

Safety Policy Framework

Draft for Public Review

February 2024

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Overview

This Public Draft Policy Framework was prepared for review by the Petaluma community. The first two sections provide important context and are identical in each of the draft policy frameworks. The “Introduction” section briefly explains general plans, Petaluma’s General Plan Update project, policy frameworks, project next steps, and key terminology. The “Policy Framework Foundations” section summarizes the analysis and community input that informed this policy framework.

The remaining sections are the core of this document that the City would like the community to review. The first of these sections, “Summary of Framework Approach,” summarizes the overall approach to the topic addressed by this framework. Next is the main body of the framework, the “Goals, Policies, and Actions” section, which is organized into several goals. Each goal, in turn, has several related policies. And many policies have actions that implement those policies.

Introduction

General Plans

State law requires that each city “adopt a comprehensive, long-term general plan for the physical development of the county or city.” This general plan must contain an “integrated, internally consistent and compatible statement of policies” that appropriately responds to local conditions and circumstances. General plans are organized into different “elements,” or chapters, like conservation, housing, and land use. There is no required time interval at which jurisdictions must update their general plans, though Housing Elements must be updated every eight years.

State law stipulates that capital improvements and certain other planning policies, such as specific plans, zoning actions, development agreements, and subdivisions, must be consistent with the general plan. The general plan also includes policies that relate to a wide variety of matters under local jurisdiction, which can guide future decision-making.

Petaluma’s General Plan Update

The current Petaluma General Plan was adopted in 2008 and last updated in 2012, and it accounts for a planning period through 2025. Petaluma has experienced a great deal of change since then, so the City initiated an update to the General Plan internally in 2020, and brought a consultant team on to assist with the project in 2021.

Petaluma’s updated General Plan will address many topics, including: natural environment, hazard mitigation, historic preservation, land use, urban design, housing, mobility, parks, facilities, the arts, economic development, and environmental justice. To meet State deadlines, the Housing Element was completed, adopted, and certified by the State in early 2023. Concurrently with the General Plan Update, the City is also developing a Climate Action Plan, the “Blueprint for Carbon Neutrality” (Blueprint); the team has worked to align the two concurrent efforts and will continue to align greenhouse gas reduction strategies with the General Plan elements as the Blueprint moves through the adoption process.

For more information about General Plans and Petaluma’s General Plan Update process, go to <https://www.planpetaluma.org/>.

Policy Frameworks

Purpose and Structure

Policy frameworks such as this one outline the proposed General Plan goals, policies, and implementation actions for each topic addressed by the General Plan. They were developed based on:

- The existing General Plan (<https://cityofpetaluma.org/general-plan/>)
- Key findings from the Existing Conditions Reports (see the “Policy Framework Foundations” section below)
- State requirements and guidance
- Related technical, policy, and programmatic resources
- Extensive community input (<https://www.planpetaluma.org/getinvolved>)
- The Vision, Pillars, and Guiding Principles developed based on community input (see the “Policy Framework Foundations” section below)
- Input from the General Plan Advisory Committee (GPAC) (<https://www.planpetaluma.org/gpac-page>)
- Input from City committees, boards, and commissions, and
- Guidance from City staff and consultants.

Topics Covered

There is a draft Policy Framework for each of the following topics¹:

- Natural Environment
- Safety
- Flood Resilience
- Land Use & Community Character
- Transportation
- Infrastructure & Utilities
- Public Facilities
- Parks & Recreation
- Historic Resources
- Arts, Culture, and Creativity
- Economic Development
- Noise
- Health Equity and Environmental Justice
- Implementation & Governance.

There are many connections among the topics covered in different frameworks. Generally, the following topics are addressed as follows. This list includes overarching topics and subtopics, and then lists the frameworks that address this topic in brackets. This is not a comprehensive list of topics covered or of intersections among frameworks:

Climate Change

- Greenhouse gas reduction (Blueprint for Carbon Neutrality, Parks & Recreation, Transportation, Infrastructure & Utilities)
- Mode shift, active transportation, EV charging, vehicle miles traveled (VMT) (Transportation)
- Green building² (Land Use & Community Character, Public Facilities, Infrastructure & Utilities)
- Low impact development³ (Natural Environment, Infrastructure & Utilities)
- Climate adaptation (Safety, Flood Resilience, Land Use & Community Character, Health Equity & Environmental Justice)
- Just transition⁴ (Economic Development)

Ecosystems

- Habitats, wildlife corridors, & open space (Natural Environment, Parks & Recreation, Transportation)
- Urban forestry⁵ (Parks & Recreation, Health Equity and Environmental Justice)

Petaluma River and Tributaries

- Ecology, habitats, & wildlife corridors (Natural Environment)
- Flooding (Safety, Flood Resilience)
- Adjacent land uses (Land Use & Community Character, Parks & Recreation, Historic Resources)
- Trails and transportation (Transportation)
- River Access and Enhancement Plan (Parks & Recreation, Flood Resilience)

Stormwater, Water Supply, and Wastewater

- Watershed and river protection (Natural Environment)
- Flood control (Flood Resilience, Parks & Recreation, Safety)
- Public water, water conservation, drought, & wastewater systems (Infrastructure & Utilities, Safety)

Transportation

- Mobility network⁶, accessibility⁷, safety, and VMT (Transportation, Parks & Recreation, Economic Development, Safety)
- Public realm⁸ (Land Use & Community Character, Noise)

15-Minute Neighborhoods

- Types, locations, and characteristics (Land Use & Community Character)
- Mobility networks, design, and safety (Transportation)

Equity (in addition to the Health Equity and Environmental Justice Framework)

- Tribal collaboration⁹ (Natural Environment, Historic Resources)
- Equitable transportation (Transportation)
- Park and public facilities access (Parks & Recreation, Public Facilities)
- Recreation program access (Parks & Recreation)
- Cultural equity (Arts, Culture, & Creativity)
- Economic justice¹⁰ (Economic Development)
- Community engagement (Parks & Recreation, Implementation & Governance).

Next Steps

The Public Draft Policy Frameworks will be reviewed by the public, Petaluma committees and commissions, the GPAC, and the City Council. Community input and related direction from the City will inform the Draft General Plan, which will also be reviewed by the community before it is presented to the City Council for adoption. A Program Environmental Impact Report (EIR) will be prepared and approved along with the updated General Plan. For the most up-to-date project information and schedule, go to <https://www.planpetaluma.org/>.

Key Definitions

When reviewing the Policy Frameworks, keep in mind these definitions:

- **Goal:** a general statement that expresses the outcomes towards which planning efforts are directed; often a topic-specific component of the Vision
- **Policy:** a statement of intent or direction that contributes toward achieving a goal and that guides decision-making
- **Action:** a specific activity, procedure, program, or project aimed at implementing a policy.

Policy Framework Foundations

Existing Conditions Key Findings

The Existing Conditions Reports for Petaluma’s General Plan Update serve as the technical analysis of diverse dimensions of the city’s status as evaluated in 2021. They provide a detailed analysis of current conditions and provide a data-based foundation for policymaking. The nineteen Existing Conditions Reports as well as a summary presentation can be downloaded from the “Plan Documents” section of the project website: <https://www.planpetaluma.org/documents#ecr-final>.

The City of Petaluma is at risk of wildfires, flooding, drought, geologic and seismic hazards, and climate hazards. Below is a list of key findings that contributed to the development of the policy framework.

Geologic and Seismic Hazards

- The City of Petaluma is situated in a highly active seismic area and given recent earthquake activity and the proclivity of the region for seismic activity, earthquake hazards will continue to be a risk for the city.
- Due to the seismic complexity of the region, all of Petaluma is susceptible to severe ground shaking.
- In the event of a significant earthquake, approximately 1,850 acres are at high risk of liquefaction within Petaluma, and 560 acres are at very high risk of liquefaction. Most of the high-risk areas follow the Northwestern Pacific railroad, which is aligned with the Petaluma River’s general location as it flows from the northwest of the city, through the center and downtown area, and out through the southeastern portion of the city.

Hazardous Waste

- There are currently 20 active hazardous material cleanup sites in the city. Six of these sites are part of the State Water Control Board’s Cleanup Program Sites and the other 14 are Leaking Underground Storage Tank (LUST) Cleanup Sites. There are a total of seven contaminated sites identified within the City’s limits using the EnviroStor tool from the Department of Toxic Substances Control, which could impact reuse of former industrial and commercial areas. The Petaluma Fire Department’s Fire Prevention Bureau is the Certified Unified Program Agency (CUPA) that provides regulatory oversight over hazardous materials and hazardous waste programs in Petaluma.
- There is a 35-acre superfund site formerly occupied by Sola Optical USA, which produced optical lenses from 1978 to 2001. The site has groundwater contaminants with volatile organic compounds (VOCs) and solvents. Following cleanup, the EPA took the site off the Superfund program’s National Priorities List (NPL) in 2013. This site is located along Highway 116 near South McDowell Boulevard.

Climate Change

- Prolonged drought, variable precipitation patterns, increasing temperature, and “boom to bust” climate patterns will greatly increase wildfire risks across the region and further impact the air quality presenting a significant public health threat.

Drought

- Over the next twenty to thirty years, a drought scenario may reduce the average mean precipitation from 31 inches to 26.3 inches for the City of Petaluma.

Wildfires

- Petaluma will see a continuation of the risk of wildfire in the coming decades as climate change exacerbates wildfire conditions. While much of the city is in the Moderate Fire Hazard Severity Zone, the pattern in the overall region suggests that fires will increase everywhere, and that indirect impacts of fires such as community exposure to poor air quality and smoke will be more severe.
- The most at-risk areas for wildfire exist along the perimeter of the city boundary where development is adjacent to or interspersed in areas with wildland vegetation present.

Flooding

- Atmospheric river events pose the most significant climate hazard risk related to flooding for the city. These events have the potential to deliver up to 50% of the region's annual rainfall within a matter of days, often resulting in catastrophic flooding. Succeeding heavy precipitation events in the area will limit economic recovery efforts. A separate Flood Resilience framework was created for strategies related to flooding and sea level rise.

Extreme Temperature

- Extreme temperature days will continue to become more frequent and could result in increased heat related illness and death for populations at highest risk.

Related Vision, Pillars, and Guiding Principles

The Vision Statement, Pillars, Guiding Principles, and Supporting Concepts reflect community engagement input that occurred during the Visioning Phase of the General Plan Update in 2021. On February 17, 2022, the GPAC voted unanimously to recommend that the City Council accept these Vision materials as the guidance for the ongoing General Plan Update planning process, and the City Council accepted them on March 21, 2022.

- The Vision Statement describes the desired future conditions and characteristics of the city.
- The Pillars are the core community values.
- The Guiding Principles and Supporting Concepts provide the broad direction and pathways to achieve the vision and honor community values, with a focus on the community's specific challenges and opportunities.

The Vision Statement, Pillars, and Guiding Principles and Supporting Concepts can be downloaded from the "Plan Documents" section of the project website: <https://www.planpetaluma.org/documents#gpuvision>. Together, the Vision Statement, Pillars, and Guiding Principles and Supporting Concepts provide the basis for the goals, policies, and programs included in the General Plan Public Draft Policy Frameworks.

The following verbatim excerpts from the Vision Statement, Pillars, and Guiding Principles informed the preparation of this policy framework:

Vision

We invest in each other. We are a community where children and youth thrive, families in all forms are supported, and our elders flourish as they age in place. We provide plentiful and varied housing choices, convenient access to healthy local food, and an educational system that builds leaders. We support all residents with accessible city services.

We are forward-thinking leaders. By achieving carbon neutrality in 2030, we demonstrate that equitable, carbon-neutral, regenerative communities and economies are possible through action and collaboration with other cities, communities, and our region. We have adapted to climate change with a community-driven, whole systems, and nature-based approach to development.

Pillars

Climate Action, Resilience, and Sustainability. Petaluma is committed to bold action to achieve carbon neutrality by 2030 and to building resilience to climate change impacts, including sea level rise, increasing temperatures, drought, and wildfire intensity. The General Plan must build climate-ready communities using science, technology, and bold ways of thinking to advance change in our relationship with the natural environment and to plan for current and future impacts.

Equity, Justice, and Demographic Changes. Current demographic trends indicate that Petaluma will have an older, more diverse population well into the future. Petaluma commits to advancing social and economic justice to create an inclusive and equitable city in which all can thrive. The General Plan must prioritize supporting those who have been most affected by injustice and inequity and advances bold action in terms of housing, transportation, public spaces, and intergenerational and multi-cultural programs to take advantage of opportunities and meet challenges as they arise.

Guiding Principles

There are a total of sixteen Guiding Principles, each with multiple, lettered Supporting Concepts. The following Guiding Principles and Supporting Concepts informed this policy framework:

1. Achieve carbon neutrality by 2030 and equitably foster a sustainable and resilient community in which today's needs do not compromise the ability of the community to meet its future needs.

- d. Capitalize on Petaluma's natural assets (river, streams, marshes, trees, plains, etc.) to address climate change and sea level rise.
- e. Develop strategies to elevate the ecological and environmental benefits of existing parks and open spaces.
- h. Take bold measures to address watershed management, water use and expected long-term drought conditions.
- i. Educate the community on the need for regenerative design.
- j. Make the city more resilient to natural and man-made disasters including sea level rise, fires, earthquakes, and flooding.

5. Ensure the health and wellness of all residents.

6. Physically and psychologically integrate and connect the East and West sides of town.

13. Ensure infrastructure supports infill development and addresses the impacts of climate change.

- c. Incorporate new (and potential) climate impacts and hazards into the design of infrastructure systems so that infrastructure is resilient and “climate-ready.”
- f. Develop strategies to elevate the ecological and environmental benefits of existing parks and open spaces.

15. Advance a forward-looking economic development strategy that focuses on diversity, opportunity, innovation, and resilience.

Summary of Framework Approach

Several recent updates to State legislation, including SB 99, SB 379, SB 1035, AB 2140, AB 747 and AB 1409 address climate vulnerability and adaptation, evacuation routes and locations, hazard mitigation, and other Safety Element requirements. This framework addresses these requirements as well as local concerns and introduces goals, policies, and actions that, in combination with other policy frameworks, such as the Flood Resilience framework, create a comprehensive plan for addressing hazards and mitigating risks in Petaluma.

Specifically, goals and policies in this framework address safety management through strategic emergency preparedness, response, and facilities (Goal SAF-1, Goal SAF-2, Goal SAF-3, and Goal SAF-4), climate resiliency (Goal SAF-5), and hazard mitigation for drought (Goal SAF-6), wildfire (Goal SAF-7), earthquakes (Goal SAF-8), and hazardous materials (Goal SAF-9).

Goals, Policies, and Actions

Goal SAF-1: Emergency Guidance and Tools

Emergency responders and community members have the guidance and tools to effectively respond to hazard events.

Policy SAF-1.1: Update Emergency Operation Plans

Maintain updated emergency operations guidance, standards, and plans per the Local Hazard Mitigation Plan and ensure its compliance with the Stafford Disaster Relief and Emergency Act and the Disaster Mitigation Act to remain eligible for federal grants.

Action SAF-1.1.1: Maintain and update an Emergency Operations Plan that conforms to the California Emergency Services Act in coordination with agency partners such as Sonoma County.

Action SAF-1.1.2: Coordinate with agency partners to develop and maintain an Evacuation Plan that accounts for all types of emergencies, to be updated a minimum of every 8 years during or immediately following Safety Element updates.

Policy SAF-1.2: Prepare the Community for Emergencies

Provide resources and training opportunities for the community to improve their ability to prepare for and respond to emergencies.

Action SAF-1.2.1: Educate the community about emergency response through the City's website, social media platforms, and in-person engagement events.

Action SAF-1.2.2: Create youth-centered educational materials on emergency response and distribute them to local public and private schools.

Action SAF-1.2.3: Conduct annual Neighborhood Response Group trainings to prepare community members for emergency response.

Action SAF-1.2.4: Increase local community participation in Neighborhood Response Group trainings by distributing training opportunities to community-based organizations and neighborhood associations.

Policy SAF-1.3: Seek Funds for Emergency Operations

Seek grants to fund emergency operations and first responder assistance.

Action SAF-1.3.1: Explore grant funding for fire assistance, such as grants through the FEMA Assistance to Firefighters Grants Program and emergency response through the FEMA Emergency Operations Center (EOC) Grant Program.

Goal SAF-2: High-Quality Emergency Services

Lives, property, and the environment are protected by providing the highest quality of service in disaster preparation and prevention, crime and fire prevention, fire protection, emergency medical services, and emergency management and response.

Policy SAF-2.1: Maintain Quality Emergency Response Service

Ensure facilities, equipment and personnel are adequate to maintain quality of service demands of the community, including but not limited to, fire suppression, Advanced Life Support (ALS), rescue, fire prevention, education, Certified Unified Program Agency (CUPA), and disaster preparedness and management.

Action SAF-2.1.1: Ensure public safety facilities are sized appropriately to accommodate necessary staff and equipment. Ensure they are located to align with decreased response times and place specialized equipment, such as a ladder truck, in a location based on an all-hazard risk assessment.

Action SAF-2.1.2: Ensure public safety facility additions and/or upgrades will accommodate privacy and workforce diversity.

Action SAF-2.1.3: Continue education and training programs to maintain technical proficiency and provide the highest level of customer service.

Action SAF-2.1.4: Provide access to training facilities to continue education and training programs to ensure training proficiency.

Action SAF-2.1.5: Maintain and modernize emergency response facilities, including fire stations, as needed to accommodate population growth.

Action SAF-2.1.6: Maintain safety department responsiveness to changes in community demographics.

Action SAF-2.1.7: Continue to upgrade and improve emergency response communications, including upgrades and additions to “repeater” sites. Evaluate and design communications and radio infrastructure for resiliency, redundancy, and interoperability.

Action SAF-2.1.8: Continue to upgrade and integrate City-wide inter-departmental communication systems for all City personnel, specifically field staff, including Police, Fire, Emergency Medical Services, Public Works, and Emergency Management staff.

Action SAF-2.1.9: Encourage communication compatibility between local and regional systems.

Action SAF-2.1.10: Develop wildfire response and mitigation programs consistent with the State Fire Marshal's recommendations.

Action SAF-2.1.11: Alleviate roadway network bottlenecks that impede the ability of police and fire from meeting established response times in a manner that is consistent with the Circulation Element.

Action SAF-2.1.12: Receive and maintain accreditation for police and fire departments.

Policy SAF-2.2: Maintain ISO Rating

Strive to maintain an Insurance Service Office (ISO) rating of Class 2 or better and work with the Council and community to ensure fiscal capacity to ensure applicable upgrades and updating of City infrastructure occurs in a timely manner.

Policy SAF-2.3: Provide Adequate EMS Services

Maintain and expand ambulance services and EMS training to meet continued needs in Petaluma.

Action SAF-2.3.1: Explore the development of a fleet of quick response vehicles designed to provide emergency medical services in situations where patient transportation is not needed, or immediate care must be provided when an ambulance is not immediately available.

Policy SAF-2.4: Educate the Public on Risk Reduction

Continue and expand on public education in fire safety, first aid/CPR, accident prevention, disaster preparedness, wildfire mitigation, and other community risk reduction efforts.

Policy SAF-2.5: Maintain Mutual Aid Agreements

Maintain cooperative agreements for mutual aid at a State level and automatic aid at a local level, and review and update as needed to maintain an acceptable level of service within Petaluma.

Goal SAF-3: Responsive Public Safety Services

The City continues to provide police and public safety services that are responsive to community needs to ensure a safe and secure environment for all people in the community.

Policy SAF-3.1: Ensure Staffing for Emergency Response

Strive to maintain a minimum staffing standard for police and fire based on local, state, and national standards in order to meet emergency response times for fire or emergency medical calls, community policing activities, and increases in calls for service, and provide a true workload evaluation for adding or reallocating staff resources as the population and workload increases.

Policy SAF-3.2: Fund Crime Prevention Programs

Continue to fund education and crime prevention programs, recognizing that the costs of education and prevention are more effective in reducing crime than the costs of apprehending, prosecuting, and incarcerating criminals.

Policy SAF-3.3: Implement Public Safety Recommendations

Work toward the implementation of the recommendations in the Center for Public Safety Management (CPSM) Comprehensive Analysis Report adopted on November 21, 2022, and as may be updated from time to time.

Policy SAF-3.4: Use Design Standards for Crime Prevention

Incorporate into new development, to the extent deemed appropriate and feasible, the Development Code Urban Design Standards for crime prevention.

Action SAF-3.4.1: Incorporate Crime Prevention Through Environmental Design (CPTED) principles into the design of parking areas, ensuring proper lighting, clear visibility, and effective wayfinding to reduce the risk of vehicle-related crimes.

Action SAF-3.4.2: Ensure adequate lighting in public spaces, including pathways, parking lots, and public transportation areas, to reduce opportunities for criminal activities and increase feelings of safety.

Action SAF-3.4.3: Encourage the use of natural surveillance techniques, such as clear sightlines, trimmed vegetation, and open layouts, to maximize visibility and deter criminal behavior.

Action SAF-3.4.4: Design urban and suburban environments that prioritize pedestrian and cyclist safety, considering factors like well-lit pathways, clear signage, and dedicated bike lanes.

Policy SAF-3.5: Provide Rapid Police Response

Ensure adequate police staff to provide rapid and timely response to all emergencies and maintain the capability to have minimum average response times. Actions that could be taken to ensure rapid and timely response to all emergencies include:

- Analyzing and monitoring factors affecting response time (population growth, police staffing, and community policing programs) and average response times as guidelines based on past experience.
- Maintaining, training, and equipping public safety staff, police officers, and police special response teams for extraordinary or extremely hazardous emergency incidents.

Policy SAF-3.6: Provide Proficient Operations Management

Consider expansion of leadership staff to provide a sufficient number of command personnel to manage operations, provide administrative oversight and logistical support.

Policy SAF-3.7: Consider Crime Analysis Unit

Consider establishing a crime analysis unit.

Policy SAF-3.8: Engage the Community on Policing Policies

Continue to strengthen community cohesion by engaging Petaluma residents in surveys and community conversations on policing and providing transparent information on policing policies.

Action SAF-3.8.1: Support community initiatives that improve the maintenance and care of public spaces, as a well-maintained environment can deter criminal activity.

Action SAF-3.8.2: Encourage the establishment of safe routes to schools and other key community destinations, promoting active transportation and enhancing safety for pedestrians, especially children and vulnerable populations.

Goal SAF-4: Evacuation

Provide safe and efficient evacuation routes and/or safe shelter-in-place plans for residents, workers, and visitors in preparation for an emergency scenario.¹¹

Policy SAF-4.1: Prepare Single-Access Neighborhoods

Alleviate evacuation constraints associated with single-access neighborhoods.

Action SAF-4.1.1: Encourage residents on single-access roads to maintain emergency supplies for at least 3 days.

Action SAF-4.1.2: Identify opportunities to create secondary access for identified single-access neighborhoods where possible and in a manner consistent with the Circulation Element.

Action SAF-4.1.3: Designate safety zones as places of refuge for single-access communities in case evacuation routes are blocked.

Action SAF-4.1.4: Conduct annual trainings and additional informational campaigns for evacuation emergency preparedness for single access neighborhoods through social media, fliers, brochures, and in-person events in identified neighborhoods.

Action SAF-4.1.5: Prioritize undergrounding of utilities for designated routes to make them more reliable during a hazard event.

Policy SAF-4.2: Provide Emergency Evacuation Resources

Address emergency evacuation constraints, particularly among low-income and minority populations.

Action SAF-4.2.1: Designate and publicize evacuation routes, including existing pedestrian pathways.

Action SAF-4.2.2: Coordinate community engagement activities with relevant regional jurisdictions to solicit input from the community on wildfire preparation needs for fast evacuation support.

Action SAF-4.2.3: Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

Action SAF-4.2.4: Issue mandatory evacuation orders and release evacuees by pre-designated zones to manage roadway congestion. Anticipate school district evacuation needs as part of evacuation orders.

Action SAF-4.2.5: Maintain emergency roadways and improve them as necessary and appropriate to ensure they stay in operation during hazardous events.

Goal SAF-5: Critical Facilities Resiliency

Critical facilities and infrastructure are resilient against natural disasters, including climate change.

Policy SAF-5.1: Establish Resilient Resource Centers

Collaborate with community partners to establish community resilience centers that meet the increasing needs of the community due to climate change.

Action SAF-5.1.1: Conduct a feasibility analysis of existing community resilience centers' infrastructure to determine community needs during extreme temperature days, extreme storm days, and wildfire smoke days.

Action SAF-5.1.2: Identify residential neighborhoods that are not in proximity to an existing resilience center and identify sites to establish new centers in proximity to those neighborhoods to ensure all parts of the community have access to a center in the event of a disaster.

Action SAF-5.1.3: Provide energy resilience to community resilience centers in the form of backup energy systems, microgrids, battery storage, renewable energy systems, and other measures that serve the community during emergency events. Prepare a feasibility analysis for installation of these systems through retrofits of existing facilities and employment in new facilities.

Action SAF-5.1.4: Establish backup energy systems for 75% of all City-owned critical facilities in the city.

Action SAF-5.1.5: Provide essential resources such as health programming and resources, food, refrigeration, charging stations, basic medical supplies, and other emergency supplies at all community resilience centers.

Action SAF-5.1.6: Develop a staffing and volunteer plan to staff resilience centers, coordinate emergency response efforts, and provide transportation for at risk residents.

Policy SAF-5.2: Establish Inter-Jurisdictional Evacuation Plans

Collaborate with Sonoma County, neighboring jurisdictions, and community organizations to establish a network of temporary evacuation points.

Action SAF-5.2.1: Identify locations throughout the city that can be used as temporary evacuation points in the event of an emergency, such as Sonoma-Marin Fairgrounds in Petaluma, large parking lots, parks, or other open areas.

Action SAF-5.2.2: Prepare a plan that outlines the process of setting up and operating temporary evacuation points that addresses signage, distribution of basic supplies such as food and water, and staffing.

Action SAF-5.2.3: Develop a notification/alert process that informs the community on where temporary evacuation points are located, alongside evacuation routes for access to these shelters.

Policy SAF-5.3: Create Hazard Resilient Critical Facilities

Prepare critical facilities to be more resilient following an emergency.

Action SAF-5.3.1: Identify critical facilities within hazardous risk areas and evaluate relocation of critical facilities to lower risk areas.

Action SAF-5.3.2: Require new critical facilities to be constructed in areas not at risk of wildfires and flooding.

Action SAF-5.3.3: Require compliance with higher building standards in the event of reconstruction of facilities following a hazardous event.

Action SAF-5.3.4: Ensure critical facilities remain operational in the event of a hazard.

Policy SAF-5.4: Prepare for Multi-Hazard Scenarios

Prepare City facilities for multi-hazard scenarios.

Action SAF-5.4.1: Coordinate with Petaluma Fire Department to determine scope of Fire Protection Systems and install in all City facilities.

Action SAF-5.4.2: Design future City facilities with micro grid technology to maintain functionality in the event of a power outage.

Action SAF-5.4.3: Install solar and battery storage system capacity to maintain operability of existing City facilities in the event of an emergency.

Action SAF-5.4.4: Seismically retrofit City facilities to ensure operational functions remain following a seismic event.

Policy SAF-5.5: Ensure Public Services During Emergencies

Ensure adequate continuation of service of water, wastewater, electricity, and telecommunications during hazard events.

Action SAF-5.5.1: Identify critical public infrastructure, including major pipelines, power lines, pumping stations, storage tanks, treatment facilities, and other similar equipment that is vulnerable to hazards, and maintain a prioritized list of improvement projects to increase resiliency of critical infrastructure.

Action SAF-5.5.2: Ensure City facilities are up to date on emergency supplies to support City disaster service workers.

Action SAF-5.5.3: Complete Emergency Operations Center replacement. Replace aging generators with battery storage and on-site renewable energy to maintain operations in the event of hazard-induced power outage.

Goal SAF-6: Climate Resilience

Prepare for increasing climate hazard risks and exacerbations through adaptation and resilience.

Policy SAF-6.1: Update Climate Resiliency Plans

Maintain and update the City's climate hazard planning documents in alignment with the LHMP.

Action SAF-6.1.1: Promote the City's Climate Ready 2030 Campaign through events and the City's website.

Action SAF-6.1.2: Update the Petaluma Climate Vulnerability Assessment in tandem with each LHMP update to ensure reliance on up-to-date climate data and consistency across plans.

Action SAF-6.1.3: Conduct a review and, where needed, update all City plans to include information and strategies on climate change impacts and resilience strategies.

Policy SAF-6.2: Consider Climate in Development Standards

Require standards for new developments to consider climate-enhanced impacts to all hazards.

Action SAF-6.2.1: Develop a climate smart scorecard to evaluate adaptation potential of development plans.

Action SAF-6.2.2: Consider including a cool roof requirement for new construction in the building code to reduce the urban heat island effect and increase resilience to extreme temperature.

Policy SAF-6.3: Prepare Buildings for Climate Change

Partner with community organizations to promote and support efforts to retrofit and upgrade residential and commercial buildings to better prepare for climate change impacts.

Action SAF-6.3.1: Seek funding opportunities with the U.S. Office of Energy Efficiency & Renewable Energy to retrofit homes.

Action SAF-6.3.2: Explore incentives for promoting retrofits to buildings through fee waivers for building and construction permits, plan checks, and applications.

Action SAF-6.3.3: Seek additional funding opportunities through FEMA grant programs such as the Building Resilient Infrastructure and Communities (BRIC) grant program to address future risks from natural disasters such as wildfires, drought, earthquakes, extreme temperature, and flooding.

Goal SAF-7: Drought

Petaluma is prepared for drought hazards.

Policy SAF-7.1: Update the Urban Water Management Plan

Update the Urban Water Management Plan (UWMP) to address drought risks.

Action SAF-7.1.1: Evaluate the UWMP for drought response and management when considering projects that will have impacts to water supply.

Action SAF-7.1.2: Consider Waterfront Edge Design Guidelines (WEDG) for commercial and multifamily development adjacent to creeks and the Petaluma River.

Action SAF-7.1.3: Recommend inclusion of stormwater infrastructure to utilize flood waters to recharge basins in the Groundwater Sustainability Plan during five year plan updates.

Action SAF-7.1.4: Evaluate and incorporate appropriate new technology to support water efficiency and conservation.

Policy SAF-7.2: Increase Water Efficiency

Increase water efficiency and conservation.

Action SAF-7.2.1: Require new development to connect to the recycled water system and to utilize recycled water for landscape irrigation where feasible.

Action SAF-7.2.2: Require high water demand customers to implement onsite reuse for non-potable uses such as landscape irrigation and flushing of toilets.

Action SAF-7.2.3: Coordinate with local water purveyors to create a recycled water plan that includes the use of graywater for landscaping purposes.

Action SAF-7.2.4: Provide educational materials and programs to support water conservation efforts that consider extended drought conditions associated with climate change.

Action SAF-7.2.5: Evaluate and incorporate appropriate new technology to support water efficiency and conservation.

Goal SAF-8: Wildfire Risk Management

Manage wildfire risk through local and regional strategies and interdisciplinary approaches.

Policy SAF-8.1: Maintain Fire Response Coordination

Maintain cooperative working relationships with local and regional fire response agencies and organizations.

Action SAF-8.1.1: Coordinate with neighboring jurisdictions on resource and response needs in the event of regional and local wildfire disasters.

Policy SAF-8.2: Implement Fire Protection Programs

Continue to implement the strategies put forth by the Sonoma County Community Wildfire Protection Plan, including fuel and vegetation reduction and community engagement.

Action SAF-8.2.1: Reduce flammable vegetation through the annual weed abatement program.

Action SAF-8.2.2: Develop program in coordination with the Petaluma Fire Department to conduct inspections of all properties in the wildland hazard severity/wildland-urban interface (WUI) zones annually.

Action SAF-8.2.3: Develop educational materials and distribute to residents on the standards and requirements of vegetation clearance, maintenance of defensible space, and wildfire risks identified by the City.

Policy SAF-8.3: Create Fuel Management Plan

Coordinate with the Petaluma Fire Department and Sonoma County to prepare a long-term fuel reduction and management plan.

Action SAF-8.3.1: Ensure compliance with requirements of Title 14 of the California Code of Regulations to strengthen fire-fighting capabilities and response times especially for residential areas adjacent to Very High Fire Hazard areas, if and where relevant in the future.

Action SAF-8.3.2: Conduct regular maintenance of evacuation routes through vegetation maintenance of roadways and critical facilities and verify private and public road emergency access routes to comply with Title 14 regulations.

Action SAF-8.3.3: Establish standards in addition to vegetation management that include the identification of fuel breaks and brush management and revegetation to reduce wildfire risk adjacent to at-risk structures.

Action SAF-8.3.4: Collaborate with local fire protection districts and regional, State, and Federal fire agencies to coordinate and implement wildfire mitigation measures and fuel load modifications including load clearing, prescribed burns, prescribed grazing, and other mitigation activities for areas proximal to the city, particularly potential wildfire approach pathways.

Action SAF-8.3.5: Work with Sonoma County to expand the Chipper Program and increase awareness to Petaluma residents. Conduct annual outreach to property owners in the WUI Zone and provide technical assistance for the application process to interested property owners.

Policy SAF-8.4: Minimize Wildland-Urban Interface Risk

Develop a WUI Pre-Fire Plan and evaluate the WUI Zone within the city.

Action SAF-8.4.1: Create fire suppression water system guidelines that include the use of water storage for fire response in the WUI.

Action SAF-8.4.2: Develop a plan to identify future water supply needs for fire suppression efforts, especially for new developments.

Action SAF-8.4.3: Continue to require new developments to have adequate water pressure or fire flows through the permitting process. Require on-site fire suppression systems for all new industrial and commercial developments to decrease reliance on local fire resources and for early response in high-risk areas.

Policy SAF-8.5: Promote Fire Safe Development

Ensure fire safe design in future developments and during post-disaster recovery and minimize new residential development in areas with medium wildfire hazard risk.

Action SAF-8.5.1: Update the City's development standards to be in conformance with state fire protection requirements regarding emergency access, signage, water supply for fire response, and fuel modifications.

Action SAF-8.5.2: Explore developing a development district overlay that applies higher standards for construction in very high wildfire risk areas and identifies natural and geologic assets that reduce wildfire risk for preservation.

Action SAF-8.5.3: Develop a Post-Disaster Recovery Plan that addresses all hazard events, including actions such as debris removal, evaluation of post-disaster re-development options, and educational materials for recovery services for rebuilding.

Action SAF-8.5.4: Require Fire Protection Plans and evacuation plans for new developments in Moderate Fire Hazard Safety Zones.

Goal SAF-9: Earthquake Resiliency

Promote public safety and welfare by reducing the risk of death or injury from the effects of earthquakes.

Policy SAF-9.1: Reduce Seismic Risk on Critical Infrastructure

Utilize advanced planning and investments in critical infrastructure to reduce the effects of geologic and seismic events.

Action SAF-9.1.1: Implement the California Building Code to address geologic and seismic hazards.

Action SAF-9.1.2: Seek grant funding opportunities to support building retrofits.

Action SAF-9.1.3: Assess existing construction to identify hazards in reinforced and unreinforced masonry that can be addressed through Code Enforcement action.

Action SAF-9.1.4: Promote evaluation of needed seismic strengthening in soft-story buildings, wood framed cripple walls, and masonry chimneys.

Policy SAF-9.2: Consider Geotechnical Information for Development

Update development standards to consider earthquake and liquefaction risk in building siting and design.

Action SAF-9.2.1: Minimize risks from liquefaction by requiring new developments to incorporate designs that minimize the potential for damage.

Action SAF-9.2.2: Require geotechnical reports demonstrating acceptable mitigation for foundation design in areas of high liquefaction susceptibility.

Action SAF-9.2.3: Adopt Appendix A of the California Existing Building Code entitled Guidelines for the Seismic Retrofit of Existing Buildings.

Action SAF-9.2.4: Enhance requirements for geotechnical investigations on all newly occupied buildings and structures.

Action SAF-9.2.5: Enhance requirements for building structural upgrades on existing occupied structures and buildings where substantial alterations occur.

Goal SAF-10: Hazardous Materials Management

Minimize community exposure to hazardous materials.

Policy SAF-10.1: Maintain Hazardous Materials Standards

Maintain existing hazardous materials programs administered by the Petaluma Fire Department Fire Prevention Bureau acting as the Certified Unified Program Agency (CUPA).

Action SAF-10.1.1: Maintain the Hazardous Materials Business Plan (HMBP), the Hazardous Waste Generator, the Underground Storage Tank, the Above-ground Petroleum Storage Tanks, and the Accidental Release Prevention programs.

Action SAF-10.1.2: Maintain the permitting requirements for the handling, storing, dispensing, or use of hazardous materials per the guidance in Section 17.21.010(C) of the City's municipal code.

Action SAF-10.1.3: Continue to enforce standards for storage and disposal of hazardous materials and waste, consistent with State and federal law.

Policy SAF-10.2: Promote Safe Transport of Hazardous Material

Maintain and implement specified travel routes for the transport of hazardous materials and wastes, and to the extent feasible routes should avoid residential areas.

Action SAF-10.2.1: Assess the need for hazardous waste transportation routes in coordination with the Petaluma Fire Department and Sonoma County Waste Management Agency (SCWMA).

Action SAF-10.2.2: Designate and maintain specific routes for the transportation of hazardous materials that avoid residential areas, health care centers, and schools to the greatest extent possible. Coordinate with the Petaluma Fire Department and Sonoma County Waste Management Agency (SCWMA) for route planning.

Policy SAF-10.3: Update Resources on Household Hazards

Update the City's website and other public information outlets with resources regarding the safe handling and disposal of household chemicals and hazardous wastes.

Action SAF-10.3.1: Update the relevant pages of the City's website to include information about common household chemicals that can be hazardous or require safe disposal practices. Include the Hazardous Waste Transportation and Disposal Firms list generated by the Petaluma Fire Department.

Policy SAF-10.4: Reduce Use of Toxic Materials

Discourage the use of toxic materials throughout the city.

Action SAF-10.4.1: Promote the use of integrated pest management techniques on City properties to keep them free of herbicides and pesticides.

Action SAF-10.4.2: Update the City website to educate residents and businesses about integrated pest management principles and ways to reduce or discontinue the use of pesticides and herbicides on their property.

Action SAF-10.4.3: Give preference in City purchasing to products that minimize packaging, can be reused, and are nontoxic.

Action SAF-10.4.4: Develop a maintenance program for all City facilities that specifies the least toxic maintenance methods and materials.

Action SAF-10.4.5: Consider adoption of standards for nontoxic exterior building materials to reduce the potential of toxic substances entering stormwater.

Policy SAF-10.5: Ensure Site Remediation

Continue to ensure that contaminated sites in the city are adequately remediated before allowing redevelopment.

Action SAF-10.5.1: Engage the community in overseeing remediation and redevelopment of former brownfield, leaking underground storage tanks (LUST), and EnviroScore Clean Up Sites as part of the redevelopment process.

Action SAF-10.5.2: Develop a response plan to remediate existing contaminated sites in the city that may be redeveloped in the future, in coordination with the appropriate regional and state agencies.

Action SAF-10.5.3: Promote the use of the latest technologies available for conducting remediation in order to expedite the remediation process and do the least harm to the environment.

Action SAF-10.5.4: Apply for funding to clean up contaminated sites through the EPA Targeted Brownfields Assessment program for abandoned and City-owned sites with contamination and the EPA Brownfields Clean Up Grants and Revolving Loan Fund.

Notes

¹ The Flood Resilience and Land Use policy frameworks will be released after the other frameworks. These Frameworks relied on the development of a comprehensive update to the City's floodplain model, which was completed in late 2023.

² Environmentally responsible and resource-efficient planning, design, construction, operation, maintenance, renovation, and demolition of buildings

³ Techniques to increase water infiltration, reduce runoff, and improve water quality

⁴ The protection of workers' rights and livelihoods while economies are shifting to sustainable production, combating climate change, and protecting biodiversity

⁵ The management of trees in urban settings

⁶ The system of streets, walkways, trails, and railroads used to move goods and people

⁷ The ease of reaching destinations by people of all abilities

⁸ Public space that is open and accessible to the general public, including roads, trails, public squares, and parks

⁹ Communication and coordination among local government and Native American Tribes

¹⁰ Creating opportunities for every person to have a dignified, productive, and creative life

¹¹ The policies and actions focused on evacuation will be further refined after completion of the ongoing analysis required by SB 99 and AB 747.