

LOCAL HAZARD MITIGATION PLAN

2023



Prepared by: Linda Soto
City of Indian Wells
1/1/2023

CONTACT INFORMATION

City of Indian Wells

Name: Linda Soto

Title: Emergency Service Coordinator

Address: 44-950 Eldorado Drive

City, State and Zip: Indian Wells, CA 92210

Direct Contact: (760) 346-2489

Fax: (760) 346-0407

Email: lsoto@indianwells.com

TABLE OF CONTENTS

TABLE OF CONTENTS	2
PLAN ADOPTION/RESOLUTION	3
EXECUTIVE SUMMARY.....	4
RECORD OF CHANGES.....	5
SECTION 1.0 - COMMUNITY PROFILE	6
1.1 CITY MAP.....	6
1.2 GEOGRAPHY AND CLIMATE DESCRIPTION	6
1.3 BRIEF HISTORY	7
1.4 ECONOMY DESCRIPTION.....	7
1.5 POPULATION AND HOUSING	8
1.6 DEVELOPMENT TRENDS AND LAND USE.....	9
SECTION 2.0 - PLANNING PROCESS	12
2.1 LOCAL PLANNING PROCESS	12
2.2 PARTICIPATION IN REGIONAL (OA) PLANNING PROCESS.....	13
2.3 DATES AVAILABLE FOR PUBLIC COMMENT.....	13
2.4 PLANS ADOPTED BY RESOLUTION.....	13
SECTION 3.0 - HAZARD IDENTIFICATION AND RISK ASSESSMENT.....	14
3.1 NEW HAZARDS OR CHANGES FROM 2018.....	14
3.2 BRIEF STATEMENT OF UNIQUE HAZARDS.....	14
3.3 IDENTIFICATION OF RISKS AND VULNERABILITIES.....	14
3.4 VULNERABILITY ASSESSMENT.....	31
3.4.3 KEY ASSETS REPLACEMENT VALUES.....	32
SECTION 4.0 – MITIGATION STRATEGIES.....	47
4.1 MITIGATION GOALS AND OBJECTIVES	48
4.2 MITIGATION ACTIONS FROM 2017 UPDATE	50
4.3 2023-2028 MITIGATION ACTIONS FOR EACH IDENTIFIED HAZARD	49
4.4 MITIGATION PROJECTS.....	51
SECTION 5.0 – COMMUNITY RATING SYSTEM.....	52
5.1 REPETITIVE LOSS PROPERTIES	52
5.2 NATIONAL FLOOD INSURANCE PROPERTIES.....	52
SECTION 6.0 - CAPABILITIES ASSESSMENT.....	52
6.1 REGULATORY MITIGATION CAPABILITIES	52
6.2 ADMINISTRATIVE/TECHNICAL MITIGATION CAPABILITIES.....	54
6.3 FISCAL MITIGATION CAPABILITIES	56
6.4 MITIGATION EDUCATION/ OUTREACH AND PARTNERSHIPS.....	57
6.5 EXPANSION OF AND IMPROVEMENT ON MITIGATION CAPABILITIES..	58
6.6 MITIGATION FUNDING OPPORTUNITIES CAPABILITIES	58
SECTION 7.0 - INCORPORATION INTO EXISTING PLANNING MECHANISMS	59
SECTION 8.0 - PLAN IMPLEMENTATION AND MAINTENANCE PROCESS.....	60
SECTION 9.0 - CONTINUED PUBLIC INVOLVEMENT	61
APPENDIX A – PUBLIC NOTICES AND MAPS	62
□Appendix A-12: HAZARD IDENTIFICATION QUESTIONNAIRE (TABLE 1A).....	80
□Appendix A-13: LHMP Draft Open for Public Comment e-blast	82
□Appendix A-14: LHMP Draft Open for Public Comment City website.....	83

PLAN ADOPTION/RESOLUTION

The City of Indian Wells will submit plans to the Riverside County Emergency Management Department, which will forward them to the California Governor's Office of Emergency Services (CAL OES) for review before being submitted to the Federal Emergency Management Agency (FEMA). In addition, we will wait to receive an "Approval Pending Adoption" letter from FEMA before taking the plan to our local governing bodies for adoption. Upon approval, the City of Indian Wells will insert the signed resolution.

EXECUTIVE SUMMARY

This local hazard mitigation plan aims to identify the city's hazards, review and assess past disaster occurrences, estimate the probability of future events, and set goals to mitigate potential risks to reduce or eliminate long-term risks to people and property from natural and manufactured hazards.

The plan was prepared under the Disaster Mitigation Act of 2000 requirements to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The City of Indian Wells' continual efforts to maintain a disaster-mitigation strategy is ongoing. We aim to develop and maintain an all-inclusive plan to include all jurisdictions, special districts, businesses, and community organizations to promote consistency, continuity, and unification.

The City of Indian Wells' planning process followed a methodology presented by FEMA and CAL-OES, which included conducting meetings with the Operational Area Planning Committee (OAPC) coordinated by Riverside County Emergency Management Department (EMD) comprised of participating Federal, State, and local jurisdictions agencies, special districts, school districts, non-profit communities, universities, businesses, tribes, and the public.

The plan identifies vulnerabilities, provides recommendations for prioritized mitigation actions, evaluates resources, identifies mitigation shortcomings, and provides future mitigation planning and maintenance of the existing plan.

The plan will be implemented upon FEMA approval.

RECORD OF CHANGES

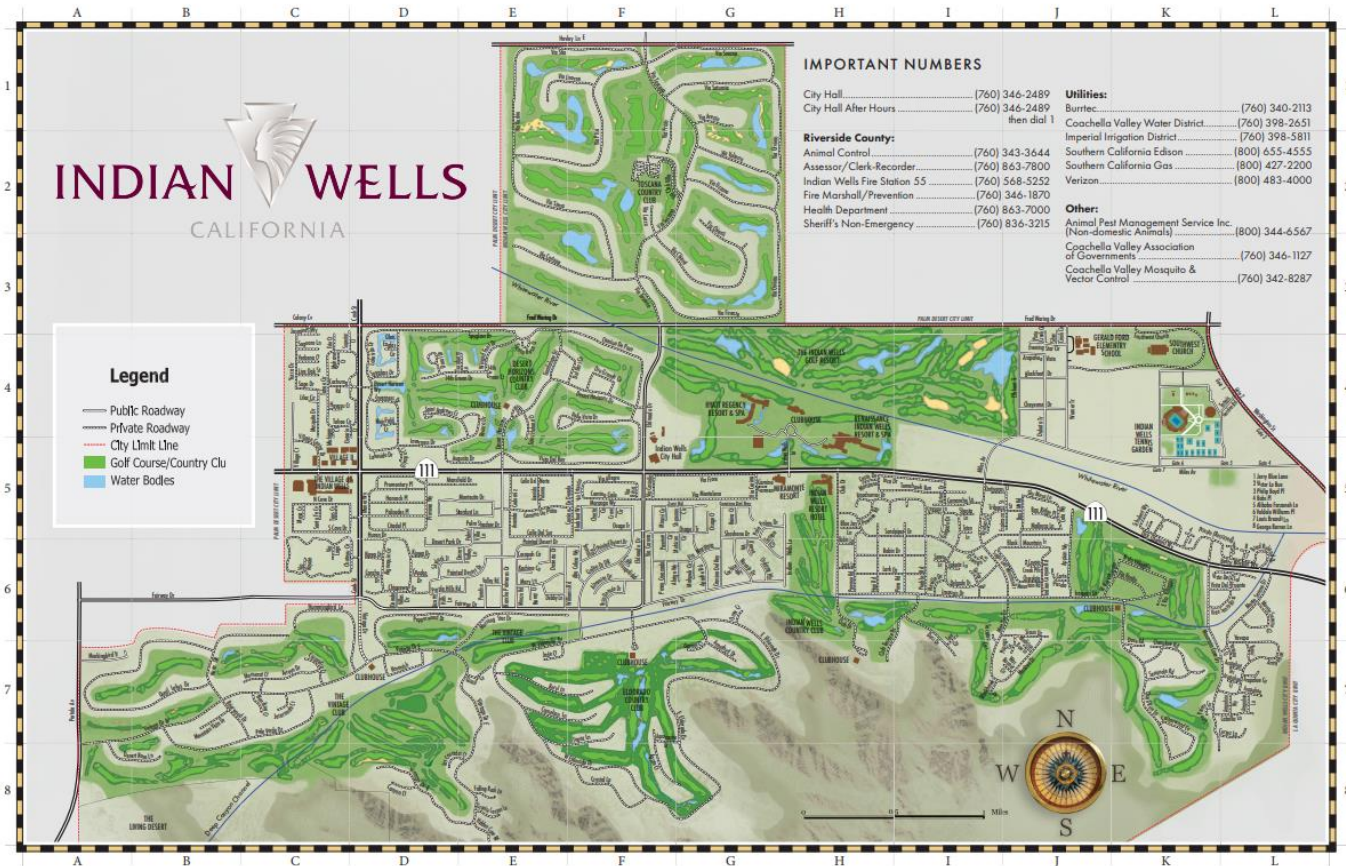
This 2023 Local Hazard Mitigation Plan, including Appendices, will be reviewed and approved annually by the Steering Committee following any significant disasters. All updates and revisions to the Plan will be tracked and recorded in the following table. This process will ensure that the City's recent version of the Plan is disseminated and implemented.

Table 1. Summary of Changes

Date of Change	Entered By	Summary of Changes

SECTION 1.0 - COMMUNITY PROFILE

1.1 CITY MAP



1.2 GEOGRAPHY AND CLIMATE DESCRIPTION

Indian Wells is a small-scale residential resort community within the Coachella Valley in Riverside County. The City of La Quinta, the City of Palm Desert, and the unincorporated areas of Riverside County adjoin the city. The current City limits encompass approximately 9,240 acres or 14.4 square miles. Direct access to the city is from State Highway 111. Direct access to the region is by Interstate 10. State Route 74 also provides access to the Coachella Valley region from the south. Unincorporated lands to the city's southwest are included within the Indian Wells sphere of influence.

Indian Wells is best known for its world-class resorts, catering to golf and tennis enthusiasts, and quality lifestyle. City residents enjoy an ideal climate, with over 330 days of sunshine each year. The City's beautiful surroundings include views of the Santa Rosa and San Jacinto Mountains.

1.3 BRIEF HISTORY

Indian Wells officially became a city on July 14, 1967. At that time, Indian Wells was the 16th city to incorporate in Riverside County and the 400th in California. It was the fourth city, after Indio, Coachella, and Palm Springs, to incorporate into the Coachella Valley. The election for incorporation was held on June 27, 1967, and, per the League of California Cities, had the most significant percentage of approval for incorporation of any city in California. The voter turnout was 87 percent of the 285 registered voters, with 93 percent in favor of becoming a city. At incorporation, there were an estimated 855 legal residents and 585 homes.

However, The Indian Wells area was inhabited long before incorporation. The name Indian Wells originated from a Cahuilla Indian hand-dug well, documented on the earliest maps of California before 1850. The original well was generally located north of present-day Highway 111 and east of Miles Avenue. The well served as a stage station until a public well was established around 1870 and remained in use until 1910. Like most communities established in the Coachella Valley, Indian Wells' origins are based on travelers' needs for water and a place to rest. A massive flood destroyed both wells in 1916.

1.4 ECONOMY DESCRIPTION

Indian Wells comprises a resort city and year-round residences with a population of 4,757 (2020 United States Census Bureau). Located in the heart of Southern California's Desert Resort communities, the City of Indian Wells is recognized worldwide for its tranquil and luxurious resort environment. The city offers numerous cultural and social activities, inspiring philanthropy, a cohesive and innovative city government, world-class resorts, and championship golf at Indian Wells Golf Resort. The city sponsors many major sporting and cultural events throughout the year. These include the world-renowned BNP Paribas Open and the Margaritaville USA Pickleball National Championships held at Indian Wells Tennis Garden; Desert Town Hall Indian Wells, the Coachella Valley's leading speaker series, and the Indian Wells Arts Festival.

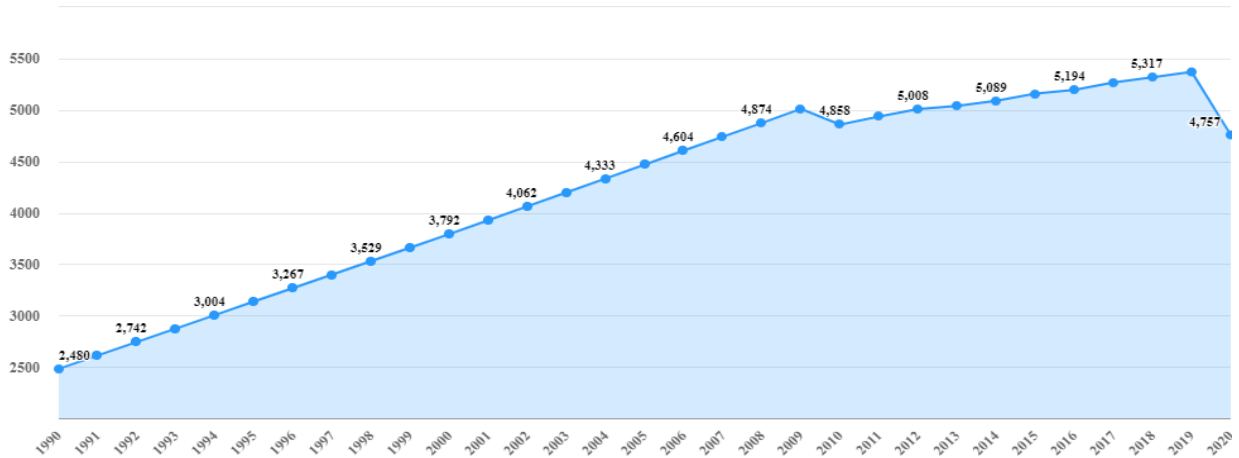
A significant contributor to the City of Indian Wells' budget revenues is collected from tourism. The tourism revenues comprised of the transient occupancy tax, admissions tax, and general sales tax comprise over 66% of the City's revenue. The 2021 American Community Surveys reported that the City of Indian Wells' median household income is \$120,680. The City of Indian Wells recognizes that a strong and healthy local economy is one of the most critical funding mechanisms in providing essential services and amenities to meet the current and future needs of the city.

1.5 POPULATION AND HOUSING

Population: 4,757 (2020 United States Census Bureau)

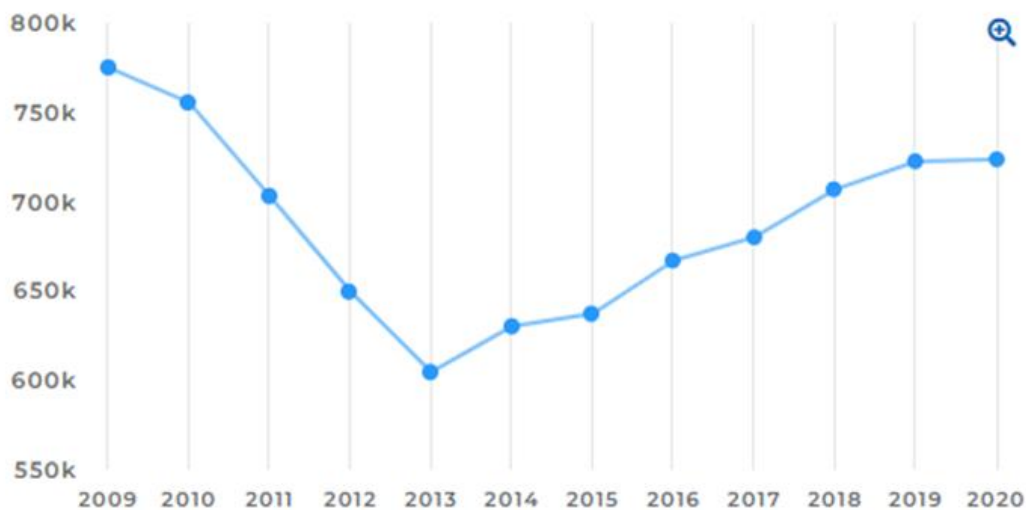
The 2020 Census showed that the total population of Indian Wells decreased by 201 people since its last 2010 survey.

United States Census Bureau Population



Housing: The City of Indian Wells' 2020 total housing units was 5,140, 23% of which are renter-occupied housing units. In 2020, the Median Home Value of an owner-occupied housing unit was 723,600. (2020 United States Census Bureau)

Median Home Values



1.6 DEVELOPMENT TRENDS AND LAND USE

The City of Indian Wells is landlocked and has no potential for expanding city boundaries because it shares borders with Palm Desert and La Quinta. The City of Indian Wells' focus has been primarily centered on the quality of new development to existing and vacant lots to stimulate economic growth, expand the hotel/resort/hospitality industry, and support opportunities to create a full spectrum housing inventory.

There are potentially three developments along the Whitewater River. Their brief descriptions are:

Genton Development – Located on the northwest corner of Highway 111 and Miles Avenue.

- Resort commercial development proposing a hotel and villas.
- The land is currently vacant, and no development application has been filed.
- The project proposes to modify the bank of the channel by relocating it approximately 60 feet to the north of its current location to create additional developable land.

Brixton Development – located on the northeast corner of Highway 111 and Miles Avenue.

- Mixed-use development proposing a hotel, a short-term rental area, and a commercial retail area.
- The land is currently vacant, and no development application has been filed.
- The project proposes to modify the bank of the channel by relocating it approximately 60 feet to the north of its current location to create additional developable land.

Housing Authority Property – located on the north side of Highway 111, just east of the Brixton site.

- City-owned property currently designated as a site for affordable housing. If an alternative location is identified for affordable housing, this site will likely be sold as another hotel site for development.
- The land is currently vacant, and no development application has been filed.
- The project proposes to modify the bank of the channel by relocating it approximately 40 feet to the north of its current location to create additional developable land.

In addition to these three sites, there are three vacant properties in the City.

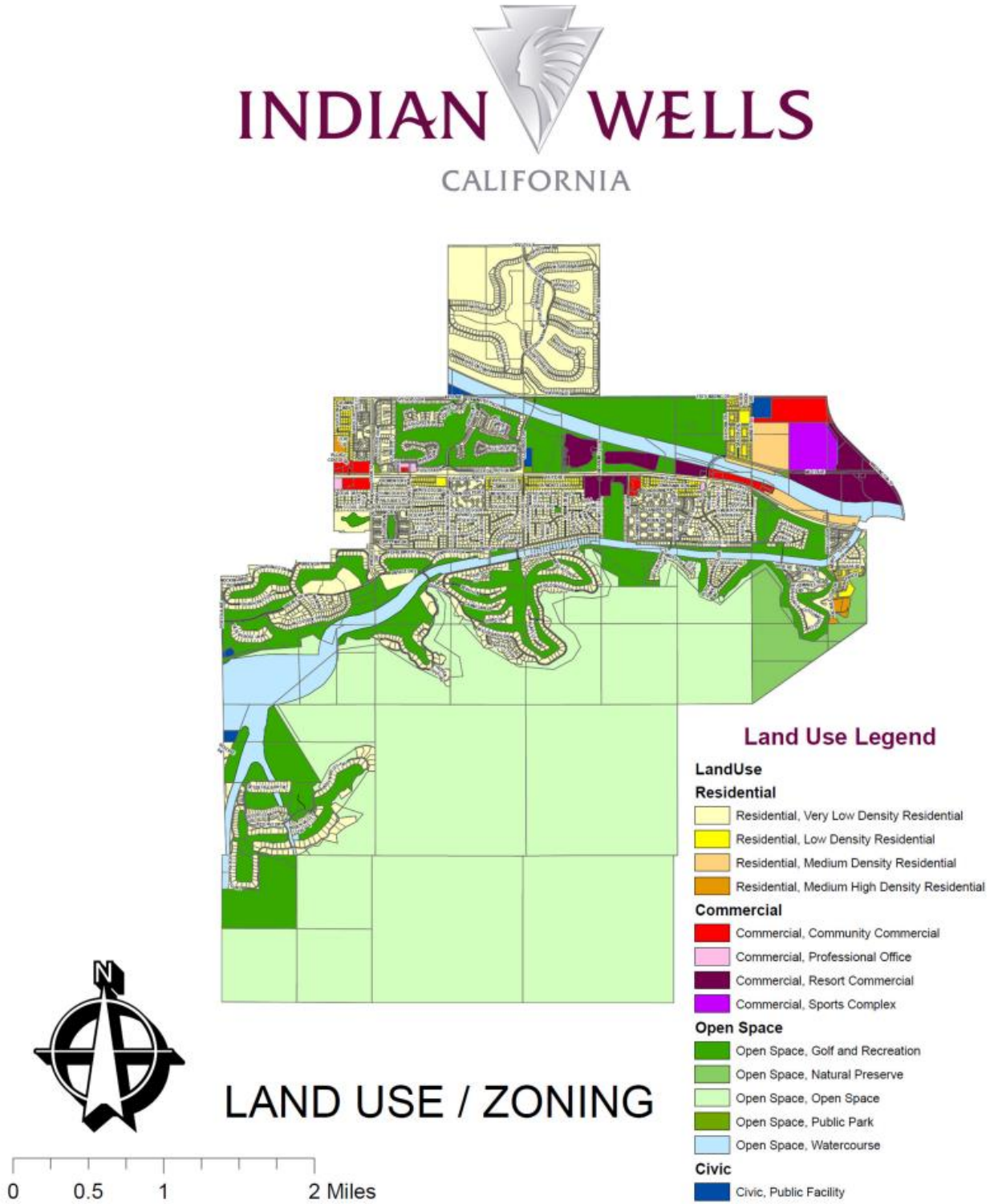
- 1) Lissoy – Located at the northeast corner of Miles Ave. at Warner Trail.
- 2) Tennis Garden (south of Miles) – Located on the south side of Miles Ave, extending from the intersection at Warner Trail to the intersection of Miles Ave and Washington Street.
- 3) Haggen – Located at the northwest corner of Washington Street at Miles Ave. This is a small parcel abutting the Indian Wells Tennis Garden property.

Potential Hazards for the Genton Development, Brixton Development, and Housing Authority property: These locations are positioned directly below the Whitewater channel, protecting the City from flooding. However, if the channel is not maintained and cleaned after heavy rains, it can become compromised, making this area a high risk for flooding.

Figure 1.6.1 City of Indian Wells Land Opportunity Site Map from General Plan



Figure 1.6.2 City of Indian Wells Land Use Map



SECTION 2.0 - PLANNING PROCESS

2.1 LOCAL PLANNING PROCESS

The City of Indian Wells Local Hazard Mitigation Planning Committee regularly meets to discuss the update process, identify mitigation strategies, prioritize mitigation actions, participate in public outreach planning, and review the plan before county submission. Representatives from multiple City departments contributed to updating the 2023 Local Hazard Mitigation Plan.

Planning Team:

NAME	POSITION	DEPARTMENT
Chris Freeland	City Manager	Management
Peter Castro	Deputy City Manager	Management
Kristen Nelson	Sr. Management Analyst	Management
Ken Seumalo	Public Works Director	Public Works
Kevin McCarthy	Finance Director	Finance
Jon Berg	Community Development Director	Planning
Matt Kotz	Battalion Chief	Cal Fire
David Wright	Lieutenant	Riverside County Sheriff's Department
John Mitroff	Special Enforcement Team (SET) Officer.	Riverside County Sheriff's Department
Kendall Martinez	Special Enforcement Team (SET) Officer.	Riverside County Sheriff's Department
Michael Ornelas	Emergency Service Coordinator Supervisor	Emergency Management Department
Linda Soto	Emergency Service Coordinator	Emergency Management Department

History of Planning Meetings, Community Events, and OA MJLHMP Meetings:

- In June 2022, the City of Indian Wells participated in a Multi-Jurisdictional Local Hazard Mitigation Plan kick-off meeting hosted by The County of Riverside Emergency Management Department.
- September 2022 LHMP Community survey for Indian Wells planning meeting.
- October 6th, 2022, LHMP update presentation for City Council and Indian Wells residents. (See Appendix A-2)
- October 12th, 2022, LHMP update meeting with City staff, Riverside County sheriffs, and Cal Fire. (See Appendix A-3)
- December 13, 2022, LHMP update meeting with City staff, Riverside County Sheriffs, and Cal Fire. (See Appendix A-5)

2.2 PARTICIPATION IN REGIONAL (OA) PLANNING PROCESS

The City of Indian Wells participated in the Multijurisdictional LHMP (MJHMP) planning process with the Riverside County Operational Area (OA) by attending workshops, plan development meetings, Operational Area planning committee, MJHMP steering committee meetings, and public hearings.

The City of Indian Wells participated in Riverside County workshops and meetings, which included:

- June 15th, 2022, The County of Riverside Emergency Management Department Multi-Jurisdictional Local Hazard Mitigation Plan kick-off meeting.
- October 5th, 2022, Riverside County Emergency Management Department LHMP Steering Committee meeting.
- October 20th, 2022, Local Hazard Mitigation Planning Risk Assessment Meeting.

2.3 DATES AVAILABLE FOR PUBLIC COMMENT

The City of Indian Wells invited its residents to participate in the update process; a survey was developed to better understand their concerns regarding hazards threatening their community. To reach the community members, the survey was sent out via social media and a community e-blast, which is the City of Indian Wells' email distribution. (See Appendix A:6)

The City provided information to the public about the Local Hazard Mitigation Plan through multiple methods to ensure the widest dissemination of information.

The methods that were utilized were:

- Online Hazard Mitigation Survey – 09/29/2022- 11/18/2022 (See Appendix A:6)
- City Council Meeting -10/06/2022 (See Appendix A:2)
- City community e-blast- 9/29/2022 and 11/14/2022 (See Appendix A:6)
- City community e-blast- 01/12/2023 (See Appendix A:13)
- LHMP draft posted for public comment on the City Website from 01/12/2023- 1/31/2023 (See Appendix A:14)

2.4 PLANS ADOPTED BY RESOLUTION

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

SECTION 3.0 - HAZARD IDENTIFICATION AND RISK ASSESSMENT

3.1 NEW HAZARDS OR CHANGES FROM 2018

No new Hazards have occurred since the approval of the 2018 LHMP plan.

3.2 BRIEF STATEMENT OF UNIQUE HAZARDS

The most prominent hazards faced by residents of Indian Wells are Earthquakes, Drought, Flooding, Wildland- Urban Interface Fires, and Severe Weather. A long-term power outage in summer could produce life-threatening extreme heat conditions for residents without access to air conditioning. In addition, the proximity of Interstate 10 and the Union Pacific Railroad increases the risk of hazardous materials transportation spills or releases during any of these natural disasters listed. The City of Indian Wells could also be impacted by terrorism or bioterrorism that initially targets the Tennis Gardens or Indian Wells Golf Resort and then spreads the impact to surrounding communities.

3.3 IDENTIFICATION OF RISKS AND VULNERABILITIES

The City of Indian Wells is a unique desert community that intends to remain the premier residential/resort city in the Coachella Valley. Only 50% of the total population resides in the City year-round. This is reflected in the fact that approximately 41 percent of the total housing units in Indian Wells were utilized for seasonal, recreational, or occasional use only, according to the 2020 Census. Although there is a decline in residential population during the summer months, the City continues to operate and prepare as if it is at 100% of the total population due to year-round tourism.

The Land Use/Zoning map shows that full build-out within the current city limits could increase from 4,685 residential units to 6,025 residential units. The City's population would increase to an estimated 6,025 persons, factoring in a vacancy rate of 0 percent.

Hazard Identification

The Hazard Mitigation Planning Committee (HMPC) conducted a hazard identification study to determine the hazards that threaten the Planning Area. This section details the methodology and results of this effort. Risks and Vulnerabilities for the Jurisdiction were identified by collecting data from our planning committee as well as utilizing The Jurisdiction Vulnerability Worksheet (See Appendix A-11 & A-12); the community was also involved and was asked to fill out a Hazard survey, which was available online. The following data sources were used for this Hazard Identification portion of the Plan Update:

- Indian Wells General Plan
- Indian Wells Emergency Operations Plan
- 2022 Indian Wells LHMP Survey (See Appendix A-6)
- The Jurisdiction Vulnerability Worksheet (See Appendix A-11 & A-12)

- 2018 Riverside County MJLHMP
- 2018 City of Indian Wells LHMP
- NOAA Storm Events Database
- FEMA National Risk Index (NRI) Comparison Report

Hazard Screening and Prioritization

Following the identification of hazards, the Planning Team went through a process to prioritize (screen) the hazards to determine which hazards created the most significant concern in the community. The Planning Team utilized a ranking implemented during this update to the City of Indian Wells LHMP. This process consists of generating a qualitative scale, Very High, High, Medium, or Low rating for 1) Probability and 2) Severity from each hazard. As part of this process, the following criteria (definitions) were applied:

❖ Geographic Extent

- **Extreme:** 50-100 percent of the planning area
- **Extensive:** 25-50 percent of the Planning area
- **Significant:** 10-25 percent of the planning area
- **Limited:** less than 10 percent of the planning area

❖ Probability

- **Very Likely:** Near 100% chance of it happening. There have been Historic Occurrences of the Hazard in the community or region, and experts concluded it is highly likely that the hazard will occur in the community. Citizens feel that there is a likelihood of occurrence.
- **Likely:** Between 10 and 100 percent chance of happening in the next year. There may or may not have been historical occurrences of the hazard in the community or region, but experts concluded that it is likely that the hazard will occur in the community. Citizens feel that there is a likelihood of occurrence.
- **Occasional:** Between 1 and 10 percent chance of happening within the next year or has a recurrence interval of 11 to 100 years. There may or may not have been a historical occurrence of the hazard in the community or region, but experts concluded that it is possible that the hazard could occur in the community. Citizens may feel that there is a likelihood of occurrence.
- **Unlikely:** Less than 1 percent chance of happening or has a recurrence interval of greater than every 100 years. There have been no historic occurrences of the hazard in the community or region and both experts and citizens agree that it is highly unlikely that the hazard will occur in the community.

❖ **Severity**

- **Catastrophic:** Both experts and citizens have concluded that the consequences will be significant in terms of building damage and loss of life. More than 50 percent of Property severely damaged, shutdown of facilities for more than 30 days; and/or multiple deaths.
- **Critical:** Consequences are thought to be significant in terms of building damage and loss of life. 25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries/illnesses result in permanent disability.
- **Limited, but not insignificant:** Consequences are thought to be modest in terms of building damage and loss of life, limited either in geographic extent or magnitude. 10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent damage.
- **Negligible:** Consequences are thought to be minimal in terms of building damage and loss of life, limited either in geographic extent or magnitude. Less than 10 percent of the property Severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid.

❖ **Risk**

- **High:** Widespread potential impact
- **Medium:** Moderate potential impact
- **Low:** minimal potential impact

Hazard	Geographic	Probability of Future Occurrence	Magnitude/Severity	Risk
Cold Wave	Extreme	Unlikely	Limited	Low
Drought	Limited	Occasional	Critical	Low
Earthquake	Extreme	Very Likely	Catastrophic	High
Flood	Significant	Very Likely	Critical	High
Heat Wave	Significant	Very Likely	Critical	High
Strong Wind	Significant	Very Likely	Critical	High
Wildland-Urban Interface Fire	Significant	Likely	Critical	High
Wind	Significant	Very Likely	Critical	High
Terrorism	Significant	Likely	Limited	High

The Planning Team identified the following Top hazards, in alphabetical order, for inclusion in the City of Indian Wells LHMP update:

- Drought
- Earthquake
- Flooding
- Extreme Heat

- Strong Wind
- Terrorism
- Wildland – Urban Interface Fire

Hazard Excluded	Reason for Exclusion
Aqueduct	The City does not have an aqueduct that could cause flooding or potential inundation. Covered in MJLHMP Section 5.3.16
Avalanches	The City does not have sufficient snowfall to have avalanche as a hazard
Civil Disturbance	While civil disturbances occur from time to time, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.1
Coastal Flooding	Due to the distance from the coast, and limited chance of waters reaching the City coastal flooding was excluded from consideration.
Cold Wave	There are low numbers of freeze events in the City. Covered in MJLHMP Section 5.3.13.2
Cyber Threats	While the potential for cyber threats exists, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.6
Hazmat Incidents	While hazardous materials releases can occur, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.22
Hurricane	While hurricane can occur along the coast, there have been no instances where it has caused a significant impact on the City.
Insects Pests and Diseases	While pests and diseases from insects can occur, there have been no instances where it has affected the City. Covered in MJLHMP Section 5.3.18
Nuclear Incident	While radiological accidents may occur, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.12
Pandemic	While the potential for a pandemic exists, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.2
Pipeline	While hazardous materials releases can occur, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.20
Tornado	While tornados can occur, there have been no instances where it has affected the City. Covered in MJLHMP Section 5.3.17
Transportation	While transportation incidents can occur, there are other avenues outside of this Plan Update to address this hazard. Covered in MJLHMP Section 5.3.14
Volcano	Due to the distance from volcanoes, and the limited chance of an eruption, volcano was excluded from consideration.
Winter Weather	While winter weather/storms can occur, the associated hazard comes from flooding and will be addressed in that hazard. Covered in MJLHMP Section 5.3.13

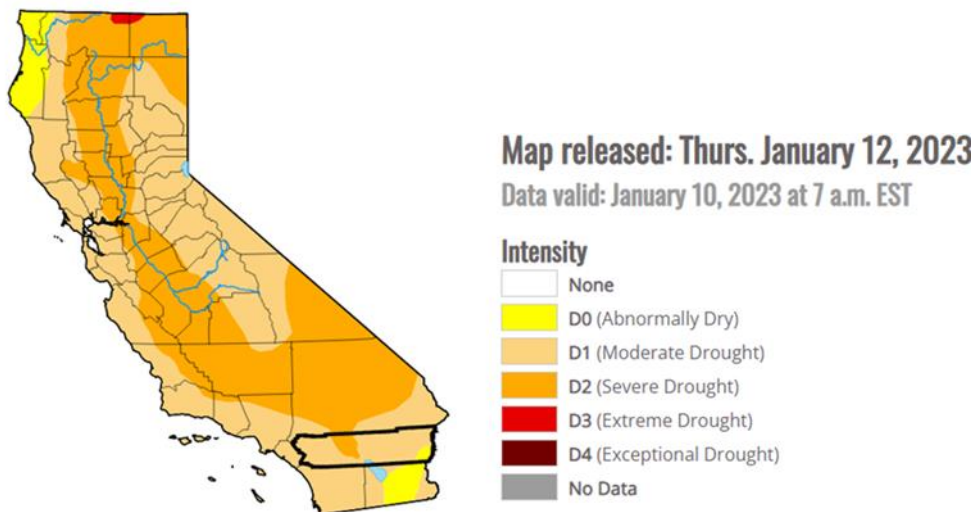
1. Drought

The City of Indian Wells is at **Low Risk** for Drought. In the Coachella Valley, the water comes from a vast underground aquifer that had been in a state of overdraft since the 1980s. Over time, the Drought risk has significantly decreased due to rain and the mitigation actions taken by the Coachella Valley Water District (CVWD) and the Coachella Valley. However, because drought is difficult to define, predict, and monitor, the entire planning area's population is at risk for Drought.

Likelihood of occurrence: Occasional

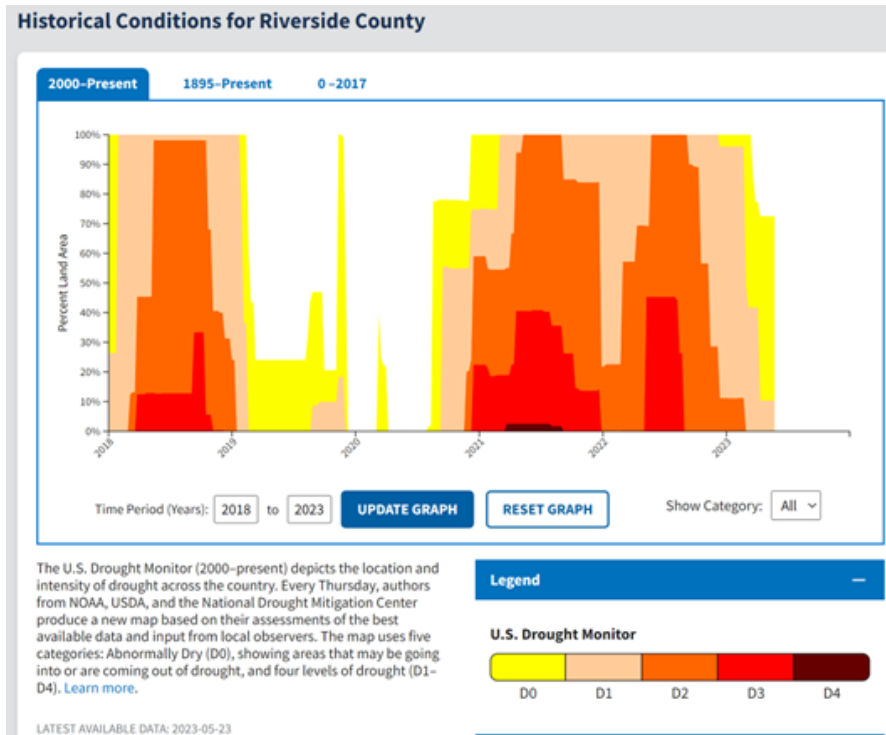
Between 1 and 10 percent chance of happening within the next year or has a recurrence interval of 11 to 100 years. With higher air temperatures, water losses could increase across the Coachella Valley Region, leading to increased evaporation in water bodies that would typically allow groundwater recharge. On average, Coachella Valley water users pump nearly three times more water out of the aquifer than is returned by natural and artificial replenishment.

Figure 1 – Indian Wells Drought Hazard



❖ History:

Figure 1.1 History of Drought in Riverside County



2. Earthquake

Ground shaking due to activity on the San Andreas and San Jacinto fault zones is the principal seismic hazard within Indian Wells. In the event of an earthquake, the location of the epicenter as well as the time of day, could have a profound effect on the potential number of deaths and casualties. An earthquake occurring in or near this area could result in property damage, environmental damage, and disruption of normal government and community services and activities. The effects could be exacerbated by collateral damage such as fires, flooding, hazardous materials spills, utility disruptions, landslides, transportation failures, and possible dam failures. The City of Indian Wells is at risk for an Earthquake at any given time. The speed of onset of earthquake is short. Duration of shaking is also short, though aftershocks may continue to occur for a period.

The San Andreas fault zone, which includes the Mission Creek and Banning faults, is located approximately four miles north of the City. Movement along the San Andreas fault is estimated to be about six centimeters yearly. The maximum probable earthquake for this fault is 7.5-8.0 on the Richter scale.

The San Jacinto fault zone is located about eight miles southwest of the City. Most of the recent earthquakes (since 1912) of moderate to large magnitude have occurred

along the San Jacinto fault zone. The San Jacinto fault zone is estimated to be able to generate a maximum probable earthquake with a magnitude of 7.0-7.5 on the Richter scale. There are no major faults located within the City boundaries. However, the City is within Seismic Response Zones.

Likelihood of occurrence: Very Likely

Near 100% chance of it happening every year. Third Uniform California Earthquake Rupture Forecast (UCERF3) concurs with previous studies that consider the Southern San Andreas Fault the most likely to host a large earthquake. Compared to UCERF2, the likelihood of $M \geq 6.7$ earthquakes on the San Jacinto Fault decreases three-fold in UCERF3 but is balanced by an equivalent increase in likelihood of $M \geq 8$ earthquakes on that fault.

Table 1 - Average time between earthquakes in the various regions together with the likelihood of having one or more such earthquakes in the next 30 years (starting from 2014).

Southern California region					
Magnitude (greater than or equal to)	Average repeat time (years)		30-year likelihood of one or more events		Readiness
5	0.24	(0.7)	100%	(1.0)	1.0
6	2.3	(0.9)	100%	(1.0)	1.0
6.7	12	(1.5)	93%	(1.0)	1.0
7	25	(1.4)	75%	(0.9)	1.1
7.5	87	(1.2)	36%	(0.9)	1.2
8	522	(0.4)	7%	(2.5)	1.3

Values listed in parentheses indicate the factor by which the rates and likelihoods have increased, or decreased, since the previous model (UCERF2). “Readiness” indicates the factor by which likelihoods are currently elevated, or lower, because of the length of time since the most recent large earthquakes. These values include aftershocks. It is important to note that actual repeat times will exhibit a high degree of variability and will almost never exactly equal the average listed here. (USGS)

Figure 2 UCERF3: Earthquake Forecast for California's Complex Fault System

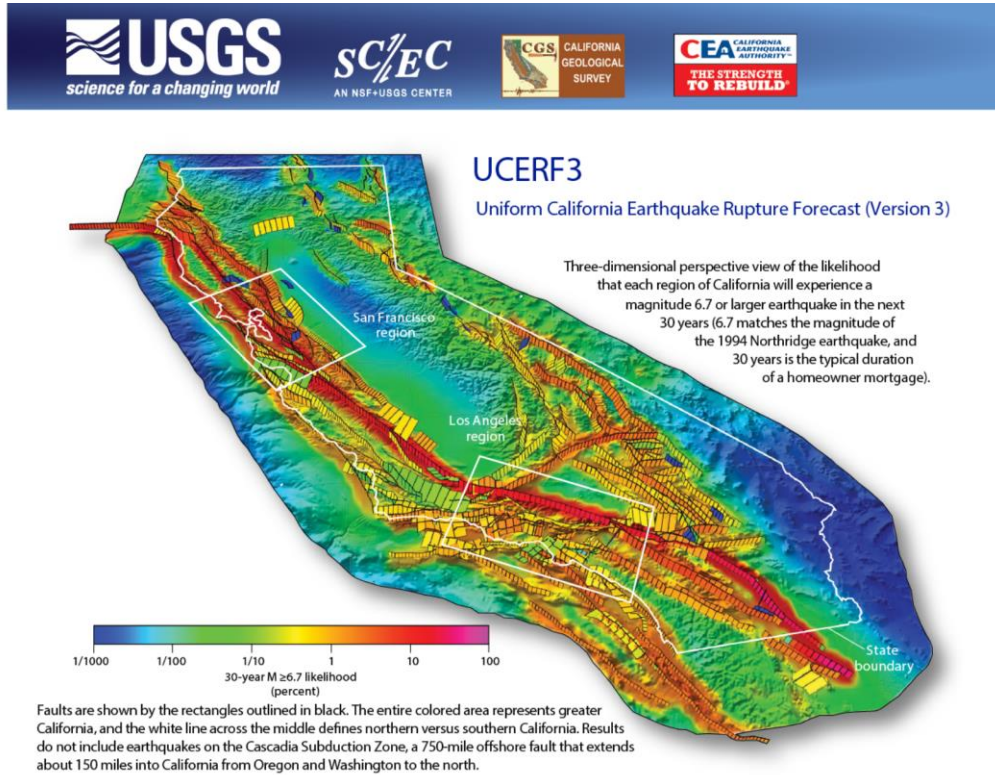
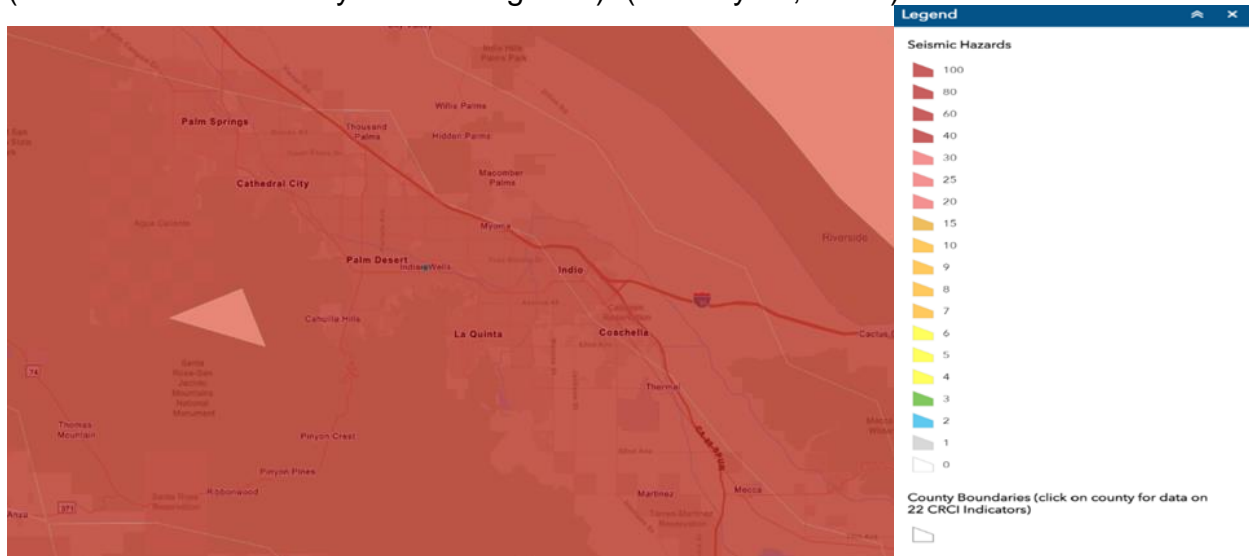


Figure 2.2 – Indian Wells Earthquake Hazard Map (See Appendix A-7) (FEMA Resilience Analysis Planning Tool) (January 1st, 2023)



❖ History

Table 2 History of San Jacinto Fault Zone Earthquakes:

Date:	Event:
2016	M5.2 Borrego Springs
2005	M _w 5.2 Anza
1987	M6.6 Superstition Hills
1968	M6.5 Borrego Mountain
1954	M6.4 San Jacinto
1942	M6.5 Fish Creek Mountains
1937	M6.0 Terwilliger Valley
1923	M6.3 North San Jacinto fault
1918	M6.8 San Jacinto
1899	M6.5 San Jacinto

3. Flood

The desert region is subject to intense storms which result in sudden and substantial runoff and flash flooding. The City of Indian Wells has two major flood control channels. The Whitewater River and Deep Canyon flood control channels generally run west to east north of Highway 111 and south of Highway 111, respectively. Heavy rains can lead to problems with storm drainage and create localized flooding.

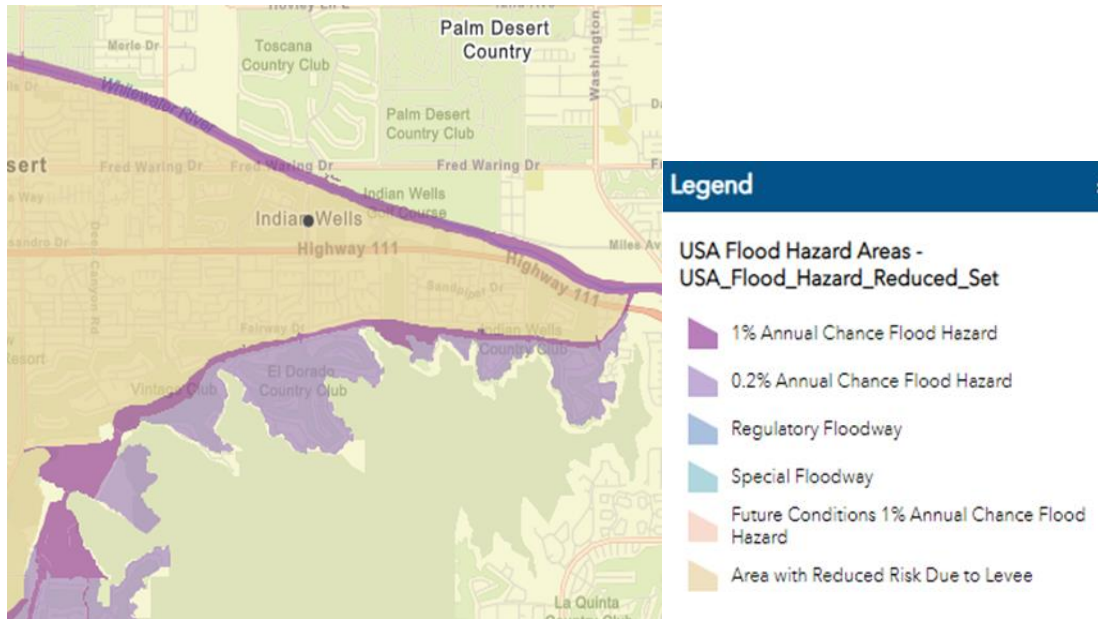
The standard measure for flooding is the "100-year flood", a benchmark used by the FEMA to establish a standard of flood control in communities throughout the country. The 100-year flood is also referred to as the "regulatory" or "base" flood. The term 100-year flood is often incorrectly used and can be misleading. The correct designation is "the 1% annual chance flood", meaning there is a 1% chance that a flood of that intensity and elevation will occur in any given year, not that the flood will occur once every hundred years.

Likelihood of occurrence: Very Likely

Near 100% chance of it happening every year. The 100-year Flood map of the City of Indian Wells is shown in Figure 2 Below. As defined by FEMA, the darker shades of purple indicate a 1% annual chance of flooding, while lighter shades of purple indicate a 0.2% annual chance of flooding. Climate change acts as an amplifier to flood hazards.

Extreme weather events have become more frequent over the past 40 to 50 years, and this trend is projected to continue. Rising sea levels and shifting weather patterns (temperate, winds) are expected to have a significant impact on rainfall frequency, intensity, and distribution, which in turn will have a significant impact on the frequency of flood occurrences. Additionally, warmer weather patterns increase snowmelt, producing more runoff to the lower elevations.

Figure 3 – Indian Wells Flood Zone Hazard Map (See Appendix A-9)
 (FEMA Resilience Analysis Planning Tool (RAPT)) (January 2023)



❖ **History**

According to the City of Indian Well’s Storm Drain Master Plan, there are several flooding problem areas in the city. These areas are primarily a result of the following:

- Clogged or plugged catch basin inlets due to debris (plastic trash bags, grass, and leaves)
- Damaged curbs and gutters where the flow lines have been disrupted due to raised gutters.

Most of the damages that occur due to flash flooding are located along the Whitewater channel that runs through our golf course between El Dorado and Miles Avenue. Some of the other causes of damages are due to undersized retention basins located along Fred Warning, El Dorado, Highway 111, and streets inside the Indian Wells, El Dorado Reserve, and Vintage Country Club.

Table 3 History of Flood Events

Hazard	Year	Damages
Winter Storm Flooding	January-February 1993	110,000
Winter Storm Flooding	February- April 1998	55,000
Flooding & Wind	December- February 2010	210, 000
Monsoonal Storm Flooding	September 2014	4,000,000
Whitewater Channel Flooding	January 2017	300,000
Whitewater Channel Flooding	February 2019	4,500,000

4. Extreme Heat

The City of Indian Wells experiences summer temperatures reaching over 120°F four months of the year and has an average temperature of over 100°F. Heat waves do not strike victims immediately, but rather their cumulative effects slowly take the lives of vulnerable populations. Heat waves do not generally cause damage or elicit the immediate response of floods, fires, earthquakes, or other more “typical” disaster scenarios. While heat waves are obviously less dramatic, they are potentially deadlier.

Likelihood of occurrence: Very Likely

Near 100% chance of it happening every year. In any given year, Indian Wells could experience extreme heat events. Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. According to information provided by FEMA, extreme heat is defined as temperatures that hover 100 degrees or more above the average high temperature for the region and last for several weeks. Heat kills by taxing the human body beyond its abilities. In a normal year, about 175 Americans succumb to the demands of summer heat. In the 40-year period from 1936 through 1975, nearly 20,000 people were killed in the United States by the effects of heat and solar radiation. In the heat wave of 1980, more than 1,250 people died. The heat index is a measure of how hot it feels when relative humidity is factored in with the actual air temperature (Figure 3).

❖ History

The City of Indian Wells experiences extreme temperatures on an annual basis. Some of the events require the City to act, including disseminating Public Service Announcements, checking in with vulnerable populations (elderly, homeless), and opening and/or coordinating with others to open cooling centers.

Figure 4 National Weather Service (NWS Heat Index, January 2023)

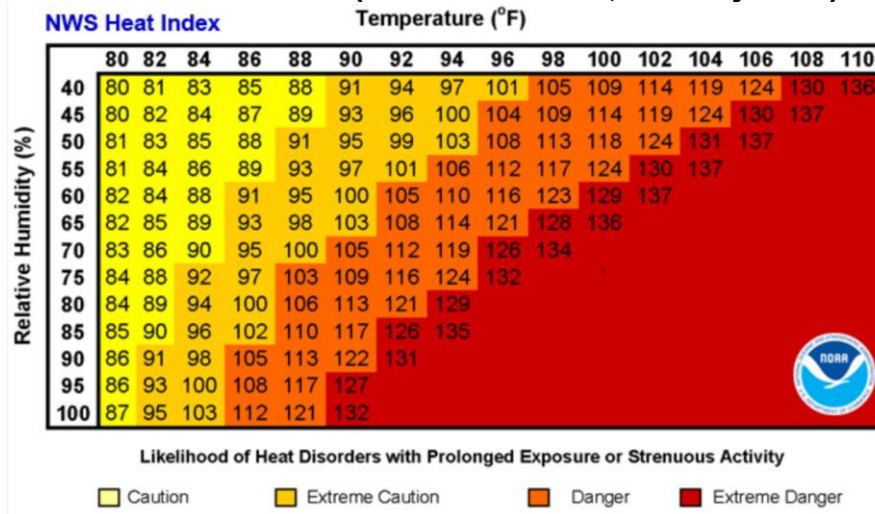


Figure 4.1 NWS Monthly Summarized Data for Max Temperature 2018-2023

Monthly Highest Max Temperature for Palm Springs Area, CA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2018	86	91	97	101	108	116	121	116	116	97	96	79	121
2019	79	80	88	104	100	116	118	121	114	102	95	75	121
2020	82	89	87	106	111	115	122	120	122	113	98	84	122
2021	90	86	96	109	102	123	120	122	113	101	94	91	123
2022	81	93	96	101	108	114	116	116	114	103	81	83	116
2023	74	79	84	106	105	M	M	M	M	M	M	M	106
Mean	82	86	91	105	106	117	119	119	116	103	93	82	118
Max	90 2021	93 2022	97 2018	109 2021	111 2020	123 2021	122 2020	122 2021	122 2020	113 2020	98 2020	91 2021	123 2021
Min	74 2023	79 2023	84 2023	101 2022	100 2019	114 2022	116 2022	116 2022	113 2021	97 2018	81 2022	75 2019	106 2023

5. Strong Wind Events

The Coachella Valley sits just east of two major mountain ranges, the San Jacinto Mountains, and the San Gorgonio Mountains. As pressure falls in the Coachella Valley, air starts rushing into the Valley from our coastal regions. The scientific explanation for this phenomenon is known as the Venturi Effect. Coastal winds from the Mediterranean climate speed up as they pass through the gap between the San Jacinto and San Gorgonio Mountains, creating a wind tunnel. As the wind shoots out of the San Gorgonio Pass, it comes out at a faster speed than it arrived at the entrance of the mountain’s opening. This effect begins in the city of Whitewater and North Palm Springs, and the wind flows all the way through to North Indio. The San Gorgonio Pass is notoriously windy, with strong gusts and sustained high winds being common.

The Coachella Valley is also susceptible to Microbursts; strong, damaging winds strike the ground and often give the impression that a tornado has struck. They frequently occur during intense thunderstorms. An intense microburst can result in damaging winds near 170 miles per hour and often lasts for less than five minutes. There are two (2) types of microburst windstorms: dry and wet.

The most significant hazard associated with winds is an increased fire danger, but winds can also cause downed trees and power lines and property damage, as well as causing potentially hazardous conditions for travelers, RV’s, semi-trailers, and aircraft.

The combination of high winds and sandy, sparsely vegetated soils, characteristic of desert areas, can also create blow sand hazards. Disturbance of soil crust through human activities such as grading, and alteration of drainage patterns can contribute to an increase in blows and hazards. Blow sand hazards impact human health by creating high levels of airborne particulate matter. blows and reduces visibility and can increase

the incidence of vehicular accidents. Property damage occurs when blow sand erodes painted surfaces and glass.

Likelihood of occurrence: Very Likely

Near 100% chance of it happening every year. The City of Indian Wells is at risk of wind events at any given time during the calendar year. However, wind events are more prevalent in the autumn and winter months. Wind can have a quick speed on onset, it can be for a short period of time (Gust) or may have longer durations lasting for a full day.

❖ **History**

the City of Indian Wells has experienced significant winds events, these events are listed in Figure 4.

Figure 5 History of Max wind speed in the Coachella Valley

Maximum Wind Speed (mph)													
Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2023	46	40	40	46	41*	---	---	---	---	---	---	---	46*
2022	39	40	40	53	51	48	39	35	38	41	40	31	53
2021	38	48	44	52	55	49	33	43	39	41	38	43	55
2020	31	37	37	43	41	48	39	37	32	43	41	36	48
2019	58	40	48	49	49	53	40	36	40	47	28	38	58
2018	26	36	38	49	52	43	35	38	35	40	41	30	52
2017	39	44	49	47	52	47	37	39	46	49	41	43	52
2016	43	41	48	44	49	45	41	35	48	46	53	43	53
2015	30	38	43	41	40	40	43	43	37	37	43	44	44
2014	43	44	48	51	49	47	43	36	38	35	39	32	51
2013	31	43	39	54	43	41	39	35	36	43	33	33	54
2012	54	40	45	44	47	45	37	29	45	36	37	35	54
2011	40	45	47	52	56	47	41	38	35	44	36	37	56
2010	39	45	46	55	48	56	45	43	43	39	43	41	56
2009	33	48	53	53	52	47	45	46	41	46	35	53	53
2008	43	49	51	54	53	59	35	37	37	46	41	44	59
2007	40	46	46	54	49	47	40	40	41	49	38	37	54
2006	43	54	40	46	49	40	45	44	47	48	40	43	54
2005	35	26	39	41	49	48	39	41	45	49	43	43	49
2004	33	33	40	49	51	41	40	38	40	38	32	26	51
Max	58	54	53	55	56	59	45	46	48	49	53	53	59

The City of Indian Wells has experienced the following Incidents resulting in damages from Windstorms:

Table 5 History of Wind Events

Hazard	Year	Damages
Wind Events	December 2009- January 2010	210,000
Regional Power Outage	September 8, 2011	No Damages Reported
Hurricane Kay Wind	September 2022	25,000

6. Wildland-Urban Interface Fires

The Wildland-Urban Interface (WUI) is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Describes an area within or adjacent to private and public property where

mitigation actions can prevent damage or loss from wildfire. When wildfires result in disastrous property losses they are referred to as "Wildland-Urban Interface" (WUI) fires, or simply "interface fires." These fires may start as small vegetation fires in cities like Oakland and Los Angeles miles from "wildlands" or be a part of large brush and forest fires. They usually happen on days of especially extreme weather conditions when wildfires threaten so many houses at once that California's vast system of cooperative fire protection is overwhelmed. (OSFM.fire.gov)

The City of Indian Wells climate, with its warm and dry summers, contributes to low relative humidity and low fuel moistures. When combined with high fuel loading, the potential for a catastrophic wildfire- urban interface fire event is significant.

Inadequate planning, infrastructure, and construction practices related to fire prevention and mitigation significantly increase the potential for conflagration, fire ignition and spread.

Likelihood of occurrence: Likely

Between 10 and 100 percent chance of happening in the next year. Three (3) weather conditions that may cause the ignition and/or impact the behavior of wildfires are as follows; Thunderstorms and the associated lightning are a significant source of fire starts, and usually occurs mid to late summer. High winds can become steady up to 20 mph and gust up to 30-40 mph throughout the year but are most likely to exacerbate fires during the months of August through October when dry vegetation conditions are generally present. Hot, dry conditions most commonly occur in August and September. Fires can have a quick speed of onset, especially during periods of drought. Fires can burn for a short period of time or may have durations lasting for a week or more. Unlike earthquakes and wind, the extent of a wildfire is dependent on fuels, weather, and topography.

Figure 6 City of Indian Wells (2023 View of the Hyatt Regency and city)



Figure 6.1 Indian Wells Wildfire Risk Map
 The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) map (January 1st, 2023)

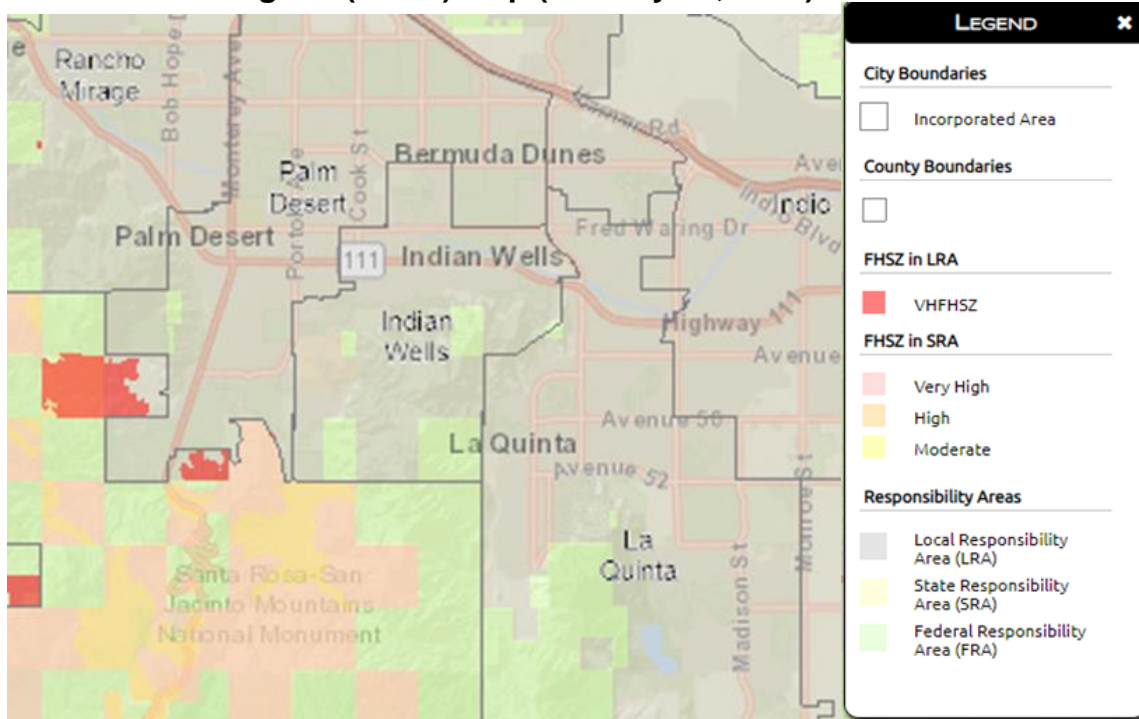
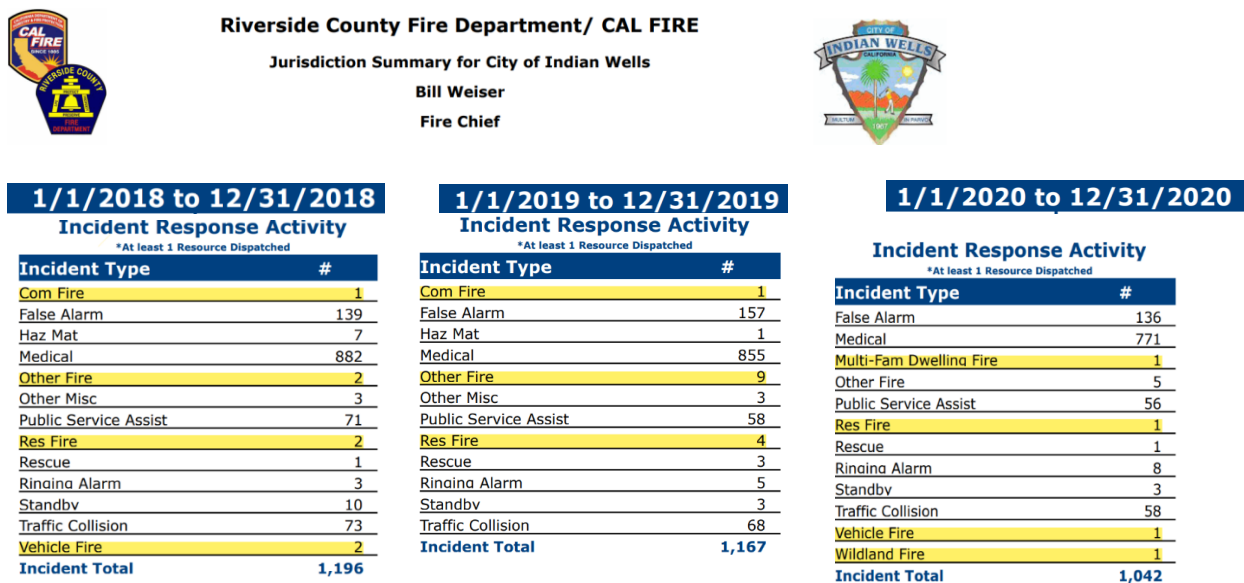


Figure 6.2 History of Fires in Indian Wells



1/1/2021 to 12/31/2021	
Incident Response Activity	
*At least 1 Resource Dispatched	
Incident Type	#
Com Fire	1
False Alarm	140
Medical	824
Other Fire	1
Other Misc	2
Public Service Assist	62
Rescue	11
Ringing Alarm	4
Standby	6
Traffic Collision	77
Vehicle Fire	2
Incident Total	1,130

1/1/2022 to 12/31/2022	
Incident Response Activity	
*At least 1 Resource Dispatched	
Incident Type	#
False Alarm	159
Haz Mat	2
Medical	972
Other Fire	2
Other Misc	3
Public Service Assist	86
Res Fire	4
Rescue	2
Ringing Alarm	8
Standby	3
Traffic Collision	84
Wildland Fire	4
Incident Total	1,329

7. Terrorism

Terrorism, as defined by the FBI, is "the unlawful use of force against persons or property to intimidate or coerce a government, the civilian population or any segment thereof, in the furtherance of political or social objectives". The act of terrorism could involve biological agents, nuclear technology, incendiary devices, chemicals, or explosives.

All City businesses and facilities are perceived as soft targets; however, due to the intended purpose of terrorism, it would most likely happen in more populous urban areas where more devastation (and fear) will ensue.

Likelihood of occurrence: Likely

Between 10 and 100 percent chance of happening in the next year. Indian Wells has long been recognized as a world-class vacation and conference destination. The city boasts a variety of renowned special events, including the BNP Paribas Open, Indian Wells Golf Resort, IRONMAN 70.3, Indian Wells Art Festival and Desert Town Hall Indian Wells Lecture Series. What's more, the city's four premier luxury resorts and Indian Wells Golf Resort offer a array of amenities that draw visitors from around the world.

The City of Indian Wells has identified high profile targets for potential attacks:

- The Indian Wells Tennis Gardens can have upto 61,000 people a day in attendance during the Two week BNP Paribas Open Tennis Tournaments.

Figure 7 Indian Wells Tennis Gardens



- The City of Indian Wells also hosts Ironman 70.3, also known as a Half Ironman, is one of a series of long-distance triathlon races organized by the World Triathlon Corporation (WTC). This race consists of swim, bike, and run segments. The Race starts at Lake Cahuilla in the city of La Quinta, after the bike route the athletes run through a course at the Indian Wells golf resort and ends at the Indian Wells Tennis Gardens. There are approximately 2- 3000 participating athletes, and an unknown amount of spectators throughout the course.

Figure 7.1 Route for Ironman



❖ History

There are no significant historical events that have occurred to date.

3.4 VULNERABILITY ASSESSMENT

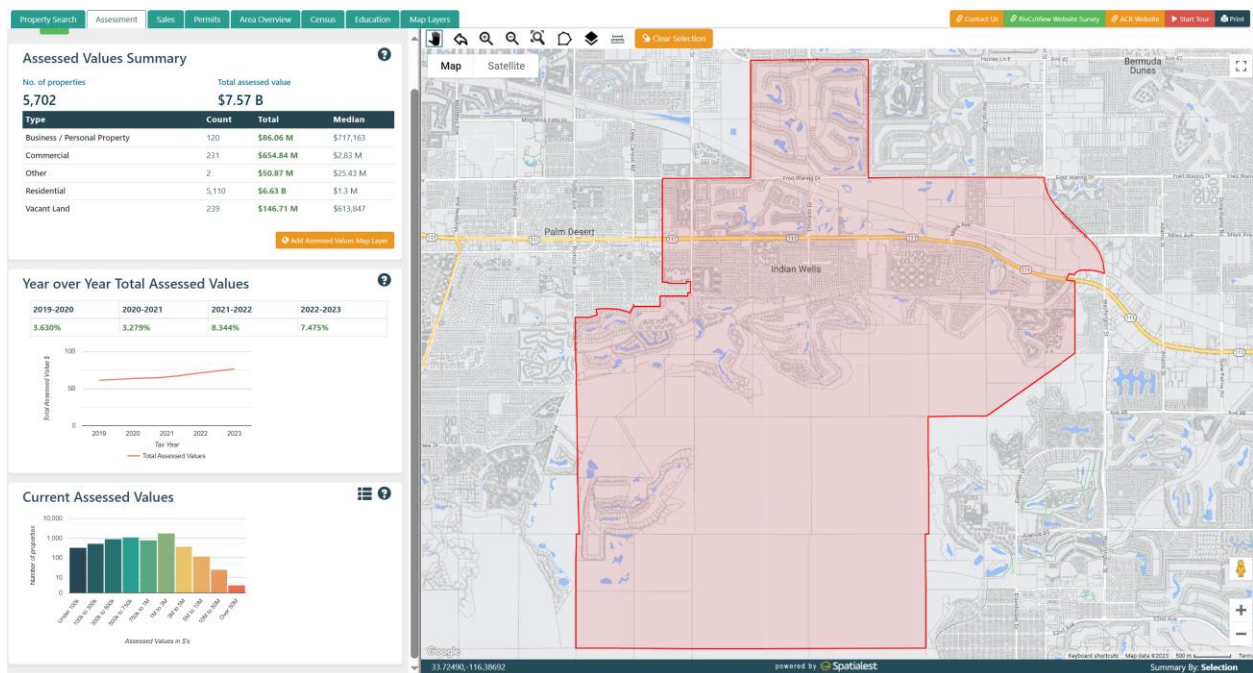
The City of Indian Wells hazards are identified and profiled, the Planning Team conducted a vulnerability assessment to describe the impact that each priority hazard would have on the City. The vulnerability assessment quantifies, to the extent feasible using best available data, assets at risk to natural hazards and estimates potential losses.

3.4.1 INDIAN WELLS VULNERABILITY AND ASSETS AT RISK

This vulnerability assessment followed the methodology described in the FEMA publication Understanding Your Risks—Identifying Hazards and Estimating Losses. The vulnerability assessment first describes the total vulnerability of the City and values at risk and then discusses vulnerability by hazard.

The Riverside County Assessor Office’s interactive web map displays a total of 5,702 properties within the City, with a total assessed value of 7.57 billion dollars. These properties are further broken down in six categories. Figure 3.5.1 displays a screenshot of the complete data from the assessor’s office.

Figure 3.4.1. Riverside County Assessors office data (2023)



3.4.2 CRITICAL FACILITIES AND INFRASTRUCTURES (See Appendix A:12)

The location and operations of high-risk facilities, such as critical infrastructure and key assets in or near the city of Indian Wells are a significant concern with respect to a disaster. The Planning team used FEMA’s “Public Assistance Guide” (FEMA 322) which defines critical facilities such as shelters, EOCs, data centers, utility plants, or highly hazardous materials facilities. They also used the FEMA Hazard Mitigation Handbook, which describes three categories of facilities for analysis to revise and update the list.

Critical Facilities Type	Number
Airports	0
Communications Centers	0
Detention Centers	0
City Hall	1
Emergency Operations Center/ Sheriff Sub Station	1
Fire Departments	1
Health Care Facilities	0
Maintenance Yards	2
Senior Community Center	1
Schools (Elementary, Intermediate, and High Schools)	1
Public Utilities—Water/Sewer	0
Total	7

3.4.3 KEY ASSETS REPLACEMENT VALUES

A subset of the general building stock are key buildings the City will rely on when responding to and recovering from disaster events. Because of the role and importance of these facilities, the City needs to ensure the facilities are maintained and will be functional during and after disasters. Also, part of these key assets are systems and equipment used to perform certain functions and/or operations. The list of key assets includes but are not limited to: Sheriff Sub Station/Emergency Operations Center, Fire Station, City Hall, Community Centers, Public Works Yard, Maintenance Building, and Mass Care and shelter Sites. A list of key assets can be found below:

Figure 3.4.3 Critical Facility Replacement Value for the City of Indian Wells
(CJPIA- PROP prepared by Alliant Insurance Services)

Name of Asset	Replacement Value (\$)	Hazard Specific Info.
City Hall**	\$5,635,250	Multihazard
Fire Station 55	\$1,086,780	Multihazard

EOC/ Sheriff Sub Station	\$556,967	Multihazard
Public Works Yard	\$932,968	Multihazard
Indian Wells Villas	\$10,711,117	Multihazard
Indian Wells Golf Resort Club House	\$29,033,750	Multihazard
Indian Wells Golf Resort Maintenance Building	1,314,599	Multihazard

3.4.3 VULNERABILITY TO HAZARDS

The Disaster Mitigation Act regulations require that the HMPC evaluate the risk and vulnerability associated with priority hazards identified in the planning process. This section summarizes the possible impacts and quantifies, where data permits, the City’s vulnerability to each of the hazards identified in Section 3.0.

- Drought
- Earthquake
- Flooding
- Heatwave
- Strong Wind
- Terrorism
- Wildland – Urban Interface Fire

An estimate of the vulnerability of the City to each identified hazard, in addition to the estimate of likelihood of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.

1. Drought Vulnerability Assessment

Likelihood of Future Occurance- Occasional

Vulnerability- Medium

Hazard Summary: Drought is the absence of precipitation rather than the presence of an event such as a hurricane, tornado, or fire. It's often described as a “creeping phenomenon” because it slowly impacts many sectors of the economy and operates on many different timescales. Just as drought is difficult to define, it’s also difficult to predict and monitor—particularly when marking the beginning and end of a period of drought.

The Planning Team noted that within Riverside County Drought can have secondary impacts. For example, drought is a major determinant of wildfire hazard, in that it creates greater propensity for fire starts and larger, more prolonged conflagrations fueled by excessively dry vegetation, along with reduced water supply for firefighting purposes. Climate change has the potential to make drought events more common in the West, including California. Extreme heat creates conditions more conducive for evaporation of moisture from the ground, thereby increasing the possibility of drought.

Methodology: Figure 1 - California Water Watch map of California shows how this water year’s precipitation compares to what has been observed historically. Figure 1.1 below provides a summary of California’s current statewide precipitation statistics. California’s new Water Year began Oct. 1, 2023 and ends Sept. 30, 2024

Figure 1 Precipitation Percentage

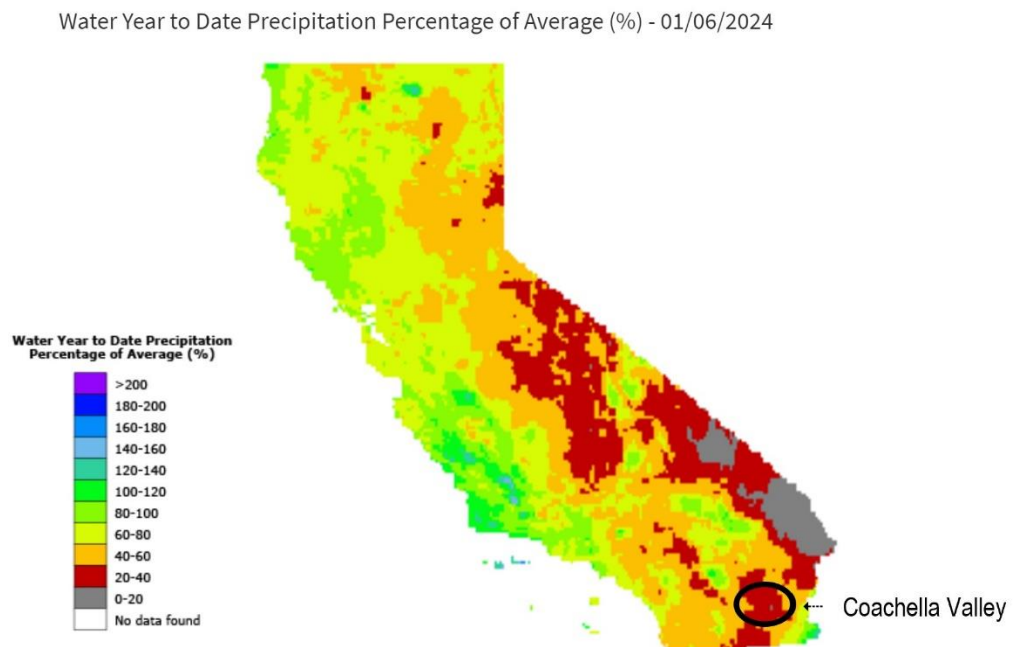
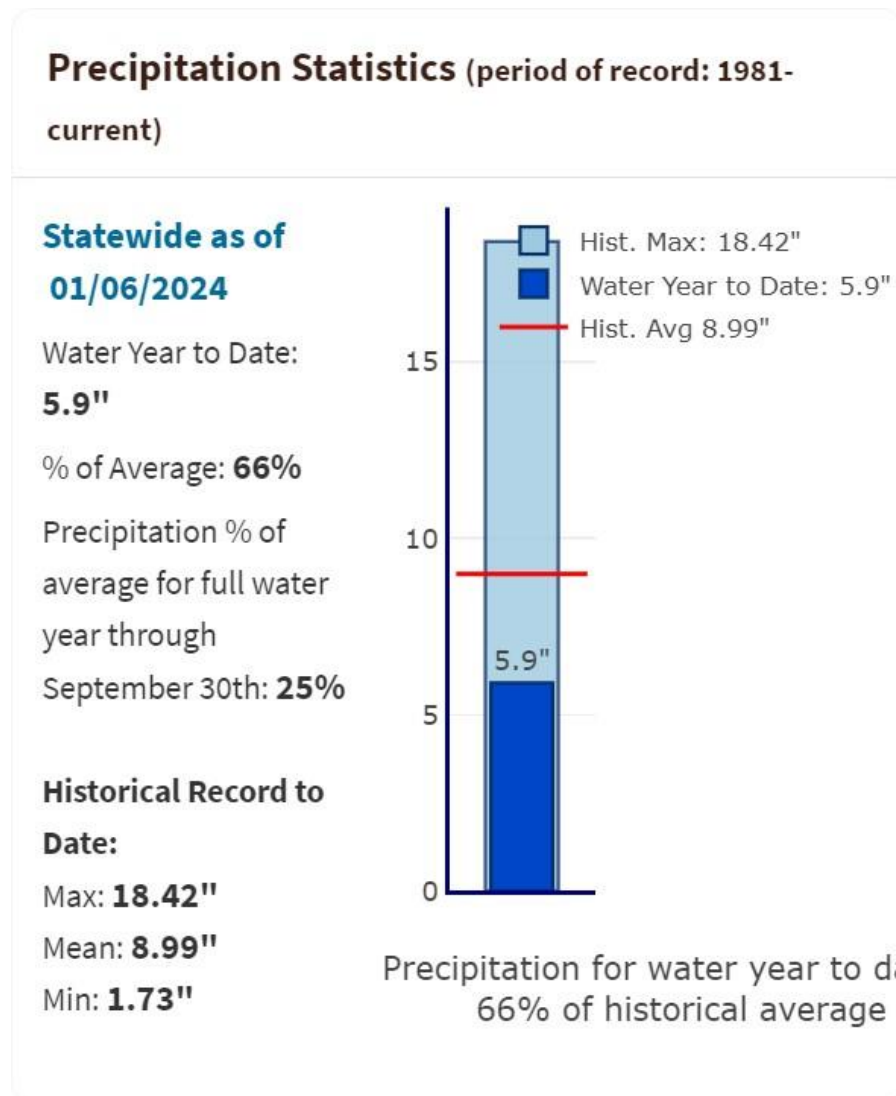


Figure 1.1 Precipitation Statistics



Critical Infrastructure at Risk: Although Drought does not directly affect critical infrastructure, its secondary impact would affect the entire Planning Area including all of the critical facilities. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Community Impact: The effects of a Drought are varied and usually based on the duration of the disturbance. Effects may impact the community in the form of water conservation measures mandated by jurisdictions with constrained water availability. Drought can also cause long-term public health problems, including shortages of drinking water and poor-quality drinking water.

Description of land uses and development trends: Encourage water-intensive land uses, such as golf courses, to utilize treated effluent for landscaping and irrigation needs. Coordinate with Coachella Valley Water District (CVWD) to monitor citywide water usage on an annual basis and make recommendations to modify or expand water conservation measures to ensure their effectiveness.

2. Earthquake Vulnerability Assessment

Likelihood of Future Occurrence- Very Likely

Vulnerability—High

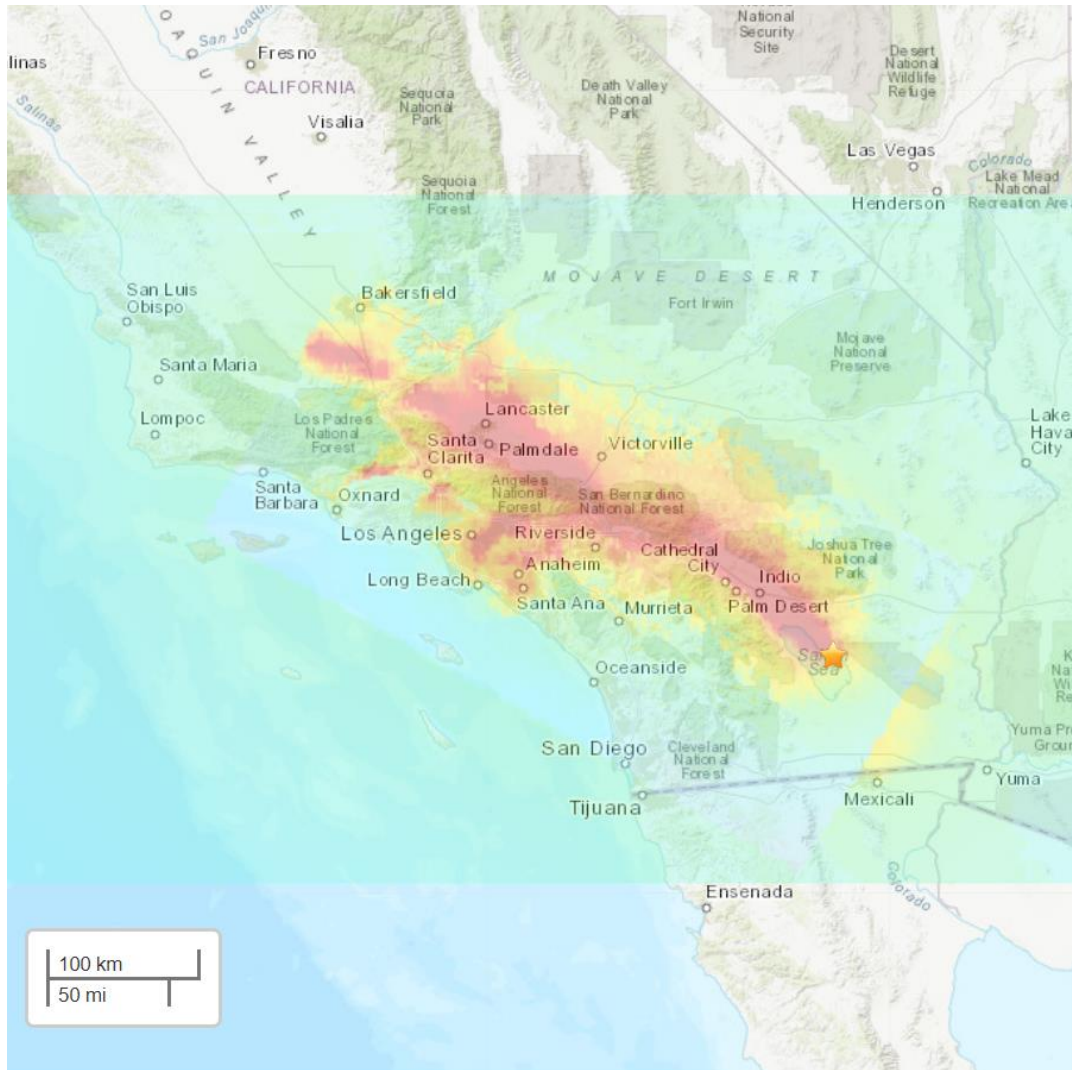
Hazard Summary: Ground shaking is typically the greatest hazard and major cause of damage. The transmission of earthquake waves can cause buildings to collapse, streets to crack, and utility lines to rupture. Strong ground shaking can also cause damage due to falling objects such as bookcases or water heaters, chemical spills, and secondary effects such as fire or explosion. Impacts from earthquake include property damage, critical facility damage, injury, and loss of life.

On any given site, the degree of shaking tends depends on the magnitude of the earthquake, distance to the fault, property of the underlying soils, building design and construction, and building materials. Shaking tends to be strongest on filled soils and in areas where soil depth and moisture content are high.

The Planning Team noted that within Riverside County, there are several earthquake faults, however, the San Andres Fault will be the focus for the assessment. Multiple faults in the County have the capability of greatly affecting the City by causing significant damage and disruption to widespread areas. The City's buildings and utility systems are generally designed to withstand some disaster damage and function at least at partial capacity. However, major quake-caused structural damage to under/above ground buildings and utilities would have a serious impact on response to and recovery from a major disaster.

Methodology: USGS earthquake shake map for a 7.8 magnitude earthquake on the San Andres Fault, Figure 1, was used to establish potential damage.

Figure 2 USGS earthquake shake map for a 7.8 magnitude earthquake



SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
PGA(%g)	<0.1	0.49	2.35	6.73	12.6	23.7	44.4	83.3	>156
PGV(cm/s)	<0.07	0.37	1.93	5.8	11.3	21.9	42.5	82.5	>160
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based on Wald et al. (1999)

Version 1: Processed 2019-08-11T18:16:33Z

△ Seismic Instrument ○ Reported Intensity

★ Epicenter

Critical Infrastructure at Risk: A magnitude 6.7 or greater earthquake would impact the entire Planning Area including all of the critical facilities. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Community Impact: A Magnitude 6.8 or greater earthquake would be catastrophic to the entire community. There would be large spread damage to housing and community lifelines. The potential road damage would make it difficult for transportation out of the affected areas or first responders to access. The aging population and those under the age of five would be the greatest impacted. The Entire population would be at risk.

Description of land uses and development trends: The Planning Team noted that future development of new development should be built to seismic code and even though built to code, these structures could still be at risk from earthquake shaking.

3. Flood Vulnerability Assessment

Likelihood of Future Occurrence—Very Likely

Vulnerability—High

Hazard Summary: The desert region is subject to intense storms which result in sudden and substantial runoff and flash flooding. The City of Indian Wells has two major flood control channels. The Whitewater River and Deep Canyon flood control channels generally run west to east north of Highway 111 and south of Highway 111, respectively. Heavy rains can lead to problems with storm drainage and create localized flooding. Floods have been a part of the City's past and will continue to be so in the future. During winter storms, prolonged precipitation can result in flooding causing damage to property and infrastructure. Predominantly, the effects of flooding are generally confined to areas near the drainageways and low-lying areas. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat. Structures can also be damaged from trees falling as a result of water-saturated soils. Electrical power outages can occur and cause major problems.

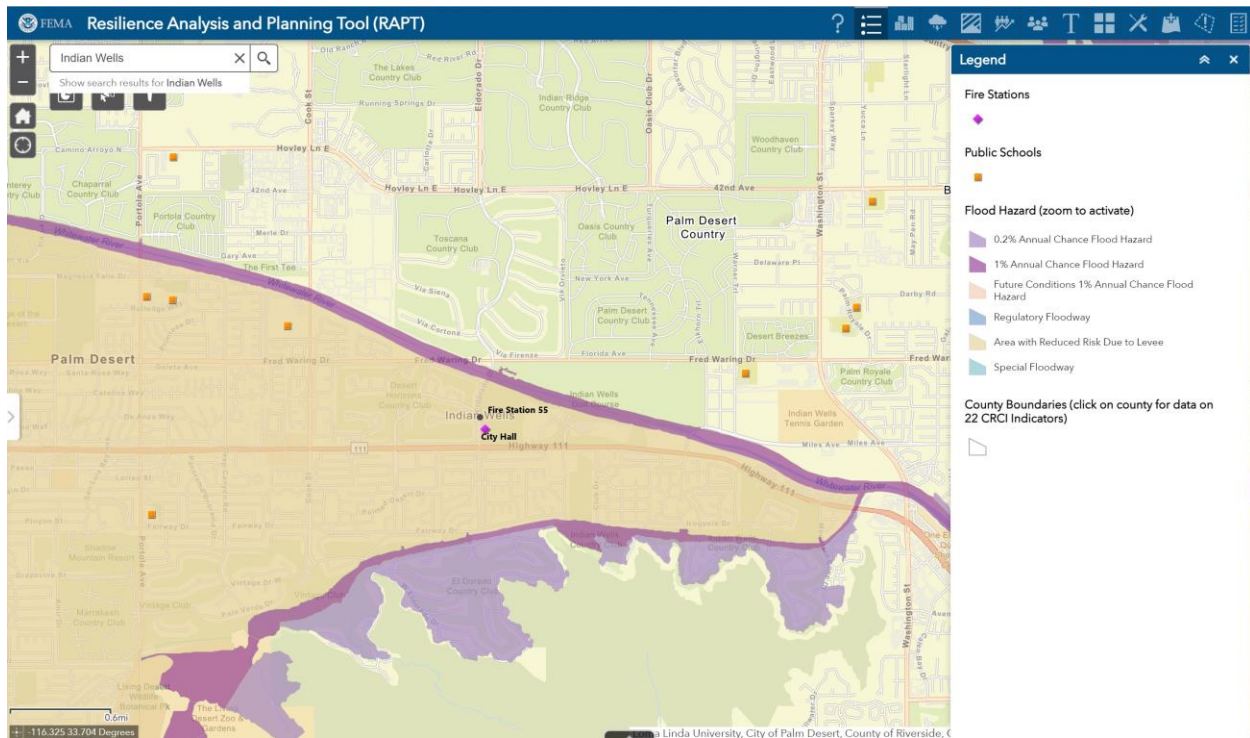
The City is working in conjunction with Riverside County Flood Control & Water Conservation District and Coachella Valley Water District to identify to mitigate areas that may cause or have the potential to cause damage or destruction of property.

Heavy rain events can also lead to problems with storm drainage systems and create localized flood problems. According to the City of Indian Well's Storm Drain Master Plan, there are several flooding problem areas in the city. These areas are primarily a result of the following: Clogged or plugged catch basin inlets due to debris (plastic trash bags, grass, and leaves) Damaged curbs and gutters where the flow lines have been disrupted due to raised gutters. Most of the damages that occur due to flash flooding are located along the Whitewater channel that runs through our golf course between El

Dorado and Miles Avenue. Some of the other causes of damages are due to undersized retention basins located along Fred Warning, El Dorado, Highway 111, and streets inside the Indian Wells, El Dorado Reserve, and Vintage Country Club.

Methodology: Using the FEMA RAPT GIS tool, the flood zones layer was overlaid with the City’s critical facilities point layer to determine those critical infrastructure facilities that could be affected.

Figure 3 RAPT Tool (2023 Flood Zone Layer)



Critical Infrastructure at Risk: The biggest impact to critical infrastructure would be to the roads and transportation corridors in the city. The City Hall, which houses the Public Works Maintenance yard and Fire Station, is in a reduced risk area own that could potentially be affected by a flooding if the levee failed. however, there are critical facilities owned and operated by outside agencies that can be affected directly by flooding, they are shown in Figure 2. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Community Impact: The City of Indian Wells has two major flood control channels. The Whitewater River and Deep Canyon flood control channels run west to east north of Highway 111 and south of Highway 11, Heavy rains can lead to problems with storm drainage and create localized flooding, impacting the transportation capability of the city. The portion of the city below the Whitewater channel relies heavily on the levee, if the levee is compromised it could cause potential displacement and/or

loss of life. Indian Wells is a unique city where their population can fluctuate from peak residential numbers of 4,500+ during the winter season to half of that number when residents seek cooler locales during the summer months. Additionally, the city's temporary population can increase due to sports events, i.e., in 2019 the BNP Paribas

Open brought over 475,372 visits to the area over two weeks. Due the fluctuating population, it is unknown how many people would be impacted.

Description of land uses and development trends: The City enforces the floodplain ordinance on new development. Future development in the City may be built in the floodplain, in conformance to the standards of the floodplain ordinance.

4. Heat Wave Vulnerability Assessment

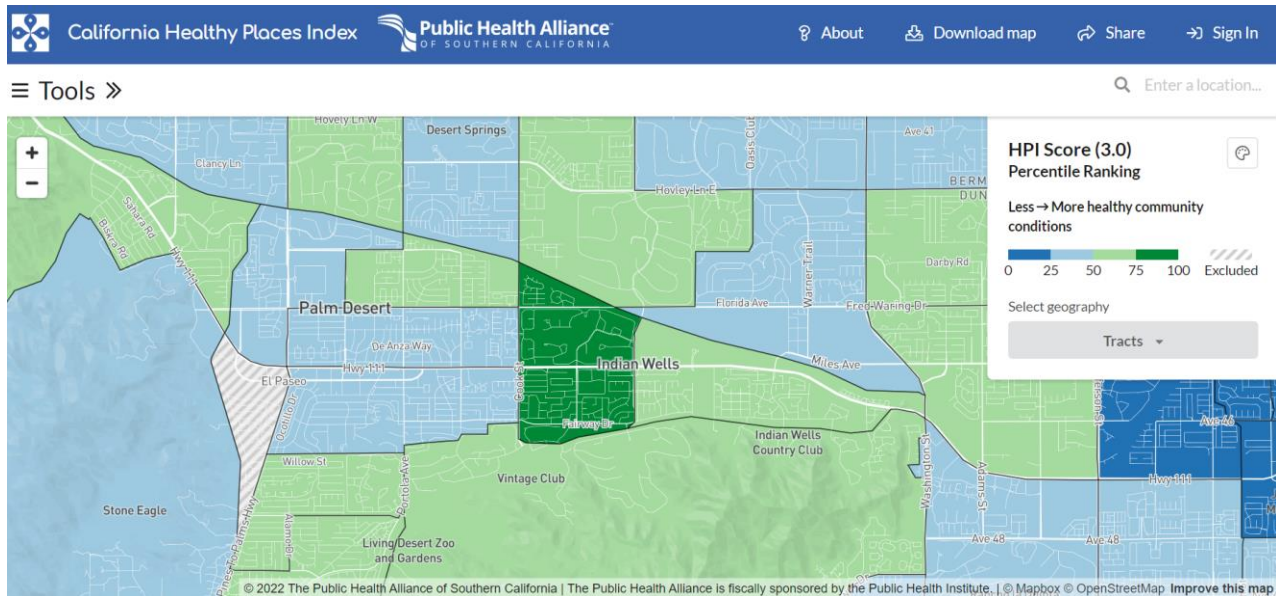
Likelihood of Future Occurrence—Very Likely

Vulnerability—Medium

Hazard Summary and Impact on Community: The City experiences summer temperatures reaching over 120°F four months of the year and has an average temperature of over 100°F. Extreme heat may overload demands for electricity to run air conditioners in homes and businesses during prolonged periods of exposure and presents health concerns to individuals outside in the temperatures. Prolonged Heat and low humidity levels can reduce moisture in vegetation, leading to the increased risk of vegetation/ wildland fires. Extreme heat, when combined with wind, can lead to Public Safety Power Shutdown (PSPS) events in the larger County area that could extend into the Planning Area.

Methodology: Physical Structures will not have significant loss from a Heat Waves and will have limited loss. The Public Health Alliance of Southern California created an index to identify health disadvantage areas within the state. Areas that have a low Healthy Place Index (HPI) would be at greater risk during heat waves. The Map Below is the HPI for the Planning Area. The greatest risk is to the vulnerable populations throughout the Planning Ara and the Planning Committee had no way to define a methodology to calculate loss risk. Heat waves will not have significant impact or damage to the physical structures and there is limited loss risk associated with them.

Figure 4 Healthy Place Index (HPI)



Critical Infrastructure at Risk: All of the critical infrastructure within the City are at risk from extreme heat, due to potential power outage that be caused by a heat wave. These critical facilities have backup generator power to ensure continuity of operations. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Impact on Community: The residents within the Planning Area in the low HPI area would be susceptible to heat waves. The most vulnerable populations would be the unhoused population, infants and children under 5, elderly, and those individuals with disabilities. Indian Wells is a unique city where their population can fluctuate from peak residential numbers of 4,500+ during the winter season to half of that number when residents seek cooler locales during the summer months. Additionally, the city’s temporary population can increase due to sports events, i.e., in 2019 the BNP Paribas Open brought over 475,372 visits to the area over two weeks. Due the fluctuating population, it is unknown how many people would be impacted.

Description of land uses and development trends: It is encouraged that future facilities have emergency plans or backup power to address power failure during times of extreme heat and in the event of a PSPS or other interruption in service.

5. Strong Wind Vulnerability Assessment

Likelihood of Future Occurrence—Very Likely

Vulnerability—Medium

Hazard Summary and Impact on Community: The Coachella Valley sits just east of two major mountain ranges, the San Jacinto Mountains, and the San Gorgonio Mountains. As pressure falls in the Coachella Valley, air starts rushing into the Valley from our coastal regions. The City of Indian Wells is at risk of wind events at any given

time during the calendar year. However, wind events are more prevalent in the autumn and winter months.

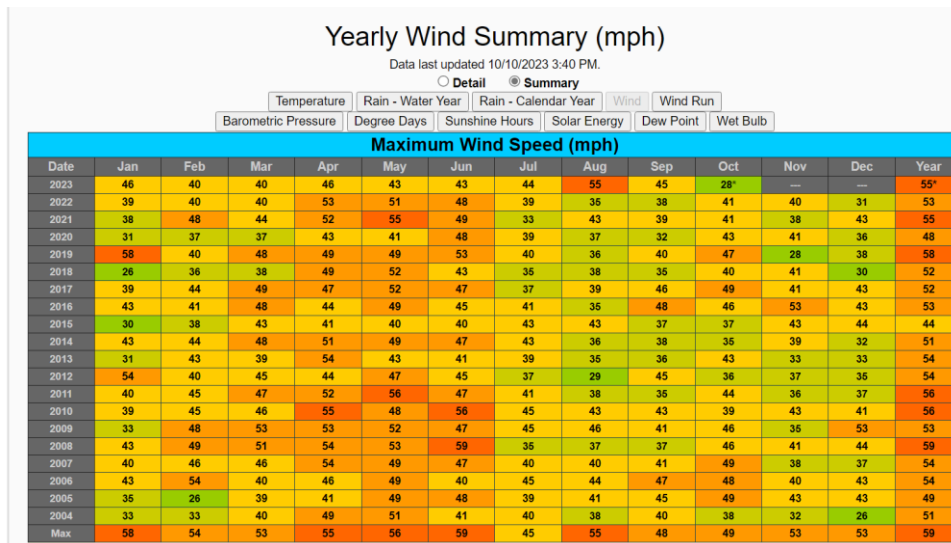
The Coachella Valley is also susceptible to Microbursts; strong, damaging winds strike the ground and often give the impression that a tornado has struck. They frequently occur during intense thunderstorms. An intense microburst can result in damaging winds near 170 miles per hour and often lasts for less than five minutes.

The most significant hazard associated with winds is an increased fire danger, but winds can also cause downed trees and power lines and property damage, as well as causing potentially hazardous conditions for travelers, RV's, semi-trailers, and aircraft.

The combination of high winds and sandy, sparsely vegetated soils, characteristic of desert areas, can also create blow sand hazards. Disturbance of soil crust through human activities such as grading, and alteration of drainage patterns can contribute to an increase in blows and hazards. Blow sand hazards impact human health by creating high levels of airborne particulate matter. blows and reduces visibility and can increase the incidence of vehicular accidents. Property damage occurs when blow sand erodes painted surfaces and glass.

Methodology: Winds are categorized by types and each type is associated with wind speeds: breeze (<0-31mph), gale (32-65 mph), storm (66-72 mph), and hurricane (73-139> mph). The Beaufort Scale categories winds by wind speed, using Force categories between 0-12 to measure speed and summarize descriptions. Figure 3.7 shows the Yearly Wind Summary for the Coachella Valley, using the Beaufort numbers. Throughout the years it is shown that max wind speed numbers get into 8-10 in the Beaufort scale.

Figure 5 DesertWeather.com Yearly Wind Summary updated 10/10/23.



WIND COLOR CODING CHART

Beaufort number	Description	Wind speed			
		mph	km/h	kts	m/s
0	Calm	< 1	< 1	< 1	< 0.3
1	Light air	1 – 3	1.1 – 5.5	1 – 2	0.3 – 1.5
2	Light breeze	4 – 7	5.6 – 11	3 – 6	1.6 – 3.4
3	Gentle breeze	8 – 12	12 – 19	7 – 10	3.4 – 5.4
4	Moderate breeze	13 – 17	20 – 28	11 – 15	5.5 – 7.9
5	Fresh breeze	18 – 24	29 – 38	16 – 20	8.0 – 10.7
6	Strong breeze	25 – 30	39 – 49	21 – 26	10.8 – 13.8
7	High wind, Moderate gale, Near gale	31 – 38	50 – 61	27 – 33	13.9 – 17.1
8	Gale, Fresh gale	39 – 46	62 – 74	34 – 40	17.2 – 20.7
9	Strong gale	47 – 54	75 – 88	41 – 47	20.8 – 24.4
10	Storm, Whole gale	55 – 63	89 – 102	48 – 55	24.5 – 28.4
11	Violent storm	64 – 72	103 – 117	56 – 63	28.5 – 32.6
12	Hurricane-force	> 73	> 118	> 64	> 32.7

Critical Infrastructure at Risk: All the critical infrastructure within the City are at risk from Strong Winds; due to potential power outage, infrastructure damage from downed trees, and property damage can occur when blow sand erodes painted surfaces and glass. In cases of power outages these facilities should have backup generator power to ensure continuity of operations. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Impact on Community: Many of the residents within the Planning Area would be susceptible to strong winds. Downed trees from winds and blow sand could have an impact on the transportation capability of the City. Blow sand can reduce visibility and increase the incidence of vehicular accidents, down trees can block roads, both hazards will impact those that rely on public transportation. Blow sand hazards impact human health by creating high levels of airborne particulate matter. The most vulnerable populations would be the unhoused population, infants, and children under 5, elderly, and those individuals with disabilities. Indian Wells is a unique city where their population can fluctuate from peak residential numbers of 4,500+ during the winter season to half of that number when residents seek cooler locales during the summer

months. Additionally, the city's temporary population can increase due to sports events, i.e., in 2019 the BNP Paribas Open brought over 475,372 visits to the area over two weeks. Due the fluctuating population, it is unknown how many people would be impacted.

Description of land uses and development trends: Enforce the City standard of inspection and management of hazardous trees. Enforce the City's Municipal Code (Chapter 8.20) Ordinance Number 313 requires that an applicant for a grading or demolition permit must first obtain an approved Fugitive Dust Mitigation Plan. This plan must include all reasonably available control measures so that fugitive dust emissions comply with South Coast Air Quality Management District Rule 403. Control measures at a construction or demolition site can include the use of soil stabilizers or watering. Erection of wind fences, covering soil stockpiles, and revegetation of disturbed surfaces'

6. Terrorism

Likelihood of Future Occurrence—Likely

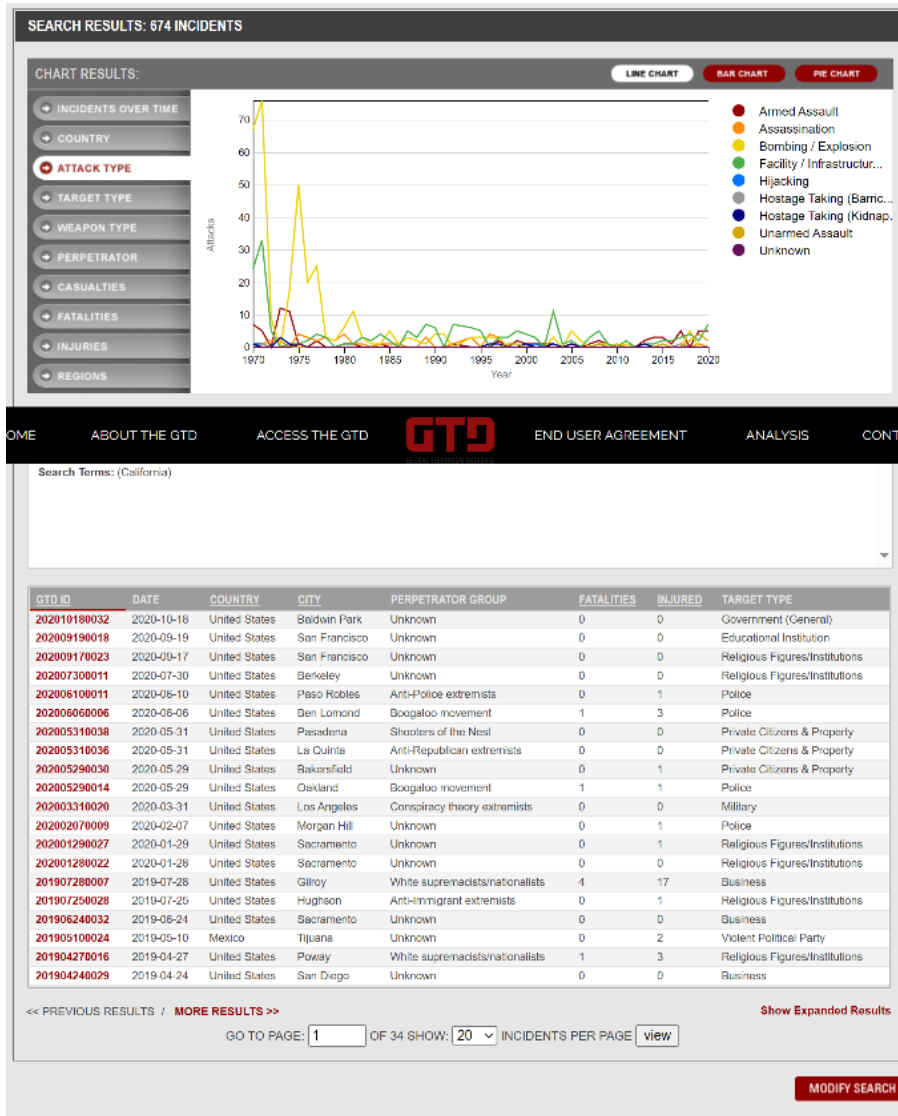
Vulnerability—High

Hazard Summary and Impact on Community: All City businesses and facilities are perceived as soft targets; however, due to the intended purpose of terrorism, it would most likely happen in more populous urban areas where more devastation (and fear) will ensue.

Indian Wells has long been recognized as a world-class vacation and conference destination. The city boasts a variety of renowned special events, including the BNP Paribas Open, Indian Wells Golf Resort, IRONMAN 70.3, Indian Wells Art Festival and Desert Town Hall Indian Wells Lecture Series. What's more, the city's four premier luxury resorts and Indian Wells Golf Resort offer a array of amenities that draw visitors from around the world.

Methodology: The Global Terrorism Database (GTD) was used as a resource to help visualize the impacts of terrorism on the community as well as infrastructure. The GTD was developed to be a comprehensive, methodologically robust set of longitudinal data on incidents of domestic and international terrorism. Its primary purpose is to enable researchers and analysts to increase understanding of the phenomenon of terrorism. If government buildings are targeted there could be a major loss in critical facilities.

Figure 6 Global Terrorism Database (GTD) results for California



Critical Infrastructure at Risk: A large scale Terrorist attack would impact the entire Planning Area including all of the critical facilities. Table 3.5.2 and 3.5.3 Identifies the critical facilities within the planning area.

Overall Impact on Community: Many of the residents within the Planning Area would be susceptible to a Terrorism attack. Transportation capability of the City could be compromised, impact those that rely on public transportation. Biological Hazards could impact human health. The most vulnerable populations would be the unhoused population, infants and children under 5, elderly, and those individuals with disabilities. Indian Wells is a unique city where their population can fluctuate from peak residential numbers of 4,500+ during the winter season to half of that number when residents seek cooler locales during the summer months. Additionally, the city's temporary population can increase due to sports events, i.e., in 2019 the BNP Paribas Open brought over

475,372 visits to the area over two weeks. Due the fluctuating population, it is unknown how many people would be impacted.

7. Wildland-Urban Interface Fire

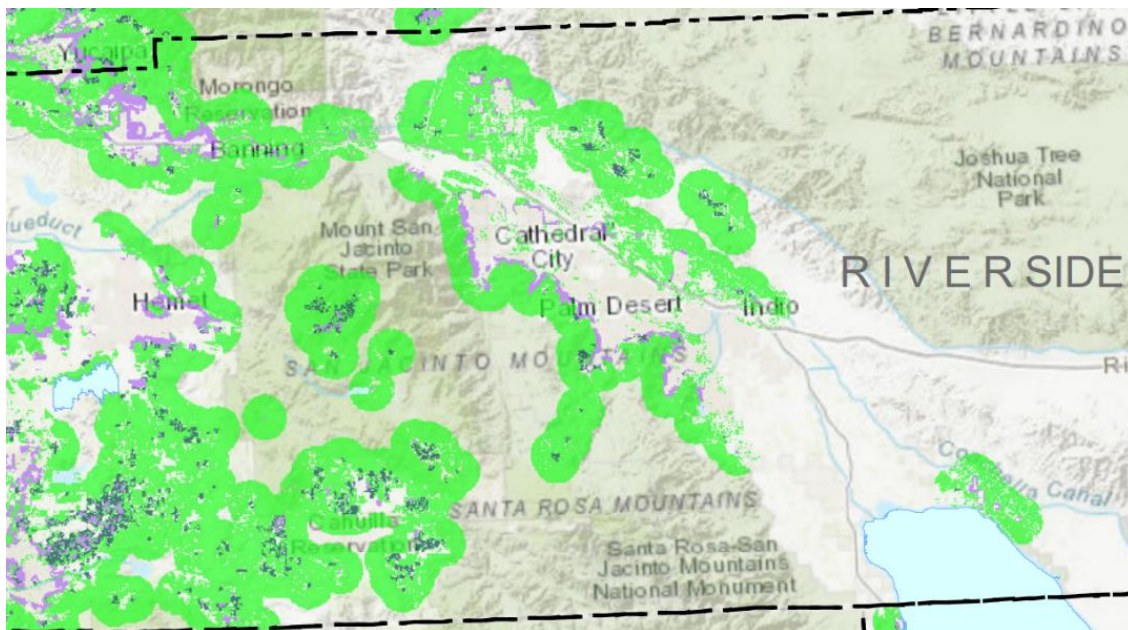
Likelihood of Future Occurrence—Likely

Vulnerability—High

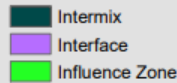
The City of Indian Wells climate, with its warm and dry summers, contributes to low relative humidity and low fuel moistures. When combined with high fuel loading, the potential for a catastrophic wildfire- urban interface fire event is significant. Three (3) weather conditions that may cause the ignition and/or impact the behavior of wildfires are as follows; Thunderstorms and the associated lightning are a significant source of fire starts, and usually occurs mid to late summer. High winds can become steady up to 20 mph and gust up to 30-40 mph throughout the year but are most likely to exacerbate fires during the months of August through October when dry vegetation conditions are generally present. Hot, dry conditions most commonly occur in August and September. Fires can have a quick speed of onset, especially during periods of drought.

Methodology: CAL Fire Resource Assessment Program (FRAP) tool indicates that the wildland risk is low for the city, while that may be true for large wildland areas, it does not consider small and large vegetation areas that are within the city limits. There would be an increased risk in loss of the City’s critical facilities.

Figure 7 Riverside County Fire WUI Map (2015 most recent map)



WILDLAND URBAN INTERFACE (WUI)



This dataset was developed for the 2015 Assessment of Forest and Rangelands. It is derived from several data sources, including housing density (input_Isn_HousingDensity12_2), Fire Hazard Severity Zones (FHSZ_Assessment11_1), Unimproved Parcels (input_UnimprovedParcels16_1), and Vegetation Cover (input_FVEG15_2). The current dataset is appropriate for displaying the overall pattern of WUI development at the county level, and comparing counties in terms of development patterns. Until the dataset is refined through a field review process, it is not suited for WUI designations for individual houses or neighborhoods.

Housing Density Classes used in the WUI definitions:

- 1 - Less than one house per 20 acres
- 2 - One house per 20 acres to one house per 5 acres
- 3 - More than one house per 5 acres to 1 house per acre
- 4 - More than 1 house per acre

Wildland Urban Interface is dense housing adjacent to vegetation that can burn in a wildfire and must meet these criteria:

- Housing density class 2, 3 or 4
- In moderate, high, or very high Fire Hazard Severity Zone
- Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer or shrub)
- Spatially contiguous groups of 30m cells that are 10 acres and larger

Wildland Urban Intermix is housing development interspersed in an area dominated by wildland vegetation subject to wildfire and must meet these criteria:

- Not Interface
- Housing density class 2
- Housing density class 3, 4 dominated by wildland vegetation
- In Moderate, High or Very High Fire Hazard Severity Zone
- Improved parcels only
- Spatially contiguous groups of 30m cells 25 acres and larger

Wildfire Influence Zone is wildfire susceptible vegetation up to 1.5 miles from Wildland Urban Interface or Wildland Urban Intermix and must meet these criteria:

- Wildland vegetation up to 1.5 miles from Interface or Intermix

Critical Infrastructure at Risk: Any of the City's critical infrastructures could be impacted by a Wildland Urban interface fire, not only by direct fire, they could also be affected by smoke, poor air quality, or potential power outages.

Overall Impact on Community: Wildland Urban interface fire would have significant impact on the community due to air quality and potential evacuations. The greatest impact will be to those with breathing issues and limited mobility.

Transportation capability could also be at risk, road closures could lead to evacuation routes being impacted. Those residents that do not have vehicles or do not have access to transportation would be at the highest risk. Indian Wells is a unique city where their population can fluctuate from peak residential numbers of 4,500+ during the winter season to half of that number when residents seek cooler locales during the summer months. Additionally, the city's temporary population can increase due to sports events, i.e., in 2019 the BNP Paribas Open brought over 475,372 visits to the area over two weeks. Due the fluctuating population, it is unknown how many people would be impacted.

SECTION 4.0 – MITIGATION STRATEGIES

The mitigation strategy for the City of Indian Wells is based on informed assumptions, recognizing both mitigation challenges and opportunities, with the ultimate mission of creating a disaster resistant and sustainable community for the future. The mitigation

strategy is derived from an in-depth understanding of possible deficiencies between potential vulnerabilities and existing capabilities, with the mitigation objectives in mind. The mitigation strategy builds upon the previous mitigation actions identified by the City of Indian Wells 2017 LHMP and was expanded to consider current needs.

4.1 MITIGATION GOALS AND OBJECTIVES

To better assist with the identification of mitigation measures, mitigation goals and objectives were developed. The mitigation goals and objectives support the City's mitigation mission to create a disaster-ready, disaster-resilient, and sustainable community while remaining aligned with the Operational Area. The City of Indian Wells is geographically located in a region that can be periodically subject to environmental hazards. The following goals and policies reflect the City's commitment to providing a safe environment for its citizens in the event natural or man-induced hazards occur.

❖ Goal 1

Prevent damage to life and property from natural hazards to the greatest extent possible.

Fire, Air, Flood, and Hazardous Materials Policies

- Objective 1.1- Require new development to conform with the City's Particulate Matter (PM) Ordinance as a condition of issuance of grading permits. Evaluate the need for permanent control devices in particularly windy areas to be installed before project grading.
- Objective 1.2 -Require construction sites and trucks hauling dirt to and from the areas to comply with the City's PM10 standards.
- Objective 1.3- Encourage and cooperate with the Coachella Valley Water District to maintain adequate flood flow capacity in the Whitewater and Deep Canyon flood control channels to prevent area flooding from anticipated maximum flood flows.
- Objective 1.4- Enforce the City's Floodplain Management Ordinance which cites specific standards applicable to development located within the 100-year floodplain and in flashflood areas to mitigate flood hazards.
- Objective 1.5 - Develop a comprehensive fire plan which forecasts future personnel and equipment needs and requires new development to pay its pro-rata share of costs for fire services.

- Objective 1.6- Restrict, after appropriate public hearings, the use of fire-prone building materials in areas defined by the Fire Department as presenting high-conflagration risk and require sprinklers to be installed in all new non-single-family residential construction per the Municipal Fire Code.
- Objective 1.7- Enforce existing Federal, State, and local ordinances regulating the use, manufacture, sale, transport, storage, and disposal of hazardous substances, and continue implementing the Riverside County Hazardous Waste Management Plan.

❖ Goal 2

Prevent damage to life and property resulting from seismic and seismic-induced hazards to the greatest extent possible.

Seismic Policies

- Objective 2.1-Adopt and maintain high standards for the seismic performance of buildings through prompt adoption and careful enforcement of the most current seismic standards of the California Building Code.
- Objective 2.2 Develop a structural hazards reduction program (per Section 8875 of the Government Code) for the upgrading of seismically hazardous buildings.
- Objective 2.3 Require geological and soil engineering studies for developments in or adjacent hillsides to assure safety from potential landslides and rockfalls.
- Objective 2.4- Require development adjacent to hillside areas to minimize the potential hazard of falling rocks through project design.

❖ Goal 3

Provide an effective emergency response in a disaster for lifesaving and the reduction of property damage and enhance emergency preparedness through community education and self-help programs.

Emergency Response and Preparedness Policies

- Objective 3.1- Encourage emergency preparedness to be the combined responsibility of the city, in conjunction with the County, CVAG, and the State, as well as City residents and the business community.
- Objective 3.2- Cooperate with the County of Riverside and CVAG to update the areawide emergency operations checklist.

- Objective 3.3- Cooperate with CVAG and other communities in the Valley to distribute periodic safety publications to inform citizens of available protective services.
- Objective 3.4- Maintain at least two east-west and two north-south primary (or significant) arterials to ensure adequate emergency evacuation routes in the General Plan Area

4.2 MITIGATION ACTIONS FROM 2017 UPDATE

This section is to provide an update to the City of Indian Wells mitigation actions from the 2017 Local Hazard Mitigation Plan, these actions are identified and prioritized based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, partners, potential funding, estimated cost, and schedule, are included.

1. Indian Wells has high winds, extreme heat and cold, and severe, localized rainstorms. The City utilizes a community-wide email blast and Nixle emergency notification system (ENS) to notify residents in advance of any impending severe weather event.

Responsible Office(s): IT Manager

Priority (High, Medium, Low): High

Cost Estimate: 4377.50 / year

Completion Date: 2028

Potential Funding: General Fund/FEMA Pre-Disaster Mitigation grants

Benefits (Avoided Losses): With Nixle, the City can send out emergency alerts via voice, SMS, email, and social media to provide residents with real-time emergency updates on severe weather issues.

2. To ensure that all those who live, work, and play in Indian Wells are safe, the city of Indian Wells provides public safety through a community-based approach that focuses on preventing problems and timely response. The City has developed Community Outreach programs to:

- Promote ‘12 steps of emergency Preparedness training for HOAs in the Indian Wells community.

- Promote community preparedness awareness by providing flyers for Community Emergency Response Team (CERT) training offered by Riverside County Emergency Management Department.

Responsible Office(s): City Manager’s Office

Priority (High, Medium, Low): High

Cost Estimate: Unknown

Completion Date: 2028

Potential Funding: City’s General Fund, Emergency Management Performance Grant (EMPG) administered by Riverside County Emergency Management Department for CERT, Community Development Block Grant, and Homeland Security Grant Program (HSGP)

In May 2021, the City Council approved the budget for Fiscal Year 2022/2023, which included funding for CERT training in the General Fund.

Budget Summary				
All Funds - Revenue Comparison				
Fund Description	2019/20 Year End Actuals	2020/21 Year End Estimate	2021/22 Projected Revenue	2022/23 Projected Revenue
General Fund				
101 General Fund	12,179,871	12,159,663	18,087,007	19,814,210
General Fund Total	12,179,871	12,159,663	18,087,007	19,814,210

3. The City of Indian Wells is seeking to renovate their current Emergency Operations Center (EOC). The City’s current EOC doubles as a substation with the Riverside County Sheriff’s Department, limiting the space allocated for the EOC equipment and staff. The renovation plan would bring the Sheriff Sub Station/ EOC up to code with Building and Seismic standards.

This mitigation goal would be the responsibility of the Public Safety Department and will be reviewed and discussed yearly during the City’s budget process. This would be a general fund expense with hopes of obtaining FEMA Pre-Disaster Mitigation grant and the goal would be to have it built in the next 1 to 3 years.

Responsible Office: Public Safety Director

Priority (High, Medium, Low): High

Cost Estimate: \$100,000,000

Potential Funding: General Fund/FEMA Pre-Disaster Mitigation grants

Completion Date: Building Plans for EOC remodel to be completed by 2024.

Benefits (Avoided Losses): This would give the City of Indian Wells the ability to create an EOC that would be more effective during a disaster and training.

4.3 2023-2028 MITIGATION ACTIONS FOR EACH IDENTIFIED HAZARD

Hazard/ Priority	Mitigation Action	Goal	Departments	Funding	Completion Timeframe
Flood					
High	Cooperate with the Coachella Valley Water District to maintain adequate flood flow capacity in the Whitewater and Deep Canyon flood control channels to prevent area flooding from anticipated maximum flood flows.	4A, 1.3	Public Works	General Fund	2023-2028
High	Enforce the City's Floodplain Management Ordinance which cites specific standards applicable to development located within the 100-year floodplain and in flashflood areas to mitigate flood hazards.	4A 1.4	Code Enforcement	General Fund	2023-2028
High	Maintain the two major flood control channels that exist in Indian Wells which confine and direct stormwater runoff. The Whitewater channel runs west to east through the city, north of Highway 111. This channel carries stormwater runoff which originates in western Coachella Valley. The Deep Canyon flood control channel runs west to east, just south of Fairway Drive and Iroquois Drive, this channel collects runoff from the mountains in the southern part of the City.	4A	Public Works	Capital Improvement Fund	2023-2028
Drought					
Medium	Encourage water-intensive land uses, such as golf courses, to utilize treated effluent for landscaping and irrigation needs.	3A	Planning	General Fund	2023-2028
High	Coordinate with Coachella Valley Water District (CVWD) to monitor citywide water usage on an annual basis and make recommendations to modify or expand water conservation measures to ensure their effectiveness	3A 5.7	Public Works	General Fund	2023-2028
Low	Strengthen education programs related to water protection and conservation. Cooperate with CVWD in the development of education materials and programs that encourage and facilitate water conservation throughout the community.	3A 5.8	Management	General Fund	2023-2028
Medium	Residential Turf Conservation Project: City Council approved the partnership with Coachella Valley Water District (CVWD) as of October 6, 2022. CVWD rebate programs are designed to assist residential customers who want to reduce their water usage.	3A	Planning/ Public Works	General Fund	2022-2024
Earthquake					
High	Adopt and maintain high standards for the seismic performance of buildings through prompt adoption and careful enforcement of the most current seismic standards of the Uniform Building Code. IV A2.2 Develop a structural hazards reduction program (per Section 8875 of the Government Code) for the upgrading of seismically hazardous buildings.	4A 2.1	Building and Safety	General Fund	2023-2028
Medium	Require geological and soil engineering studies for developments in or adjacent to hillsides to assure safety from potential landslides and/or rockfalls. Require development adjacent to hillside areas to minimize the potential hazard of falling rocks through project design.	4A 2.3	Engineering	General Fund	2023-2028
Medium	The State of California has established stringent seismic standards for buildings. These standards are contained in the State's Building Code. Indian Wells requires compliance with the State's Building Code for all development projects.	4A	Building and Safety	General Fund	2023-2028
Strong Wind					
High	Enforce the City standard of inspection and management of hazardous trees. The City Annually maintains and identifies high risk trees.	4A	Public Works	General Fund	2023-2028
Medium	The City's Municipal Code (Chapter 8.20) Ordinance Number 313 requires that an applicant for a grading or demolition permit must first obtain an approved Fugitive Dust Mitigation Plan. This plan must include all reasonably available control measures so that fugitive dust emissions comply with South Coast Air Quality Management District Rule 403. Control measures at a construction or demolition site can include the use of soil stabilizers or watering. Erection of wind fences, covering soil stockpiles, and revegetation of disturbed surfaces'	4A	Code Enforcement/ Public Works	General Fund	2023-2028

Extreme Heat					
Medium	Community Action Partnership (CAP) of Riverside County has Cooling centers placed throughout the County. La Quinta Wellness Center, 78450 Ave La Fonda La Quinta 92253 and Palm Desert Community Center 43-900 San Pablo Ave Palm Desert 92260 have been identified as the closet center for Indian Wells Residents.	2B	Management	General Fund	2018- 2028
High	Educate employees, businesses, and residents about the dangers of extreme heat and the steps they can take to protect themselves when extreme temperatures occur.	4A	Management	General Fund	2023-2028
Fire					
High	All proposed construction shall meet minimum standards for fire safety as defined in the City's Building or Fire codes based on building type, design, occupancy, and use.	4A	Code Enforcement/ Building and Safety	General Fund	2023-2028
Medium	Continue to work with Riverside County to provide comprehensive planning and future fire protection services.	4A	Public Works/ Planning	General Fund	2023-2028
High	Ensuring Fire flow (water pressure and volume available at hydrants) is adequate, as determined by the Riverside County Fire Department (RCFD). The RCFD requires 3,000 gallons per minute (GPM) for commercial and 1,500 GPM for residential peak water flows	4A	Public Works	General Fund	2023-2028
Medium	Restrict, after appropriate public hearings, the use of fire-prone building materials in areas defined by the Fire Department as presenting high-conflagration risk and require sprinklers to be installed in all new non-single-family residential construction per the Municipal Fire Code.	4A 1.6	Code Enforcement/ Building and Safety	General Fund	2023-2028
Terrorism					
High	Coordinate with the County, surrounding local cities, and the regional Fusion Center; acquire equipment, supplies, and other material as needed to support role.	4A	Management	General Fund	2023-2028
High	Develop and maintain Emergency Circulation (Traffic) Plan(s); acquire the necessary equipment to support implementation (Mass Evacuation Plan)	4A	Management/ Planning	General Fund	2023-2028
All Hazard					
High	Develop a post-disaster recovery plan to facilitate decision-making following a hazard event.		Management	General Fund	2023-2028
High	Continue to implement multi-hazard public awareness through the CERT program and 12 steps of emergency preparedness presentations.	4A 3.1	Management	General Fund	2023-2028
High	Maintain at least two east-west and two north-south primary (or major) arterials to ensure adequate emergency evacuation routes in the General Plan Area (see <i>Appendix A-10</i>).	4A 3.5	Planning	General Fund	2023-2028
High	EOC Upgrade- The city of Indian Wells is in the process of Upgrading its EOC to building code standards. Council approved a 2-year CIP to upgrade our Emergency Operations Center. FY 23-24 - \$100,000 for design work	4A	Management/ Planning/ Public Works	General Fund	2023-2024

4.4 MITIGATION PROJECTS

Table 4.4.1 Mitigation Projects 2023-2028





Future/planned Mitigation Projects	Flood Mitigation	Funding/ Cost Estimate																								
<p>Whitewater Storm Channel</p> 	<p>During the storm events of February 2019, the Whitewater Storm Channel experienced considerable flooding that damaged the West Drop Structure near Eldorado Drive. The approved design restores the flow of water through the channel to prevent future flooding.</p>	<p>This project will receive partial reimbursement from FEMA.</p> <table border="1" data-bbox="993 506 1403 541"> <thead> <tr> <th>Funding Sources</th> <th>FY 2022</th> <th>FY 2023</th> </tr> </thead> <tbody> <tr> <td>FEMA</td> <td></td> <td>\$1,539,000</td> </tr> </tbody> </table>	Funding Sources	FY 2022	FY 2023	FEMA		\$1,539,000																		
Funding Sources	FY 2022	FY 2023																								
FEMA		\$1,539,000																								
<p>Channel Lining Project</p> 	<p>Three vacant lots located along Highway 111 near Miles Avenue are too narrow to be effectively developed. The City is working with Developers to add buildable area by relocating a portion of the southern bank of the Whitewater River Channel. The project, currently in design, moves the channel bank northerly to create the additional buildable area. The consequence of this change requires the banks of the Whitewater River Channel to be protected against erosion. This project is in the design phase.</p>	<table border="1" data-bbox="993 674 1403 814"> <thead> <tr> <th>Expenditures</th> <th>FY 2022</th> <th>FY2023</th> </tr> </thead> <tbody> <tr> <td>Planning/Design</td> <td></td> <td></td> </tr> <tr> <td>Construction</td> <td>\$2,000,000</td> <td></td> </tr> <tr> <td>Administration/Inspection</td> <td></td> <td></td> </tr> <tr> <td>Contingency</td> <td></td> <td></td> </tr> <tr> <td>TOTAL</td> <td></td> <td></td> </tr> </tbody> </table> <table border="1" data-bbox="993 831 1403 877"> <thead> <tr> <th>Funding Sources</th> <th>FY 2022</th> <th>FY 2023</th> </tr> </thead> <tbody> <tr> <td>Housing Authority</td> <td></td> <td></td> </tr> </tbody> </table>	Expenditures	FY 2022	FY2023	Planning/Design			Construction	\$2,000,000		Administration/Inspection			Contingency			TOTAL			Funding Sources	FY 2022	FY 2023	Housing Authority		
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Funding Sources	FY 2022	FY 2023																								
Housing Authority																										
<p>Hwy 111 Drainage</p> 	<p>Will alleviate flooding occurring near Mountain View Villas</p>	<p>This project is budgeted under the 316 Capital Improvement Fund.</p>																								
<p>East Drop Structure Repair</p> 	<p>During the storm events of February 2019, the Whitewater Storm Channel experienced considerable flooding that damaged the East Drop Structure located behind the Renaissance hotel. Design is underway for FY 21-22, and we anticipate construction in FY 23</p>	<p>This project will receive partial reimbursement from FEMA.</p> <table border="1" data-bbox="993 1451 1403 1497"> <thead> <tr> <th>Funding Sources</th> <th>FY 2022</th> <th>FY 2023</th> </tr> </thead> <tbody> <tr> <td>FEMA</td> <td></td> <td>\$1,500,000</td> </tr> </tbody> </table>	Funding Sources	FY 2022	FY 2023	FEMA		\$1,500,000																		
Funding Sources	FY 2022	FY 2023																								
FEMA		\$1,500,000																								

Table 4.4.2 Completed Mitigation Projects from 2017 LHMP

Completed Mitigation Projects	Flood Mitigation
Manitou Basin	project constructed a debris basin to capture “bulk” during a rainstorm. Bulk is the solid debris carried by storm water and this material blocks roadways and storm drains. The purpose of the project was to capture the bulk materials to give the storm drain system a better opportunity to function properly. Capturing the bulk material during a storm also keeps the street passable for emergency vehicles or evacuation if needed. The project cost over \$1,000,000 and was completed in 2021.
Dry Well project	Dry Well project – a dry well uses percolation into the groundwater as a method of dealing with nuisance water typically caused by over irrigation to landscaping. The system is problematic because it gets clogged with sand and silt and needs to be removed and replaced. The City removed the dry well located north of Highway 111 at Rancho Palmeras and replaced the system with an overland drainage course. Eventually this new drainage pattern delivers flood water to the Whitewater River Channel. This project is completed.

SECTION 5.0 – COMMUNITY RATING SYSTEM

5.1 REPETITIVE LOSS PROPERTIES

The city of Indian Wells does not have any repetitive or severe loss of properties.

5.2 NATIONAL FLOOD INSURANCE PROPERTIES

The City of Indian Wells is a member of the Federal Emergency Management Agency (FEMA) Flood Insurance Program, and property owners within the City are eligible to purchase flood insurance from FEMA. The City is also a part of the National Flood Insurance Program (NFIP) Community Rating System (CRS)

SECTION 6.0 - CAPABILITIES ASSESSMENT

The purpose of this section is to capture the different resources available to the City of Indian Wells in support of mitigation. To efficiently demonstrate these resources, this section has been organized by: Mitigation Governance Resources; Technical Resources; and Fiscal Resources. The city regularly assesses and evaluates the effectiveness of its governance and incorporates changes to help meet the intended goal.

6.1 REGULATORY MITIGATION CAPABILITIES

There are a variety of governance that are directly related to or influence mitigation efforts. This governance falls under: 1) Laws, Regulations, Codes, and Ordinances; 2)

Plans, Studies, and Reports. The City will continue to ensure that necessary regulations are put in place relating to building codes, ordinances, and state and federal requirements.

Table 6.1.1 Regulatory Mitigation Governance Capabilities

Regulatory Tool	Active Yes/No/N/A	Comments/ Ability to Support Mitigation
General plan	Yes	Indian Wells Comprehensive General Plan was adopted February 1996, as amended. The General Plan supports hazard mitigation. Specifically, policies that ensure that the City of Indian Wells minimizes the effect and damage of any possible natural or man-made disasters are summarized in Chapter IV: Community Safety. This chapter also outlines the policies of coordinating with other local authorities in ensuring hazard mitigation by preparedness and communication.
Emergency Operations Plan	Yes	The City Adopted an all-hazards plan describing how the City will organize and respond to incidents. It is based on and is compatible with the laws, regulations, plans, and policies listed above. The Emergency Operations Plan (EOP) also addresses the integration and coordination of resources and activities with other Governmental Agencies, Special Districts, and private-sector partners. This plan also includes the City's Continuity of Operations.
Zoning Ordinance	Yes	Indian Wells Adopted Amended Zoning Code Ordinance on July 2022; Title 21. Mitigation actions that are not outlined in the ordinance can be incorporated into the Zoning ordinance by the community development director or designee with Planning Commission, City Council, and public approval.
Subdivision ordinance	Yes	Indian Wells Adopted Indian Wells Ordinances; Title 20; Chapter 20.04, 20.12, 20.16, 20.20, 20.24, 20.28, 20.32, 20.36, 20.40, 20.44, 20.48, 20.50, 20.52, 20.56, 20.60, 20.64, 20.68, 20.72, 20.76, 20.80. Mitigation actions that are not outlined in the ordinance can be incorporated into the Subdivision ordinance by the community development director or designee with Planning Commission, City Council, and public approval.
Site plan review requirements	Yes	Title 21; Chapter 21.60

Growth management ordinance	No	
Floodplain ordinance	Yes	Title 16; Chapter 16.36
Other special purpose ordinances (stormwater, water conservation, wildfire)	Yes	Title 9 Peace, Safety and Morals; Title 8 Health and Sanitation; Title 22 Resources Management; Chapter 22.04
Building code	Yes	Title 16, Building and Construction, enforce all State of California Building Codes.
Fire department ISO rating	Yes	Rating 3/ 3x
Erosion or sediment control program	No	Title 8; Chapter 8.24
Stormwater management program	Yes	Storm Drain Master Plan
Capital improvements plan	Yes	Five-year plan updated bi-annually, incorporating hazard mitigation by including construction or upgrades of City infrastructure and facilities.
Economic development plan	Yes	The city of Indian Wells Economic development plan can incorporate hazard mitigation related to new business attraction and business growth in the City.
Local emergency operations plan	In Progress	The Emergency operations plan can be revised on an ongoing basis to include hazard mitigation through training and preparedness.
Other special plans	N/A	
Flood Insurance Study or other engineering study for streams	Yes	Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

6.2 ADMINISTRATIVE/TECHNICAL MITIGATION CAPABILITIES

The City of Indian Wells has many proficiencies and expertise that can be leveraged in support of mitigation efforts. In addition to public safety and fire suppression capabilities, the City has access to staff with skills in Engineering/Construction, Planning, Environmental, Risk Management, Project/Grant Management, Economic Development, Debris Removal, and Emergency Management. As with many jurisdictions, the City of Indian Wells has been increasing its technology capabilities. This includes providing secure platforms to store and access information, means of ensuring continuity of government, cyber security, and general technical support.

Table 6.2.1 is a list of City Departments that can have a role in activities related to hazard mitigation.

Figure 6.2.1 – City of Indian Wells Administrative/Technical Mitigation Capabilities

Personnel Resources	Active Yes/No	Department/ Position	Ability to Support Mitigation
Planner/engineer with knowledge of land development/land management practices	Yes	Planning Department/ Planner and Public Works /City Engineer	Community Development Director and Public Works Director can make recommendations and draft updates to incorporate hazard mitigation related to new or existing land development into City Code and City activities.
Engineer/professional trained in construction practices related to buildings and infrastructure	Yes	Public Works /City Engineer and Building Department/ Building Official	The City Engineer and Building Official can make amendments or suggestions for the implementation or revision of hazard mitigation pertaining to building and infrastructure construction.
Planner/engineer/scientist with an understanding of natural hazards	Yes	Public Works /City Engineer and Building Department/ Building Official	The City Engineer or Building Official can improve current and future practices to better mitigate the effects of natural disasters
Personnel skilled in GIS.	Yes	Planning Department/P lanner and Public Works/ Manager	Planning and Public Works have skilled GIS staff who can implement technological solutions to hazard mitigation, such as tools for increased awareness of potential local hazards.
The full-time building official	Yes	Building Department/ Building Official	The Building Official can bring mitigation activities pertaining to the structural safety of buildings to the City's attention.
Floodplain manager	Yes	Public Works/ City Engineer	The Public Works Department can implement hazard mitigation pertaining to floodplain management, such as updating the Floodplain ordinance.
Emergency manager	Yes	City Manager/Part-time Emergency Management Coordinator	The Emergency manager can support all City departments with continuous mitigation preparedness and implementation. The emergency manager can also provide City staff and residents with emergency preparedness training and information.
Other personnel	No		

GIS Data—Land use	Yes	Riverside County / RCIT-GIS	Riverside County Information Technology (RCIT) Geographic Information Systems (GIS) database is designed to provide info for more robust, safer, and healthier communities.
GIS Datalinks to Assessor's data	Yes	Riverside County / RCIT-GIS	https://gis1.countyofriverside.us/Html5Viewer/index.html?viewer=MMC_Public
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	Fire Department, Emergency Management Department.	The Fire department and emergency management department can cooperate to update emergency processes and ensure interoperability in times of crisis.

6.3 FISCAL MITIGATION CAPABILITIES

The financial resources of the City of Indian Wells are allocated to and accounted for in various funds based upon the purposes for which the funds are to be spent and the means by which spending activities are controlled. The City will continue to identify additional funding opportunities that can be expanded upon for mitigation. In previous years, hazard mitigation grants have not been utilized to complete any projects that have been identified by the hazard mitigation planning team.

Table 6.3.1 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Table 6.3.1 City of Indian Wells Fiscal Mitigation Capabilities

Financial Resources	Accessible/ Eligible to Use (Yes/No)	Comments
Community Development Block Grants	Yes	
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	With voter approval
Fees for water, sewer, gas, or electric services	No	
Impact fees for new development	Yes	
Incur debt through general obligation bonds	Yes	With voter approval
Incur debt through special tax bonds	Yes	With voter approval
Incur debt through private activities	No	
Withhold spending in hazard-prone areas	N/A	

Other: General Fund Emergency Reserve	Yes	With Council Approval
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6.4 MITIGATION EDUCATION/ OUTREACH AND PARTNERSHIPS

Table 4.4.1 lists the City of Indian Wells public outreach capabilities. These capabilities include programs such as hazard awareness campaigns, public information, or communications offices. Education and outreach capabilities can be used to inform the public on current and potential mitigation activities.

Table 6.4.1 Mitigation Education/ Outreach and Partnerships

Name	Description (Effect on Hazard Mitigation)	Lead Organization
CERT	The City of Indian Wells trains residents in emergency preparedness and hazard mitigation through Community Emergency Response Team (CERT) classes that are available to residents twice a year.	City of Indian Wells and Riverside County Emergency Management Department (EMD)
12 Steps of Emergency Preparedness	The city of Indian Wells offers 12 Steps of Emergency Preparedness presentation to the residents of Indian wells, this presentation promotes preparedness and Hazard mitigation.	City of Indian Wells
The Great Shakeout	The City Participates in the annual Great Shakeout Exercise	City of Indian Wells
HOA Radio Program	The City of Indian Wells encourages HOAs/ Residents to participate in the Radio Program, this promotes communication between the EOC and residents during a disaster.	City of Indian Wells and RACES
County Emergency/Disaster Readiness App	the City promotes the Riverside County readiness app (RivCo Ready). It is a great tool for the community to use in preparation for all major disaster types.	Riverside county EMD
City Website	Emergency Management Site hosts information on earthquake preparedness, heat risk, warming/cooling centers, floods, and fires.	City of Indian Wells
Nixle emergency notification system	notify residents in advance of any impending severe weather event and/or incident within the city.	City of Indian Wells
RACES	The City of Indian Wells partners with Radio Amateur Civil Emergency Service (RACES), they are Licensed Radio Amateur Operators who are authorized to transmit during declared emergencies.	RACES and Riverside County EMD

6.5 EXPANSION OF AND IMPROVEMENT ON MITIGATION CAPABILITIES

The ability to expand current mitigation capabilities will generally be reliant upon the budgeting allocated for each department/program for that fiscal year. The level at which these programs may or may not be expanded upon, will be dependent upon the amount of funding received.

There are a multitude of methods and processes that a jurisdiction may use to improve upon current capabilities to mitigate emergencies or disasters. The City of Indian Wells has identified the below to support this thought process.

- ❖ **Regulatory/ Governance:** The City of Indian Wells should actively identify, adopt, and enforce the most current set of development codes and standards available. Strongly encouraging new development to be constructed to higher standards than currently required, increasing resilience within the community.
- ❖ **Administrative/ Technical:** The City of Indian Wells possesses a high level of administrative and technical capability that will be utilized to implement the actions identified in this plan. This existing capability will be maintained by the City and expanded as necessary to address the expansion of new programs or change in the scope of existing programs.
- ❖ **Fiscal:** During annual budgeting processes, the City should identify new funding sources (bonds, grants, assessment districts, etc.) that can be used to support the enhancement of existing capabilities.
- ❖ **Outreach:** Fostering new relationships to bring underrepresented populations and partners to the hazard mitigation planning process. Expand current capability through an increase in the number of events participated in and presentations conducted to the community through integration with HOAs and civic organizations. Promote preparedness through increased use of social media and the creation of an emergency management section to the City application.

6.6 MITIGATION FUNDING OPPORTUNITIES CAPABILITIES

- **Measure A** – Measure A is generated by a Riverside County one-half percent sales tax approved by the voters in 1989. This money is used to maintain and construct local streets and roads.
- **Development Impact Funds** – The City of Indian Wells charges fees for development-related activities such as infrastructure and public facilities.
- **Air Quality Management District** - Revenues received resulting from Assembly Bill 2766, which imposed an additional registration fee on motor vehicles. These revenues are used to reduce air pollution from motor vehicles.

- **Grants** – The City of Indian Wells receives various grant funds from various local, state, and federal agencies. These grants include funding for various programs such as recycling and public safety.
- **FEMA- FEMA Grant:** The City is either in application for or has received funding from FEMA for flood repairs and/or flood damage prevention. To date, the City has received commitment from FEMA for \$3,415,000 for flood damage mitigation projects.
- **Community Development Block Grant** - Revenues received from the Department of Housing and Urban Development. These revenues must be expended to accomplish the elimination of blight or to benefit low- and moderate-income persons by providing loans or grants for various programs.
- **Local Law Enforcement Services Fund** - Also known as the Citizens Option for Public Safety (COPS) grant, funding is provided for the purpose of front-line law enforcement services that are not already funded by Indian Wells
- **Landscape/Lighting Maintenance District** - Revenue collected through special assessments levied to benefitting property owners to cover the cost of associated with providing landscape and lighting maintenance.
- **Gas Tax** – Revenue received from a tax imposed on the sale of gas. Gas Tax funds are the most flexible transportation-related funding source. Gas Tax funds are used for various transportation purposes, including street-related projects, construction, or maintenance.
- **Transportation Uniform Mitigation Fee** – a multi-jurisdiction fee program that ensures that new development pays its fair share for the increased traffic that it creates. Under the TUMF, Western Riverside County is divided into five zones. The TUMF is structured so that 48.7% of funds generated in each zone go back to that zone to be programmed for projects.

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

SECTION 7.0 - INCORPORATION INTO EXISTING PLANNING MECHANISMS

The City of Indian Wells has adopted the 2018 Local Hazard Mitigation Plan as the Safety Element of the City's General Plan.

The City has a Safety Element in its General Plan that discusses fire, earthquake, flooding, and landslide hazards. This plan was adopted as an implementation appendix to the Safety Element. The City of Indian Wells uses the below programs to identify gaps that may lead to disaster vulnerabilities to work on ways to address these risks through mitigation:

- The City's General Plan adopted on February 1, 1996
- Title 21 Land Zoning and Use Planning.
- Title 16 Building and Construction
- Adopted all County Building Codes
- Emergency Operations Plan (EOP)

The City of Indian Wells conducts regular meetings to update the City's Municipal Code to keep current with new Federal and State regulations. This includes novel circumstances and potential hazards discovered in the normal course of City activities, including annual trainings and exercises. Additionally, the city works with both neighboring cities and county departments to keep abreast of new or continued vulnerabilities.

City staff brings draft ordinances to any relevant Commissions, then to the City Council for consideration and public input. Council and public-approved changes and ordinances that have passed the necessary readings are codified into the City's Municipal Code.

SECTION 8.0 - PLAN IMPLEMENTATION AND MAINTENANCE PROCESS

The City of Indian Wells will monitor and evaluate our LHMP every year over the next five years. The planning team will review the LHMP and assess the following:

- The goals, objectives, and address current and expected conditions.
- If the nature, magnitude, and type of risks have changed, we will update the plan as necessary.
- Current resources for implementing the plan and exploring new resources.
- Implementation problems include technical, political, legal, or coordination issues with other agencies.
- The outcomes to ensure they align with the expected result; if not, we will modify the plan.
- Changes in Federal, State, and local ordinances; if laws and regulations have changed, we will make changes to reflect current regulations.

- Involve the public by posting notices on websites and announcements during public meetings, intent to review and update the Local Hazard Mitigation Plan allowing for public comment and input.

If we discover changes have occurred during the evaluation, we will update the LHMP Revision Page and notify Riverside County EMD to update our Annex.

The Riverside County Emergency Management Department will coordinate the monitoring, evaluation, and update of the LHMP.

SECTION 9.0 - CONTINUED PUBLIC INVOLVEMENT

The City of Indian Wells will continue to include the public in reviewing and providing annual comments through Public Hearings at the Planning Commission, Public Safety Commission, and City Council meetings.

- Social Media (Facebook and Twitter): The Indian Wells residents rely heavily on the internet and social networking sites for information and community-building. The city will utilize Facebook and Twitter to reach out and notify citizens of updates and changes to the plan.
- Resident E-Blast and the City's Indian Wells Fast Fact
- Website: The city of Indian Wells website is a tool that is maintained and up to date with information sharing and updates regarding City business.

For public concern and inquiry, the residents are encouraged to use this email address: community@indianwells.com.

APPENDIX A – PUBLIC NOTICES AND MAPS

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



May 25, 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 Indian Wells' intent to participate in the County of Riverside Multi-Jurisdictional Hazard Mitigation Planning. As a condition to participating, City of Indian Wells 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.

City of Indian Wells 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 (MLHMP) by the jurisdiction's governing body.

I, Peter Castro, commit City of Indian Wells 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 25th day of May 2022

A blue ink signature of Peter Castro, Deputy City Manager.

Peter Castro, Deputy City Manager

44-950 Eldorado Drive ~ Indian Wells, California 92230-7497 ~ V (760) 546-2689 F (760) 546-0427
www.indianwells.com

- **Appendix A-2:** LHMP update presentation for City council and Indian Wells residents. *City Council Meeting Agenda from October 6, 2022 (see attached)*



INDIAN WELLS
CALIFORNIA
CITY COUNCIL
Meeting Agenda

Thursday, October 6, 2022
1:30 PM

Council Chamber and Remotely through Zoom in compliance with Government Code
Section 54953(e) (AB 361)
44950 Eldorado Drive, Indian Wells

Welcome to a meeting of the Indian Wells City Council. The meeting will be held in person and via Zoom/Teleconference: [Webinar ID 839 2052 7282](#) or by phone dial 1-669-900 9128. A password will be required to join the Zoom meeting, please email CityClerk@indianwells.com or call City Hall at (760) 346-2489 to request password prior to the meeting.

Public Comments: *Members of the Public who wish to speak should fill out a blue slip and submit it to the City Clerk, comments are limited to 3 minutes. In accordance with State Law, remarks during public comment are to be limited to subjects within the City's jurisdiction.*

Notification: *If you are an individual with a disability and need a reasonable modification or accommodation pursuant to the Americans with Disabilities Act (ADA) please contact the City Clerk at 760-346-2489, 48 hours prior to the meeting.*

Please turn off all communication devices (phones) or put them on non-audible mode (vibrate) during Council proceedings. All documents for public review are available for public inspection at City Hall reception, 44-950 Eldorado Drive, Indian Wells during normal business hours.

Pages

- A. CONVENE THE INDIAN WELLS CITY COUNCIL, PLEDGE OF ALLEGIANCE AND ROLL CALL**
- B. APPROVAL OF THE FINAL AGENDA**
- C. PROCLAMATIONS AND PRESENTATIONS**
 - C.1. Riverside County Sheriff Department Update by Indian Wells Lieutenant David Wright**
 - C.2. Riverside County Fire Department Update by Battalion Chief Matt Kotz**
 - C.3. Indian Wells Mini Muster Recognition and Presentation by Mike Lewis**
 - C.4. Local Hazard Mitigation Plan Presentation by Indian Wells Emergency Services Coordinator Linda Soto**
- D. PUBLIC COMMENTS**

Members of the Public who wish to speak on items not listed on the agenda or consent items may do so at this time. Public Comments are limited to 3 minutes. Speakers will be alerted when their time is up and are then to return to their seats and no further comments will be permitted.

To address the Council during the virtual live session via zoom, please use the "raise your hand" function on zoom in order to be recognized by the City Clerk in order to provide comments in real time.

Please note that while the City Council values your comments, the Council cannot respond nor take action on matters not listed on the agenda until the matter may appear on the forthcoming agenda.

E. CITY MANAGER'S REPORTS

The City Manager or Department Heads may make brief announcements, informal comments, or brief the Council on items of interest.

F. CITY ATTORNEY REPORTS AND COMMENTS

- **Appendix A-3** Local Hazard Mitigation Plan Update Meeting agenda and sign in sheet from October 12, 2022 (See Attached)



Bruce Barton, Director

LHMP Steering Committee

Agenda

Date: 10/12/2022

1330-1500 hours

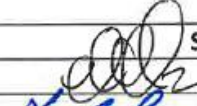









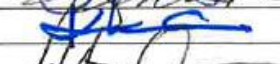

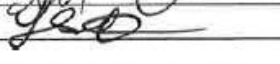
Location: Indian Wells Executive Conference Room

SUBJECT	TIME	PRESENTED BY	PURPOSE
I. Welcome	5 min.	Michael Ornelas	
II. Introductions	10 min.	All	
III. Plan Overview: <ul style="list-style-type: none"> • Purpose of Plan/Hazard Mitigation • Review of Hazards • Review of Goals of LHMP 	40 min	Michael Ornelas	Discuss
IV. LHMP Calendar/Timeline	15 min.	Michael Ornelas	Inform
V. Roundtable	15 min	All	Discuss
VI. Adjourn	5 min	Michael Ornelas	

Next Meeting: TBD

City of Indian Wells LHMP Review

10/12/22

NAME	SIGNATURE
MATTHEW KOTZ	
KEN SEUMALO	
ALEX MITROFF	
JOSHUA FRANSEK	
KENDALL MARTINEZ	
PETER CRIDEN	
DAVID WRIGHT	
Chris Freeland	
Jon Berg	
KRISTEN NELSON	
Kevin McCarthy	
Michael Ornela	
LINDA SOTO	

- **Appendix A-4: Public Safety Committee Meeting Agenda from October 20, 2022, Emergency Services and LHMP update (see attached)**



**Special Public Safety Committee
Thursday, October 20, 2022 at 1:00 p.m.
City Hall – Executive Conference Room
44950 Eldorado Drive, Indian Wells, CA 92210**

CALL TO ORDER

APPROVAL OF THE AGENDA

PUBLIC COMMENTS

A three-minute limit comment period is customary for all persons wishing to address the Committee. Please note you may address the Committee on an agenda item at the time it is discussed, but only after being recognized by the Chair.

GENERAL BUSINESS

I. NEW BUSINESS

1. Update regarding CV Sync
2. Update regarding traffic/ accident data along Highway 111
3. Update regarding the Home Security Rebate Program and CPTED Assessments
4. 2023 Meeting Schedule

II. FIRE UPDATE

III. SHERIFF UPDATE

IV. EMERGENCY SERVICES UPDATE

STAFF MATTERS/COMMITTEE COMMENTS

ADJOURNMENT – To the next regularly scheduled meeting of the Public Safety Committee on Wednesday, January 18, 2023, at 3:00 p.m. at City Hall in the Executive Conference Room.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at (760) 346-2489. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to

- **Appendix A-5: Local Hazard Mitigation Plan Update Meeting agenda and sign in sheet from December 13, 2022 (See Attached)**



Bruce Barton, Director

LHMP Steering Committee

Agenda

Date: 12/13/2022

1400-1530 hours









Location: Indian Wells Executive Conference Room

SUBJECT	TIME	PRESENTED BY	PURPOSE
I. Welcome	5 min.	Linda Soto	
II. Introductions	10 min.	All	
III. Plan Overview: <ul style="list-style-type: none"> • Review Purpose of Plan/Hazard Mitigation • Review LHMP Rough Draft 	40 min	Linda Soto	Discuss
IV. LHMP Calendar/Timeline	15 min.	Linda Soto	Inform
I. Roundtable	15 min	All	Discuss
II. Adjourn	5 min	Linda Soto	


Next Meeting: TBD

City of Indian Wells LHMP Review

12/13/22

NAME	SIGNATURE
PETER CASTO LIBERTY CITY MEMBER	
DAVID WELLS RIVERSIDE SHERIFF	
MATTHEO KOTZ CAL FIRE	
TALON BURGESS KMA INTERN	
KEN SEYMALO	
JAN BERA	
MICHAEL DANIEL RIVED (NAME)	
LINDA SEED	Present via Teams
KRISTEN NELSON	

- **Appendix A-6: Website Outreach screenshot (see attached)**



Tell us what's on your mind!

The City of Indian Wells is asking for your feedback!

The City of Indian Wells' Office of Emergency Management is in the process of updating the City's Local Hazard Mitigation Plan, or LHMP. The purpose of an LHMP is to identify hazards within the City and ways to mitigate those hazards.

This survey is designed to gather public input on the perceived threat of a variety of potential hazards to ensure the LHMP update is as comprehensive as possible.

The survey will remain open until Friday, November 18, 2022 at 5:00 p.m.

For questions regarding the LHMP, contact Emergency Services Coordinator Linda Soto at Linda.Soto@Rivco.org

We love hearing directly from our community. Check out the survey below and let your voice be heard.

[Let's go!](#)

1,107 starts with 326 submits. Submission rate was 29.45%

Date/Tri 1	Agricu 2	Droug 3	Earthq 4	Extren 5	Flood 6	Insect 7	Lands 8	Pandk 9	Sever 10	Wildl 11	Aquac 12	Civil 13	Hazr 14	Jaillf 15	Nuck 16	Pipel 17	Power 18	Terra 19	Trans 20	Isyo 21	Doys 22	Isyo 23	Doys 24	Isyo 25	Prev 26	Prop 27	Natu 28	Stru 29	Emr 30	Public
09/30/21	5	1	5	1	10	10	10	2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
09/29/21	5	1	1	1	2	3	5	3	1	2	1	1	4	1	10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11/14/20	5	5	3	2	3	3	5	10	2	3	6	6	6	2	6	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
09/30/21	1	9	8	10	5	2	3	4	7	6	2	3	1	4	6	10	4	9	10	4	9	10	4	9	10	4	9	10	4	9
09/30/21	10	9	7	2	8	6	9	6	7	8	2	3	2	1	4	4	9	7	10	4	9	7	10	4	9	7	10	4	9	7
11/15/20	8	3	3	5	9	8	10	4	3	10	6	9	5	3	9	9	2	3	3	3	3	3	3	3	3	3	3	3	3	3
11/15/20	1	10	10	10	8	5	1	5	10	5	10	5	5	2	1	3	10	3	10	3	10	3	10	3	10	3	10	3	10	3
11/14/20	4	7	6	1	8	5	9	2	3	10	7	2	3	9	10	6	4	5	1	1	1	1	1	1	1	1	1	1	1	1
09/29/21	1	8	10	9	7	7	3	7	7	1	1	2	2	1	5	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11/14/20	9	8	2	4	3	7	5	6	1	10	5	6	4	8	9	3	1	7	1	1	1	1	1	1	1	1	1	1	1	1
09/29/21	4	8	8	1	7	7	1	4	8	7	1	3	5	4	3	1	6	6	6	6	6	6	6	6	6	6	6	6	6	6
11/14/20	1	5	10	10	5	7	1	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
10/22/21	4	9	10	8	8	5	10	10	6	7	4	6	3	5	5	9	6	8	10	4	8	10	4	8	10	4	8	10	4	8
09/30/21	10	1	1	1	6	6	7	3	2	8	10	8	9	9	10	6	1	8	3	10	6	1	8	3	10	6	1	8	3	10
11/15/20	8	3	5	1	6	4	10	8	7	9	10	7	3	8	4	2	1	6	5	10	4	2	1	6	5	10	4	2	1	6
09/30/21	6	7	8	8	3	7	5	7	7	3	6	4	6	3	6	8	4	5	10	4	5	10	4	5	10	4	5	10	4	5
09/29/21	3	10	8	10	6	7	2	10	8	6	3	5	4	2	2	1	10	6	10	6	10	6	10	6	10	6	10	6	10	6
10/01/20	4	10	8	10	5	4	2	10	7	10	1	4	4	3	1	1	6	4	5	10	4	5	10	4	5	10	4	5	10	4
09/29/2022 08:12	9	9	9	2	4	2	5	9	4	6	2	3	1	1	1	9	3	1	1	9	3	1	1	9	3	1	1	1	9	3
09/30/21	1	10	10	3	8	10	2	10	10	8	1	5	5	5	2	10	10	5	10	10	5	10	10	5	10	10	5	10	10	5
09/30/21	1	9	10	8	3	5	4	6	7	2	2	8	7	4	5	3	9	6	10	10	4	5	3	9	6	10	10	4	5	3
10/22/21	5	8	8	10	3	5	1	3	10	2	1	5	5	5	1	8	10	4	8	10	4	8	10	4	8	10	4	8	10	4
11/14/20	6	3	2	3	1	1	3	5	3	3	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
09/30/21	5	1	7	1	10	3	9	8	4	6	10	5	9	10	6	4	3	5	1	1	1	1	1	1	1	1	1	1	1	1
11/14/20	5	5	2	5	8	7	6	5	5	5	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
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11/14/20	4	3	5	3	9	4	9	3	3	3	4	4	4	3	1	6	5	5	3	10	4	3	10	4	3	10	4	3	10	4
10/01/20	7	9	7	8	4	3	3	3	3	3	1	2	4	3	1	1	8	3	4	10	4	1	8	3	4	10	4	1	8	3
11/15/20	3	10	7	3	3	8	1	6	6	8	3	5	3	5	3	1	7	9	2	5	10	4	5	10	4	5	10	4	5	10
11/14/20	5	9	7	8	4	5	4	7	7	5	5	8	4	6	3	4	5	8	5	10	4	5	10	4	5	10	4	5	10	4
09/30/21	10	2	3	3	8	8	10	8	10	3	8	10	3	7	7	7	9	2	9	2	9	2	9	2	9	2	9	2	9	2
11/14/20	7	10	8	10	1	4	3	7	8	1	3	3	5	1	1	8	10	2	8	10	2	8	10	2	8	10	2	8	10	2
09/30/21	5	7	9	9	9	7	6	10	7	9	7	8	8	7	7	6	10	8	8	8	8	8	8	8	8	8	8	8	8	8

211	10/02/20	10	6	5	5	6	6	6	10	5	5	6	2	6	6	9	9	4	6	6	No	Never	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
212	09/29/21	6	5	10	7	6	6	6	6	7	7	4	8	5	5	4	4	9	7	3	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
213	10/04/20	4	1	1	1	2	2	6	1	1	8	8	1	4	9	8	3	1	6	5	No	Yes	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
214	09/29/21	4	9	9	10	9	6	5	5	7	9	3	3	1	1	1	4	8	2	5	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
215	09/29/21	3	1	1	1	1	3	10	3	9	3	2	10	10	6	9	5	10	5	5	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
216	09/29/21	7	10	8	8	6	7	3	7	7	3	4	2	5	1	6	6	10	3	3	No	Not Sure	No	Never	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
217	11/14/20	10	1	3	1	5	8	7	3	2	1	10	3	4	4	7	1	1	1	3	No	Not loca	Yes	Never	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
218	09/29/21	1	6	10	10	3	1	5	3	3	7	3	7	5	7	5	7	10	9	3	No	No	Not loca	No	Too exp	SomeW	SomeW	SomeW	Not Impc	Very Imp	Very Imp	
219	09/29/21	3	3	9	4	4	4	2	1	2	2	5	6	5	7	7	8	3	6	5	No	No	Never	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
220	09/29/21	3	10	6	9	7	2	4	8	5										No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
221	10/08/20	2	1	1	1	4	5	6	1	1	4	5	3	2	5	8	4	1	1	1	No	No	Never	No	Never	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
222	09/30/21	6	10	3	5	2	4	3	5	4	6	4	3	6	4	2	2	4	3	4	No	No	Not neci	Yes	Too exp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
223	09/29/21	3	8	7	6	5	5	6	6	6	6	5	6	5	9	7	8	3	6	3	No	No	Never	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
224	11/14/20	6	3	3	6	4	6	6	6	7	4	6	9	5	9	5	3	9	6	10	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
225	11/14/20	8	1	5	1	9	9	9	9	3	3	9	9	9	9	9	3	3	3	3	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
226	09/30/21	1	5	7	8	1	1	2	4	2	2	2	2	4	1	1	4	8	2	8	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
227	10/12/20	10	1	6	1	8	3	1	8	3	2	7	8	6	5	2	4	4	6	2	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
228	09/30/21	9	3	5	3	3	7	9	6	3	9	9	9	9	9	9	6	4	9	3	No	No	Too exp	No	Too exp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
229	11/14/20	3	10	10	7	6	10	10	3	8	10	7	7	7	10	10	10	10	10	10	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
230	10/03/20	2	1	3	5	9	8	8	3	6	8	8	8	6	8	10	8	4	7	4	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
231	11/17/20	2	6	5	8	3	3	1	5	6	3	1	3	2	1	2	4	6	2	2	No	No	Too exp	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
232	09/29/21	5	10	10	5	8	8	7	6	6	6	3	3	2	1	6	10	3	3	8	No	No	Too exp	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
233	11/15/20	5	8	8	8	2	2	2	2	8	1	2	1	1	1	1	4	1	2	1	No	No	Not neci	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
234	11/14/20	9	3	3	3	4	3	5	5	3	6	9	4	9	5	5	6	4	10	6	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
235	10/01/20	6	3	1	4	2	3	5	3	2	3	4	9	4	5	6	6	6	2	4	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
236	09/30/21	10	2	4	5	8	8	7	2	5	8	7	9	5	10	4	3	4	8	5	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
237	11/14/20	7	4	3	5	10	9	8	6	1	2	7	6	8	9	10	2	1	4	5	No	No	Never	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
238	09/30/21	10	1	5	1	10	10	8	10	5	1	1	1	5	1	5	1	10	1	5	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
239	09/29/21	10	3	1	4	5	6	9	7	2	8	6	1	3	7	8	4	2	5	3	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
240	11/15/20	8	8	8	8	4	2	5	3	9	9	4	5	5	5	5	9	5	5	5	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
241	09/29/21	4	2	6	8	4	2	5	3	9	9	4	5	5	5	5	9	5	5	5	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
242	09/29/21	7	1	4	9	8	6	10	5	3	2	3	4	7	8	9	6	2	5	1	No	No	Never	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
243	09/29/21	5	10	10	5	8	5	5	7	7	5	5	5	5	1	3	10	1	7	10	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
244	09/30/21	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
245	11/14/20	5	10	10	8	5	5	5	8	8	8	2	2	8	2	2	2	5	2	8	No	No	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
246	11/15/20	3	2	3	1	4	4	3	3	2	3	4	4	4	4	5	5	4	5	4	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
247	10/03/20	2	10	10	10	2	5	2	10	5	5	5	5	5	5	1	5	10	1	5	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
248	09/30/21	2	4	9	6	3	6	3	3	8	2	6	2	6	2	2	5	8	5	8	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
249	09/30/21	3	8	9	8	6	7	3	6	3	6	2	3	6	5	3	2	4	10	8	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
250	11/16/20	5	7	8	9	8	6	7	3	6	2	3	6	5	3	2	3	9	2	3	No	Not Sure	No	Never	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
251	09/29/21	7	10	8	10	6	6	4	2	5	1	1	7	4	1	1	1	1	1	6	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
252	09/29/21	6	2	5	1	10	6	7	4	3	9	4	3	7	5	10	6	2	7	1	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
253	11/14/20	10	1	8	2	4	1	5	7	4	4	6	2	4	6	2	4	10	4	3	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
254	09/30/21	10	5	1	1	2	7	5	9	2	8	3	8	9	10	10	2	1	10	1	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
255	11/14/20	1	2	10	5	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	No	No	Not loca	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
256	09/30/21	2	7	8	6	7	3	3	7	7	5	2	2	2	3	2	3	7	2	4	No	Not Sure	No	Never	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
257	09/29/21	5	2	5	7	5	8	7	5	4	3	4	6	2	2	3	4	3	4	4	No	Yes	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
258	11/15/20	10	5	3	1	8	5	9	9	3	3	10	10	8	10	10	5	10	8	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
259	09/29/21	5	6	5	4	4	7	8	9	2	10	7	9	3	4	10	5	1	6	2	No	No	Not neci	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
260	09/29/21	6	10	5	10	5	5	1	2	5	1	2	1	1	1	1	4	1	5	10	No	No	Not neci	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
261	11/14/20	10	1	8	4	4	1	1	1	1	4	1	1	1	1	1	4	1	4	1	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
262	10/04/20	7	2	5	1	8	4	9	3	6	10	5	4	3	9	8	7	1	6	2	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
263	11/17/20	8	10	8	8	4	10	1	2	2	1	1	6	2	5	1	6	10	3	6	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
264	11/15/20	3	3	3	3	7	3	10	5	2	6	3	10	5	10	10	3	10	5	10	No	No	Not loca	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
265	09/29/21	5	2	1	9	4	3	4	3	5	7	4	4	6	2	2	2	6	2	3	No	Not Sure	Yes	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp	
266	09/29/21	10	8	1	8	10	10	7	7	10	10	10	8	9	7	9	3	7	6	10	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW	SomeW	SomeW	Very Imp	Very Imp
267	09/30/21	10	5	1	1	1	10	1	1	1	10	1	1	1	1	1	1	1	1	1	No	No	Not neci	No	Too exp	Very Imp	SomeW	SomeW				



OUR CITY

CITY HALL

SERVICES

I WANT TO...



Current Local Hazard Mitigation Plan

The city has a plan to respond to any disaster -- from preparation through recovery -- as do Indian Wells country clubs.

If a major earthquake or other event causes damage to roads and communications infrastructure, city and Red Cross officials estimate families should be prepared to take care of themselves for the first 72 hours. By that time, it is anticipated that communications will be restored and emergency response can begin in earnest. Learn more about the city's Emergency Operations Center.

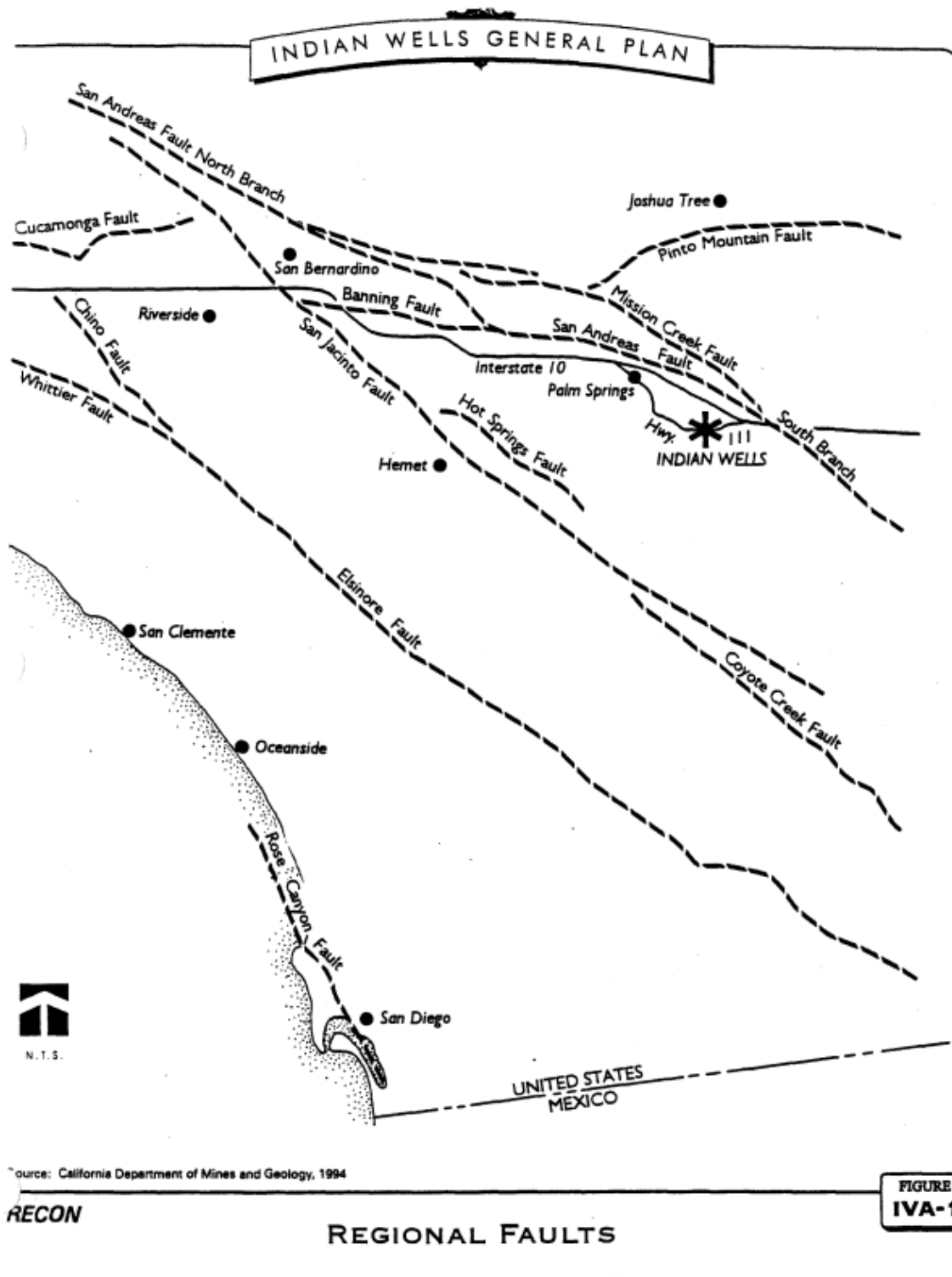
It is extremely important for residents to have family emergency plans. The most critical items to have on hand are a disaster kit, three to five days of food and water readily available (for you and your pets!), and a supply of all necessary medications. Moreover, plan in advance where you will be staying if you leave your home or the valley. Making those decisions ahead of time ensures that you will have a well thought out emergency plan that will improve your comfort and safety.

The City of Indian Wells is conducting a 5-year update to our Local Hazard Mitigation Plan (LHMP) to help reduce or remove long-term risk and protect people and property from the effects of events like earthquake, fire, flood, terrorism, etc. Under the Disaster Mitigation Act of 2000 (Public Law 106-390), State, Local and Tribal governments are required to develop a hazard mitigation plan to be eligible for certain federal disaster assistance.

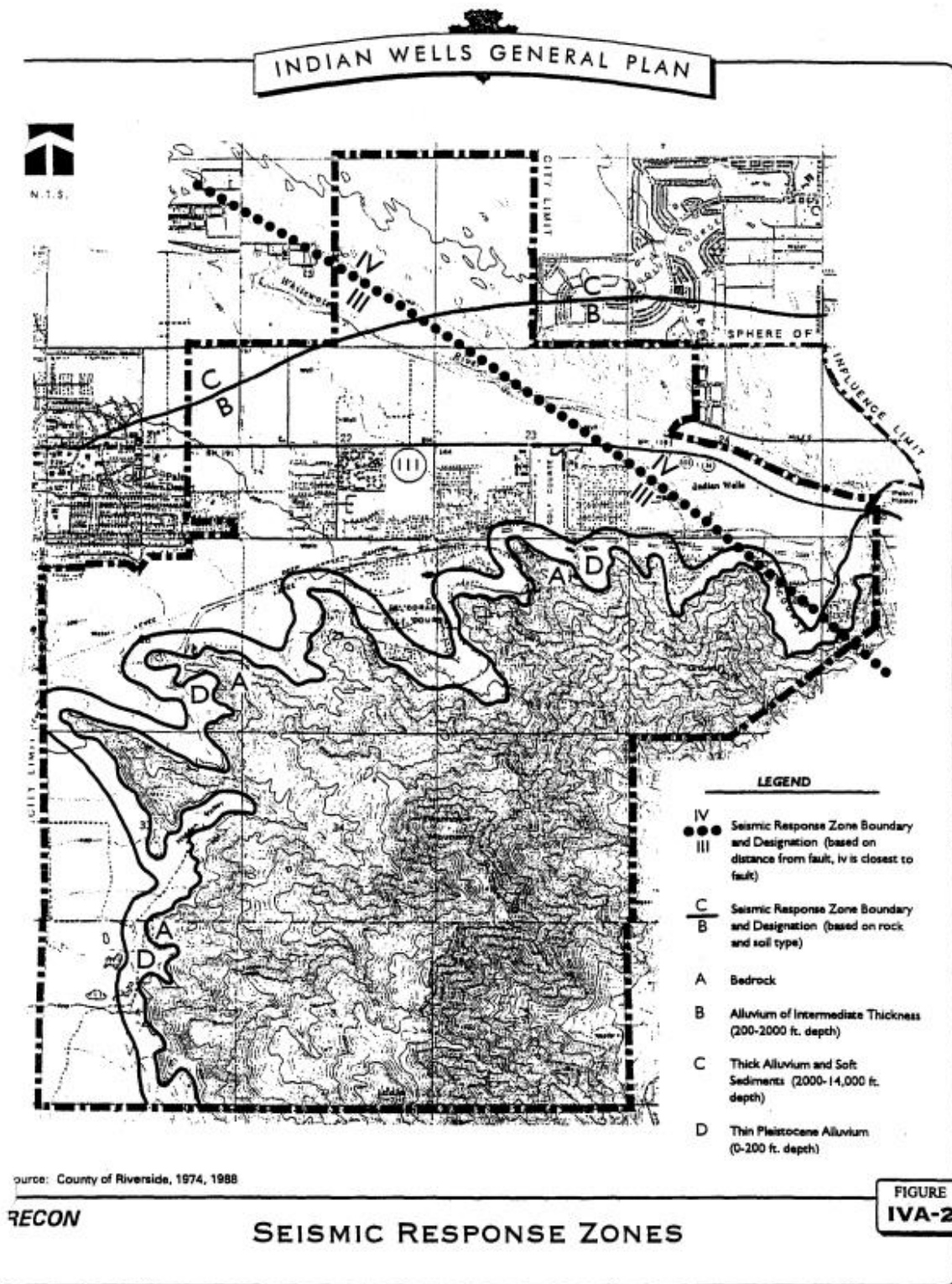
Nixle

All residents are encouraged to sign up for Nixle, an alert notification service that informs community members of relevant information including severe weather, traffic, missing persons and community events. To opt in to this service, use your mobile phone to text 92210 to 888777. For sign up

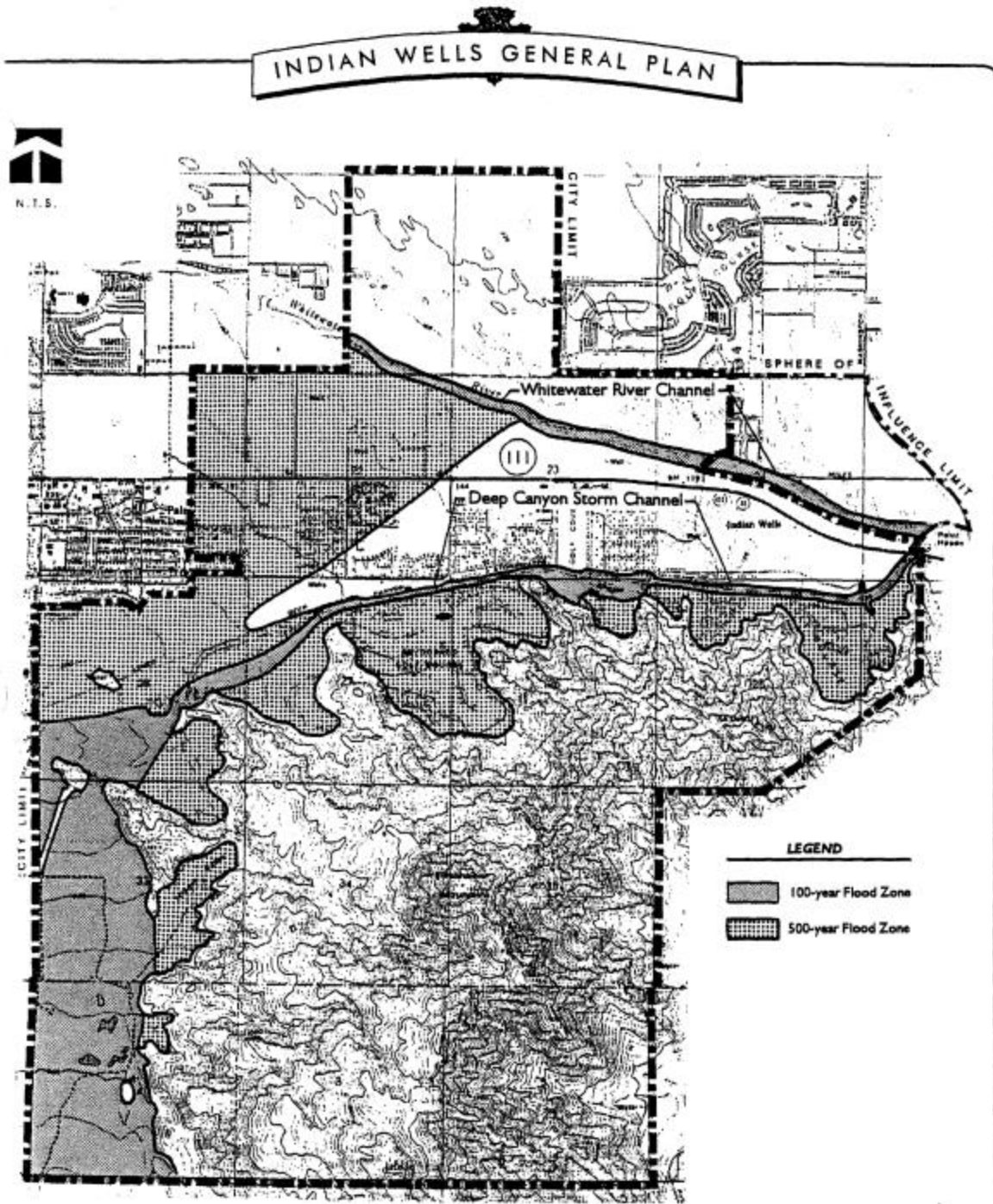
- **Appendix A-7: Regional Faults Indian Wells Map**



- **Appendix A-8: Seismic Response Zones Indian Wells Map**



- **Appendix A-9: Flood Zone Indian Wells Map**



Source: Federal Emergency Management Agency, 1982

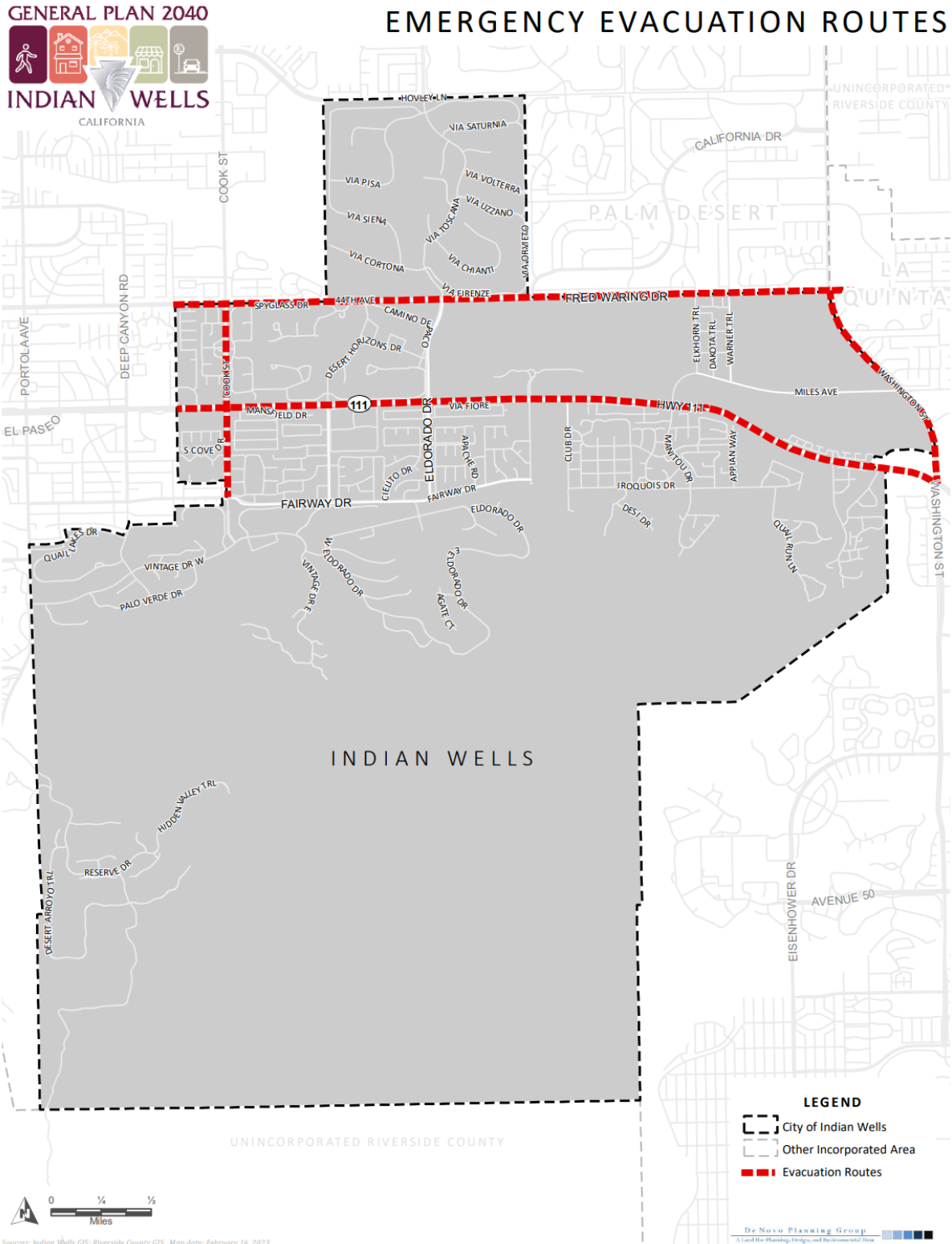
RECON

FLOOD ZONES

FIGURE
IVA-3

IVA-9

- Appendix A-10: Emergency Evacuation Routes Indian Wells Map



- **Appendix A-11: Jurisdiction Vulnerability Worksheet (Table 1C)**

JURISDICTION VULNERABILITY WORKSHEET (TABLE 1C)

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

- **Appendix A-12: HAZARD IDENTIFICATION QUESTIONNAIRE (TABLE 1A)**

HAZARD IDENTIFICATION QUESTIONNAIRE (TABLE 1A)

DOES YOUR ORGANIZATION HAVE:	
AIRPORT IN JURISDICTION	No
AIRPORT NEXT TO JURISDICTION	No
DAIRY INDUSTRY	No
POULTRY INDUSTRY	No
CROPS/ORCHARDS	No
DAMS IN JURISDICTION	No
DAMS NEXT TO JURISDICTION	No
LAKE/RESERVOIR IN JURISDICTION	Yes
LAKE/RESERVOIR NEAR JURISDICTION	Yes
JURISDICTION IN FLOOD PLAIN	Yes
CONTROLLED FLOOD CONTROL CHANNEL	Yes
UNCONTROLLED FLOOD CONTROL CHANNEL	No
EARTHQUAKE FAULTS IN JURISDICTION	Yes
EARTHQUAKE FAULTS NEXT TO JURISDICTION	Yes
MOBILE HOME PARKS	No
NON-REINFORCED FREEWAY BRIDGES	No
NON-REINFORCED BRIDGES	No
BRIDGES IN FLOOD PLAIN	No
BRIDGES OVER OR ACROSS RIVER/STREAM	Yes
ROADWAY CROSSING RIVER/STREAM	Yes
NON-REINFORCED BUILDINGS	No
FREEWAY/MAJOR HIGHWAY IN JURISDICTION	No
FREEWAY/MAJOR HIGHWAY NEXT TO JURISDICTION	No
FOREST AREA IN JURISDICTION	No
FOREST AREA NEXT TO JURISDICTION	No
WITHIN THE 50 MILES SAN ONOFRE EVACUATION ZONE	No
MAJOR GAS/OIL PIPELINES IN JURISDICTION	Yes
MAJOR GAS/OIL PIPELINES NEXT TO JURISDICTION	No
RAILROAD TRACKS IN JURISDICTION	No
RAILROAD TRACKS NEXT TO JURISDICTION	No
HAZARDOUS WASTE FACILITIES IN JURISDICTION	No
HAZARDOUS WASTE FACILITIES NEXT TO JURISDICTION	No
HAZARDOUS STORAGE FACILITIES IN JURISDICTION	No
HAZARDOUS STORAGE FACILITIES NEXT TO JURISDICTION	No
DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY	
IN A FLOOD PLAIN	Yes
NEAR FLOOD PLAIN	Yes
NEAR RAILROAD TRACKS	No
NEAR A DAM	No
UPSTREAM FROM A DAM	No
DOWNSTREAM FROM A DAM	No
DOWNSTREAM OF A LAKE	No
DOWNSTREAM FROM A RESERVOIR	No
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	Yes
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	No
ON AN EARTHQUAKE FAULT	No
NEAR AN EARTHQUAKE FAULT	Yes
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	No

HAZARD IDENTIFICATION QUESTIONNAIRE CONTINUED (Table 1A)

DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY CONTINUED:	
IN A FOREST AREA	No
NEAR A FOREST AREA	No
NEAR A MAJOR HIGHWAY	No
A HAZARDOUS WASTE FACILITY	No
NEAR A HAZARDOUS WASTE FACILITY	No
A HAZARDOUS STORAGE FACILITY	No
NEAR A HAZARDOUS STORAGE FACILITY	No
NON-REINFORCED BUILDINGS	No
A MAJOR GAS/OIL PIPELINE	Yes
NEAR A MAJOR GAS/OIL PIPELINE	No
DOES YOUR ORGANIZATION HAVE ANY LOCATIONS THAT:	
HAVE BEEN DAMAGED BY EARTHQUAKE AND NOT REPAIRED	No
HAVE BEEN DAMAGED BY FLOOD	Yes
HAVE BEEN DAMAGED BY FLOOD MORE THAN ONCE	Yes
HAVE BEEN DAMAGED BY FOREST FIRE	No
HAVE BEEN DAMAGED BY FOREST FIRE MORE THAN ONCE	No
HAVE BEEN DAMAGED BY WILDLAND FIRE	No
HAVE BEEN DAMAGED BY WILDLAND FIRE MORE THAN ONCE	No
HAVE BEEN IMPACTED BY A TRANSPORTATION ACCIDENT	No
HAVE BEEN IMPACTED BY A PIPELINE EVENT	No
EMERGENCY OPERATIONS INFORMATION	
DOES YOUR ORGANIZATION HAVE AN EOC	Yes
IS YOUR EOC LOCATED IN A FLOOD PLAIN	No
NEAR FLOOD PLAIN	No
NEAR RAILROAD TRACKS	No
NEAR A DAM	No
UPSTREAM FROM A DAM	No
DOWNSTREAM FROM A DAM	No
DOWNSTREAM OF A LAKE	No
DOWNSTREAM FROM A RESERVOIR	No
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	Yes
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	No
ON AN EARTHQUAKE FAULT	No
NEAR AN EARTHQUAKE FAULT	Yes
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	No
IN A FOREST AREA	No
NEAR A FOREST AREA	No
NEAR A MAJOR HIGHWAY	Yes
A HAZARDOUS WASTE FACILITY	No
NEAR A HAZARDOUS WASTE FACILITY	No
A HAZARDOUS STORAGE FACILITY	No
NEAR A HAZARDOUS STORAGE FACILITY	No
NON-REINFORCED BUILDINGS	No
A MAJOR GAS/OIL PIPELINE	No
NEAR A MAJOR GAS/OIL PIPELINE	Yes
OTHER FACILITY INFORMATION	
ARE THERE LOCATIONS WITHIN YOUR JURISDICTION THAT:	
COULD BE CONSIDERED A TERRORIST TARGET	Yes
COULD BE CONSIDERED A BIO-HAZARD RISK	No

- **Appendix A-13: LHMP Draft Open for Public Comment e-blast**



Indian Wells Local Hazard Mitigation Plan UPDATE

Public Comment Period for the Local Hazard Mitigation Plan (LHMP) is open until 1/31/23

Residents are invited to review the final draft of the city's updated Local Hazard Mitigation Plan ("LHMP") before it goes before Council for adoption.

Please send any questions, comments or concerns to Emergency Services Coordinator Linda Soto at Linda.Soto@Rivco.org by 12:00 noon on Tuesday, January 31, 2023.

The draft LHMP can be found [HERE](#).

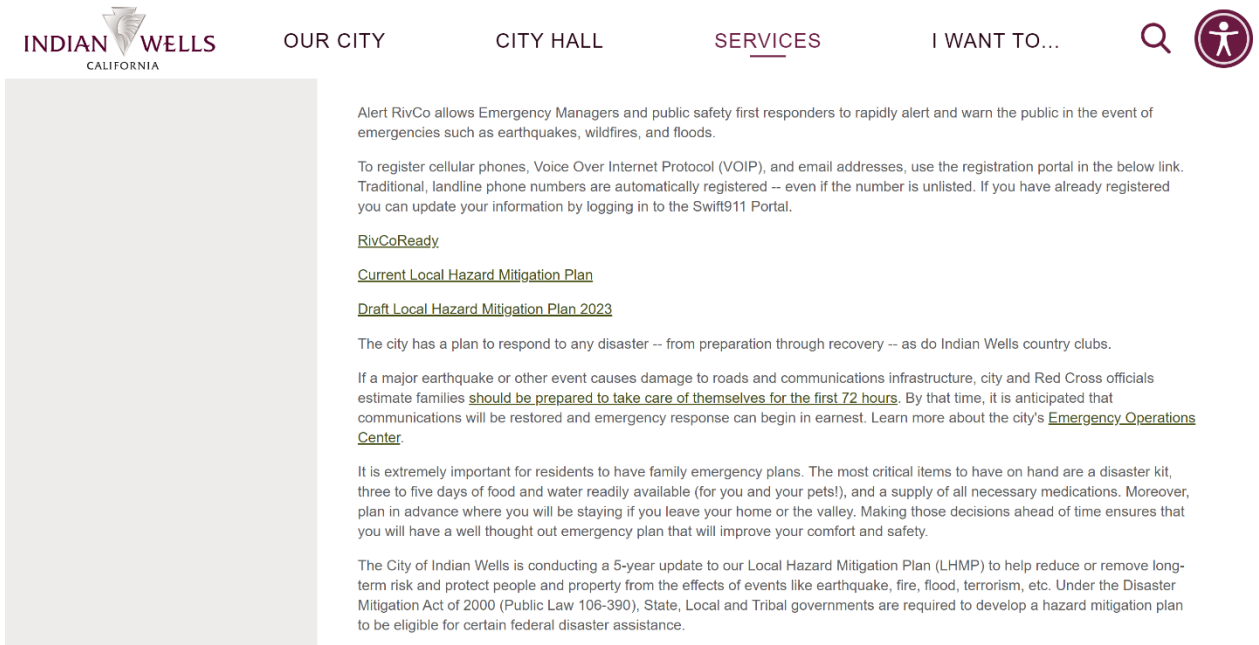
City of Indian Wells
44-950 Eldorado Drive
Indian Wells, CA 92210
(760) 346-2489

Monday- Friday
8:00 a.m. - 5:00 p.m.
(Closed 12:00 p.m. - 1:00
p.m.)
Closed Major Holidays

Stay Connected



- **Appendix A-14: LHMP Draft Open for Public Comment City website.**



The screenshot shows the top navigation bar of the Indian Wells, California website. The navigation menu includes: INDIAN WELLS CALIFORNIA, OUR CITY, CITY HALL, SERVICES (underlined), and I WANT TO... A search icon and a person icon are also visible on the right side of the navigation bar.

The main content area on the left is a large grey rectangle, likely representing a placeholder or a redacted section. The text on the right side of the page is as follows:

Alert RivCo allows Emergency Managers and public safety first responders to rapidly alert and warn the public in the event of emergencies such as earthquakes, wildfires, and floods.

To register cellular phones, Voice Over Internet Protocol (VOIP), and email addresses, use the registration portal in the below link. Traditional, landline phone numbers are automatically registered -- even if the number is unlisted. If you have already registered you can update your information by logging in to the Swift911 Portal.

[RivCoReady](#)

[Current Local Hazard Mitigation Plan](#)

[Draft Local Hazard Mitigation Plan 2023](#)

The city has a plan to respond to any disaster -- from preparation through recovery -- as do Indian Wells country clubs.

If a major earthquake or other event causes damage to roads and communications infrastructure, city and Red Cross officials estimate families should be prepared to take care of themselves for the first 72 hours. By that time, it is anticipated that communications will be restored and emergency response can begin in earnest. Learn more about the city's [Emergency Operations Center](#).

It is extremely important for residents to have family emergency plans. The most critical items to have on hand are a disaster kit, three to five days of food and water readily available (for you and your pets!), and a supply of all necessary medications. Moreover, plan in advance where you will be staying if you leave your home or the valley. Making those decisions ahead of time ensures that you will have a well thought out emergency plan that will improve your comfort and safety.

The City of Indian Wells is conducting a 5-year update to our Local Hazard Mitigation Plan (LHMP) to help reduce or remove long-term risk and protect people and property from the effects of events like earthquake, fire, flood, terrorism, etc. Under the Disaster Mitigation Act of 2000 (Public Law 106-390), State, Local and Tribal governments are required to develop a hazard mitigation plan to be eligible for certain federal disaster assistance.

- **Appendix A-15 Resolution**

RESOLUTION NO. 2024-02

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDIAN WELLS, CALIFORNIA, ADOPTING THE CITY OF INDIAN WELLS LOCAL HAZARD MITIGATION PLAN ANNEX FROM THE RIVERSIDE COUNTY OPERATIONAL AREA MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION PLAN AS REQUIRED BY THE FEDERAL DISASTER MITIGATION AND COST REDUCTION ACT OF 2000

WHEREAS, President William J. Clinton signed H.R. 707, the Disaster Mitigation and Cost Reduction Act of 2000, into law on October 30, 2000; and

WHEREAS, the Disaster Mitigation Act of 2000 requires all jurisdictions to be covered by a Local Hazard Mitigation Plan to be eligible for Federal Emergency Management Agency post-disaster funds; and

WHEREAS, the City of Indian Wells (the "City") has committed to participate in the development of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan; and

WHEREAS, the City coordinated the development of the City of Indian Wells Local Hazard Mitigation Plan Annex; and

WHEREAS, the City is concerned about mitigating potential losses from natural disasters before they occur, and

WHEREAS, the plan identifies potential hazards, potential losses and potential mitigation measures to limit losses, and

WHEREAS, the California Governor's Office of Emergency Services has reviewed the plan on behalf of the Federal Emergency Management Agency; and

WHEREAS, formal adoption of the plan by the City Council is required before final approval of the plan can be obtained from the Federal Emergency Management Agency; and

WHEREAS, the City has determined that it would be in the best interest of Indian Wells to adopt the Local Hazard Mitigation Plan Annex.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL HEREBY ADOPTS the Local Hazard Mitigation Plan Annex to meet the requirements of the Disaster Mitigation and Cost Reduction Act of 2000; and directs the City to forward the Local Hazard Mitigation Plan Annex to the Riverside County Fire Department – Office of Emergency Services, the California Governor's Office of Emergency Services and to the Federal Emergency Management Agency on behalf of the City of Indian Wells for final approval.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Indian Wells, California, at a regular meeting held on this 15 day of February 2024.

E-SIGNED by Greg Sanders
on 2024-02-18 16:51:35 PST

GREG SANDERS
MAYOR

CERTIFICATION FOR RESOLUTION NO. 2024-02

I, Angelica Avila, City Clerk of the City Council of the City of Indian Wells, California, **DO HEREBY CERTIFY** that City Council is comprised of five (5) members; that the above and foregoing Resolution was duly and regularly passed and adopted at a regular meeting of the City Council of the City of Indian Wells on the 15th day of February 2024, by the following vote:

AYES: Griffith, Peabody, Reed, Sanders, Whitman
NOES: None

ATTEST:

APPROVED AS TO FORM:

E-SIGNED by Angelica Avila
on 2024-02-20 16:34:58 PST

E-SIGNED by Todd Leishman
on 2024-02-18 18:38:19 PST

ANGELICA AVILA
CITY CLERK

TODD LEISHMAN
CITY ATTORNEY