California is a living museum dedicated to preserving and exhibiting historic rail equipment from the early days of the railroads in California. Founded in 1956, the museum has grown to include over 200 pieces of rolling stock, including locomotives, passenger cars, freight cars, and cabooses. The museum also features exhibits and activities that honor the history and contributions of the railroads to the development of California.

1.4 ECONOMY DESCRIPTION

The City of Perris continues to grow rapidly due to its thriving business sectors notably technology and manufacturing which are the primary drivers behind rapid expansion recently. Logistics remain an integral component of local economy managing considerable freight volumes from international airports close by, creating even more jobs for residents. Retail & hospitality (from different eateries and stores) provide significant contribution towards economic activity here today. Healthcare also plays an important role with several medical facilities located throughout region.

Perris has seen the job market increase by 2.2 percent over the last year. Future job growth over the next ten years is predicted to be 39.4 percent, which is higher than the U.S. average of 33.5 percent. In 2020, the median household income of 17,000 households in Perris grew to $66,926 from the previous year's value of $63,829.

Table 1 – Industry for Civilian Employed Population 16 Years and Over 2020

Industry for Civilian Employed Population 16 Years and Over 2020
in Perris city, California

Measure	Value
Agriculture, Forestry, Fishing and Hunting, and Mining	0.8%
Construction	13.1%
Manufacturing	9.6%
Wholesale Trade	3.5%
Retail Trade	12.8%
Transportation and warehousing, and utilities	11.7%
Information	0.6%
Finance and insurance, and real estate and rental and leasing	3.6%
Professional, scientific, and management, and administrative and waste management services	9.9%
Educational services, and health care and social assistance	17.4%
Arts, entertainment, and recreation, and accommodation and food services	9.7%
Other services, except public administration	4.1%
Public administration	3.2%

Source: United States Census Bureau

https://data.census.gov/profile/Perris_city,_California?g=1600000US0656700

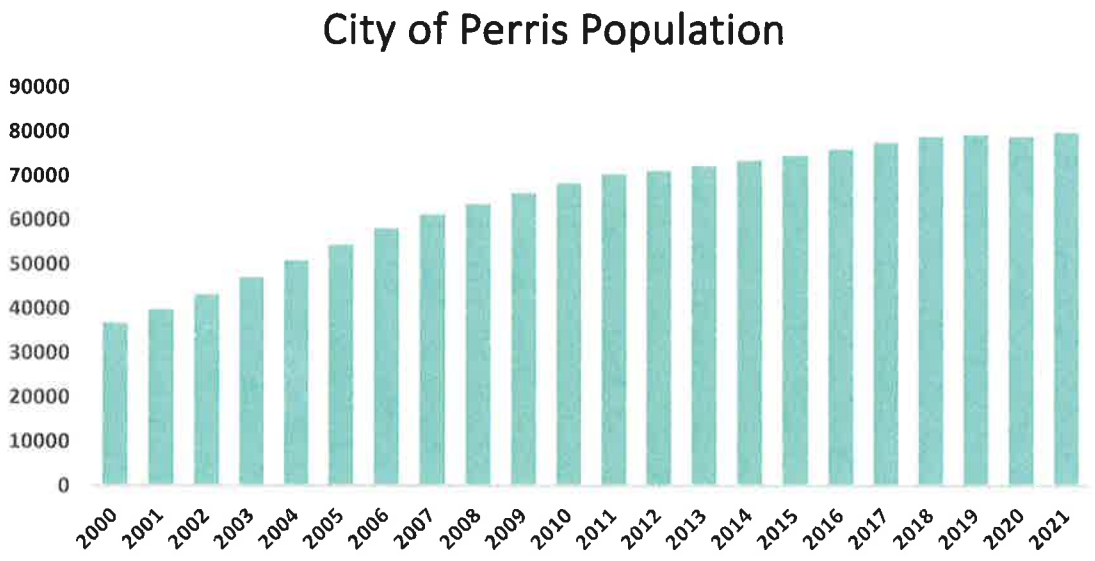
1.5 POPULATION AND HOUSING

Population: 79,835 (2020 United States Census Bureau)

The U.S. Census Bureau estimated the population for 2021 to be 79,835 for the City of Perris. From 2000 to 2021 the population has grown 116.4 percent from 36,887 to 79,835.

Perris' population continues to grow over the years, ranking 453rd in largest population in the U.S, 108th in the State of California, and 10th in the County of Riverside. The City of Perris contains 3.1 percent of the total population that reside in Riverside County.

Figure 1 – City of Perris Population



Source: United States Census Bureau

https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html#ds

Table 2 – Demographics

Race and Hispanic Origin	Percent
White alone	26.50%
Black or African American alone	8.70%
American Indian and Alaska Native alone	0.30%
Asian alone	4.20%
Native Hawaiian and Other Pacific Islander alone	0.50%
Two or More Races	9.70%
*Hispanic or Latino	79.30%
White alone, not Hispanic or Latino	6.60%

*Hispanics may be of any race, so also are included in applicable race categories

Housing: As of 2020, the median property value for a house in the City of Perris is $309,500, which is 1.35 times larger than the national average of $229,800. Also, in 2020 65.1 percent of the housing units in Perris were occupied by their owner. This percentage grew from the previous year's rate of 63.2 percent.

Between 2019 and 2020 the median property value increased from $281,600 to $309,500, a 9.91 percent increase. The homeownership rate in Perris, CA is 65.1 percent, which is approximately the same as the national average of 64.4 percent. The largest share of households pay taxes in the $3,000+ range.

Table 3 – Perris Renter vs Owner Occupied by Household Type

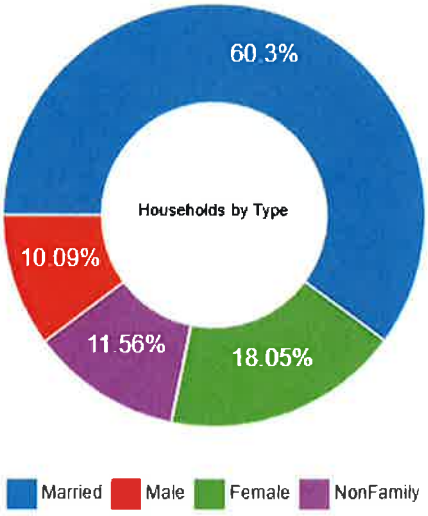
Household Type	Count	Average Size	Owner	Renter
All	17,470	4.43	65.1	34.9
Married	10,535	4.93	74.7	25.3
Female	3,154	4.6	48.3	51.7
Non-Family	2,019	1.64	46.4	53.6
Male	1,762	4.37	59	41

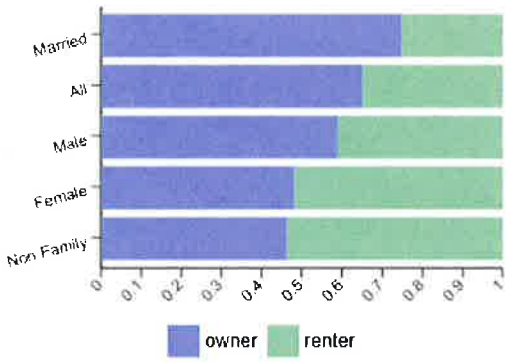
Source: U.S. Census 2020 ACS

https://worldpopulationreview.com/us-cities/perris-ca-population

Year	Population	Year	Population
2000	36887	2011	70426
2001	39930	2012	71229
2002	43307	2013	72295
2003	47059	2014	73485
2004	50856	2015	74613
2005	54428	2016	76046
2006	58159	2017	77563
2007	61356	2018	78903
2008	63743	2019	79291
2009	66136	2020	78897
2010	68386	2021	79835

Figure 2 – Household by Type





4.61 Average Family Size
4.43 Average Household Size
65.1% Rate of Home Ownership

1.6 DEVELOPMENT TRENDS AND LAND USE

In the past few years, the City of Perris has seen a significant amount of development. From 2017 to 2023, 500 residential homes have been built across four tracts. These homes have provided a much-needed boost to the local economy. In 2021, a new 11-acre multi-use park named Enchanted Hills was opened and has since served numerous communities. Recent years also brought about thousands of square feet of industrial and

commercial developments. Major retailers such as Amazon, Home Depot, Aldi, and Harbor Freight have all opened branches in the area. These businesses have brought even more prosperity to the city, bringing in more jobs and tax revenue.

The City of Perris has continued leading the county in the Cannabis Industry, having allocated several acres of land in support of the budding commerce. The city currently has about 20 active licenses spread among cultivation, distribution, manufacturing, testing, and retail. It is in talks with developers for one of the first Cannabis lounges south of Riverside County. In the past years since the last LHMP update, the Cannabis Industry has contributed positively towards the City's development.

The City of Perris is set to expand with a number of exciting developments. At least 500 more residential homes from developers such as Pulte, Richmond Valley, & DR Horton are being built. The Skills Center, a regional secondary school, will provide educational and job training opportunities to the local community. Perris will also be home to Riverside County's first Cannabis Lounge. Commercial developments will include In N Out, Raising Cane's and Target. There are also plans to create thousands of square feet of space dedicated to Distribution, Warehousing, and Truck Terminals. This expansion will provide more job opportunities, high quality housing, and recreational activities. It will also help to further stimulate the local economy. The City of Perris is headed in a constructive direction and these developments are sure to further spur economic development.

SECTION 2.0 - PLANNING PROCESS

2.1 LOCAL PLANNING PROCESS

Planning Committee

The City of Perris developed a Hazard Steering Committee for the development of the Local Hazard Mitigation Planning Annex. The personnel included:

Planning Team:

NAME	POSITION	DEPARTMENT
Clara Miramontes	City Manager	Management
Wendell Bugtai	Assistant City Manager	Management
Ernie Reyna	Deputy City Manager	Management
Kenneth Phung	Director of Development Services	Management
Veronica Arana	Building & Safety Manager	Building & Safety
David J. Martinez	Building Official/Fire Marshal	Building & Safety
Arvie Dagatan	Management Analyst	Development Services
Nathan Perez	Senior Planner	Planning
Mark Scoville	Battalion Chief	CAL FIRE
Bob Turner	Director	Perris Elementary School District
Judy Miller	Director	Perris Union High School District
Ryan Bray	Technical Consultant	Eastern Municipal Water District
Eric Cadden	Emergency Management Program Supervisor	Riverside Emergency Management Department
Jennifer Ramirez	Emergency Service Coordinator	Riverside Emergency Management Department

Initial kick-off involved Veronica Arana and relevant staff meetings with each department to go over their specific involvement with the project. The planning involved review of the prior plan, risk assessments and developing new mitigation strategies.

2.2 PARTICIPATION IN REGIONAL (OA) PLANNING PROCESS

The City of Perris has attended the meetings, workshops and trainings listed below with the purpose of community recovery, internal restructuring, and redevelopment, especially related to Emergency Management and Regional Planning Process. These activities were essential to the growth of Perris and its community. They provided helpful insights and strategies on how to move forward and progress. The City of Perris is determined to build a strong and resilient community and is committed to the development of its citizens through the implementation of the strategies discussed in the meetings. By taking part in these activities, the City of Perris is making great strides towards its goal of a strong and resilient society.

June 02, 2022 – Rapid Needs Assessment

June 15, 2022 – Multi-Jurisdictional Local Hazard Mitigation Plan Kick-off Meeting

August 10, 2022 – WebEOC Training

November 15, 2022 – Emergency Services Training

2.3 DATES AVAILABLE FOR PUBLIC COMMENT

The Public Hearing was held in January 2023 to discuss new directions regarding Emergency Management. The hearing was attended by City staff, community leaders, and major stakeholders to ensure that all perspectives were heard. Following the hearing, a survey was sent out to the public on February 06, 2023, to gather feedback on the proposed changes. Additionally, the Hazard Identification questionnaire and Jurisdiction Vulnerability worksheet were sent out to community leaders and major stakeholders to update the assessment of hazards within the jurisdiction. The survey and questionnaire were designed to ensure that all voices within the community were heard and that the proposed changes would reflect the needs of the community as a whole. Through this process, City staff was able to gain a better understanding of the community's needs and make decisions that would be beneficial to all. The survey and questionnaire responses influenced the City's updated Local Hazard Mitigation Plan. By having a public hearing and gathering feedback from the community, City staff was able to ensure that the updates were accurate and precise.

2.4 PLANS ADOPTED BY RESOLUTION

Upon approval by FEMA, the LHMP will be presented to the Perris City Council in a public meeting for adoption via an official Resolution.

SECTION 3.0 – MITIGATION ACTIONS/UPDATES

3.1 BRIEF STATEMENT OF UNIQUE HAZARDS

The City of Perris has the same hazards as much of Riverside County, such as earthquakes, flooding, and fires. However, it has a unique hazard that other cities in the area don't have – the Lake Perris Dam. The dam, if damaged, could cause a great deal of destruction to the city and its structures. Furthermore, the lake is a popular recreation spot for locals and tourists, so any damage to the dam could also lead to injuries. Additionally, the city is located in an area that is prone to earthquakes, which could cause the dam to suffer further damage. Furthermore, the dam also serves as a source of water for the city, so any damage to it could cause water shortages. In addition, the 215 highway and the BNSF railroad that runs through the middle of the city also create potential transportation related hazards and incidents. With the expected completion of the Mid County Parkway, a 16-mile transportation corridor, Perris becomes more susceptible to transport-related dangers. All these unique hazards make the City of Perris a particularly dangerous place to live.

3.2 MITIGATION PROJECT UPDATES SINCE 2018'

The City of Perris identified a list of mitigation actions taken by the City since the approval of 2018 plan.

Table 4 – Mitigation Strategies and Actions Updates from 2018 LHMP

Mitigation Project	Mitigation Action	Lead Department/ Jurisdiction	Status Update	Moving to 2023 Plan
California Building Codes	Adopt and implement current California Building Codes	Building and Safety	Completed	No
Nuevo Bridge Widening	Reduced Flood Plain	Engineering	Completed	No
Perris Reservoir	Safely route flows in the unlikely event that Perris Reservoir needs to be lowered during an emergency.	Department of Water Resources	In Progress	Yes
Perris Valley Storm Drain Infrastructure	Improve the City's Infrastructure. Indian Avenue Reconstruction, Clayton Street paving, and the completion of the Orange Avenue crossing.	Public Works	Completed	No

Flooding - Mapes and Goetz Roads	A pair of newly installed drainage pipes and an improved Floodwater Hannelore expected to alleviate problems at a major intersection in the City's south end known for chronically flooding during rainy weather.	Public Works	Completed	No
Fire Hazard severity Zone	Improved wild land fire behavior science, data sets and understanding of structure ignition mechanisms during conflagrations.	Fire department	Ordinance No. 1253 adopted 03/31/09	No
Case Road Bridge	Scheduled to be removed and replaced with a higher in elevation bridge to accommodate a 10-year storm event. The new bridge will also be widened to a 4-lane roadway and longer in length to mitigate environmental impact.	Public Works/ Engineering	Pending The project is in design and the environmental permits are in progress.	Yes
Goetz Road Bridge	Remove and replace Goetz Road Bridge with a higher in elevation bridge to accommodate a 10-year storm event. This bridge will widen to a 4-lane roadway and longer in length to mitigate environmental impact.	Public Works/ Engineering	Pending	Yes
San Jacinto River	Riverside County Flood Control and Water Conservation district (RCFCD) is the local flood control management agency and they have a preliminary design for San Jacinto River improvements. RCFCD is currently processing the project's respective environmental permits with the Federal, State and Local regulatory agencies and departments.	RCFCD/ Public Works/ Engineering	Pending	Yes

3.3 DEVELOPMENT UPDATES OF MITIGATION PROJECTS

The city continues to improve and develop new and existing projects to mitigate long-term risk to hazards. Structure and Infrastructure projects have been a high priority to create defensible space around structures. Both Figure 3 and 4 have been recent projects that have been completed since the last revision of the 2018 LHMP.

With improved infrastructure focusing on flood mitigation projects such as enhancing defensible space around structures, drainage and the transportation corridor project, the City has been able to reduce risk to its communities while improving the quality of life. Additionally, as the City continues to develop new housing, it has created an increase in new residents settling in the City. With a growth in population, it has also created a potential for an increase in the loss of lives from the Perris Dam. The City continues to work with the Perris Dam officials to update, exercise, and enhance their dam inundation and early notification plans.

Figure 3 – Mid County Parkway – Placentia Avenue

The Mid County Parkway is a new 16-mile transportation corridor designed to reduce travel times between the San Jacinto and Perris valleys. The Interstate 215 Placentia Avenue Interchange in Perris is the first construction project of this new corridor. Designed to meet the needs of a growing population, the Placentia interchange project will improve access, traffic flow, and air quality by adding on-ramps and off-ramps to Placentia Avenue. It will also realign East Frontage Road, widen the Placentia Avenue overcrossing, and add

lanes to Placentia Avenue between Harvill Avenue and Indian Avenue. The new interchange is located between Ramona Expressway to the north and Nuevo Road to the south. This project will provide a new way to enter and exit I-215, helping to reduce congestion in the area. The realigned East Frontage Road will help traffic flow more efficiently. Additionally, the widened Placentia Avenue overcrossing will help ease traffic in the area. Opened in January 2023, the project is expected to improve access and reduce travel times between the San Jacinto and Perris valleys. It will also help reduce air pollution by providing an alternate route to I-215.

Figure 4 – Perris Valley Storm Drain

A storm drain is an underground pipe system that is used to collect and transport excess rainwater and runoff from impervious surfaces, such as streets, sidewalks, and parking lots. The storm drain system helps to prevent flooding and water contamination by collecting and routing the runoff away from homes and businesses. Storm drains, also known as storm sewers, typically lead to a natural waterway, such as a lake, river, or ocean. Storm drains are designed to protect public safety by preventing the accumulation of standing water in public areas, which can become a breeding ground for mosquitoes and other pests. Storm drains can also help to reduce the burden on sewage systems by carrying rainwater and runoff to a natural waterway, where it can be naturally filtered and recycled. Storm drains can also help to improve the quality of surface water by reducing the sediment, debris, and other pollutants that can be carried through runoff. The Perris Valley Storm Drain has been completed since the last LHMP update.

SECTION 4.0 - HAZARD IDENTIFICATION AND RISK ASSESSMENT

4.1 CRITICAL FACILITIES AND INFRASTRUCTURES

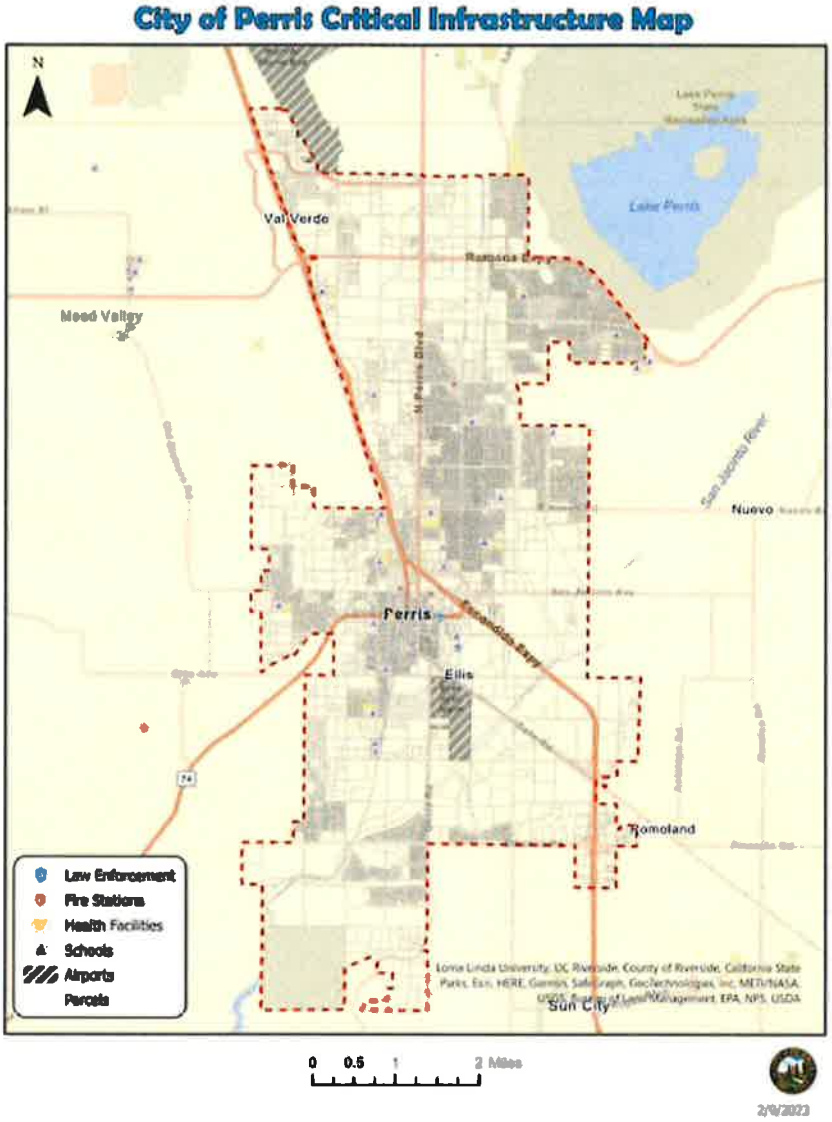
Critical infrastructures are the essential services and systems that support the functioning of a society, including energy, water, transportation, health, communications, and emergency response centers. They are the backbone of a nation and are vital for the economic, social, and political stability of a country.

Soft targets are civilian or public places (such as schools and facilities) that have limited physical security and are accessible to the general public. These places are highly vulnerable to calamities, as they are not designed to withstand emergencies both natural and man-made.

Table 5 – Critical Facilities

Critical Facilities Type	Number
Airports	1
Communications Centers	0
Detention Centers	0
City Hall	1
Emergency Operations Center	1
Fire Departments	1
Health Care Facilities	1
Law Enforcement Facilities	2
Maintenance Yards	1
Senior Community Center	3
Schools and Daycare Facilities	36
Public Utilities—Water/Sewer	0
Total	47

Figure 5 – City of Perris Critical Infrastructure Map



4.2 ESTIMATING POTENTIAL LOSS

Considering the current inflation rate at the time of this writing, the City is facing a potential loss of more than $50 million dollars for its structural assets alone. This loss includes all City owned facilities as outlined in Table 6. It is important to note that this estimate does not include any potential losses for City vehicles, trucks, cars, sedans, cargo containers, fences, or other similar infrastructure items. Such items are not included in the table. The potential loss from these items could be significant, exceeding the $50 million estimate. It is vital that the City accounts for these assets in planning for emergencies, recovery, and mitigation efforts.

4.3 TABLE REPLACEMENT VALUES

Table 6 – Estimating Potential Loss

Site	Building	Bldg. Value	Hazard Specific Info.
4TH AND WILKERSON LIFT STATION	4TH AND WILKERSON LIFT STATION	$59,674.00	Earthquake, Extreme Weather, Drought
7TH AND G STREET LIFT STATION	7TH AND G STREET LIFT STATION	$109,565.00	Earthquake, Extreme Weather, Drought, Flood
AVALON WATER WELL	AVALON WATER WELL	$282,425.00	Earthquake, Extreme Weather, Drought, Flood, Dam
BANK BUILDING	BANK BUILDING	$722,250.00	Earthquake, Extreme Weather, Drought, Flood
BOB LONG PARK	RESTROOM BUILDING	$166,942.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CITY HALL	SOLAR CANOPY 1	$237,852.00	Earthquake, Extreme Weather, Drought
CITY HALL	SOLAR CANOPY 2	$237,852.00	Earthquake, Extreme Weather, Drought
CITY HALL	SOLAR CANOPY 3	$425,813.00	Earthquake, Extreme Weather, Drought
CITY HALL	SOLAR CANOPY 4	$425,813.00	Earthquake, Extreme Weather, Drought
CITY HALL	CITY HALL	$2,320,647.00	Earthquake, Extreme Weather, Drought
CITY HALL	PLANNING OFFICE BUILDING	$1,157,846.00	Earthquake, Extreme Weather, Drought
CITY HALL	AUDITORIUM AND GYMNASIUM	$4,310,307.00	Earthquake, Extreme Weather, Drought
CITY HALL	STATLER YOUTH CENTER	$393,318.00	Earthquake, Extreme Weather, Drought
CITY HALL	MODULAR ENGINEERING DEPARTMENT	$168,271.00	Earthquake, Extreme Weather, Drought
CITY HALL	COUNCIL CHAMBERS	$1,582,089.00	Earthquake, Extreme Weather, Drought
CODE ENFORCEMENT BUILDING	MODULAR IT OFFICE BUILDING	$1,020,017.00	Earthquake, Extreme Weather, Drought
CODE ENFORCEMENT BUILDING	CODE ENFORCEMENT BUILDING	$3,400,581.00	Earthquake, Extreme Weather, Drought,
CORPORATE YARD	SOLAR CANOPY	$410,953.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CORPORATE YARD	OFFICE BUILDING	$211,155.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CORPORATE YARD	WATER DEPARTMENT OFFICE AND STORAGE	$82,746.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CORPORATE YARD	MODULAR OFFICE	$38,536.00	Earthquake, Extreme Weather, Drought, Flood, Dam

CORPORATE YARD	VEHICLE MAINTENANCE BUILDING	$307,912.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CORPORATE YARD	WASTE OIL STORAGE BUILDING	$13,892.00	Earthquake, Extreme Weather, Drought, Flood, Dam
CORPORATE YARD	EQUIPMENT STORAGE BUILDING	$192,792.00	Earthquake, Extreme Weather, Drought, Flood, Dam
FILTER PLANT STORAGE BUILDING	FILTER PLANT STORAGE BUILDING	$144,354.00	Earthquake, Extreme Weather, Drought,
FIRE STATION	FIRE STATION	$2,067,093.00	Earthquake, Extreme Weather, Drought, Dam
FIRE STATION	SOLAR CANOPY 1	$116,811.00	Earthquake, Extreme Weather, Drought, Dam
FIRE STATION	SOLAR CANOPY 2	$256,937.00	Earthquake, Extreme Weather, Drought, Dam
FIRE STATION	STORAGE BUILDING	$59,795.00	Earthquake, Extreme Weather, Drought, Dam
FOSS FIELD PARK	RESTROOM BUILDING	$116,569.00	Earthquake, Extreme Weather, Drought
FRANK EATON PARK	RESTROOM BUILDING	$129,496.00	Earthquake, Extreme Weather, Drought, Dam
LIBRARY BUILDING	CARPORT SOLAR PANELS	$291,333.00	Earthquake, Extreme Weather, Drought
MERCADO PARK	RESTROOM BUILDING	$135,535.00	Earthquake, Extreme Weather, Drought
METZ PARK	RESTROOM BUILDING	$224,442.00	Earthquake, Fire, Extreme Weather, Drought, Flood
MONUMENT RANCH PARK	PARK PAVILION	$103,887.00	Earthquake, Extreme Weather, Drought,
MORGAN PARK	RESTROOM AND CONCESSION BUILDING	$388,605.00	Earthquake, Extreme Weather, Drought, Flood, Dam
MORGAN PARK	SHELTER	$33,824.00	Earthquake, Extreme Weather, Drought, Flood, Dam
MUSEUM SANTA FE DEPOT	MUSEUM SANTA FE DEPOT	$1,544,279.00	Earthquake, Extreme Weather, Drought
NORTH PUBLIC WORKS YARD	CORPORATE YARD	$694,828.00	Earthquake, Fire, Extreme Weather, Drought, Flood, Dam
POLICE STATION	POLICE STATION	$3,806,581.00	Earthquake, Extreme Weather, Drought
POLICE STATION	STORAGE GARAGE	$419,893.00	Earthquake, Extreme Weather, Drought
RAMONA WATER WELL	RAMONA WATER WELL	$280,010.00	Earthquake, Extreme Weather, Drought, Flood
SAN JACINTO FIRE STATION	EOC BUILDING	$345,482.00	Earthquake, Extreme Weather, Drought

SAN JACINTO FIRE STATION	SAN JACINTO FIRE STATION	$2,126,163.00	Earthquake, Extreme Weather, Drought
SAN JACINTO FIRE STATION	STORAGE BUILDING	$76,706.00	Earthquake, Extreme Weather, Drought
SCHEDULED ITEMS FROM VEHICLE DATABASE	SCHEDULED ITEMS FROM VEHICLE DATABASE	$0.00	Earthquake
SENIOR CENTER	SOLAR CANOPY	$353,213.00	Earthquake, Extreme Weather, Drought
SENIOR CENTER	CARPORT	$161,265.00	Earthquake, Extreme Weather, Drought
SENIOR CENTER	SENIOR CENTER	$1,901,237.00	Earthquake, Extreme Weather, Drought
SINGLE FAMILY RESIDENCE	CITY OF PERRIS HOUSING AUTHORITY RENTAL PROPERTY	$403,125.00	Earthquake, Fire, Extreme Weather, Drought, Dam
SKYDIVE PARK	RESTROOM BUILDING	$149,306.00	Earthquake, Extreme Weather, Drought, Flood, Dam
STREETLIGHTS	BANC OF AMERICA LEASING & CAPITAL LEASE/FINANCE	$5,555,452.00	Earthquake, Fire, Extreme Weather, Drought, Dam
THEATER BUILDING	THEATER BUILDING	$1,757,005.00	Earthquake, Fire, Extreme Weather, Drought, Dam
WATER AGENCY	BOOSTER STATION	$1,063,021.00	Earthquake, Extreme Weather, Drought
WATER AGENCY	WATER TANK 1	$848,605.00	Earthquake, Fire, Extreme Weather, Drought
WATER AGENCY	DIESEL TANK	$28,872.00	Earthquake, Extreme Weather, Drought
WATER AGENCY	WATER WELL 1	$282,425.00	Earthquake, Fire, Extreme Weather, Drought
WATER AGENCY	WATER TANK 2	$848,605.00	Earthquake, Extreme Weather, Drought
WATER AGENCY	WATER WELL 2	$282,425.00	Earthquake, Extreme Weather, Drought
WATER RESERVOIRS	WATER RESERVOIR 2	$1,300,147.00	Earthquake, Extreme Weather, Drought
WATER RESERVOIRS	WATER RESERVOIR 1	$1,117,983.00	Earthquake, Fire, Extreme Weather, Drought
TOTAL		$47,694,557.00	

4.4 IDENTIFICATION OF RISKS AND VULNERABILITIES

Risk and vulnerabilities were identified by utilizing information from the Perris General Plan Safety Element along with data from several FEMA tools such as Resilience Analysis and Planning Tool (RAPT), National Risk Index (NRI), and National Flood Hazard Layer (NFHL). While also accounting for previous incidents that have occurred in the past within the jurisdiction. Lastly, the Jurisdiction Vulnerability Worksheet (See Appendix A-6) was also utilized when ranking the top hazard in the City of Perris. A risk matrix is displayed in Table 7. was developed to rank the hazards and recognize the significance of each. The top hazards identified are described in Table 8.

Table 7 – City of Perris Hazard Matrix

City of Perris Hazard Risk Matrix 2023

RISK MATRIX					
	Severity				
Probability		Minor (1)	Moderate (2)	Major (3)	Catastrophic (4)
	Highly Likely (4)	MEDIUM	HIGH	EXTREME	EXTREME
	Likely (3)	LOW	MEDIUM	HIGH	EXTREME
	Unlikely (2)	LOW	MEDIUM	MEDIUM	HIGH
	Rare (1)	LOW	LOW	MEDIUM	HIGH

Severity:

- **Catastrophic – Complete and irrecoverable failures, long-term environmental damage, or death.**
- **Major – Some disruptions, or sometimes failures with severe impacts such as major cost increase, major environmental damage or injuries.**
- **Moderate – Some disruptions with medium impacts such as moderate cost increase, delay, and minor environmental damage.**
- **Minor – Some inconvenience with minor impacts such as small cost and little to no environmental damage.**

Probability:

- **Highly Likely – Continuously experienced.**
- **Likely – Will occur frequently.**
- **Unlikely – Remotely possible but not probable.**
- **Rare – Improbable but has occurred in the past.**

Significance:

- **Extreme – Widespread potential impact**
- **High - Significant potential impact**
- **Medium – Moderate potential impact**
- **Low – Insignificant potential impact**

Table 8 – Hazard Identification

Hazard	Severity	Probability	Significance
Fire	4	4	Extreme
Flood	4	3	Extreme
Earthquake	4	3	Extreme
Extreme Weather – Heat	3	3	High
Dam Failure	4	1	High
Drought	3	3	High
Transportation Failure	4	1	High

The City of Perris chose to list the hazards below that were ranked at a higher probability level.

4.4.1 Fire

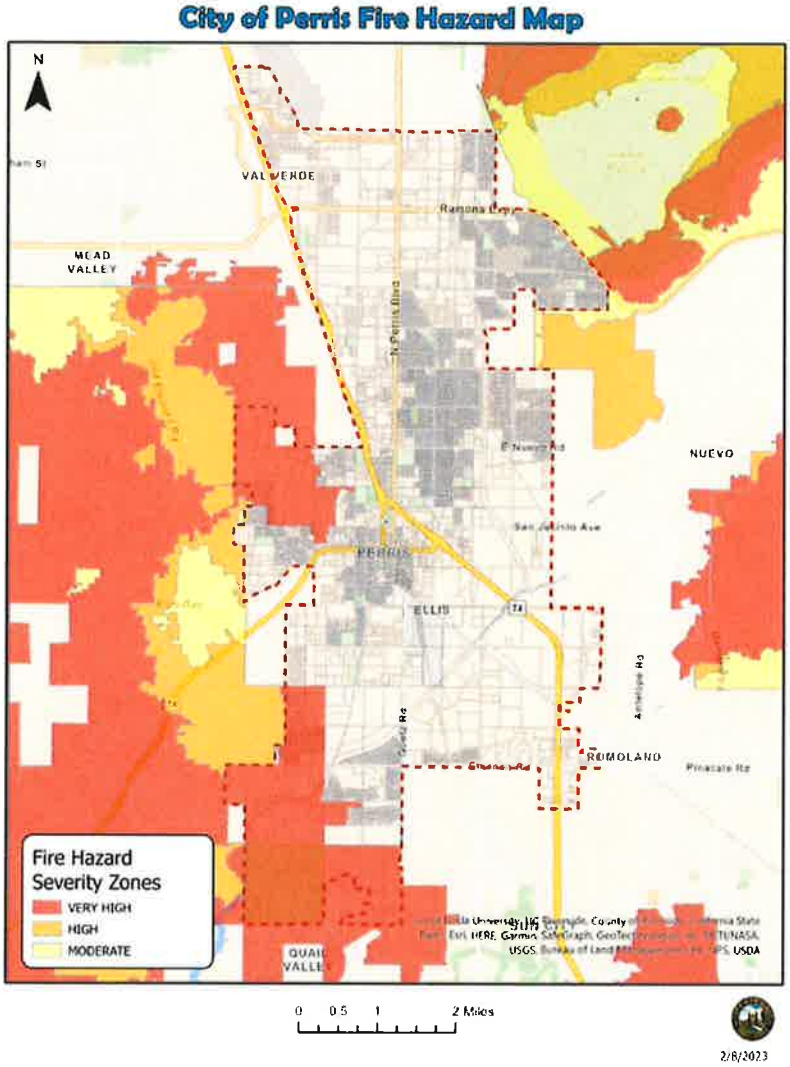
Ranking:
Severity – Catastrophic
Probability – Highly Likely
Significance – Extreme

Description: The most common type of natural hazard in California are wildfires, which can burn large areas of undeveloped or natural land in a short amount of time. They often begin as smaller fires caused by lightning strikes, downed power lines, or unattended campfires but may rapidly expand in size if conditions are dry and/or windy. The recent trend toward more prolonged periods of drought increases the likelihood of a wildfire. Typically, wildfires pose minimal threat to people and buildings in urban areas but increasing human encroachment into natural areas increases the likelihood of bodily harm or structural damage. This encroachment occurs in areas called the wildland-urban interface (WUI), considered an area within the high and very high fire hazard severity zone, as defined by Cal FIRE.

Community Impact: Wildfires have occurred in Perris in the past and pose a significant threat to people and property. Natural, undeveloped hillsides border the community. Perris's northwest and southwest portions are classified within the Very High Fire Hazard Severity Zones (VHFHSZ). A Fire Hazard Severity Zone Map is a map on Figure 6 that shows areas of high fire risk and identifies locations that are subject to the most extreme fire behavior. These maps are used by fire departments and other agencies to plan for potential wildfires and to help prioritize areas for fuel

reduction projects. The maps are based on a few factors, including topography, vegetation, and weather patterns. As seen below, Perris is surrounded by high-risk fire areas particularly in the North-East area towards Lake Perris, and again in the South-West area heading to Highway 74. These areas include housing, local business, vegetation, and City-owned properties.

Figure 6 – City of Perris Fire Hazard Map



History: The City of Perris has been identified as a Community at Risk by the California Fire Alliance and was assigned the highest category for wildfire risk. The rating is based on available vegetative fuel sources, terrain, and ease of access by firefighting equipment. Additionally, severe wind events (Santa Ana Winds) can increase the wildfire threat as winds can transport embers far distances, igniting structures within the City. Areas of greatest concern regarding wildfire primarily

include portions of the Sphere of Influence to the west of the City, the southernmost portion, and a small area in the City's northeast portion.

Future Probability: The City of Perris is surrounded by very high fire hazard zones; however, a large section of the City's urban area is not within the zones but can be affected depending on the severity of any fire.

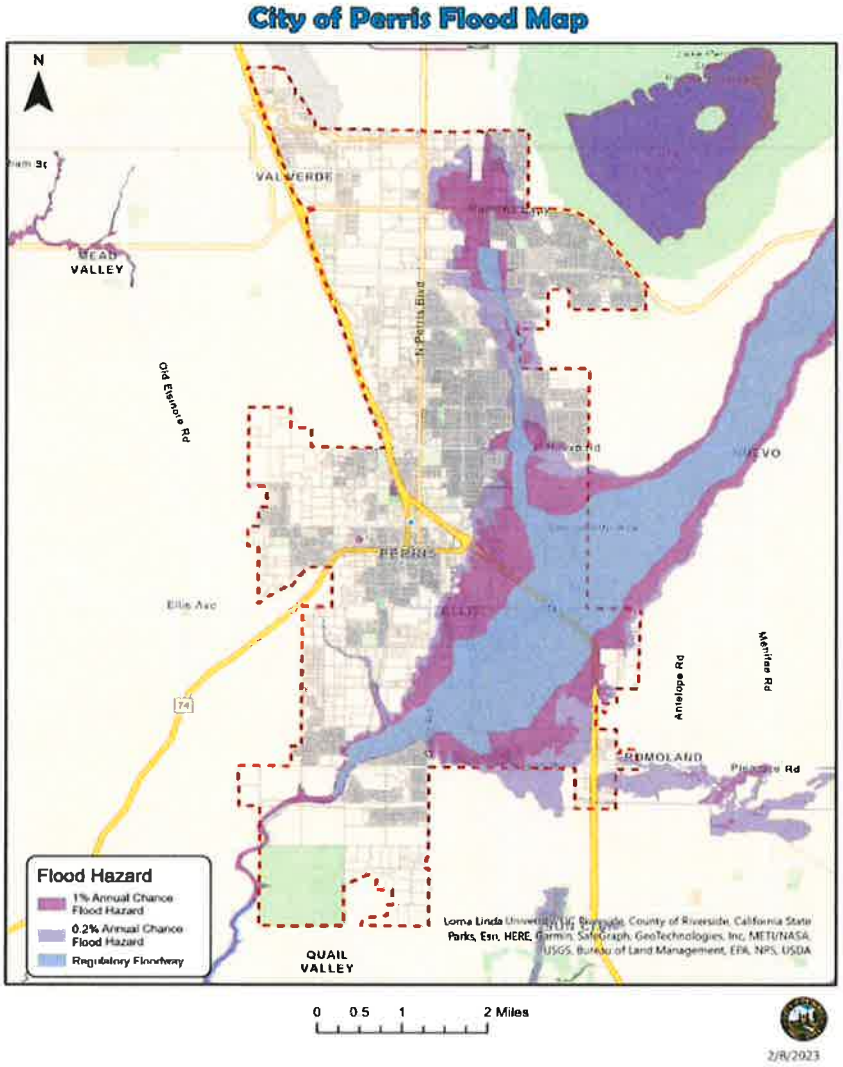
4.4.2 Flood

Ranking:
Severity – Catastrophic
Probability – Likely
Significance – Extreme

Description: Flooding is caused by the accumulation of water on the ground surface. This typically occurs after heavy rainfall but can also result from water delivery infrastructure failures such as pipes and storage containers. Worsening drought conditions caused by climate change may exacerbate the effects of flooding, as surfaces that typically absorb water can quickly dry out and become less permeable. Flooding presents multiple dangers to people and structures alike. Standing water may be deep enough to cause drowning, and even shallow water can easily damage buildings and property. Fast-moving water is more hazardous, as it may sweep people downstream or cause extensive damage to structures.

Community Impact: While normal rainfall events don't typically cause significant flooding, major storms can cause flooding if stormwater cannot be absorbed or transported by existing storm drain infrastructure. During these conditions, excessive stormflow can cause ponding, overwhelm storm drains, and erode natural drainage channels, generating mudslides. Depending on the location of flooding, roadways can become inundated and/or damaged, affecting transportation access to parts of the City. There are 1,447 properties in Perris that have a greater than 26% chance of being severely affected by flooding over the next 30 years. This represents 20% of all properties in Perris. In addition to damage on properties, flooding can also cut off access to utilities, emergency services, transportation, and may impact the overall economic well-being of an area. The City's main flood pattern follows that of the San Jacinto River Channel across the city, as shown in Figure 7. Improving the drainage and or absorption capacity for both San Jacinto and Perris Valley Storm channels would aid in decreasing the affected flood areas.

Figure 7 – City of Perris Flood Map



History: The City of Perris has dedicated over $6 million in maintenance and repairs for streets, and storm drains for flood control within each city district. The fees received by the Master Drainage Plan allow for continuation of mitigating excessive flooding.

Future Probability: A flood zone is an area designated by the Federal Emergency Management Agency (FEMA) that is at risk of flooding. It is based on the probability of flooding due to factors such as local terrain, hydrology, and rainfall patterns. Flood zones are designated as high-risk, moderate-to-low-risk, and undetermined-risk areas. More than half of the City is in a Flood Zone as seen in Figure 7. Heavy rains and or continuous rain for a long duration may cause extensive flooding throughout the City leading to road damage and other risks.

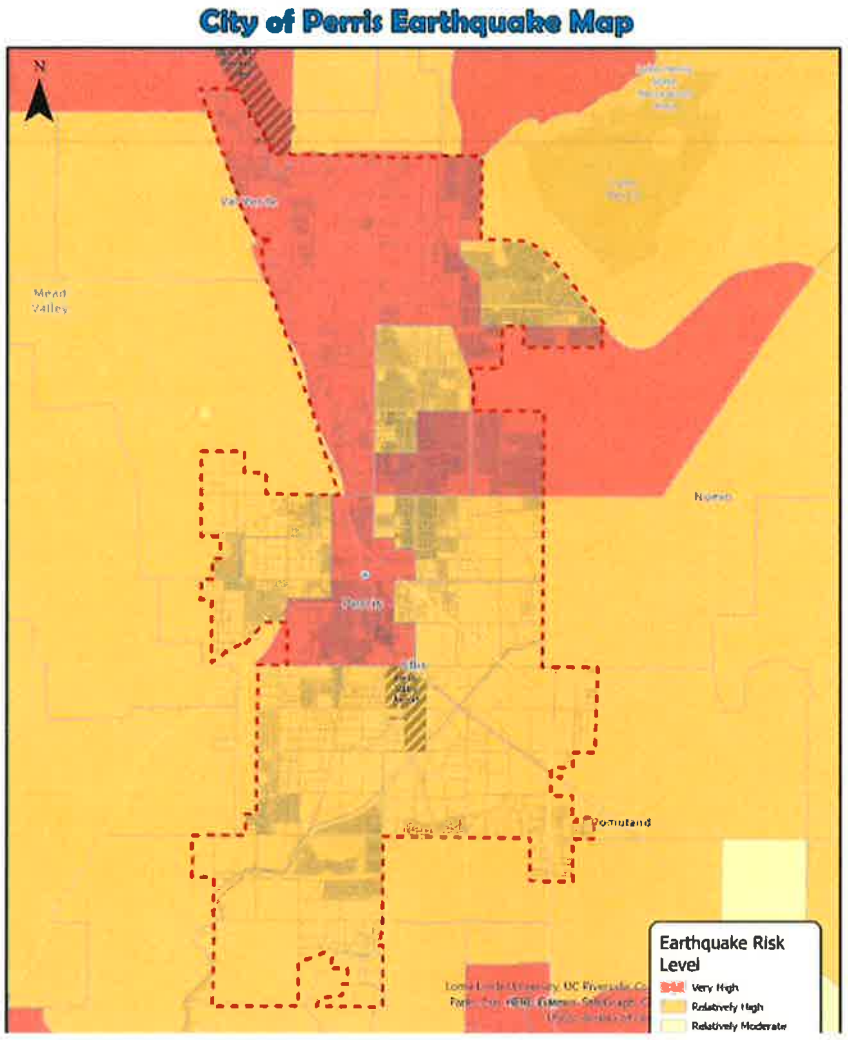
4.4.3 Earthquake

Ranking:
Severity – Catastrophic
Probability – Likely
Significance – Extreme

Description: An earthquake is the sudden, rapid shaking of the earth, caused by the breaking and shifting of subterranean rock as it releases strain that has accumulated over a long time. Initial mild shaking may strengthen and become extremely violent within seconds. Additional earthquakes, called aftershocks, may occur for hours, days, or even months. Most are smaller than the initial earthquake, but larger magnitude aftershocks also occur. California has the most damaging earthquakes in the United States.

Community Impact: The planning team has identified approximately 36 Unreinforced Masonry (URM) buildings in the city. The majority of the unreinforced masonry buildings are located in the downtown area of the city, which is very much a community asset. The downtown area is the community's major attraction while also being a place of gathering for many employees during hours of work. City Hall is the only critical facility that is an unreinforced masonry building, located in the downtown area. The risk levels can be seen below in Figure 8.

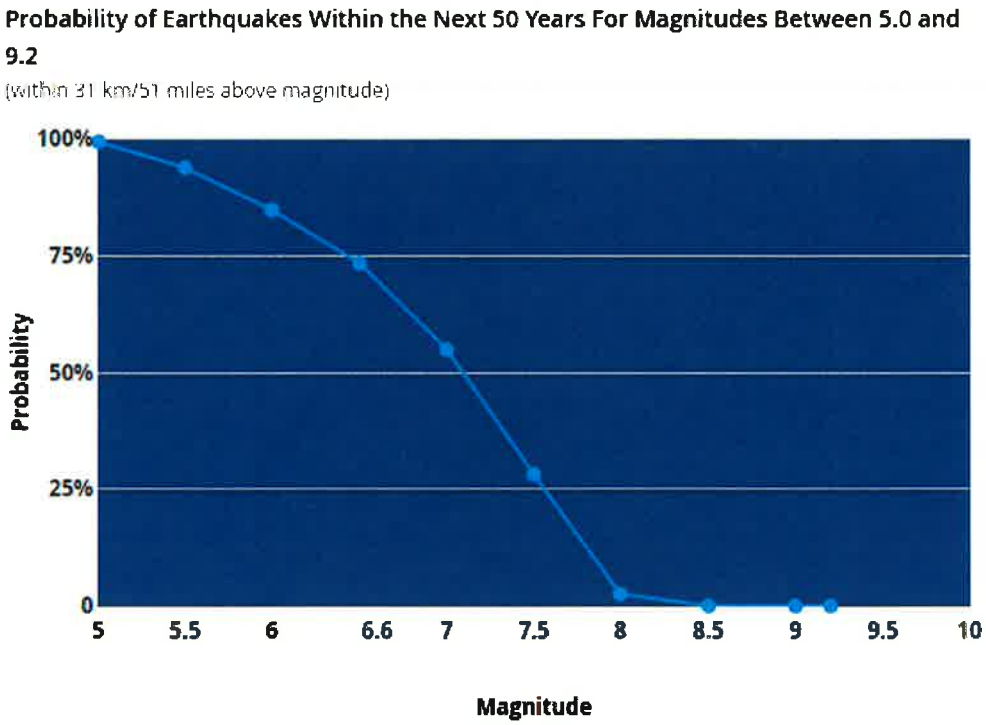
Figure 8 – City of Perris Earthquake Map



History: Perris is prone to seismic hazards due to its location in a seismically active region. These hazards can be divided into three categories, each with unique characteristics and implications for planning. Perris Valley lies between the San Jacinto Fault and the Elsinore Fault, within the Perris Block, a 20 by 50-mile mass of crystalline rocks generated in the Cretaceous time period. The Perris Block is bounded by the San Jacinto Fault to the east, the Elsinore Fault to the west, and the Cucamonga Fault to the north. This block has historically experienced vertical land movements of several thousand feet due to shifts in the Elsinore and San Jacinto faults.

Future Probability: Perris, CA has a very high earthquake risk, with a total of 28,926 earthquakes since 1931. The USGS database shows that there is a 99.36% chance of a major earthquake within 50km of Perris, CA within the next 50 years. The largest earthquake within 30 miles of Perris, CA was a 5.9 Magnitude in 1986.

Figure 9 – Probability of Earthquakes



Source: United States Geological Survey

https://earthquake.usgs.gov/earthquakes

4.4.4 Extreme Weather – Heat

Ranking:
Severity – Major
Probability – Likely
Significance – High

Description: According to FEMA, extreme heat is defined as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. In extreme heat, your body works extra hard to maintain a normal temperature, which can lead to death. Extreme heat is responsible for the highest number of annual deaths among all weather-related hazards. Lack of understanding that extreme heat can be fatal can increase hospitalizations and deaths. Because some places are hotter than others, this depends on what's considered average for a particular location at that time of year. Humid and muggy conditions can make it seem hotter than it really is.

Community Impact: The whole city is exposed to extreme heat conditions. Community members should be educated on the severity of heat illness to decrease the number of people who suffer heat illness related injury. As well as be informed of the facilities available that provide cooling resources. An increase in temperatures, extreme heat days, and changes in precipitation can affect not only humans and animals but also the agriculture people depend on. Table 9 identifies the current and historical conditions as well as projected future conditions within the City of Perris that are associated with weather change.

Table 9 – Current and Historical Heat Conditions

	Historic (1961-1990)	Future (2070-2099)
Annual Mean Temperature	79.0° F	85.2 to 87.9° F
Extreme Heat Days	4 days per year	34 to 52 days per year
Annual Mean Precipitation	10.6 inches	10.6 to 11.5 inches
Annual Average Area Burned	36.8 acres	0.0 to 32.1 acres

Source: https://cal-adapt.org/

History: The hottest temperature in Riverside, California history is 118 °F which has happened 3 times, most recently on Friday July 6, 2018. The most recent Proclamation of a State of Emergency was issued on August 31, 2022. A significant heat wave was expected to bring temperatures in excess of 100 °F throughout the State. The National Weather Service (NWS) issued Excessive Heat Warnings and Excessive Heat Watches within the State in effect beginning on August 31, 2022, through September 6, 2022.

Future Probability: As weather patterns continue to vary and change throughout the years, the City of Perris can experience extreme heat waves during any given year, especially during the summer timeframe.

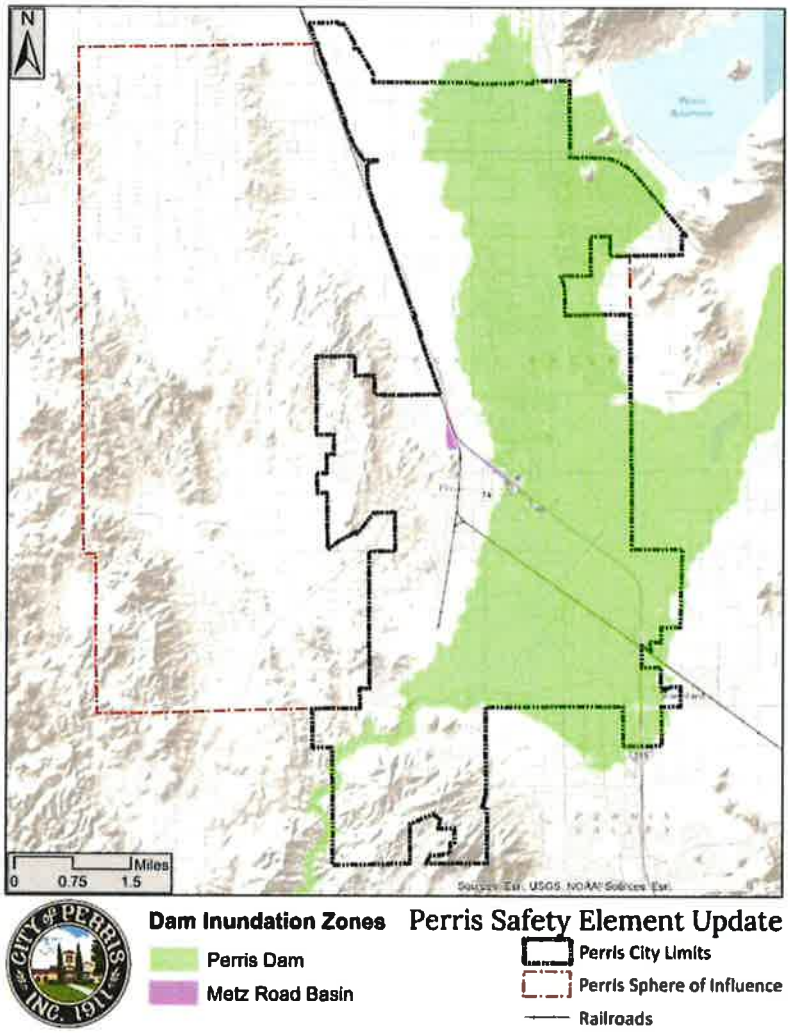
4.4.5 Dam Failure

Ranking:
Severity – Catastrophic
Probability – Rare
Significance – High

Description: A catastrophic type of failure characterized by the sudden, rapid, and uncontrolled release of impounded water, or the likelihood of such an uncontrolled release. It is recognized that there are lesser degrees of failure and that any malfunction or abnormality outside the design assumptions and parameters that adversely affect a dam's primary function of impounding water is properly considered a failure. These lesser degrees of failure can progressively lead to or heighten the risk of a catastrophic failure.

Community Impact: Dams provide 70 percent of California's urban and agricultural water supply and are an important component in providing flood management. In 2005, Perris City Council had a work session identifying two hazard scenarios involving the Perris Reservoir. The first scenario addressed the release of water from the dam due to a 7.0 or greater earthquake, and the second scenario addressed the release of water due to dam failure. If any type of failure were to occur, expelling massive amounts of water, more than half of the city would be inundated. The map below displays the dam inundation zones in Figure 10. It is vital to understand and exercise the implementation of the Dam inundation notification protocols to prevent the loss of life.

Figure 10 – Dam Inundation Zones



History: The Perris Dam was constructed from 1970 to 1974 by the California Department of Water Resources (DWR). Perris Dam was identified as a high priority state-owned dam for seismic improvements due to its proximity to nearby earthquake faults and large downstream communities. The Perris Dam Modernization Project addresses seismic risks that could impact water deliveries and the safety of surrounding communities. In 2005, DWR began the Perris Dam Modernization Project with the seismic retrofit to the dam embankment, with the completion of the remaining project components in 2026.

Future Probability: The Perris Dam Modernization Project includes three projects: the Perris Dam Remediation Project, the Outlet Tower Improvements Project, and the Emergency Release Facility Project. With the completion of the remaining project components in 2026, DWR will achieve its goal of upgrading its

infrastructure to protect our water system and enhance public safety. This upgrade will decrease the likelihood of having a dam break significantly.

4.4.6 Drought

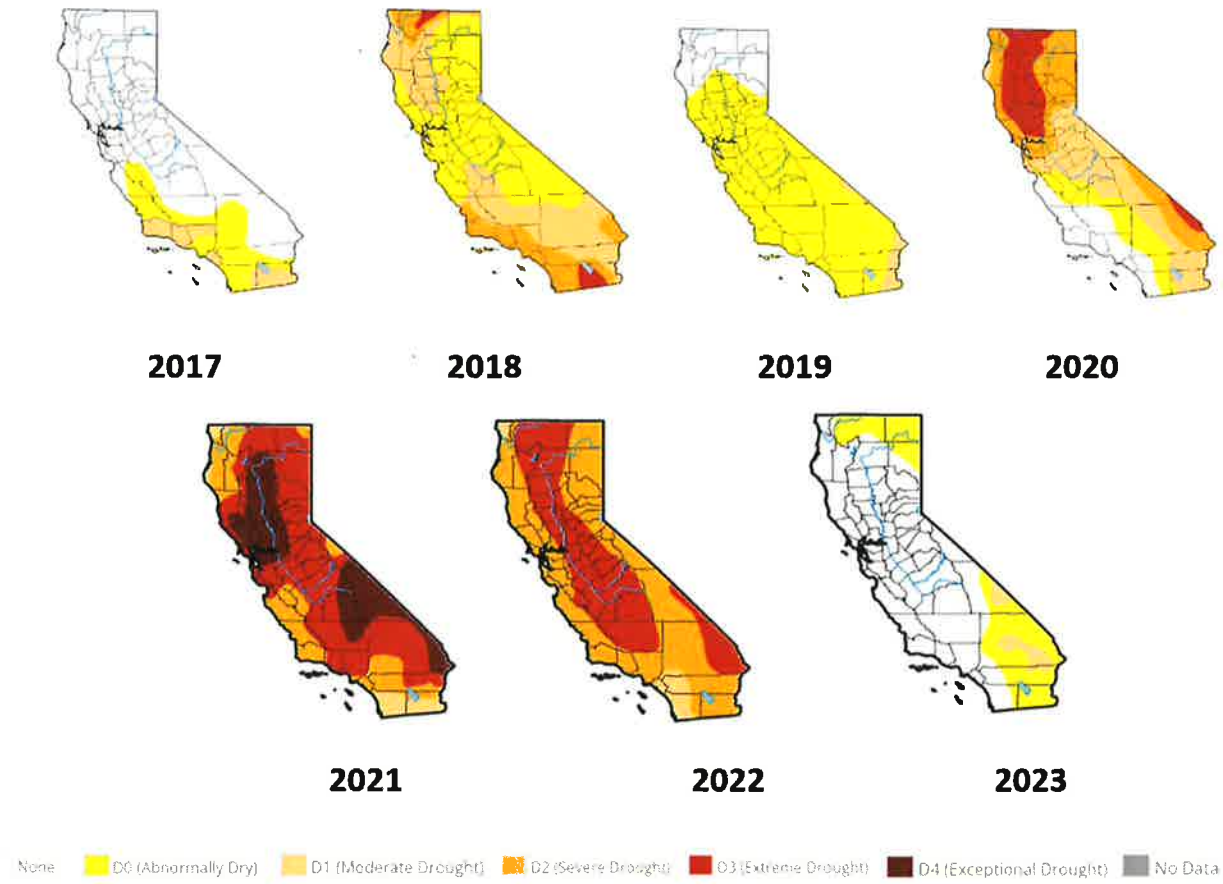
Ranking:
Severity - Major
Probability – Likely
Significance – High

Description: A drought is a deficiency of precipitation over an extended period of time resulting in a water shortage. It can be a slow-onset hazard that can last for months or years. As a hazard, it has the potential to impact many aspects of life, including two of our most important needs: drinking water and food. Because of the long duration of droughts, the impacts last for years and can ripple through a community over time. Severe droughts are projected for the coming decades and may increase incidences of other events, like wildfires. A single dry year isn't a drought for most Californians because of the state's extensive system of water infrastructure and groundwater resources buffer impacts.

Community Impact: The City of Perris relies on annual rainfall and urban runoff to recharge Lake Perris. The Lake is a source of recreation and tourism in the City. In the event of a drought, businesses throughout the City would be impacted by reduced use of the lake due to lower water levels and occurrence of fish kills. The City also has several zones of agriculture that depend on natural rainfall.

History: California is no stranger to drought; it is a recurring feature of the climate. The most recent experience has been the 5-year event of 2012-2016, and other notable historical droughts included 2007-09, 1987-92, 1976-77, and off-and-on dry conditions spanning more than a decade in the 1920s and 1930s. Provisions of California's Emergency Services Act have been used to declare a statewide drought emergency for only two of our droughts, the 2012 to 2016 event and its immediate predecessor in 2007-09. The water year that ended September 30, 2021, was the second driest on record, due to extreme heat and lack of rain and snow. With the recent Severe Storms that occurred from January through April 2023, the drought conditions in California have improved. Figure 11 demonstrates the improvement in drought conditions.

Figure 11 – California's Drought Level November 2017-2023



Future Probability: Droughts happen over time and are based upon the water supply, water storage, and geographical area. Future droughts are likely to occur given the history of California.

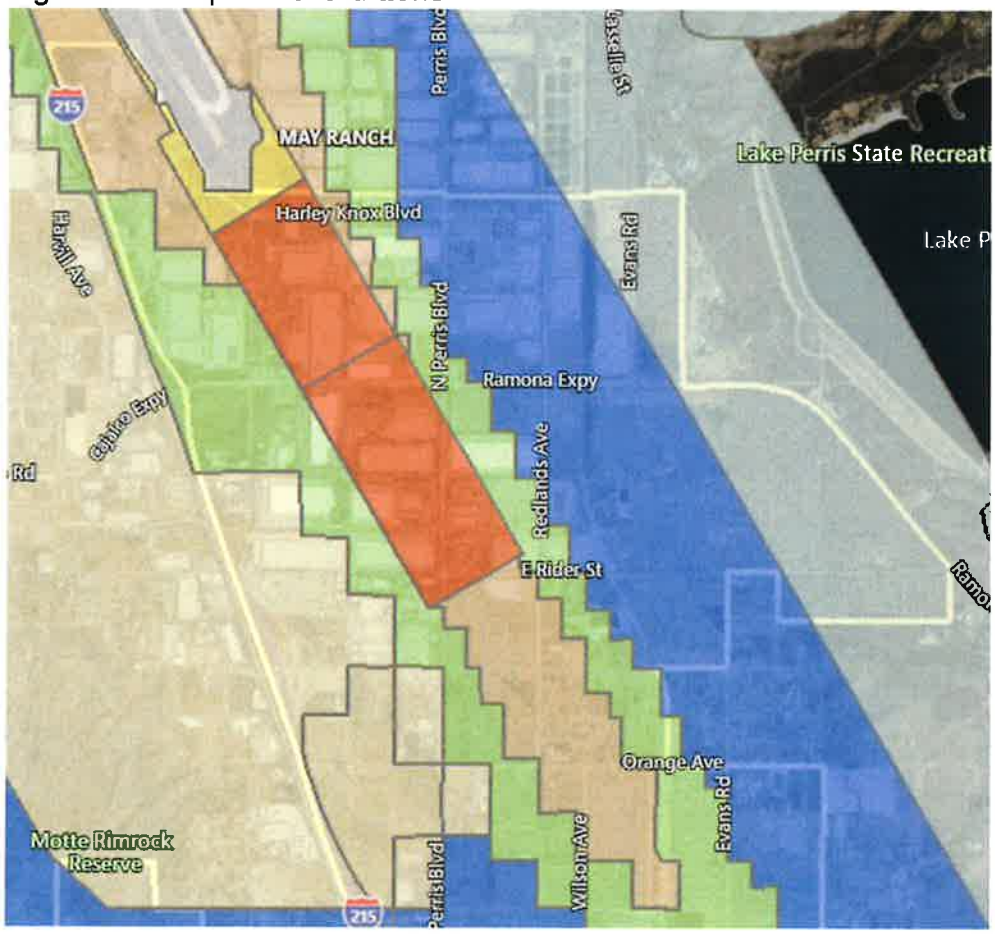
4.4.7 Transportation Failure – Air Installation Compatible Use Zone

Ranking:
Severity – Catastrophic
Probability – Rare
Significance – High

Description: The Air Installation Compatible Use Zone (AICUZ) program concerns people and their comfort, safety, and protection. Since land within proximity of

March Air Reserve Base (MARB) is subject to aircraft noise and accident potential, certain types of development are not suitable. Military aircraft conducting operations in conformance with the requirements of Federal Aviation Regulation Part 91, may safely fly over structures, such as houses, for any number of reasons in the normal course of flying. Flight paths over houses are frequently required for approaches and departures to established airfields.

Figure 12 – Airport Hazard Zone



Community Impact: The Airport Influence Area (AIA) bordering the City of Perris and March Air Reserve Base possess risks such as airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. The MARB/Inland Port Airport (IPA) Land Use Compatibility Plan divides the area close to the airport into zones based on proximity to the airport and potential impacts. Accident Potential Zones (APZ) I and II as well as Compatibility Zones for example, are located within the B1 Inner Approach and Departure Zone for MARB. This encompasses areas of high noise

levels (i.e., levels in excess of 65dB CNEL) and high accident potential risk within the inner portion of the runway approach and departure corridors.
APZ's I & II prohibit new residential uses and uses involving hazardous materials. Additionally, APZ I has more stringent non-residential intensity limitations than APZ II (i.e., limited to 25 people per acre in the APZ I and limited to 50 people per acre in the APZ II). Development in the APZs I and II are required to comply with various mitigation measures relating to the APZ I & II and Compatibility Zone B1, Avigation Easement, noise, land use and density limitations, property disclosures, lighting, development restrictions, and others. A summary of restrictions for Zone A and B1 are shown in Table 10.

Table 10 – Summary of Restrictions

Zone	Locations	Density / Intensity Standards				Additional Criteria	
		Residential (d.u./ac) [1]	Other Uses (people/ac) [2] Average [5]	Other Uses (people/ac) [2] Single Acre [6]	Req'd Open Land	Prohibited Uses [3]	Other Development Conditions [4]
M	Military					› No ALUC authority	
A	Clear Zone [7]	No new dwellings allowed	0	0	All Remaining	› All non-aeronautical structures › Assemblages of people › Objects exceeding FAR Part 77 height limits › All storage of hazardous materials › Hazards to flight [8]	› Electromagnetic radiation notification [9] › Avigation easement dedication and disclosure [8, 7]
B1	Inner Approach/ Departure Zone	No new dwellings allowed [10]	25 (APZ I) 50 (APZ II and outside APZs) [11]	100 100	Max. 50% lot coverage within APZs [12]	› Children's schools, day care centers, libraries › Hospitals, congregate care facilities, hotels/ motels, restaurants, places of assembly › Bldgs with >1 aboveground habitable floor in APZ I or >2 floors in APZ II and outside of APZs [13] › Hazardous materials manufacture/storage [14] › Noise sensitive outdoor nonresidential uses [15] › Critical community infrastructure facilities [16] › Hazards to flight [8] › Uses listed in AICUZ as not compatible in APZ I or APZ II [17]	› Locate structures maximum distance from extended runway centerline › Sound attenuation as necessary to meet interior noise level criteria [18] › Zoned fire sprinkler systems required › Airspace review req'd for objects >35 ft. tall [19] › Electromagnetic radiation notification [9] › Avigation easement dedication and disclosure [8]

History: The Department of Defense (DoD) developed the AICUZ program in response to increased urban development around military airfields. The Air Force built most of its air bases in the late 1940's and early 1950's in locations well away from urban population centers. Since then, urban growth has gradually moved closer towards the boundaries of many installations. AICUZ assists local, state, and federal officials in protecting the health, safety, and welfare of civilians and military members by encouraging compatible land use while ensuring that the incompatible development does not affect the defense mission. It also helps to reduce noise impacts caused by aircraft operations while meeting operational, training, and flight safety requirements, both on and near air installations.

Future Probability: An F-16 fighter jet crashed into a warehouse just outside MARB in 2019, sending a dozen people to hospitals for evaluation after they were exposed to debris. The crash happened as the pilot was landing following a routine training mission, the pilot ejected and parachuted to safety. The sound of planes coming and going is typically loud, but the noise just before a crash is deafening. Although plane crashes are not a common occurrence, the possibility of another aircraft crashing in the area still remains.

4.5 HAZARD REVIEW AND SUMMARY

The City of Perris has not experienced a wildfire in its district in some time, however, it remains in an area that is prone to wildfires. The main active faults in the planning area near Perris are the San Andreas, San Jacinto, Cucamonga, and Elsinore Faults. Fortunately, none of these faults are in the City of Perris or its Sphere of Influence, therefore ground surface rupture is not a concern.

The City of Perris is divided into 10 flood zones, with each zone described in detail in the Land Use portion of the General Plan. Zone 1 is located in the northern region of the City and is the most prone to flooding due to its proximity to a large body of water. Zone 2 is located in the southern region near the Elsinore Fault and is the least prone to flooding. Zone 3 is primarily located in the central region of the City and is moderately prone to flooding. Zone 4 is located in the west and is moderately prone to flooding. Zone 5 is located in the east and is moderately prone to flooding. Zone 6 is located in the northeast and is moderately prone to flooding. Zone 7 is located in the northwest and is moderately prone to flooding. Zone 8 is located in the southeast and is moderately prone.

SECTION 5.0 – COMMUNITY RATING SYSTEM

5.1 REPETITIVE LOSS PROPERTIES

The City of Perris does not have any repetitive or severe loss of properties.

5.2 NATIONAL FLOOD INSURANCE PROPERTIES

The National Flood Insurance Program (NFIP) was created in 1968 to help communities adopt more effective floodplain management programs and regulations. The Federal Emergency Management Agency (FEMA) is responsible for implementing the NFIP and approves the floodplain management plans for participating cities and

counties. Perris participates in the NFIP and uses Title 15, Chapter 4 of the Perris Municipal Code to administer flood management regulations throughout the City.

SECTION 6.0 - CAPABILITIES ASSESSMENT

6.1 REGULATORY MITIGATION CAPABILITIES

These capabilities can be expanded and improved upon by incorporating hazard information into the General Plan. Implement a process to ensure mitigation actions identified in the hazard mitigation plan are reviewed as part of the update to the City's Capital Improvement Program, Continuity of Operations Plan, and Emergency Operations Plan.

Ordinances and zoning codes offer an avenue to expand current regulatory mitigation capabilities. A dialogue between the community, the city, and developers regarding establishing green infrastructure ordinances that mandate sustainable practices in development projects has been ongoing and is at the forefront of the planning commissioner's agenda.

The council, planning commissioners, and city staff periodically review zoning ordinances and regularly consider code changes to promote mixed-use developments that encourage coexistence of residential, commercial, and recreational spaces within the jurisdiction.

Essentially, the goal is to expand on mitigation capabilities through continuous landscaping improvements and property development that incorporate some degree of fire, flood, and seismic resistance to structures. Each structure erected will go through multiple plan checks and reviews to ensure that all developments are compliant with the building and zoning codes.

Table 11 lists planning and land management tools typically used by jurisdictions to implement hazard mitigation actives and those that are currently active in the City.

Table 11 – Planning and Land Management Tools

Regulatory Tool	Active Yes/No	Comments/ Ability to Support Mitigation
General plan	YES	The General Plan is a 30-year guide for local government decision on growth, capital investment, and physical development in the City of Perris. The comprehensive General Plan was updated January 2022.
Zoning ordinance	YES	Title 19 in Municipal Code. Adopted in 1997 with amendments through January 2010
Subdivision ordinance	YES	Title 18 in Municipal Code.
Site plan review requirements	YES	Title 19 in Municipal Code. Chapter 19.50, 19.54, 19.55.
Floodplain ordinance	YES	Title 15 in Municipal Code.
Other special purpose ordinance (storm water, water conservation,	YES	Title 7 Health and Welfare; Title 9 Public Peace, Safety and Morals.
Building code	YES	The 2022 Versions of the California Codes became effective on January 1, 2023, at the local level for the City of Perris.
Fire department ISO rating	YES	
Erosion or sediment control program	YES	National Pollutant Discharge Elimination System (NPDES)
Storm water management program	YES	Title 14 in Municipal Code. Chapter 14.22 Stormwater/ Urban Runoff Management and Discharge Control.
Capital improvements plan	YES	Reviewed and updated annually.
Economic development plan	YES	
Local emergency operations plan	YES	The Emergency operations plan can be revised on an ongoing basis to include hazard mitigation through training and preparedness.
Flood Insurance Study or other engineering study for streams	YES	Completed by Interwest.

6.2 ADMINISTRATIVE/TECHNICAL MITIGATION CAPABILITIES

The Administrative and Technical capabilities can be expanded and improved to reduce risk through coordination with department managers during the annual review of the LHMP and as the City progresses towards implementation. This coordination would identify information that should be included in future updates.

The City of Perris will begin training key positions to specialize in Emergency Management, Mitigation, and Response. Specifically, over the next years, the city will begin building its own Emergency Division & Engineering Department that can provide valuable information, mitigation & response strategies based on their respective expertise.

Discussions regarding providing the ICS Series of courses to non-management staff have begun. In addition, training will be provided to general staff to better equip them for emergency management, response, and mitigation tasks. Staff members will receive instruction aimed at enhancing their capabilities in effectively addressing and managing emergencies. This training initiative seeks to bolster the staff's preparedness and proficiency in handling various crisis situations. Specifically, the management team and other key positions involved with the Incident Command System will receive training over the course of the following years.

Table 12 is a list of City Departments that can have a role in activities related to hazard mitigation.

Table 12 – City Department Hazard Mitigation Roles

	Active Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	YES	Development Services Director
Engineer/professional trained in construction practices related to buildings and/or infrastructure	YES	Interwest
Engineer with an understanding of natural hazards	YES	City Planner, City Building Official, and Public Works Director
Personnel skilled in GIS	YES	IT Department
Full time building official	YES	Building Official/ FIRE Marshal, Development Services Department
Floodplain manager	YES	Engineering & Public Works Department
Emergency manager	YES	Building & Safety Manager, Development Services
Grant writer	YES	Housing & Planning Department
GIS Data—Land use	YES	IT Department & Planning Department
GIS Data—Links to Assessor's data	YES	IT Department
Warning systems/services (Reverse 9-11, outdoor warning signals)	YES	FIRE, IT Department, Emergency Management Department

6.3 FISCAL MITIGATION CAPABILITIES

Fiscal Capabilities can be expanded and improved upon by coordinating with other departments, organizations, and agencies to identify potential assets and resources that may not currently be considered. Table 13 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Staff will continuously monitor upcoming grant opportunities while improving the project selection and fund-use of existing grant awards. Currently, the Emergency Management Division only holds three grants namely, Emergency Management Grant Program (EMPG), State Homeland Security Program (SHSP), and LISTOS. The goal is to accumulate a total of $100,000.00 to support the development of Emergency Management, Mitigation, and Response initiatives.

In addition, obtaining a Grants Analyst dedicated to seeking grant funding opportunities would increase the City's mitigation capabilities. Lastly, staff will seek to obtain grant funding from the Department of Water Resources to increase training and awareness related to Dam safety.

Table 13 – Mitigation Activity Resources

Financial Resources	Accessible	Comments
Community Development Block Grants, HMPG, other federal infrastructure	YES	HOUSING DEP, EMPG, SHSP
Capital improvements project funding	YES	ENGINEERING & PUBLIC WORKS
Authority to levy taxes for specific purposes	YES	CITY COUNCIL
Fees for water, sewer, gas, or electric services	YES	COMMUNITY SERVICES
Impact fees for new development	YES	DEVELOPMENT SERVICES
Incur debt through general obligation bonds	YES	CITY COUNCIL
Incur debt through special tax bonds	YES	CITY COUNCIL
Incur debt through private activities	YES	CITY COUNCIL
Withhold spending in hazard prone areas		

6.4 MITIGATION OUTREACH AND PARTNERSHIPS

The City of Perris is committed to emergency management preparedness and has taken various steps to ensure the safety of its citizens. The Community Emergency Response Team (CERT) program is undergoing a revamp to incorporate community volunteers, and City staff have attended neighboring CERT programs to exchange knowledge.

Perris Fire Department has entered mutual aid agreements for fire and emergency medical services with the Riverside County Fire.

Another prospective program is the LISTOS program, where the City will provide preparedness classes and events for its community members.

The City is partnering with California Governor's Office of Emergency Services (Cal OES) to receive funding through several grants, such as the State Homeland Security Program and the Emergency Management Program Grant.

In addition, Perris is partnering with Riverside County Emergency Department & Riverside County California Fire Department (CalFire) in developing the City's emergency response and mitigation plans. City staff have also been participating in California Specialized Training Institute (CSTI) courses aimed at emergency management. These initiatives demonstrate the City of Perris' commitment to emergency management and mitigation outreach and partnerships.

Aside from partnerships mentioned above, the goal is to establish a network of local community groups for mutual aid within the next 3 years. City staff is targeting at least 5 community groups to participate in the network. The division will work towards this goal by consistently reaching out to existing community organizations through leveraging social media and various emergency management-related activities.

6.5 FUNDING OPPORTUNITIES

The City of Perris has the same funding opportunities as Riverside County Operational Area.

The City was awarded more than $50,000 from the California Office of Emergency Services (Cal OES) to support Emergency Management and CERT Related activities. These grants will help fund essential emergency-related activities, such as updating the Emergency Operations Center (EOC), public outreach, and training for both the community and staff.

The funds were provided through three main grant programs: the State Homeland Security Program (SHSP), the Emergency Management Performance Grant Program (EMPG), and LISTOS. These three programs provide a wide range of resources and assistance for local governments to ensure the awareness, safety, and security of their citizens. The City's investment in these programs will help ensure that they are well-prepared to respond to any future emergencies or disasters.

SECTION 7.0 - MITIGATION STRATEGIES

7.1 GOALS AND OBJECTIVES

Goal 1: Provide Protection for People's Lives from All Hazard

Objective 1.1: Provide timely notification and direction to the public of imminent and potential hazards.

Objective 1.2: Protect public health and safety by preparing for, responding to, and recovering from the effects of natural or technological disasters.

Objective 1.3: Improve community transportation corridors to allow for better evacuation routes for public and better access for emergency responders

Goal 2: Improve Community and Agency Awareness about Hazards and Associated Vulnerabilities That Threaten Our Communities

Objective: 2.1: Increase public awareness about the nature and extent of hazards they are exposed to, where they occur, what is vulnerable, and recommend responses to identified hazards (i.e., both preparedness and response).

2.1.1: Create/continue an outreach program, provide educational resources, and develop and provide training.

Goal 3: Improve the Community's Capability to Mitigate Hazards and Reduce Exposure to Hazard Related Losses

Objective 3.1: Reduce damage to property from an earthquake event.

3.1.1: Adopt/maintain building codes to meet required earthquake standards.

Objective 3.2: Reduce flood and storm related losses.

Provide for better collection of data related to severe weather events.

: Reduce localized flooding within the City's storm drain systems.

3.2.2.1: Implement better drainage to accommodate heavy rains that cause flooding.

Objective 3.3: Minimize the impact to the City due to reoccurring drought conditions that impact both ground water supply and agricultural industry.

3.3.1: Develop an integrated City water management plan and groundwater management plan for the City of jurisdiction.

Objective 3.4: Minimize the impact to vulnerable populations within the community that may be affected by severe weather-related events, such as long duration heat waves and winter storms.

3.4.1 Develop community response plans, such as cooling centers, during heat waves.

3.4.2 : Develop community response plans during winter storms to assist the vulnerable population.

Goal 4: Provide Protection for Critical Facilities Utilities. And Services from Hazard Impacts

Objective 4.1: Improve the city's infrastructure

Goal 5: Maintain Coordination of Disaster Planning

Objective 5.1: Coordinate with changing DHS/FEMA needs

5.1.1: National Incident Management System (NIMS)
5.1.2: Disaster Mitigation Act (DMA) planning
5.1.3: Emergency Operations Plans

Objective 5.2: Coordinate with community plans

5.2.1 General plans
5.2.2: Drainage plans
5.2.3: Intergovernmental agency disaster planning.

Objective 5.3: Maximize the use of shared resources between jurisdictions and special districts for mitigation/communication.

5.3.1: Develop Mutual/Automatic Aid agreements with adjacent jurisdictions and agencies.

Objective 5.4: Standardize systems among agencies to provide for better interoperability.

5.4.1: Standardize communication technology and language

Table 14 – Mitigation Actions by Hazard

Hazard	Mitigation Action	Goal	Department(s)	Potential Funding	Completion Timeframe
Fire					
	Enforce current California Building Code standards to exclude the use of materials that pose a fire risk, such as untreated wood roofing materials, and retrofit existing structures with these elements.	1,3,5	Code Enforcement/Building	General Funds	2023 - 2028
	Identify existing non-conforming structures within the VHFHSZ's and ensure that that these structures are brought into compliance with the latest fire safe regulations and best practices.	1,3,5	Planning/Building/FIRE/ Code Enforcement	General Funds	2023 - 2028
	Establishing weed abatement efforts through code enforcement.	1,3,5	Code Enforcement	General Funds	2023 - 2028
Flood					
	Improve stability to safely route flows in the event that Perris Reservoir needs to be lowered during an emergency. (LHMP 2018)	1,3,4	Department of Water Resources/ Public Works/ Engineering	DWR Funds/ General Funds	2018 - 2026
	Improve Case Road Bridge and Goetz Road Bridge flow with a higher elevation to accommodate a 10-year storm event. In addition to widening lanes to a 4-lane roadway or longer in length to mitigate environmental impact. (LHMP 2018)	1,3	Public Works/ Engineering/ Planning	General Funds	2018 - 2027
	Riverside County Flood Control and Water Conservation (RCFCD) is the local flood control management agency to improve constructing deep foundations in erosion hazard areas within the San Jacinto River. (LHMP 2018)	1,2,3	RCFCD/ Public Works/ Engineering/ Planning	RCFCD Funds/ General Funds	2018 - 2028
	Increasing drainage or absorption capacities to improve the Perris Valley Storm Channel and San Jacinto River Channel.	1,3,4	Public Works/ Engineering/ Developers	General Funds, Transportation Uniform Mitigation Fee	2023 - 2028
	Require periodic update of the Master Drainage Plan Fees to fund drainage improvements.	1,3,5	Public Works/Engineering/ Planning/ Building Management	General Funds, Perris Valley and Romoland Drainage Fees	2023 - 2028
Earthquake					
	Require engineered slopes to be designed to resist seismically induced failure, in accordance with state-of-the-art engineering parameters and analytical methods.	1,3,4	Engineering	General Funds	2023 - 2028
	Require cut and fill transition lots to be over-excavated and require complete maximum variation of fill depths beneath structures to mitigate the potential of seismically induced differential settlement.	1,3,4	Public Works	General Funds	2023 - 2028
	Geotechnical studies will be required for all projects to determine the potential for damage from expansive soils and define appropriate mitigation measures to address the identified damage potential.	1,2,5	Public Works/Engineering	General Funds	2023 - 2028
Extreme Weather - Heat					
	Increase the availability of facilities used for cooling centers for community members to include low-income, elderly, and vulnerable groups with access and functional needs.	1,2	Emergency Management/Building/ Housing Authority	General Funds, EMPG, SHSP	2023 - 2028
	Educate people on the potential dangers of extreme heat.	1,2,5	Emergency Management/Building	General Funds, EMPG, SHSP	2023 - 2028
	Provide resources and education materials to local businesses, school districts, and community members related to extreme heat.	1,2	Emergency Management/Building/ Community Services	General Funds, EMPG, SHSP	2024 - 2028
Dam Failure					
	Determining and enforcing dam inundation notification protocols, consistent with the Perris Dam Emergency Action Plan, after a seismic event.	1,4,5	Public Works/Engineering/Planning/ Building/Emergency Management	General Funds	2023 - 2028
Drought					
	Developing agreements for secondary water resources that may be used during drought conditions.	1,3,4	Public Works/Engineering	General Funds	2023 - 2028
Transportation Failure					
	Participate in March Operations Assurance Task Force to resolve inconsistencies between local land use regulations and AICUZ and ALUP policies.	1,4,5	Planning/Building	General Funds	2023 - 2028
	Continue to notify March Air Reserve Base, and March Inland Port Airport Authority of new development project applications and consider their input before making land-use decisions.	1,4,5	Planning/Building	General Funds	2023 - 2028

7.2 FUTURE MITIGATION STRATEGIES

The City of Perris's mitigation goals and objectives include the following:

- Actively pursue to complete the mitigation policies and strategies contained in the City of Perris General Plan
- Continue to train the general city staff in the Emergency Operations Center (EOC), Emergency Operations Plan (EOP), Standardized Emergency Management System (SEMS), National Incident Management System (NIMS) and in Incident Command System (ICS).
- Train and educate the public and business community in the City of Perris' Community Emergency Response Team (CERT); as to increase the percentage of the city's population in mitigation, emergency preparedness and response. This will allow the citizens of Perris to stabilize their neighborhoods and businesses in assisting the first responders by minimizing the effects of any hazard.

Responsibility and Actions:

These future training responsibilities have been assigned to the City's Emergency Manager. Future CERT, and Emergency Workshops have been planned for the City staff, on an annual basis. In addition, the City is revamping its Community Emergency Response Team (CERT) Program. To ensure the community is better equipped to handle emergency situations, the City is partnering with the Riverside Emergency Management Department. This collaboration will result in the development of an updated Local Hazard Mitigation Plan and the organization of emergency-related workshops, meetings, and trainings. These initiatives are all part of the City's plan to enhance the community's resilience and preparedness. The Riverside Emergency Management Department will provide guidance and support to the CERT program, helping to ensure all activities are conducted correctly, safely, and efficiently. The City also plans on providing educational materials and resources to members of the community to further promote emergency preparedness. With these initiatives, the City of Perris hopes to create a more secure and resilient community.

All of these efforts will help ensure that Perris remains a sustainable and resilient city for years to come.

SECTION 8.0 - PLAN IMPLEMENTATION AND MAINTENANCE PROCESS

The City of Perris Municipal Code provides for mitigation of the hazards identified in the LHMP and an emergency response and disaster relief plan in the event of an emergency. The following codes include:

The California Model Building Codes; all adopted as the most recent. Municipal Code 16.08.050

- 2022 California Building Code
- 2022 California Plumbing Code
- 2022 California Mechanical Code
- 2022 California Electrical Code
- 2022 California Existing Building Code found in CBC, Part 10, Vol. II
- 2022 California Fire Code & NFPA
- 2022 California Administrative Code
- 2022 California Residential Code
- 2022 California Green Standards Code
- 2022 California Energy Code

The City Municipal Code takes cues from state and federal regulations as well as historical events in the City in promulgating regulations and guidance. As new regulations are passed at the state and federal level, Department staff aware of the new requirements drafts updates to the Perris Municipal Code for City Council approval. Changes and ordinances are presented before City Council by way of a public hearing during which comments are sought, considered, and recommendations are made.

The City of Perris Development Services Division will oversee the LHMP. In coordination with other City Departments, we will monitor and evaluate our LHMP on an ongoing and annual basis for the 5-year cycle as required.

On an ongoing basis, the following will be considered:

- Funding source opportunities to include grants.
- New development entitlement and construction that provide opportunity for improvements to infrastructure and communication.
- Jurisdiction trends including population growth, demographics, and build-out patterns.
- Opportunities for hazard mitigation through interagency cooperative agreements.
- The annual review will assess whether:
  - The goals and objectives are relevant to current and expected conditions.
  - Risks identified have changed or new types have been identified.
  - The current resources are appropriate for implementing the plan.
  - There are implementation problems, such as technical, political, legal, or coordination issues with other agencies.
  - The outcomes have occurred as expected (a demonstration of progress).
  - The agencies and other partners participated as originally proposed.

If changes occur during the evaluation, the City of Perris will update the LHMP revision page and update our Annex in addition to following Riverside County Multi-Jurisdictional Hazard Mitigation Plan for maintenance schedule.

SECTION 9.0 - INCORPORATION INTO EXISTING PLANNING MECHANISMS

The City has incorporated the Local Hazard Mitigation Plan by adoption into the Safety Element of the City's General Plan.

The City of Perris has a Safety Element in its General Plan that includes a discussion of fire, earthquake, flooding, and landslide hazards. This plan was adopted as an implementation appendix to the Safety Element. In addition, the City enforces the requirements of the California Environmental Quality Act (CEQA), which, since 1988, requires mitigation for identified natural hazards. The City has used these pre-existing programs as a basis for identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

The City has incorporated the plan into our Strategic Goals and Ordinances. As this change, we will update our Local Hazard Mitigation Annex.

SECTION 10.0 - CONTINUED PUBLIC INVOLVEMENT

If any changes are made in the Scheduled Plan Maintenance Process, the public will be notified through actions taken at City Council meetings by posting of the agenda and made available through outreach at community meetings.

The City of Perris will utilize various social media platforms including Instagram, Facebook & Twitter to increase public involvement and outreach regarding hazard awareness and mitigation. For major events, the City will consider using a newsletter, the local news channel, and the City's YouTube channel to disseminate information. Revamped programs, specifically the Community Emergency Response Team (CERT) program will be advertised through social media platforms and City events with an open invite to the public when the program becomes available.

APPENDIX A – PUBLIC NOTICES

Appendix A-1: County of Riverside Operational Area Multi-Jurisdictional Hazard Mitigation Planning Letter of Commitment.

CITY OF PERRIS
DEVELOPMENT SERVICES DEPARTMENT
135 NORTH D STREET, PERRIS, CA 92570-2200
TEL.: (951) 943-5003

June 03, 2022

Riverside County Emergency Management Department
Bruce Barton, Director
450 E. Alessandro Blvd.
Riverside, CA 92508

Re: County of Riverside Operational Area Multi-Jurisdictional Hazard Mitigation Planning Letter of Commitment

Dear Riverside County Emergency Management Department:

The Disaster Services Act of 2000 amended by the Stafford Act has created the framework for state, local, and tribal governments to engage in hazard mitigation planning to receive certain types of non-emergency disaster assistance. Requirements for hazard mitigation planning are identified in the Federal Code of Regulations 44 CFR § 201.6. Federal Code of Regulations identifies the Federal Emergency Management Agency (FEMA) and the State as having the responsibility for reviewing and approving of mitigation planning activities.

This letter serves as the City of Perris' intent to participate in the County of Riverside Multi-Jurisdictional Hazard Mitigation Planning. As a condition to participating, the City of Perris agrees to cooperate with the County of Riverside Emergency Management Department and meet the requirements for mitigation plans as identified in 44 CFR § 201.6.

The City of Perris understands that it must engage in the following planning processes, as described in FEMA's March 2013 Local Mitigation Planning Handbook including but not limited to:

- Identifying hazards unique to the jurisdiction;
- Conducting a risk identification and vulnerability analysis;
- Formulating mitigation goals based on public input and developing a range of mitigation actions complementary to these goals;
- Demonstrating proactive participation in the planning process by all community stakeholders (e.g., attending meetings, contributing research, data, or other information, and commenting on plan drafts);
- Documenting of a process to maintain and implement the plan; and,
- Formal adoption of the County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP) by the jurisdiction's governing body.

I, Veronica Arana, commit the City of Perris to the County of Riverside Emergency Management Department Multi-Jurisdictional Hazard Mitigation Planning effort with an understanding of the above obligations for participating in the hazard mitigation planning process.

Executed this 6th day of June 2022

Veronica Arana, Building & Safety Manager

City of Perris/ (951) 943-5003 ext. 227/ varana@cityofperris.org

Appendix A-2: Local Hazard Mitigation Plan Survey Questions

LHMP Survey Questions

Question 1: Are you responding as a Resident, Community Member, Local Business or Non-Profit Organization?

Question 2: Are you aware that the City of Perris has a Local Hazard Mitigation Plan?

Question 3: Please select the ONE hazard you think is the highest threat to your neighborhood:

a. Extreme Drought
b. Earthquake
c. Extreme Weather
d. Wildland Fire
e. Flood
f. Dam Failure
g. Emergency Disease/ Contamination
h. Landslide
i. Civil Disorder
j. HazMat Incident
k. Pipeline Disruption
l. Water Supply Disruption/ Contamination
m. Aqueduct Failure
n. Insect Infestation
o. Tornado
p. Communications Failure
q. Cyber Attack
r. Electrical Failure
s. Nuclear Incident
t. Terrorist Event – Mass Casualty Incident
u. Transportation Failure
v. Pandemic Flu

Question 4: Please select the one hazard you think is the SECOND highest threat to your neighborhood:

a. Extreme Drought
b. Earthquake
c. Extreme Weather
d. Wildland Fire
e. Flood
f. Dam Failure
g. Emergency Disease/ Contamination

h. Landslide
i. Civil Disorder
j. HazMat Incident
k. Pipeline Disruption
l. Water Supply Disruption/ Contamination
m. Aqueduct Failure
n. Insect Infestation
o. Tornado
p. Communications Failure
q. Cyber Attack
r. Electrical Failure
s. Nuclear Incident
t. Terrorist Event – Mass Casualty Incident
u. Transportation Failure
v. Pandemic Flu

Question 5: In your opinion, what are some steps the City of Perris could make to reduce or eliminate the risk of future hazard damages in your neighborhood?

Question 6: Are there any other issues regarding the reduction of risk and loss associated with hazards or disasters in the community that you think are important?

Question 7: A number of community-wide activities can reduce our risk from hazards. In general, these activities fall into one of the categories. Please tell us how important you think each one is for your community to consider pursuing:

a. Prevention: Administrative or regulatory actions that influence the way land is developed and buildings are constructed (Example- Planning and zoning , Building, codes , etc.)
b. Public Education and Awareness: Actions to inform and educate residents, elected officials, and property owners about the hazards and potential ways to mitigate them (Example- Outreach, real estate disclosure, school-age and adult education).
c. Emergency Services: Actions that protect people and property during and immediately after a disaster or hazard event (Example-Warning systems, protections of official facilities, etc.
d. Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard (Example-Dams, floodwalls , etc.).

e. Property Protection: Actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them from the hazard area (Example- retrofits, relocation, acquisition, etc.).
f. Natural Resource Protection: Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems (Example-Erosion control, stream restoration, etc.).

Question 8: What would make you lose confidence in your jurisdiction's ability to protect you and your community from hazards?

a. Non-disclosure of the hazards in my community
b. Poor planning and response to an emergency or disaster
c. Lack of follow-up in implementing carrying out mitigation projects
d. No early alert and warning notifications during an emergency or disaster
e. Too many alert and warning notifications regarding an emergency or disaster

Question 9: Please provide us your name, email, and telephone number. The City of Perris will use this information only in instances where they need to respond to your questions or comments. We will not share this information with anyone.

Appendix A-3: Outreach Flyer

Appendix A-4: Local Hazard Mitigation Plan Update Meeting agenda and sign-in sheet

LHMP Planning Committee

Agenda

Date: Thursday March 16, 2023

Time: 11:30am to 12:00pm

Location: Microsoft Team/ Zoom

	SUBJECT	TIME	PRESENTED BY	PURPOSE
I.	Opening Remarks	2 Mins		
II.	Introductions	5 Mins	All	To introduce Emergency Coordinator
III.	Plan Overview • Purpose of Plan/ Hazard Mitigation • Review of Hazards • **Mitigation Actions (CERT)** • **Importance of Damage Assessment after Calamity**	5 Mins	Arvie D. Jennifer	Discuss
IV.	LHMP Timeline	5 mins	Jennifer R.	Inform
V.	Roundtable	5 Mins	All	Discuss
VI.	Closing Remarks	2 Mins		

City of Perris LHMP Review

3/16/2023

NAME	TITLE	Department/Agency	STATUS
Kenneth Phung	Director	Development Services	Present
Zuzzette Bricker	Safety & Emergency Management Officer	Eastern Municipal Water District	Present
Bryant Hill	Director	Public Works	Present
Veronica Arana	Manager	Building and Safety	Present
Jennifer Ramirez	Emergency Services Coordinator	Riverside Emergency Management Department	Present
Arvie Dagatan	Management Analyst	Development Services	Present

Appendix A-5: Hazard Identification Questionnaire (Table 1A)

HAZARD IDENTIFICATION QUESTIONAIRE (TABLE 1A)

DOES YOUR ORGANIZATION HAVE:	
AIRPORT IN JURISDICTION	Y
AIRPORT NEXT TO JURISDICTION	Y
DAIRY INDUSTRY	N
POULTRY INDUSTRY	N
CROPS/ORCHARDS	N
DAMS IN JURISDICTION	N
DAMS NEXT TO JURISDICTION	N
LAKE/RESERVOIR IN JURISDICTION	N
LAKE/RESERVOIR NEAR JURISDICTION	Y
JURISDICTION IN FLOOD PLAIN	Y
CONTROLLED FLOOD CONTROL CHANNEL	Y
UNCONTROLLED FLOOD CONTROL CHANNEL	Y
EARTHQUAKE FAULTS IN JURISDICTION	N
EARTHQUAKE FAULTS NEXT TO JURISDICTION	Y
MOBILE HOME PARKS	Y
NON-REINFORCED FREEWAY BRIDGES	N
NON-REINFORCED BRIDGES	N
BRIDGES IN FLOOD PLAIN	Y
BRIDGES OVER OR ACROSS RIVER/STREAM	Y
ROADWAY CROSSING RIVER/STREAM	Y
NON-REINFORCED BUILDINGS	N
FREEWAY/MAJOR HIGHWAY IN JURISDICTION	Y
FREEWAY/MAJOR HIGHWAY NEXT TO JURISDICTION	Y
FOREST AREA IN JURISDICTION	N
FOREST AREA NEXT TO JURISDICTION	N
WITHIN THE 50 MILES SAN ONOFRE EVACUATION ZONE	N
MAJOR GAS/OIL PIPELINES IN JURISDICTION	N
MAJOR GAS/OIL PIPELINES NEXT TO JURISDICTION	N
RAILROAD TRACKS IN JURISDICTION	Y
RAILROAD TRACKS NEXT TO JURISDICTION	Y
HAZARDOUS WASTE FACILITIES IN JURISDICTION	N
HAZARDOUS WASTE FACILITIES NEXT TO JURISDICTION	Y
HAZARDOUS STORAGE FACILITIES IN JURISDICTION	Y
HAZARDOUS STORAGE FACILITIES NEXT TO JURISDICTION	Y
DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY	
IN A FLOOD PLAIN	Y
NEAR FLOOD PLAIN	Y
NEAR RAILROAD TRACKS	Y
NEAR A DAM	Y
UPSTREAM FROM A DAM	N
DOWNSTREAM FROM A DAM	Y
DOWNSTREAM OF A LAKE	Y
DOWNSTREAM FROM A RESERVOIR	Y
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	Y
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	N
ON AN EARTHQUAKE FAULT	N
NEAR AN EARTHQUAKE FAULT	N
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	N

HAZARD IDENTIFICATION QUESTIONAIRE CONTINUED (Table 1A)

DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY CONTINUED:	
IN A FOREST AREA	N
NEAR A FOREST AREA	N
NEAR A MAJOR HIGHWAY	Y
A HAZARDOUS WASTE FACILITY	N
NEAR A HAZARDOUS WASTE FACILITY	N
A HAZARDOUS STORAGE FACILITY	N
NEAR A HAZARDOUS STORAGE FACILITY	N
NON-REINFORCED BUILDINGS	N
A MAJOR GAS/OIL PIPELINE	N
NEAR A MAJOR GAS/OIL PIPELINE	N
DOES YOUR ORGANIZATION HAVE ANY LOCATIONS THAT:	
HAVE BEEN DAMAGED BY EARTHQUAKE AND NOT REPAIRED	N
HAVE BEEN DAMAGED BY FLOOD	Y
HAVE BEEN DAMAGED BY FLOOD MORE THAN ONCE	Y
HAVE BEEN DAMAGED BY FOREST FIRE	N
HAVE BEEN DAMAGED BY FOREST FIRE MORE THAN ONCE	N
HAVE BEEN DAMAGED BY WILDLAND FIRE	N
HAVE BEEN DAMAGED BY WILDLAND FIRE MORE THAN ONCE	N
HAVE BEEN IMPACTED BY A TRANSPORTATION ACCIDENT	Y
HAVE BEEN IMPACTED BY A PIPELINE EVENT	N
EMERGENCY OPERATIONS INFORMATION	
DOES YOUR ORGANIZATION HAVE AN EOC	Y
IS YOUR EOC LOCATED IN A FLOOD PLAIN	N
NEAR FLOOD PLAIN	N
NEAR RAILROAD TRACKS	Y
NEAR A DAM	N
UPSTREAM FROM A DAM	N
DOWNSTREAM FROM A DAM	N
DOWNSTREAM OF A LAKE	N
DOWNSTREAM FROM A RESERVOIR	N
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	N
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	N
ON AN EARTHQUAKE FAULT	Y
NEAR AN EARTHQUAKE FAULT	Y
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	Y
IN A FOREST AREA	N
NEAR A FOREST AREA	N
NEAR A MAJOR HIGHWAY	Y
A HAZARDOUS WASTE FACILITY	N
NEAR A HAZARDOUS WASTE FACILITY	N
A HAZARDOUS STORAGE FACILITY	N
NEAR A HAZARDOUS STORAGE FACILITY	N
NON-REINFORCED BUILDINGS	N
A MAJOR GAS/OIL PIPELINE	N
NEAR A MAJOR GAS/OIL PIPELINE	N
OTHER FACILITY INFORMATION **ARE THERE LOCATIONS WITHIN YOUR JURISDICTION THAT:**	
COULD BE CONSIDERED A TERRORIST TARGET	Y
COULD BE CONSIDERED A BIO-HAZARD RISK	Y

Appendix A-6: Jurisdiction Vulnerability Worksheet (Table 1C)

JURISDICTION VULNERABILITY WORKSHEET (TABLE 1C)

HAZARDS	LOCAL JURISDICTION		
NATURAL DISASTER / CLIMATE	SEVERITY 0 - 4	PROBABILITY 0 - 4	RANKING 1-25
EARTHQUAKE	4	3	3
FIRE	4	4	1
FLOOD	4	3	2
AQUEDUCT FAILURE	1	0	25
DROUGHT	3	3	6
STORM	3	3	13
INSECT INFESTATION	2	2	12
LANDSLIDE	1	1	15
TORNADO	2	1	20
EXTREME WEATHER - HEAT	3	3	4
ANTHROPOGENIC / TECHNOLOGICAL			
CIVIL DISORDER	2	1	24
COMMUNICATIONS FAILURE	4	2	9
CYBER ATTACK/ CYBER TERRORISM	3	2	8
DAM FAILURE	4	1	5
ELECTRICAL FAILURE	4	2	11
HAZARDOUS MATERIALS INCIDENT	3	1	19
JAIL/PRISON EVENT	1	1	22
NUCLEAR INCIDENT	3	1	23
PIPELINE DISRUPTION	3	1	16
RADIOLOGICAL INCIDENT	2	1	21
TERRORIST EVENT – MASS CASUALTY INCIDENT (MCI)	1	1	14
TRANSPORTATION FAILURE	4	1	7
WATER SUPPLY DISRUPTION / CONTAMINATION	4	1	10
MEDICAL			
EMERGENT DISEASE / CONTAMINATION	3	2	18
PANDEMIC	3	2	17