

2 Community Profile

The City of Petaluma is located approximately 40 miles north of San Francisco. Petaluma is a unique community, geographically defined by the surrounding hillsides and a reputation for maintaining a "small town" atmosphere as the City has grown in population.

Today the City's proximity to the San Francisco Bay Area and the well-preserved historic downtown continues to make it an attractive place for home buyers. Petaluma has experienced steady growth since suburbanization in the 1950s and the adoption of the Urban Growth Boundary (UGB). In 2018 The City's population was projected to reach 62,700 in four years, making Petaluma the seventh-fastest growing city of Sonoma County's nine major cities (Sonoma County 2018).

2.1 Location and Geography

The City of Petaluma is located at the southern end of Sonoma County. The City is comprised of 13.9 square miles of land and one-tenth of a square mile of water consisting mostly of the Petaluma River. U.S. Highway 101 bisects the City easily connecting locals and visitors to the surrounding Bay Area region.

Petaluma's boundaries have been defined mostly by the surrounding natural landscape. The City is within the Petaluma River Valley, which is defined by Sonoma Mountain to the northeast and hills extending from Burdell Mountain on the west (City of Petaluma 2012). The City is surrounded by the unincorporated communities of Penngrove to the north and Lakeville to the south.

The City was built on the northern banks of the navigable end of the Petaluma River, a tidal estuary that flows south to the San Pablo Bay.

2.2 Land Use Distribution

The City of Petaluma's land use pattern has been defined by historical growth and land use regulations (City of Petaluma 2012). In 1998, Petaluma voters approved a 20-year UGB as part of Measure I. In 2010, voters approved the expansion of the UGB to include an additional 330 acres and extended the UGB until December 31, 2025. According to the City's revised 2012 General Plan (2025 General Plan) the UGB has not affected growth management numbers but did confine the growth and physical development of the City until 2018. The Hazard Mitigation Planning Committee (HMPC) selected the UGB as the Planning Area for this plan because it represents the City's boundaries at the planned buildout. This Planning Area is shown in Figure 2-1.

It should be noted that the "planning area" defined in the Local Hazard Mitigation Plan (LHMP) is different than the "planning area" defined in the City's General Plan. State law allows cities to identify a planning area during their General Plan process. This is typically an area outside of city boundaries and generally outside the UGB. It is designed to act as a signal to the County and other nearby local authorities that Petaluma recognizes that development may occur within these areas. The most common land use classification in the City of Petaluma is residential with 50 percent of parcels being designated as residential single-family homes. The remaining land uses include primarily mixed-use, business parks and commercial (17 percent), multifamily (1 percent), open space (8 percent), education (3 percent), and agricultural (1 percent). A detailed breakdown of land use in the City is summarized in Table 2-1. These land uses are shown in Figure 2-2.



Table 2-1: City of Petaluma Land Uses by Acreage

Land Use Description	Acres	Percentage of Total
Right of Way Private	0.62	0.01%
Agriculture Support Industrial (CPSP)	7.91	0.09%
Proposed City Park	44.64	0.50%
Agriculture	46.13	0.52%
Right of Way	46.30	0.52%
River Dependent Industrial (CPSP)	47.95	0.54%
Neighborhood Commercial	91.59	1.04%
High Density Residential (18.1-30.0 hu/ac)	97.93	1.11%
Mobile Homes (8.0-18.0 hu/ac)	117.29	1.33%
Floodway	136.46	1.54%
Industry	180.56	2.04%
Community Commercial	198.36	2.24%
City Park	242.42	2.74%
Regional Park	255.93	2.89%
Rural Residential (0.1-0.5 hu/ac)	268.21	3.03%
Education	268.22	3.03%
Medium Density Residential (8.1-18.0 hu/ac)	360.62	4.08%
Diverse Low Density Residential (6.1-12.0 hu/ac)	369.39	4.18%
Business Park	516.09	5.84%
Mixed Use	536.55	6.07%
Very Low Density Residential (0.6-2.0 hu/ac)	568.87	6.43%
Open Space	737.72	8.34%
Public/Semi-Public	1,182.87	13.38%
Low Density Residential (18.1-30.0 hu/ac)	2,518.26	28.48%
Total	8,840.89	100%

Source: City of Petaluma 2019



Figure 2-1: City of Petaluma Planning Area

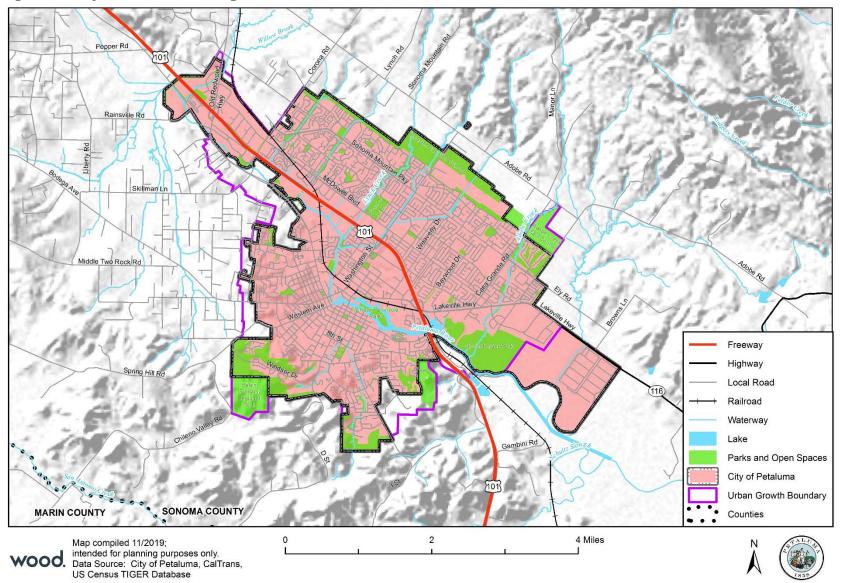
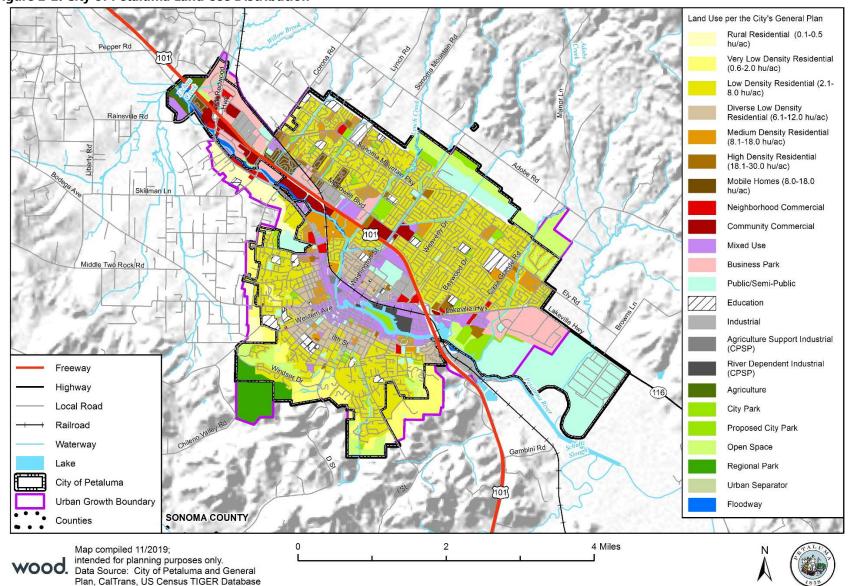




Figure 2-2: City of Petaluma Land Use Distribution





2.3 History

In 1850 a group of hunters established a primitive hunting camp on the west of bank of the Petaluma River. The camp quickly developed along the Petaluma River and became a trading post for the growing San Francisco area. After incorporation of the City in 1858, downtown Petaluma began to develop along the southwest bank of the Petaluma River, along what is now Petaluma Boulevard North (City of Petaluma 2012). With the arrival of the railroad in 1870 the City became a thriving commerce center for the region. Agriculture dominated as an industry not only in Petaluma but throughout Sonoma County. By 1908, 75 percent of the county's population raised poultry (Visit Petaluma 2017). By the end of World War I, the City's egg industry was in trouble and in 1918 the City's Chamber of Commerce hired a well-known Public Relations consultant to rebrand Petaluma as "The World's Egg Basket" leading to a surge in industry until the 1940s when cost of production became too high for many farmers.

In 1937 with the completion of the Golden Gate Bridge, the City transformed into a bedroom community and experienced the post-World War II suburbanization similar to many small U.S. communities during that time. The completion of U.S. Highway 101 in the 1950's provided quick access to San Francisco which led to the arrival of families and the continued growth of Petaluma. In this timeframe residential and commercial areas expanded east of U.S. Highway 101. The City's proximity to the San Francisco Bay Area has consistently made it an attractive place for home buyers and the City has experienced steady growth since suburbanization in the 1950s.

The City of Petaluma was not impacted by the 1906 San Francisco Earthquake that devasted neighboring communities but served as a refuge for evacuees and survivors (Sommer 2017). Because of this many well-preserved historic buildings still exist in the Petaluma's downtown including several theaters and opera houses. Historic preservation of these building continues to be a priority for the City of Petaluma.

2.4 Demographics

Comprehensive data on the City of Petaluma's demographics was obtained from the U.S. Census Bureau's American Community Survey (ACS) five-year estimates (2013-2017) and the California Department of Finance population estimates.

2.4.1 Population and Growth Projections

Between 2010 and 2018 the population of Petaluma increased by 4,310 persons (6.8 percent) (DOF 2019) as shown by Table 2-2 reported by the California Department of Finance Population Estimates. During the same time period, the state of California population increased by 6.2 percent and Sonoma County's population increased by 3.7 percent. This growth trend demonstrates that the City of Petaluma has grown at approximately the same pace State and slightly faster than the surrounding region (US Census 2010; California DOF 2018).

The Sonoma County Economic Development Board is projecting the City of Petaluma will grow by 3.2 percent by 2022, outpacing the state and nation in five-year growth projections. The City's General Plan buildout estimates an additional 15,500 residents in the City by 2025.

The key land use changes noted in the City's General Plan buildout are increases in residential and mixed-use land areas. The City is estimating the buildout will result in 6,000 additional housing units for a total of 27,949 units, a 27 percent increase in housing units in the City (City of Petaluma 2012). The nonresidential growth is projected to increase by 36 percent with the addition of 6.1 million square feet of non-residential space and 23 million square feet of non-residential floor area by 2025 (City of Petaluma 2012).



Table 2-2: City of Petaluma Populations Changes (counts), 2010-2019

Year	Total Population
2019	62,247
2018	62,251
2017	61,124
2016	60,757
2015	60,237
2014	59,829
2013	59,241
2012	58,412
2011	58,123
2010	57,941

Sources: California DOF 2019

Table 2-3 breaks down Petaluma's demographics for select characteristics.

Table 2-3: City of Petaluma's Demographic and Social Characteristics, 2013-2017

Characteristic	
Gender/Age	
Median Age	41.8
Male, percentage	48.8%
Female, percentage	51.2%
Under 5 Years, percentage	5.6%
Under 18 Years, percentage	21.8%
65 Years and Over, percentage	16.1%
Race/Ethnicity	Percentage
White	78.8%
Hispanic or Latino (Any Race)	21.6%
Asian	6.2%
Some Other Race	12.4%
Black or African American	1.3%
American Indian/Alaska Native	1.3%
Native Hawaiian and Other Pacific Islander	0.6%
Education**	Percentage
High School Graduate or Higher	88.6%
Bachelor's Degree or Higher	37.9%

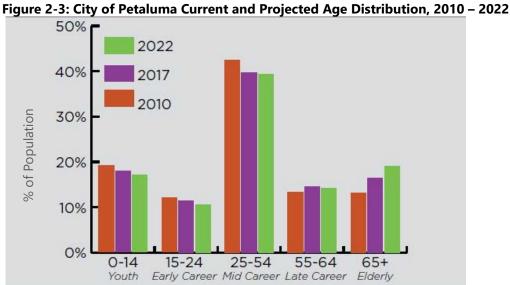
Source: U.S. Census Bureau American Community Survey, 2013-2017, www.census.gov/

^{**}California DOF estimates

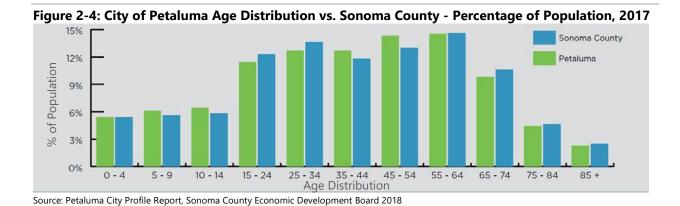


2.4.2 Age

As noted in Table 2-3, the median age of Petaluma residents was 41.8 years old in 2017. According to the 2018 Petaluma City Profile Report from the Sonoma County Economic Development Board, Petaluma is ranked fifth of the County's nine incorporated cities in terms of age, and older than the median age of California (36). The City's labor force is older than the state but younger than the county overall. The City is projected to continue to age with the greatest increase by 2022 being individuals 65 years and older. Figure 2-3 and Figure 2-4 show the age distribution as of 2017 and projected for 2022.



Source: Petaluma City Profile Report, Sonoma County Economic Development Board 2018



2.4.3 Housing

Housing tenure for City of Petaluma was also obtained through the U.S. Census Bureau ACS and shows the majority of residents live in a home they own. Table 2-4 breaks down the differences in housing tenure.



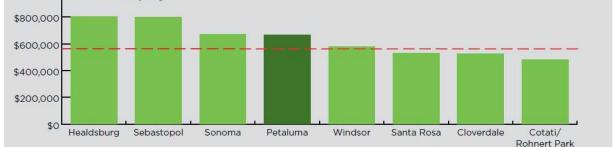
Table 2-4: City of Petaluma Housing Tenure, 2013-2017

Characteristic	Estimates
Occupied Housing Units	22,202
Owner Occupied	14,671
Renter Occupied	7,531

Source: U.S. Census Bureau American Community Survey, 2013-2017, www.census.gov/

Median home prices in the City of Petaluma as of 2017 was \$667,750, which is \$91,750 (or around 15.9%) higher than the County's median home sales of \$576,000. Of the nine incorporated communities in Sonoma County, Petaluma has the fourth highest median home sale price in the county. In the past five years alone, Petaluma's median home sales prices have risen by 76 percent (Sonoma County 2018). Figure 2-5 compares Petaluma's median home sale prices to the other incorporated communities in Sonoma County.





Source: 2018 Petaluma City Profile Report, Sonoma County Economic Development Board

The City of Petaluma Housing Department also manages an affordable housing program that has built or improved 1,336 housing units for low income families, which equates to 22 percent of all housing units built in the City over the past 15 years (City of Petaluma 2019). This program ensures affordable and stable housing services are provided to a broad spectrum of the community's low and moderate-income residents.

2.4.4 Race and Ethnicity

Table 2-5 shows the comparative demographic estimates between 2008 and 2017. The racial and ethnicity makeup of the City is similar to the County. Petaluma is less diverse in terms of race and ethnicity compared to the state.

Table 2-5: City of Petaluma Race and Ethnicity, 2008-2012 vs. 2013-2017

Race/Ethnicity	2008-2012				2013-2017	
	Petaluma	County	California	Petaluma	County	California
White	69.1%	66.3%	40.1%	69.4%	63.8%	37.9%
Black	1.4%	1.5%	5.8%	0.7%	1.4%	5.5%
American Indian and Alaska Native	0.7%	0.7%	0.4%	0.1%	0.5%	0.4%
Asian	5.6%	4.0%	13.0%	4.2%	3.9%	13.9%
Native Hawaiian and Other Pacific	0.3%	0.3%	0.4%	0.0%	0.3%	0.4%
Other	0.3%	0.2%	0.2%	1.3%	0.5%	0.2%
Hispanic	20.7%	24.8%	37.6%	21.6%	26.4%	38.8%

Source: U.S. Census Bureau American Community Survey, Comparative Demographic Estimates, 2008-2012 and 2013-2017 estimates, www.census.gov/



2.4.5 Income and Poverty

Individual households are commonly expected to use private resources and funds to prepare for, respond to and recover from disasters. This means that households living in poverty are disadvantaged when confronting natural and human-caused hazards. Households living in poverty may also occupy poorly built or inadequately maintained housing. These housing types may be more susceptible to damage in earthquakes or flood events than other types of housing. In urban areas, such as the City of Petaluma, households living in poverty may also live in older houses and multi-family housing that is constructed of un-reinforced masonry, a building type that is susceptible to damage during earthquakes. Further, residents living below the poverty level are less likely to have insurance to compensate for the losses incurred from natural disasters.

Persons under 18 years old in Petaluma can also be disproportionately affected by poverty. According to the 2013-2017 ACS data, 9.6 percent of the City's total residents under the age of 18 were living in poverty (Table 2-5), compared to the 5.7 percent of all families in the City. The percentage of residents in poverty in Petaluma has decreased since 2008 (Table 2-5). The income brackets of \$50,000 to \$75,000 is estimated to shrink by 2.2 percent while the income bracket of \$200,000 and more is estimated to grow by 2.1 percent by 2022 (Sonoma County 2018).

The City of Petaluma also had the second-highest median household income in the County as the average household income in 2017 was \$84,949according to the California Department of Finance,. During the same year, the median household income in Sonoma County at \$71,769 while household incomes in nearby counties ranged higher from \$104,703 to \$79,637 (Marin and Napa counties), The 2017 statewide median income at \$67,169 (DOF 2019). In 2017, the median household income for the State was \$67,169 and the 11.1 percent of families were living below the poverty line (U.S. Census Bureau ACS 2017). Based on this comparison, while the City of Petaluma has a higher median household income than the County and State, there are small segments of the City's population that are low income and disadvantaged and expected to be more susceptible to natural disasters and less likely to recover at the same pace as the rest of the community.

Additional demographic data and information on income, social vulnerability, and disadvantaged communities in the Petaluma Planning Area are summarized below in Section 2.5 Social Vulnerability. Information on growth is summarized in Section 2.8 Growth and Development Trends.

2.5 Social Vulnerability

Social vulnerability considerations were included in the development of this plan to identify populations across the City's Planning Area that might be more vulnerable to hazard impacts based on a number of factors. Hazard events can have very different impacts for different segments of a community, even if the hazard effects the entire City of Petaluma. The combination of socioeconomic status, household composition, physical disabilities, age, race and ethnicity, education level, primary language, housing, and transportation barriers can alter the way communities prepare for and respond to hazard events. For example, as stated in the previous section, families with lower household incomes may not be able to renovate their home to be more resilient to flooding and earthquakes, and as a result these households may be disproportionately affected by a flood or earthquake event. The elderly population may have limited mobility due to age and physical disabilities, which could lead to less accessibility during hazard events. It may also be more time-intensive for this population to receive hazard information and respond in the event of a hazard. Similarly, for those segments of the population where English is not their native language, it may take these individuals and families more time to prepare and respond during a hazard event.





The social vulnerability considerations in this plan cover household income, ethnicity, English proficiency, senior population, disabled population, single-parent households metrics. The considerations in this plan are broad in scope and are based on best available data and mapping information from the following source:

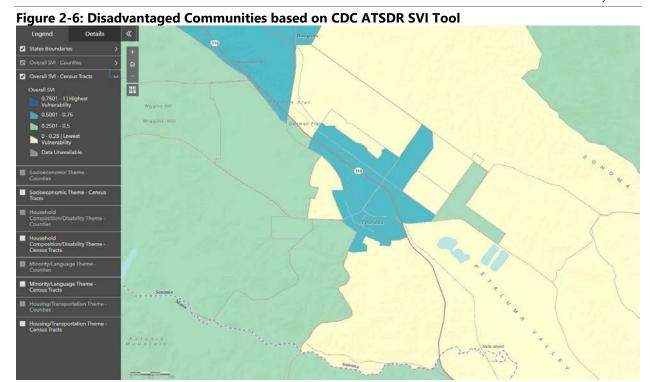
Center for Disease Control's (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI).

CDC Agency for Toxic Substances and Disease Registry Social Vulnerability Index

A social vulnerability index (SVI) was developed by the Center for Disease Control's (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) and their Geospatial Research, Analysis & Services Program, as a way to portray communities' capacities to prepare for and respond to natural and manmade disasters. The SVI provides information on vulnerable populations to assist emergency response planners and public health officials in the identification of communities more likely to require additional support before, during, and after a hazardous event. The CDC's SVI includes county- and state-level maps that show relative vulnerability, provide key socially and spatially relevant information on communities' populations, and the maps compare the SVI based on Census Tracts. This SVI index combines four main themes of vulnerability: socioeconomic status; household composition and disability; minority status and language; and housing and transportation. The information from the SVI data informs the vulnerability of people, as qualitatively discussed in the vulnerability assessment for each hazard in Section 5.

An overview of social vulnerability for the City's Planning Area is shown in Figure 2-6 based on CDC SVI data aggregated to Census Tracts. The SVI map depicts that within the City there is one census tract in the central portion with population with a higher vulnerability to disasters (in blue) and a portion of another census tract to the north with population with high vulnerability. The census tracts shaded in green and yellow have moderate to low vulnerability to disasters. The overall social vulnerability in the surrounding unincorporated portion of Sonoma County based on the SVI data is shown in Figure 2-7. Additional maps using the four main vulnerability themes of the SVI, including socioeconomic vulnerability, household composition and disability, minority status, language vulnerability, and housing and transportation are provided on the CDC's SVI online materials and maps at https://svi.cdc.gov/.

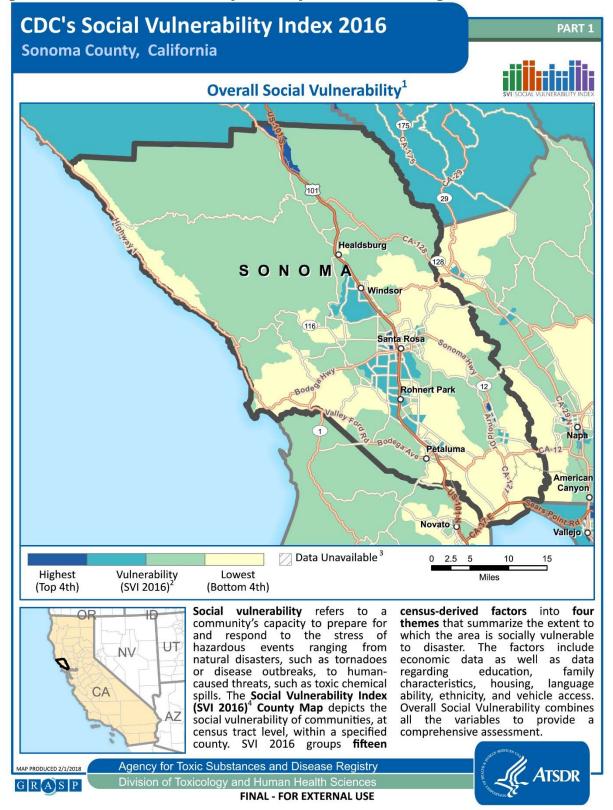




Source: CDC ATSDR 2019



Figure 2-7: Overall Social Vulnerability in the City of Petaluma Planning Area based on SVI Data





2.5.1 Environmental Justice

Certain low-income residents, communities of color, and immigrant communities in California have disproportionately experienced greater environmental burdens and related health problems than other communities. The inequity is a result of many factors, including, but not limited to inappropriate zoning, discriminatory housing, limited political and economic power among certain demographics, and development patterns that tend to concentrate pollution in in certain communities (CEJA 2018). When combined with a lack of economic resources and unjust policy making, these residents and communities, also known as disadvantaged communities (DACs) or environmental justice (EJ) groups can face significant barriers to their overall health, livelihood, and resiliency to hazard events. With the support of community-based organizations, planners, local governments, and public health advocacy groups, recent legislation in California was developed to create healthier cities and counties and prioritize the needs of DACs.

SB 1000 Requirements §65302(h)(1)

The environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, shall do all of the following:

- (A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
- (B) Identify objectives and policies to promote civil engagement in the public decision making process.
- (C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

In 2016 California passed Senate Bill 1000 (SB 1000), the Planning for Healthy Communities Act, which mandates that cities and counties to adopt EJ elements or integrate EJ goals and policies into the elements of their General Plans when they are updating two or more elements of their General Plan concurrently on or after January 1, 2018. Environmental justice is defined by state law as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies" (Gov. Code § 65040.12e). According to the California Environmental Protection Agency (EPA), SB 1000, and pursuant to Section 39711 of the California Health and Safety Code a DAC is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.

Cities and counties are individually responsible for identifying EJ communities within their jurisdictions and incorporating the SB 1000 requirements into their planning processes. The City of Petaluma incorporated these requirements into the LHMP, as this plan will be incorporated into their General Plan in accordance with Assembly Bill 2140. The City meets these requirements by identifying DACs and socially vulnerable communities, promoting engagement in the public decision-making process and in socially vulnerable communities through the implementation of an outreach strategy, addressing EJ considerations to a degree in the vulnerability assessment, and by considering prioritization criteria, such as social equity during the development of mitigation actions. For example, during the HMPC meeting, prioritization criteria included social equity and the HMPC discussed applying a higher priority to actions that related to social equity that benefited DACs or socially vulnerable communities. The HMPC also broadly addressed vulnerable and sensitive populations. The following sections summarize additional information on DACs within the City of Petaluma Planning Area based on various state and local sources.



2.5.2 Disadvantaged Communities

DACs refer to areas in California that suffer the most from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, the presence of hazardous wastes and the high incidence of asthma and other health diseases. DACs have been identified across the state, region, and Sonoma County using various criteria. The social equity considerations in this plan regarding DACs cover household income, ethnicity, English proficiency, senior population, disabled population, and single-parent households metrics. The considerations in this plan are broad in scope and are based on best available data and mapping information from the following state and local sources:

- California Department of Water Resources (DWR) Disadvantaged Communities (DAC) Mapping Tool,
- California Office of Environmental Health Hazard Assessment's (OEHHA) CalEnviroScreen Tool, and
- Sonoma County's Disadvantaged Communities Online Mapping Tool.

The metrics and methodology applied by each federal, state, and local source is summarized below, followed by a "snapshot" of the social vulnerability metrics and information available for the population in the City according to each tool.

California DWR Disadvantaged Community (DAC) Mapping Tool

California DWR defines DACs as a community with an annual median household income (MHI) that is less than 80 percent of the statewide annual MHI (Public Resources Code 7500(g)). Census geographies within an annual MHI less than 60 percent of the statewide annual MHI are considered "severely disadvantaged communities." Figure 2-8 shows DACs within the City's Planning Area.



As shown in Figure 2-9 there is one census tract on the north end of Petaluma identified as a DAC that extends to Cotati and the western portion of Rohnert Park. There are three block groups identified in downtown Petaluma identified as a DAC with approximately 4,418 residents within 1,627 households.



California OEHHA CalEnviroScreen Tool

California's OEHHA uses the CalEnviroScreen Tool to identify California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. CalEnviroScreen is a science-based mapping tool that uses environmental conditions such as proximity to solid waste sites, clean-up sites, etc.; personal health (sensitive populations with asthma, cardiovascular disease, etc.), and socioeconomic (poverty, unemployment, educational attainment, etc.) information to produce a numerical score for each census tract in the state. A census tract with a high score (orange to red) is a community that experiences higher pollution burden and vulnerability than census tracts with low score (yellow to green).

California's Global Warming Solutions Act of 2006 (Assembly Bill 32) implemented a cap-and-trade program as one of several strategies in California to reduce greenhouse gas emissions that cause climate change. In 2012 the Legislature passed Senate Bill 535 that directed 25 percent of the proceeds from the Greenhouse Gas Reduction Fund (GHGRF) go to projects that provide benefit to DACs. As a result, the legislation gave California's EPA responsibility for identifying those communities. California EPA identified the 25 percent highest scoring CalEnviroScreen census tracts as DACs. The designation then lead to AB 1550 that requires 25 percent of the proceeds from the GHGRF be spent on project located in DACs. As shown in Figure 2-10 there are no environmentally burdened or vulnerable communities with high scores in the City of Petaluma.

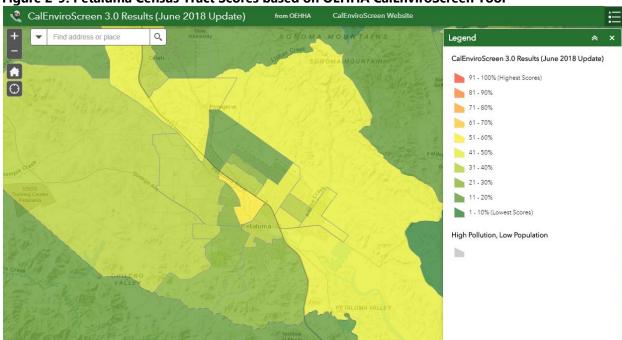


Figure 2-9: Petaluma Census Tract Scores based on OEHHA CalEnviroScreen Tool

Source: California Office of Environmental Health Hazard Assessment 2018 Sonoma County's DAC Online Mapping Tool

The Sonoma County Transportation Authority (SCTA) functions as the countywide planning and fund programming agency for transportation projects. The SCTA was created in 1990 as a result of federal and state legislation to address regional planning, specifically the implementation of transportation improvement projects. The SCTA Board of Directors also coordinates countywide climate protection activities through its other role as the Sonoma County Regional Climate Protection Authority (RCPA).





SCTA defines DACs using different identification criteria than the tools developed by other state agencies. The following DAC designations are defined in the SCTA Disadvantaged Communities mapping tool, including whether the DAC designations occur within the City of Petaluma:

- MTC Adopted Communities of Concern (COC): MTC identified regional COCs use demographic variables including ethnicity, income, English proficiency, senior population, disabled population, single-parent households, zero-vehicle households, and overburdened renters using Census Tract data from the 2005-2009 and 2010-2014 ACS 5-Year Average. These CoCs were adopted as part of Plan Bay Area and are currently being revised as part of the Plan Bay Area update that is underway. There are no MTC Adopted COCs within the City of Petaluma Planning Area.
- SCTA Defined COCs: SCTA Defined COCs use poverty level data (i.e., 30 percent of the census block group households earning 200 percent or less of the federal poverty level) and a more detailed level of census geography. Using census block groups allows better accuracy when identifying pockets of poverty in Sonoma County, especially in areas that are located in large census tracts, or that are adjacent to affluent areas. There are 12 census block groups that are within the City of Petaluma Planning Area, and a portion of a large census block group that intersects with the Planning Area towards the north end of the City. The 12 census block groups identified as SCTA-defined COCs comprise approximately 13,903 residents (22.3 percent of population) within 5,104 households.
- 2019 Caltrans Active Transportation Program (ATP) DACs: The Caltrans ATP defines DACs using income, tribal lands, and proximity to disadvantaged schools. Disadvantaged schools are those where 75 percent of the students are eligible to receive free or reduced meals. The majority of the City's Planning Area was identified as a 2019 ATP DAC.
- Portrait of Sonoma County Priority Places. Portrait of Sonoma County considers life expectancy, education, and income of county residents and combines the variables into a single Human Development Index (HDI), which can be used to identify disadvantaged communities and disparities among Sonoma County neighborhoods. The 20 census tracts in the County with the lowest HDI are identified as DACs and included in the mapping tool. There were no census tracts that met this criteria in the City of Petaluma Planning Area.

Figure 2-10 shows the SCTA-defined COCs and 2019 Caltrans ATP DACs in the Planning Area.



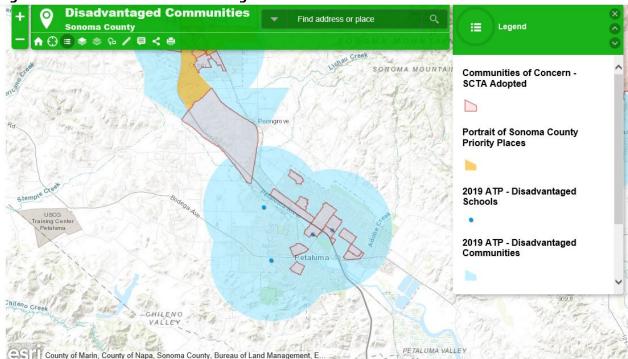


Figure 2-10: SCTA-Defined Disadvantaged Communities in Petaluma

Source: SCTA 2019

2.6 Economy and Employment

The most comprehensive economic data available for the City of Petaluma comes from the U.S. Census Bureau ACS data and the California Department of Finance. Select estimates of economic characteristics for the City of Petaluma are summarized below.

As of 2017, Petaluma had the lowest unemployment rates of the cities in Sonoma County (Sonoma County 2018). The ACS 5-year estimates show a 3.3 percent unemployment rate, lower than the county (3.8 percent), and statewide rates (4.8 percent) and even nationwide (4.4 percent); this reflects an exceptionally strong economy and demand for labor in Petaluma. Table 2-6 summarizes the City's general economic characteristics.

Table 2-6: City of Petaluma's Comparative Economic Characteristics, 2008 vs. 2017

	City of Petaluma		
Characteristic	2008	2017	
Families below Poverty Level	5.6%	5.7%	
All People below Poverty Level (under 18 years)	12.8%	9.6%	
All People below Poverty Level (18 years and over)	7.9%	8.5%	
Median Household Income	\$82,259	\$84,949	
Per Capita Income	37,450	40,784	
Population in Labor Force	70%	66.2%	
Population Employed*	64.8%	62.9%	
Unemployment	7.2%	3.3%	

Source: U.S. Census Bureau American Community Survey, 2013-2017, obtained by California Office of Finance.

^{*}Excludes active duty armed forces



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Table 2-7 illustrates the breakdown of employment by industry in the City of Petaluma from 2013-2017, as well as the number of people employed by each industry, and Table 2-8 lists the City's major employers and approximate number of employees.

Table 2-7: City of Petaluma's Employment by Industry, 2013-2017

Industry	# Employed	% Employed
Agriculture, Forestry, Fishing, Mining	588	1.9
Construction	2,210	7.2
Manufacturing	2,146	7.0
Transportation and warehousing, and utilities	1,098	3.6
Information	931	3.1
Wholesale Trade	982	3.2
Retail Trade	3,539	11.6
Finance, Insurance, Real Estate and rental and leasing	2,094	6.9
Arts, entertainment, and recreation, and accommodation, and food	3,267	10.7
services		
Educational services and Health care and social assistance	6,781	22.2
Professional, scientific, and management, and administrative and	3,952	13.0
waste management services		
Other services	1,443	4.7
Public Administration	1,460	4.8
Totals	30,491	100

Source: U.S. Census Bureau American Community Survey, 2013/2017 www.census.gov/

Table 2-8: City of Petaluma's Major Employers

Employer	# of Employees
Petaluma School District	1,347
Petaluma Poultry Processors	561
Petaluma Valley Hospital	507
City of Petaluma	372
Enphase Energy Inc.	338
Lagunitas Brewing Company	346
Santa Rose Junior College	300
Hansel Auto	268
Olde Adobe Union School District	256
Clover Stornetta Farms	256

Source: City of Petaluma, California Comprehensive Annual Financial Report For the Year Ended June 30,2017, City of Petaluma Finance Department http://cityofpetaluma.net/finance/pdf/cafr/CAFR-FY2017.pdf

2.7 Commuter Population

Based on ACS five-year estimates data for 2013-2017, nearly 33.7 percent of Petaluma's workforce travelled to another county for employment while 65 percent worked within Sonoma County. Of those traveling outside the county for work, nearly 36 percent drove alone while 41.5 percent carpooled. Nearly 72 percent of those traveling outside the county used public transportation compared to 22 percent of those who travel within Sonoma County for work. Commuting patterns can increase congestion on U.S. Highway 101 and local county and city roads. Commute congestion can also affect the City's transportation infrastructure, as well as how the City responds to hazard events that may limit the commuting population's ability to travel to work and safely return to Petaluma after an event.

^{*}Civilian population 16 or older



2.8 Growth and Development Trends

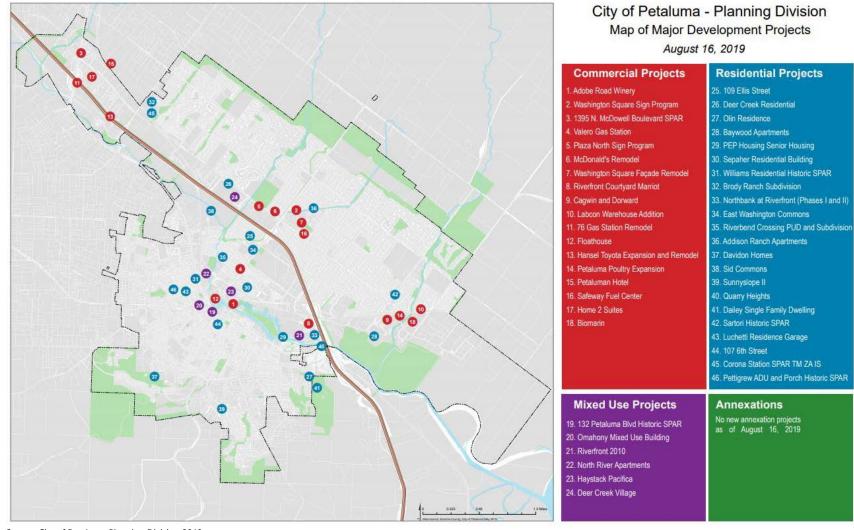
By the 1960's, after years of post-World War II suburbanization that resulted in sprawling subdivisions, the City of Petaluma experienced pressures on city infrastructure, increasing environmental concerns, and the increasing pressures on the local economy as growth edged toward the agricultural and dairy lands. There were also increasing concerns over the divide between the growing commuter-oriented east side and the older west side of the city, as retail businesses began to move away from downtown to the east side. As a result of these growth pressures the City implemented a system of controls to slow the pace of the new residential construction. The City of Petaluma General Plan lists the following milestones in the City's growth management history:

- **1961 General Plan** The 1961 General Plan recognized the importance of compact development patterns and cost-effective provision of public services and infrastructure. It provided a framework for development within Downtown, expansion of industrial areas, new parks, residential neighborhoods, commercial areas, schools, and the roadway network.
- **Environmental Design Plan of 1972** This served as a short-range strategic plan, limiting housing construction to a not-to-exceed rate of 500 dwelling units per year for the five-year period 1972 to 1977. It also established an urban separator (then called greenbelt).
- Residential Growth Management System (RGMS) As part of the 1972 Plan (see above), the RGMS established the criteria to distribute 500 annual housing unit permits. The review process included a Council appointed citizen committee to review all residential development proposals prior to the Council granting of allocations. Although the allocation process is no longer utilized, the cap of 500 housing units is still monitored.
- **Environmental Design Plan of 1978** This reiterated the city's UGB (then called Environmental Design Plan boundary) and extended its effective date through 1985. It identified an optimum population of approximately 70,000 to 90,000 residents.
- **Urban Limit Line (ULL)** The 1987 General Plan designated a ULL for the period 1987 to 2005 that identified the outer edge of allowable urban development, encompassing 10,300 gross acres. General Plan population projections for buildout were "between 60,000 and 67,000 persons." Buildout was, at the time, expected to be reached by 2008.
- **Urban Growth Boundary (UGB)** Placed on the ballot by the City Council in 1998, city voters overwhelmingly adopted a fixed urban edge, which for the most part was coterminous with the 1987 ULL. Although the UGB did not affect the growth management numbers, it confined the growth and physical development of the City until 2018. In 2010, the City Council placed a ballot measure before the voters extending the UGB to 2025.

According to the General Plan, between 1985 and 2005 the City grew at an average annual rate of 1.8 percent. Currently the city has two growth management programs in place, the RGMS and the UGB. Development on the western side of the City is constrained by the hilly topography and the UGB, while the east side is constrained by the UGB until 2025. As of August 16, 2019, the City has forty-six major development projects going through the planning process with the Planning Division. A majority of the projects (22) are residential developments, followed by commercial projects (18), and mixed use (6) projects. The major development projects are located throughout the City with a majority being concentrated near downtown Petaluma. Figure 2-11 shows the location of each development project in the Planning Area.



Figure 2-11: City of Petaluma Major Development Projects – As of August 16, 2019



Source: City of Petaluma Planning Division 2019



Table 2-9 shows the City's land use acreages at complete General Plan buildout.

Table 2-9: City of Petaluma Land Use Acreages at Plan Buildout

Land use	Land Area (acres)
Residential Land	4,348
Rural	268
Very Low Density	604
Low Density	2,520
Diverse Low	363
Medium Density	377
High Density	99
Mobile Homes	117
Commercial Land	290
Neighborhood Commercial	88
Community Commercial	202
Mixed Use	542
Business Park	512
Industrial Land	188
Industrial	180
Agricultural Support Industrial (CPSP)	8
Public and Educational	1,447
Public/Semi-Public	1,179
Education	268
Parks and Open Space	1,594
City Parks	308
County Parks	256
Agricultural	77
Open Space	953
Total	8,921

Source: City of Petaluma General Plan 2008-2025

Additional information on development trends in the City's Planning Area can be found in the Future Development section of each hazard profile in the Section 5.

2.9 Mitigation Capability Assessment

During the development of this plan the City's HMPC completed a mitigation capability assessment to understand what loss prevention mechanisms are already in place. When combined with the risk assessment the mitigation capability assessment this results in the City's "net vulnerability" to disasters, and more accurately focuses the goals and proposed actions of this plan. For this planning effort, a representative from most departments where the City had in-house staff available, participated on the HMPC.

The HMPC used a two-step approach to conduct the capability assessment for the City. First, an inventory of common mitigation activities was made through the use of a matrix. The purpose of this effort was to identify policies and programs that were either in place, needed improvement, or could be undertaken if deemed appropriate. Second, the HMPC conducted an inventory and review of existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses or if they inadvertently contributed to increasing such losses.

Similar to the HMPC's effort to describe hazards, risks, and vulnerability of the City of Petaluma, this mitigation capability assessment describes the City's existing capabilities, programs, and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. It also identifies select state and federal departments/agencies that can supplement the City's mitigation





capabilities. This assessment is divided into four sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, and mitigation outreach and partnerships.

2.9.1 City of Petaluma's Regulatory Mitigation Capabilities

Table 2-10 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Petaluma. Excerpts from applicable policies, regulations, and plans and program descriptions follow to provide more detail on existing mitigation capabilities.

Table 2-10: City of Petaluma's Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General Plan	Yes	The City's General Plan was last updated and amended in 2012. The Housing Element was last updated and amended in 2018. Both planning documents are the City's most comprehensive land use and development tools. Together, they establish the vision for the buildout of the City of Petaluma through 2025. They also include a set of broad-based goals and objectives to guide development in the City. Upon adoption of the LHMP, the City should update the General Plan Safety Element and amend the General Plan to include the LHMP.
Zoning Ordinance	Yes	The City's Implementing Zoning Ordinance (IZO) replaced the City's 1973 zoning ordinance. It guides current development through standards and regulations relating to allowable land uses consistent with the General Plan, conditionally allowable land uses, height, setbacks, parking, and signage. The IZO also addresses Hillside Protection, Tree Preservation, Floodway and Floodplain districts.
Subdivision Ordinance	Yes	Title 20 of the Petaluma's Municipal Code contains the City's subdivision provisions and Chapter 4 of IZO has procedural requirements, tentative subdivision maps, parcels maps, dedications, and improvements. It also outlines streets, alleys, and other public right-of-way or easements for emergency access.
Growth Management Ordinance	Yes	The City adopted RGMS in 1972; an ULL was designated in 1987. An UGB was approved by voters in 1998 and then extended in 2010.
Floodplain Ordinance	Yes	Chapter 6 of the Petaluma IZO contains the City's Floodplain Regulations. Special flood hazard areas in the City are based on the August 1979 Flood Insurance Study (FIS) for the City of Petaluma and recent Flood Insurance Rate Map (FIRM). It limits development of projects in the flood hazard zone unless the project demonstrates flood management facilities will protect the project to the urban level of flood protection, implements conditions on the permit or project entitlement that protect the project to standard flood protection standards.



		Community Profile
Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
		Chapter 6.070 summarizes the standards of construction for new projects, and new construction or substantial improvements shall have the lowest floor elevation, including basements, elevated at least 12 inches above the level of the base flood elevation (BFE). Upon completion of construction, the elevation of the lowest flood shall be certified by a registered professional engineer or verified by the community building inspector. The certification shall be provided to the Floodplain Administrator.
Other special purpose ordinance (e.g., stormwater, steep slope, wildfire)	Yes	Chapter 16 Hillside Protection of the Petaluma's IZO contains the City's provisions for development and altering properties in hillside and ridgeline areas. The purpose is to preserve the essential scenic and natural resources that define the character of Petaluma and minimize potential for geologic failures, fires and floods. Section 16.070 ensures hillside subdivisions are designed to avoid development on steep slopes exceeding 10 percent as determined by the City's Average Slope Formula. Title 17, section 17.30 provides information on Storm Drainage. The Unreinforced Masonry (URM) Building Ordinance, Petaluma Ordinance No. 1882, Section 17.34.110, contains details related to resolution No. 92-48 N.C.S. from the City, originally initiated in 1992. The URM Ordinance requires URM buildings in the City to be retrofitted by the year 2017. This retrofitting process
Building Code	Yes	should be complete as of 2019. The City adopted the 2016 California Building Code (CBC). Adoption and reference to the 2016 CBC is outlined in Title 17, section 17.04.
Fire department Insurance Services Office (ISO) rating	Yes	ISO rating of 3
Erosion or Sediment Control Program	Yes	Title 17, section 31 of the Petaluma Municipal Code grading and erosion control and section 17.30 contains storm drainage.
Storm Water Management Program	Yes	They City complies with requirements under MS4 Order No. 2013-0001-DWQ, which was updated in 2013 as part of the second Phase II Small MS4 General Permit (adopted July 2013). They City is implementing a Storm Water Management Plan that contains processes that will be used to meet mandatory requirements under the updated order.
Site Plan Review Requirements City of Petaluma Local Hazard Mitigation Plan March 2020	Yes	Discretionary projects involve site plan review as part of the planning and approval process conducted by the City's Planning Divisions. The Development Engineering Division of the Public Works Department provides review and permit processing. This division reviews subdivision maps, construction plans, public improvement, and grading plans for all residential, commercial, and industrial projects.





		Community Profile
Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
Capital Improvements Plan	Yes	The Capital Improvement Division of the Public Works and Utilities Department is responsible for the planning, designing and renovating of all City of Petaluma CIP projects. These include projects, such as construction, repair, and improvements of public streets, utility pipelines, pump stations, bridges, bike paths, public buildings, and public parks. The Capital Improvement Division follows design standards, and standard plans and specifications for all street, utility, parks, streetscape, and storm water projects. The Division also maintains a Pavement Management System database of all the City street with a uniformly calculated numeric rating of the condition of pavement.
Economic Development Plan	Yes	The Economic Development Division contains various business development and incentive and program resources for commercial, retail, and property owners. Oversight of the Community Block Grant (CDBG) and Housing Program are functions of the City Manager's Office.
Local Emergency Operations Plan	Yes	The City of Petaluma adopted their Emergency Operations Plan (EOP) in 2007.
Other special plans	Yes	The City of Petaluma Floodplain Management Plan (FMP) (October 2015) describes the natural and magnitude of flooding the City has experienced in the past, floodplain management activities implemented, additional alternative remedies, and a plan for future action to address current floodplain problems. The City of Petaluma has participated in the CRS Program since 1991 and has a Class Rating 6.
Flood Insurance Study or other engineering study for streams	Yes	The City joined the NFIP on February 15, 1983. The City began implementing their NFIP floodplain regulations in 1980. The most recent FIS for the City was completed on March 7, 2017.
Elevation certificates	Yes	See Chapter 4 of this plan, and the City's 2015 Flood Management Plan. The City digitally tracks all of the elevation certificate records and has records dating back to 1991 when the City joined the CRS Program.
Other Source: HMPC Data Collection Guide	Yes	Urban Water Management Plan (2015); River Enhancement Plan; Fire Sprinkler Ordinance for all new construction and existing building remodels.

As indicated in the table above, the City of Petaluma has several plans and programs that guide the City's development in hazard-prone areas. Starting with the City of Petaluma's General Plan, which is the most comprehensive of the City's plans when it comes to mitigation, these relevant plans and programs are described in more detail below.



City of Petaluma General Plan (2008)

The City's General Plan provides a comprehensive and long-term blueprint for the future by establishing a framework for how Petaluma should grow and change over the next two decades (Year 2025). The General Plan contains goals, objectives, policies, and actions that empower the City and community to achieve their future vision. The General Plan is the City's principal policy and planning document to guide future conservation, enhancement, and development in the City. It addresses all aspects of development organized in 12 chapters or elements, including six required by State Planning law and four elements prepared to meet local needs and concerns. The seven mandatory elements include the Land Use Element, Housing Element, Circulation Element (Mobility), Open Space Element, Conservation Element, Safety Element, and Noise Element. The five remaining elements include the Community Character Element, Economic Development Element, Public Facilities and Services Element, Water Resources Element, and Air Quality Element. The City of Petaluma's General Plan also has a section on Historic Preservation.

The following four elements have goals, policies, and implementation programs related to hazards and hazard mitigation, as detailed below:

- Community Facilities, Services, and Education Element
- Water Resources Element
- Health and Safety Element

Each of these elements include goal statements relating to different aspects of the issues addressed in the element. The summary below tracks the organization of each relevant element, with topically-focused goals.

Community Facilities, Services, and Education Element

This element lists all city-owned public facilities in Petaluma, including those that will be assessed in the LHMP. It summarizes broad policies that ensure adequate public facilities and services exist and are maintained to meet the needs of the community. Relevant public facilities and services and fire protection goals are outlined in Table 2-11.

Table 2-11: City of Petaluma Public Facilities, Services, and Fire Protection Goals

Goal	Goal Description
Goal 7-G-1	Ensure adequate public facilities and services exist and are maintained to meet the needs of the community for an array of high-quality services and programs.
Goal 7-G-5	Protect lives, property, and the environment by providing the highest quality of service in prevention, fire protection, emergency medical services, and community preparedness.

Water Resources Element

The water resources element summarizes four components: water supply and demand, recycled water, wastewater, and surface water. This element covers flood hazards, groundwater supply, and drought issues, as they relate to water conservation. Relevant flood and stormwater conveyance goals are outlined in Table 2-12.



Table 2-12: City of Petaluma Flood and Stormwater Conveyance Goals

Goal	Goal Description
Goal 8-G-8	Provide surface drainage and flood protection facilities to meet the community's needs of reducing flood hazards and potential property damage.
Goal 8-G-9	Preserve the design conveyance capacity of the surface water drainage system.

Health and Safety Element

Planning for growth and development requires the consideration of a wide range of public safety issues. Many of the safety risks associated with development, including risks to buildings and infrastructure, can be avoided through siting decisions made at the planning stages of development, while others may be lessened through the use of mitigation measures in the planning and land use review process. The City's Health and Safety Element aims to minimize risks posed by environmental hazards, including geologic and seismic hazards, noise, and hazardous materials and waste. The element also addresses emergency preparedness. Relevant natural hazard and emergency preparedness goals are outlined in Table 2-13.

Table 2-13: City of Petaluma Natural Hazard and Emergency Preparedness and Management Goals

Goal	Goal Description
Goal 10-P-1	Minimize risks of property damage and personal injury posted by natural hazards.
Goal 7-G-5	Protect lives, property, and the environment by providing the highest quality of service in prevention, fire protection, emergency medical services, and community preparedness.
Goal 10-P-2	Protect the community from risks associated with seismically induced surface ruptures, ground-shaking, ground failure, slope instability leading to mudslides and landslides, subsidence, liquefaction, and other seismic, geologic, and fire hazards.
Goal 10-P-3	Protect public health and welfare by eliminating or minimizing the effects of existing noise problems, and by minimizing the increase of noise levels in the future.
Goal 10-P-4	Minimize the risk to life and property from the production, use, storage, and transportation of hazardous materials and waste by complying with all applicable state and local regulations.

City of Petaluma 2015 – 2023 Housing Element

The City prepared the latest Housing Element in 2015 and revised it in 2018. The Housing Element is one of the seven mandatory elements of the General Plan. The Housing Element provides a long-term comprehensive plan to address the housing needs for all economic segments of the community. It addresses existing and projected housing demand and establishes goals, objectives, policies, and actions to assist the City in implementing the plan in accordance with other General Plan policies. The 2015-2023 Housing Element was prepared under a separate timeline and under different detailed State criteria.

City of Petaluma Urban Water Management Plan (2015)

The City's Urban Water Management Plan (UWMP) is prepared to meet the requirements of the California Water Code, which requires "every urban water supplier providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to adopt and submit an UWMP every five years" (City of Petaluma 2015). The purpose of the plan is to evaluate the required potable and recycled water system facilities required to serve the buildout of the City's General Plan. It includes several objectives designed to help the City meet their future water demands and develop performance and operational criteria. It also presents the City's capital improvement program for recommended potable and recycled water system facilities. These range from costs associated with land acquisition, storage reservoir development, groundwater wells, booster pump





stations, new pipelines, and interconnection facilities. Several of the objectives and the sustainability principles outlined in the plan will help the City minimize drought hazards.

Floodplain Management Regulations and NFIP Participation (1983)

The City of Petaluma has participated in the National Flood Insurance Program (NFIP) since 1974 through emergency entry and regular entry since 1983 by administering floodplain management regulations that meet the minimum requirements of the NFIP. The purpose of these regulations is to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas. These regulations apply to all areas of special flood hazards within the jurisdiction of Petaluma identified in FEMA's most recent FIS completed for Sonoma County on March 7, 2017. The Special Flood Hazard Area (SFHA), also known as the base flood, 100 year flood (1 percent annual chance flood) in the City is mapped as Zone A or AE.

Floodplain management is administered through the City's Public Works and Utilities Department. The City maintains records of BFE certificates for the properties within the SFHA and the NFIP is administered by the City Engineer (Floodplain Administrator) within the Public Works and Utilities Department.

Community Rating System (CRS) Program Participation

The City of Petaluma has participated in the Community Rating System (CRS) since 1991 as one of its efforts to reduce potential losses due to flooding for its citizens. This program, created by the NFIP, encourages communities to become proactive in their flood management planning activities. Under this program, participating communities, such as the City receive a point rating reflective of their efforts in undertaking these activities. The CRS ratings result in reduced flood insurance premiums to floodplain residents and property owners.

According to the 2015 FMP, the NFIP has conducted annual audits of the City's floodplain management efforts for over two decades and awarded the City a Class 6 rating, reducing flood insurance premiums to policy holders located in the SFHA throughout the City by approximately 20 percent and 10 percent for those who have standard X-Zone policies. According to FEMA, as of June 30, 2015, there were approximately 393 flood insurance policies currently in effect, with an annual premium of over \$418,774 (City of Petaluma 2015). It is estimated that the City's participation in the CRS program saves insured residents \$83,755 per year (City of Petaluma 2015). Potential opportunities to improve the City's class rating are described below in Section 3.1.5.

City of Petaluma Floodplain Management Plan (2015)

The City of Petaluma FMP was developed in an open public process and is considered a living document that is subject to revisions that reflect the City's change in policy or the state and/or federal regulations. This plan describes the magnitude of past flood events in the City and its purpose is to describe floodplain management activities implemented to date; additional alternative remedies; and a plan for future action to address the current flooding problems. The objective of the plan is to quantify flooding problems and propose solutions when funding becomes available (City of Petaluma 2015). The specific mitigation actions described in FMP were integrated into this LHMP in the mitigation strategy.

City of Petaluma Storm Water Management Plan (2003)

The City's Storm Water Management Plan describes actions and efforts that include best management practices that will address the reduction of nutrients, pathogens, and sediment in the City's stormwater. The plan also includes measurable goals and timetables for the minimum control measures. The City Water Resources and Conservation Division of the Public Works Department is responsible for implementing the plan and the City's Storm Water Program.

City of Petaluma Emergency Operations Plan (2007)

The City's EOP was updated in 2007. It includes a basic plan that addresses the City of Petaluma's responsibilities in emergencies associated with natural disaster, human-caused emergencies, and





technological incidents. It provides a framework for coordination of response and recovery efforts within the City and in coordination with local, state, and federal agencies. The EOP contains the following goals:

- Provide effective life safety measures
- Reduce property loss and damage to the environment
- Provide for the rapid resumption of impacted government, community and business services;
- Provide accurate documentation and records required for cost recovery.

The plan establishes emergency organization staff to direct and control operations during a period of emergency by assigning responsibilities to specific personnel. The scope of the plan addresses earthquakes, hazardous materials emergencies, flooding, and wildfires. It includes procedures for emergencies that may or may not require the full or partial activation of an Emergency Operation Center (EOC). The City's response to an emergency incident is coordinated through the EOC and the City Manager serves as the Emergency Operations Director. The EOC also utilizes the Incident Command System (ICS) and the Standardized Emergency Management System/National Incident Management System (SEMS/NIMS) for unity of command and span of control.

2.9.2 City of Petaluma Administrative/Technical Mitigation Capabilities

Table 2-14 identifies the City personnel responsible for activities related to mitigation and loss prevention in the City of Petaluma.

Table 2-14: City of Petaluma's Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	Yes	Community Development / Planning Manager
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Community Development / Chief Building Official
Planner/engineer/scientist with an understanding of natural hazards	Yes	City Public Works and Utilities Department staff
Personnel skilled in GIS	Yes	Information Technology/GIS Technician
Full-time building official	Yes	Building Division / Chief Building Official
Floodplain manager	Yes	Public Works and Utilities Department / City
		Engineer
Emergency manager	No	Economic Development and Open
		Government Manager
Grant Writer	Yes	Handled within each department/program
GIS data—Hazard areas	Yes	GIS Specialist
GIS data—Critical facilities	Yes	GIS Specialist
GIS data—Building footprints	Yes	GIS Specialist
GIS data—Land use	Yes	GIS Specialist
GIS data—Assessor's data	Yes	GIS Specialist
Warning Systems/Service (Reverse 911, cable override, outdoor warning signals)	Yes	Flood alert system; Nixle; WEA; EAS; IPAWS; SoCo Alert

Source: HMPC Data Collection Guide

City Departments/Agencies

The City of Petaluma government consists of a City Council with six members and the Mayor. The City Council appoints the City Manager. The City Manager is the chief administrative officer for the City with all City employees with the exception of the City Attorney and City clerk reporting to the City Manager.



City Attorney's Office

The City Council appoints a City Attorney, which is staffed by one Assistant City Attorney, one Deputy City Attorney, and one legal secretary. The City Attorney's office provides legal advice to the City Council, Commissions, and City staff. They attend all City Council and Planning Commission meetings. They also assist in the preparation of legal documents, ordinances, and resolutions; prepare negotiations and contracts, and prosecute code violations.

City's Clerk Office

The City Clerk's office provides a variety of administrative services in support of the City Council. The office prepares City Council agendas and minutes, maintains the City's official records, recruits for City Council appointed boards and commissions, and the City Clerk serves as a filing officer.

City Manager's Office

The City of Petaluma's City Manager's Office provides general management, oversight and direction to all the City's departments and programs and provides administrative support to the Mayor and Council. The City Manager is responsible for organizing the departments within the City for efficient and effective delivery of services. The Manager also acts as the City's Personnel, Budget, and Purchasing Officer and provides strategic planning for anticipated future needs.

The City Manager department provides oversight to the following five divisions.

- Building Division. The Building Division is dedicated to improving the safety of the residents of
 Petaluma through professional and technical services. This department implements and enforces
 building and fire codes, conducts site plan and building permit review, and coordinates daily
 development review, permit issuance, and inspections.
- **Planning Division.** The City's Planning Division is currently managed by an outsourced planning contractor. The contracting team is responsible for implementing City policies that direct the physical development and community character of the City. Implementation of City development policies involves analysis and establishing conformance to local implementing plans, including various Specific Plans, the Zoning Ordinance, the Growth Management Ordinance and Guidelines, PUDs, and the City's Design Guidelines. Project development and approvals also involve environmental analysis to determine environmental impacts, as required by the California Environmental Quality Act.
- **Economic Division.** The Economic Development Division promotes and pursues commercial, industrial, and office development within the City to create a diversified and sustainable economic base for the community. This base provides a stable tax revenue structure for the City, as well as a full range of retail shopping, services, and employment opportunities for its residents.
- **Housing Division.** The Housing Division implements the City's Housing Program and administers funding through two sources: the fee collected in-lieu of providing units and the commercial linkage fee collected to mitigate the housing impacts of new changed or expanded commercial retail or industrial development.
- Information Technology Division. This Division supports all systems and enterprise systems within the City. GIS is within the IT Division and created GIS web applications and updates all GIS data through Open Data Petaluma.

Finance Department

The Finance Department is responsible for City budget preparation and compliance, accounting and financial reporting, debt issuance and management, accounts payable, City employee payroll preparation, utility billing, business licensing, accounts receivable, cashiering and sales. The department also ensures the fiscal foundation necessary to deliver community services.

Fire Department



Community Profile

The City of Petaluma fire, rescue and emergency medical services provides services within the city limits of Petaluma, Southern Sonoma County and a portion of Marin County; covering 184 square miles and 70,000 persons. The Department consists of 58 personnel, with 48 divided among 3 platoons that work 24-hour rotating shifts.

Human Resources Department

The Human Resources Department supports City training and development programs. The Department also oversees and manages the Risk Management Division.

Parks and Recreation Services Department

The Parks and Recreation Department oversees the City's parks and community facilities, public transportation system and bikeways, library, and other recreational programs.

Police Department

The Police Department ensures Petaluma is a safe place to live and work and is "proactive in Community Oriented Policing Philosophy" The Department covers 13 square miles and serves nearly 60,000 persons. There are 85 full time employees within the Department including three (3) K-9 Officers, Traffic Unit, Motorcycle Patrol, SWAT Team, Investigations Unit, FTP Program and Reserve Community Service Officer Program.

Public Works and Utilities Department

The Public Works Department provides maintenance services for streets, trees, traffic control systems, parks, landscape maintenance districts, City buildings and vehicles, graffiti removal, solid waste, and recycling. The department also maintains water distribution, sewer collection and drainage systems. The Department oversees the operation and maintenance of several facilities including the Ellis Creek Water Recycling Facility and is responsible for maintenance, repairs, and replaces mechanical and electrical plant equipment. The Department is also responsible for administrating the City's floodplain regulations.

The Public Works and Utilities Department is comprised of the following seven divisions:

- Capital Improvements
- Environmental Services
- Transit
- Public Works Operations
- Airport/Marina
- Development Engineering
- Parks/Facilities Maintenance

2.9.3 City of Petaluma Fiscal Mitigation Capabilities

Table 2-15 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.



Table 2-15: City of Petaluma's Fiscal Mitigation Capabilities

Table 2-15: City of Petaluma's Fiscal N		
Financial Resources	Accessible/Eligible	Comments
	to Use (Yes/No)	
Community Development Block Grants	Yes	The City is an Entitlement Jurisdiction under the CDBG Program. A majority of CDBG allocation is for housing development and housing-related services. Because of the Entitlement status the both HOME and Emergency Shelter funds are also available to the City. The funds, granted through the U.S. Department of Housing and Urban Development (HUD) target programs and/or projects geared towards assisting low and moderate-income persons by providing decent housing, a suitable living environment, and expanding economic opportunity.
Capital Improvements Project funding	Yes	Grants like FEMA or Cal OES
Authority to levy taxes and assessments for specific purposes	Yes	Tax assessment for a specific mitigation project
Fees for water, sewer, services	Yes	Utility fees can be used for hazard mitigation of water and sewer projects
Impact fees for new development	Yes	The City oversees a comprehensive development impact fee program.
Incur debt through general obligation bonds	Yes	
Incur debt through special tax bonds	Yes	
Incur debt through private activities	Yes	
Withhold spending in hazard prone areas	No	

2.9.4 Mitigation Outreach and Partnership Capabilities

Sonoma County Community Wildfire Protection Plan (2016)

The Sonoma County Community Wildfire Protection Plan (CWPP) consists of three components: a collaborative effort of input from various agencies and community members, the identification of prioritized treatment areas and mitigation strategies, and the recommendation of measures to reduce ignitability of structures. The plan was developed with Fire Safe Sonoma, Cal Fire, and Sonoma County. The Sonoma County Board of Supervisors unanimously approved the Fire Safe Sonoma's 2016 CWPP.

Regional Climate Protection Authority Climate Action Plan (2016)

The Regional Climate Protection Authority (RCPA) is governed by a twelve member Board of Directors comprised of representatives from the Sonoma County Board of Supervisors and Council Members from each of the nine cities – Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, Sonoma and Windsor. The RCPA coordinates climate protection activities countywide and performs a variety of important related functions including advocacy, project management, planning, finance, grant administration, and research. The Climate Action 2020 and Beyond, Sonoma County's Regional Climate Action Plan published in 2016 was a collaborative effort between Sonoma County and all nine cities within the County. The Plan is specific to the reduction of countywide Greenhouse Gas (GHG) emissions. The Plan sets forth near-term actions to be implemented through 2020 to achieve a 25 percent reduction in countywide GHG emissions. Although this plan is still referenced as it relates to the County's GHG emissions inventory and targets, it was not formally adopted by the County.



City of Petaluma Climate Emergency Resolution (2019)

In May 2019 the Petaluma City Council became the first city in Sonoma County to pass a Climate Emergency Resolution. The goal of the resolution is to frame climate as an urgent crisis and to engage action at the local government level. During the planning process for this LHMP and for future planning efforts related specifically to the Climate Emergency Resolution, the City Council also appointed six members to the newly formed Climate Action Commission to discuss and make recommendations to the Petaluma City Council on climate policy.

Sonoma County Operational Area Hazard Mitigation Plan (2016)

The Sonoma County HMP assesses the County's vulnerabilities to hazards and presents a mitigation strategy of actions intended to reduce the disruption to life, property, and economy that might result from a natural disaster. The HMP focuses on earthquake, flood, wildland fire, and landslide hazards, as they were considered to constitute the greatest risk to the County based on past disaster events, future probabilities, and vulnerability. Within the HMP risk assessment, secondary and tertiary are addressed, such as winter storms, coastal erosion, bluff failure, tsunamis, and post fire erosion.

Sonoma Water Local Hazard Mitigation Plan (2018)

Sonoma Water, previously referred to as Sonoma County Water Agency, is a wholesale provider of potable water that serves nine municipal customers in Sonoma and Marin counties. The water agency maintains a water transmission system that provides naturally filtered Russian River water, builds variety of flood protection projects, manages the county sanitation zones and districts that provide wastewater collection and treatment and recycled water distribution, and produces recycled water from its wastewater treatment plants to offset surface water drawn from the Russian River.

Sonoma Water also implements the Sustainable Groundwater Management Act (SGMA) in Sonoma County and is actively working to protect the basins throughout the region. The water agency adopted a LHMP in 2018 to comprehensively assess the natural hazard risks and vulnerabilities facing the agency's infrastructure, and to articulate a plan to address the vulnerabilities. The plan includes three tailored mitigation strategies focusing on water supply and distribution, sewer and sanitation, and flood control projects.

Petaluma's Power Shutoff Webpage (2019)

Following the unprecedented 2018 wildfire season in California, Pacific Gas & Electric (PG&E) announced it will be conducting Public Safety Power Shutoffs (PSPS) when there are high winds and dry conditions and generally a heightened fire risk forecast. The outages could last several days, and PG&E has suggested customers be prepared for outages that could last longer than 48 hours. A majority of Sonoma County could be affected by the power outages including almost the entirety of the City of Petaluma. PG&E has a plan in place to install a resource area at the Sonoma-Marin Fairgrounds within 24 hours of a PSPS, and will offer power, air conditioners and updates for local residents. In 2019 the City began planning for the shutoffs, including evaluating where vulnerable populations are located in the City, and how infrastructure and relationships with other agencies could be affected.

The first major shutoff occurred on October 8, 2019 impacting 30 counties in northern and central California including Sonoma County. Additional shutoffs took place throughout the month of October 2019 due to severe high winds and increasing fire danger. The City was proactive and created a website dedicated to share information on the PSPS, both before they took place and after PG&E announced the shutoffs. Snapshots of the City's webpages are shown in Figure 2-12 and Figure 2-13. Information on the website is provided in both English and Spanish and includes information such as tips for citizens to prepare and make plans for their families, the opening of community shelters, school closures and which areas of the City are impacted.



Figure 2-12: City of Petaluma Public Safety Power Shutoff Webpage

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PUBLIC SAFETY POWER SHUTOFF

In order to reduce the risk of wild fires, energy companies like PG&E will turn off power in certain areas during times of extreme fire danger. This type of power outage is called a Public Safety Power Shutoff, or PSPS. Scroll down for info about what to do before, during, and after a PSPS.

UPDATES

October 30, 2019, 6:00 p.m. – Mandatory Evacuations Lifted, Power Back On. En Español

October 29, 2019, 2:30 p.m. – Shelter Updates and Power Shut Off. En Español

October 28, 2019, 6:30 p.m. – Shelter Updates and Power Shut Off. En Español

October 28, 2019, 1:30 a.m. – Shelter Updates, Air Ouality & Needs. En Español

October 27, 2019, 6:00 p.m. – Shelters, Power Shut Off, School Closures. En Español

POWER SHUTOFF INFO

A Power Shutoff could occur with little notice and last for hours or even days. Because the electric system is so connected, Petaluma could experience a Power Shutoff even if there is not a high fire risk in our immediate area.

The City of Petaluma is working hard to make sure our systems and staff are prepared for a Power Shutoff. We ask that you do the same for yourself, your family, your business, and your neighborhood.

Don't wait for a power shutoff to happen and hope for the best. Get prepared NOW. Help your neighbors and friends—particularly those with medical needs that require electricity—get prepared, too.



Figure 2-13: City of Petaluma Public Information on Public Safety Power Shutoffs



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GET PREPARED FOR HISTORIC WIND EVENT COMING THIS WEEKEND

OCTOBER 25, 2019, 9:00 P.M.

POTENTIAL POWER SHUTOFF IN SONOMA COUNTY SATURDAY (10/26) THROUGH MONDAY (10/28)

PG&E announced another likely power shutoff in Sonoma County on Saturday (10/26), Sunday (10/27), and Monday (10/28). Current maps indicate that Petaluma's west side will be most affected. Residents and businesses can visit PG&E's website to determine if they will be impacted by the power shut off by looking up their addresses. Even if you are not shown to be impacted by the planned power shutoff, we urge you to stay alert and prepare as the anticipated weather may damage infrastructure and lead to expanded power interruptions.

WEATHER UPDATE

The National Weather Service (NWS) has issued a Fire Weather Red Flag Warning and a high wind watch in effect from 8pm on Saturday to 11am on Monday. This event is anticipated to reach historic levels. Winds are expected to reach 70 to 80 mile per hour in the mountain areas with winds at 40 to 50 miles per hour in the valley areas.

LOCAL COOLING / CLEAN AIR / CHARGING CENTER

The Petaluma Community Center will be open for fresh air and cooling through 8pm this evening and from 8am to 8pm Saturday and Sunday.

ADDITIONAL INFORMATION

City of Petaluma staff are monitoring the situation and preparing city facilities and infrastructure for potential power shutoffs and upcoming fire weather.

For up-to-date emergency information, tips for using generators, driving during a power shutoff, and other important safety and health information, visit the **Sonoma County Emergency Website** or review this **fact sheet**. For support and information via phone dial **2-1-1**.

Community Shelters

On October 23, 2019 the Kincade Fire started in northeastern Sonoma County and once contained the fire had burned 77,758 acres. The fire did not directly impact the City of Petaluma, and because of this the City was able to open its community shelters from evacuees from neighboring communities in Sonoma County. Eight shelters were open in Petaluma, including the Sonoma-Marin Fairground which opened in partnership with the Red Cross. The Petaluma Community Center and the Veterans Building provided support for over 1,000 evacuees, as a total of 200,000 people were ordered to evacuate from northern Sonoma County (Argus Courier 2019).

Other Planning Capabilities (Ongoing)

The HMPC noted the following additional mitigation outreach efforts during planning sessions:

- **Sonoma County Regional Water Supply Resiliency Plan.** The City has participating in planning process and outreach efforts for this plan.
- **Fire Department COPE.** COPE stands for Citizens Organized to be Prepared for Emergencies. The Fire Department holds a quarterly seminar on preparedness and encouraging neighborhood organization through "Map Your Neighborhood."
- **Police Department.** The City's Police Department has participated in disaster preparedness education with the City's Fire Department and Sonoma County, especially since the 2017 wildfire events.



• **City's Website.** The City of Petaluma's website provides public information and resource. Including information on water conservation efforts and information related to the PG&E PSPS. The City's social media accounts (Twitter, Facebook) are used to disseminate public information.

2.9.5 Opportunities for Enhancement

Based on the capabilities assessment, the City of Petaluma has several existing mechanisms in place that already help to mitigate hazards. In addition to these existing capabilities, there are also opportunities for the City to expand or improve on these policies and programs to further protect the community. Required future opportunities for enhancement comply with Assembly Bill 2140 include amending the City's General Plan Health and Safety Element to include the LHMP. The City can update other plans, such as the City's Capital Improvement 5 Year Plans to include hazard mitigation actions and climate adaptation strategies that relate to infrastructure resiliency. Other future improvements may include providing hazard training for staff or hazard mitigation grant funding in partnership with Sonoma County and Cal OES.

CRS Program Class Rating Improvements

The City of Petaluma currently has a Class 6 rating under the NFIP CRS Program. As previously mentioned, this Class 6 results in a 20 percent discount to policy holders in the SFHA and 10 percent reduction for those who have standard X-Zone policies. According to Table 2-16, the City currently has 2,125 credit points which are listed below by CRS activities.

Table 2-16: City of Petaluma Credit Points under the Community Rating System Program

Activity	Activity Description		Total
C310	Elevation Certificates	2016	38
C320	Map Information	2016	90
C330	Outreach Projects	2016	96
C340	Hazard Disclosure	2016	15
C350	Flood Protection Information	2016	29
C360	Flood Protection Assistance	2016	55
C370	Flood Insurance Promotion	2016	0
C410	Floodplain Mapping	2016	0
C420	Open Space Preservation	2016	1137
C430	Higher Regulatory Standards	2016	241
C440	Flood Data Maintenance	2016	144
C450	Stormwater Management	2016	70
C510	Floodplain Management Planning	2016	177
C520	Acquisition and Relocation	2016	33
C530	Flood Protection	2016	0
C540	Drainage System Maintenance	2016	0
C610	Flood Warning and Response	2016	0
C620	Levees	2016	0
C630	Dams	2016	0

¹ – Year the City of Petaluma floodplain management activities were audited by the Insurance Services Office (ISO). ISO works on behalf of FEMA and insurance companies to review recertification applications and verify communities credit points under the CRS program. The next verification cycle will occur in 2021.

Source: FEMA Community Information System (CIS) 2019

The City will need 280 more points of credit to reach a CRS Class 5 and a 25 percent reduction in the cost of flood insurance. To reach a Class 5, the following activities of credit can be modified:

 Activity 330 Outreach Projects where a maximum of 200 points of credit are available for Outreach Projects. The City only has 96 points currently.





- Activity 510 Floodplain Management Planning where a maximum of 382 points are available and the City currently has 177 points for its current plan.
- Activity 540 Drainage System Maintenance where the maximum credit is 470 points and the City currently does not have any credit assigned. Taking credit for Problem Site Maintenance and the City's Capital Improvement Program could add 120 points under this activity.

Modifying these three activities may be enough credit for the City to reach a CRS Class 5 and savings of more than \$106,264 each year and an average annual policy discount of \$259. See Table 2-17 for savings.

Table 2-17: Cost Savings by Policy and by Community under CRS Class 5

CRS Class	Description	Total	SFHA	X-STD/AR/A99
9	Per Policy	\$55	\$97	\$40
	Per Community	\$22,628	\$20,336	\$2,292
8	Per Policy	\$105	\$195	\$40
	Per Community	\$42,964	\$40,672	\$2,292
7	Per Policy	\$154	\$292	\$40
	Per Community	\$63,300	\$61,008	\$2,292
6	Per Policy	\$210	\$389	\$79
	Per Community	\$85,928	\$81,344	\$4,584
5	Per Policy	\$259	\$487	\$79
	Per Community	\$106,264	\$101,680	\$4,584
4	Per Policy	\$309	\$584	\$79
	Per Community	\$126,600	\$122,016	\$4,584
3	Per Policy	\$358	\$681	\$79
	Per Community	\$146,936	\$142,352	\$4,584
2	Per Policy	\$408	\$778	\$79
	Per Community	\$167,272	\$162,688	\$4,584
1	Per Policy	\$458	\$876	\$79
	Per Community	\$187,608	\$183,024	\$4,584

¹ - SHFA includes Zones A, AE, A1-A30, V, V1-V30, AO, and AH; discount varies depending on class.

Other Opportunities

Additional training opportunities will help to inform City staff members on how best to integrate hazard information and mitigation projects into their departments. Continuing to train City staff on mitigation and the hazards that pose a risk to the City of Petaluma will lead to more informed staff members who can better communicate this information to the public.

^{2 -} SFHA includes Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO; 10 percent discount for Classes 1-6; 5 percent discount for Classes 7-9 Source: CRS 2019