CITY OF PALM SPRINGS ANNEX

LOCAL HAZARD MITIGATION PLAN

AUGUST 2012

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Emergency Service Coordinator

CONTACT INFORMATION

CITY OF PALM SPRINGS

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EXECUTIVE SUMMARY

The purpose of this local hazard mitigation plan is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards.

The plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 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.

Riverside County's continual efforts to maintain a disaster-mitigation strategy is on-going. Our goal is to develop and maintain an all-inclusive plan to include all jurisdictions, special districts, businesses and community organizations rather than them writing their own plan to promote consistency, continuity and unification.

The County's planning process followed a methodology presented by FEMA and CAL-EMA which included conducting meetings with the Operational Area Planning Committee (OAPC) coordinated by Riverside County Fire – Office of Emergency Services comprised of participating Federal, State and local jurisdictions agencies, special districts, school districts, non-profit communities, universities, businesses, tribes and general public.

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

The plan will be implemented upon FEMA approval.

PLAN ADOPTION/RESOLUTION

The City of Palm Springs will submit plans to Riverside County Fire – Office of Emergency Services who will forward to CAL EMA for review prior to being submitted to FEMA. In addition, we will wait to receive an "Approval Pending Adoption" before taking the plan to our local governing bodies for adoption. Upon approval, the City of Palm Springs will insert the signed resolution.

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SECTION 1.0 - COMMUNITY PROFILE

1.1 CITY OF PALM SPRINGS MAP

Figure 1. Map of the City of Palm Springs

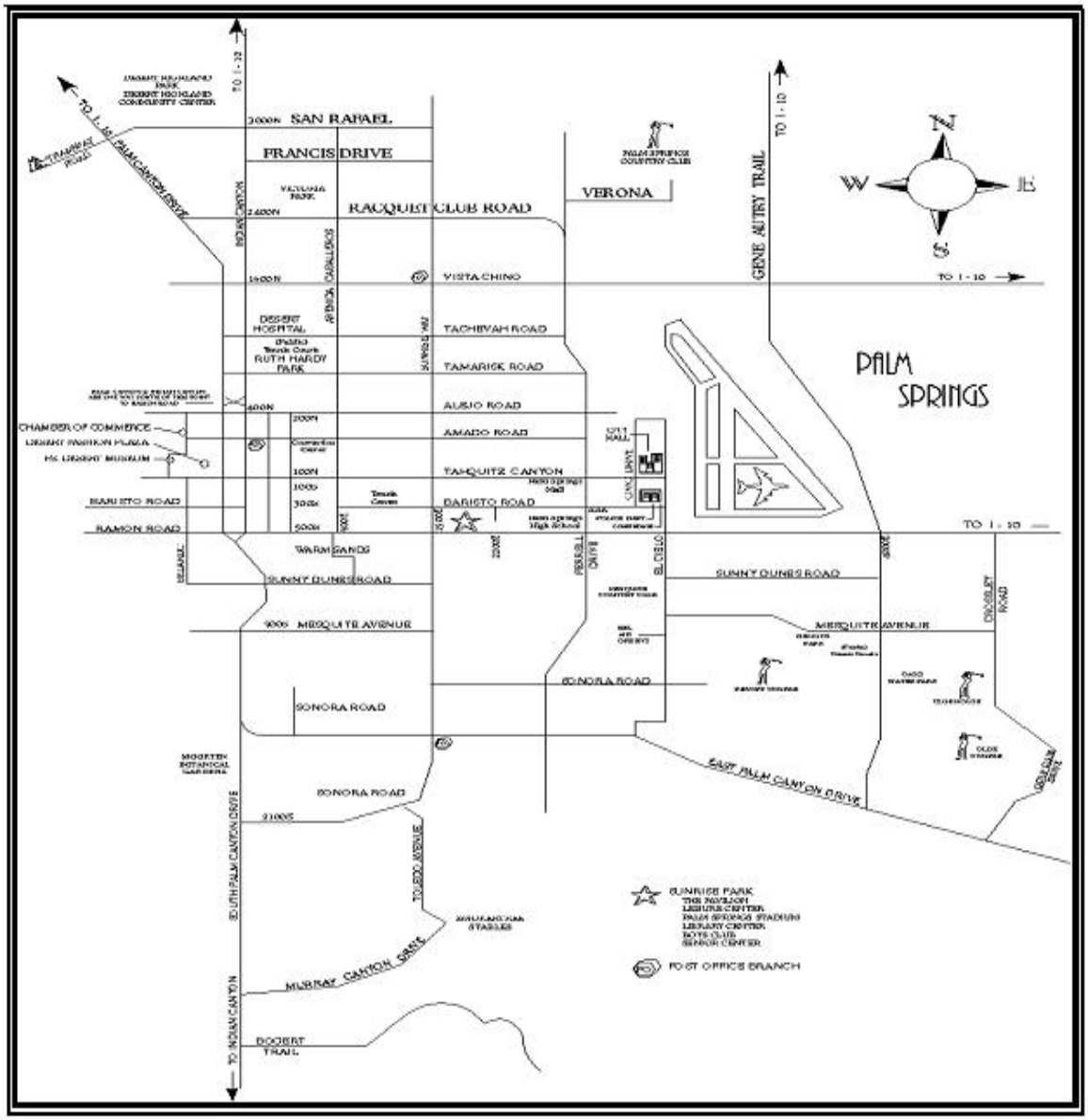


Figure 1.1.2- Map of Jurisdictions Adjacent to the City of Palm Springs

1.2 GEOGRAPHY AND CLIMATE DESCRIPTION

The City of Palm Springs is a charter city in Riverside County located in the State of California. The City is nestled at the base of the San Jacinto and Santa Rosa Mountains, approximately 60 miles east of Riverside. Serving as the "gateway city" for the Coachella Valley, the City of Palm Springs comprises an incorporated area that encompasses 60,440 acres, or nearly 95 square miles. Palm Springs has a residential population of approximately 44,552 (census 2010) and a seasonal population of up to 74,000 residents and guests.

The City of Palm Springs is located within Riverside County Region VI Southern Administrative Region of the California Emergency Management Agency (Cal EMA). Primary access to the City is provided by Interstate 10 and California State Highway 111; north–south access to the City is provided via Indian Canyon Drive and Gene Autry Trail. The Southern Pacific Railroad and Kinder Morgan pipeline run through the Coachella Valley and specifically through the City's northern boundary.

Palm Springs has an arid desert climate with annual rainfall of less than six inches. There are more than one hundred days a year when temperatures are 100°F or more. Hot, dry winds during the summer months along with seasonal Santa Ana winds are common to Palm Springs.

The San Andreas Fault is a major earthquake fault located only a few miles north of Palm Springs. In addition, there are numerous minor faults located throughout Riverside County which are subject to earthquakes.

1.3 BRIEF HISTORY

The area encompassing the present City of Palm Springs was discovered centuries ago by the Agua Caliente Band of Cahuilla Indians, who established their village around the natural hot mineral springs known for their medicinal and healing capabilities. Throughout the 19th century, many explorers, colonizers, and soldiers came through the desert, but it wasn't until 1853 that United States Topographical Engineers described the combination of palm trees and warm springs they encountered as "Palm Springs." The name became more commonly used several years later.

In 1877, the Southern Pacific Railroad completed its line through the desert to the Pacific Ocean. Early development in Palm Springs was associated with attempts to establish agricultural activity in the area and the southern portions of the Coachella Valley. In the 1920s, the region became a retreat for successful business and movie personalities, who took advantage of the warm weather, the remote location, and the hot water spas. The tourist and resort community of Palm Springs developed over the following decades and dramatically changed the character and economy of the Coachella Valley. In 1938, the City of Palm Springs was officially incorporated.

The City of Palm Springs is divided into Indian and non-Indian property holdings, based upon a grid pattern of square-mile sections of alternating ownerships. Indian land which has been subdivided into sections, half sections, and sometimes even smaller areas—is controlled by the Tribal Council or by individual allottees of the Agua Caliente Band of Cahuilla Indians (the Tribe). Over time, this checkerboard land-ownership pattern has led to an inconsistent pattern of development, since the majority of development has occurred on non-Indian-owned lands.

The City has a major hospital (Desert Regional Medical Center). The Medical Center is a 367-bed full service acute care facility that includes a Level II trauma center. There are four public full service elementary schools, one middle school, one high school, and one alternative school within the City of Palm Springs that are administered by the Palm Springs Unified School District. The city has a regional airport (Palm Springs International Airport), numerous large and small hotels, shopping centers, and commercial/industrial zones. Interstate 10 and State Highway 111 traverse the City as well as several main arterial roadways.

The City has its own police and fire departments and also relies on local volunteer organizations for assistance in emergency response, communications, and other necessary emergency services.

1.4 ECONOMY DESCRIPTION

Palm Springs is comprised of both a resort city and year-round residences. Palm Springs has always embraced its reputation as a world class resort, holding such titles as "America's premier desert resort city," and "America's Resort port." The City currently is host to over two million visitors annually. Palm Springs maintains the largest number of hotel rooms in the Coachella Valley: 6,500 of the total 15,865 rooms (source: Economic Conditions and Trends Report, 2005). City government is dependent on sales tax, property tax and transient occupancy tax as revenue sources. Seventy (70) percent of available jobs within Palm Springs are categorized within three employment sectors: retail, entertainment, and health care and other services, and government and local services. In contrast, manufacturing and transportation represent only nine percent of jobs within the City. Employment is projected to increase from approximately 32,500 jobs in 2000 to 55,800 jobs by the year 2030.

Downtown serves as the functional, economic, and psychological heart of Palm Springs. It is a heavily visited area of town, has a collection of outstanding architecture and urban design features, and has a concentration of popular restaurants and stores. Community events such as Village Fest, cultural amenities such as the Village Green Heritage Center and the Palm Springs Art Museum, and visitor-serving uses such as the Convention Center and Spa Resort Casino bring thousands of visitors to downtown annually.

The Convention Center serves as a major center of business and tourist activity within the City. Providing approximately 211,400 square feet of conference facilities, the Convention Center generates large numbers of conference attendees who support nearby hotel and convention-related businesses and who often extend their stays to take advantage of the recreational activities that Palm Springs has to offer. The City is also home to the Palm Springs Aerial Tram, the Palm Springs Air Museum, and Knott's Soak City Water Park, which are geared toward family recreation and entertainment.

The City has a limited amount of industrial uses, the majority of which are located along I-10 or adjacent to the airport. These job centers are characterized by low-intensity industrial development consisting primarily of administrative, wholesaling, light manufacturing, and industrial uses typically permitted within business park environments. Portions of the City north of I-10 contain wind energy facilities,

commercial uses, light and medium intensity industrial uses, and a modern natural-gas-fueled power plant. Wind turbine generators create significant amounts of clean renewable energy, which benefits Palm Springs and the entire Coachella Valley.

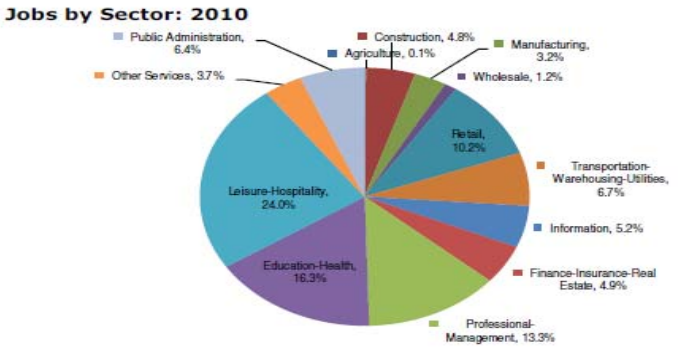
The Palm Springs International Airport serves as the primary air transportation access to the Coachella Valley communities in a county which has been one of the fastest growing in the nation. Located on over 930 acres of land on the eastern edge of the City, the airport not only serves as a major transportation and tourist hub, but is also an asset to the City's economic development.

Bounded approximately by Ramon Road, Calle Encilia, Alejo Road and Belardo Road, the Central Business District designation allows for a mix of commercial, residential, and office uses at a higher concentration, density, and intensity than in other areas of the City. The CBD serves as the main activity center and cultural core of the community and, as such, theatres, museums, retail, and other entertainment venues are encouraged here.

Figure 1.4.1 – Major Employers in Palm Springs

Major Employers in Palm Springs, CA	Number of Employees
Agua Caliente Band of Cahuilla Indians	2,403
Palm Springs Unified School District	2,000
Desert Regional Medical Center	1,750

Figure 1.4.2 – Chart of Jobs by Sector 2010 for City of Palm Springs



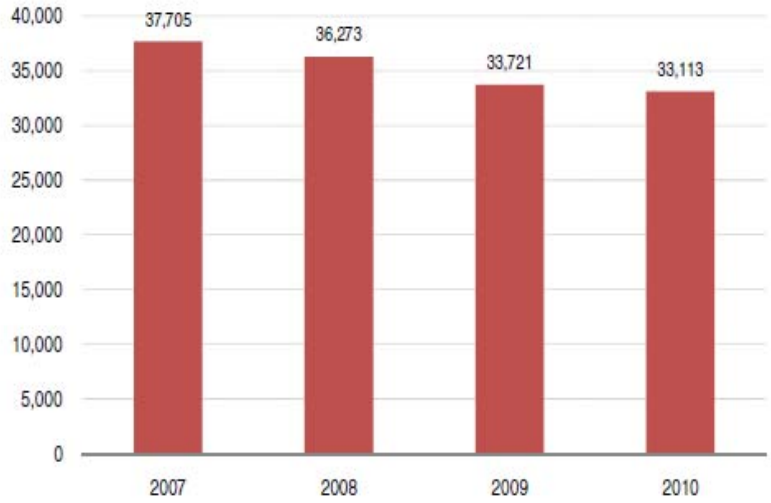
- In 2010, the Leisure-Hospitality sector was the largest job sector, accounting for 24 percent of total jobs in the city.
- Other large sectors included Education-Health (16.3 percent), Professional-Management (13.3 percent), and Retail (10.2 percent).

Sources: California Employment Development Department, 2010; InfoUSA; and SCAG

Figure 1.4.3 – Employment Development for City of Palm Springs

Employment

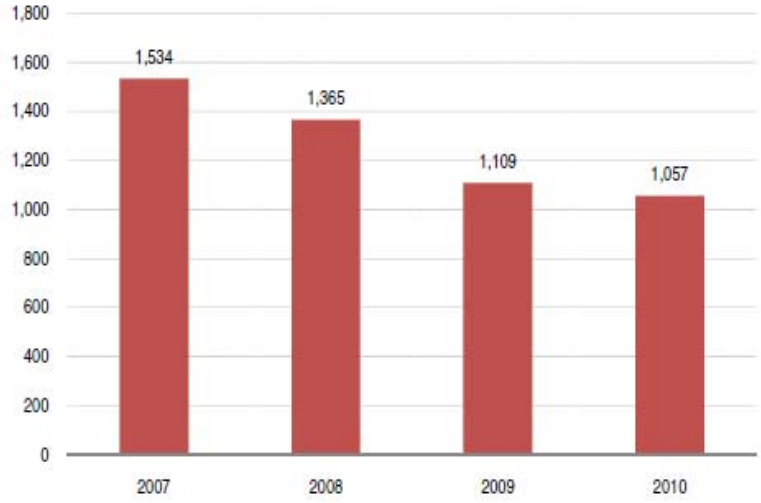
Total Jobs: 2007 - 2010



Sources: California Employment Development Department, 2007 to 2010; InfoUSA; and SCAG

- In 2010, total jobs in the City of Palm Springs numbered 33,113, a decrease of 12.2 percent from its 2007 level.
- Total jobs included wage and salary jobs and jobs held by business owners and self-employed persons. The total job count does not include unpaid volunteers or family workers, and private household workers.

Jobs in Manufacturing: 2007 - 2010



Sources: California Employment Development Department, 2007 to 2010; InfoUSA; and SCAG

- Manufacturing jobs include those employed in various sectors including food, apparel, metal, petroleum and coal, machinery, computer and electronic product, and transportation equipment.
- Between 2007 and 2010, the number of manufacturing jobs in the city decreased by 31.1 percent.

1.5 POPULATION

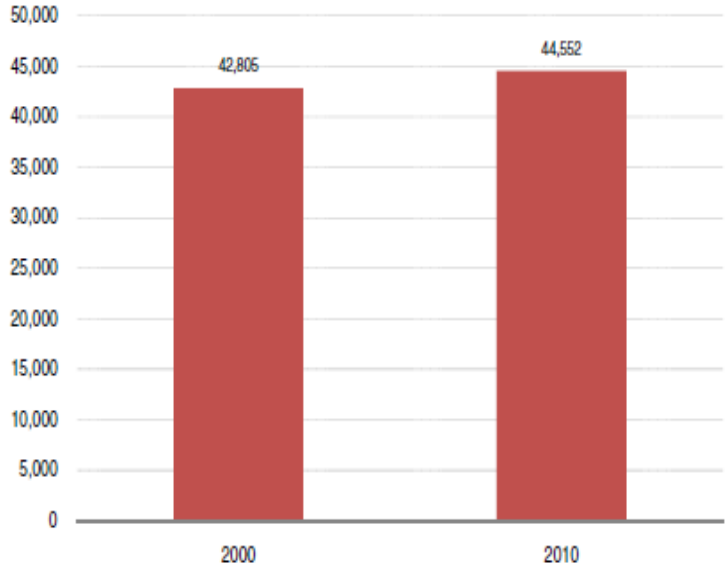
The population of Palm Springs from the 2010 Census was estimated at 44,552. This was a 4% increase in the population from the 2000 Census of 42,807.

Figure 1.5.1 - Population Growth for City of Palm Springs

Population (City of Palm Springs)*

Population Growth

Population: 2000, 2010



Sources: 2000 and 2010 Census

- Between 2000 and 2010, the total population of the City of Palm Springs increased by 1,747 reaching 44,552 in 2010.
- During this 10-year period, the city's population growth rate of 4.1 percent was lower than the Riverside County rate of 41.7 percent.
- In 2010 the city's population was ranked 13th out of Riverside County out of 27 cities in the county.

Note: Due to discrepancies in 2010 population estimates between the U.S. Census Bureau and the California Department of Finance (DOF), in fall 2011, DOF is scheduled to revise 2001 to 2009 estimates, in light of the 2010 Census counts. After the DOF revises its 2001 to 2009 estimates, SCAG plans to incorporate them in updated Local Profiles reports.

* The following charts in this report contain data for the City of Palm Springs unless noted otherwise.

1.6 DEVELOPMENT TRENDS

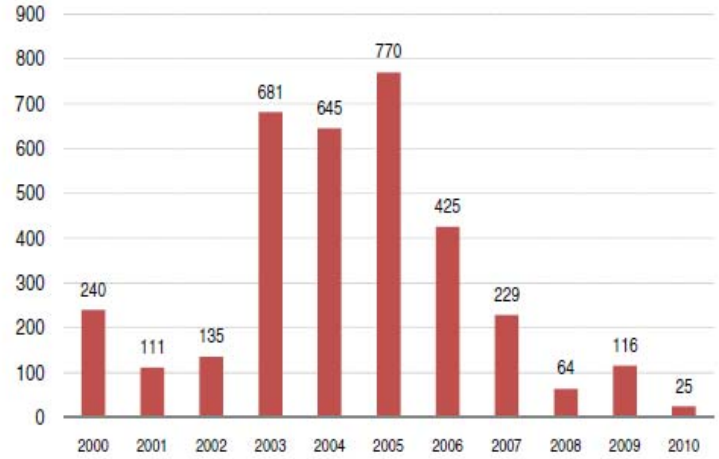
The City of Palm Springs is land locked form further growth on all sides because of the City of Cathedral and Desert Hot Springs, Tribal Land, and a National Monument.

Figure 1.6.1 – City of Palm Springs Housing Production

Housing

Housing Production

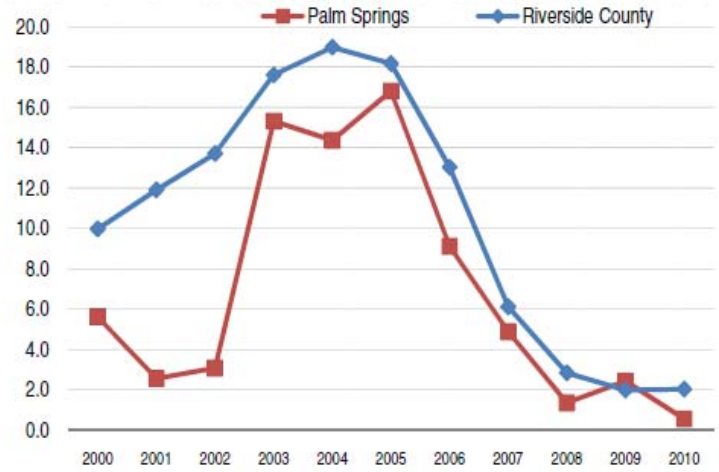
Residential Units with Permits Issued: 2000 - 2010



Source: Construction Industry Research Board, 2000-2010

- Between 2000 and 2010, permits were issued for 3,441 new residential units. About 6 percent of these were issued in the last 3 years.

Units with Permits Issued per 1,000 Residents: 2000 - 2010



Sources: Construction Industry Research Board, 2000-2010; SCAG

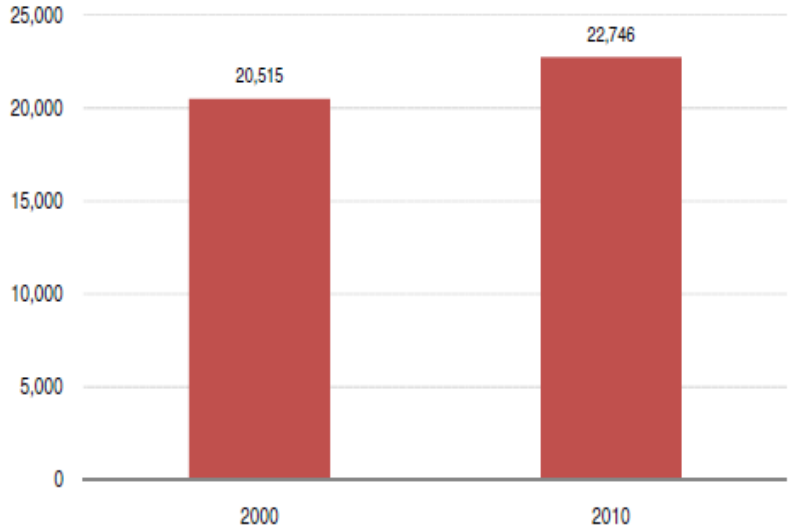
- In 2000, the City of Palm Springs had 5.6 permits per 1,000 residents compared to the overall county figure of 10 permits per 1,000 residents.
- For the city in 2010, this figure decreased to 0.6 permit per 1,000 residents and for the county overall decreased to 2 permits per 1,000 residents.

Figure 1.6.2 – City of Palm Springs Household Characteristics

Households

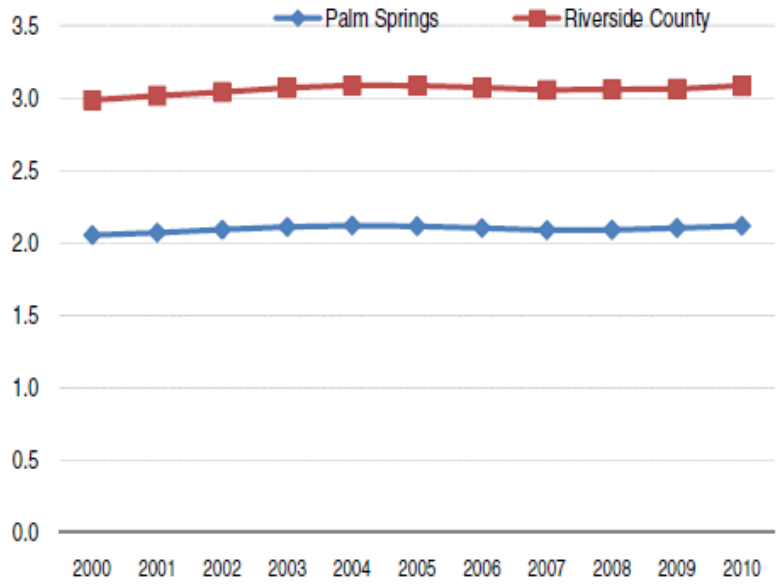
Number of Households

Number of Households: 2000, 2010



Sources: 2000 and 2010 Census

Average Household Size: 2000 - 2010



Source: California Department of Finance, E-5, May 2010

- Between 2000 and 2010, the total number of households in the City of Palm Springs increased by 2,231 or 10.9 percent.
- During this 10-year period, the city's household growth rate of 10.9 percent was lower than the overall county growth rate of 34.4 percent.
- Note: 2000 and 2010 data are based on actual Census counts. For 2001 to 2009 data, SCAG plans to incorporate DOF's revised estimates scheduled for fall 2011.
- In 2010, the city's average household size was 2.1, lower than the overall county average of 3.1.
- Between 2000 and 2010, average household size remained the same in the city.

Figure 1.6.3 – Development Trends Questionnaire for City of Palm Springs

LOCAL JURISDICTION DEVELOPMENT TRENDS QUESTIONNAIRE 2011

JURISDICTION:	DOES YOUR AGENCY HAVE RESPONSIBILITY FOR LAND USE AND/OR DEVELOPMENT ISSUES WITHIN YOUR JURISDICTIONAL BOUNDARIES? YES NO			
	2005 DATA	2011 DATA		PROJECTED 2017
Current Population in Jurisdiction or Served	44,500	47,060	Projected Population in Jurisdiction or Served - in 2017	51,331
Current Sq Miles in Jurisdiction or Served	96	96	Projected Sq Miles in Jurisdiction or Served - in 2017	96
Does Your Jurisdiction have any ordinances or regulations dealing with disaster mitigation, disaster preparation, or disaster response?	YES	YES	If yes, please list ordinance or regulation number. City of Palm Springs Municipal Code: Chapter 8.68 - Flood Damage Prevention Ordinance	
What is the number one land issue your agency will face in the next five years	Earthquake and Population Growth			
Approximate Number of Homes/Apts/etc.	33,515	34,207	Projected Number of Homes/Apts/etc.- in 2017	35,600
Approximate Total Residential Value	$5 Billion	$5.8 Billion	Projected Residential Total Value - in 2017	$6.6 Billion
Approximate Number of Commercial Businesses	2,500	2,600	Projected Number of Commercial Businesses - in 2017	2,900
Approximate Percentage of Homes/Apts/etc in flood hazard zones	15% in A Zone $850 million	14% in A Zone $ 900 million	Approximate Percentage of Homes/Apts/etc in flood hazard zones - in 2017	14% in A Zone $1 billion
Approximate Percentage of Homes/Apts/etc in earthquake hazard zones	Alquist/ Priolo Zone 0%	Alquist/ Priolo Zone 0%	Approximate Percentage of Homes/Apts/etc in earthquake hazard zones - in 2017	Alquist/ Priolo Zone 0%
Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones	0% Zone 5% Urban Interface	0% Zone 10% Urban Interface	Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones - in 2017	0% 10% Urban Interface
Approximate Percentage of Commercial Businesses in flood hazard zones	≤2%	≤1%	Approximate Percentage of Commercial Businesses in flood hazard zones - in 2017	≤1%
Approximate Percentage of Commercial Businesses in earthquake hazard zones	≤1%	≤1%	Approximate Percentage of Commercial Businesses in earthquake hazard zones - in 2017	≤1%
Approximate Percentage of Commercial Businesses in wildland fire hazard zones	0%	0%	Approximate Percentage of Commercial Businesses in wildland fire hazard zones - in 2017	0%
Number of Critical Facilities in your Jurisdiction that are in flood hazard zones	0	0	Projected Number of Critical Facilities in your Jurisdiction that are in flood hazard zones - in 2017	0
Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones	0	4	Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones - in 2017	4
Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones.	0	0	Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones - in 2017	0
Does your jurisdiction plan on participating in the County's on-going plan maintenance program every two years as described in Part I of the plan?	Yes		If not, how will your jurisdiction do plan maintenance? N/A	
Will a copy of this plan be available for the various planning groups within your jurisdiction for use in future planning and budgeting purposes?				Yes

SECTION 2.0 - PLANNING PROCESS

2.1 LOCAL PLANNING PROCESS

The City of Palm Springs Local Hazard Mitigation Plan Committee was comprised of representation from the following Departments:

- City Manager, David Ready
- Executive Services Administrator, Bette O'Camb
- Assistant City Manager, Tom Wilson
- Police Chief, Al Franz
- Fire Chief, Scott Ventura
- Deputy Fire Chief, Sang Wang
- Emergency Services Coordinator, Anjila Lebsock
- Airport Executive Director, Thomas Nolan
- (Airport 2nd in command)
- Finance Director, Geoffrey Kiehl
- Director of Public Works and Engineering, Dave Barakian
- Assistant Director of Public Works/ Assistant City Engineer, Marcus Fuller
- Engineering Assistant, Felipe Primera
- Public Works Administrator, Carrie Rovney
- Director of Building Services, Terry Tatum
- Director of Planning Services, Craig Ewing
- Associate Planner, Ken Lyon
- Director of Community and Economic Development, John Raymond
- Community Development Administrator, Dale Cook

The committee held its initial meeting on September 20, 2011. Prior to this meeting the individual committee meeting members reviewed the 2005 Local Hazard Mitigation Plan and assessed the information in relation to what had occurred in the City between 2005 and December 2010. The initial meeting reviewed the Local Hazard Mitigation Inventory to assess how and where changes had occurred since the last plan. As part of the meeting action items were outlined and assigned to the appropriate departments. The departments worked on compiling the information between September 20 and October 18, 2011. During the compiling process numerous department level meetings were held to discuss the information being compiled. The departments then submitted the information to the Emergency

Services Coordinator for compiling into the City's Local Hazard Mitigation Inventory report.

2.2 PARTICIPATION IN REGIONAL (OA) PLANNING PROCESS

The City of Palm Springs has participated in Riverside County workshops, conferences, and meetings including:

- Operational Area Planning Committee Meeting, Beaumont
- April 8, 2010, July 8, 2010, October 7, 2010, January 13, 2011, July 14, 2011
- County LHMP Meeting Kickoff, Palm Desert July 5, 2011
- County LHMP Workshop, Roy Wilson Training Center (RWTC) Thousand Palms, August 23, 2011

In addition, the City of Palm Springs has provided information, as well as, written and oral comments on the multi-jurisdictional plan.

2.3 DATES AVAILABLE FOR PUBLIC COMMENT

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:

- City Webpage
- City Public Access Channel
- Palm Springs Neighborhood Involvement Committee (PSNIC) meetings
- Community Groups
- Business and Industry Group

The City posted a Portable Document File (PDF) flyer explaining about what a hazard mitigation plan is comprised of. Also on the flyer was contact information for the City coordinator where additional information could be obtained or provide feedback on the plan. The flyer was posted on the City webpage from September 14, 2011 and remains posted continuously to inform the public about hazard mitigation. The same information posted on the web page was placed on the City's Access Channel and will run from September 26 to October 24, 2011. Exhibit B contains a copy of the flyer.

The City's Emergency Services Coordinator (ESC) spoke to about the purpose of the LHMP, the process the City was taking to update the LHMP, and contact information to review the plan or provide input was given at the public meetings on the following page:

- PSNIC Disaster Preparedness Subcommittee Meeting on September 13, 2011
- PSNIC General Council Meeting on September 15, 2011
- Sunrise Rotary Meeting on September 20, 2011
- Hotelier General Managers Meeting on September 21, 2011

The PSNIC general meeting was targeted for public outreach because a representative from each neighborhood in the City attends the meeting provided the widest possible reach to the citizens of the community. The committee has members 28 members and had 8 people from the public.

PSNIC Disaster Subcommittee was targeted due to the members being active in the Community Emergency Response Team (CERT) and would be the most aware of potential hazards within their area of the community because of their training. The committee is comprised of 12 members.

Hotelier General Managers was targeted for their knowledge of the hazards in their immediate area as well as the unique hazard of having people that are unaware of the community hazards and how to react to them if they occur. There were ten people in attendance.

Rotary was targeted to reach those active in their community through social works. This group has knowledge of the community and represents many different facets of the community. The meeting had 23 members in attendance.

2.4 PLANS ADOPTED BY RESOLUTION

The City of Palm Springs City Council will adopt the plan in a public meeting (Council Meeting) via an official Resolution upon approval by FEMA.

SECTION 3.0 - UPDATES AND MITIGATION ACTIONS

3.1 UPDATES FROM 2005 PLAN

No potential new hazards have been identified by the City Planning team since the approval of the 2005 plan. The City of Palm Springs experienced the follow incidents since 2005:

- Freeway closure on EB I-10 – June 2006
- Windy Point Fire - July 2006
- Power Outage – Safari Mobile Home Park – July 2010
- Wind Event February 2008
- Flooding 2010 FEMA – 1884-DR 2010 Severe Winter Storms
- Flooding December 2010

3.2 NEW HAZARDS OR CHANGES FROM 2005

The City had no new identified hazards since the 2005 LHMP. The City increased in severity the risk of pandemic and nuclear. The committee determined that even though the City is not in a nuclear power plant planning radius there is still a risk due to nuclear material held at the hospitals. Also, pandemic was increased because of the potential due to the large tourist and winter visit population in the City.

3.3 BRIEF STATEMENT OF UNIQUE HAZARDS

The City of Palm Springs has many hazards similar to other jurisdictions in Riverside County especially earthquake, flooding, and fires. In addition to these hazards the City also has the following:

- Many areas of the City may be subject to flooding, due to flash flooding, urban flooding (storm drain failure/infrastructure breakdown), river channel overflow, downstream flooding, etc.) The City has historically been vulnerable to tropical storms and severe winter storms.
- A transportation incident such as a major air, train derailment or trucking incident could impact areas within the City. This type of incident could expanded to include hazardous materials
- A civil unrest incident could impact areas within the City or the entire City.

- The City is not within the planned range of a radioactive plume of a nuclear power plant but does have medical facilities that have radioactive material.
- Severe wind incidents within the City are common especially during the spring. These wind events can cause wild land fires to rapidly increase in size or spread fine silt sand over roads ways which requires closure of roads until it can be removed.
- Landslides within the City are generally triggered by another incident such as an earthquake, slope erosion due to lack of vegetation because of a wild land fire or severe wind.

3.4 MITIGATION PROJECT UPDATES

Figure 3.4.1 – City of Palm Springs Capital Improvement Projects and Updates

TYPE OF HAZARD	MITIGATION ACTION	LEAD DEPARTMENT OR JURISDICTION	STATUS UPDATE
Flood	Bridge Repairs	City of Palm Springs Public Works Department	Project on hold until funding secured.
Flood	Storm Drain - Line 8 building and maintaining a drainage and flood control system within the City.	City of Palm Springs Public Works Department	Project out to bid. Should be completed early 2013.
Flood	Gene Autry Trail Railroad Bridge Widening -	City of Palm Springs Public Works Department	Project on hold until funding secured.
Flood and Debris Removal	Construct an all-weather roadway on N. Indian Canyon Way between Tramway Road and Interstate 10	City of Palm Springs Public Works Department	See Section 7.2 on pp. 74

For a complete listing of Development Projects, see Appendix B- pages 1-19

SECTION 4.0 - HAZARD IDENTIFICATION AND RISK ASSESSMENT

4.1 CRITICAL FACILITIES AND INFRASTRUCTURES

Essential facilities include public services that are critical to the health and welfare of the citizens of the City and that are especially important following a major disaster or emergency. These facilities include hospitals, police stations, fire stations, emergency operation centers, communication center, generators and substations, infrastructure (water treatment, water distribution, communications), and reservoirs. Essential facilities designed to remain functional during and immediately after a disaster may provide limited services if the lifelines they depend on are disrupted. Water supply facilities, such as dams, reservoirs, pumping stations, water treatment plants, and distribution lines are especially critical after an earthquake, not only for drinking water, but to fight fires.

The impact of the 1994 Northridge earthquake on lifeline systems was widespread and illustrated the continued need to study earthquake impacts, to upgrade substandard elements in the systems, to provide redundancy in systems, to improve emergency-response plans, and to provide adequate planning, budgeting, and financing for seismic safety. The City's Planning Committee has identified the following critical facilities:

Figure 4.1.1 - Table – City of Palm Springs Primary Critical Facilities

Primary Critical Facilities Type	Number
International Airport	1
Communication Repeater—Edom Hill	1
Co-Generation Plant	1
Emergency Operations Center (Primary and Back-up)	2
Fire Stations	5
Desert Regional Medical Center	1
Law Enforcement Facility/ Communications Center (911 Dispatch)	1
City Building—Fleet Maintenance	1
Public Utility—Desert Water Agency	
Public Utility—Water Treatment/Sewer (Equipment owned by the City and the Operation of the Facility is performed by a private Company, Veolia Water North America	1
Totals	14

Source: City of Palm Springs Local Hazard Mitigation Planning Committee

Figure 4.1.2 - Table – City of Palm Springs Secondary Critical Facilities

Secondary Critical Facilities Type	Number
Assisted Living Facilities	4
Homeless Shelter—Roy's Desert Resource Center	1
Mental Health—The Path Safehaven of the Desert	1
Public Utilities—Electricity (substations) and Communication (cell towers)	236
City Building—Animal Shelter	1
Schools and Day Care Facilities	13
City Building—Pavilion and Pool	1
City Building—Senior Centers (Mizell and Golden Rainbow)	2
City Building—Streets, Parks, and Credit Union	16
Totals	275

Source: City of Palm Springs Local Hazard Mitigation Planning Committee

Figure 4.1.3 - Map of Critical Facilities within the City of Palm Springs

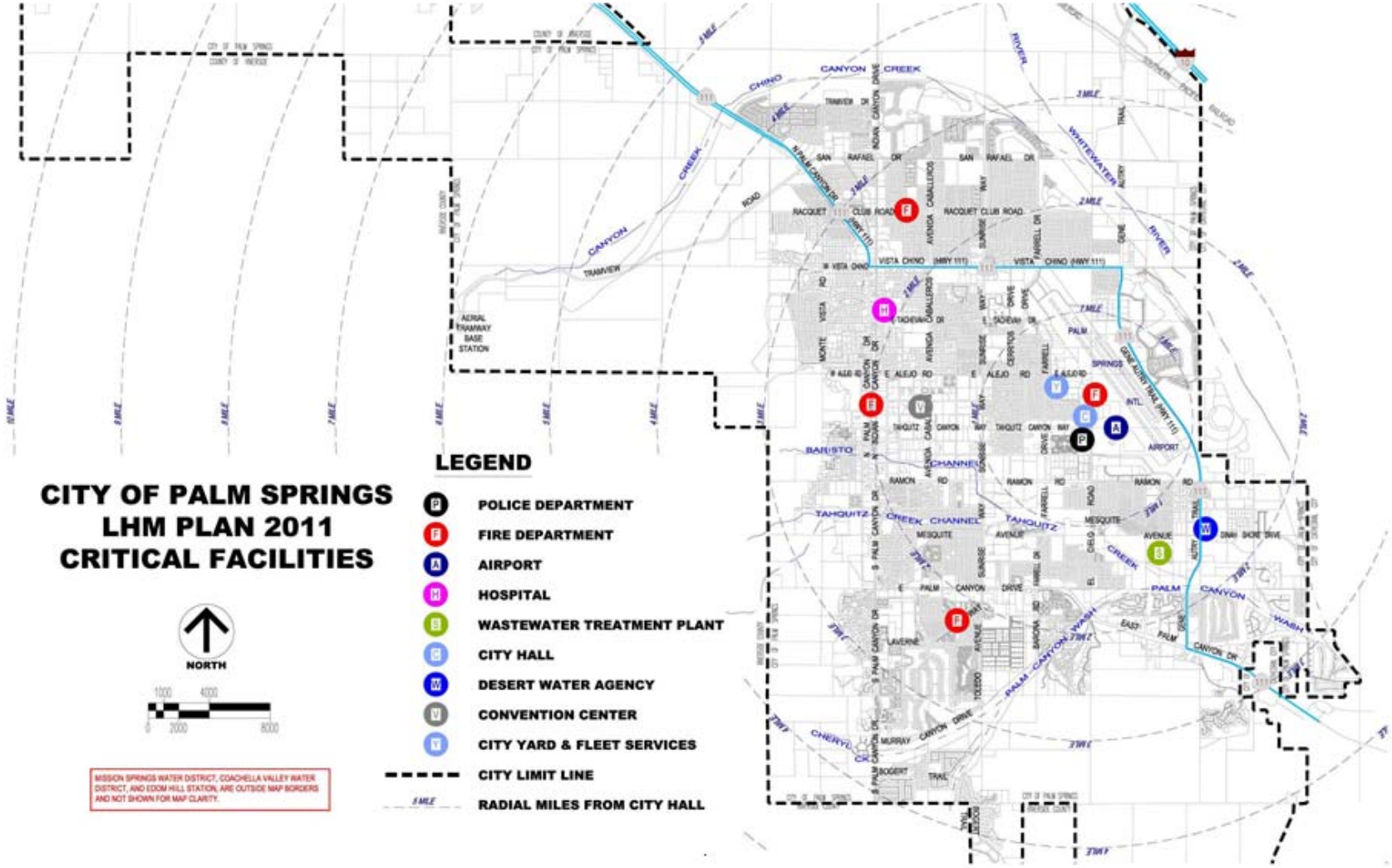
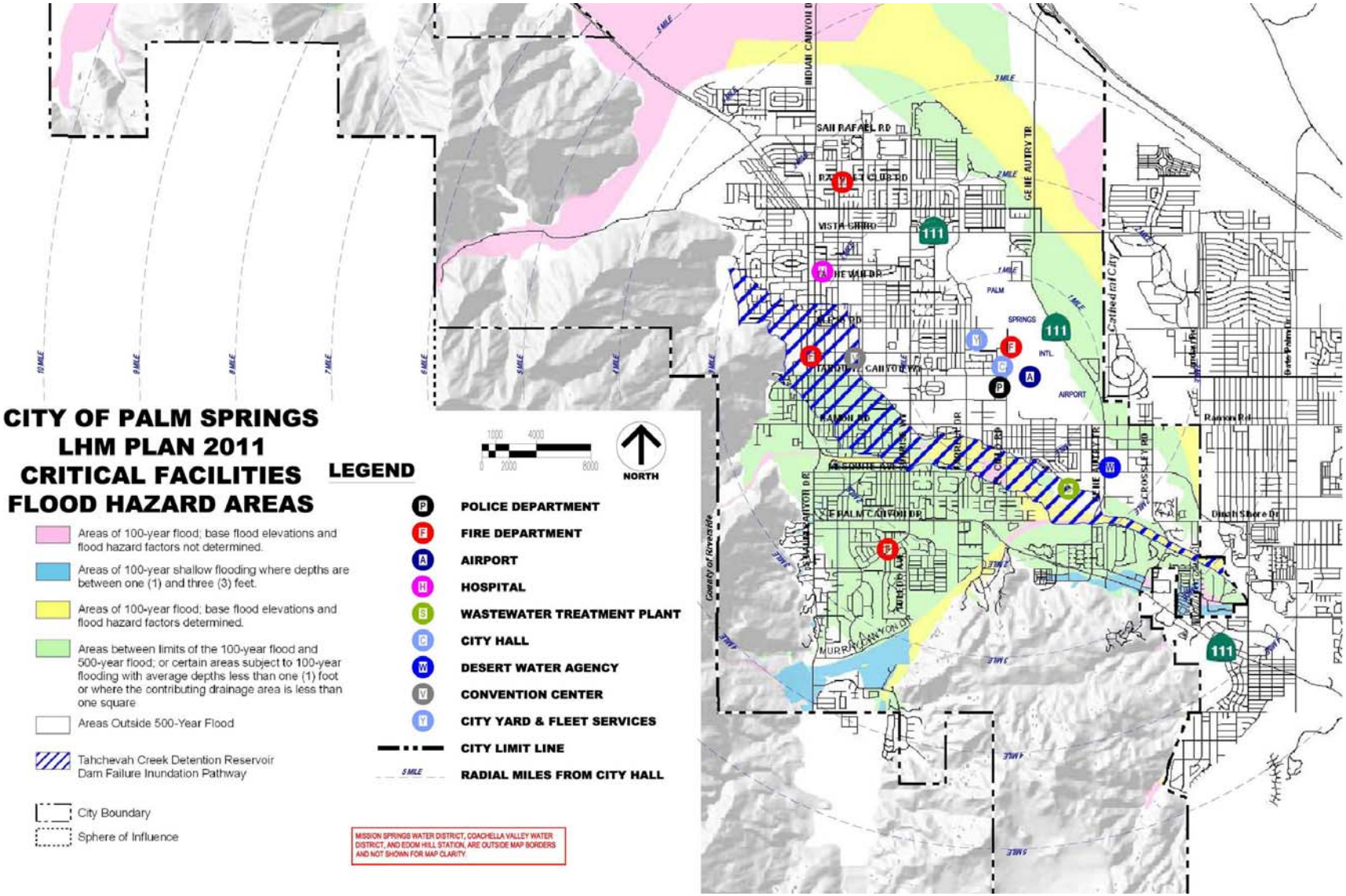


Figure 4.1.4 - Map Flood Plain and the Critical Facilities within the City of Palm Springs



4.2 ESTIMATING POTENTIAL LOSS

Government Buildings

Palm Springs government buildings vary in structural design due to time of construction and building codes that were utilized. These varying building codes affect the residency of a building to withstand a disaster. It is critical that certain branches of city government continue to function after the initial shock. Because of the structural design and construction, the City EOC is expected to withstand a significant shock, and damage is anticipated to remain minimal. Fire stations are generally not earthquake resistant, but because of the redundancy of stations, the city fire protection will remain intact. Stations 441 and 443 may be hardest hit due to their location and construction and could suffer major damage due to ground shaking and settling. Fire Station #443 at 590 E. Racquet Club Road has had a seismic retrofit to its apparatus room following the Landers earthquake.

Airport

There is one commercial and international airport in the Coachella Valley, Palm Springs International Airport. The primary hazards at this site are damage to terminal, runways, air traffic control tower, hangars, and fuel storage facilities.

Palm Springs International Airport runway is expected to remain operational, with potential minor to moderate damage. Emergency actions may need to be taken to control air space, prioritize use of available air transport, and restrict access to the facility. Nearby Banning Airport is located in an area of anticipated high shaking intensity with potential moderate to major damage expected.

In addition to Palm Springs International Airport, the area hosts other smaller airfields: Thermal, Bermuda Dunes, Desert Center and Blythe Airports. Thermal Airport is located in a high potential liquefaction area. Desert Center Airport is relatively isolated in an area of sparse population to the east of the fault. Bermuda Dunes Airfield is located close to the fault rupture zone, but is not within the liquefaction area. Blythe Airport is sufficiently distant from the fault zones to experience little, if any damage.

Sanitation Systems

Palm Springs' sanitation services are provided by the city's waste water treatment facility located on Mesquite Road near Demuth Park. This facility may be damaged and operate in a limited capacity following a disaster.

Waste water supply and sewage lines, storage reservoirs pumping plants, treatment ponds, treatment plants and solid and liquid waste disposal sites will sustain varying degrees of damage depending on their location relative to the affected fault, soil conditions and adequate facility design to withstand shaking.

Disruption of the sewage system will result in sewage flowing in some streets and streams where human contact can result. Public notice in such cases will be important.

Overflow of sewage through manholes and from ponds can be expected due to breaks in mains and loss of power. Gas mains will be broken, causing natural gas to migrate into sewers. Rupture of underground gasoline storage tanks will result in infiltration of gas into sewers. Consequently, there is the possible danger of the collection of explosive gas in sewers and the flow of untreated sewage in some street gutters. Many house connection sewers will break and plug, causing them to become inoperative.

Although extensive damage may affect the sewage collection system, the damage will not be sufficient in most areas to significantly impair the system's ability to convey waste water. This is because most of the system conveys by gravity.

Medical and Custodial Care Facilities

The primary provider of medical services will be Desert Regional Medical Center. This facility is a 367-bed, fully licensed and accredited general/acute care hospital and Level II Trauma Center. Their services include the following:

1. 24 hour fully equipped emergency room with specially trained personnel.

2. Intensive Care Unit

3. Coronary Care Unit

4. Post Coronary Care Unit

5. Fully equipped and staffed Cardiology, Laboratory, Gastrointestinal, Hematological, Radiological and Surgical Facilities.

Upon receiving notification of a medical emergency, Desert Hospital External Disaster Plan 091-00 will be put into effect by the appropriate hospital authority. Referral of patients or survivors will be made to other emergency facilities which may be used for the treatment of casualties as determined by this Plan.

In addition to the hospital, there are many immediate care facilities and nursing facilities in Palm Springs. These facilities are, perhaps, the most difficult because of the non-ambulatory nature of some of the occupants. Specific planning is imperative to deal with the probability of evacuation and relocation of persons involved. Critical care facilities may suffer loss of power, telephones and sanitation. Damage and interruption of the orderly flow of activities may result beginning at a level VI of the Modified Mercalli scale

(See page 15 - Local Jurisdiction Development Trends Questionnaire)

4.3 TABLE REPLACEMENT VALUES

The City of Palm Springs Local Hazard Mitigation Plan Team has reviewed the hazards that affect the City and summarized that there were changes in priority ranks of hazards since the 2005 plan. These changes were due to the City operations and the types of disaster declarations that occurred from 2005 through December 2010.

Figure 4.3.1 – Asset Table/Replacement Value – Primary Critical Facilities

Name of Asset	Replacement Value ($ million)	Occupancy/ Capacity #	Hazard Specific Information
City Hall (Primary EOC)	10	Governmental Offices 300	Hazardous Materials Unsecured Perimeter
Fire Department—Station 441	1.1	Fire Station 4	Hazardous Materials Unsecured Perimeter Infectious Disease
Fire Department—Station 442 (Alternate EOC)	3.7	Fire Station 20	Hazardous Materials Unsecured Perimeter Infectious Disease
Fire Department—Station 443	1.2	Fire Station 4	Hazardous Materials Unsecured Perimeter Infectious Disease
Fire Department—Station 444	0.9	Fire Station 4	Hazardous Materials Unsecured Perimeter Infectious Disease
Fire Department—Station 445	0.7	Fire Station 4	Hazardous Materials Unsecured Perimeter Infectious Disease
International Airport	80.6	Airport Transit Population	Hazardous Materials
City Building—Fleet Maintenance	4	Maintenance Shop 20	Hazardous Materials
Co-Generation Plant	3	City Power Generation Facility N/A	Hazardous Materials
City Building—Water/Sewer	49	Water Treatment Plant Run by a Contractor	Hazardous Materials
Police Department and Dispatch Center	14	Police and Dispatch Center 70	Hazardous Materials Unsecured Perimeter
Communication Repeater—Edom Hill	5	City Repeaters N/A	Hazardous Materials
City Building—Convention Center	63.3	Large Meeting Location 1400	Hazardous Materials Unsecured Perimeter
Desert Regional Medical Center	Unknown, not a City facility	Hospital 367 bed capacity	Hazardous Materials Unsecured Perimeter Infectious Disease

*Note: Value includes building and content.

Figure 4.3.2 – Asset Table/Replacement Value – Secondary Critical Facilities

Name of Asset	Replacement Value ($ million)	Occupancy/ Capacity #	Hazard Specific Information
Assisted Living Facilities	Unknown, not a City facility	Governmental Offices 300	Hazardous Materials Infectious Disease
Public Utilities—Electricity (substations) and Communication (cell towers)	Unknown, not a City facility	Electrical Substations and Cell Towers N/A	Hazardous Materials
City Building Animal Shelter	0.5	Animal Shelter 70	Hazardous Materials Infectious Disease
Schools and Day Care Facilities	N/A	Schools	Hazardous Materials Infectious Disease
City Building—Pavilion and Pool	15	Recreation Facility 500	Hazardous Materials Infectious Disease
City Building—Senior (Mizell and Golden Rainbow)/	6.7	Community Center 2	Infectious Disease Civil Unrest
Homeless Shelter—Roy's Desert Resource Center	Unknown, not a City facility	Shelter 120 beds	Infectious Disease Civil Unrest
Mental Health	Unknown, not a City facility	Shelter/ Inpatient 25 beds	Infectious Disease Civil Unrest
City Building—Streets, Parks, and Credit Union	2.5	Airport	Hazardous Materials

Note: Replacement values include building and content.

4.4 IDENTIFICATION OF RISK AND VULNERABILITIES

The rankings on the Severity Rating table where modified from the previous Local Hazard Mitigation Plan due to changes in City operations and to reflect the types of disaster declarations between the previous plan and now. The City no longer operates a jail as such the lowest possible severity, probability and ranking were assigned to it.

The severity was increased for earthquake, flood, drought, insect infestations, severe wind event, and pipeline. Flood and severe wind were increased in severity because two disaster declarations occurred for each during the previous five year period. Insect infestation was increased due to the increase of West Nile virus mitigation efforts. Pipeline was increased because of its direct effect on a major transportation corridor into and out of the City. Earthquake was increased because of the increased fault line activity and the critical impact it would have on other critical infrastructures within the City.

Extreme weather, flood, severe wind event, nuclear accident, pandemic, and civil unrest were increased in ranking. Extreme weather was increased because this is a major factor that can compound the severity of other disasters. Flood and severe wind were increased in severity because two disaster declarations occurred for each during the previous five year period. Pandemic was added to the vulnerability worksheet this year. The ranking of pandemic was based on the number of foreign visitors and large tourism population in the City. Civil unrest was increased in ranking due to the number of special events that are being held in the City and the increased potential for civil unrest. Agricultural, Disease/contamination and terrorism were increased by one rank because the City closed its jail which resulted on the jail/prison event becoming the lowest ranking category.

Landslides, wildland fire, hazmat accidents, and terrorism decreased in ranking. Landslides were decreased by one because flooding incidents had occurred more frequently in the last five years. Wildland fire was reduced one in the ranking due to other hazards that occurred within the five year period that had disaster declarations. Hazardous Material incidents were reduced in ranking by four and terrorism was decreased by five because other hazards had greater probability of occurrence.

4.5 HAZARD REVIEW AND SUMMARY

THIRD TIER CRITICAL INFRASTRUCTURE

Highways and Bridges

Palm Springs is located south of a major overland access route. Interstate 10, the principal east-west freeway extends from the Arizona border to the San Bernardino County line northwest of Beaumont. This 150 mile stretch consists of primarily divided multi-lane traffic with many overpasses and bridges. California Department of Transportation is in the process of expanding the overpasses at Gene Autry and Indian Canyon Drive which will upgrade these freeway overpasses to the most current building code which will increase the probability of these structures withstanding a mild to moderate earthquake. The San Andreas Fault crosses I-10 just east of Indio in the Coachella Valley and could severely limit access to the City.

Most of the lengths are unpopulated with bridge and overpass collapse capable of isolating vehicle occupants in the arid desert regions of the Coachella Valley. Road buckling could cause traffic accidents, if not anticipated, including vehicles transporting hazardous materials. Freeway off and on ramps remaining intact may provide limited access and egress to portions of the system.

Other major transport routes and streets in Palm Springs are vulnerable to minor and moderate structural damage. Flooding and sewage discharge could cause some streets and Highway 111 to be impassable. Falling rocks along Hwy 111, trees, utility lines and poles, could not only block traffic, but damage vehicles and injure occupants. In areas with multi-story buildings, transportation access will be determined by the amount of building debris landing in the roadways and the width of the streets.

Effectiveness of road clearance operations will be determined by the access and availability of equipment to the problem areas, the availability of and access to fuel and maintenance, and the ability to communicate with and mobilize crews to staging locations. Palm Springs lacks sufficient resources to clear anything other than the most minor road blockage.

Natural Gas

Natural gas is supplied to the City through facilities of the Southern California Gas Company. Analysis of the natural gas supply system can be considered in two phases: bulk supply lines from out of state and local distribution via a network consisting of underground storage and pumping stations.

Imported supplies could be interrupted by damage where two 30-inch in diameter lines cross the San Andreas in the San Gorgonio Pass. These transmission lines, running the entire width of Riverside County and crossing all three major fault traces, provide 40% of the natural gas distributed throughout Southern California with the transmission division headquarters located in Banning. Damage to these pipelines will necessitate temporary dependence upon underground storage.

Many portable LPG tanks are not properly secured and even a minor tremor could dislodge them. Once their connections are severed or if they become damaged, the potential for fire and explosion are very high.

A high pressure liquid gas line runs near the City's northern boundary parallel to the railroad tracks. The line is parallel to the San Andreas Fault, also. A rupture in these lines could release up to 900,000 gallons of product. This is the approximate capacity of product between the detector shutoff valves located near Banning and Thousand Palms.

Gas Stations

With a limited amount of gas stations in the City, fuel sources are going to quickly become quite critical. Also, if electricity is disturbed these stations may not be usable until power is restored to run the pumps. Special attention will have to be paid to gas stations to insure that their hazard potential is kept low (from fire or a hazardous materials incident through leakage) and at the same time they remain a viable source of fuel to aid in the recovery operation.

Communications - Telephone System

Telephone communication systems may fail due to physical damage of equipment, facilities and support utilities. Circuits could be overloaded by telephone receivers being knocked off their cradles and/or individuals trying to call in and out of the area. There may be an immediate telephone communications blackout following the earthquake, with partial communications being restored after the first 24 to 72 hours. 9-1-1 may also be disrupted.

The commercial carriers will institute network control procedures to regain control of the situation as quickly as possible. Priorities have been assigned to all critical circuits transiting the key facilities, based on established criteria. Through the EOC staff, Verizon has granted "priority" restoration of phone service to key city phone systems and key city official's home residences.

Buildings

The following buildings will be considered critical infrastructure:

1. Residential buildings
2. Schools and churches
3. Businesses and industrial facilities
4. Medical and custodial care facilities
5. Governmental buildings
6. Grocery stores
7. Hardware stores
8. Gas stations
9. Pharmacies

Residential Buildings

Single family homes are expected to suffer some structural damage and loss of contents, although not general collapse. Wood frame structures which have natural flexibility will probably sustain less damage than brick and masonry. Many newer Palm Springs homes (post 1970) are built of wood frame construction with chicken wire beneath the stucco. This provides added structural cohesiveness.

Mobile homes in Palm Springs could be subject to shifting off their foundation supports. Attached awnings, porches and skirting could be subject to separation and utilities could be sheared off where they enter the coach. Seldom would actual collapse of the structure itself occur unless nearby trees and power poles toppled.

Multi-story residential units are generally more vulnerable to higher shaking intensities and therefore pose a greater life safety hazard. There are no residential high-rises in Palm Springs.

The HAZUS database for the 7.8 ShakeOut Scenario estimates that 39% of residential structures will be moderate to severely damage as a result of the shaking and approximately 397 people will be requiring short term sheltering.

Schools and Churches

There are many schools and churches in the City which will sustain varying degrees of damage. During the Coachella Valley quake, magnitude 5.9 Richter scale, schools sustained light damage totaling $32,000 in 1986 dollars. Church loss was not reported specifically. Schools in general are earthquake resistant and may withstand intensities of up to VIII on the Modified Mercalli scale (see Attachment 3) although general panic and fright will result. Poorly built or designed churches or perhaps day care centers may experience partial collapse and interiors will experience heavy damage. None of these facilities reported damage following the June 28, 1992 Landers Quake.

Business and Industrial Facilities

There are many licensed businesses operating in Palm Springs. Retail shops, light industrial, and hotel operations are the primary businesses. Many businesses will suffer major dollar losses due to damaged stock, interruption of business and damage to structures. Some of the older brick and wood joist structures may suffer moderate to severe damage. Well-built ordinary structures will suffer slight to moderate damage at a VII level of the Modified Mercalli scale. At a level IX, specially designed earthquake resistant structures may suffer serious damage and lesser buildings will be damaged. If the quake is significant, fright and panic will result and selective entrapments will result. Hazardous materials facilities may cause long term significant problems including health implications.

Grocery Stores

There are major grocery stores in the City and several smaller ones. Because of the fast-paced nature of our society, we are very dependent upon our ready supply of food. However, following a major earthquake, that source will be severely interrupted. Structural damage notwithstanding, most stores will suffer major damage and disruption inside because of inventory damage and the perishable nature of the products. Shelves are not designed to contain products subjected to any appreciable degree of shaking. Clean-up will be major problems before the public may, once again, use the facility. Also, since most stores receive deliveries on a daily basis, resupply will be a serious concern requiring an overall logistical effort.

Hardware Stores

Following a major earthquake, rescuing people from damaged structures will be a first priority. Hardware stores should be secured in order to procure emergency supplies to aid in the rescue efforts. Short term, following-up on reconstruction work will also be

initially relying heavily on the supplies available through local hardware stores. However, it should be noted that these stores have only minimal building materials on hand.

Pharmacies

Besides the obvious need for medical supplies, a great number of people are also dependent on prescription medicines. Unfortunately, pharmacies are as vulnerable to internal damage as are grocery stores. Most of their inventory is kept on unprotected shelves and a great deal of cleanup and restocking will be required before the pharmacies will once again be operational.

4.6 JURISDICTION HAZARDS

The City of Palm Springs has experienced a number of different disasters since its incorporation in 1938, including numerous earthquakes, floods, wild land fires, and severe storms.

Historic Earthquakes in Palm Springs

After the 1986 North Palm Springs earthquake, numerous landslides consisting primarily of debris slides and rock falls were reported. In June 1992 Landers-Big Bear quakes struck the City. The 1994 Northridge earthquake was felt in Palm Springs and during the earthquake centered in Borrego on July 7, 2010 the City felt the shock waves but the sustained no damage.

Historic Flooding in Palm Springs

Major flooding occurred in Palm Springs in 1938, when the Whitewater River flooded the Coachella Valley. Overflow from the Tachevah Creek caused major flooding in Downtown Palm Springs and people in the City were isolated for nearly a week. Similarly, in the winter of 1965, the Cottonwood Creek overflowed Interstate 10 east of Highway 111, blocking traffic and isolating the City of Palm Springs.

Historic Wildland Fires in Palm Springs

Relatively few wildland fires have occurred in the urbanized areas of Palm Springs within the past ten years. However, between 1980 and 1994, three very large wildfires occurred in the San Jacinto Mountains and foothills along the western border of Palm Springs and its sphere of influence—the Dry Falls fire of 1980, the Tram Fire of 1985, and the Palm Fire of 1994. The Blaisdell Canyon Fire of 2005 burned more than 5,000 acres in the mountains above Palm Springs proper, threatening the Palm Springs Aerial Tramway area. Fortunately, these fires were mostly limited to undeveloped areas of rugged terrain.

Historic Severe Storms Disasters in Palm Springs

Strong winds are endemic to the Palm Springs area, due to the tunneling effect of air through the narrow San Gorgonio Pass. Wind can damage land and vegetation, and in this region, where surface sediments are predominantly dry and granular, windblown sand and dust can impact surface improvements, air quality (creating health hazards), and visibility.

In Palm Springs, windblown sand has repeatedly caused the closure of several roads, costing the City thousands of dollars in cleanup. The roads with the most frequent closures include Indian Canyon Drive, Gene Autry Trail, and Vista Chino. The City has had severe disaster declarations since 2005. These incidents include wind and flood.
Federally Declared Disasters between 2005 and December 2010

Post incident mitigation measures were implemented for the following disasters:

- Wind Event February 2008
- Flooding 2010 FEMA – 1884-DR 2010 Severe Winter Storms
- Flooding December 2010

JURISDICTION VULNERABILITY WORKSHEET

NAME: Hazard Mitigation Committee AGENCY: City of Palm Springs DATE September 20, 2011

	COUNTY		LOCAL JURISDICTION		
HAZARD	**SEVERITY 0 – 4**	**PROBABILITY 0 - 4**	**SEVERITY 0 - 4**	**PROBABILITY 0 - 4**	**RANKING 1 - 20**
EARTHQUAKE	4	3	**4**	**4**	**1**
WILDLAND FIRE	3	4	**3**	**3**	**7**
FLOOD	3	3	**3**	**2**	**6**
OTHER NATURAL HAZARDS					
DROUGHT	3	3	**3**	**2**	**12**
LANDSLIDES	2	3	**2**	**1**	**14**
INSECT INFESTATION	3	4	**2**	**1**	**19**
EXTREME SUMMER/WINTER WEATHER	2	4	**2**	**4**	**4**
SEVERE WIND EVENT	3	3	**3**	**3**	**5**
AGRICULTURAL					
DISEASE/CONTAMINATION	3	4	**0**	**0**	**17**
TERRORISM	4	2	**0**	**0**	**18**
OTHER MAN-MADE					
PIPELINE	2	3	**3**	**3**	**8**
AQUEDUCT	2	3	**1**	**1**	**15**
TRANSPORTATION	2	4	**4**	**4**	**3**
POWER OUTAGE	3	4	**3**	**4**	**2**
HAZMAT ACCIDENTS	3	3	**2**	**3**	**13**
NUCLEAR ACCIDENT	4	2	**1**	**1**	**16**
TERRORISM	4	2	**4**	**2**	**9**
CIVIL UNREST	2	2	**2**	**2**	**10**
JAIL/PRISON EVENT	1	2	**0**	**0**	**20**
MEDICAL					
PANDEMIC			**1**	**1**	**11**

THREAT ASSESSMENT 1: EARTHQUAKE

Major Earthquake - Severity -4, Probability -4, Ranking – 1

The City of Palm Springs is in the vicinity of several known active and potentially active earthquake faults and shares many of the hazards associated with earthquake faults in Southern California. At least two active faults, the Banning and Garnet Hill faults extend through portions of the City. Both fault zones are capable of causing damage to the City. Other faults in the region, such as the San Andreas, San Gorgonio Pass, and San Jacinto faults, also have the potential to produce strong seismic shaking in Palm Springs. Historically, major temblors have struck the Coachella Valley every 150 years, on average, but for reasons no one can explain, it's been quiet for 300 years.

More recent studies of the eastern knot of the San Andreas near San Gorgonio Pass reveal that this area is more advanced in the cycle of strain accumulation than the western knot at the Cajon Pass. A growing body of geologic evidence suggests that the south-central segment of the San Andreas Fault is ruptured repeatedly by a characteristically large event such as the 1857 Fort Tejon earthquake, Richter magnitude 7.9. Earthquake activity around the southern San Andreas in June, 1992 Landers-Big Bear quakes, have prompted scientists to increase their studies of this area. The San Andreas Fault represents the greatest threat to Palm Springs. However, the San Jacinto Fault also represents a significant threat to the City and should not be discounted.

Recently, the U.S. Geological Survey and the California Geological Survey teamed up to develop *The ShakeOut Scenario* which describes how a magnitude 7.8 earthquake on the southern portion of the San Andreas Fault would impact the region, causing loss of lives and massive damage to infrastructure, including critical transportation, power, and water systems. It could be aggravated by aftershocks and landslides, fires, hazardous material spills and explosions. An earthquake of this magnitude could directly affect all of Riverside County and most of southern California, causing a critical demand on mutual aid resources and competition for Federal relief.

Ground Shaking

The most significant earthquake action in terms of potential structural damage and loss of life is ground shaking. Ground shaking is the movement of the earth's surface in response to a seismic event. The intensity of the ground shaking and the resultant damages are determined by the magnitude of the earthquake, distance from the epicenter, and characteristics of surface geology. This hazard is the primary cause of the collapse of buildings and other structures.

The HAZUS (Hazards U.S.) database for the 7.8 *ShakeOut Scenario* estimates for the City of Palm Springs that the long duration ground shaking will moderately or completely damage nearly 25% of the total building structures in the city .

Earthquake-Induced Slope Failures and Landslides

Strong ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions. Earthquake-induced slope failures generally include rock falls, landslides, and debris flows that can overrun structures, people, or property, sever utility lines, or block roads, which can hinder rescue operations after an earthquake. After the 1986 North Palm Springs earthquake, numerous landslides consisting primarily of debris slides and rock falls were reported over an area of 600 square kilometers.

The southern parts of Palm Springs are most vulnerable to seismically induced slope failure, due to the steep terrain. These areas of the City are at the foot of the San Jacinto Mountains or below hills covered with large boulders that are most susceptible to rock fall. In areas where there is development at the base of steep slopes, dislodged boulders can roll down onto roadways, with the potential to impact passing motorists.

Liquefaction

Liquefaction occurs when loose, soft, unconsolidated, or sandy soils that are saturated with water are subjected to ground vibrations during a seismic event. Significant ground shaking causes soil to lose strength and “liquefy,” triggering structural distress or failure due to the settling of the ground or a loss of strength in the soils underneath structures.

The northern and eastern areas of the City have a low possibility of being affected by liquefaction. This hazard is considered low in the Palm Springs area because the approximate depth to groundwater is greater than 50 feet. Research and historical data indicate that loose, granular materials saturated with groundwater and located at depths of less than 50 feet with silt and clay contents of less than 30 percent are most susceptible to liquefaction. Shallow groundwater that can contribute to the occurrence of liquefaction is known to occur locally in the downtown area, immediately surrounding the Agua Caliente Springs. A strong earthquake could cause liquefaction in this area, most likely occurring as “sand volcanoes” immediately surrounding the spring. Seasonal fluctuations in groundwater levels and the introduction of residential irrigation increase liquefaction risk.

Many areas may have buildings destroyed or unusable due to the phenomenon of liquefaction. Liquefaction is a phenomenon involving the loss of shear strength of a soil. The shear strength loss results from the increase of poor water pressure caused by the rearrangement of soil particles induced by shaking or vibration. Liquefaction has been observed in many earthquakes, usually in soft, poorly graded granular materials (i.e., loose sands), with high water tables. Liquefaction usually occurs in the soil during or shortly after a large earthquake. In effect, the liquefaction soil strata behave as a heavy

fluid. Buried tanks may float to the surface and objects above the liquefaction strata may sink. Pipelines passing through liquefaction materials typically sustain a relatively large number of breaks in an earthquake. In Palm Springs the Spa Hotel and some areas downtown may be susceptible to the effects of liquefaction.

Electrical Power

Major power plants are expected to sustain some damage due to liquefaction and the intensity of the earthquake. Up to 60% of the system load may be interrupted immediately following the initial shock. According to representatives of Southern California Edison Company, the electrical power will not be rerouted and will be lost for an undefined period of time. Much of the imported power is expected to be lost. In some areas of greatest shaking it should be anticipated that some of the distribution lines, both underground and surface, will be damaged. Much of the affected area may have service restored in days; damaged areas with underground distribution may require a longer time. Loss of Southern California Edison transmission lines is possible.

Water Supply

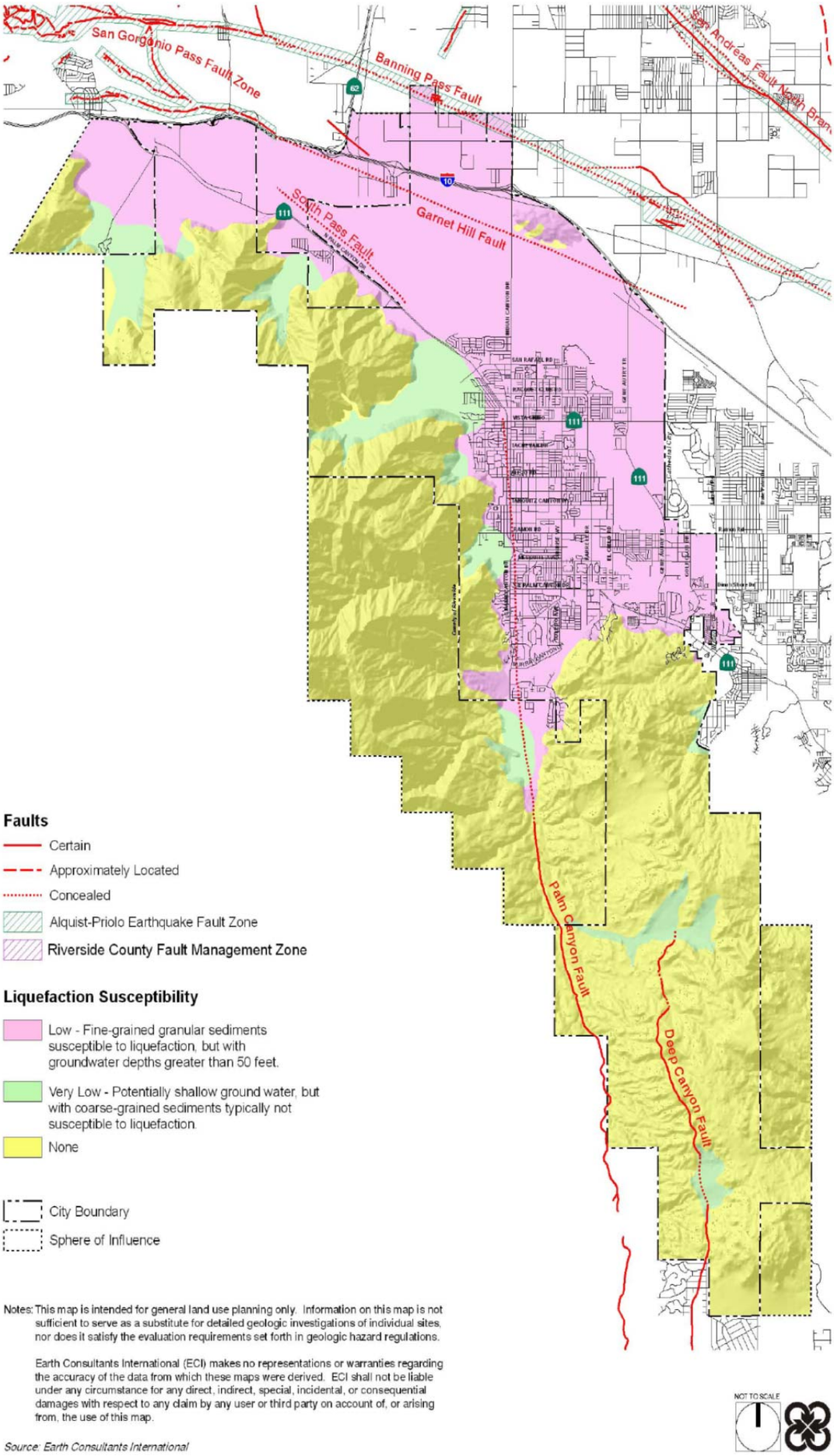
In the event of a major earthquake, most water systems within the City will suffer some damage. Water distribution pipelines vary from 2 inches to 54 inches or more in diameter. Pipe materials vary from cast iron to welded steel and asbestos cement to a variety of plastic materials. The damage to distribution pipelines is expected to vary with pipe material, soil type slide conditions, and degree of corrosion, design and installation practices, and joint type. In local distribution lines of fewer than 12 inches in diameter, there will be hundreds of breaks and thousands of leaks. Breaks in housing service connections will be common.

The Desert Water Agency has been proactive in installing "Earthquake" valves on its larger reservoirs to prevent an uncontrolled flow of water following a major earthquake.

Pumping plants are generally more compact structures and with the exception of related electrical equipment and transformers, will probably not suffer as much damage as distribution reservoirs. Large pumping plants will suffer damage closely related to ground acceleration and to the soils on which they were constructed. Damage is anticipated to be primarily related to pipeline rupture and transformer damage.

(See Riverside County OA MJHMP Section 5.3.3 Pages 196-218).

Figure 4.6.1 - Map of Earthquake Faults and Liquefaction in City of Palm Springs



THREAT ASSESSMENT 2: Wildland Fires

Wildland Fires - Severity - 3, Probability - 3, Ranking - 7

Wildfires are a significant hazard in the Western United States, where they occur naturally and have always been part of the natural environment. Large areas of southern California are particularly susceptible to wildfire due to the region's weather, topography, and native vegetation. The typically mild winters, characteristic of the region's Mediterranean climate, result in an annual growth of grasses and plants that dry out during the hot summer months. This dry vegetation provides fuel for wildfires in the autumn, when the area is intermittently impacted by Santa Ana winds—the hot, dry winds that blow across the region in the late fall. Although dangerous, wildland fire is a natural process and a necessary part of the natural ecosystem of southern California.

Relatively few wildland fires have occurred in the urbanized areas of Palm Springs within the past ten years. However, between 1980 and 1994, four very large wildfires occurred in the San Jacinto Mountains and foothills along the western border of Palm Springs and its sphere of influence. These fires were the Dry Falls fire of 1980, the Tram Fire of 1985, and the Palm Fire of 1994. The Blaisdell Canyon Fire of 2005 burned more than 5,000 acres in the mountains above Palm Springs proper, threatening the Palm Springs Aerial Tramway area. Fortunately, these fires were mostly limited to undeveloped areas of rugged terrain.

Only one relatively small area in the northwest corner of the City of Palm Springs and its Sphere of Influence is designated as a State Responsibility Area (SRA). The CALFIRE have primary responsibility for fire protection in this area. Fire suppression in the remaining wildland areas in and near Palm Springs is the responsibility of the USDA Forest Service (USFS) and the Bureau of Land Management. The direct protection area assignments affect firefighting resources in the City and should be a consideration in all fire hazard mitigation. Within the Palm Springs city limits, the western and southwestern portions of the City, specifically the neighborhoods located along the foothills and canyon mouths, are generally the most susceptible to wildland fire. Also susceptible to wildland fire are those areas with more vegetation, such as in the lower canyon reaches draining the San Jacinto Mountains, including Tachevah Canyon, Tahquitz Creek, Andreas Canyon, and Palm Canyon, where water may be more plentiful.

(See Riverside County OA MJHMP Section 5.3.1 Pages 154-164)

Figure 4.6.2 - Map of Wildland Hazards within the City of Palm Springs

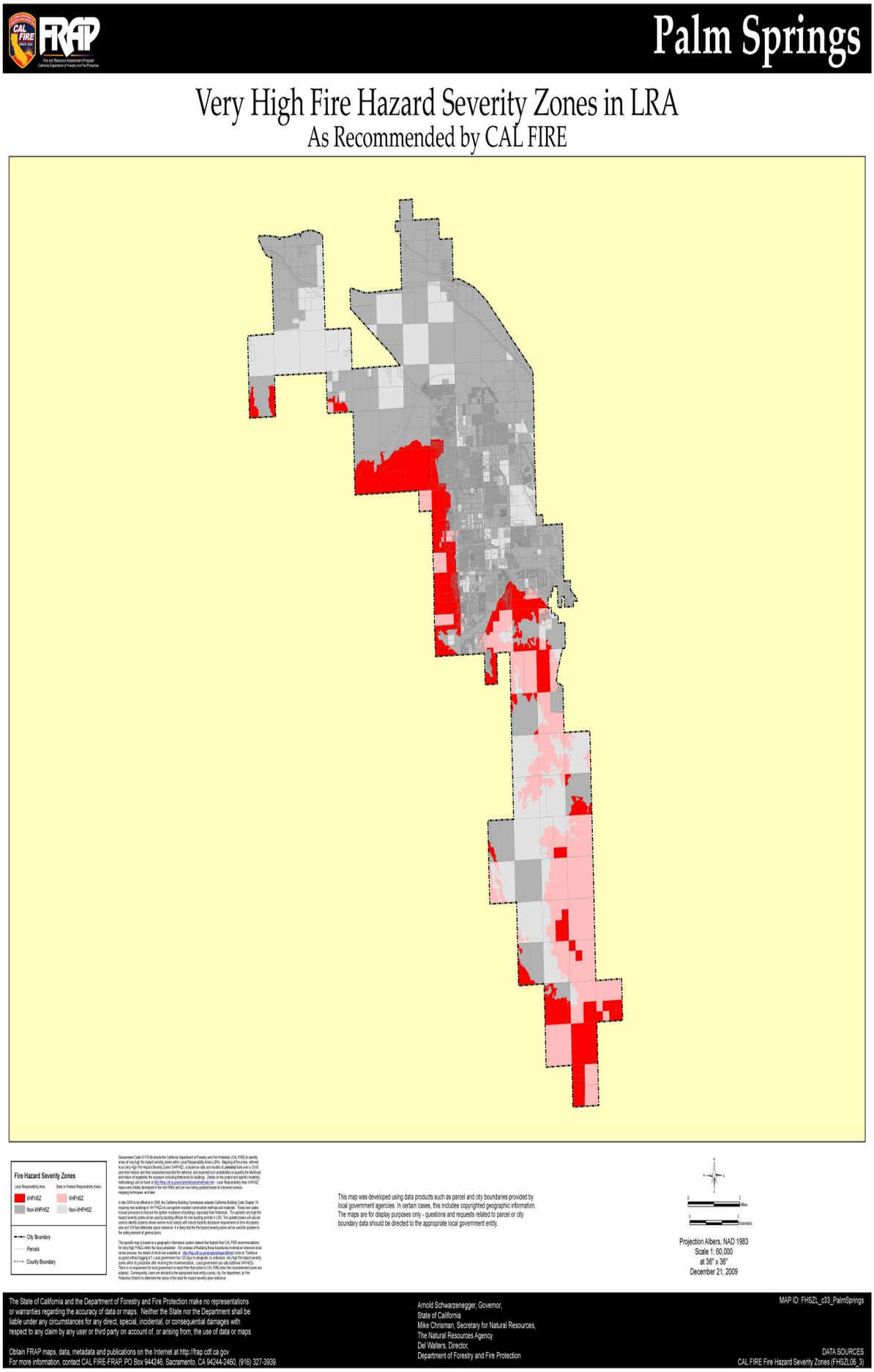
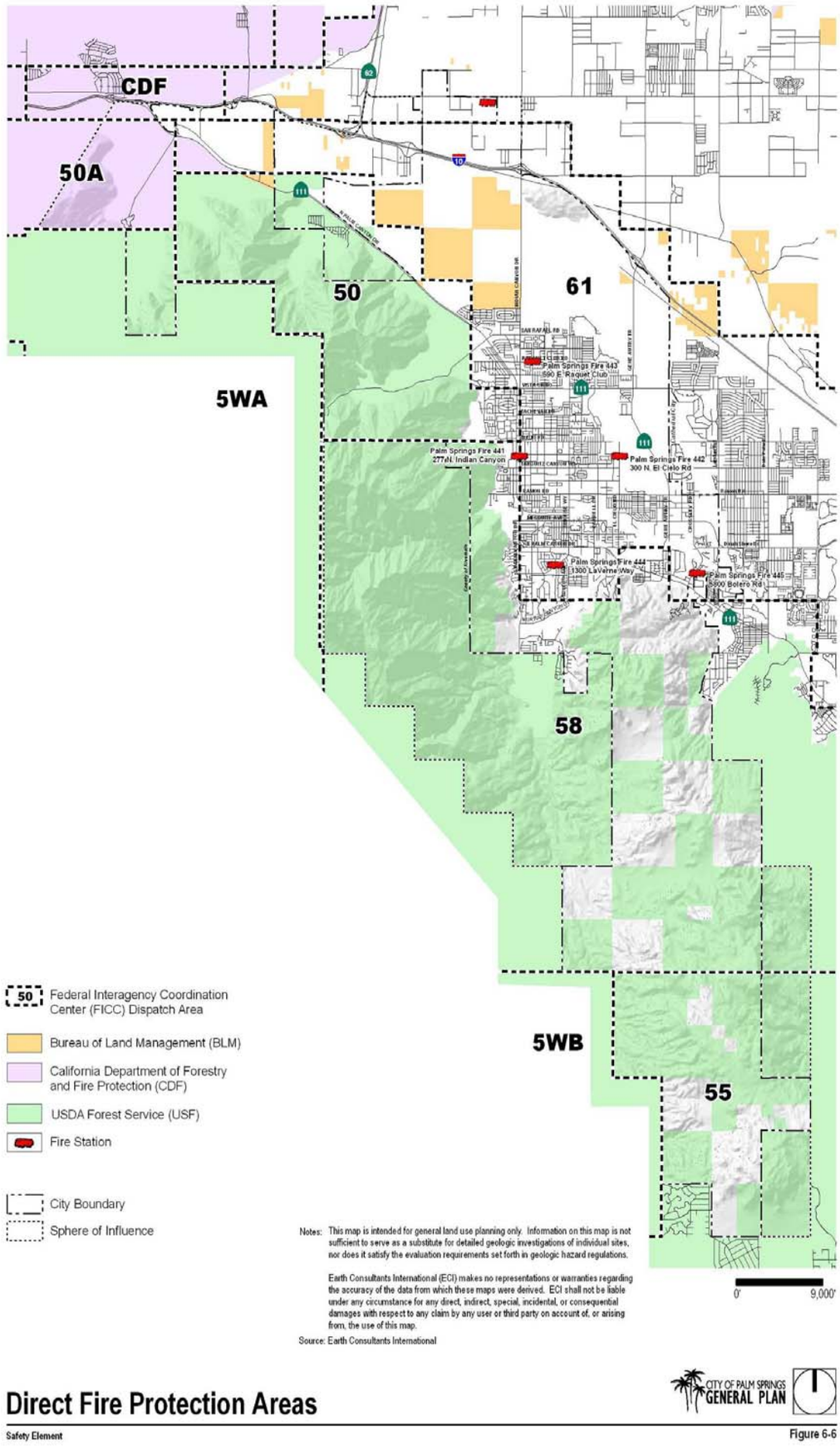


Figure 4.6.3 - Map of the Fire Direct Protect Areas of the City of Palm Springs.



THREAT ASSESSMENT 3: FLOODS

Dam and Flood Control Channels - Severity -3, Probability - 2, Ranking - 6

Major flood control structures in the City of Palm Springs area include the Whitewater River Levee, the Chino Canyon Levee and Channel, and the Palm Canyon Wash Levee. The levee between Palm Canyon Wash and Gene Autry Trail, maintained by the Riverside County Flood Control and Water Conservation District (RCFCWCD), protects the northern part of the highly developed Palm Springs area from 100- and 500-year flooding from Chino Creek and the Whitewater Channel. The Palm Canyon Wash levee directs flows from Palm Canyon and Arenas Canyon northeastward to the Tahquitz Creek. It provides 100-year storm protection on the north side of the channel down to Tahquitz Creek and on the south side of Tahquitz Creek channel to the Whitewater River.

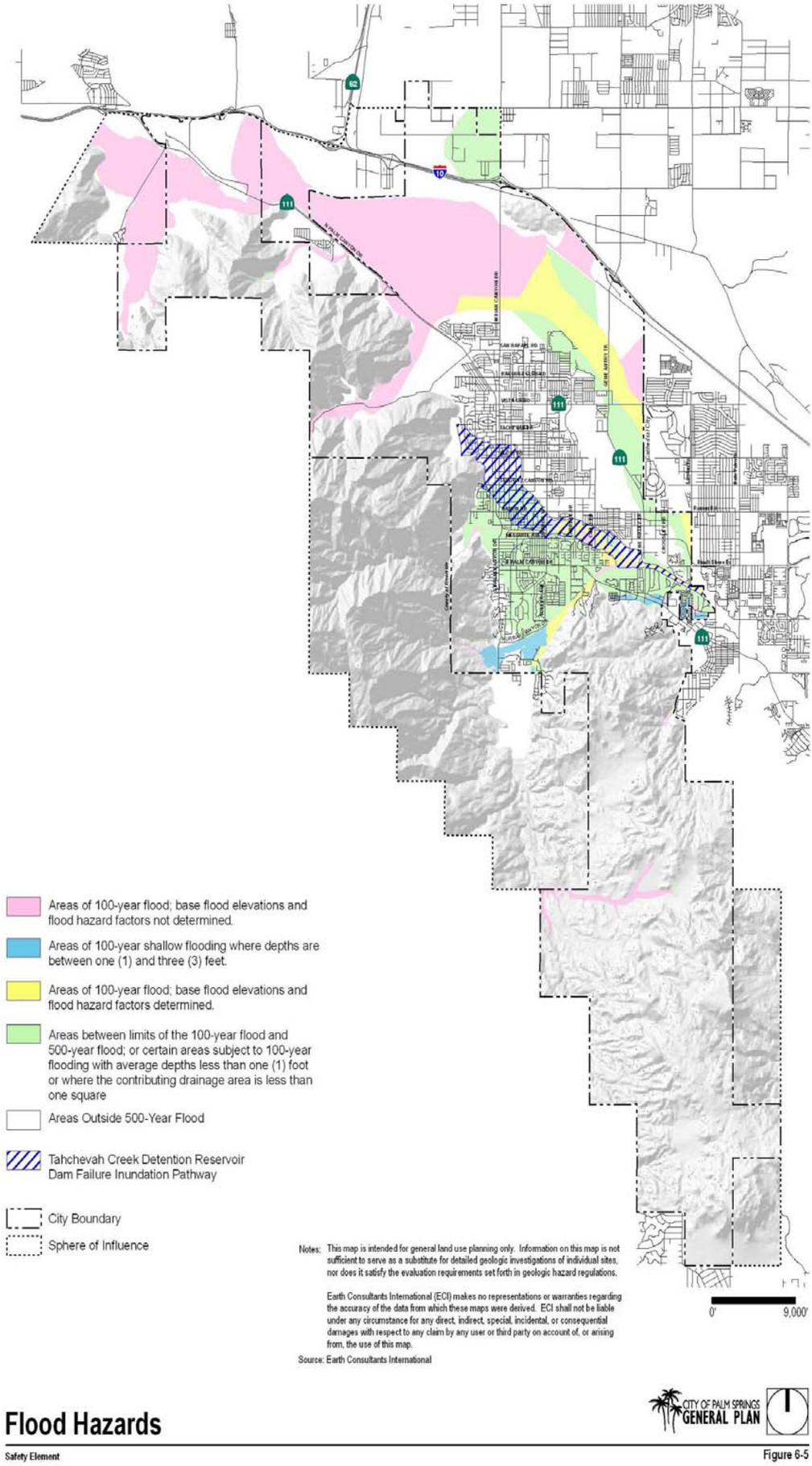
Flooding resulting from dam failure is a potential hazard for the City. The Tachevah Creek Detention Reservoir and the Tahquitz Creek Debris Basin are two flood-control structures in the Palm Springs area required by the California State Water Code to be monitored for structural safety and that have the potential to pose a flooding risk to the City.

The Tachevah Creek Detention Reservoir, about 1,200 feet downstream from the mouth of Tachevah Canyon, is formed by a 42-foot-high embankment constructed of compacted earth fill, and has a capacity of approximately 650 million gallons. This dam was built in 1964 and protects the highly urbanized central part of the City from floods and debris flows.

The Tahquitz Creek Debris Basin, which is a considerably smaller structure, was designed and constructed to reduce the risk of flooding the Tahquitz Creek has historically posed to Palm Springs. Completed in May 1991 by the U.S. Army Corps of Engineers, the basin consists of a natural channel and dam with a debris storage capacity of about 33 million gallons and a two-mile reach of grass-lined channel used as a golf course and bicycle and equestrian trails. An inundation pathway for this dam is not available, possibly because it rarely holds water expect during periods of intense and continuous rainfall. Therefore, its inundation threat is considered very low.

Flooding is also expected to occur on the alluvial fans that the developed part of the City occupies, primarily from sheet flow. Flood-control structures built and maintained by the RCFCWCD have helped reduce flood damage in the City since they were installed. Outside of the developed area of the City, most drainage channels are still in their natural state. Due to the construction of flood-control structures, sheet flow in most of these areas is estimated to be infrequent in occurrence and less than one foot deep. (See Riverside County OA MJHMP Section 5.3.1 Pages 164-195)

Figure 4.6.4 - Map of Flood Hazards within the City of Palm Springs



THREAT ASSESSMENT 4: Slope Instability

Landslides and Debris Flow - Severity - 2, Probability - 1, Ranking - 14

Slope instability could be a widespread hazard in the City if the areas of the San Jacinto and Santa Rosa mountains within city limits were open to development. However, since most of these highlands have been set aside as a preserve, little development is expected to occur within the mountainous areas that are moderately to highly susceptible to slope instability. Slope stability issues do pose a concern along the developed areas of the City that abut mountainous terrain, including roads, like Highway 111, that are along the base of the slopes. Intense rainfall, ground shaking, and other environmental factors, including time, can cause boulders to fall or roll onto these areas, posing a threat to structures and passing motorists. Planning for developments and infrastructure placed in these areas should be supported by site-specific geotechnical analyses for slope stability. Careful land management in hillside areas can reduce the risk of economic and social losses from slope failures.

Slope failure is the down slope movement of rock, debris, and soil in response to gravitational stresses and pressures. Slope failures can occur on natural or manmade slopes. For manmade

.lopes, most failures occur on older slopes, many of which were built at slope gradients steeper than those allowed by today's grading codes. Although infrequent, failures can also occur on newer, graded slopes, generally due to poor engineering or poor construction.

The potential for slope failure is dependent on many factors. Some of the most important factors include slope height, slope steepness, and the strength of weaker layers of soil underlying the slope. Heavy and prolonged rainfall, erosion, undercutting by streams, manmade alterations to the slope, and seismic shaking all contribute to conditions in which slope failures are likely to occur.

Potential as well as past landslides pose risks to the Palm Springs area. Landslides are downward movements of mixes of bedrock blocks, fragments, debris, and soils. Large landslide deposits are present in the San Jacinto and Santa Rosa Mountains, but only one landslide deposit has been identified in the Palm Springs area. This deposit is located in the San Jacinto Mountains overlooking Blaisdell Canyon. Failed slopes in northwestern area of Palm Springs resulting from the 1986 North Palm Springs earthquake also pose risks for potential landslides and other associated hazards, such as compressible soils. In addition, the foothills and mountains adjacent to Palm Springs have steep slopes along which landslides and other slope failures can occur during or after periods of intense rainfall or in response to strong seismic shaking. Areas of high topographic relief, such as steep canyon walls, are most likely to be impacted by rock falls, rockslides, soil slips, and to a lesser degree, large landslides. Likewise, locations in the Garnet Hill and Whitewater Hill areas contain unstable soil types along which slope failures could occur.

During exceptional storm periods or prolonged rainfall, the risk of debris flow increases. Debris flows are the most dangerous and destructive type of slope failure, generally consisting of rapidly moving slurry of water, mud-rock, vegetation, and debris. This type of slope failure usually occurs during an intense rainfall event, following saturation of the soil by previous rains.

Rock falls are free-falling or tumbling masses of bedrock that have broken off steep canyon walls or cliffs. Rock falls can happen wherever fractured rock slopes have become steep from stream erosion or human activities. This hazard is present in the hills that frame the southern part of the Coachella Valley, along the southwestern portions of Palm Springs. Rock falls can occur suddenly and without warning, but are more likely to occur in response to earthquake-induced ground shaking, during periods of intense rainfall, or as a result of human activities such as grading and blasting.

THREAT ASSESSMENT 5: Other Naturally Occurring
Severity - 2, Probability - 4, Ranking - 4

Insect Infestation

City has limited problems with insect infestation but with prolonged rain in the spring with high temperatures could increase the probability of mosquitoes.

Extreme Weather

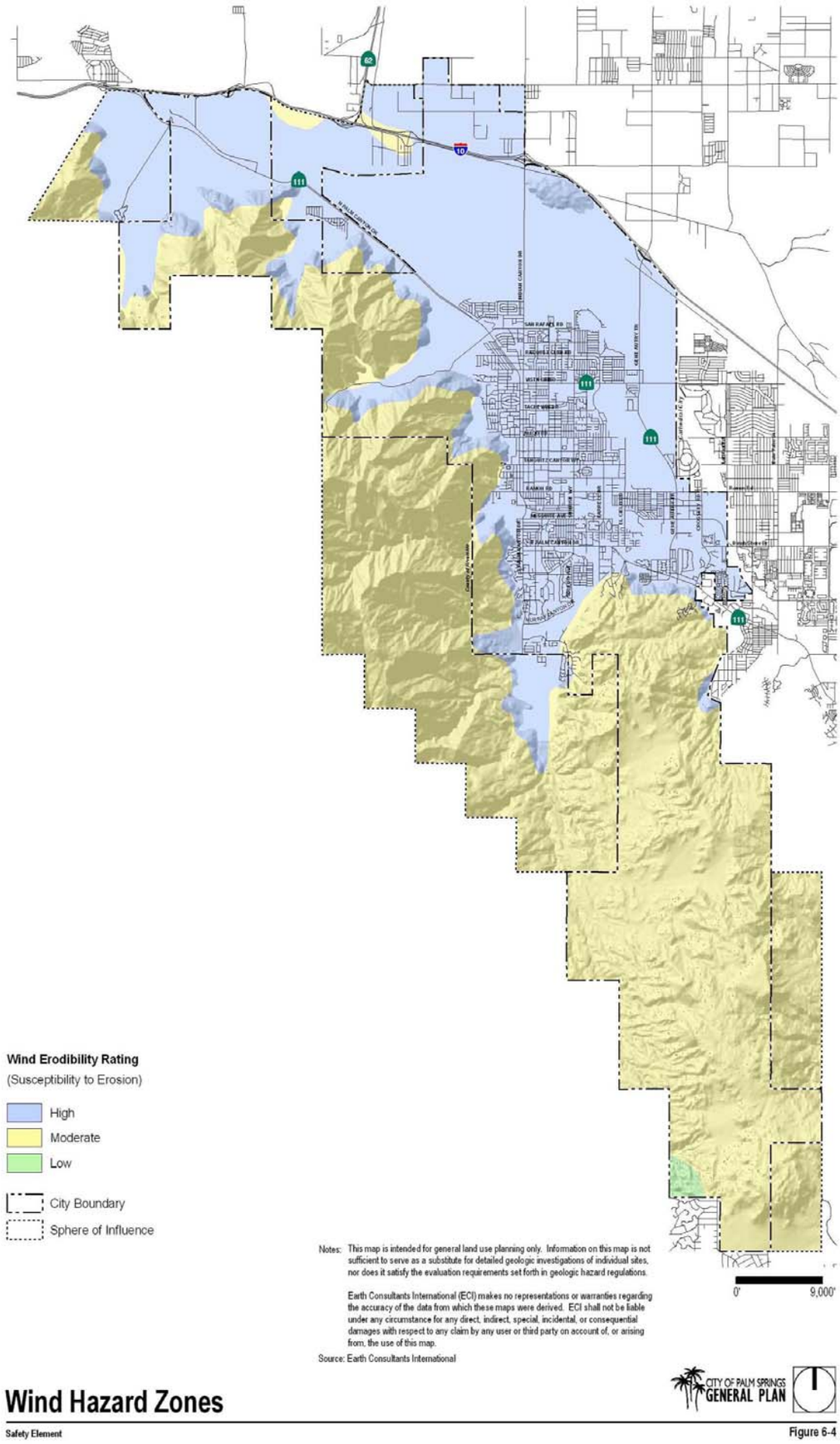
Strong winds are endemic to the Palm Springs area, due to the tunneling effect of air through the narrow San Gorgonio Pass. Wind can damage land and vegetation, and in this region, where surface sediments are predominantly dry and granular, windblown sand and dust can impact surface improvements, air quality (creating health hazards), and visibility.

Wind erosion commonly occurs in flat, bare areas, dry, sandy soils, or anywhere the soil is loose, dry, and finely granulated. Wind erosion damages land and natural vegetation by removing soil from one place and depositing it in another. Since high winds blow down the axis of the Coachella Valley, recreational and resort communities that first developed in the upper Coachella Valley were generally located in areas sheltered from these winds, tucked in coves at the base of the mountains. However, as the area has grown, development has had to move into the central axis of the valley and into the high-wind areas. As seen in Figure 7, most of the urban development in the City of Palm Springs lies within an area of high susceptibility to wind erosion. Recreational land uses, especially use of off-road vehicles, can also accelerate erosion in the area.

Wind and windblown sand pose an environmental hazard throughout the Coachella Valley. Buildings, fences, roads, crops, automobiles, trees, and shrubs can all be damaged by abrasive blowing soil. In some areas, windblown sand has actually forced the abandonment of dwellings and subdivided tracts in the central Coachella Valley. In Palm Springs, windblown sand has repeatedly caused the closure of several roads, costing the City thousands of dollars in cleanup. The roads with the most frequent closures include Indian Canyon Drive, Gene Autry Trail, and Vista Chino.

(See Riverside County OA MJHMP Section 5.3.4 Pages 219-226 and Section 5.3.8 pages 239-245)

Figure 4.6.5 - Map of Wind Erodibility Zones within the City of Palm Springs



THREAT ASSESSMENT 6: Other Human Caused –

Transport of Hazardous Materials Severity - 4, Probability - 4, Ranking - 3

State Highway 111, I-10, and the Southern Pacific Railroad corridor are all used to transport hazardous materials through the City. It is these areas that have the highest likelihood of potential spills or leaks. The California Highway Patrol is in charge of spills that occur in or along freeways, with Caltrans and local police and fire departments responsible for providing additional assistance. Additionally, natural gas transmission pipelines extend across the City and sphere of influence north of I-10. Rupture of any portion of this pipeline would adversely impact the area.

Railroads

Major rail transport lines near Palm Springs include the Southern Pacific, and Union Pacific Railway Companies. Rails, cars, supporting bridges, overpasses, and electrically operated switching mechanisms are susceptible to damage.

The Southern Pacific, a major Southern California supply route, enters the Coachella Valley from Imperial County along the eastern shore of the Salton Sea. It follows Highway 111 and then Interstate 10 through the Coachella Valley. Because of the close proximity of the rail lines as they parallel almost the entire length of the San Andreas Fault, particularly in the area near the City, extensive damage could occur. This may include bent rails, overturned cars (including possible carriers of hazardous materials) and damage to supporting structures.

Petroleum Fuels

Most major pipelines cross the San Andreas Fault, and pipeline breakage is expected. There is a possibility of fire where pipeline failures occur. Priorities will have to be established to assure adequate fuel for emergency crews. Ruptures of numerous lines due to fault breaks on the San Andreas are most likely. Fire is a serious threat if leaking products are ignited and a considerable environmental concern if they leak into the ground.

Nuclear

The City is not within a nuclear power plant response area but does have a hospital. The hospital does have radioactive materials for medical procedures. There is a potential for this material to be stolen and be used in a terrorism incident.

Terrorism

The City of Palm Springs has numerous high profile sites and Seismic potential that require additional security/preparation measures to be taken in conjunction with other Local, State and Federal agencies. Some of these sites include: Palm Springs International Airport, numerous high profile events, Railroad commerce, High Volume Gas pipeline, Electrical Generation, Tribal lands, National Parks, Tourist and Historical Landmarks, past Presidents and Hollywood influences. In the event of a terrorist attack, natural disaster or other large-scale emergency, the Department of Homeland Security, in conjunction with the City of Palm Springs, will provide a coordinated, comprehensive response and mount a swift and effective recovery effort.

Fusion centers are owned and operated by state and local entities with support from federal partners in the form of deployed personnel, training, technical assistance, exercise support, security clearances, and connectivity to federal systems, technology, and grant funding. The City of Palm Springs participates with the JRIC (Joint Regional Information Center) that encompasses seven counties in Southern California.

The Department of Homeland Security provides the coordinated, comprehensive federal response in the event of a terrorist attack, natural disaster or other large-scale emergency while working with federal, state, local, and private sector partners to ensure a swift and effective recovery effort.

Civil Unrest

The City hosts a large number of conventions and public gathers. With these types of events there is a potential for civil unrest. People that come for conventions or other major events bring with them their own cultural norms that do not always align with the established cultural norms of the community they are visiting. These conflicting social norms can result in the potential for civil unrest. Civil unrest can severely impact the City due tourism being one of the major economic drives of the City. Without tourism the City would be severely impacted.

THREAT ASSESSMENT 6: Medical - Severity - 1, Probability - 1, Ranking - 11

Tourism being one of the largest economic drives of the City brings with it unique challenges. These unique challenges are people from areas other than the United States bringing with them viral strains that residents of Palm Springs may not have immunity to. This lack of immunity to a viral strain could cause a pandemic situation within the immediate area. Also, with an International Airport even if the travelers do not stay within the City they could spread viral strain to other travelers and personnel employed at the airport. (See Part II – Jurisdiction Vulnerability Worksheet on page 9).

SECTION 5.0 - COMMUNITY RATING SYSTEM

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

1. Reduce flood losses;
2. Facilitate accurate insurance rating; and
3. Promote the awareness of flood insurance.

5.1 REPETITIVE LOSS PROPERTIES

There was no repetitive loss properties in the City based on the information from FEMA Repetitive loss data last updated in 2008. From 2005 through December 2010 the City had NO repetitive loss properties that were outside of a flood plain.

5.1 NATIONAL FLOOD INSURANCE PROPERTIES

The City of Palm Springs has participated in the National Flood Insurance Program since 1970. The City of Palm Springs also participates in the Community Rating System and is currently class 6.

a. ***Describe participation in NFIP, including any changes since previously approved plan.***

   There is a yearly review and 5-year cycle review to make sure the City in being reactive and proactive to issues relating to flood hazards in the area through major storm event pre/post data, record keeping of construction related certificates and permits, storm drain and channel maintenance, and community awareness of NFIP and requirement for flood insurance in Special Flood Hazard Area (SFHA). Major changes have been with technology and the ease of access and dissemination of flood maps, flood proofing and flood prevention information, flood insurance information for single-family and multi-family homeowners and renters, and FEMA forms, applications, and publications through the internet and web-based media.

b. ***Date first joined NFIP****.* The City joined the NFIP on December 11, 1970.

c. ***Identify actions related to continued compliance with NFIP****.*

   Making sure that FEMA and local applications and permits related to properties in an SFHA are filled out properly and local agency and DFIRM information is correct, keeping logs and records on all activities in SFHA area, keeping maintenance records related to small and large storm drain and flood channel

systems within the City limits, using print, web, and television based media outlets to inform the public about flood hazards and the need for flood insurance if they are in or near a flood zone, and monitoring State, County and local warning systems. We've increased our community awareness program significantly in the last 5 years.

d. ***CRS member?*** YES, CRS Community No. 060257

e. ***CRS class?***

The City has a CRS Class rating of 6, garnering the citizens of Palm Springs in a Special Flood Hazard Area (SFHA) a 20% discount on flood insurance. This rating was updated on May 2011 from the 5-year Cycle visit in 2010.

f. ***Describe any data used to regulate flood hazard area other than FEMA maps***.

The City acquires data from the Riverside County Flood Control and Water Conservation District. This agency regulates and maintains large storm drains and flood channels within the entire Coachella Valley.

g. ***Have there been issues with community participation in the program*****?**

The biggest one is the complacency of the City's full-time and seasonal residents living in a desert environment that may get a major storm incident once a year.

h. ***What are the general hurdles for effective implementation of the NFIP?***

There are no general hurdles relating to the effective implementation of the NFIP.

i. Summarize actions related to continued compliance with NFIP (c-2 and c-4)

The last repetitive loss properties were four properties that submitted claims between 1995 and 1996. The Repetitive Lost list was last updated on or before June 30, 2008 and these properties had been removed because of the implementation of mitigation Measure E.

j. Repetitive Loss Properties - Digital Flood Information Maps – DFIRM's

On September 28, 2007, the Federal Emergency Management Agency (FEMA) issued a new set of Digital Flood Information Maps (DFIRMs). The City of Palm Springs was asked to review them for accuracy prior to final issuance of the maps. The City of Palm Springs reviewed the DFIRMS but had no comments at the time. The final DFIRM maps were issued on August 28, 2008 by FEMA in electronic format along with accompanying GIS location

files. The City of Palm Springs Public Works Department does not have any GIS software, so the maps were electronically coverted to PDF files.

The Public Works department uses these DFIRMS to verify flood zones for customers who walk in, email, or phone for the information. The City has created a DFIRM Flood Zone Information form that identfies the property address, legal description, Assessor's Parcel Number, Flood Zone and whether they are in or out of a Special Flood Hazard Area (SFHA). Per the requirements of the NFIP/CRS certification requirments, the City keeps a log of all Flood Zone Information requests on file.

There are 21 DFIRM Panels that encompass the City of Palm Springs city limits (NFIP/CRS Community No. 060257). There are 16 panels that encompass the developed portions of the City. Some of the panels fall under the community indexes for Riverside County (RC), the City of Desert Hot Springs (DHS), the City of Palm Springs (PS), the City of Cathedral City (CC), the Agua Caliente Band of Cahuilla Indians (ACBCI), and the City of Rancho Mirage (RM), or any combination of these. The list of DFIRM panels is as follows:

06065C0870G (RC-CPS)
06065C0890G (RC-CPS)
06065C0895G (RC-PS-DHS)
06065C1535G (RC-PS)
06065C1551G (RC-PS-ACBCI)
06065C1552G (RC-PS-ACBCI)
06065C1553G (RC-PS-ACBCI)
06065C1554G (RC-PS-ACBCI)
06065C1556G (PS-ACBCI)
06065C1557G (PS-ACBCI)
06065C1558G (PS-ACBCI)
06065C1559G (PS-ACBCI)
06065C1565G (RC-PS-ACBCI)
06065C1566G (PS-ACBCI)
06065C1567G (PS-ACBCI)
06065C1569G (RC-PS-ACBCI)
06065C1576G (RC-CC-PS-ACBCI)
06065C1577G (CC-PS-ACBCI)
06065C1586G (CC-PS-ACBCI)
06065C1588G (CC-PS-ACBCI-RM)
06065C1588G (CC-PS-ACBCI-RM)

SECTION 6.0 - CAPABILITIES ASSESSMENT

6.1 REGULATORY MITIGATION CAPABILITIES

Figure 6.1.1 - City of Palm Springs Regulatory Mitigation Capabilities

Regulatory Tool	Yes/No	Comments
General plan	Yes	Comprehensive General Plan for the Palm Springs completed in 2007
Zoning ordinance	Yes	Planning Department
Subdivision ordinance	Yes	Planning Department
Site plan review requirements	Yes	Planning Department
Growth management ordinance	No	N/A
Floodplain ordinance	Yes	Adopted Ordinance 1739 on March 12, 2008
Other special purpose ordinance (storm water, water conservation, wildfire)	No	N/A
Building code	Yes	Adopted 2010 California Building Code on November 3, 2010
Fire department ISO rating	Yes	Rating: 3
Erosion or sediment control program	No	N/A
Storm water management program	Yes	City of Palm Springs Municipal Code Chapter 8.70 Storm water Management and Discharge Controls
Capital improvements plan	Yes	Five-year plan; updated annually
Economic development plan	Yes	Coachella Valley Economic Blueprint http://www.cvepblueprint.com/
Local emergency operations plan	Yes	Emergency Operations Plan, 2008
Other special plans	No	N/A
Flood Insurance Study or other engineering study for streams	Yes	FEMA Flood Insurance Study, 2005

Comprehensive General Plan for Palm Springs and adopted in 2007

The City of Palm Springs's General Plan reflects the City's long-range aspirations of physical form and amenity and provides guidance for developmental regulations, such as zoning and subdivision ordinances. The General Plan is considered a "long-term" plan since it looks 20 years or more into the future. The City's charter status provides it with greater control over its future development and administration. Listed below are five of the eight identified goals, policies, and actions listed in the City's General Plan: Safety Element. These five relate to the highest hazards in the community or provide an overview of the mitigation efforts of the City.

Seismic Safety Considerations

Goal SA1: Reduce, to the greatest extent possible, the physical and environmental effects of seismic hazards within the City.

Policies

SA1.1 Minimize the risk to life and property through the identification of potentially hazardous areas, adherence to proper construction design criteria, and provision of hazards information to all residents and business owners.

SA1.2 Require geologic and geotechnical investigations in areas of potential seismic hazards such as fault rupture, seismic shaking, liquefaction, and slope failure, as part of the environmental and/or development review process for all structures, and enforce structural setbacks from faults that are identified through those investigations in accordance with the Seismic Hazards Mapping Act. Require subsurface investigations of the Garnet Hill fault if and as that area of northern Palm Springs is developed.

SA1.3 Coordinate with the National Earthquake Hazard Reduction Program of the Federal Emergency Management Agency to identify earthquake risks and available mitigation techniques.

SA1.4 Enforce the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts when citing, evaluating, and constructing new projects within the City.

SA1.5 Disallow the construction of buildings designed for human occupancy within 50 feet of an active fault and prevent new critical, sensitive, and high-occupancy facilities from being located within 100 feet of a potentially active fault.

SA1.6 Maintain a strong, enforceable ordinance for upgrading unreinforced masonry buildings that is tailored to the local conditions in the City of Palm Springs.

SA1.7 Require that engineered slopes be designed to resist earthquake-induced failure.

SA1.8 Require that lifelines crossing a fault be designed to resist damage in the occurrence of fault rupture.

SA1.9 Require removal or rehabilitation of hazardous or substandard structures that may collapse in the event of an earthquake, in accordance with the Unreinforced Masonry Law and other applicable regulations.

SA1.10 Designate, where appropriate, hazard zones (earthquake fault lines, floodways and floodplains, steep or unstable slopes, areas susceptible to rock falls and landslides, etc.) as open space, and these areas on the land use map.

SA1.11 Encourage and cooperate with Caltrans to stabilize susceptible slopes and strengthen bridges, elevated roadways, and other structures along state highways, which may be subject to failure during major seismic events, thereby isolating portions of the community from emergency aid and assistance.

SA1.12 Ensure that the highest and most current professional standards for seismic design are used in the design of Critical, Sensitive, and High-Occupancy facilities such as water tanks, dams, levees, and hospitals.

SA1.13 Require liquefaction-assessment studies in those areas identified as being susceptible to liquefaction.

SA1.14 Include liquefaction-mitigation measures in the construction of bridges, roadways, major utility lines, or park improvements in potentially liquefiable areas, such as the Whitewater riverbed or at the mouths of canyons.

SA1.15 Determine the areas potentially subject to flooding in the event of a rupture of flood-control facilities in the Palm Springs area due to earthquake activity, especially where such facilities cross or are near active faults.

Actions

SA1.1 Prepare a detailed geotechnical analysis for new construction and significant alterations to structures located in areas identified as being subject to slope failure, rock falls, or landslides.

SA1.2 Participate with surrounding communities and applicable state and federal agencies to establish and maintain maps illustrating the location of seismic and geological hazard zones occurring within the City boundaries and sphere of influence.

SA1.3 Initiate an educational public outreach program in coordination with local utility companies, the Coachella Valley Water District, the Desert Water Agency, the Palm Springs Unified School District, police and fire departments, and others outlining appropriate action before, during, and after earthquakes and other disasters.

SA1.4 Keep the City's public awareness programs on natural-disaster management and emergency preparedness up-to-date on current hazards and issues and seek public participation in the development of hazard mitigation and disaster recovery programs.

Geologic Safety Considerations

GOAL SA2: Reduce, to the greatest extent possible, the physical and environmental effects of geologic hazards within the City.

Policies

SA2.1 Minimize grading and otherwise changing the natural topography to protect public safety and reduce the potential for property damage as a result of geologic hazards.

SA2.2 Require geologic and geotechnical investigations in areas of potential geologic hazards as part of the environmental and/or development review process for all structures.

SA2.3 Limit the development of permanent slopes to the inclinations permitted by building codes.

SA2.4 Analyze the stability of large temporary slopes prior to construction, and provide mitigation measures as needed.

SA2.5 In the areas of Palm Springs susceptible to slope instability, require geotechnical investigations that include engineering analyses of slope stability, surface and subsurface drainage specifications, and detailed recommendations for fill placement and excavation.

SA2.6 Prohibit the reconstruction of structures meant for human habitation that are damaged or destroyed by failed slopes unless the applicant can prove that the remedial measures proposed will improve slope conditions and make the site suitable for redevelopment.

SA2.7 Conduct a focused assessment of the effect of debris flow hazards on individual structures located or planned in vulnerable positions, including canyon areas, the toes of steep, natural slopes, and the mouths of drainage channels.

SA2.8 Require that new construction and significant alterations to structures located within potential landslide areas be evaluated for site stability, including the potential impact to other properties, during project design and review.

SA2.9 In areas susceptible to rock falls or landslides, erect protective devices such as barriers, rock fences, retaining structures, or catchment areas.

SA2.10 Participate in regional programs designed to protect groundwater resources and the regional groundwater basin from the hazard of regional ground subsidence.

SA2.11 Protect slopes from the effects of erosion by directing surface water away from slope faces and planting slopes with drought-resistant, ground-covering vegetation.

SA2.12 Adequately set back developments that are adjacent to natural drainage channels to protect them from eroding channel banks, or modify the channel to reduce the potential impacts created by erosion.

SA2.13 Prohibit the construction of hilltop homes or structures above natural slopes at the head of steep drainage channels or gullies.

SA2.14 Ensure the protection of structures placed near the bases of slopes or the mouths of small canyons, swales, washes, and gullies from sedimentation.

SA2.15 Protect slopes within developed areas from concentrated water flow over the tops of the slopes by the use of berms or walls. Engineer all ridge-top building pads to direct drainage away from slopes.

SA2.16 Provide protection for roadways and utility lines from erosion and sedimentation.

SA2.17 Encourage the incorporation of wind barriers, architectural design or features, and drought-resistant ground coverage in new development site designs to mitigate the impacts from erosion and windblown sand.

Actions

SA2.1 Establish and maintain maps illustrating the location of geologic hazard zones occurring within the City boundaries and sphere of influence in coordination with the California Division of Mines and Geology and the United States Geological Survey (USGS).

SA2.2 Initiate a public education program that focuses on reducing losses from geologic hazards, including the importance of proper irrigation practices and the care and maintenance of slopes and drainage devices.

SA2.3 The City Engineer shall conduct regular inspection of grading operations to maximize site safety and compatibility with community character.

SA2.4 Develop and implement a groundwater monitoring program to combat ground subsidence as a result of groundwater withdrawal.

SA2.5 Establish ordinances and guidelines to reduce the hazards from windblown sand and dust.

Flood and Dam Indentation Hazards

GOAL SA3: Reduce, to the greatest extent possible, the risk to life, property, and essential facilities from flooding and other hydrological hazards within the City.

Policies

SA3.1 Provide appropriate land use regulations and site-development standards for areas subject to flooding.

SA3.2 Evaluate all development proposals located in areas that are subject to flooding to minimize the exposure of life and property to potential flood risks.

SA3.3 Require that future planning for new development consider the impact on flooding potential as well as the impact of flood control structures on the environment, both locally and regionally.

SA3.4 Continue to work with the Federal Emergency Management Agency, Riverside County Flood Control and Water Conservation District, the Coachella Valley Water District, and the United States Army Corps of Engineers to receive and implement updated flood-control measures and information.

SA3.5 The City shall provide drainage controls and improvements that enhance local conditions and are consistent with and complement the Regional Master Drainage Plan and ensure that updated and effective Master Drainage Plans are implemented in a timely fashion.

SA3.6 The City shall establish Area Drainage Plans for purposes of funding needed drainage improvements benefiting defined tributary areas of the community.

SA3.7 Provide direction and guidelines for the development of on-site storm water retention facilities consistent with local and regional drainage plans and community design standards.

SA3.8 Implement the regulations of the City of Palm Springs Flood Damage Prevention Ordinance (Sections 93.17.00 et seq.) to minimize public and private losses for properties within 100-year flood zone areas.

SA3.9 Continue to utilize the Emergency Announcement System to implement flood warnings and evacuation plans for those portions of the 100- and 500-year flood zones that have already been inhabited or developed and for critical facilities such as schools.

SA3.10 Apply for mitigation funding for design and construction to ensure emergency evacuation routes are constructed to appropriate all-weather standards.

SA3.11 Design underground storm drains serving local neighborhoods to accommodate runoff from a 10-year frequency storm for conveyance to a downstream outlet and locate them in existing or proposed street rights-of-way where possible. Flows exceeding the 10-year frequency storm will be carried within public rights-of-way.

SA3.12 Design flood-control facilities so that biological impacts are minimized and locally significant habitat are either avoided or replaced.

SA3.13 Discourage the introduction of flood-control measures in the undeveloped areas of Palm Springs at the expense of environmental degradation.

SA3.14 Continue to leave existing watercourses and streams natural wherever possible by developing them as parks, nature trails, golf courses, or other types of recreation areas that could withstand inundation and provide for their enhancement as wildlife habitat.

SA3.15 In conjunction with the Coachella Valley Water District and the Riverside County Flood Control District, assure that design opportunities for enhanced open space and recreation amenities, including habitat enhancement, hiking, and equestrian trails, are fully explored and incorporated when designing and constructing channels, debris and detention basins, and other major drainage facilities, to the greatest extent practical.

SA3.16 Require the extensive landscaping of open-space areas in new development, provide the maximum permeable surface area to reduce site runoff, and prohibit unnecessary paving.

SA3.17 Continue to participate in the National Flood Insurance Program.

Actions

SA3.1 With assistance from the Coachella Valley Water District and the Riverside County Flood Control and Water Conservation District, develop and continually update a Regional Master Drainage Plan for the City, providing these entities with land use and other relevant data and information.

SA3.2 Establish and/or update local regulations and guidelines to direct the management of runoff and provide for local drainage facilities that tie into and maximize the effective use of regional drainage facilities.

SA3.3 Adopt or update local drainage policies and development standards that reduce the rate of runoff from developed lands that is consistent with capacities of public facilities and local and regional management plans, while providing opportunities for open space enhancement and multi-use.

SA3.5 Inspect bridges before and after a flood event to determine whether or not there is scouring damage that could impact their foundations.

SA3.6 Investigate the feasibility for additional all-weather crossings of the major drainage channels: e.g., Indian Canyon Drive, Gene Autry Trail, and Vista Chino across the Whitewater River.

SA3.7 With assistance from the Coachella Valley Water District, file the appropriate FEMA application materials and secure amendments to Flood Insurance Rate Maps as improvements are made to flood-control facilities or as changes in property elevations occur that warrant such considerations.

SA3.8 Develop a public outreach program to inform property owners about the potential for flooding in their area, including potential flooding of access routes to and from their neighborhoods.

Wildland Fire

GOAL SA4: Protect the lives and property of residents, business owners, and visitors from the hazards of urban and wildland fires.

Policies

SA4.1 Assess the need for greenbelts, fuel breaks, fuel reduction, and buffer zones around existing and newly proposed communities to minimize potential losses created by fires.

SA4.2 Support brush removal and weed abatement in developed areas to minimize fire risk, and coordinate with the Riverside County Fire Department Hazard Reduction Office regarding jurisdictional issues relating to brush removal.

SA4.3 Continue to classify areas of varying fire-hazard severity based upon the proximity to open wildland slope, grades, accessibility, water supply, and building construction features.

SA4.4 Require property owners adjacent to wildland areas to maintain a defensible space around structures that is free from dry brush and other flammable materials and to comply with the 100′ Defensible Space Requirement in the Public Resources Code (PRC 4291) and Government Code (GC 51182) for fuel modification to reduce fire danger.

SA4.5 Continue to conduct long-range fire safety planning, including enforcement of stringent building, fire, subdivision, and other Municipal Code standards; improved infrastructure; and mutual-aid agreements with other public agencies and the private sector.

SA4.6 Continue to refine procedures and processes to minimize the risk of fire hazards by requiring new and existing development to:

- Utilize fire-resistant building materials
- Incorporate fire sprinklers as appropriate
- Incorporate defensible-space requirements
- Comply with Riverside County Fuel Modification Guidelines

- Provide Fire Protection Plans

- Develop fuel modification in naturalized canyons and hills to protect life and property from wildland fires, yet leave as much of the surrounding natural vegetation as possible; and

- Use selective trimming and obtain permits when necessary in designated areas to preserve environmentally sensitive native plants.

SA4.7 Encourage owners of non-sprinkler properties, especially midrise structures and high-occupancy structures, to retrofit their buildings and include internal fire sprinklers.

SA4.8 Ensure that public and private water distribution and supply facilities have adequate capacity and reliability to supply both every day and emergency firefighting needs.

SA4.9 Utilize reservoirs, tanks, and wells for emergency fire suppression water sources.

SA4.10 Ensure that fuel modification and controlled fire burns are consistent with any adopted habitat-conservation plans.

SA4.11 Ensure adequate firefighting resources are available to meet the demands of new development, including the construction of midrise structures, by ensuring that:

- Response times do not exceed desired levels of service

- Fire-flow engine requirements are consistent with Insurance Service Office (ISO) recommendations

- The heights of truck ladders and other equipment are sufficient to protect multiple types of structures.

SA4.12 As areas of the City and its sphere of influence are developed, construction of new fire stations should be considered so that the Fire Department can continue to respond to any emergency call within six minutes of receiving the call at dispatch.

SA4.13 Continue public education efforts to inform residents, business owners, and visitors of fire hazards and measures to minimize the damage caused by fires to life and property.

Actions

SA4.1 Evaluate the adequacy of access routes to and from fire hazard areas relative to the degree of development or use (e.g., road width, road type, length of dead-end roads, etc.).

SA4.2 Develop education and mitigation strategies that focus on the enhanced or higher hazard present in the summer and fall, when dry vegetation and hot, windy weather coexist.

SA4.3 Regularly evaluate specific fire-hazard areas and adopt reasonable safety standards, covering such elements as adequacy of nearby water supplies, routes or throughways for fire equipment, clarity of addresses and street signs, and maintenance.

SA4.4 Form a task force to review the adequacy of the City's water-storage capacity and distribution network in the event of an earthquake. Redundant systems should be considered and implemented in those areas of the City where ground failure could result in breaks to both the water and gas mains, with the potential for significant conflagrations.

Disaster Preparedness and Recovery

GOAL SA8: Reduce the risk to life, property, and essential facilities through emergency preparedness and public awareness.

Policies

SA8.1 Take measures to reduce the level of death, injury, property damage, economic and social dislocation, and disruption of vital services that would result in the event of a major disaster.

SA8.2 Ensure, to the fullest extent possible, that in the event of a major disaster, essential structures and facilities remain safe and functional.

SA8.3 Require that proposed essential, sensitive, and high-occupancy facilities undergo careful seismic review prior to any approvals and that earthquake survival and efficient post disaster functioning be a primary concern in the citing, design, and construction standards for essential facilities.

SA8.4 Encourage the local gas and water purveyors to review and retrofit their main distribution pipes, with priority given to those lines that cross or are located near the mapped traces or of the Banning and Garnet Hill faults, in order to maintain lifelines.

SA8.5 Prohibit the location of new essential, sensitive, and high-occupancy facilities within 100 feet of an active or potentially active fault, or require compensating design characteristics where fault identification is not feasible.

SA8.6 Coordinate disaster preparedness and recovery with other governmental agencies and continue to cooperate with Cathedral City, Riverside County, the State of California, and the various federal agencies to provide cooperative police and fire assistance in emergency situations.

SA8.7 Maintain effective mutual- and automatic-aid agreements for fire, police, medical response, public works, building inspection, mass care, and heavy rescue.

SA8.8 Prepare the community to respond to emergencies by conducting public outreach programs such as CERT.

SA8.9 Urge owners and managers of hotels and restaurants and other places of public assembly to maintain CPR-certified employees on their staffs.

SA8.10 Enlist the cooperation of the business community to develop its own disaster response plans and have provisions for food, water, first aid, and shelter for employees who may not be able to return home for several days following a major earthquake.

SA8.11 Formulate and maintain police, fire, evacuation, hospitalization, and recovery programs in response to a natural gas leakage and/or explosion, railroad accident, earthquake, or other similar event.

SA8.12 Plan for and facilitate the rapid and effective recovery of the City following a disaster, prevent the recurrence of specific problems and hazards encountered during a disaster, and plan for alternative sources of financing for reconstruction.

SA8.13 Establish the mitigation of hazards as a high priority for City programs, both before and after a disaster.

SA8.14 Evaluate the adequacy of access routes to and from hazard areas relative to the degree of development or use (e.g., road width, road type, length of dead-end roads) and evaluate the sufficiency of signage related to public safety and evacuation.

SA8.15 Include procedures for traffic control, emergency evacuations and housing, and security of damaged areas in all disaster response plans.

SA8.16 Evaluate new developments for their ability to provide proper police and fire protection. Project review should include, but is not limited to, adequacy of internal circulation systems and provision of project directories, street names, and numbering systems.

SA8.17 The City will continue to participate in the Master Mutual Aid Agreement for the provision of emergency fire protection services.

SA8.18 Establish a six-minute response time for the first-due engine company and an eight-minute response time for a full-alarm assignment in compliance with NFPA 1710.

SA8.19 Use percentage of completion goals as the standard for the distribution and concentration of fire crews throughout the City, as recommended in the Standards for Response Cover Deployment Analysis for the City of Palm Springs Fire Department.

SA8.20 Ensure that new development does not result in a reduction of law enforcement or fire protection services below acceptable levels.

SA8.21 Analyze the site plan layout for new projects to ensure they provide an adequate amount of defensible space around structures.

SA8.22 Continue to regulate and enforce the installation of fire protection water system standards for all new construction projects built within the City. Standards shall include the installation of fire hydrants providing adequate fire flow, fire sprinkler systems, and wet and dry on-site standpipe systems.

SA8.23 Develop an ongoing fire protection water system program that will provide adequate water supply for firefighting purposes within the City.

SA8.24 Require all new commercial and multiple-unit residential development to install fire protection systems and encourage the use of automatic sprinkler systems.

SA8.25 Require all new construction to use noncombustible roofing materials.

SA8.26 Require that all new buildings incorporate adequate egress systems into project design and encourage existing structures to upgrade existing exit systems.

SA8.27 The Fire Department should develop requirements for existing and future development occurring in wildland-urban interface areas. These requirements include, but are not limited to, the use of noncombustible (Class A) roofing materials, thermal pane or safety glass for glazing purposes, and drought- and fire-resistant landscaping.

SA8.28 Developers of property on or abutting hillsides shall implement, with consultation and approval from the City Fire Department, a safety buffer zone, otherwise known as a fuel-modification zone, between natural open space and planned development to lessen the fire hazard potential in these interface areas.

SA8.29 Ensure adequate provision of public information to residents and businesses on actions to minimize damage and facilitate recovery from a natural disaster.

SA8.30 Continue to conduct public outreach efforts to prepare the community and provide them with guidance on how to respond to natural disasters.

Actions

SA8.1 Assess existing essential and sensitive facilities with significant seismic vulnerabilities, and upgrade, relocate, or phase them out as appropriate.

SA8.2 Develop, maintain, and continually update a Citywide, coordinated, responsive, and effective emergency- and disaster-preparedness, response and implementation plan to assure a high degree of readiness to respond to and recover from daily emergencies, major catastrophes, and disastrous events.

SA8.3 Implement the Emergency Response Plan adopted by the City incorporating the following three emphases: hazard mitigation, disaster response, and self-sufficiency/mutual support of residents, business, and industry.

SA8.4 Ensure the availability of both the Safety Element and City emergency-preparedness plans to employers and residents of Palm Springs.

SA8.5 Exercise and upgrade the City's disaster responses plans and, at least annually, conduct periodic exercises to evaluate their practicality and effectiveness.

SA8.6 Conduct earthquake- and disaster-response exercises at least once a year using the adopted emergency management system.

SA8.7 Establish a standing committee for disaster recovery to provide contingency planning for the rapid and effective reconstruction of the City of Palm Springs following

a disaster. The committee shall include representatives of the City Council, Planning Commission and appropriate City staff.

SA8.8 Guidelines shall be developed by the Disaster Recovery Committee for the exercise of emergency authorities for such purposes as:

- rapid designation of redevelopment areas;
- revision of land use, circulation and parking requirements, and institution of other programs for improving the community environment;
- adoption and institution of special programs for disaster recovery;
- funding of disaster recovery measures;
- moratoria on reconstruction in any high-hazard areas where damage could be repeated in aftershocks or in future earthquakes;
- amendments to codes and ordinances;
- establishment of Geologic Hazard Abatement Districts, as appropriate; and
- designation of sites for temporary housing (e.g., travel trailers and prefabricated construction) of households made homeless in a disaster, in cooperation with the Disaster Housing Program of the Federal Emergency Management Agency.

SA8.9 Solicit state and federal funds to implement the City's disaster programs as such revenues become available.

SA8.10 The Fire Department should develop the capability to place 40 to 50 trained and equipped firefighters on scenes of major fires within 30 minutes of receipt of alarm, through the development of a reserve force, off-duty recall of firefighting personnel, and mutual aid.

SA8.11 Formulate and implement a fire safety and emergency evacuation program for multistory structures. Such a program should include zoning and building code requirements for the use of sprinklers, smoke alarms, and emergency evacuation stairways and other routes, fire-resistant building materials, architectural design elements that do not obstruct or hinder emergency access, and other pertinent components.

SA8.12 Conduct a study to identify the types of systems that can be installed in existing commercial and multifamily residential buildings where automatic sprinkler and other fire protection systems do not exist and evaluate their feasibility for implementation.

SA8.13 Train multilingual personnel to assist in evacuation and other emergency response activities to meet the community need.

6.2 ADMINISTRATIVE / TECHNICAL MITIGATION CAPABILITIES

Personnel Resources	Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	Yes	Public Works and Planning Department: Director of Planning Services Assistant Director of Public Works
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Public Works and Building Department: Director of Building and Safety, Director of Public Works, Assistant Director of Public Works, Engineering Assistant, Plans Examiner, Building Inspector
Planner/engineer/scientist with an understanding of natural hazards	Yes	Public Works and Building Department: Engineering Assistant
Personnel skilled in GIS	Yes	Public Works and Building Department: Engineering Assistant
Full time building official	Yes	Building Department: Director of Building and Safety
Floodplain manager	Yes	Public Works Department: Engineering Assistant
Emergency manager	Yes	Fire Department: Emergency Services Coordinator
Grant writer	Yes	Contract with outside consultant City Departments: Airport, Community and Economic Development, Fire, Police, Public Works, and Parks and Recreation
Other personnel	No	
GIS Data—Land use	No	
GIS Data—Links to Assessor's data	No	
Warning systems/services (Reverse 9-11)	Yes	Fire Department: All Department Personnel
Other		

6.3 FISCAL MITIGATION CAPABILITIES

City of Jurisdiction's Fiscal Mitigation Capabilities

Financial Resources	Accessible/Eligible to Use (Yes/No)	Comments
Community Development Block Grants	Yes	Must meet eligibility requirements
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	City does not provide any utility services
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	Yes	
Other- Pre-Hazard Mitigation Grants	Yes	

6.4 FUNDING OPPORTUNITIES

Please refer to Section 7.4 and Table 7.4 of the Riverside County Multi-Jurisdictional Hazard Mitigation on pages 327-336 plan for list of funding sources available.

6.5 MITIGATION OUTREACH AND PARTNERSHIPS

The City of Palm Springs Fire Department conducts Community Emergency Response Team (CERT) training twice a year. The training provides residents with the skills that they will need after a disaster to help themselves and their neighbors. To maintain the skills of those that have completed the 20-hour, monthly refreshers classes are offered.

The City of Palms Springs Fire Department has Memorandums of Understand with the following agencies:

- Master Mutual Aid System
- California Fire Assistance Agreement
- California Master Cooperative Wildland Fire Management and Stafford Act

6.6 OTHER MITIGATION EFFORTS

Other examples of mitigation measures not mentioned elsewhere in the plan are:

- The City has designated cooling centers and secondary sites if needed during a heat emergency. City Recreation Department staff would assist in staffing these sites, and the City would provide for water and other basic needs.

- Heater meals are stored in the Emergency Operations Center which will allow the City to feed key personnel for up to 72-hours after a disaster.

- The City's Airport has purchased heater meals and water storage containers to feed and water stranded passengers during a disaster.

SECTION 7.0 - MITIGATION STRATEGIES

7.1 GOALS AND OBJECTIVES

The City of Jurisdiction's mitigation goals and objectives are the following:

The City of Palm Spring's LHMP Committee selected the primary high hazards from the Local Jurisdictions Mitigation Strategies and Goals assessment and then created a detailed list of Mitigation Strategies and Goals.

- Goal 1: Flood Gates
  - Objective 1.1: Identify critical roadways that are in known flood control channels.
  - Objective 1.2: Design and install gates that can be closed to prevent the public from using specific flood control areas during a flood incident.

- Goal 2: Interoperability
  - Objective 2.1: Update the City's cellular provider contract to ensure readiness and deployable of Cellular on Wheels (COWs) after a disaster.
  - Objective 2.2: Maintain participation the radio MOUs within the Coachella Valley to ensure a common radio operational frequency after a disaster
  - Objective 2.3: Identify critical infrastructure that is required for Public Safety Answering Point (PSAP) and City's 800 MHz and Fire Department VHF radios after a disaster.

- Goal 3: Co-Generation Plant
  - Objective 3.1: In order for the City to be self-sufficient during the response and recovery phases of an incident ensure that the Primary Critical City facilities have at least two sources of obtaining electricity.
  - Objective 3.2: Create a new co-generation site.

- Objective 3.3: Identify which facilities on the list of Primary Critical Facilities do not have a back-up generator and work to identify funding sources to obtain the generators.
- Objective 3.4: Identify other electric producing sources
- Objective 3.5: Have a majority of the City buildings on electricity that is generated by the City.

❖ Goal 4: Building Codes
  - Objective 4.1: Update and enforce building codes related to public safety and welfare.
  - Objective 4.2: Maintain knowledge of upcoming and coming changes to codes based on previous disasters.

❖ Goal 5: Shelter and Disaster Assistance Centers
  - Objective 5.1: Pre-identify shelters that meet the Access and Functional Needs guidance from FEMA.
  - Objective 5.2: Leverage grants to modify facilities and obtain equipment for the shelters.
  - Objective 5.3: Develop a plan on how to open and operate a shelter.

7.2 MITIGATION ACTIONS

In the 2005 LHMP the City proposed to construct an all-weather roadway on North Indian Canyon Way between Interstate 10 and Tramview Road. The City has received the first one million of the project from the California Department of Transportation to begin the engineer design and environmental studies of the project. The City's Public Works Department is managing the project and is working on obtaining further State and Federal funds to bring this project to completion. The mitigation strategy number is one.

7.3 ON-GOING MITIGATION STRATEGY PROGRAMS

The City of Palm Springs LHMP Committee prioritized the Emergency Operations Center (EOC) water well project as the number one priority for the City because water is one of the keys for life necessity. The other identified mitigation projects require obtaining federal and state mitigation dollar assistance due to the astronomical cost and time to completion.

Restore well water to the EOC

Issue/Background: The EOC currently has a well but the pump is not working. It was identified that the pump was burned out because the water dropped in the well. To resolve this problem at least 100 feet of additional piping needs to be added to the well. The project will involve extending the piping in the well and replacing the pump. Also, as part of this project a fill spout will be added so that potable water tanks could be filled form the well which will allow for water to be provide to other City facilities or shelter operations.

Other Alternatives: Stockpile water.

Responsible Office: Public Works Department Facilities Division

Priority (High, Medium, Low): High

Cost Estimate: $20,000

Potential Funding: City General Fund

Benefits (Avoided Losses): If this project is not completed the EOC would not be able to supply water to personnel if Desert Water Agency's infrastructure fails after a disaster.

Schedule: 12 months after is funding secured

On-Going Mitigation Strategy Programs

The City of Palm Springs has many on-going mitigation programs that help create a more disaster-resistant community. The following list highlights those programs:

- Vulnerability assessments of City facilities
- Non-structural mitigation for building contents

7.4 FUTURE MITIGATION STRATEGIES

The City of Palm Springs future mitigation strategies are the following:

- Increase literature development for the hotel/motel industries
- Continue to pursue securing funding to complete the projects identified in the Capital Improvement Plan.
- Actively pursue mitigation items listed in the General Plan

SECTION 8.0 - PLAN IMPLEMENTATION AND MAINTENANCE PROCESS

The requirement 201.6(c) (4) (i) states “The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluating, and updating the plan in a 5 years cycle.

The City of Palm Springs will monitor, evaluate, and update the plan as necessary over the next five years based on the following criteria:

- After each disaster declaration the LHMP will be evaluated to identify mitigation opportunities that can be implemented during the recovery phase. Also as part of the After Action Review determine if any of the identifiable strategies affect the LHMP and if the plan needs to be updated.
- After an incident that occurred in an area not previously identified for that type of hazard.
- The completion of a hazard mitigation project.
- If reduction in resources previously allocated to a mitigation project occurs.
- The Fire Department will be responsible for updating the LHMP based on information from the Committee.

SECTION 9.0 - INCORPORATION INTO EXISTING PLANNING MECHANISMS

The City of Palm Spring's Steering Committee reviewed and identified hazards, prioritized Capital Improvement Projects and developed the Capital Improvement Budget based upon current and future funding availability. The five year Capital Improvement Plan is reviewed, evaluated and modified when necessary annually. The CIP was presented and open for public comment via City Council meetings, website and Palm Springs Community Television Channel 17.

The City of Palm Springs has several planning mechanisms which incorporate the Local Hazard Mitigation Plan following:

- The City's General Plan incorporates the LHMP through Section 6: Safety Element.
- The Fire Department's Mission Statement
- The Fire Department's Strategic Plan: Strategic Priority Number Seven
- Land Zoning and Use Planning
- City of Palm Springs Municipal Code: Chapter 8.68 - Flood Damage Prevention Ordinance
- Fire Department ISO rating: 3
- City of Palm Springs Municipal Code Chapter 8.70 - Stormwater Management and Discharge Controls
- Adopted 2010 California Building Code on November 3, 2010 - Building Code
- Adopted Ordinance 1739 on March 12, 2008 - Flood Plain ordinance
- Emergency Operations Plan, 2008
- Comprehensive General Plan for the Palm Springs completed in 2007
- NFIP/CRS Community No. 060257
- FEMA Flood Insurance Study, 2005

The City of Palm Springs has a Safety Element in its General Plan that includes a discussion of fire, earthquake, flooding, and landslide hazards. The City also participates in the National Flood Insurance Program which aims to reduce losses through flood plan management.

See "Regulatory Mitigation Table" on page 56

SECTION 10.0 - CONTINUED PUBLIC INVOLVEMENT

After the City goes through the Scheduled Plan Maintenance Process, we will notify the public of any changes in the Local Hazard Mitigation Plan by posting a notice on the City webpage.

The City will also maintain a flyer on its website explaining what LHMP is and whom to contact if the public has questions.

APPENDIX A -

Exhibit A -1 - Jurisdiction Boundary Map

Exhibit A-2 - Public Meeting Announcements

Exhibit A-3 - Desert Water Agency Boundaries

Exhibit A-4 - Referenced Documents

Exhibit A-1 – Jurisdiction Boundary Map

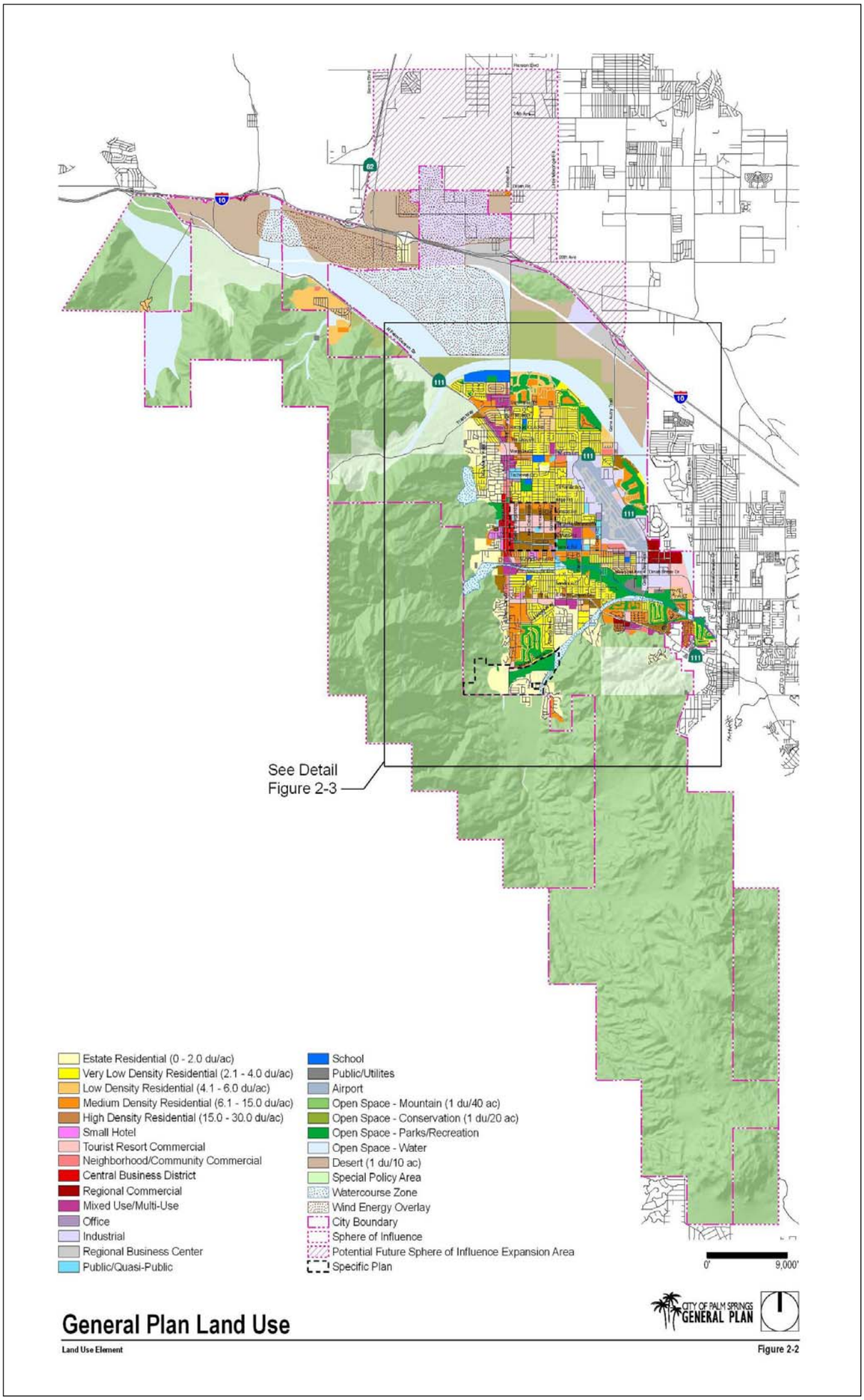


Exhibit –A-2 – Public Meeting Announcement

CITY OF PALM SPRINGS
LOCAL HAZARD MITIGATION PLAN

City of Palm Springs is in the process of updating their Local Hazard Mitigation Plan (LHMP). The LHMP is updated every five years, as defined in the Stafford Act, to continually identify hazards within the City and ways to mitigate those hazards.

What is Mitigation Planning?
Mitigation planning is a process through which communities assess risks and identify actions to reduce vulnerability to hazards through hazard mitigation.

What is a Mitigation Plan?
A Mitigation Plan is a community-driven, living document that helps the City to reduce their vulnerability to hazards.

Why assess and plan for risk?
The plan and its process show the link between land-use decisions and vulnerability. It serves as a tool to be used by planners or other officials to advise and inform decision makers.

What is the Stafford Act?
The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for State, local, and Indian Tribal governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning.

Why have a Mitigation Plan?
The City must have a plan to apply for or receive federal grants to mitigate identified hazards . These grants can augment local mitigation activities already being done. Ultimately, these actions reduce vulnerability, and the City is able to recover more quickly from disasters.

How does it affect the residents and business of the City?
For citizens with flood insurance the hazard mitigation plan in combination with the Community Rating System (CRS) plan establishes the level of discount that is applied to the rate premium.

Comments can be sent to the City by one of the following methods:

Palm Springs Fire Dept
300 N El Cielo
Palm Springs, Ca 92262

Email: Anjila.lebsock@palmsprings-ca.gov
Phone: 760-323-8185

Exhibit –A-2 – Public Meeting Announcement (Continued)

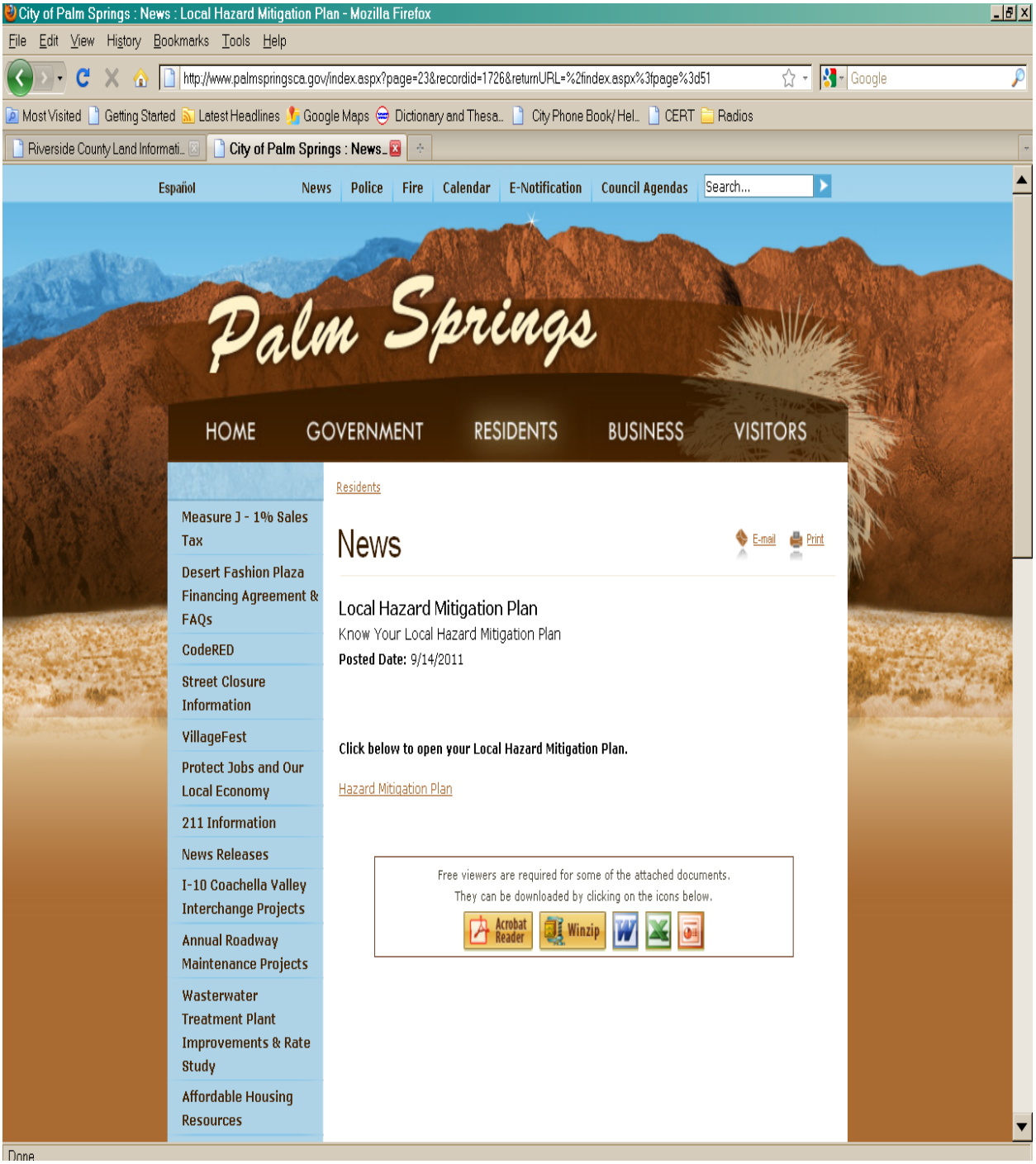


Exhibit A-3 – Desert Water Agency Service Boundaries

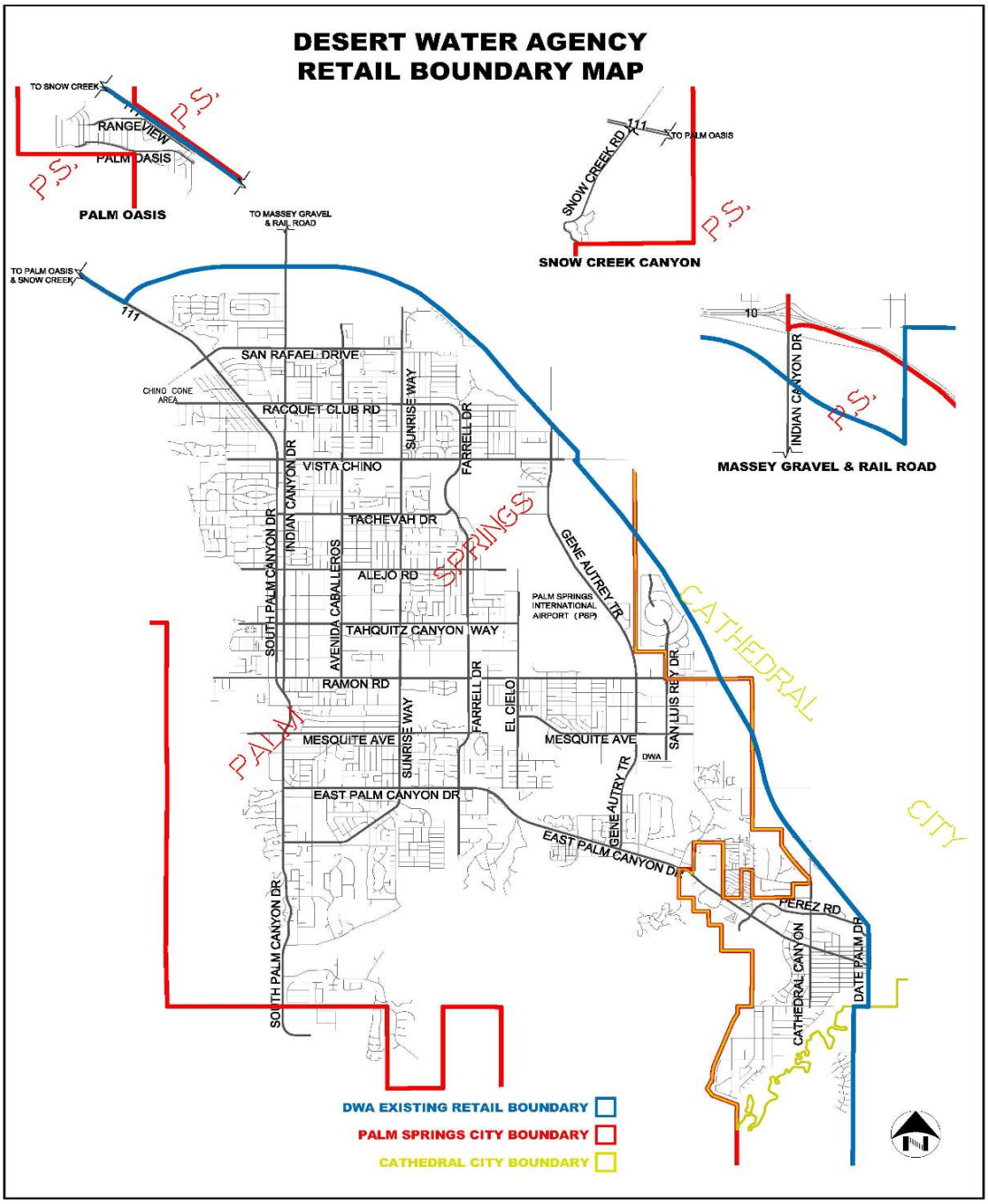


Exhibit A-4 – Reference Documents

"Desert Water Agency Service Boundaries." *Desert Water Agency.* Web 14 October 2011. <http://www.dwa.org/index.php?option=com_content&view=article&id=49&Itemid=37>

"City of Palm Springs Convention Center." *City of Palm Springs Convention Center.* Web 14 October 2011. <http://www.palmspringscc.com/cn/page/meeting-planner/12784.

"City of Palm Springs: General Plan." *City of Palm Springs: General Plan*. Web. 17 Oct. 2011. <http://www.ci.palm-springs.ca.us/index.aspx?page=558>.

City of Palm Springs Insurance Summary by Building dated 10/31/2008.

"California Fire: Fire Hazard Mapping." "California Fire. Web 12 October 2011. <http://www.fire.ca.gov/fire_prevention/fhsz_maps/fhsz_maps_riverside_city_maps.php >

APPENDIX B - PROJECT UPDATES

SEE ATTACHMENT

DEVELOPMENT PROJECTS UPDATE - OCTOBER

(This Report is current through September 30, 2012)

DEPARTMENT OF PLANNING SERVICES
TEL: 760-323-8245

Report online at
www.palmspringsca.gov in the Planning Services Department section
under Project Status

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
1	3.3079 MAJ	5.0792	COMMERCIAL BUILDING	63700 19th AVENUE WEST OF INDIAN AVENUE Construction of a 7,742 square foot building on a 93,499 square foot site fronting 19th Avenue west of Indian Avenue; an outside storage yard of about 57,328 square feet is included in the overall site area. *Commercial/Industrial*	On Hold	Frederick Noble	(760)836-9073	Planning Services
2	5.1112 PD 328	TTM 32736	MOUNTAIN TERRACES AT THE LEGENDS	34TH AVENUE & MESQUITE AVENUE EAST To establish a site plan, design standards, and guidelines for a 41-cluster condominium project with private streets. *Residential*	Approved; On Hold	Marshall Ininns	(949)376-1794	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
3	5.0845 FIN PD A	5.0845 PD 262	THE ESTANCIAS	0500 ACANTO DRIVE An amendment to Final PD 262 for the construction of single family homes on 15 lots within the 48-lot Estancias Subdivision. *Residential*	Under Construction	Janisch Allen Berkson Brian	(949)224-1970	David Newell
4	5.1132 PD 333	TTM 35236 3.3002 MAJ	MONDRIAN HOTEL / OASI GROUP	0450 - 0456 AMADO ROAD AT CALLE ALVARADO Development of a full-service hotel (including 200 guestrooms, meeting space, restaurant, bar, deli, retail, spa, fitness facilities) and condominiums to be built in three phases on 10.48 acres of leased land. *Hotel*	Approved; On Hold	Lauri Kibby	(310)877-3110	Edward Robertson
5	3.3075 MAJ	7.1254 AMM	WAREHOUSE	3443 ANZA ROAD Construction of a manufactured steel building with steel exterior siding for warehousing and long term automobile storage. *Commercial/Industrial*	On Hold	Nevrig Mazmanian	(760)327-3610	Planning Services
6	5.0975 CUP	6.473 VAR	HAPPY VALLEY LLC / MARQUIS TIMESHARES	0444 ARENAS ROAD EAST Eighty-six (86) vacation ownership units, pool, spas, and underground parking on 1.8 acres between East Arenas Road, East Tahquitz Canyon Way, Calle El Segundo, and Calle Encilia. *Hotel/Mixed Use*	On Hold	Happy Valley LLC	(702)734-2400	Planning Services

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
7	5.1162 GPA	5.1162 PD 342	PALM MOUNTAIN RESORT	0155 BELARDO ROAD SOUTH A General Plan amendment requesting an increase in density to 70 units per acre for the existing 55 year old 120 room Palm Mountain Resort Hotel into a renovated 194-room two and three-level hotel on 2.80 acres (120,537 square feet). *Hotel*	Approved by City Council; On Hold	William McWethy	(858)481-2476	Edward Robertson
8	5.1085 CUP	TTM 34019	PALI HOUSE FORMERLY THE ORCHID TREE INN	0261 BELARDO ROAD SOUTH The subdivision of one large parcel to develop 34 residential condominiums, one commercial condo unit for a nine-room hotel, and one commercial condo unit for a bar as accessory use to the hotel. *Hotel/Mixed Use*	On Hold	Richard Weintraub	(310)457-8970	Planning Services
9	5.1108 PD 326	TTM 34580	THE EDGE AT BELARDO	1501 & 1601 BELARDO ROAD SOUTH A Planned Development and subdivision of 6.9+ acres for 68 contemporary two-story townhomes with a three-story 500 square foot option or a roof terrace above the second floor. *Residential*	Approved; On Hold	Michael Braun	(760)325-3321	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
10	5.0881 PD 269	TTM 30046	MONTE SERENO	1040 BOGERT TRAIL A gated, 89-unit, single-family subdivision on 50.49 acres at Bogert Trail and the Palm Canyon wash. *Residential*	Construction in Progress	Tom Hill	(760)200-9290	Planning Services
11	5.0881 PD AMN	TTM 30046	MONTE SERENO	1040 BOGERT TRAIL An amendment to Final Planned Development 269 to allow the construction of new detached single family residences (three different prototypes proposed) on existing lots to include typical landscape plans. *Residential*	03/14/12 - Approved Planning Commission; In Plan Check	Andrew Adler	(310)286-9200	David Newell
12	5.1022 PD 305	TTM 32732	TAHITI PARTNERS - OCEO	1700 CAMINO REAL Construction of nine single-family residences, 25 attached homes, and 5,000 square feet for a restaurant bistro. *Residential*	Construction in Progress	Geoffrey Payne	(562)433-1286	Planning Services
13	31095 TTM		BOULDERS	CHINO CANYON WEST AND PANORAMA ROAD A subdivision of 30.4 acres into 45 single-family residential lots at West Chino Canyon and Panorama Road. *Residential*	Approved; On Hold	John Wessman	760-325-3050	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
14	5.1211 ZTA		CITY OF PALM SPRINGS	CITY WIDE A Zone Text Amendment to establish policies and standards relating to outdoor accessory uses and religious institutions. *Commercial/Services*	Pending City Council Review	Craig Ewing	(760)323-8245	Craig A. Ewing
15	5.1262 ZTA		CITY OF PALM SPRINGS	CITY WIDE Zone Text Amendment to consider adding tattooing, body piercing, tobacco sales and fortune telling as permitted uses in the Central Business District (CBD) Zone. *City Wide*	In Process	Ken Lyon	(760)323-8245	Ken Lyon
16	5.1265 ZTA		CITY OF PALM SPRINGS	CITY WIDE A Zone Text Amendment to establish definitions and regulations for substance abuse recovery treatment centers. *City Wide*	07/11/12 - Pending Planning Commission Review	Ken Lyon	(760)323-8245	Ken Lyon
17	5.1271 ZTA		CITY OF PALM SPRINGS	CITY WIDE Application by the City of Palm Springs to amend the Palm Springs Zoning Code to amend sign regulations related to temporary banners, digital signs and for lease signs. *City Wide*	Pending Planning Commission Review	Craig Ewing	(760)323-8245	Craig A. Ewing

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
18	5.1273 ZTA		CITY OF PALM SPRINGS	CITY WIDE Initiation of an Amendment to Chapter 94.02.01D.3, 94.06.01B.2, and 94.04.0.E.2 of the Palm Springs Zoning Code to allow the Director of Planning Services the option of referring to the Planning Commission applications for Land Use Permits, Minor Architectural Approvals and Administrative Minor Modifications. *City Wide*	09/05/12 - Approved City Council	Craig A. Ewing	(760)323-8245	Craig A. Ewing
19	5.1287		CITY OF PALM SPRINGS	CITY WIDE Conversion of Zoning Map to GIS (Graphic Information Systems) format. *City Wide*	Pending Initial Review	Ken Lyon	(760)323-8245	Ken Lyon
20	5.1221 ZTA		CITY OF PALM SPRINGS	CITY-WIDE Initiation of a Zone Text Amendment - Second Unit/Granny Flats for Single Family Residential Zones. *Residential*	Pending City Council Review	David Newell	(760)323-8245	David Newell
21	5.1222 ZTA		CITY OF PALM SPRINGS	CITY-WIDE Initiation of a Zone Text Amendment - Hillside Ordinance. *Residential*	Pending City Council Review	Craig Ewing	(760)323-8245	Craig A. Ewing

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
22	5.1225 ZTA		CITY OF PALM SPRINGS	CITY-WIDE Amend the Palm Springs Zoning Code relating to the definition and measurement of building heights. *Residential*	Pending City Council Review	Craig Ewing	(760)323-8245	Craig A. Ewing
23	5.1235 ZTA		CITY OF PALM SPRINGS	CITY-WIDE Application by the City of Palm Springs to amend the Palm Springs Zoning Code related to canopies and carports. *City Wide*	Pending City Council Review	Craig Ewing	(760)323-8245	Craig A. Ewing
24	5.1240 CUP	7.1346 AMM,	PALM SPRINGS RE-POWER WIND ENERGY CENTER (FORMERLY KNOWN AS WPP93)	DILLON ROAD AND DIABLO ROAD The decommission and replacement of up to 80 existing wind turbine generators and the addition of 26 new wind turbine generators located west of Indian Canyon Drive, north of Hwy 111 and south of Interstate-10 freeway on approximately 597.1 acres. *Commercial/Industrial*	Under Construction	M. Andrew Starke	(561)304-5488	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
25	3.3430 MAJ		FREEDOM ASSEMBLY	4088 EL DORADO BOULEVARD New construction of a one-story commercial building of 3,840 square feet in size on an approximately 8,306 square foot lot at the southeast corner of Tramview Way and El Dorado Boulevard and a variance request for relief from the Zoning Ordinance. *Commercial/Services*	10/08/12 - AAC recommended Restudy	Joset Roberts	(310)836-2399	David Newell
26	5.1177 PD 348		BP FUEL STORAGE & DISTRIBUTION CENTER	18600 HALLECK ROAD "Fuels, Storage & Distributiion Center" for a 6,200 square feet.storage building and distribution center for ethanol, ultra low-sulfur clean diesel, bio-fuels and gasoline. Needs EIR, traffic study, and hydrology study. *Commercial/Industrial*	Approved; On Hold	Bryan Gorrell	(714)228-6802	Edward Robertson
27	3.0638 MAJ	7.1376 AMM	BAGERDJIAN RESIDENCE	1699 HILLVIEW COVE Proposal for an addition and remodel to the existing single family residence per submitted plans and a request for setback reduction for sideyard setback and to increase building height to 28.5 feet for the construction of a tennis pavilion and shade structure. *Residential*	In Process	Haig Bagerdjian	(818)783-2915	Glenn Mlaker

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
28	5.1012 PD 300	TTM 31104	SPANISH INN HOTEL & VILLA	0640 INDIAN CANYON DRIVE NORTH Proposal for major expansion with underground parking. Conversion of 12 existing units to condominiums, and construction of 8 additional units. Under consideration for historic designation. *Hotel/Mixed Use*	On Hold	Nejat Kohan	(760)325-3700	Planning Services
29	5.1052 PD 313-B	TTM 33334	PALM SPRINGS RACQUET CLUB	2743 INDIAN CANYON DRIVE NORTH Request for the re-approval of TTM 33334 and 5.1052 PD 313 which allowed for the construction of 63 townhouses and loft bid condominiums in addition to the remodeling of existing historic structures: 1 home, 7 bungalows, and a high-end restaurant. *Residential*	Approved; On Hold	James I Hunter	(510)337-7999	Edward Robertson
30	5.1257 CUP		COD / WEST VALLEY CAMPUS GREEN PARK PV SOLAR ARRAY FACILITY	4201 INDIAN CANYON DRIVE NORTH Proposed development of a 10 megawatt solar photovoltaic (PV) array, power conditioning and transmission equipment, on 60+/- acres of the western portion of the College of the Desert, West Valley Campus. *Community Projects*	Awaiting Plan Check	Edwin Deas	(760)773-2592	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE		STATUS	APPFIRST APPLAST	APPTEL	PLANNER
31	5.1252 CUP AM		GARNET SOLAR POWER GENERATION STATION 1	5400	INDIAN CANYON DRIVE NORTH	Pending Initial Review	Eric Cantrell	(951)541-0887	David Newell
				An amendment for the development and operation of a 5.0MW solar power plant consisting of 17,000 photovoltaic panels mounted on single axis tracking equipment on approximately 39.7 acres of a 134.3-acre project site. *Commercial/Industrial*					
32	5.1268 CUP	6.525 VAR	WKN WAGNER WIND PROJECT	18510	KAREN AVENUE	Approved	Eric Johnston	(858)450-6800	Edward Robertson
				A request for a Conditional Use Permit proposing to install two turbines and one meteorological tower and related electrical infrastructure on a portion of APN 666-330-001 and APN 666-320-026 and a variance request to increase the maximum height of the two turbines and tower. *Commercial/Industrial*					
33	5.1285 CUP	3.3594 SFR	SKEOCH RESIDENCE / THE ESTANCIAS	3182 & 3194	LAS BRISAS WAY	Pending Planning Commission Review	Donald Skeoch	(213)256-4092	Glenn Mlaker
				A Conditional Use Permit request for the proposed construction of a single family residence with guest house on merged lots with lighted tennis court. *Residential*					

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
34	5.1202-B ZTA AMN		CITY OF PALM SPRINGS	MULTI-WIDE An application to amend the Palm Springs Zoning Code relating to portable open signs in commercial areas of the City. *Commercial/Services*	09/26/12 - Approved Planning Commission			Craig A. Ewing
35	5.1218-B ZTA	5.1218	CITY OF PALM SPRINGS	MULTI-WIDE A zoning ordinance text amendment increasing the number of medical cannabis collectives and cooperatives from three to four. *Commercial/Industrial*	06/13/12 - Planning Commission continued	Ken Lyon	(760)323-8245	Ken Lyon
36	3.3487 MAJ		LLOYD'S PEST CONTROL	19161 NEWHALL STREET Proposed construction of a 2,420 square foot industrial building per submitted plans. *Commercial/Industrial*	Under Construction	James A. Ogle III	(619)668-1953	David Newell
37	28610 TTM		STREBE CONSOLIDATED TRUST	NORTH OF TACHEVAH DRIVE A 19-lot, single-family, residential subdivision north of Tachevah Drive, beween North Avenida Caballeros and North Sunrise Way. *Residential*	Partially Complete	Evan Matzner	(760)275-7741	Planning Services

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
38	5.1283 CUP	5.1282 CUP	INTERVENTION 911	1590 PALM CANYON DRIVE EAST Request for a Conditional Use Permit to allow a substance abuse recovery center currently in a 16-unit hotel complex. *Residential*	TBD - Pending PC Review	Eric McLaughlin	(323)401-3660	Ken Lyon
39	35623 TTM	5.1135 PD 334	RAINBOW VISION PALM SPRINGS	4401 PALM CANYON DRIVE EAST A proposed condominium map for the development of approximately 13.28 acres for a campus-style resort/ retirement community of 184 for-sale condominiums with the availability of home healthcare service provision through a third party provider, along with resort-style hospitality services and amenities. *Hotel/Mixed Use*	On Hold	Joy Silver	(505)474-9696	Edward Robertson
40	5.0943 CZ	5.1004 PD 297	RIMROCK VILLAGE	5001 PALM CANYON DRIVE EAST A Change-of-Zone from UR to R-2, General Plan Amendment, the subdivison of 18.2 acres, and a Planned Development District for 105 single-family, cluster-type residences in a gated community. *Residential*	On Hold	John Wessman	(760)325-3050	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
41	36446 TTM		DESERT FASHION PLAZA	0123 PALM CANYON DRIVE NORTH Proposal to subdivide the property into lots for future development and lots for public streets at 101 & 123 North Palm Canyon Drive. *Commercial/Services*	09/26/12 - Continued by PC indefinitely.	John Wessman	(760)325-3050	Edward Robertson
42	5.1091 PD AMN	5.1091 PD 324	PORT LAWRENCE	0400 PALM CANYON DRIVE NORTH This application is an Amendment to an existing approved PDD to change the use to a boutique hotel and retail mixed-use development. *Mixed Use*	Pending Final PD Approval	Graeme Rael	(949)250-4245	Edward Robertson
43	5.1237 PD 357	5.1237 GPA	LEGACY PALM SPRINGS	1000 PALM CANYON DRIVE NORTH Proposed re-design of project for a 114-bed assisted living facility on approximately 1.4 acres. *Residential*	Complete	Steven Tappan	(949)597-0200	Ken Lyon
44	5.1284 PD 360		ARRIVE HOTEL	1551 PALM CANYON DRIVE NORTH Project to include a 32-room LEED certified boutique hotel, 100-seat restaurant, two 560-square foot freestanding retail buildings with off-street parking. *Hotel*	10/10/12 - Approved PC pending City Council action.	Chris Pardo	(206)351-6535	Ken Lyon

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
45	3.3265 MAJ	6.508 VAR	HOWARD MUSEUM / OFFICE	2555 PALM CANYON DRIVE NORTH Proposed office (approx. 393 square feet), museum displays (approx. 1,709 square feet) and upper level storage (approx. 1,064 square feet) on an approximate 5,000 square foot lot area. *Commercial/Office*	On Hold	Robert S. Howard	(760)413-5380	Planning Services
46	33162 TTM	5.1103 CUP	132 @ PEDREGAL	2855 & 621 PALM CANYON DRIVE NORTH & TRAMWAY ROAD An application to amend the Conditions of Approval (Conditions 99 and 100 - Utility Undergrounding) for the underlying Tentative Tract Map for the subdivision of two parcels into four lots for 132 one-and two-story condominiums on 13.95+ acres with one custom-built home. *Residential*	On Hold	Dennis Cunningham	(760)320-8773	Edward Robertson
47	5.1056 PD 314	TTM 33575	THE CAMERON FORMERLY MESQUITE VILLAGE	0850 & 990 PALM CANYON DRIVE SOUTH Final application for architectural approval of mixed-use development, including 80 two-story attached townhomes, 22 live-work units, and 15,000 square feet of retail at 850 & 990 South Palm Canyon Drive. *Residential*	On Hold	David Hilliard	(310)393-8006	Edward Robertson

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
48	5.0996 PD 294	TTM 31766	CRESCENDO	1000 RACQUET CLUB ROAD WEST The subdivision and Planned Development of 42.2 acres of vacant land into 79 single-family residential lots between East Racquet Club Road, Tramway Road, and Vista Grande. *Residential*	Approved; On Hold	John Wessman	(760)325-3050	Edward Robertson
49	5.1000		VILLAGE TRADITIONS CONDOMINIUMS	0670 RAMON ROAD EAST A 104-unit townhome development on 11 acres. *Residential*	Approved; On Hold	Margaret Park	(760)325-3400	Edward Robertson
50	3.3118 MAJ		DESERT SON-SHINE PRESCHOOL & KINDERGARTEN	2022 SAHARA DRIVE The construction of a 10,694 square foot one-story pre-school and kindergarten school. *Professional*	On Hold	David Jacobs	(760)320-9533	Edward Robertson
51	5.1071 PD 318	TTM 33989	SINGLE-FAMILY RESIDENTIAL SUBDIVISION	0588 SEPULVEDA ROAD The subdivision of 0.51 acres for the construction of three single-family residences. *Residential*	On Hold	Wade Weaver	(626)695-7789	Planning Services

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
52	5.1084 GPA/CZ	32817 MAJ	SUNRISE TOWNHOMES	1515 SUNRISE WAY NORTH Proposed GPA and Change-of-Zone from P to R2 to develop 1.14 acres of vacant land into a gated, residential, 12-unit, two-story condominium project. *Residential*	On Hold	Shaida Mansoub	(818)674-9754	Planning Services
53	5.1156 PD AMN	5.1156 PD 339	HARD ROCK HOTEL	0750 TAHQUITZ CANYON WAY EAST Requesting an amendment to prior approved "Hard Rock Hotel" PD as well as architectural approval of the restaurant building at 750 East Tahquitz Canyon Way. *Hotel*	Approved; On Hold	Rob Eres	(714)546-5600	Edward Robertson
54	5.1160 PD 341 A	TPM 35989	VIVANTE PALM SPRINGS	1112 & 1122 TAHQUITZ CANYON WAY EAST An approximately 145,000-square foot mixed-use development consisting of a 132-unit senior assisted living facility, and approximately 26,120 square-feet of retail / restaurant / office space within three separate buildings and a Tentative Parcel Map (TPM 35989) request to sub-divide approximately 10 acres into three parcels. *Commercial/Retail*	Pending City Council Review on 11/07/12	Rob Eres	(714)546-5600	David Newell

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
55	5.1160-R PD 341	TPM 35989	CONVENTION CENTER COMMONS	1112 -1122 TAHQUITZ CANYON WAY EAST Proposed development of a 4-story 180-room Hyatt Place with up to 3,000 square feet meeting rooms, pool and recreational amenities; a 4-story 126-room Marriott Residence Inn with up to 3,000 square feet meeting rooms; 1- & 2-story retail buildings totaling approximately 26,000 square feet along Tahquitz Canyon Way. *Mixed Use*	On Hold	Rob Eres	(714)546-5600	Edward Robertson
56	5.1025 FINAL PD	5.1025 PD 307	TAHQUITZ PLAZA COMMERCIAL SHOPPING CENTER	TAHQUITZ CANYON WAY EAST & SUNRISE WAY NORTH Time extension request for a Final Planned Development District for a 255,250 square foot commercial shopping center on 5.86 acres to include a grocery store, shop building, and five-pad buildings along North Sunrise Way and East Tahquitz Canyon Way. *Commercial/Retail*	Approved; On Hold	Hank Gordon	(702)220-4500	Edward Robertson
57	5.1277 CUP		WHITEWATER SOLAR FARM 1, LLC	58641 TIPTON ROAD Proposal to develop 18 acres of land to generate approximately 3MW of electricity using solar panels in an array consisting of approximately 546 tables of 24 panels each table. *Commercial/Industrial*	Pending Planning Comission Review	David Allen	(951)461-7555	Ken Lyon

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
58	5.1240-B CUP	5.1240 CUP	PALM SPRINGS RE-POWER WIND ENERGY CENTER PHASE 1 (WPP3)	TIPTON ROAD NEAR HWY 111 Proposal to remove (decommission) up to 9 existing wind turbine generators and to replace with up to 3 General Electric 1.5 megawatt turbines near the intersection of Highway 111 and I-10 and is accessible via Tipton Road on approximately 108 acres. *Commercial/Industrial*	Under Construction	Ray Coulter	(561)304-5488	Edward Robertson
59	5.0609 PD 224	TTM 28587	SHADOWROCK RESORT	TRAMWAY RD. BETWEEN TRAM BASE STN./HWY 111 A Planned Development for a destination resort, including an 18-hole championship golf course, golf clubhouse, future residential lots, hotel/resort, and reservoir on a 340 acre site. *Hotel/Mixed Use*	On Hold	Mark Bragg	(760)641-9888	Planning Services
60	28495 TTM	SFR 3.2539 -	TUSCANY HEIGHTS	2201 - 2489 TUSCANY HEIGHTS DRIVE A gated, residential, subdivision on 7.8+ acres at Racquet Club Road and Milo Drive for the construction of 15 single-family homes. *Residential*	Partially Completed	Evan Matzner	(760)345-2626	Planning Services

REC#	CASE# TYPE	RELATED CASES	PROJECT NAME	ADDRESS / DESCRIPTION PROPERTY TYPE	STATUS	APPFIRST APPLAST	APPTEL	PLANNER
61	5.1035 CZ	TTM 33282	CASA VERONA	VERONA ROAD The subdivision of a 6.1 acre parcel of land into 25 lots on Verona Road between Verona Road Extension on the east and the Whitewater Country Club property on the west -- contingent on a zone change from 0-5 to R1D. *Residential*	Approved; On Hold	John Sanborn	(760)423-0600	Edward Robertson
62	28966 TTM	3.2787 MAA	PRESERVE ESTATES	0555 VIA MONTE VISTA A gated, 17-unit, single-family residential subdivision on 18.23 acres. *Residential*	Under Construction	Valari Calise	(760)320-3331	Planning Services
63	5.1282 CUP	5.1283 CUP	INTERVENTION 911	1425 VIA SOLEDAD Request for a Conditional Use Permit to allow a substance abuse recovery center in a 5 unit apartment complex. *Residential*	TBD - Pending PC Review	Eric McLaughlin	(323)932-0077	Ken Lyon

APPENDIX C - INVENTORY WORKSHEETS

SEE ATTACHMENT

Appendix C

RIVERSIDE COUNTY MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION AGENCY INVENTORY WORKSHEETS

City of Palm Springs
August 2012

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6. Local Jurisdiction Proposed Mitigation Action and Strategy Proposal	Page 16-20
7. Local Jurisdiction Development Trends	Page 22-23

Following page 23 is the attached crosswalk for your reference. This is the document Cal EMA and FEMA will be using to verify that all of the required information is in the submitted document. Please refer to the document for information. OES will be placing the page numbers in the crosswalk.

1. LOCAL JURISDICTION CONTACT INFORMATION

Agency/Jurisdiction:		Palm Springs		
Type Agency/Jurisdiction:		City		
Contact Person:	Title:	Emergency Service Coordinator		
First Name:	Anjila	Last Name:	Lebsock	
Agency Address:	Street:	300 N. El Cielo Rd.		
	City:	Palm Springs		
	State:	CA		
	Zip:	92262		
Contact Phone	760-323-8185		FAX	760-778-8430
E-mail	Anjila.lebsock@palmspringsca.gov			

Population Served	47,060	Square Miles Served	96

Does your organization have a general plan?	YES
Does your organization have a safety component to the general plan?	YES
What year was your plan last updated?	10/24/2007

Does your organization have a disaster/emergency operations plan?	YES
What year was your plan last updated?	3/1/2008
Do you have a recovery annex or section in your plan?	NO
Do you have a terrorism/WMD annex or section in your plan?	YES

2. HAZARD IDENTIFICATION QUESTIONNAIRE

DOES YOUR ORGANIZATION HAVE:	
AIRPORT IN JURISDICTION	YES
AIRPORT NEXT TO JURISDICTION	NO
DAIRY INDUSTRY	NO
POULTRY INDUSTRY	NO
CROPS/ORCHARDS	NO
DAMS IN JURISDICTION	YES
DAMS NEXT TO JURISDICTION	NO
LAKE/RESERVOIR IN JURISDICTION	NO
LAKE/RESERVOIR NEAR JURISDICTION	NO
JURISDICTION IN FLOOD PLAIN	YES
CONTROLLED FLOOD CONTROL CHANNEL	YES
UNCONTROLLED FLOOD CONTROL CHANNEL	YES
EARTHQUAKE FAULTS IN JURISDICTION	YES
EARTHQUAKE FAULTS NEXT TO JURISDICTION	YES
MOBILE HOME PARKS	YES
NON-REINFORCED FREEWAY BRIDGES	NO
NON-REINFORCED BRIDGES	NO
BRIDGES IN FLOOD PLAIN	YES
BRIDGES OVER OR ACROSS RIVER/STREAM	YES
ROADWAY CROSSING RIVER/STREAM	YES
NON REINFORCED BUILDINGS	NO
FREEWAY/MAJOR HIGHWAY IN JURISDICTION	YES
FREEWAY/MAJOR HIGHWAY NEXT TO JURISDICTION	YES
FOREST AREA IN JURISDICTION	NO
FOREST AREA NEXT TO JURISDICTION	YES
WITHIN THE 50 MILES SAN ONOFRE EVACUATION ZONE	NO
MAJOR GAS/OIL PIPELINES IN JURISDICTION	YES
MAJOR GAS/OIL PIPELINES NEXT TO JURISDICTION	YES
RAILROAD TRACKS IN JURISDICTION	YES
RAILROAD TRACKS NEXT TO JURISDICTION	YES
HAZARDOUS WASTE FACILITIES IN JURISDICTION	NO
HAZARDOUS WASTE FACILITIES NEXT TO JURISDICTION	NO
HAZARDOUS STORAGE FACILITIES IN JURISDICTION	YES
HAZARDOUS STORAGE FACILITIES NEXT TO JURISDICTION	YES
DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY	
IN A FLOOD PLAIN	YES
NEAR FLOOD PLAIN	YES
NEAR RAILROAD TRACKS	YES
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	YES
NEAR A HAZARDOUS STORAGE FACILITY	YES
NON REINFORCED BUILDINGS	NO
A MAJOR GAS/OIL PIPELINE	NO
NEAR A MAJOR GAS/OIL PIPELINE	YES
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	YES
HAVE BEEN DAMAGED BY FOREST FIRE MORE THAN ONCE	YES
HAVE BEEN IMPACTED BY A TRANSPORTATION ACCIDENT	YES
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	NO
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	YES
NEAR A HAZARDOUS STORAGE FACILITY	NO
NON REINFORCED BUILDINGS	NO
A MAJOR GAS/OIL PIPELINE	NO
NEAR A MAJOR GAS/OIL PIPELINE	NO
OTHER FACILITY INFORMATION ARE THERE LOCATIONS WITHIN YOUR JURISDICTION THAT:	
COULD BE CONSIDERED A TERRORIST TARGET	YES
COULD BE CONSIDERED A BIO-HAZARD RISK	YES

SPECIFIC HAZARDS SUMMARY

The list of pools was expanded to include Knots Soak City and the City Pool which were left off of the 2005 Hazard Mitigation Plan.

The airport was added to the Specific Hazards Summary due to the amount of fuel onsite and the potential for a transportation related incident.

The hospital was added to the list due to the volume and type of chemicals and materials contained at the facility.

The Wastewater Treatment plant was added because if water is not properly treated a biological outbreak could occur and secondly the site stores chemicals on site.

SPECIFIC HAZARDS SUMMARY				
Jurisdiction	Hazard Type	Hazard Name	In Jurisdiction ?	Adjacent to Jurisdiction?
Palm Springs	Dam	Tachevah Creek Detention Basin	Yes	No
Palm Springs	Fault	Garnet Hill Fault	Yes	No
Palm Springs	Fault	San Andreas Fault	No	Yes
Palm Springs	Flood Channel	South Palm Canyon Wash	Yes	No
Palm Springs	Flood Channel	Tahquitz Creek	Yes	No
Palm Springs	Flood Channel	Whitewater River	Yes	No
Palm Springs	Pipeline	Kinder Morgan High Pressure Liquid Petroleum	Yes	Yes
Palm Springs	Pipeline	Southern California Gas High Pressure	Yes	Yes
Palm Springs	Transportation/ Railroad Track	Union Pacific	Yes	Yes
Palm Springs	Electric Power Generation	Palm Springs City Co-Gen Plant	Yes	No
Palm Springs	Pool Chemical Storage	Leslie Pool Supplies	Yes	No
Palm Springs	Pool Chemical Storage	Superior Pool Products	Yes	No
Palm Springs	Pool Chemical Storage	City Pool	Yes	No
Palm Springs	Pool Chemical Storage	Knotts Soak City	Yes	No
Palm Springs	Chemical/ Biological	Desert Regional Medical Center Hospital	Yes	No
Palm Springs	Chemical/ Biological	Wastewater Treatment	Yes	No
Palm Springs	Chemical/ Transportation	Airport	Yes	No
Palm Springs	Dam	Tahquitz Creek Debris Basin	Yes	No

JURISDICTION VULNERABILITY WORKSHEET

The rankings on the Severity Rating table where modified from the previous Local Hazard Mitigation Plan due to changes in City operations and to reflect the types of disaster declarations between the previous plan and now. The City no longer operates a jail as such the lowest possible severity, probability and ranking were assigned to it.

The severity was increased for earthquake, flood, drought, insect infestations, severe wind event, and pipeline. Flood and severe wind were increased in severity because two disaster declarations occurred for each during the previous five year period. Insect infestation was increased due to the increase of West Nile virus mitigation efforts. Pipeline was increased because of its direct effect on a major transportation corridor into and out of the City. Earthquake was increased because of the increased fault line activity and the critical impact it would have on other critical infrastructures within the City.

Landslides, extreme weather, flood, severe wind event, nuclear accident, pandemic, and civil unrest were increased in ranking. Landslides were increased because of the potential related to earthquakes and flood events. Extreme weather was increased because this is a major factor that can compound the severity of other disasters. Flood and severe wind were increased in severity because two disaster declarations occurred for each during the previous five year period. Pandemic was increased because of the number of foreign visitors and large tourism population in the City. Civil unrest was increased in ranking due to the number of special events that are being held in the City and the increased potential for civil unrest.

Wildland fire, hazmat accidents, and terrorism decreased in ranking. Wildland fire was reduced one in the ranking due to other hazards that occurred within the five year period that has disaster declarations. Hazardous Material incidents were reduced in ranking by four and terrorism was decreased by five because other hazards had greater probability of occurrence.

JURISDICTION VULNERABILITY WORKSHEET

NAME: Hazard Mitigation Committee AGENCY: City of Palm Springs DATE September 20, 2011:

	COUNTY		LOCAL JURISDICTION		
HAZARD	**SEVERITY 0 - 4**	**PROBABILITY 0 - 4**	**SEVERITY 0 - 4**	**PROBABILITY 0 - 4**	**RANKING 1 - 20**
EARTHQUAKE	4	3	**4**	**4**	**1**
WILDLAND FIRE	3	4	**3**	**3**	**7**
FLOOD	3	3	**3**	**2**	**6**
OTHER NATURAL HAZARDS					
DROUGHT	3	3	**3**	**2**	**12**
LANDSLIDES	2	3	**2**	**1**	**14**
INSECT INFESTATION	3	4	**2**	**1**	**19**
EXTREME SUMMER/WINTER WEATHER	2	4	**2**	**4**	**4**
SEVERE WIND EVENT	3	3	**3**	**3**	**5**
AGRICULTURAL					
DISEASE/CONTAMINATION	3	4	**0**	**0**	**17**
TERRORISM	4	2	**0**	**0**	**18**
OTHER MAN-MADE					
PIPELINE	2	3	**3**	**3**	**8**
AQUEDUCT	2	3	**1**	**1**	**15**
TRANSPORTATION	2	4	**4**	**4**	**3**
POWER OUTAGE	3	4	**3**	**4**	**2**
HAZMAT ACCIDENTS	3	3	**2**	**3**	**13**
NUCLEAR ACCIDENT	4	2	**1**	**1**	**16**
TERRORISM	4	2	**4**	**2**	**9**
CIVIL UNREST	2	2	**2**	**2**	**10**
JAIL/PRISON EVENT	1	2	**0**	**0**	**20**
MEDICAL					
PANDEMIC			**1**	**1**	**11**

4. JURISDICTION MITIGATION STRATEGIES AND GOALS

Priorities were increased for literature development for the hotel/motel industries, Emergency Alert System (EAS) integration with radio notification systems, installing earthquake warning devices at critical facilities, strengthen/harden communication in a disaster, mutual aid agreements and earthquake retrofitting of mobile homes parks. Outreach through literature and increased communication before and after a disaster reduces the probability of misinformation and increases the self reliance of the individual in the critical hours after a disaster. The hotel/motel industry is extremely important to the financial health of the City. The greater prepared the industry is after a disaster, the quicker they will return to full operations, diminishing the impact on the economics of the City. Mutual aid agreements was increased because of the addition of a Countywide radio communication system and the reliance on surrounding Cities and the State Fire for resources because of the increase in number and severity of incidents. The City, through its federal funded Community Development Block Grant (CDBG) Home Repair Program has been installing gas shut-off valves to low income residents. This project is in place due to the increased severity of an incident within a mobile home park and local income area as compared to a traditional track housing subdivision and lower social economic status.

The following areas were decreased:

- Incorporate County geologist data into planning
- Evaluate pipeline seismic resiliency
- Evaluate adequacy of reservoir capacity for sprinkler systems
- Evaluate depths of aquifers/wells for adequacy during quakes
- Public education on locations of flood plains
- Evaluate depths of aquifers/wells for adequacy during quakes
- Re-examine historical flooding data for potential street re-design
- Enhanced public information
- Public education program
    - Weather reporting/alerting
    - Building protection
    - Respiration (CPR)
- Aggressive weed abatement program
- Improved notification of run away trains

Public outreach was reduced in some areas to align them at a medium status unless the outreach material had already been developed. Outreach is important but it must be addressed equally across all hazards. Pipelines and run away trains are reliant upon outside industries and regulatory industries that are not within the purview of the City. The City will aggressively relay information to the Public once it is confirmed to be factual. Depths of aquifers can be evaluated but this evaluation may not be beneficial after an earthquake due to liquefaction as such it was reduced to free up resources on a higher priority item.

Prison, evaluation of existing lift stations for adequacy, and evacuation and installation of earthquake cutoffs at reservoirs were moved to N/A. Prison evacuation was moved to N/A because the City no longer has a jail. The City has no reservoirs or lift stations and this item should have been N/A on the 2005 Mitigation Plan.

EARTHQUAKE	
H	Aggressive public education campaign in light of predictions
	Generate new literature for dissemination to:
H	◊ Government employees
M	◊ Businesses
M	◊ Hotel/motel literature
H	◊ Local radio stations for education
M	◊ Public education via utilities
H	◊ Identify/create television documentary content
	Improve the Emergency Alert System (EAS)
M	◊ Consider integration with radio notification systems
L	◊ Upgrade alerting and warning systems for hearing impaired
M	◊ Training and maintenance
H	Procure earthquake-warning devices for critical facilities
L	Reinforce emergency response facilities
L	Provide training to hospital staffs
M	Require earthquake gas shutoffs on remodels/new construction
N/A	Evaluate re-enforcing reservoir concrete bases
M	Evaluate EOCs for seismic stability
H	Install earthquake cutoffs at reservoirs
M	Install earthquake-warning devices at critical facilities
N/A	Develop a dam inundation plan for new Diamond Valley Reservoir
	Earthquake retrofitting
N/A	◊ Bridges/dams/pipelines
L	◊ Government buildings/schools
L	◊ Mobile home parks
L	Develop educational materials on structural reinforcement and home inspections **(ALREADY DEVELOPED)**
	Ensure Uniform Building Code compliance
H	◊ Update to current compliance when retrofitting
H	Insurance coverage on public facilities
H	Funding for non-structural abatement (Earthquake kits, etc.)
L	Pre - identify empty commercial space for seismic re-location
H	Electrical co-generation facilities need retrofitting/reinforcement (Palm Springs, others?)
L	Mapping of liquefaction zones
L	Incorporate County geologist data into planning
M	Backup water supplies for hospitals
L	Evaluate pipeline seismic resiliency

L	Pre-positioning of temporary response structures
M	Fire sprinkler ordinance for all structures
L	Evaluate adequacy of reservoir capacity for sprinkler systems
L	Training/standardization for contractors performing retrofitting
L	Website with mitigation/contractor/retrofitting information
N/A	◊ Links to jurisdictions
M	◊ Alerting information
M	◊ Volunteer information
L	Evaluate depths of aquifers/wells for adequacy during quakes
L	Evaluate hazmat storage regulations near faults
COMMUNICATIONS IN DISASTER ISSUES	
H	Communications Interoperability
H	Harden repeater sites
H	Continue existing interoperability project
H	Strengthen/harden
M	Relocate
H	Redundancy
H	Mobile repeaters
FLOODS	
L	Update development policies for flood plains
M	Public education on locations of flood plains
L	Develop multi-jurisdictional working group on floodplain management
M	Develop greenbelt requirements in new developments
H	Update weather pattern/flood plain maps
H	Conduct countywide study of flood barriers/channels/gates/water dispersal systems
M	Required water flow/runoff plans for new development
L	Perform GIS mapping of flood channels, etc.
H	Install vehicular crossing gates/physical barriers for road closure
M	Maintenance of storm sewers/flood channels
L	Create map of flood channels/diversions/water systems etc
H	Require digital floor plans on new non-residential construction
L	Upgrade dirt embankments to concrete
L	Conduct countywide needs study on drainage capabilities
L	Increase number of pumping stations
L	Increase sandbag distribution capacities
M	Develop pre-planned response plan for floods
M	◊ Evacuation documentation
M	◊ Re-examine historical flooding data for potential street re-design
M	Training for city/county PIOs about flood issues
M	Warning systems - ensure accurate information provided
M	◊ Publicize flood plain information

M	◊ Install warning/water level signage
M	◊ Enhanced public information
H	◊ Road closure compliance
M	◊ Shelter locations
H	◊ Pre-event communications
	Look at County requirements for neighborhood access
M	◊ Secondary means of ingress/egress
L	Vegetation restoration programs
M	Ensure critical facilities are hardened/backed up
N/A	Hardening water towers
N/A	Terrorism Surveillance - cameras at reservoirs/dams
M	Riverbed maintenance
N/A	Evaluate existing lift stations for adequacy
L	Acquisition of property for on-site retention
L	Evaluate regulations on roof drainage mechanisms
H	Erosion-resistant plants
L	Traffic light protection
M	Upkeep of diversionary devices
L	Install more turn-off valves on pipelines
L	Backup generation facilities
H	Identify swift water rescue capabilities across County
	WILDFIRES
L	Aggressive weed abatement program
L	◊ Networking of agencies for weed abatement
M	Develop strategic plan for forest management
H	Public education on wildfire defense
H	Encourage citizen surveillance and reporting
M	Identify hydrants with equipment ownership information
H	Enhanced fire fighting equipment
L	Fire spotter program/red flag program
L	◊ Expand to other utilities
L	Research on insect/pest mitigation technologies
L	Volunteer home inspection program
	Public education program
L	◊ Weather reporting/alerting
L	◊ Building protection
L	◊ Respiration (CPR)
H	Pre-identify shelters/recovery centers/other resources
H	Roofing materials/defensive spacing regulations
N/A	Community task forces for planning and education
N/A	Fuel/dead tree removal

H	Strategic pre-placement of fire fighting equipment
M	Establish FEMA coordination processes based on ICS
L	Brush clearings around repeaters
M	Research new technologies for identifying/tracking fires
H	Procure/deploy backup communications equipments
N/A	"Red Tag" homes in advance of event
N/A	Provide fire-resistant gel to homeowners
N/A	Involve insurance agencies in mitigation programs
N/A	Clear out abandoned vehicles from oases
H	Code enforcement
H	Codes prohibiting fireworks
H	Fuel modification/removal
H	Evaluate building codes
N/A	Maintaining catch basins
	OTHER HAZARDS
L	Improve pipeline maintenance
M	Wetlands mosquito mitigation (West Nile Virus)
L	Insect control study
N/A	Increase County Vector Control capacities
	General public drought awareness
L	◊ Lawn watering rotation
L	Develop County drought plan
L	Mitigation of landslide-prone areas
L	Develop winter storm sheltering plan
L	Ease permitting process for building transmission lines
M	Evaluate restrictions on dust/dirt/generating activities during wind seasons
N/A	Rotational crop planning/soil stabilization
N/A	Enhance agricultural checkpoint enforcement
N/A	Agriculture - funding of detection programs
H	Communications of pipeline maps (based on need to know)
L	Improved notification plan on runaway trains
H	Improve/maintain blackout notification plan.
M	Support business continuity planning for utility outages
	Terrorism training/equipment for first responders
H	◊ Terrorism planning/coordination
M	◊ Staffing for terrorism mitigation
N/A	Create a SONGS regional planning group
M	◊ Include dirty bomb planning
H	Cooling stations - MOUs in place
M	Fire Ant eradication program
L	White Fly infestation abatement/eradication program

H	Develop plan for supplemental water sources
M	Public education on low water landscaping
N/A	Salton Sea desalinization
N/A	Establish agriculture security standards (focus on water supply)
H	ID mutual aid agreements
L	Vulnerability assessment on fiber-optic cable
N/A	Upgrade valves on California aqueduct
	Public education
M	◊ Bi-lingual signs
M	◊ Blackout information
L	Notification system for rail traffic - container contents
H	Control and release of terrorism intelligence
N/A	Develop prison evacuation plan (shelter in place?)

5. LOCAL JURISDICTION PROPOSED MITIGATION ACTION AND STRATEGY PROPOSAL

A. PROPOSAL No. 1

Jurisdiction:	City of Palm Springs
Contact:	Anjila Lebsock, Emergency Services Coordinator
Phone:	760-323-8185

MITIGATION STRATEGY INFORMATION

Proposal Name:

Construct an all weather roadway at North Indian Canyon Drive between Tramview Road and Interstate 10.

Proposal Location:

Palm Springs City (northern section)

Proposal Type

Place an "X" by the type of mitigation strategy (one or more may apply)

X	Flood and mud flow mitigation
	Fire mitigation
X	Elevation or acquisition of repetitively damaged structures or structures in high hazard areas
	Mitigation Planning (i.e. update building codes, planning develop guidelines, etc.)
	Development and implementation of mitigation education programs
	Development or improvement of warning systems
	Additional Hazard identification and analysis in support of the local hazard mitigation plan
	Drinking and/or irrigation water mitigation
	Earthquake mitigation
	Agriculture - crop related mitigation
	Agriculture - animal related mitigation
	Flood inundation/Dam failure
	Weather/Temperature event mitigation

DESCRIPTION OF THE PROPOSED MITIGATION STRATEGY

Proposal/Event History	List any previous disaster related events (dates, costs, etc.) The following financial losses have occurred: 1993 $550,000, 1996 $400,000, January 2010 $28,000, December 2010 $252,000 Indian Canyon Drive was washed away on both occasions at the Whitewater River Channel. This site has also required debris clearance projects on many other occasions when the road is closed due to water, sand and debris (most winter storms).
Description of Mitigation Goal Narrative:	Give a detailed description of the need for the proposal, any history related to the proposal. List the activities necessary for its completion in the narrative section below, including estimated timeline. (how long will it take) An interim mitigation measure is to elevate Indian Canyon Drive and add culverts underneath the road to allow water, sand, and mud to pass under not over the road. When debris crosses the road during a flooding event it erodes the roadway

rendering it unsafe and impassable. This roadway is one of the primary access roads into Northern Palm Springs and Interstate 10. The long term solution would be to build a bridge over this crossing point.

Does your jurisdiction have primary responsibility for the proposal? If not, what agency does?

Yes X No Responsible Agency: City of Palm Springs

FUNDING INFORMATION

Place an "X" by the proposed source of funding for this proposal

X Unfunded proposal - funds are not available for the proposal at this time
Local jurisdiction General Fund
Local jurisdiction Special Fund (road tax, assessment fees, etc.)
Non-FEMA Hazard Mitigation Funds
X Local Hazard Mitigation Grant Funds - Future Request
Hazard Mitigation Funds

Yes Has your jurisdiction evaluated this mitigation strategy to determine its cost benefits? (i.e. has the cost of the mitigation proposal been determined to be beneficial in relationship to the potential damage or loss using the attached Cost/Benefit Analysis Sheet or another internal method)

B. PROPOSAL No. 2

Jurisdiction:	City of Palm Springs
Contact:	Anjila Lebsock, Emergency Services Coordinator
Phone:	760-323-8185

MITIGATION STRATEGY INFORMATION

Proposal Name:

Repair the well at the primary Emergency Operations Center.

Proposal Location:

Palm Springs (central section)

Proposal Type

Place an "X" by the type of mitigation strategy (one or more may apply)

	Flood and mud flow mitigation
	Fire mitigation
	Elevation or acquisition of repetitively damaged structures or structures in high hazard areas
	Mitigation Planning (i.e. update building codes, planning develop guidelines, etc.)
	Development and implementation of mitigation education programs
	Development or improvement of warning systems
	Additional Hazard identification and analysis in support of the local hazard mitigation plan
X	Drinking and/or irrigation water mitigation
	Earthquake mitigation
	Agriculture - crop related mitigation
	Agriculture - animal related mitigation
	Flood inundation/Dam failure
	Weather/Temperature event mitigation

DESCRIPTION OF THE PROPOSED MITIGATION STRATEGY

	List any previous disaster related events (dates, costs, etc)
Proposal/Event History	The primary EOC location was previously a bomb shelter. This EOC location includes a water well powered by a pump to supply the bomb shelter with a water source. Presently the electrical system needs to be repaired in order for the pump to work properly. In addition, connection fittings need to be installed so the fire department potable water tender can fill at this location to distribute water into the community.
Description of Mitigation Goal Narrative:	Give a detailed description of the need for the project, any history related to the project. List the activities necessary for its completion in the narrative section below.
	Water is vital in the event of a major earthquake or other disaster that destroys the water infrastructure system. During a major emergency or disaster stored water supplies will be quickly consumed. Repairs are needed to the electrical system and the piping needs to be extended further into the water table to prevent the pump from burning out. Also, an outside connection for fire department access needs to be added

Does your jurisdiction have primary responsibility for the project? If not, what agency does?

Yes X No Responsible Agency: City of Palm Springs

FUNDING INFORMATION

Place an "X" by the proposed source of funding for this project

X Unfunded project - funds are not available for the project at this time

X Local jurisdiction General Fund

Local jurisdiction Special Fund (road tax, assessment fees, etc.)

Non-FEMA Hazard Mitigation Funds

Local Hazard Mitigation Grant Funds - Future Request

Hazard Mitigation Funds

Yes Has your jurisdiction evaluated this mitigation strategy to determine it's cost benefits? (i.e. has the cost of the mitigation proposal been determined to be beneficial in relationship to the potential damage or loss using the attached Cost/Benefit Analysis Sheet or another internal method)

C. PROPOSAL No. 3

Jurisdiction:	City of Palm Springs
Contact:	Anjila Lebsock, Emergency Services Coordinator
Phone:	760-323-8185

MITIGATION STRATEGY INFORMATION

Proposal Name:

Construct an all weather road way on Vista Chino were it crosses the Whitewater Wash.

Proposal Location:

Palm Springs (northern section)

Proposal Type

Place an "X" by the type of mitigation strategy (one or more may apply)

X	Flood and mud flow mitigation
	Fire mitigation
X	Elevation or acquisition of repetitively damaged structures or structures in high hazard areas
	Mitigation Planning (i.e. update building codes, planning develop guidelines, etc.)
	Development and implementation of mitigation education programs
	Development or improvement of warning systems
	Additional Hazard identification and analysis in support of the local hazard mitigation plan
	Drinking and/or irrigation water mitigation
	Earthquake mitigation
	Agriculture - crop related mitigation
	Agriculture - animal related mitigation
	Flood inundation/Dam failure
	Weather/Temperature event mitigation

DESCRIPTION OF THE PROPOSED MITIGATION STRATEGY

	List any previous disaster related events (dates, costs, etc.)
Proposal/Event History	The City has sustained two losses since the last Hazard Mitigation Plan. The total costs of these two emergencies were $26,657.11.
Description of Mitigation Goal Narrative:	Give a detailed description of the need for the proposal, any history related to the proposal. List the activities necessary for its completion in the narrative section below, including estimated timeline. (how long will it take)
	Vista Chino is a low grade low water crossing of the Whitewater Wash. The City of Palm Springs has a critical need to replace this crossing with a bridge. The road floods during heavy storms leaving sand deposits that cause costly clean-up and traffic delays. Also the City has very few transportation routes that are crossable during a flooding event.

Does your jurisdiction have primary responsibility for the project? If not, what agency does?

Yes X No Responsible Agency: City of Palm Springs

FUNDING INFORMATION

Place an "X" by the proposed source of funding for this project

X Unfunded project - funds are not available for the project at this time

X Local jurisdiction General Fund

Local jurisdiction Special Fund (road tax, assessment fees, etc.)

Non-FEMA Hazard Mitigation Funds

Local Hazard Mitigation Grant Funds - Future Request

Hazard Mitigation Funds

Yes Has your jurisdiction evaluated this mitigation strategy to determine it's cost benefits? (i.e. has the cost of the mitigation proposal been determined to be beneficial in relationship to the potential damage or loss using the attached Cost/Benefit Analysis Sheet or another internal method)

6. LOCAL JURISDICTION DEVELOPMENT TRENDS QUESTIONNAIRE

LAND USE ISSUES - COMPLETE THE INFORMATION BELOW

This questionnaire identifies a comparison of specific land use issues between 2004, 2012 and 2017. The questionnaire also identifies the specific threat potential to the jurisdiction in relationship to residential and commercial structures along with critical facilities. This threat potential is focused on structural loss rather than dollar-value loss as it relates to the three main natural hazards – earthquakes, floods, and wildland fires. The determination of dollar-value loss relating to commercial and critical facilities was found to be very limited and a difficult task to establish. This issue will be addressed in future updates of the Plan.

The questionnaire also requires the jurisdiction to identify the process it will use to maintain their portion of the Plan.

LOCAL JURISDICTION DEVELOPMENT TRENDS QUESTIONNAIRE 2011

LAND USE ISSUES - COMPLETE THE INFORMATION BELOW

JURISDICTION:	**DOES YOUR AGENCY HAVE RESPONSIBILITY FOR LAND USE AND/OR DEVELOPMENT ISSUES WITHIN YOUR JURISDICTIONAL BOUNDARIES? YES NO**			
	2005 DATA	**2012 DATA**		**2017**
Current Population in Jurisdiction or Served	44,500	47,060	Projected Population in Jurisdiction or Served - in 2017	51,331
Current Sq Miles in Jurisdiction or Served	96	96	Projected Sq Miles in Jurisdiction or Served - in 2017	96
Does Your Jurisdiction have any ordinances or regulations dealing with disaster mitigation, disaster preparation, or disaster response?	YES	YES	If yes, please list ordinance or regulation number. City of Palm Springs Municipal Code: Chapter 8.86 - Flood Damage Prevention Ordinance	
What is the number one land issue your agency will face in the next five years	Earthquake and Population Growth			
Approximate Number of Homes/Apts/etc.	33,515	34,207	Projected Number of Homes/Apts/etc.- in 2017	35,600
Approximate Total Residential Value	$5 Billion	$5.8 Billion	Projected Residential Total Value - in 2017	$6.6 Billion
Approx. Number of Commercial Businesses	2,500	2,600	Projected Number of Commercial Businesses - in 2017	2,900
Approximate Percentage of Homes/Apts/etc in flood hazard zones	15% in A Zone $850 million	14% in A Zone $ 900 million	Approximate Percentage of Homes/Apts/etc in flood hazard zones - in 2017	14% in A Zone $1 billion
Approximate Percentage of Homes/Apts/etc in earthquake hazard zones	Alquist/ Priolo Zone 0%	Alquist/ Priolo Zone 0%	Approximate Percentage of Homes/Apts/etc in earthquake hazard zones - in 2017	Alquist/ Priolo Zone 0%
Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones	0% Zone 5% Urban Interface	0% Zone 10% Urban Interface	Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones - in 2017	0% 10% Urban Interface
Approximate Percentage of Commercial Businesses in flood hazard zones	2%	1%	Approximate Percentage of Commercial Businesses in flood hazard zones - in 2017	1%
Approximate Percentage of Commercial Businesses in earthquake hazard zones	1%	1%	Approximate Percentage of Commercial Businesses in earthquake hazard zones - in 2017	1%
Approximate Percentage of Commercial Businesses in wildland fire hazard zones	0%	0%	Approximate Percentage of Commercial Businesses in wildland fire hazard zones - in 2017	0%
Number of Critical Facilities in your Jurisdiction that are in flood hazard zones	0	0	Projected Number of Critical Facilities in your Jurisdiction that are in flood hazard zones - in 2017	0
Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones	0	4	Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones - in 2017	4
Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones.	0	0	Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones - in 2017	0
Does your jurisdiction plan on participating in the County's on-going plan maintenance program every two years as described in Part I of the plan?	Yes	Yes	If not, how will your jurisdiction do plan maintenance? N/A	
Will a copy of this plan be available for the various planning groups within your jurisdiction for use in future planning and budgeting purposes?				Yes

APPENDIX D - PLAN REVIEW TOOL/CROSSWALK

SEE ATTACHMENT

APPENDIX D:
LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan's strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

Jurisdiction: City of Palm Springs	**Title of Plan:** Local Hazard Mitigation Plan	**Date of Plan:** August 2012
Local Point of Contact: Anjila Lebsock	**Address:** 300 N. El Cielo Road Palm Springs, CA, 92262	
Title: Emergency Service Coordinator		
Agency: Local Jurisdiction		
Phone Number: 760-323-8185	**E-Mail:** Anjila.lebsock@palmspringsca.gov	

State Reviewer:	**Title:**	**Date:**

FEMA Reviewer:	**Title:**	**Date:**
Date Received in FEMA Region *(insert #)*		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

SECTION 1:
REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Part I – Annex Section 2.0 pp. 16-18		
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Part I – Annex Section 2.0 pp. 16-18		
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Part I – Annex Section 2.0 pp. 16-18		
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Part I – Section 6.0 pp. 56-72, Section 9.0 pp. 77		
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Part I - Section 10 pp. 77		
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Part I - Section 8-10 pp. 76-77		
ELEMENT A: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Part I – Section 3.3 pp. 19-20 and Section 4.4 -4.6 pp. 30-52		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Part I - Section 3.1 – pp. 19, Section 4.4 - 4.6 pp. 30-52		
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Part I- Section 4.4 - 4.6 pp. 30-52		
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Part I – Section 5.0 pp. 53-55		
ELEMENT B: REQUIRED REVISIONS			
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Part I - Section 6.1 pp. 56-72.		
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Part I – Section 5.0 pp. 53-55		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Part I – Section 7.0 pp. 73-74, Section 6.1 pp. 57-70		
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Part I – Section 3.4 pp. 20, Section 6.1 pp. 57-70 and Appendix B		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Appendix B, Part I- Section 7.3 pp.75 and Appendix C - Part II pp. 10-21		
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Part I - Section 9.0 pp. 77, Appendix B		
ELEMENT C: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Part I – Section 1.4-1.6 pp. 9-15,		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Part I – Section 3.0-3.4 pp. 19-20 and Section 7.2-7.3 pp. 74-75		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Part I - Section 7.2-7.3 pp. 74-75 and Appendix C – Part II pp. 10-15		
ELEMENT D: REQUIRED REVISIONS			
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Part I – Page 3 and Section 2.4 pp. 18		
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Part I – Page 3 and Section 2.4 pp. 18		
ELEMENT E: REQUIRED REVISIONS			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)			
F1.			
F2.			
ELEMENT F: REQUIRED REVISIONS			

SECTION 2:
PLAN ASSESSMENT

INSTRUCTIONS: The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

1. Plan Strengths and Opportunities for Improvement
2. Resources for Implementing Your Approved Plan

Plan Strengths and Opportunities for Improvement is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item, and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature, and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

Resources for Implementing Your Approved Plan provides a place for FEMA to offer information, data sources and general suggestions on the overall plan implementation and maintenance process. Information on other possible sources of assistance including, but not limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

How does the Plan go above and beyond minimum requirements to document the planning process with respect to:

- *Involvement of stakeholders (elected officials/decision makers, plan implementers, business owners, academic institutions, utility companies, water/sanitation districts, etc.);*
- *Involvement of Planning, Emergency Management, Public Works Departments or other planning agencies (i.e., regional planning councils);*
- *Diverse methods of participation (meetings, surveys, online, etc.); and*
- *Reflective of an open and inclusive public involvement process.*

Element B: Hazard Identification and Risk Assessment

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

1) *A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;*
2) *The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and*
3) *A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.*

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- *Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;*
- *Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);*
- *Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;*
- *Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and*
- *Identification of any data gaps that can be filled as new data became available.*

Element C: Mitigation Strategy

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- *Key problems identified in, and linkages to, the vulnerability assessment;*
- *Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;*
- *Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;*
- *An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, post-disaster actions, etc);*
- *Specific mitigation actions for each participating jurisdictions that reflects their unique risks and capabilities;*
- *Integration of mitigation actions with existing local authorities, policies, programs, and resources; and*
- *Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.*

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- *Status of previously recommended mitigation actions;*
- *Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;*
- *Documentation of annual reviews and committee involvement;*
- *Identification of a lead person to take ownership of, and champion the Plan;*
- *Reducing risks from natural hazards and serving as a guide for decisions makers as they commit resources to reducing the effects of natural hazards;*
- *An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);*
- *Discussion of how changing conditions and opportunities could impact community resilience in the long term; and*
- *Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.*

B. Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- *What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?*
- *What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?*
- *What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?*
- *Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?*
- *What mitigation actions can be funded by other Federal agencies (for example, U.S. Forest Service, National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development (HUD) Sustainable Communities, etc.) and/or state and local agencies?*

SECTION 3:
MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)

INSTRUCTIONS: For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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