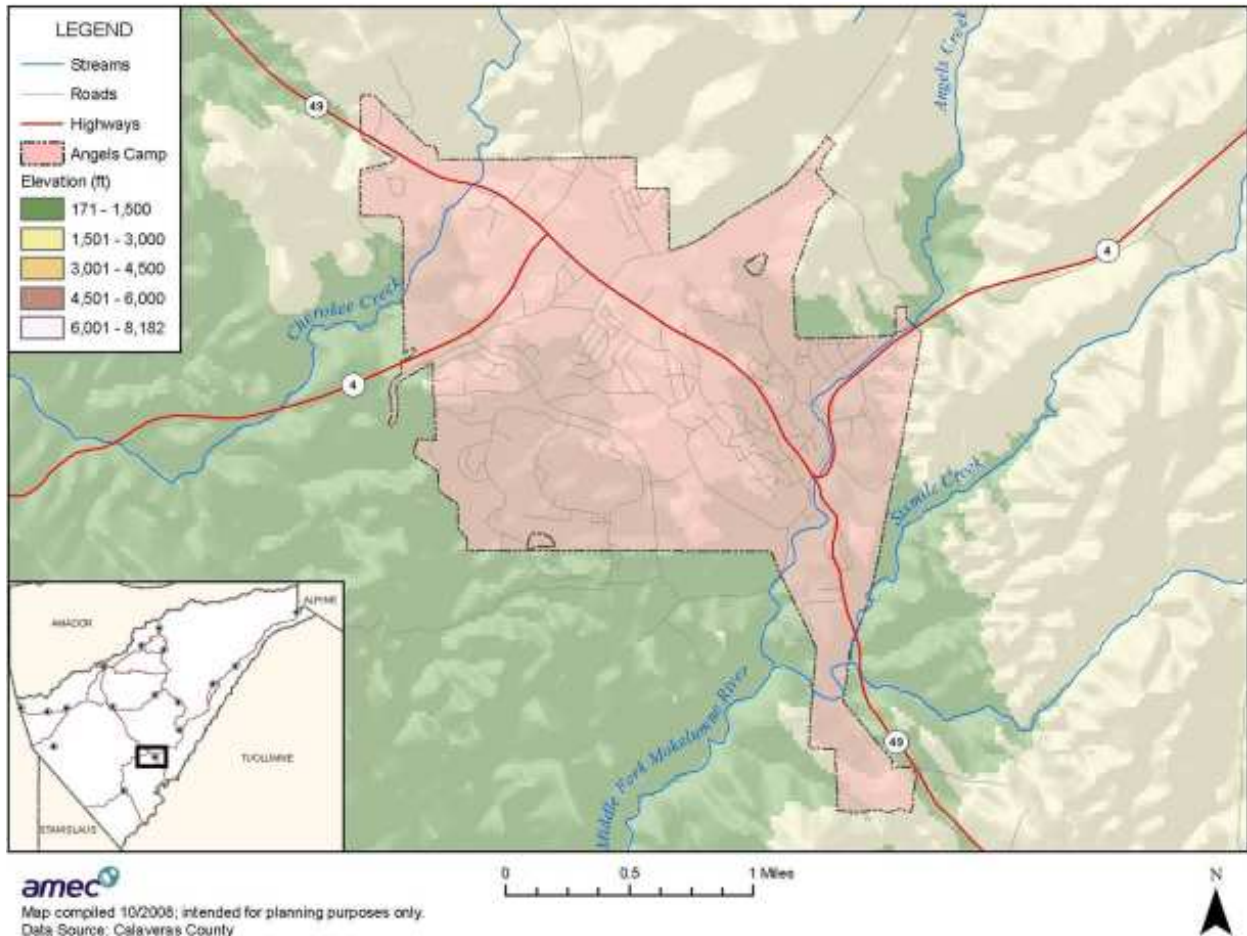


A.1 Community Profile

Figure A.1 shows the City of Angels Camp and its location in Calaveras County.

Figure A.1 Map of Angels Camp

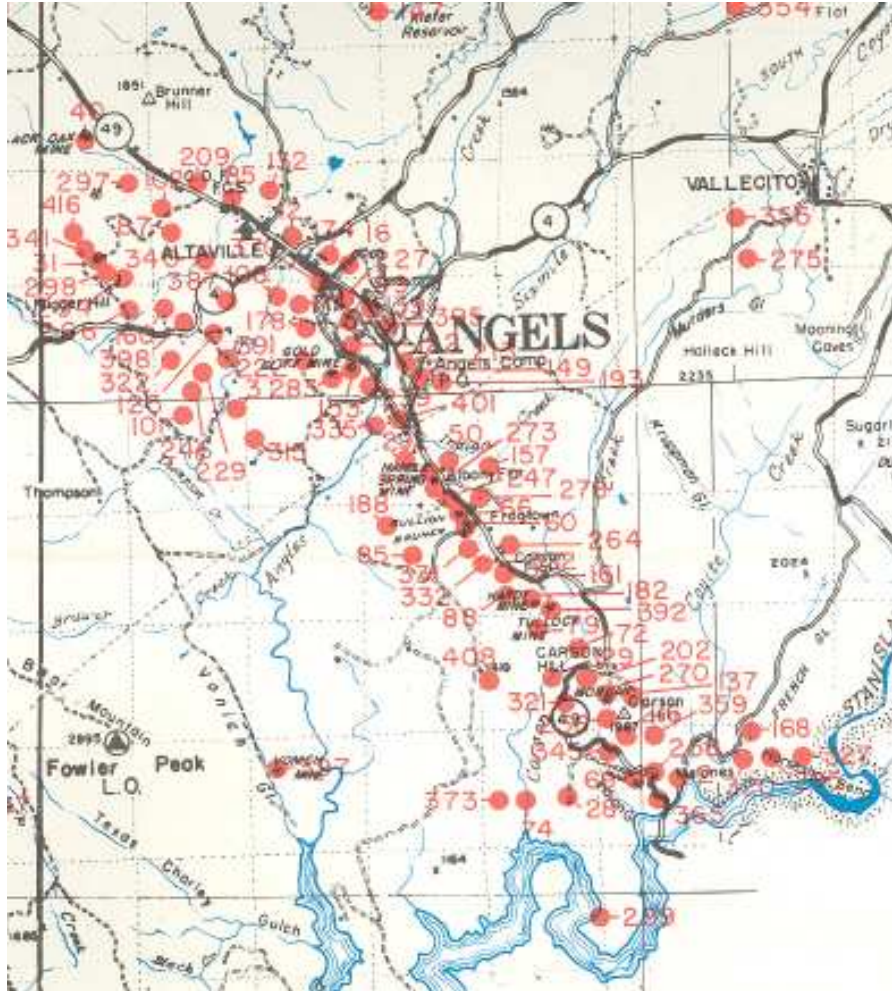


Geography

Angels Camp is situated in the southern-central portion of Calaveras County at 1,379 feet above sea level. This location is generally on the eastern fringe of the San Joaquin Valley and in the western foothills of the Sierra Nevada Range, typically above the winter fog and extreme summer heat of the lower valley and below most of the snow of the high Sierras. Highway 49 is the main north-south arterial and Highway 4 is the main east-west arterial. Cherokee Creek crosses the northwestern section of the city. Angels Creek, Sixmile Creek and Indian Creek converge to form the Middle Fork Mokelumne River near the south end of town.

The area of Calaveras County that includes Angels Camp is noted for its mineral resources, including a history of gold mining and prospecting. Figure A.2 shows gold mines and prospects in the Angels Camp area circa 1962.

Figure A.2 Gold Mines and Prospects within the Angels Camp Sphere of Influence, 1962



Source: Angels Camp General Plan, Appendix 4 Conservation and Open Space; Mines & Mineral Resources of Calaveras County, CA County Report #2 – CA Division of Mines & Geology, 1962

A number of special status plant and animal species as defined by the U.S. Fish and Wildlife Service (USFW), California Department of Fish and Game (CDFG) and California Native Plant Society (CNPS) occur in the Angels Camp geographic sphere of influence. Table A.1 lists these special status species.

Table A.1. Special Status Plant and Animal Species Occurring or with the Potential to Occur Within the Angela Camp Sphere of Influence, 2006

Common Name	Scientific Name	Status
Invertebrates		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT
Reptiles		
Western pond turtle	<i>Clemmys marmorata</i>	SSC
Amphibians		

Common Name	Scientific Name	Status
California tiger salamander	<i>Abystoma californiense</i>	FC, SSC
California red-legged frog	<i>Rana aurora draytonii</i>	FC, SSC
Foothill yellow-legged frog	<i>Rana boylei</i>	SSC
Western spadefoot	<i>Scaphiopus hammondi</i>	SSC
Birds		
Cooper's hawk	<i>Accipiter cooperi</i>	SSC
Sharp-shinned hawk	<i>Accipiter striatus</i>	SSC
Tricolored blackbird	<i>Agelaius tricolor</i>	SSC
Golden eagle	<i>Aquila chrysaetos</i>	SSC, BGEPA
Ferruginous hawk	<i>Buteo regalis</i>	SSC
Willow flycatcher, nesting	<i>Empidonax traillii extemis</i>	FE
White-tailed kite	<i>Elanus leucurus</i>	SA, FPS
Merlin	<i>Falco mexicanus</i>	SSC
Bald eagle – wintering	<i>Haliaeetus leucocephalus</i>	FT, BGEPA
Loggerhead shrike	<i>Lanius ludovicianus</i>	SSC
California horned lark	<i>Phrynosoma coronatum frontale</i>	SSC
Burrowing owl	<i>Speotyto cunicularia</i>	SSC
Mammals		
Pallid bat	<i>Antrozous pallidus</i>	SSC
Ringtail	<i>Bassaricus astutus</i>	FPS
Greater western mastiff bat	<i>Eumops perotis californicus</i>	SSC
Western red bat	<i>Lasiurus blossevilli</i>	SSC
Pale big-eared bat	<i>Plecotus townsendii pallescens</i>	SA
Pacific western big-eared bat	<i>Plecotus townsendii townsendii</i>	SA
Plants		
Ione manzanita	<i>Arctostaphylos myrtifolia</i>	CNPS 1B, FT
Chinese Camp brodiaea	<i>Brodiaea pallida</i>	CNPS 1B, FT, SE
Hoover's calycadenia	<i>Calycadenia hooveri</i>	CNPS 1B
Mariposa cryptantha	<i>Cryptantha mariposae</i>	CNPS 1B
Tuolumne button celery	<i>Eryngium pinnatisectum</i>	CNPS 1B
Parry's horkelia	<i>Horkelia parryi</i>	CNPS 1B
Veined water lichen	<i>Hydrothyria venosa</i>	USDA
Ahart's dwarf rush	<i>Juncus leiospermus var. ahartii</i>	CNPS 1B
Stebbin's lomatium	<i>Lomatium stebbinsii</i>	CNPS 1B
Pansy monkeyflower	<i>Mimulus pulchellus</i>	CNPS 1B
Whipple's monkeyflower	<i>Mimulus whipplei</i>	CNPS 1A
Tongue-leaf copper moss	<i>Scopelophila cataractae</i>	CNPS 2

Status Key

- CNPS 1A California Native Plant Society, List 1A: Presumed extinct in California, but may occur or be re-discovered during the life of the plan.
- CNPS 1B California Native Plant Society List 1B: Plants rare, threatened or endangered in California or elsewhere
- CNPS 2 California Native Plant Society List 2: Plants rare, threatened or endangered in California, but more common elsewhere
- CNPS 3 California Native Plant Society List 3: More information needed
- FT: Federally listed, threatened (Federal Endangered Species Act)

- FE: Federally listed, endangered (Federal Endangered Species Act)
 FC: Federal candidate for listing (Federal Endangered Species Act)
 SE: State listed, endangered (California Endangered Species Act)
 SSC: Species of Special Concern (California Department of Fish and Game, CDFG)
 SA: California Natural Diversity Database Special Animal (California Department of Fish and Game, CDFG). May include animals considered endangered or rare pursuant to Section 15380(d) of the CEQA guidelines; animals that are biologically rare, very restricted in distribution or declining throughout their range; population(s) in California that may be peripheral to the major portion of the animal's range, but which are threatened with extirpation in California; and animals closely associated with habitat that is declining in California (e.g., wetlands, riparian, native grasslands); this category may apply to species at specific life stages (e.g., wintering, breeding, nesting).
 BGEPA: Bald and Golden Eagle Protection Act (United States Code Sections 668-668d)
 FPS: Fully protected species, California Department of Fish and Game (California Fish and Game Code Section 4700 of Chapter 8; Section 5050 of Chapter 2, Division 6; and Chapter 1, Section 5515)
 USDA: United States Department of Agriculture, Forest Service, Sensitive Species
 Source: Angels Camp General Plan, Appendix 4 Conservation and Open Space

Characteristics of the primary soils in the Angels Camp area are described in Table A.2. below.

Table A.2. Drainage, Permeability and Erosion Potential of Soils in the Angels Camp Geographic Sphere of Influence

Soil Name	Natural Drainage	Permeability	Erosion Hazard
Guenoc-Stonyford Association*	Good	Moderately slow	Slight-Moderate
Josephine-Mariposa Association*	Good	Moderately slow to slow	Slight to Moderate
Supan Association	Good	Moderately slow	Slight to Moderate
Forward-Rockland Association*	Good	Moderately rapid	Moderate
Auburn-Argonaut Association	Good to Moderate	Moderate to slow	Slight to Moderate
Perkins Acid Variant Association	Good	Moderately slow	Slight to Moderate
Mariposa/Josephine Association	Good	Moderate	Medium to Rapid
Whiterock/Auburn Association	Good	Moderate	Slight to Moderate

Source: Angels Camp General Plan, Appendix 4 Conservation and Open Space

Note: * indicates primary soils occurring within Angels Camp city limits.

Angels Camp receives an average of 31.3 inches of precipitation per year, slightly less than the U.S. average of 36.6 inches. Based on long term annual trends there are 76 days per year with measurable precipitation and 222 sunny days per year. The July average high is 95.8°F, and the January average low is 38.3°F. Table 2.1 shows climate information for Angels Camp's in comparison to national averages.

Table A.3. Angels Camp—Annual Climate Averages

Climate	Angels Camp	United States
Precipitation (Inches)	31.3	36.6
Precipitation Days	76	101
Sunny Days	255	205

Average July High	95.8	86.5
Average January Low	38.3	20.8
Elevation (Feet)	1,379	1,062

Sources: Sperlings, http://www.bestplaces.net/city/Angels_City-California.aspx

Population

The California Department of Finance population estimate for Angels Camp in January 2008 is 3,593. Based on data from the 2000 Census, demographic and social characteristics for Angels Camp are compared to Calaveras County, California and the U.S. are shown in Table A.3.

Table A.3. Angels Camp—Comparative Demographic and Social Characteristics, 2000

Characteristic	Angels Camp	Calaveras County	California	U.S.
Population (2000)	3,004	40,554	33,871,648	281,421,906
Under 5 Years (%)	5.2	4.4	7.3	6.8
65 Years and Over (%)	18.2	18.2	10.6	12.4
Average Household Size	2.34	2.44	2.87	2.59
High School Graduate or Higher (%)	85.3	85.7	76.8	80.4
Bachelor Degree or Higher (%)	16.3	17.1	26.6	24.4

Source: U.S. Census Bureau, 2000, www.census.gov/

History

The history of Angels Camp is similar to many of the towns formed in the mid-19th century during the California's Gold Rush. During the first few years, there were as many as 4,000 miners working the surface gold of Angels in the one mile area from Angels Creek to Utica Park. This source played out quickly, but as the legend goes, Bennegar Rasberry's fired his muzzle loader into the ground and split a stone to reveal gold inside, thus initiating the era of hard rock mining in Angels Camp.

The main quartz vein extended from southern Altaville to Angels Creek and all along Main Street of early Angels Camp. The estimated gross recovery of gold from the 5 primary mines from 1886 to 1910 was \$19,985,747...and Angels Creek ran chalky white from the mill wastes.

Mark Twain based his short story "The Celebrated Jumping Frog of Calaveras County" on a story he claimed he heard at the Angels Hotel. The event is commemorated to this day with a Jumping Frog Jubilee in May each year at the Calaveras County Fairgrounds, just east of Angels Camp.

Economy

According to the 2000 U.S. Census, the industries that employed the highest percentages of Angels Camp's labor force were educational, health and social services (28.7 percent); retail

trade (14.8 percent) and construction (9.8 percent). Economic characteristics for Angels Camp are shown in Table A.4. compared to Calaveras County, California and the U.S. overall.

Table A.4. Angels Camp—Comparative Economic Characteristics

Characteristic	Angels Camp	Calaveras County	California	U.S.
Families below Poverty Level, (%) 1999	10.0	8.7	10.6	9.2
Individuals below Poverty Level, (%) 1999	13.0	11.8	14.2	12.4
Median Home Value (\$)	146,400	156,900	211,500	119,600
Median Household Income, (\$) 1999	33,371	41,022	47,493	41,994
Per Capita Income, (\$) 1999	19,599	21,420	22,711	21,587
Population in Labor Force (%)	57.6	54.0	62.4	63.9

Source: U.S. Census Bureau (2000), www.census.gov/

A.2 Hazard Identification and Profiles

The Angels Camp planning team identified the hazards that affect the community and summarized their geographic location, probability of future occurrence, potential magnitude or severity, and planning significance specific for the city (see Table A.5). In the context of the countywide planning area, there are no hazards that are unique to Angels Camp.

Table A.5. Angels Camp—Hazard Summary

Hazard Type	Geographic Extent*	Probability*	Magnitude*	Planning Significance
Dam and Levee Failure	N/A	Unlikely	Negligible	Low
Drought		Occasional	Limited	Low
Earthquake		Occasional	Critical	Moderate
Expansive Soils		Unlikely	Limited	Low
Extreme Heat		Occasional	Limited	Low
Flood		Occasional	Limited	Low
Landslide/Erosion		Occasional	Limited	Low
Volcano	N/A	N/A	N/A	N/A
Severe Winter Weather		Unlikely	Limited	Low
Wildfire		Likely	Critical	Moderate
Windstorm		Likely	Critical	Moderate

*See Section 3.2 for definitions of these factors

Information on past events for each hazard can be found in Section 3.2 Hazard Profiles of the main plan.

A.3 Vulnerability Assessment

The intent of this section is to assess Angel Camp’s vulnerability as distinguished from that of the planning area as a whole, which has already been assessed in Section 3.3 Vulnerability

Assessment. This vulnerability assessment analyzes the population, property, and other assets exposed to impact from hazards with moderate or high planning significance for the City of Angels Camp using the same approach and methodology established for the county as a whole in Chapter 3 Risk Assessment.

Community Asset Inventory

Table A.6. shows the number and assessed value of structures in by land use type in Angels Camp. Land values were purposely excluded from value estimates because land remains following disasters, and subsequent market devaluations are frequently short-term and difficult to quantify. Additionally, state and federal disaster assistance programs generally do not address loss of land or its associated value.

Table A.6. Angels Camp—Building Exposure by Type

Property Type	Structure Count	Structure Value
Agriculture-Ranch	9	\$1,667,862
Commercial	63	\$28,907,270
Exempt	16	\$17,160,488
Industrial	2	\$370,586
Other	753	\$90,824,707
Residential	691	\$168,824,490
Vacant	16	\$2,939,891
Total	1,550	\$310,695,294

Source: Calaveras County parcel data (structure number and value data)

Table A.7 lists critical facilities and other community assets identified by Angels Camp planning team as important to protect in the event of a disaster.

Table A.7. Angels Camp—Critical Facilities

Name of Asset	Address
Medical Facilities	
Angels Camp Family Medical	445 South Main Street
Stockton Cardiology Medical Group	1300 Kurt Drive
Fire Stations	
Altaville-FFS	125 N. Main Street
Fowler Peak-L.O.	Fowler Peak-L.O.
Angels City Fire Department Station	1404 Highway 4
Angels City Fire Department Station	200 Monte Verda Street
California Department of Forestry	Riata Way

Sources: City of Angels Camp; Calaveras County GIS

Vulnerability by Hazard

This section analyzes existing and future structures and other assets at risk to hazards ranked of moderate or high significance that vary from the risks facing the entire planning area and estimates potential losses. These hazards include flood, and wildfire...

Flood

Areas of potential flooding in Angels Camp include sections of Angels Creek through the center of town and to a lesser extent along sections of Sixmile Creek on the southern end of the city.

Existing Development

Angel Camp's current effective flood insurance rate map (FIRM) is from 1997. The city is participating with Calaveras County in the Federal Emergency Management Agency's (FEMA) map modernization program to develop new digital flood insurance rate maps (DFIRMs). Flood vulnerability analysis for Angels Camp was based on the location of properties in relation to preliminary DFIRM floodplain. To be considered affected by a 100-year flood, the centroid or geographic center of the property falls within the area of inundation or 100-year floodplain. Table A.8. shows the type, number and value of properties affected by a 100-year flood in the City of Angels Camp.

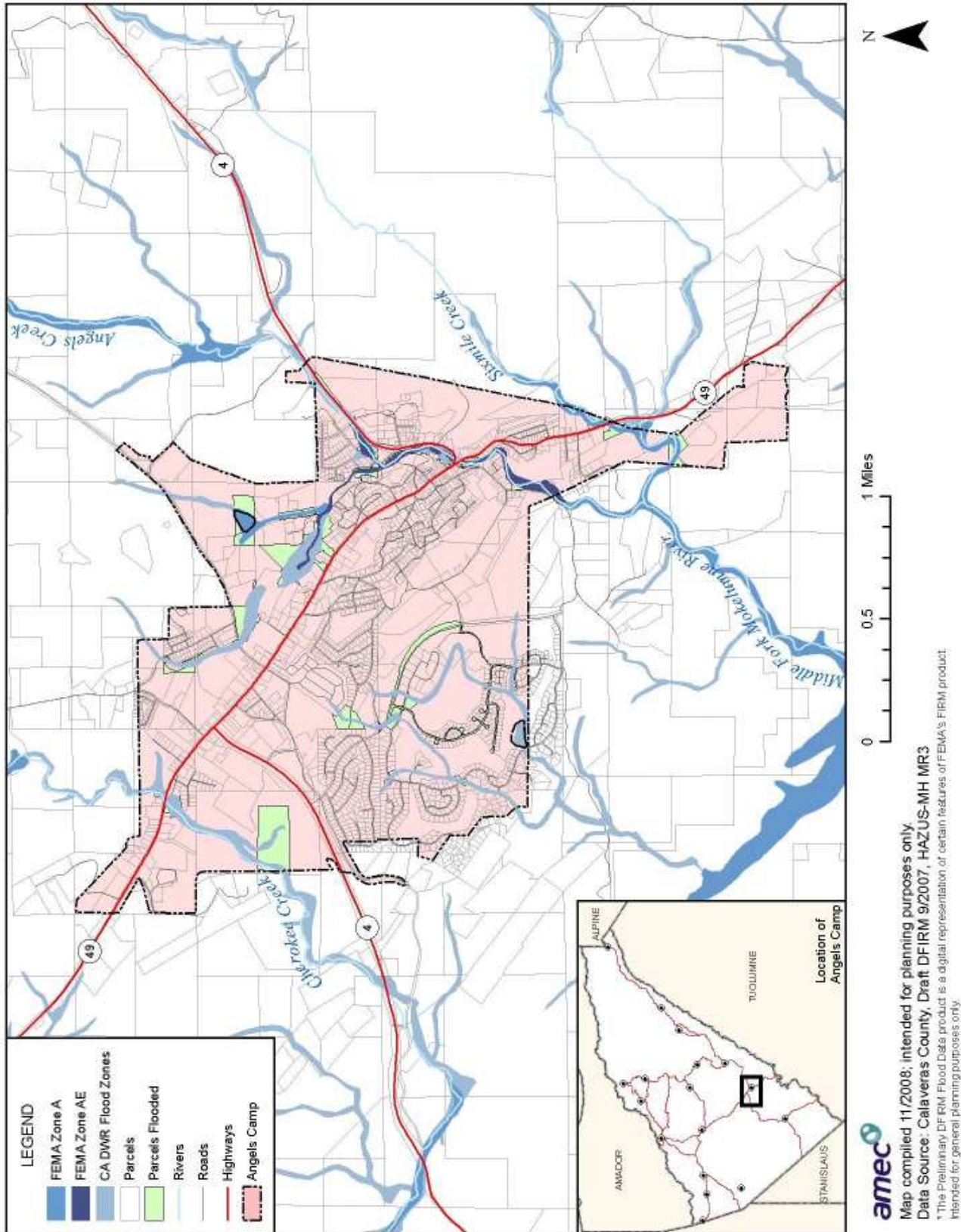
Table A.8. Angels Camp: Type and Value of Properties Affected by 100-Year Flood

Property Type	Number	Improved Value	Estimated Contents Value	Total Value	Loss Estimate
Agriculture-Ranch	1	\$152,000	\$76,000	\$228,000	\$45,600
Other	10	\$1,076,549	\$538,275	\$1,614,824	\$322,965
Residential	1	\$197,824	\$98,912	\$296,736	\$59,347
Total	12	\$1,426,373	\$713,187	\$2,139,560	\$427,912

Source: FEMA Preliminary DFIRM data (flood area), Calaveras County (property data)

Figure A.2 on the following page shows the relationship of city parcels and critical facilities to flood zone with 1.0 percent annual probability, or a 100-year flood, based on digital flood insurance rate map flood hydrology and mapping. This analysis indicates that one critical facility, an evacuation site at the junction of Highway 49 and Highway 4, is located in the identified floodplain in Angels Camp

Figure A.2. Angels Camp Preliminary DFIRM and DWR Flood



National Flood Insurance Program

Based upon the 2000 FEMA Flood Insurance Study, development within the 100-year floodplain in Angels Camp is relatively limited. Angels Camp joined the National Flood Insurance Program (NFIP) on September 24, 1984. NFIP insurance data indicates that as of March 24, 2008, there were nine (9) flood insurance policies in force valued at \$2,634,100 of coverage. Eight (8) of the nine policies were residential (five for single-family homes, three for 2-4 family dwellings). Four of the policies were in A zones and five were in B, C, and X zones.

There have been three paid flood loss claims since Angels Camp joined the NFIP. The value of the paid claims totals \$13,701. There have been no repetitive losses or severe repetitive losses.

As of May 1, 2008 Angels Camp was not a participant in the Community Rating System (CRS).

Future Development

The Town's flood damage prevention ordinance regulates development in special flood hazard areas. At this time there is no future development planned in special flood hazard areas.

Wildfire

Existing Development

A wildfire hazard severity assessment was developed by the California Department of Forestry and Fire Protection, Fire and Resource Assessment Program for Calaveras County including Angels Camp. It classifies wildfire threat as moderate, high, or very high based on fuel hazards, risk of wildfire ignition, values at risk, and firefighting capability. Tables A.7. and A.8. below shows the type, number and value of properties in Angels Camp located in high fire severity or very high fire severity zones, respectively.

Table A.9. Angels Camp—Properties in High Fire Severity Zones

Property Type	Number of Structures	Improved Value
Agriculture-Ranch	5	\$688,113
Commercial	21	\$11,750,799
Exempt	5	\$10,070,312
Industrial	1	\$197,880
Other	267	\$34,821,010
Residential	293	\$73,828,160
Vacant	8	\$1,221,899
Total	600	\$132,578,173

Source: CA-Department of Forestry; Calaveras County

Table A.10. Angels Camp—Properties in Very High Fire Severity Zones

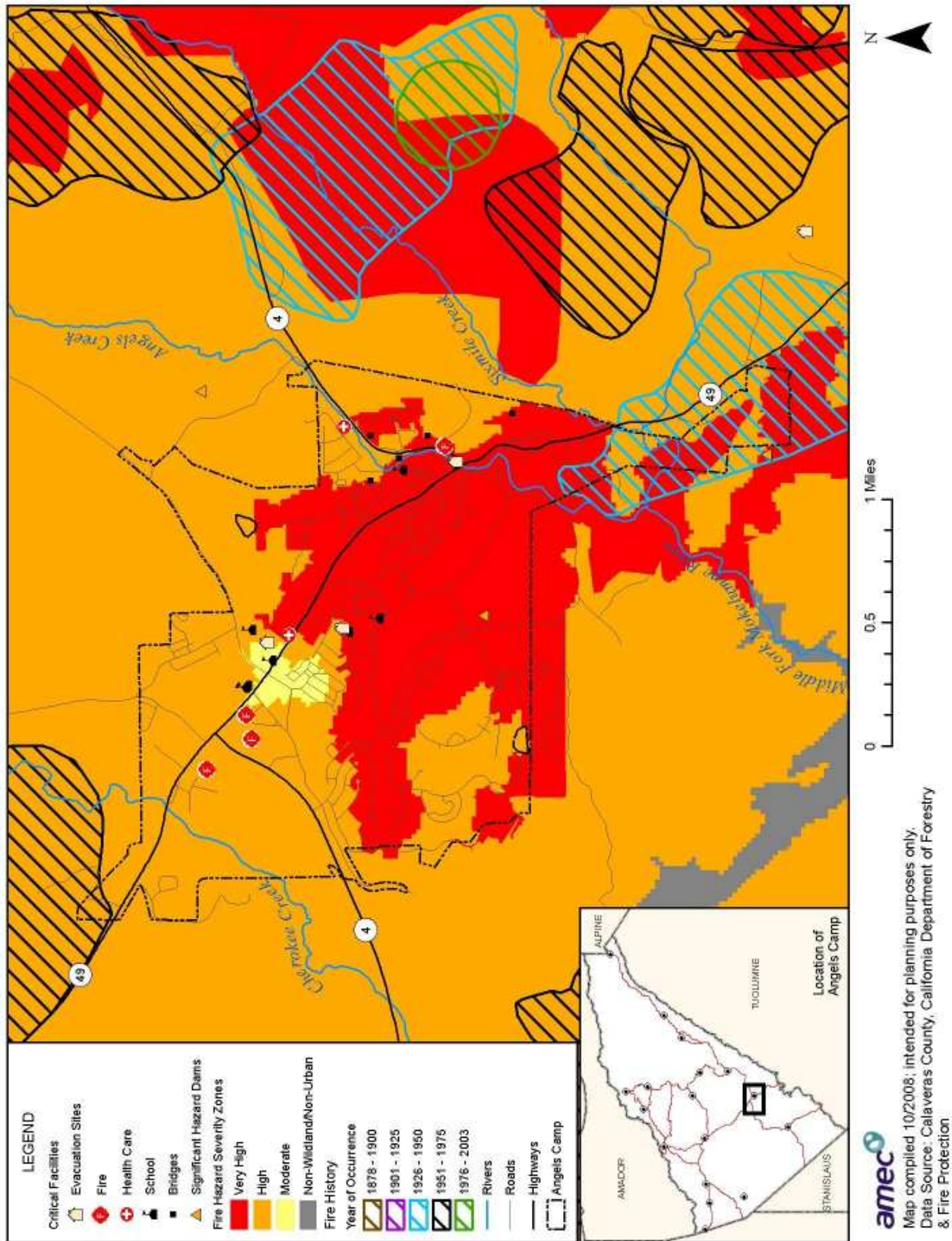
Property Type	Number of Structures	Improved Value
Agriculture-Ranch	4	\$979,749
Commercial	35	\$11,472,344

Property Type	Number of Structures	Improved Value
Exempt	11	\$7,090,176
Industrial	-	-
Other	475	\$53,336,230
Residential	394	\$94,674,938
Vacant	8	\$1,717,992
Total	927	\$169,271,429

Source: CA-Department of Forestry; Calaveras County

Based on this analysis, Angels Camp has a total of 1,527 structures (98.5 percent of the city total) located within High Fire Severity or Very High Fire Severity Zones. The total value of improvements within these two zones is over \$300 million, (97.2 percent of the total value of improvements for the city). 394 residences in Angels Camp valued at over \$94 million are located in Very High Fire Severity zones. Figure A.3 shows the location of previous wildfires, and fire severity ratings relative to the location of critical facilities in Angels Camp.

Figure A.3. Angels Camp Wildfire History, Fire Hazard Severity, and Critical Facilities



Future Development

Wildfire hazards, especially the wildland-urban interface, are becoming a larger issue in Angels Camp and the surrounding lands. A large percentage of the valley floor in the area that includes Angels Camp has been developed and residential subdivisions are now being built on the forested slopes that surround the city.

Growth and Development Trends

The incorporated limits of Angels Camp are roughly 3 square miles (1,920 acres) in area, with a population density of 1,196 persons per square mile in 2007. Table A.8 below shows that since 1999, the city has experienced an increase in the pace of growth and development that is higher than the national average.

Table A.11. Angels Camp—Housing Units, Period of Construction

Period of Construction	Angels Camp, Percent of Housing Units (%)	U.S., Percent of Housing Units (%)
1999 to October 2005	15.02	10.15
1995 to 1998	5.34	6.69
1990 to 1994	6.89	6.7
1980 to 1989	10.43	14.75
1970 to 1979	16.64	17.11
1960 to 1969	13.66	12.78
1950 to 1959	8.63	11.64
1940 to 1949	2.48	6.64
1939 or Earlier	20.92	13.55

Source: U.S. Census

Table A.9 illustrates growth and development trends for Angels Camp in terms of change in population and number of housing units from 2000 to 2008. Note the pace of housing unit increase is higher than the pace of population increase for the period measured.

Table A.12. Angels Camp—Change in Population and Housing Units, 2000-2008

2000 Population	2008 Population	Population % Change 2000-2008	Housing Units 2000	Housing Units 2008	Housing Unit % Change 2000-2008
3,004	3,593	+19.6	1,442	1,812	+25.7

Source: U.S. Census 2000, California DOF, http://www.dof.ca.gov/research/demographic/reports/estimates/e-5_2001-06/

As shown in Table A.10 below, in 2006, the City of Angels Camp building department issued 24 construction permits, the lowest number since 1997. The total value of housing starts for the period was in excess of \$112 million and the 548 new permits issued during that period represent roughly 30 percent of the city's total housing units as of 2008.

Table A.13 City of Angels Camp—Housing Construction Permits and Values, 1996-2006

Year	Construction Permits	Average Cost of Home (\$)	Total Value of Construction (\$)
1996	35	169,700	5,939,500
1997	23	166,800	3,836,400
1998	36	161,400	5,810,400
1999	66	170,100	11,226,600
2000	89	240,900	21,440,100
2001	61	181,900	11,095,900
2002	52	217,800	11,325,600
2003	56	203,300	11,384,800
2004	50	183,300	9,165,000
2005	56	259,300	14,520,800
2006	24	280,800	6,739,200
Total	548	205,263	112,484,300

Source: <http://www.city-data.com/city/Angels-City-California.html>

A.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

Regulatory Mitigation Capabilities

Table A.11 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities.

Table A.14. Angels Camp—Regulatory Mitigation Capabilities

Regulatory Tool (Ordinances, Codes, Plans)	Yes/No
Master Plan	Yes
Zoning Ordinance	Yes
Subdivision Ordinance	Yes
Growth Management Ordinance	In Process
Floodplain Ordinance	Yes
Other Special Purpose Ordinance (Stormwater, Steep Slope, Wildfire)	Yes
Building Code	Yes
Fire Department ISO Rating	Yes
Erosion or Sediment Control Program	Yes
Stormwater Management Program	No

Site Plan Review Requirements	Yes
Capital Improvements Plan	Yes
Economic Development Plan	Yes
Local Emergency Operations Plan	Yes
Flood Insurance Study or Other Engineering Study for Streams	Yes
Elevation Certificates	No

Outlined below are existing, adopted planning documents with provisions specifically relating to hazard mitigation, public safety and loss reduction.

City of Angels General Plan, 2006

Overview

The City of Angels (Angels Camp) General Plan guides the long-term growth and development of the City. With the goal of defining the community’s view of its future, the General Plan outlines a vision, goals, policies, and implementation programs to guide decision makers in the future. The City of Angels Vision Statement, adopted by the Angels City Council in 1998, is:

- To beautify and promote uniformity in the City by encouraging cleanliness, rehabilitation, maintenance and enhancement of public and private property
- To create family sustaining jobs and healthy well-balanced community
- To promote the cultural interest of the City through the preservation of our historical heritage
- To provide public services and facilities that are compatible with the needs and philosophy of the community.

In keeping with California State Law, the City of Angels General Plan document is organized into seven mandatory elements and five non-mandatory elements: Land Use (Chapter 1); Housing (Chapter 2); Circulation (Chapter 3); Conservation & Open Space (Chapter 4); Noise (Chapter 5); Public Safety (Chapter 6); Public Facilities and Services (Chapter 7); Cultural Resources (Chapter 8); Air Quality (Chapter 9); Economic Development (Chapter 10); Community Identity (Chapter 11); Parks and Recreation (Chapter 12).

Mitigation Capabilities

The following section outlines specific goals, policies and implementation programs from the various chapters of the General Plan that pertain to hazard mitigation regulatory capabilities.

Chapter 1 Land Use Element

- **Policy 1.A.4:** Protect the public, existing and planned land uses, and the environment from potential identified hazards. Policy 3.1.14: The Town shall establish open space land dedication requirements that preserve and protect areas of significance to the community. These include but are not limited to wetlands, steep slopes, 100-year floodplains, significant landforms, significant vegetation, and view corridors.

-
- **Policy 1.B.2:** Protect life and property from identified flood hazards.

- **Implementation Program 1.B.e: Designate Identified Flood Hazard Areas as Resource Management/Open Space**

Designate flood hazard areas, as identified by the Federal Emergency Management Agency or as refined through local studies, as Resource Management (“RM” general plan) and Open Space (“OS” zoning).

Equivalent Program: 4Ha (Conservation & Open Space)

Related Program: 1Be (Land Use), 4Ha (Conservation & Open Space), 6Bd (Public Safety)

- **Implementation Program 1.B.f: Designate Resource Management & Open Space Setbacks Along Creeks**

Establish an open space setback encompassing designated flood hazard areas along Angels Creek and Six Mile Creek. Designate these areas as Resource Management (RM) on the city’s general plan maps and as Open Space (OS) on the city’s zoning maps. Establish similar setbacks along other drainages within the city (e.g., China Gulch) or along drainages in areas that may be annexed into the city in the future.

Equivalent Programs: 4Dd (Conservation & Open Space), 4Gc (Conservation & Open Space), 6Bg (Public Safety), 11Bb (Community Identity)

Related Programs: 1Be (Land Use), 4Dc (Conservation & Open Space), 4Ha (Conservation & Open Space)

- **Policy 1.B.3** Continue to identify and implement land use strategies to protect life and property from fire hazards.

- **Implementation Program 1.B.j: Make Available Fire Protection Standards**

Publish the city’s adopted development standards in booklet form or on-line to allow for easy access to this information by the public. Alternatively, amend the municipal code to include a separate title for the city’s adopted fire protection standards including, but not limited to:

- a. The City’s adopted standards for the urban/wildland interface including provisions for defensible space, secondary access and other fire-protection related standards
- b. Adopted standards for fire flow for commercial, residential, industrial and other land use categories
- c. Standards for installing fire sprinklers
- d. Standards for fire protection systems
- e. Standards for placement of propane tanks and facilities
- f. Standards of coverage for fire and emergency medical response as may be established pursuant to **Program 7.C.a**

Equivalent Program: 1Gc (Land Use), 7Ce (Public Facilities & Services)

Related Programs: 1Ge (Land Use), 3Ab (Circulation)

- **General Policy**

- **Implementation Program 1.C.e: Draft a Hillside Management Ordinance**

Draft a hillside management ordinance establishing acceptable hillside slope-related densities and alternatives for hillside construction standards that reduce grading and other adverse environmental impacts. The ordinance should address infill development on city lots (in particular, those lots established prior to the adoption of the city's development standards for creating new parcels) and the appropriateness of setbacks, lot sizes, road widths, road-related facilities (e.g., bike ways, sidewalks), parking standards and related development standards.

Equivalent Programs: 2Bj (Housing), 3Ec (Circulation), 6Aj (Public Safety), 11Bd (Community Identity)

- **Implementation Program 1.C.f: Prepare a Grading Ordinance/Promote Best Management Practices**

Prepare a grading ordinance addressing: When a grading permit is required, when a grading plan shall be prepared, required contents of a grading plan, anticipated grades before and after construction, the total amount of soil to be removed, location and design of retaining walls, erosion control standards, preparation of erosion control plans, recommended erosion control methods, soil disposal, vegetation retention, revegetation, drainage, requirements for erosion and sediment control plans and other elements, as identified. The ordinance, or a companion publication (either prepared as an original publication or adopted from existing publications), should be prepared/ adopted in conjunction with the grading ordinance and illustrate best management practices.

Resources for *Best Management Practices* are listed in **Appendix 4C**.

Equivalent Programs: 4Cf (Conservation & Open Space), 4Ga (Conservation & Open Space), 6Al (Public Safety), 11Ac (Community Identity)

- **Implementation Program 1.E.e: Establish Standards for Erosion and Dust Control**

Establish and adopt standards for erosion and dust control to be included as conditions of approval, conditions of site development or to be otherwise attached as requirements of entitlements issued by the city, as necessary to reduce dust and erosion during construction activities. Methods to be addressed include, but are not limited to:

- a. Revegetating cut and fill slopes
- b. Hydroseeding
- c. Re-vegetation using native grasses
- d. Use of on-site water trucks or similar devices during non-precipitation periods to control dust emissions and maintain water quality during demolitions, construction, or other dust - generating activities
- e. Installation of erosion control devices (e.g., silt fences, hay bales) prior to the rainy season
- f. Measures for protecting soil stability (See **Program 6Ak**)
- g. Tire-washing stations for trucks leaving construction sites

Equivalent Programs: 6Am (Public Safety), 9Ad (Air Quality), 11Ad (Community Identity)
Related Program: 6Ak (Public Safety)

- **General Plan Resource Management (RM) Land Use Classification**

Purposes and Intent

- To conserve important areas of scenic, biological or cultural values
- To protect the city’s residents from natural hazards (e.g., flood zones, fault zones, areas of geological instability).

Location

- Encompassing areas prone to geotechnical hazards, flooding, important scenic or biological resources, or other significant natural areas. Includes portions of Angels Creek, Six Mile Creek, Cherokee Creek, Greenhorn Creek and Indian Creek (limited recreational use may be permitted along some portions of these creeks).

Minimum Design Standards

- Generally, development within these areas is limited in order to preserve open areas to protect resources or to avoid natural hazards.
 - Maximum impervious surfaces: 5%. May be increased to 10% for parcels 5 acres or less in size upon the review and approval of the City of Angels Planning Commission to accommodate minor facilities in support of passive recreational uses which may be compatible with some resource management areas.

Chapter 6 Public Safety Element

The Public Safety Element of the General Plan has a direct relationship to hazard mitigation. In essence each of the goals, policies and implementation programs of the Public Safety Element could be listed here as relating to the established mitigation capabilities of Angels Camp. For sake of brevity Table A.15 below outlines the organizational structure of this element.

Table A.15. Angels Camp 2020 General Plan: Chapter 6 Public Safety Element Organizational Structure

Section	Issue	Description
6A	Geologic Hazards	Addresses seismically induced surface rupture, ground shaking, ground failure, tsunamis, seiche, slope instability leading to mudslides and landslides, subsidence, liquefaction and other seismic or geologic hazards known to the City including those associated with collapsing mines. Volcanic activity also is addressed in this section.
6B	Flood Hazard and Dam Failure	Addresses the potential for flooding within the City and evaluates the potential for dam failures to impact the City.

6C	Emergency Services Plan & Emergency Services	Addresses hospitals, ambulance (ground and air) services, and evacuation routes.
6D	Hazardous Materials	Addresses those establishments identified within and near Angels Camp that store these materials and the potential for hazardous material spills.
6E	Water Supply, Utilities & Communications	Addresses peak load demand for Angels Camp and issues associated with water quality and water quantity during emergencies and addressing interruption of sewer services, electrical, communication, gas and other utility services.
6F	Transportation, Severe Weather, Radiological Incidents, Civil Disturbances	Addresses transportation accidents, severe weather, radiological incidents, and civil disturbances.
--	Fire Protection	Fire protection is addressed in the Public Facilities and Services Element of the Angels Camp General Plan (Chapter 7). That element addresses levels of service provided by the Angels Camp Fire Department and mutual aid agencies (e.g., California Department of Forestry and Fire Protection), including minimum road widths and clearances around structures.
--	Law Enforcement	Law enforcement is addressed in the Public Facilities and Services Element of the Angels Camp General Plan (Chapter 7). That element addresses levels of service provided by the Angels Camp Police Department, Calaveras County Sheriff's Department, California Highway Patrol and the County's Court System.
--	Military Installations/Agricultural Disasters	There are no military installations located in or near Angels Camp. Therefore, issues related to protection of military installations are not addressed herein. There are no commercial agricultural operations within the City; therefore, issues related to Agricultural disasters are not addressed herein.

Source: Angels Camp 2020 General Plan

City of Angels Minimum Site Grading Requirements

Each of the site grading requirements listed below has either a direct or indirect relationship to hazard mitigation, public safety and loss reduction for the City of Angels Camp.

1. Erosion control measures will be provided for during construction wet weather grading at the beginning of grading work, and for permanent conditions prior to final inspection, in wet weather conditions measures will be taken to control site water runoff and silting of roadways and road drainage systems. Plans will show a note for the type of erosion controls proposed.

2. No modifications to the drainage courses over property lines are allowed unless an engineered design is approved. Plans will show the drainage facilities for both existing and proposed.

3. Provide compaction testing reports for the entire depth of fills over 12 inches deep when any structure is supported by the fill. Compaction must meet a minimum 90% relative compaction.

4. Maximum fill and cut slopes to be 2:1 (2 horizontal to 1 vertical) or an engineering report for the slope stabilization is required.

5. Structure setback at toe of slope (height of fill ÷ 2) 15' max.

6. Structure setback at top of slope (height of slope ÷ 3) 40' max.

7. Setbacks of slopes to property lines and easements at the toe of the slope (height of slope ÷ 2) 2' min., 20' max.

8. Setbacks of slopes to property and easements lines at the top of slope (height of slope ÷ 5) 2' min., 10' max.

Administrative/Technical Mitigation Capabilities

Table A.16 identifies the personnel responsible for activities related to mitigation in Angels Camp.

Table A.16. Angels Camp—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position
Planner/Engineer with Knowledge of Land Development/Land Management Practices	Yes	Planning Department
Engineer/Professional Trained in Construction Practices Related to Buildings and/or Infrastructure	Yes	City Engineer
Planner/Engineer/Scientist with an Understanding of Natural Hazards	Yes	City Engineer
Personnel Skilled In GIS	Yes	Planning Department
Full Time Building Official	Yes	Building Department
Floodplain Manager	Yes	Building Department
Emergency Manager	Yes	Police Department
Grant Writer	Yes	Terry Cox-Part Time Employee As Needed
Warning Systems/Services	Yes	Police Department

Fiscal Mitigation Capabilities

Table A.13 identifies financial tools or resources that Angels Camp could potentially use to help fund mitigation activities.

Table A.13. Angels Camp—Fiscal Mitigation Capabilities

Financial Resources	Accessible/Eligible to Use (Yes/No)
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
Fees for Water, Sewer, Gas, or Electric Services	Yes
Impact Fees for New Development	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activities	No
Withhold Spending in Hazard Prone Areas	No

Mitigation Outreach and Partnerships

Angels Camp is involved in ongoing outreach activities and partnerships related to hazard mitigation, which include the following:

- Partnership with Calaveras County
- Public Outreach Programs at local schools on Fire Safety

Past Mitigation Efforts

Other mitigation related programs and projects that Angels Camp has implemented in the past include the following:

- Public Outreach at local schools on Fire Safety
- Fire Extinguisher Use Trainings at Local Businesses
- Weed Abatement Ordinance-

15.25.020 Nuisance declaration and abatement.

- A. No person owning or otherwise in control of any real property within the city shall permit or allow any weeds as defined to grow, stand or remain upon such real property, lot, street or sidewalk in the city of Angels.
- B. Weeds as defined are declared to be a nuisance/fire hazard and subject to abatement as required in this chapter. (Ord. 427A (part), 2006: Ord. 427 (part), 2006)

15.25.030 Abatement requirements.

- A. All combustible weeds, as defined, shall be removed from parcels less than one acre in size. Parcels more than one acre in size shall be clear of all weeds within one hundred feet of any structures, and thirty feet of any streets, driveways, and property lines of improved properties.
- B. Abatement shall constitute chemical abatement, or cutting combustible vegetation to less than four inches above mineral soil. Abatement by agricultural means such as grazing by livestock may be permitted provided such means are not in conflict with other regulations or create additional environmental issues. The minimum grazing shall be one animal unit (one thousand pounds) per acre to feed off the grass in one month or less.
- C. Other abatement specifications may be adopted by the city council by resolution. (Ord. 427A (part), 2006: Ord. 427 (part), 2006)

F.5 Mitigation Goals and Objectives

Angels Camp adopted the hazard mitigation goals and objectives developed by the Calaveras County Hazard Mitigation Planning Committee and described in Chapter 4 Mitigation Strategy.

F.6 Mitigation Actions

The planning team for Angels Camp identified and prioritized the following mitigation actions based on the risk assessment. Background information on how each action will be implemented and administered, such as ideas for implementation, responsible agency, potential funding, estimated cost, and timeline also are included.

As part of their mitigation strategy, Angels Camp will continue participation in and compliance with the NFIP. Specific activities that the City will undertake to continue compliance include the following:

- Working with FEMA and the State in the map modernization program and adopting new DFIRMs when effective
- Continuing participation in the Community Rating System and identifying opportunities to increase points and lower rating, such as through this planning process
- Revising language of the flood damage prevention ordinance to improve clarity and ease of use (see Mitigation Action—3).

Mitigation Action: Angels Camp—1...

Jurisdiction:

Action Title:

Priority:

Issue/Background

**Ideas for
Implementation:**

Responsible Agency:

Partners:

Potential Funding:

Cost Estimate:

**Benefits:
(Losses Avoided)**

Timeline: