

Appendix I
City of Carmel-by-the-Sea

**Table I-1
City of Carmel-by-the-Sea Estimated Population and Building Inventory**

Population	Residential Buildings		Nonresidential Buildings	
2000 Census Population Count*	Total Building Count	Total Value of Buildings ** (x\$1000)	Total Building Count	Total Value of Buildings*** (x\$1000)
4,070	420	130,813	31	16,753

Source: Monterey County (residential and commercial buildings) and U.S. Census 2000 population data.

* Population count using census blocks within the city limits.

** Tax Assessor records.

*** Tax Assessor records.

**Table I-2
City of Carmel-by-the-Sea Critical Facilities and Infrastructure**

Category	Facility	Address	Estimated Insured Structural Value (x\$1000)
Government	City Hall	Monte Verde Ave., between Ocean and 7th Ave.	6,659
Emergency Response	Police Department	Southeast corner of Junipero St. and 4 th Aves.	1,652
	Fire Department	6 th Ave. between Mission St. and San Carlos St.	619
Care	Agape of Carmel	25527 Flanders Dr.	802
Education	Junipero Serra School (Carmel Mission)	3080 Rio Road	2,440

Source: FEMA HAZUS-MH (estimated values) and Monterey County data

Table I-3
City of Carmel-by-the-Sea Potential Hazard Vulnerability Analysis – Population and Buildings

Hazard Type	Methodology	Population Number	SoVI Score	Buildings			
				Residential		Nonresidential	
				Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	1	N/A	1	197	2	466
Dam Failure	Inundation area	2	N/A	1	117	2	5
Earthquake	Extreme	0	N/A	0	0	0	0
	High	3,752	N/A	2,930	607,254	129	210,552
	Moderate	308	N/A	216	40,163	2	364
Flood	100-year flood zone	1	N/A	1	58	2	125
Hazardous Materials Event	1-mile buffer transport corridor	3,901	0.54	418	128,506	29	14,276
	1-mile buffer fixed site	N/A	N/A	N/A	N/A	N/A	N/A
Landslide	High	N/A	N/A	N/A	N/A	N/A	N/A
	Moderate	40	-0.11	0	0	1	0
Sea Level Rise	Inundation area	0	N/A	0	0	0	0
Tsunami	Inundation area	11	2.63	1	231	0	0
Wildland Fire	Very high	10	3.58	0	0	0	0
	High	0	N/A	0	0	0	0
	Moderate	3,950	0.54	419	130,581	31	16,753
Windstorm	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Building value based on Tax Assessor records (x1000)
N/A = Not Applicable

Table I-4
City of Carmel-by-the-Sea Potential Hazard Vulnerability Analysis – Critical Facilities

Hazard	Methodology	Government		Emergency Response		Lifeline Utilities		Care		Educational		Marine, Environmental, and Community		Total	
		No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dam Failure	Inundation area	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Earthquake	Extreme	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	High	1	6,659	2	619	0	0	0	0	1	2,440	0	0	5	9,718
Flood	Moderate	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100-year flood zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous Materials Event	1-mile buffer transport corridor	0	0	2	619	0	0	1	0	1	2,440	0	0	4	3,059
	1-mile buffer fixed site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landslide	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sea Level Rise	Inundation area	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tsunami	Inundation area	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wildland Fire	Very high	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Windstorm	Moderate	1	6,659	2	0	0	0	0	0	1	2,440	0	0	5	9,099
	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Building value based on Tax Assessor records (x1000)
N/A = Not Applicable

Table I-5
City of Carmel-by-the-Sea Potential Hazard Vulnerability Analysis – Critical Infrastructure

Hazard	Methodology	Highways		Railroads		Bridges		Airports	
		Miles	Value (\$) ¹	Miles	Value (\$) ¹	Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	0	0	0	0	0	0	0	0
Dam Failure	Inundation area	0	0	0	0	0	0	0	0
Earthquake	Extreme	0	0	0	0	0	0	0	0
	High	0	0	0	0	0	0	0	0
	Moderate	0	0	0	0	0	0	0	0
Flood	100-year flood zone	0	0	0	0	0	0	0	0
Hazardous Materials Event	1-mile buffer transport corridor	0	0	0	0	0	0	0	0
	1-mile buffer fixed site	0	0	0	0	0	0	0	0
Landslide	High	0	0	0	0	0	0	0	0
	Moderate	0	0	0	0	0	0	0	0
Sea Level Rise	Inundation area	0	0	0	0	0	0	0	0
Tsunami	Inundation area	0	0	0	0	0	0	0	0
Wildland Fire	Very high	0	0	0	0	0	0	0	0
	High	0	0	0	0	0	0	0	0
	Moderate	0	0	0	0	0	0	0	0
Windstorm	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Estimated value (x1000)

N/A = Not Applicable

Coastal Erosion

The rocky cliffs along the city's coastline erode at approximately 2-4 inches a year. Therefore, using a 100-year projection to determine areas at risk to coastal erosion, only 1 person, 1 residential building (worth \$197,000), and 2 nonresidential buildings (worth \$466,000 thousand), are located in this hazard area.

Dam Failure

Failure of the San Clemente and Los Padres dams is a risk to 2 people, 1 residential building (worth \$117,000), and 2 nonresidential buildings (worth \$5,000) located along the southern portion of the City limits.

Earthquake

There are no residents, buildings, or critical facilities located in an extreme shaking hazard area. Approximately 3,752 residents (nearly 95 percent of the City's population), 2,930 residential buildings (worth \$607.3 million), 129 nonresidential buildings (worth \$210.6 million), and 5 critical facilities (worth \$9.7 million) are located in a high shaking hazard area. 308 residents, 216 residential buildings (worth \$40.2 million), and 2 nonresidential buildings (worth \$364,000) are located in a moderate hazard shaking area.

Flood

Only 1 person, 1 residential building (worth \$58,000), and 2 nonresidential buildings (worth \$125,000) are located in a SFHA.

Hazardous Materials Event

Located within the 1-mile buffer area of Highway 1 and therefore exposed to a hazardous materials transport event are 3,901 people, 418 residential buildings (worth \$128.5 million), 29 nonresidential buildings (worth \$14.3 million), and 4 critical facilities (worth \$3.1 million). These figures are for the entirety of the transportation corridors and, therefore, overstate the exposure since a single HAZMAT event at a given point along these corridors is unlikely to affect all of the area within the 1-mile buffer.

There are no hazards associated with fixed HAZMAT sites within the city.

Landslide

There are no residents, buildings, or facilities located in a high landslide hazard area. Less than 1 percent of the city's total population (along the western city limits) is exposed to moderate landslides. This includes 40 people, 0 residential buildings and 1 nonresidential building.

Sea Level Rise

While the potential for sea level rise is present along the entire coast of Monterey County, no people, buildings, critical facilities, or critical infrastructure in the City of Carmel-by-the-Sea are located in this hazard area.

Tsunami

Using the New Tsunami Inundation Map data, only 11 people, 1 residential building (worth \$231,000) and 0 nonresidential buildings are located in this hazard area along the southern portion of the city.

Wildland Fire

Using the California FRAP model, wildland fire risk areas, less than 1 percent of the city's population resides in very high and high wildland hazard areas. As such, the remaining 99 percent of the city's population reside in a moderate wildland fire hazard area. This area also includes 419 residential buildings (worth \$130.6 million), 31 nonresidential buildings (worth \$16.8 million), and 5 critical facilities (worth \$9.1 million).

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Table I-6
City of Carmel-by-the-Sea Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Effect on Hazard Mitigation
Plans, Ordinances, and Codes	General Plan, Environmental Safety Element	The Environmental Safety Element (last updated in 2009) provides policies and programs to address hazard avoidance, mitigation, and recovery.
	Hazard Mitigation Plan	Presently covered under countywide multi-jurisdictional hazard mitigation plan. This plan is currently being updated and is anticipated to be completed and re-adopted in late 2014.
	Floodplain Management Plan	
	Emergency Operations Plan	The Emergency Operations Plan (EOP) was updated and approved by the City Council in June 2013 and includes annexes that cover evacuation planning, continuity of operations planning, and disaster recovery planning. This plan will be updated every two years.
	Community Wildfire Protection Plan	The Fire Department maintains development standards and property maintenance requirements for development in high fire hazard areas.
	Capital Improvements Plan	
	Historic Preservation Plan	The City of Carmel is a Certified Local Government with the State Office of Historic Preservation and has a Historic Preservation Board. This could potentially facilitate mitigation activities related to the mitigation of historic properties and other cultural assets.
	Transportation Plan	The Metropolitan Transportation Improvement Plan for FY 2012/13 to 2015/16 facilitates hazard mitigation.
	Zoning Ordinance	The City's Zoning Ordinance provides guidance on permitting requirements for post-disaster reconstruction.
	Subdivision Ordinance	
Programs	Site Plan Review Requirements	
	Fire Prevention Code	
	National Flood Insurance Program (NFIP)	Makes affordable flood insurance available to homeowners, business owners, and renters in participating communities. In exchange, those communities must adopt and enforce minimum floodplain management regulations to reduce the risk of damage from future floods.
	Local Coastal Program	

Table I-6
City of Carmel-by-the-Sea Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name		Effect on Hazard Mitigation
Policies (Municipal Code)	Title 12 Streets, Sidewalks and Public Places	Chapter 12.20 Stormwater Utility	Creates a City enterprise to operate, maintain and fund the City's storm and surface drainage system.
	Title 14 Seismic Hazards	Chapter 14.04 Seismic Hazards Identification Program	Promotes public safety by identifying those buildings in the City of Carmel-by-the-Sea which exhibit structural deficiencies and by determining the severity and extent of those deficiencies in relation to their potential for causing loss of life or injury
	Title 15 Building and Construction	Chapter 15.08 Building Code	Adopts the 2001 California/Uniform Building Code.
		Chapter 15.12 Dangerous Buildings Code	Adopts the 2001 California/Uniform Code for the Abatement of Dangerous Buildings.

**Table I-7
City of Carmel-by-the-Sea Administrative and Technical Resources for
Hazard Mitigation**

Staff/Personnel Resources	Department/Division Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Planning and Building
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Planning and Building; Public Services
Planner(s) or engineer(s) with an understanding of manmade or natural hazards	Planning and Building
Building inspector	Planning and Building
Emergency manager	Public Safety
Floodplain manager	Planning and Building
Land surveyor(s)	Public Services
Resource development staff or grant writers	Planning and Building
Public information officer(s)	Library
Staff with education or expertise to assess the community's vulnerability to hazards	Planning and Building; Public Safety
Maintenance programs to reduce risk	Public Services
Warning systems/services	Public Safety
Mutual Aid Agreements	Police

**Table I-8
City of Carmel-by-the-Sea Financial Resources for Hazard Mitigation**

Financial Resources	Effect on Hazard Mitigation
General funds	If funding is available, can be used for hazard mitigation activities, including debt service for bonds.
Capital improvements project funding	
Water/sewer fees	
Development impact fees	
Authority to levy taxes for specific purposes	Can be used for any hazard mitigation activity with voter approval.
Incur debt through general obligation bonds	Can be used for any hazard mitigation activity with voter approval.
Incur debt through special tax and revenue bonds	Revenue Bonds can be issued through the City with voter approval.
FEMA HMGP and PDM grants	HMGP grant funding is available to local communities after a Presidentially-declared disaster. It can be used to fund both pre- and post-disaster mitigation plans and projects. PDM funding is available on an annual basis. This grant can only be used to fund pre-disaster mitigation plans and projects only.
United States Fire Administration (USFA) Grants	The purpose of these grants is to assist state, regional, national, or local organizations to address fire prevention and safety. The primary goal is to reach high-risk target groups including children, seniors, and firefighters.

Table I-9
City of Carmel-by-the-Sea Education and Outreach Resources for Hazard Mitigation

Education and Outreach Resources	Effect on Hazard Mitigation
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Includes a non-profit group (Sustainable Carmel, Police volunteers), CERT program, and Carmel Red Cross.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Includes emergency preparedness workshops with Carmel Red Cross, PG&E, NOAA, and Monterey Fire Department.
Natural disaster or safety related school programs	Includes Monterey County Emergency Response and Safety program.
StormReady certification	Awarded by the National Weather Service
Public-private partnership initiatives addressing disaster-related issues	Carmel Red Cross, PG&E, NOAA, United Way 211, Monterey County OES, All Saints Church, and Sustainable Carmel.

Problem Statements are statements of particular interest with regard to primary hazards of concern, geographic areas of concern, or vulnerable community assets. These statements were primarily derived from local community site visits and discussion with local staff and officials from each community during Individual Jurisdiction Meetings, in combination with a review of the Safety Elements of local General Plans and GIS analysis using best available data in support of updates to the vulnerability analysis for each jurisdiction. They were developed to assist in the identification and analysis of potential hazard mitigation actions for the City of Carmel-by-the-Sea.

- Mission Trails Park and Pescadero Canyon are considered at particularly high risk to wildland fire, for which controlling excessive buildup of flammable vegetative material on vacant lots is an ongoing priority for the City. Other areas of primary concern include Forest Hill Park and Del Monte Forest.
- There are two areas historically prone to landslides within city limits. The first area is located in the north-central portion of the City, which encompasses the Pescadero Canyon, including portions of 2nd, 3rd, and 4th Avenues, and Camino Del Monte Avenue, between 2nd and 3rd Avenues. The second area prone to landslides is located in the eastern portion of the City and encompasses the eastern portion of the Mission Trail Nature Preserve.
- High winds associated with winter storms are a major concern for the City due to the vast amount of trees (50% tree cover) that have proven to exacerbate damage and power outages.
- The primary area of concern for coastal flooding is along Carmel Beach and within areas in proximity to Carmel Lagoon, including Mission Fields (flooded twice in 1996).
- Localized flooding caused by drainage issues are a constant concern, as existing stormwater infrastructure is incapable of conveying runoff during heavy rain storms or prolonged rainfall events. Storm drains also frequently become clogged with debris (pine needles, etc.) which makes the problem even worse. Primary areas of concern include the Mission Trail

Nature Preserve (owned by the City and used as a park, with some on-site retention), Carpenter Street between 4th and 5th Avenue, the intersection area of Camino Real and 4th Street, and portions of 2nd Avenue along Pescadero Canyon. The Harrison Memorial Library is a critical community asset that has been flooded in the past.

- o *Potential Mitigation Solution:* “Stormwater Recapture Plan” has been conceived by the City, which would provide the dual benefit of capturing rain flow for irrigation and other purposes while increasing capacity of existing system.

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Table I-9
City of Carmel-by-the-Sea Mitigation Action Plan Matrix

Action Number	Description	Ranking / Prioritization	Administering Department	Potential Funding	Timeframe	Benefit-Costs	Status	Narrative Update/ Explanation
1	Identify hazard-prone critical facilities and infrastructure and carry out acquisition, relocation, and structural and nonstructural retrofitting measures as necessary.	Priority / High	Planning and Building	HMGP and PDM Grants	Ongoing	This action will help ensure that the community/critical facilities can operate in some capacity before, during, and after the disaster.	Ongoing / Continuous	The City has retained an engineering firm to assist in project management of Public Services Department hazard evaluation. The City will also be retaining an engineering consultant to evaluate the City's revetments and other shoreline protection structures in the next year or two.
2	Develop a sustained public outreach program that encourages consistent hazard mitigation content. For example, consider publishing tsunami inundation maps in telephone books, wildland fire defensible space tips with summer water bills, and the safe handling and disposal of hazardous waste and chemicals with garbage bills.	Priority / High	City Clerk	General Funds, HMGP, and PDM Grants	0-1 years	A mitigation outreach program will help build and support local capacity to enable the public to prepare for, respond to, and recover from disasters.	Partially Completed / In Progress	The City has installed new tsunami warning signs along shoreline areas and beach access points. The City will be revamping its website in the next few years and can add information on hazard mitigation such as wildland fire prevention routes, evacuation actions, and hazardous waste disposal.

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3	Develop an unreinforced masonry grant program that helps correct earthquake-risk nonmasonry building problems, including chimney bracing and anchoring water heaters.	Priority / High	Planning and Building	General Funds, HMGP, and PDM Grants	0-3 years	This action will prevent future residential and nonresidential losses of unreinforced masonry buildings in the future. The retrofitting of unreinforced masonry buildings is a high priority for the State of California.	Deferred	The City has not had adequate staff resources to implement this program yet. The City is in the process of addressing staffing needs, so progress on this program may be feasible in the next 2-3 years.
4	Continue to conduct current fuel management programs and investigate and apply new and emerging fuel management techniques.	Priority / High	Fire	General Funds and PDM Grant	Ongoing	The probability of future damage from wildland fires could be high if this mitigation action is not implemented.	Ongoing / Continuous	The City has provided for fuel management on City owned lands and will provide that service annually. Staff will explore the use of goats as a new method to do this work to improve the fuel management in steeper terrain areas.
5	Develop and provide funding and/or incentives for defensible space measures (e.g., free chipping day, free collection day for tree limbs).	Priority / High	Fire	General Funds, HMGP, and PDM Grants	Ongoing	The potential cost of this mitigation action seems reasonable for the size of the problem and its likely benefits.	Deferred	Due to staff and fund shortages, this item has not been implemented. The City has provided, and will continue to provide, inspection, information, and enforcement of fuel management on private property as appropriate.

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6	Work with the Utility Companies (especially PG&E) to build and strengthen relationships to improve communication regarding emergency situations and develop an emergency response plan that includes all emergency responders and 911 communications.	Priority / Moderate	Public Safety/Police	General Funds	Ongoing	As this action would consist primarily of communication and planning activities, the benefits of this project would far outweigh its minimal costs.	New	New action for 2014-2019.
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Appendix J
City of Del Rey Oaks

Table J-1
City of Del Rey Oaks Estimated Population and Building Inventory

Population	Residential Buildings		Nonresidential Buildings	
2000 Census Population Count*	Total Building Count	Total Value of Buildings **- (x\$1000)	Total Building Count	Total Value of Buildings*** (x\$1000)
1,650	482	67,890	129	31,147

Source: Monterey County (residential and commercial buildings) and U.S. Census 2000 population data.

* Population count using census blocks within the city limits.

** Tax Assessor records.

*** Tax Assessor records.

Table J-2
City of Del Rey Oaks Critical Facilities and Infrastructure

Category	Facility	Address	Estimated Insured Structural Value (x\$1000)
Government	City Hall	650 Canyon del Rey Blvd.	6,659
Emergency Response	Police Department	650 Canyon del Rey Blvd.	1,652

Source: FEMA HAZUS-MH (estimated values) and Monterey County data

Table J-3
City of Del Rey Oaks Potential Hazard Vulnerability Analysis – Population and Buildings

Hazard Type	Methodology	Population Number	SoVI Score	Buildings			
				Residential		Nonresidential	
				Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Earthquake	Extreme	0		0	0	0	0
	High	698		261	59,344	9	5,142
	Moderate	952		420	93,369	11	17,830
Flood	100-year flood zone	78		35	7,756	2	2,777
Hazardous Materials Event	1-mile buffer transport corridor	1,441	0.19	433	61,722	120	30,168
	1-mile buffer fixed site	N/A	N/A	N/A	N/A	N/A	N/A
	High	N/A	N/A	N/A	N/A	N/A	N/A
Landslide	Moderate	235	-1.20	12	4,125	14	3,506
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very high	0	N/A	0	\$0	0	\$0
	High	94	-0.99	19	3,183	0	\$0
	Moderate	1,452	-0.84	463	64,707	129	31,147
Windstorm	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Building value based on Tax Assessor records (x1000)
N/A = Not Applicable

Table J-4
City of Del Rey Oaks Potential Hazard Vulnerability Analysis – Critical Facilities

Hazard	Methodology	Government		Emergency Response		Lifeline Utilities		Care		Educational		Marine, Environmental, and Community		Total	
		No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Earthquake	Extreme	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	High	1	6,659	1	0	0	0	1	0	0	0	0	0	3	6,659
	Moderate	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flood	100-year flood zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous Materials Event	1-mile buffer transport corridor	1	6,659	1	0	0	0	1	0	0	0	0	0	3	6,659
	1-mile buffer fixed site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landslide	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very high	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	1	6,659	1	0	0	0	0	0	0	0	0	0	2	6,659
Windstorm	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Building value based on Tax Assessor records (x1000)

N/A = Not Applicable

Table J-5
City of Del Rey Oaks Potential Hazard Vulnerability Analysis – Critical Infrastructure

Hazard	Methodology	Highways		Railroads		Bridges		Airports	
		Miles	Value (\$) ¹	Miles	Value (\$) ¹	Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Earthquake	Extreme	0.0	0	0.0	0	0	0	0	0
	High	0.5	2,553	0.0	0	0	0	0	0
	Moderate	1.5	7,752	0.0	0	0	0	0	0
Flood	100-year flood zone	0.4	1,927	0.0	0	0	0	0	0
Hazardous Materials Event	1-mile buffer	0.2	TBD	0.0	0	0	0	0	0
	1-mile buffer fixed site	0	0	0	0	0	0	0	0
Landslide	High	0.0	0	0.0	0	0	0	0	0
	Moderate	0.0	TBD	0.0	0	0	0	0	0
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very high	0.0	0	0.0	0	0	0	0	0
	High	0.0	TBD	0.0	0	0	0	0	0
	Moderate	0.2	TBD	0.0	0	0	0	0	0
Windstorm	Prevailing wind zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Value = Estimated value (x1000)

N/A = Not Applicable

Earthquake

No residents, buildings, or critical facilities are located in an extreme shaking hazard area. However, approximately 40 percent of the city's residents are located in a high shaking hazard area. As such, exposed within the high shaking hazard area are 698 people, 216 residential buildings (worth \$59.3 million), 9 nonresidential buildings (worth \$5.1 million), and 3 critical facilities (worth \$6.7 million). Less than 2 miles of highways are located in this hazard area.

Within the moderate hazard shaking area are 952 people, 420 residential buildings (worth \$93.4 million), and 11 nonresidential buildings (worth \$17.8 million). There are no critical facilities located within this area. Only 1.5 miles of highway are vulnerable to this hazard.

Flood

The Arroyo Del Rey SFHA stretches from the northwest to the southeast of the city. Exposed within this hazard area are 78 people (5 percent of the city's population), 35 residential buildings (worth \$7.8 million), and 2 nonresidential buildings (worth \$2.8 million). In addition, 0.4 miles of highway are located in this hazard area.

Hazardous Materials Event

87 percent of the city's population resides within the 1-mile buffer of the transportation corridors and therefore is at risk to a hazardous materials transportation event. This includes 1,441 people, 433 residential buildings (worth \$61.7 million), 120 nonresidential buildings (worth \$30.2 million), and 3 critical facilities (worth \$6.7 million). These figures are for the entirety of the transportation corridors and, therefore, overstate the exposure since a single HAZMAT event at a given point along these corridors is unlikely to affect all of the area within the 1-mile buffer.

There are no hazards associated with fixed HAZMAT sites within the city.

Landslide

No residents, buildings, or critical facilities are located in a high landslide hazard area. Approximately 14 percent of city's total population is exposed to moderate landslides, however. This area includes 235 people, 12 residential buildings (worth \$4,125 million) and 14 nonresidential buildings (worth \$3,506 million). Less than 0.2 miles of highway is located in this hazard area.

Tsunami

Using the New Tsunami Inundation Map data, no residents, buildings, or critical facilities are located in this hazard area.

Wildland Fire

Using the California FRAP model, there are no very high wildland fire areas within the city. Less than 6 percent of the city's population resides in a high wildland fire area while the remaining 94 percent of the population is located in a moderate wildland fire area. Within the area of high

wildland fire exposure area are 94 people, 19 residential buildings (worth \$3.2 million), and 0 nonresidential buildings.

Areas of moderate wildland fire risk include 1,452 people, 463 residential buildings (worth \$64.7 million), 129 nonresidential buildings (worth \$31.1 million), and 2 critical facilities (worth \$6.7 million).

Table J-6
City of Del Rey Oaks Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Effect on Hazard Mitigation
Plans, Ordinances, and Codes	City of Del Rey Oaks General Plan Safety Element	Establishes policies that will minimize the potential of human injury and property damage to natural hazards.
	Hazard Mitigation Plan	Presently covered under countywide multi-jurisdictional hazard mitigation plan. This plan is currently being updated and is anticipated to be completed and re-adopted in late 2014.
	Open Space Management Plan	
	Stormwater Management Plan	
	Emergency Operations Plan	
	Continuity of Operations Plan	
	Community Wildfire Protection Plan	
	Evacuation Plan	
	Disaster Recovery Plan	
	Capital Improvements Plan	Currently under development.
	Economic Development Plan	Currently under development.
	Historic Preservation Plan	Currently under development.
	Transportation Plan	
	Floodplain Ordinance	
	Zoning Ordinance	
	Subdivision Ordinance	
	Site Plan Review Requirements	
	Building Code	
	Fire Prevention Code	

Table J-6
City of Del Rey Oaks Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Effect on Hazard Mitigation
Programs	National Flood Insurance Program (NFIP)	Makes affordable flood insurance available to homeowners, business owners, and renters in participating communities. In exchange, those communities must adopt and enforce minimum floodplain management regulations to reduce the risk of damage from future floods.
	Monterey Regional Storm Water Management Program	Reduces pollution from storm water discharge and runoff with regard to the EPA's Phase II Storm Water National Pollutant Discharge Elimination System requirements. It is a collective effort and implementation of area-wide activities designed to benefit all participating entities.
Policies (Municipal Code)	Not Available	Not Available

Table J-7
City of Del Rey Oaks Administrative and Technical Resources for
Hazard Mitigation

Staff/Personnel Resources	Department/Division Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Planning and Building
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Maintenance
Planner(s) or engineer(s) with an understanding of manmade or natural hazards	Planning and Building
Building inspector	Contract for service with the City of Monterey
Emergency manager	Chief of Police/City Operations Supervisor
Public information officer(s)	City Manager
Staff with education or expertise to assess the community's vulnerability to hazards	Police
Warning systems/services	Monterey County Communications
Mutual Aid Agreements	State and Local Agencies

Table J-8
City of Del Rey Oaks Financial Resources for Hazard Mitigation

Financial Resources	Effect on Hazard Mitigation
General funds	If funding is available, can be used for hazard mitigation activities including debt service for bonds.
Authority to levy taxes for specific purposes	Can be used for any hazard mitigation activity, but only eligible for use with voter approval.
Incur debt through general obligation bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
Incur debt through special tax and revenue bonds	Revenue Bonds can be issued through the City without voter approval, to raise funds for hazard mitigation activities.
Incur debt through private activity bonds	Can be used for any hazard mitigation activity but is only eligible for use with voter approval.
FEMA HMGP and PDM grants	HMGP grant funding is available to local communities after a Presidentially-declared disaster. It can be used to fund both pre- and post-disaster mitigation plans and projects. PDM funding is available on an annual basis. This grant can only be used to fund pre-disaster mitigation plans and projects only.
United States Fire Administration (USFA) Grants	The purpose of these grants is to assist state, regional, national, or local organizations to address fire prevention and safety. The primary goal is to reach high-risk target groups including children, seniors, and firefighters.

Problem Statements are statements of particular interest with regard to primary hazards of concern, geographic areas of concern, or vulnerable community assets. These statements were primarily derived from local community site visits and discussion with local staff and officials from each community during Individual Jurisdiction Meetings, in combination with a review of the Safety Elements of local General Plans and GIS analysis using best available data in support of updates to the vulnerability analysis for each jurisdiction. They were developed to assist in the identification and analysis of potential hazard mitigation actions for the City of Del Rey Oaks.

- Primary hazard concerns include any event that threatens to shut down State Highway 218, the central spine and main transportation corridor providing ingress and egress to all areas within the city.
- Other identified critical community assets that must be protected from hazard risks include City Hall, the main pump station (located across the street from City Hall), the Public Works yard, and access to/from the school bus facility.

Table J-9
City of Del Rey Oaks Mitigation Action Plan Matrix

Action Number	Description	Ranking / Prioritization	Administering Department	Potential Funding	Timeframe	Benefit-Costs	Status	Narrative Update/ Explanation
1	Identify hazard-prone critical facilities and carry out acquisition, relocation, and structural and nonstructural retrofitting measures as necessary.	Priority / High	Planning and Building	HMGP and PDM Grants	Ongoing	This action will help ensure that the community/critical facilities can operate in some capacity before, during, and after the disaster.	Deferred	City has critical budget shortfall.
2	Develop a sustained public outreach program that encourages consistent hazard mitigation content. For example, consider publishing tsunami inundation maps in telephone books, wildland fire defensible space tips with summer water bills, and the safe handling and disposal of hazardous waste and chemicals with garbage bills.	Priority / High	City Clerk	General Funds, HMGP, and PDM Grants	0-1 years	A mitigation outreach program will help build and support local capacity to enable the public to prepare for, respond to, and recover from disasters.	Partially Completed / In Progress	Staff has defined the City's newsletter as the most viable method of providing information to the residents. The newsletter will be used to provide information on wildland fire prevention information, flood prevention and earthquake preparedness information.
3	Develop an unreinforced masonry grant program that helps correct earthquake-risk nonmasonry building problems, including chimney bracing and anchoring water heaters.	Priority / High	Planning and Building	General Funds, HMGP, and PDM Grants	0-3 years	This action will prevent future residential and nonresidential losses of unreinforced masonry buildings in the future. The retrofitting of unreinforced masonry buildings is a high priority for the State of California.	Deferred	City has critical budget shortfall.

Appendix J City Of Del Rey Oaks

4	Examine and mitigate critical infrastructure that has been identified as currently being too narrow to ensure the safe transportation of truck loads within Monterey County.	Priority / High	Maintenance	General Funds	1-3 years	This effort will ensure that heavily used critical infrastructure will ensure the safe transportation of truck loads.	Deferred	City has critical budget shortfall.
5	Continue to conduct current fuel management programs and investigate and apply new and emerging fuel management techniques.	Priority / High	City Clerk/ Seaside Fire	General Funds and PDM Grant	Ongoing	The probability of future damage from wildland fires could be high if this mitigation action is not implemented.	Ongoing / Continuous	City has made great progress by utilizing the Gablian Conservation Crew to abate fuel loads.
6	Develop and provide funding and/or incentives for defensible space measures (e.g., free chipping day, free collection day for tree limbs).	Priority / High	City Clerk/ Seaside Fire	General Funds, HMGP, and PDM Grants	Ongoing	The potential cost of this mitigation action seems reasonable for the size of the problem and its likely benefits.	Ongoing / Continuous	City has made great progress by utilizing the Gablian Conservation Crew to abate fuel loads.

Appendix K
City of Gonzales

Table K-1
City of Gonzales Estimated Population and Building Inventory

Population	Residential Buildings		Nonresidential Buildings	
2000 Census Population Count*	Total Building Count	Total Value of Buildings **- (x\$1000)	Total Building Count	Total Value of Buildings*** (x\$1000)
7,539	316	43,689	1,330	200,417

Source: Monterey County (residential and nonresidential buildings) and U.S. Census 2000 population data.

* Population count using census blocks within the city limits.

** Tax Assessor records.

*** Tax Assessor records.

Table K-2
City of Gonzales Critical Facilities and Infrastructure

Category	Facility	Address	Estimated Insured Structural Value (x\$1000)¹
Government	City Hall	147 Fourth St.	6,659
	Animal Control Facility	201 C St.	1,180
Emergency Response	Police Department	109 Fourth St.	1,652
	Fire Department	325 Center St.	708
Lifeline Utilities	Sewage Treatment Plant	Short Rd.	78,588
	Power Substation	10 Seventh St.	10,000
Care	Medical Center	133 Fourth St.	1,600
Educational	District Facilities	600 Elko St.	1,218
	Pre-school	550-B Fifth St.	211
	La Gloria Elementary School	220 Elko St.	10,090
	Fairview Middle School	401 Fourth St.	12,485
	Gonzales High School	501 Fifth St.	29,192
	Somavia High School	650 Elko St.	299

Source: FEMA HAZUS-MH (estimated values) and Gonzales Unified School District

¹ Educational facility values are based on real property replacement costs as provided by the Gonzales Unified School District.

Table K-3
City of Gonzales Potential Hazard Vulnerability Analysis – Population and Buildings

Hazard Type	Methodology	Population Number	SoVI Score	Buildings			
				Residential		Nonresidential	
				Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0	N/A	0	0	0	0
Earthquake	Extreme	N/A	N/A	N/A	N/A	N/A	N/A
	High	7,539	1.00	1,355	228,996	38	69,754
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A
Flood	100-year flood zone	528	0.56	99	15,867	2	2,714
Hazardous Materials Event	1-mile buffer transport corridor	7,314	1.00	316	43,689	1,329	200,417
	1-mile buffer fixed sites	4,600	1.00	202	26,668	692	119,601
Landslide	High	N/A	N/A	N/A	N/A	N/A	N/A
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very High	N/A	N/A	N/A	N/A	N/A	N/A
	High	0	N/A	0	0	0	0
	Moderate	6,540	1.49	246	33,593	1,061	146,171
Windstorm	Prevailing wind zone	7,539	TBD	1,355	228,996	38	69,754

¹Value = Building value based on Tax Assessor records (x1000)

Table K-4
City of Gonzales Potential Hazard Vulnerability Analysis – Critical Facilities

Hazard	Methodology	Government		Emergency Response		Lifeline Utilities		Care		Educational		Marine, Environmental, and Community		Total	
		No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0	0	0	0	1	78,588	0	0	0	0	0	0	1	78,588
Earthquake	Extreme	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	High	2	7,839	2	2,360	2	88,588	1	1,600	4	2,360	0	0	11	102,747
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flood	100-year flood zone	0	0	0	0	1	78,588	0	0	0	0	0	0	1	78,588
Hazardous Materials Event	1-mile buffer transport corridor	2	7,839	2	0	0	0	0	0	5	0	0	0	9	7,839
	1-mile buffer fixed site	0	0	2	0	0	0	0	0	5	0	0	0	7	0
Landslide	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire*	Very High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Windstorm	Moderate	2	7,839	2	0	0	0	0	0	5	0	0	0	9	7,839
	Prevailing wind zone	2	7,839	2	2,360	2	88,588	1	1,600	4	2,360	0	0	11	102,747

¹Value = Building value based on Tax Assessor records (x1000)

Table K-5
City of Gonzales Potential Hazard Vulnerability Analysis – Critical Infrastructure

Hazard	Methodology	Highways		Railroads		Bridges		Airports	
		Miles	Value (\$) ¹	Miles	Value (\$) ¹	Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0.0	0	0.0	0	0	0	0	0
Earthquake	Extreme	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	High	1.0	10,286	1.5	2,113	1	1,785	0	0
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flood	100-year flood zone	0.0	0	0.0	0	0	0	0	0
Hazardous Materials Event	1-mile buffer transport corridor	3.9	TBD	2.2	TBD	2	TBD	0	0
Landslide	1-mile buffer fixed site	3.2	TBD	1.9	TBD	2	TBD	0	0
	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire*	Very High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	High	0.1	TBD	0.1	TBD	0	0	0	0
	Moderate	2.2	TBD	1.6	TBD	1	TBD	0	0
Windstorm	Prevailing wind zone	1.0	10,286	1.5	2,113	1	1,785	0	0

Agricultural Emergency

There are 62 acres (0.097 square miles) of cropland in the City of Gonzales that intersect with the 100-year floodplain. Whereas an agricultural emergency would have little to no direct physical impact on buildings and infrastructure, an agricultural emergency would have a significant impact on the local economy and could lead to other crippling indirect impacts.

Dam Failure

Failure of the San Antonio and Nacimiento dams do not pose a risk to the city's population according to GIS analysis. Exposed within the inundation zone (on the far west side of the city) is 1 critical facility (worth \$78.6 million).

Earthquake

No residents and/or buildings and facilities are located in an extreme shaking hazard area. However, 100 percent of the city's total population (7,539), including 1,355 residential buildings (worth \$229 million), 38 nonresidential buildings (worth \$69.8 million), and 11 critical facilities (worth \$102.7 million) are located in a high shaking hazard area. Approximately 1 mile of highway, 1.5 miles of railroad tracks, and 1 bridge are located in the high shaking hazard area.

Flood

The Special Flood Hazard Area (SFHA) includes the Gonzales Slough which bisects the city from the north to the southeast. Exposed within this hazard area are 528 people (7 percent of the city's population), 99 residential buildings (worth \$15.9 million), 2 nonresidential buildings (worth \$2.7 million), and 1 critical facility (worth \$78.6 million).

Hazardous Materials Event

Within the 1-mile buffer around the transportation corridors, 100 percent of the city's population is exposed to a hazardous materials transport event. This includes 7,539 people, 316 residential buildings (worth \$44 million), 329 nonresidential buildings (worth \$200 million), and 9 critical facilities (worth \$8 million). These figures are for the entirety of the transportation corridors and, therefore, overstate the exposure since a single HAZMAT event at a given point along these corridors is unlikely to affect all of the area within the 1-mile buffer.

Within the 1-mile buffer around the fixed HAZMAT sites, 4,600 people are exposed to a fixed-site hazardous materials event. This includes 202 residential buildings (worth \$27 million), 1,329 nonresidential buildings (worth \$120 million), and 7 critical facilities. These figures are for all of the fixed HAZMAT sites and, therefore, overstate the exposure since a single HAZMAT event at any one location is unlikely to affect all of the area within the jurisdiction.

Wildland Fire

No residents, buildings, or facilities are located in a very high wildland fire hazard area. However, 7 percent of the population resides in a high wildland fire hazard area while the remaining 93 percent reside in a moderate wildland fire hazard area. Therefore, using the California FRAP (Fire and

Resource Assessment Program) model developed by the California Department of Forestry and Fire Protection, within the high wildland fire hazard area are 54 people, 0 residential buildings, and 0 nonresidential buildings.

Areas of moderate wildfire risk include 6,540 people, 246 residential buildings (worth \$34 million), 1,061 nonresidential buildings (worth \$146 million), and 9 critical facilities (worth \$8 million).

Windstorm

Windstorms created by prevailing northwest sustained surface winds are common throughout the central and southern Salinas Valley. As such, the entire city, including its population, residential buildings, nonresidential buildings, and critical facilities and infrastructure are equally at risk to this hazard.

Table K-6
City of Gonzales Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Authority	Effect on Hazard Mitigation
Plans, Ordinances, and Codes	Gonzales General Plan Safety Element	Chapter V: Community Health and Safety (adopted 1/18/11)	Assisting in preparedness for response and insures new development is only done after safety is considered.
	Hazard Mitigation Plan	2008 adoption revision in progress	Plans action on mitigating potential threats to the community. Helps focus attention on mitigation planning and preparedness.
	Floodplain Management Plan	Chapter 14.04 of Gonzales City Code	Insures no development occurs when the flood hazard it too high. Assists in maintaining a floodway that can contain potential flooding events.
	Open Space Management Plan	Chapter 12.92 of Gonzales City Code	Assists the community in focusing on the need for open spaces to protect the environment and provide buffer zones for development. Coordinates open space and community safety.
	Stormwater Management Plan	Currently under development	Will assist in planning environmental preservation and flooding potential.
	Climate Action Plan	Adopted 2/19/13	Plans for actions to minimize Gonzales' effect on the area's environment.
	Emergency Operations Plan	Adopted in 2008, update pending	Plans for response and recovery operations to improve community resilience.
	Continuity of Operations Plan	Currently under development	Will improve community resilience for governmental operations, business continuance, and residential recovery.
	Capital Improvements Plan	Each Department maintains	Assists in mitigating damage during events to old equipment and facilities by replacing needed equipment and facilities with updated resilient equipment and facilities.
	Economic Development Plan	Adopted 10/11/13	Provides improved economic vitality to the community to ensure events do not cause as disastrous an effect on community life. Shortens recovery time.
	Transportation Plan	Chapter III of adopted General Plan 1/18/11	Includes actions for emergency routes and sustainable development that emergency response can protect. Includes alternate and redundant transportation corridors for evacuation, response, and recovery efforts.

Table K-6
City of Gonzales Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Authority	Effect on Hazard Mitigation
	Zoning Ordinance	Title 12 of Gonzales City Code	Provides framework for uses in Gonzales that can be provided safely and coordinated with other uses to minimize disastrous effect of one type of use on another.
	Subdivision Ordinance	Title 13 of Gonzales City Code	Keeps one area's development from adversely affecting others. Insures only safe development occurs in Gonzales.
	Site Plan Review Requirements	Chapter 12.20 of Gonzales City Code	Provides an opportunity for planning, public works, and public safety departments to review and comment on potential uses of property in the community to minimize the negative effects of one use on the overall community. This improves the disaster recovery capability of the overall community. Projects must mitigate, when practical, negative effects they would have on the area.
	Unified Development Ordinance	Title 13 of Gonzales City Code	Requires development to mitigate identified potential impacts to the community and environment.
Programs	Fire Prevention Code	Chapter 11.08.090 of Gonzales City Code	Keeps the community safe by mitigating hazards before they become a problem.
	National Flood Insurance Program (NFIP)	National Flood Insurance Act of 1968, as amended	Makes affordable flood insurance available to homeowners, business owners, and renters in participating communities. In exchange, those communities must adopt and enforce minimum floodplain management regulations to reduce the risk of damage from future floods.
	Policies (Municipal Code)	Title 11.08 Adoption of California Building Code	Adopts and enforces the California Building Code, 1998 Edition.
		Title 11.32 Abatement of Dangerous Buildings	Adopts and enforces the Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition.

Table K-6
City of Gonzales Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Authority	Effect on Hazard Mitigation
		Title 11.40 Building Earthquake Safety	Promotes public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on buildings constructed prior to the adoption of local building codes requiring earthquake resistant design and construction, which have unreinforced masonry bearing walls and other characteristics specified in California Health and Safety Code section 19161 which make them potentially hazardous to life in the event of an earthquake. It establishes a program for the identification of all such buildings in the city, for the determination of the severity and extent of such hazards in relation to their potential for causing death or injury in the event of an earthquake, and for the carrying out of measures to mitigate such hazards.
	Title 14 Flood Control	Title 14.04 Flood Damage Prevention	Identifies areas where terrain characteristics would present new developments and their users with potential hazards to life and property from potential inundation by a 100-year frequency flood or other known flood hazards. These standards are also intended to minimize the effects of development on drainage ways and watercourses.

Table K-7
City of Gonzales Administrative and Technical Resources for Hazard Mitigation

Staff/Personnel Resources	Department/Division Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Planning
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Public Works
Planner(s) or engineer(s) with an understanding of manmade or natural hazards	Planning
Building inspector	Building
Emergency manager	Emergency Services
Floodplain manager	Public Works
Resource development staff or grant writers	City Manager's Office
Public information officer	Police
Staff with education or expertise to assess the community's vulnerability to hazards	Emergency Services
Personnel skilled in GIS and/or HAZUS-MH	Emergency Services
Maintenance programs to reduce risk	Public Works
Warning systems/services	Emergency Services
Mutual Aid Agreements	Emergency Services

Table K-8
City of Gonzales Financial Resources for Hazard Mitigation

Financial Resources	Effect on Hazard Mitigation
General funds	If funding is available, can be used for hazard mitigation activities.
Capital improvements programming	Should assist in reducing vulnerability.
Authority to levy taxes for specific purposes	Can be used for any hazard mitigation activity, but only eligible for use with voter approval.
Incur debt through general obligation bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
Incur debt through special tax and revenue bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
Water/Sewer Fees	Fees pay for maintenance activities which improve resiliency.
Development Impact Fees	Provide funds for response capability to keep up with growth.
Incur debt through private activity bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
FEMA HMGP and PDM grants	HMGP grant funding is available to local communities after a Presidentially-declared disaster. It can be used to fund both pre- and post-disaster mitigation plans and projects. PDM funding is available on an annual basis. This grant can only be used to fund pre-disaster mitigation plans and projects only.
United States Fire Administration (USFA) Grants	The purpose of these grants is to assist state, regional, national, or local organizations to address fire prevention and safety. The primary goal is to reach high-risk target groups including children, seniors, and firefighters.

Problem Statements are statements of particular interest with regard to primary hazards of concern, geographic areas of concern, or vulnerable community assets. These statements were primarily derived from local community site visits and discussion with local staff and officials from each community during Individual Jurisdiction Meetings, in combination with a review of the Safety Elements of local General Plans and GIS analysis using best available data in support of updates to the vulnerability analysis for each jurisdiction. They were developed to assist in the identification and analysis of potential hazard mitigation actions for the City of Gonzales.

- The Fifth Street Overpass is a vital infrastructure asset for the city to protect from any damage or disruption caused by hazards, as it not only serves as critical transportation artery but is also used for all sewer and water lines that provide service for the city.
- The city's wastewater treatment facility is vulnerable to flooding along the Salinas River. It is currently located in a special flood hazard area and protected by two uncertified earthen levees, with privately-owned farmland in between. These levees, which have been overtopped in past flood events, should be bolstered to increase protection against future

flood damages and service disruptions.

- Three schools are designated as community shelters (La Gloria Elementary, Fairview Middle, and Gonzales High) but currently the portable classrooms are deemed more structurally safe to seismic events.
- Past flood losses/claims have all occurred along the slough (and within the mapped special flood hazard area) on west side of city between First and Fifth Streets.
- Local fertilizer plants are known to store extremely hazardous substances, such as ammonia, so hazardous materials events remain a primary concern for the City.

Table K-9
City of Gonzales Mitigation Action Plan Matrix

Action Number	Description	Ranking / Prioritization	Administering Department	Potential Funding	Timeframe	Benefit-Costs	Status	Narrative Update/ Explanation
1	Identify hazard-prone critical facilities and infrastructure and carry out acquisition, relocation, and structural and non structural retrofitting measures as necessary	Priority / High	City Management	Federal and State Grants (e.g. PDM grants)	In progress to be ongoing process	This action will help ensure that the community/critical facilities can operate in some capacity before, during, and after the disaster.	Continuous	This action will continue to be evaluated and implemented as appropriate throughout the next five-year planning cycle
2	Develop an unreinforced masonry grant program that helps correct earthquake-risk nonmasonry building problems, including chimney bracing and anchoring water heaters.	Priority / High	Building Department	Federal and State Grants (e.g. PDM grants)	When funding is acquired	The identification of and mitigation of unreinforced nonmasonry buildings will reduce potential losses due to earthquakes.	Continuous	This action will continue to be evaluated and implemented as appropriate throughout the next five-year planning cycle
3	Explore mitigation opportunities for repetitively flooded properties, and if necessary, carry-out acquisition, relocation, elevation, and flood-proofing measures to protect these properties.	Priority / High	Planning Department	Federal and State Grants (e.g. FMA grants)	As funding is available	The mitigation of repetitively flooded properties is a priority for FEMA grant programs.	Continuous	This action will continue to be evaluated and implemented as appropriate throughout the next five-year planning cycle
4	Identify and carry-out minor flood and stormwater management projects	Priority / High	Public Works Department	Federal and State Grants (e.g. PDM	As funding is available	The identification and implementation of minor flood and stormwater	Continuous	This action will continue to be evaluated and implemented as appropriate throughout

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	that would reduce damage to infrastructure and flooding/inadequate drainage.			grants)		management projects will reduce multi-asset (critical facility, critical infrastructure, and residential and nonresidential) losses due to flooding.		the next five-year planning cycle
5	Examine and mitigate critical infrastructure that has been identified as currently being too narrow to ensure the safe transportation of truckloads within Monterey County.	Priority / High	Planning Department	Federal and State Grants (e.g., PDM grants)	As funding is available	This effort will ensure that heavily used critical infrastructure will ensure the safe transportation of truck loads.	Continuous	This action will continue to be evaluated and implemented as appropriate throughout the next five-year planning cycle
6	Promote Disaster Resistant Community.	Priority / Moderate	Office of Emergency Services	Local General Fund	Continuous	Monitor all actions, plans, and development within Gonzales to insure it remains a safe and resilient community.	New Action	New Action
7	Implement adopted climate action plan.	Priority / Moderate	Community Development Department	Local General Fund	Continuous	Monitor, report on, and improve the adopted climate action plan to limit Gonzales' cumulative effect on the environment.	New Action	New Action
8	Monitor all existing critical facilities for susceptibility to impacts from natural and manmade disasters.	Priority / Low	Building Department	Local General Fund	Continuous	Every year, each critical facility should be assessed for vulnerability to each of the selected disaster potentials	New Action	New Action

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							listed in this report.			
9	Improve floodway management.	Priority / High	Public Works Department	Various Grants	2-4 Years When Funded	Develop the Gonzales slough into a vital waterway, open space, and recreational option.	New Action	New Action	New Action	
10	Improve public education for disaster resilience.	Priority / High	Office of Emergency Services & Public Safety Department	Local General Fund	Continuous	Community education in English and Spanish by all segments of the response community and all segments of the population.	New Action	New Action	New Action	
11	Improve disaster response training between all responders.	Priority / High	Public Safety Department	Local General Fund	Continuous	Police, Fire, and Public Works should develop plans together and train on those plans.	New Action	New Action	New Action	
12	Improve Emergency Operations Center capability.	Priority / Moderate	Office of Emergency Services	Unknown—Grants Needed	1 Year When Funded	Add communications capability, storage capacity, and EOC management team training.	New Action	New Action	New Action	
13	Develop public-private partnerships with local businesses to increase business and government resilience.	Priority / High	Community Development Department	Local General Fund	Continuous	Work with local businesses to increase their resilience and opportunities for public-private partnerships to improve continuity of operations for the community.	New Action	New Action	New Action	
14	Increase flood resilience of wastewater treatment	Priority / Moderate	Public Works Department	Mitigation Grants Matched by	2-3 Years When	Acquire land and build levy.	New Action	New Action	New Action	

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	facility.			Local Funds	Funded			
15	Develop redundant systems for water system resilience.	Priority / Moderate	Public Works Department	Mitigation Grants Matched by Local Funds	1 Year When Funded	Develop new well and storage on both sides of US 101.	New Action	New Action

Appendix L
City of Greenfield

Table L-1
City of Greenfield Estimated Population and Building Inventory

Population	Residential Buildings		Nonresidential Buildings	
2000 Census Population Count*	Total Building Count	Total Value of Buildings **- (x\$1000)	Total Building Count	Total Value of Buildings (x\$1000)
12,842	2,548	219,910	406	84,745

Source: Monterey County (residential and nonresidential buildings) and U.S. Census 2000 population data.

* Population count using census blocks within the city limits.

** Tax Assessor records.

*** Tax Assessor records.

Table L-2
City of Greenfield Critical Facilities and Infrastructure

Category	Facility	Address	Estimated Insured Structural Value (x\$1000)
Government	City Hall	45 El Camino Real	6,659
Emergency Response	Police Department	215 El Camino Real	1,652
	Fire Department	380 Oak Ave.	66
Lifeline Utilities	Wastewater Treatment Plant	Located from aerial photography	78,588
Care	Touch of Grace	706 Elm St.	802
	Clinica de Salud del Valle de Salinas	808 Oak St	802
	Greenfield Urgent Care	634 Walnut	802
Educational	Oak Avenue School	1239 Oak Ave.	590
	Greenfield Elementary School	490 El Camino Real	590
	Vista Verde Middle School	1199 Elm Ave.	590
	Greenfield Primary School	801 Walnut Ave.	590
	Greenfield High School	2025 El Camino Real	590
	Ventana High Continuation School	2015 El Camino Real	590

Source: FEMA HAZUS-MH (estimated values) and Monterey County data

Table L-3
City of Greenfield Potential Hazard Vulnerability Analysis – Population and Buildings

Hazard Type	Methodology	Population	SoVI	Buildings			
				Residential		Nonresidential	
		Number	Score	Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0		0	0	0	0
Earthquake	Extreme	0		0	0	0	0
	High	0		0	0	0	0
	Moderate	12,842		2,243	352,242	26	34,416
Flood	100-year flood zone	0		0	0	0	0
Hazardous Materials Event	1-mile buffer transport corridor	11,936	0.50	2,251	192,611	395	83,105
	1-mile buffer fixed site	6,911	2.21	1,335	108,367	192	49,667
Landslide	High	N/A	N/A	N/A	N/A	N/A	N/A
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very high	0	N/A	0	0	0	0
	High	0	N/A	0	0	0	0
	Moderate	9,246	3.26	1,475	113,663	239	52,094
Windstorm	Prevailing wind zone	12,842		2,243	352,242	26	34,416

¹Value = Building value based on Tax Assessor records (x1000)

Table L-4
City of Greenfield Potential Hazard Vulnerability Analysis – Critical Facilities

Hazard	Methodology	Government		Emergency Response		Lifeline Utilities		Care		Educational		Marine, Environmental, and Community		Total	
		No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹	No.	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Earthquake	Extreme	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	High	0	0	2	66	1	0	2	0	5	0	0	0	10	66
	Moderate	1	6,659	0	0	0	0	0	0	0	0	0	0	1	6,659
Flood	100-year flood zone	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Hazardous Materials Event	1-mile buffer transport corridor	1	6,659	2	66	0	0	2	0	5	0	0	0	10	6,725
	1-mile buffer fixed site	0	0	2	66	0	0	1	0	1	0	0	0	4	66
Landslide	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Maximum average run-up	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Very high	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wildland Fire	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	1	6,659	2	66	0	0	2	0	1	0	0	0	6	6,725
Windstorm	Prevailing wind zone	1	6,659	2	2,360	1	78,588	1	802	5	2,950	0	0	10	91,359

¹Value = Building value based on Tax Assessor records (x1000)

Table L-5
City of Greenfield Potential Hazard Vulnerability Analysis – Critical Infrastructure

Hazard	Methodology	Highways		Railroads		Bridges		Airports	
		Miles	Value (\$) ¹	Miles	Value (\$) ¹	Number	Value (\$) ¹	Number	Value (\$) ¹
Agricultural Emergency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	100-year erosion zone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam Failure	Inundation area	0.0	0	0.0	0	0	0	N/A	N/A
Earthquake	Extreme	0.0	0	0.0	0	0	0	N/A	N/A
	High	0.0	0	0.0	0	0	0	N/A	N/A
	Moderate	3.5	29,058	0.0	0	3	4,105	N/A	N/A
Flood	100-year flood zone	0.0	0	0.0	0	0	0	N/A	N/A
Hazardous Materials Event	1-mile buffer	4.2	TBD	0.0	0	4	TBD	0	0
	transport corridor								
Landslide	1-mile buffer fixed site	3.0	TBD	0.0	0	3	TBD	0	0
	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sea Level Rise	Moderate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tsunami	Inundation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wildland Fire	Very high	0.0	0	0.0	0	0	0	0	0
	High	0.0	0	0.0	0	0	0	0	0
	Moderate	1.7	TBD	0.0	0	3	TBD	0	0
Windstorm	Prevailing wind zone	3.5	29,058	0.0	0	3	4,105	N/A	N/A

¹Value = Estimated value (x1000)

Agricultural Emergency

There are 49.2 acres (0.077 square miles) of cropland in the City of Greenfield that intersect with the 100-year floodplain.

Dam Failure

Failure of the San Antonio, Nacimiento, and Salinas dams poses a risk to only one critical facility (wastewater treatment plant, worth \$78.6 million) in the City of Greenfield.

Earthquake

No residents, buildings, or facilities are located in extreme or high shaking areas. However, the entire city is at risk to moderate shaking. This includes 12,842 people, 2,243 residential buildings (worth \$352.2 million), 26 nonresidential buildings (worth \$34.4 million), 11 critical facilities (worth \$6.7 million) and 3.5 miles of highway.

Flood

Flooding within the Salinas River SFHA poses a risk to only one critical facility (wastewater treatment plant, worth \$78.6 million) in the most western portion of the city.

Hazardous Materials Event

Within the 1-mile buffer around the transportation facilities, approximately 93 percent of the city's population is exposed to a hazardous material transport event. This includes 11,936 people, 2,251 residential buildings (worth \$192.6 million), 395 nonresidential buildings (worth \$83.1 million), and 10 critical facilities (worth \$6.7 million). These figures are for the entirety of the transportation corridors and, therefore, overstate the exposure since a single HAZMAT event at a given point along these corridors is unlikely to affect all of the area within the 1-mile buffer.

Within the 1-mile buffer around the fixed HAZMAT sites, 6,911 people are exposed to a fixed-site hazardous materials event. This includes 1,335 residential buildings (worth \$108.4 million), 192 nonresidential buildings (worth \$49.7 million), and 4 critical facilities (worth \$66,000). These figures are for all of the fixed HAZMAT sites and, therefore, overstate the exposure since a single HAZMAT event at any one location is unlikely to affect all of the area within the jurisdiction.

Wildland Fire

Using the California FRAP model, no residents, buildings, or facilities are located in the high or very high wildland fire risk areas. As such, within the area of moderate wildland fire exposure is 9,246 people and 1,475 residential buildings (worth \$113.7 million), 239 nonresidential buildings (worth \$52.1 million) and 6 critical facilities (worth \$6.7 million). In addition, 1.7 miles of highway and 3 bridges are located in this hazard area.

Windstorm

Windstorms created by prevailing northwest sustained surface winds are common throughout the central and southern Salinas Valley. As such, the entire population, buildings, facilities, and infrastructure are vulnerable to windstorms from March to October.

Table L-6
City of Greenfield Legal and Regulatory Resources Available for Hazard Mitigation

Regulatory Tool	Name	Effect on Hazard Mitigation
Plans, Ordinances, and Codes	City of Greenfield General Plan 2005 Safety Element	Establishes policies that will minimize the potential of human injury and property damage to natural hazards. Hazards identified in the Safety Element include: geologic and seismic hazards, flooding, hazardous materials, and fire hazards.
	Hazard Mitigation Plan	Presently covered under countywide multi-jurisdictional hazard mitigation plan. This plan is currently being updated and is anticipated to be completed and re-adopted in late 2014.
	Open Space Management Plan	
	Emergency Operations Plan	
	Capital Improvements Plan	
	Transportation Plan	
	Subdivision Ordinance	
	Site Plan Review Requirements	
Programs	Fire Prevention Code	
	National Flood Insurance Program (NFIP)	Makes affordable flood insurance available to homeowners, business owners, and renters in participating communities. In exchange, those communities must adopt and enforce minimum floodplain management regulations to reduce the risk of damage from future floods.
Policies (Municipal Code)	Zoning Code	Ensures that the use, handling, storage, and transportation of hazardous materials comply with all state laws and that appropriate information is reported to the Fire Department as the regulatory authority.
	Municipal Code	Adoption of California Building Code
	Municipal Code	Adopts and enforces the California Building Code, 1997 Edition.
		Adopts and enforces the Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition.

Table L-7
City of Greenfield Administrative and Technical Resources for Hazard Mitigation

Staff/Personnel Resources	Department/Division Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Planning
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Building
Planner(s) or engineer(s) with an understanding of manmade or natural hazards	Planning
Building inspector	Building
Emergency manager	Planning
Maintenance programs to reduce risk	Public Works

Table L-8
City of Greenfield Financial Resources for Hazard Mitigation

Financial Resources	Effect on Hazard Mitigation
General funds	If funding is available, can be used for hazard mitigation activities including debt service for bonds.
Capital improvements project funding	
Stormwater utility fees	
Water/sewer fees	
Development impact fees	
Authority to levy taxes for specific purposes	Can be used for any hazard mitigation activity, but only eligible for use with voter approval.
Incur debt through general obligation bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
Incur debt through special tax and revenue bonds	Revenue Bonds can be issued through the City without voter approval, to raise funds for hazard mitigation activities.
Incur debt through private activity bonds	Can be used for any hazard mitigation activity but only eligible for use with voter approval.
FEMA HMGP and PDM grants	HMGP grant funding is available to local communities after a Presidentially-declared disaster. It can be used to fund both pre- and post-disaster mitigation plans and projects. PDM funding is available on an annual basis. This grant can only be used to fund pre-disaster mitigation plans and projects only.
Community Development Block Grants (CDBG)	The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs.
United States Fire Administration (USFA) Grants	The purpose of these grants is to assist state, regional, national, or local organizations to address fire prevention and safety. The primary goal is to reach high-risk target groups including children, seniors, and firefighters.

Problem Statements are statements of particular interest with regard to primary hazards of concern, geographic areas of concern, or vulnerable community assets. These statements were primarily derived from local community site visits and discussion with local staff and officials from each community during Individual Jurisdiction Meetings, in combination with a review of the Safety Elements of local General Plans and GIS analysis using best available data in support of updates to the vulnerability analysis for each jurisdiction. They were developed to assist in the identification and analysis of potential hazard mitigation actions for the City of Greenfield.

- The city's wastewater treatment operation is vulnerable to flooding along the Salinas River. While protected by an earthen levee, the effluent ponds are located in the special flood hazard area and should be better protected to withstand future flood and earthquake events to prevent damages, service disruption, and environmental contamination. There is also currently no generator for backup power at the treatment facility.
- Isolation caused by Highway 101 bridge closures/failures is a major concern for the City (losing bridge access at Soledad to the north and King City to the south). This nearly occurred as a result of the major flood event in 1995.
- The city experiences frequent nuisance flooding at the intersection of Apple Avenue and El Camino Real due to inadequately sized stormwater drainage systems.
- Five URM structures remain in the city, all of which are privately-owned and have been posted with warning placards.
- The generator at City Hall is currently capable of only providing backup power to the Police Department, preventing the use of approximately half the building during power outage. This is identified as a threat to sustaining post-disaster recovery operations following major events.
- The City's Council Chambers has been designated by default as the Emergency Operations Center, but a dedicated and fortified structure is needed for the City to be better prepared in dealing with future hazard events.

Table L-9
City of Greenfield Mitigation Action Plan Matrix

Action Number	Description	Ranking / Prioritization	Administering Department	Potential Funding	Timeframe	Benefit-Costs	Status	Narrative Update/Explanation
1	Identify hazard-prone critical facilities and carry out acquisition, relocation, and structural and nonstructural retrofitting measures as necessary.	Priority / High	Planning	HMGF and PDM Grants	Ongoing	This action will help ensure that the community/critical facilities can operate in some capacity before, during, and after the disaster.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
2	Develop a sustained public outreach program that encourages consistent hazard mitigation content. For example, consider publishing tsunami inundation maps in telephone books, wildland fire defensible space tips with summer water bills, and the safe handling and disposal of hazardous waste and chemicals with garbage bills.	Priority / High	Various	General Funds, HMGF, and PDM Grants	0-1 years	A mitigation outreach program will help build and support local capacity to enable the public to prepare for, respond to, and recover from disasters.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
3	Develop an unreinforced masonry grant program that helps correct earthquake-risk nonmasonry building problems, including chimney bracing and anchoring water heaters.	Priority / High	Planning	General Funds, HMGF, and PDM Grants	0-3 years	This action will prevent future residential and nonresidential losses of unreinforced masonry buildings in the future. The retrofitting of unreinforced masonry buildings is a high priority for the State of California.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle

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4	Examine and mitigate critical infrastructure that has been identified as currently being too narrow to ensure the safe transportation of truck loads within Monterey County.	Priority / High	Planning	General Funds	1-3 years	This effort will ensure that heavily used critical infrastructure will ensure the safe transportation of truck loads.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
5	Continue to conduct current fuel management programs and investigate and apply new and emerging fuel management techniques.	Priority / High	Fire District	General Funds and PDM Grant	Ongoing	The probability of future damage from wildland fires could be high if this mitigation action is not implemented.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
6	Develop and provide funding and/or incentives for defensible space measures (e.g., free chipping day, free collection day for tree limbs).	Priority / High	Fire District	General Funds, HMGP, and PDM Grants	Ongoing	The potential cost of this mitigation action seems reasonable for the size of the problem and its likely benefits.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
7	Develop windstorm building requirements (e.g., fasteners for roof sheathing and singles) in high wind hazard areas.	Priority / High	Planning	General Funds	0-1 year	This effort will ensure that future development is less vulnerable to this hazard.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle
8	Include provisions for dust erosion control methods in building, grading, and land clearing permits.	Priority / High	Planning	General Funds	0-1 year	Dust control erosion measures will reduce the effects of bad air quality and soil loss, thereby improving health and work conditions.	Continuous	This action will continue to be monitored and evaluated over the next five-year planning cycle