5. Safety, Climate Resilience, Noise, and Public Services and Facilities

The beautiful environment that attracts people to Santa Rosa also poses potential risks from hazards such as wildfires, floods, droughts, earthquakes, and slope instability that can harm people and property and cause economic and social dislocation.

The climate crisis has already begun to severely impact Santa Rosa. Wildfires have resulted in poor air quality, damage and destruction to portions of the built and natural environment, and loss of human life. In addition, recent local and regional droughts have been among the most severe recorded. Temperatures are increasing, extreme heat events are expected to get worse, and precipitation patterns are changing, increasing the risk of both flooding and drought. Wildfires across the region, state, and nation are becoming more frequent, severe, damaging, and deadly.

The State requires the City's General Plan to include a safety element that identifies and mitigates short- and long-term risks and hazards that could affect the community. It also must include a climate change vulnerability assessment, measures to address identified vulnerabilities, and a comprehensive hazard mitigation and emergency response strategy.

This chapter focuses on ensuring that Santa Rosa is resilient to hazards; equipped to recover from future hazard events, such as earthquakes and wildfires; and able to maintain community members' quality of life through goals, policies, and actions for safety, climate resilience, noise, and public services and facilities.

To support equitable outcomes, some policies and actions in this chapter, as in others, prioritize the needs of Equity Priority Areas and Equity Priority Populations (shown in **Figure 2-4** in **Chapter 2, Land Use and Economic Development**).

The Vision for Santa Rosa, as stated in **Chapter 1, Introduction**, is the foundation for the goals in this chapter. The following components of the Vision are especially pertinent to these goals and their policies and actions:

- **Safe:** Streets are safe; public safety services are provided by caring and thoughtful community members who are representative of and familiar with the neighborhoods, groups, and individuals they serve; and everyone, including immigrants and people of color, can safely access these services.
- **Prepared:** The health and safety of everyone is supported by neighborhood, City, and county-wide efforts to prepare for natural and human-caused hazards, and roadways are optimized to support efficient evacuations.
- **Resilient:** All facets of the community, including housing, infrastructure, and social services are sustainable and resilient to hazards and economic changes.

Figure 5-1 illustrates some of the key concepts that this chapter addresses.

Chapter Contents

Equity Priority Areas are areas in Santa Rosa where residents suffer most from economic, health, and environmental burdens. The City has also identified 10 **Equity Priority Populations,** groups with characteristics understood to contribute to vulnerability and/or the likelihood of being underserved.

1. Low-income individuals and families
2. Racial or ethnic groups experiencing disparate health outcomes
3. Seniors, children, youth, and young adults
4. Individuals with disabilities
5. Immigrants and refugees
6. Outdoor workers and farmworkers
7. Individuals who have limited English proficiency
8. Unhoused people
9. Lesbian, gay, bisexual, transgender, queer, intersexual, asexual, and other LGBTQIA+ communities
10. Individuals who are incarcerated or who have been incarcerated

Environmental justice needs and health and equity considerations of Equity Priority Areas and Equity Priority Populations have priority in some of the goals, policies, and actions in this and other chapters of the General Plan.

Figure 2-4 shows the locations of Equity Priority Areas, **Chapter 2, Land Use and Economic Development,** and **Chapter 6, Health, Equity, and Environmental Justice,** discuss Equity Priority Areas in detail.

Figure 5-1: Visualizing the Concepts

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Safety

Geology and Seismicity

The relatively flat valley floor adjacent to highland areas in and around Santa Rosa signifies the presence of active earthquake faults, as depicted on **Figure 5-2, Regional Fault Lines**. The primary seismic hazard to existing and new development is shaking and fault rupture from the Rodgers Creek-Healdsburg fault zone that transects the city. Other notable faults that could produce strong seismic shaking in Santa Rosa include the San Andreas, Hayward, Calaveras, Mayacamas, San Gregorio, Concord, Green Valley, and Greenville faults. These other active faults are close enough that the city has a high probability of experiencing a magnitude 6.7 or greater earthquake by 2043, most likely along the San Andreas and Rodgers Creek-Hayward Fault systems. Secondary earthquake hazards of concern are landslides and liquefaction—when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking—as seen on **Figures 5-3, Landslide Susceptibility Areas,** and **5-4**, **Liquefaction Zones**.

Goals, Policies, and Actions

Goal 5-1: Minimize community exposure to seismic and geologic hazards.

Policy 5-1.1: **New development, redevelopment, and major remodels shall avoid or adequately mitigate seismic and geologic hazards. (EIR)**

Action 5-1.1: *Prior to new development approval, ensure geologic studies and analyses are deemed acceptable by a California Certified Engineering Geologist and/or Geotechnical Engineer for applicable hazard conditions. (EIR)*

Action 5-1.2: *Restrict development in areas where adverse impacts associated with known natural or human-caused geologic hazards cannot be effectively mitigated, as determined by a California Certified Engineering Geologist and/or Geotechnical Engineer. (EIR)*

Action 5-1.3: *Avoid or adequately mitigate any development of critical facilities—hospitals, fire stations, emergency management headquarters, broadcast services, sewage treatment plants, and places of large congregations—in high-risk geologic hazard zones (e.g., Rodgers Creek Fault zone, liquefiable soils, areas of slope instability).*

Action 5-1.4: *Establish and periodically update an inventory of seismically vulnerable structures that includes unreinforced masonry construction, soft-story construction, and nonductile concrete construction.*

Action 5-1.5: *Require retrofitting and abatement of structural hazards to levels of risk acceptable to the Building Official.*

Action 5-1.6: *Prioritize retrofitting and abatement of City-owned buildings in areas determined to experience strong ground shaking during an earthquake.*

Action 5-1.7: *Provide owners of potentially vulnerable structures, such as unreinforced masonry, soft-story construction, and/or nonductile concrete, with information needed to retrofit to meet the latest State seismic safety requirements.*

Action 5-1.8: *Retrofit and harden water storage facilities, wastewater conveyance, electricity transmission lines,*

roadways, water detention facilities, levees, and other utilities near the Rodgers Creek Fault.

Policy 5-1.2: **Promote erosion-control strategies that reduce hazards to structures, properties, and drainages.**

Action 5-1.9: *Identify enhanced erosion-control measures for properties that exhibit high erosion potential, are in areas of steep slopes, or have experienced past erosion problems.*

Action 5-1.10: *Ensure each update to the Community Wildfire Protection Plan identifies slope stability and wildfire hazard areas and mitigation strategies to reduce post-wildfire erosion.*

Figure 5-2: Regional Fault Lines

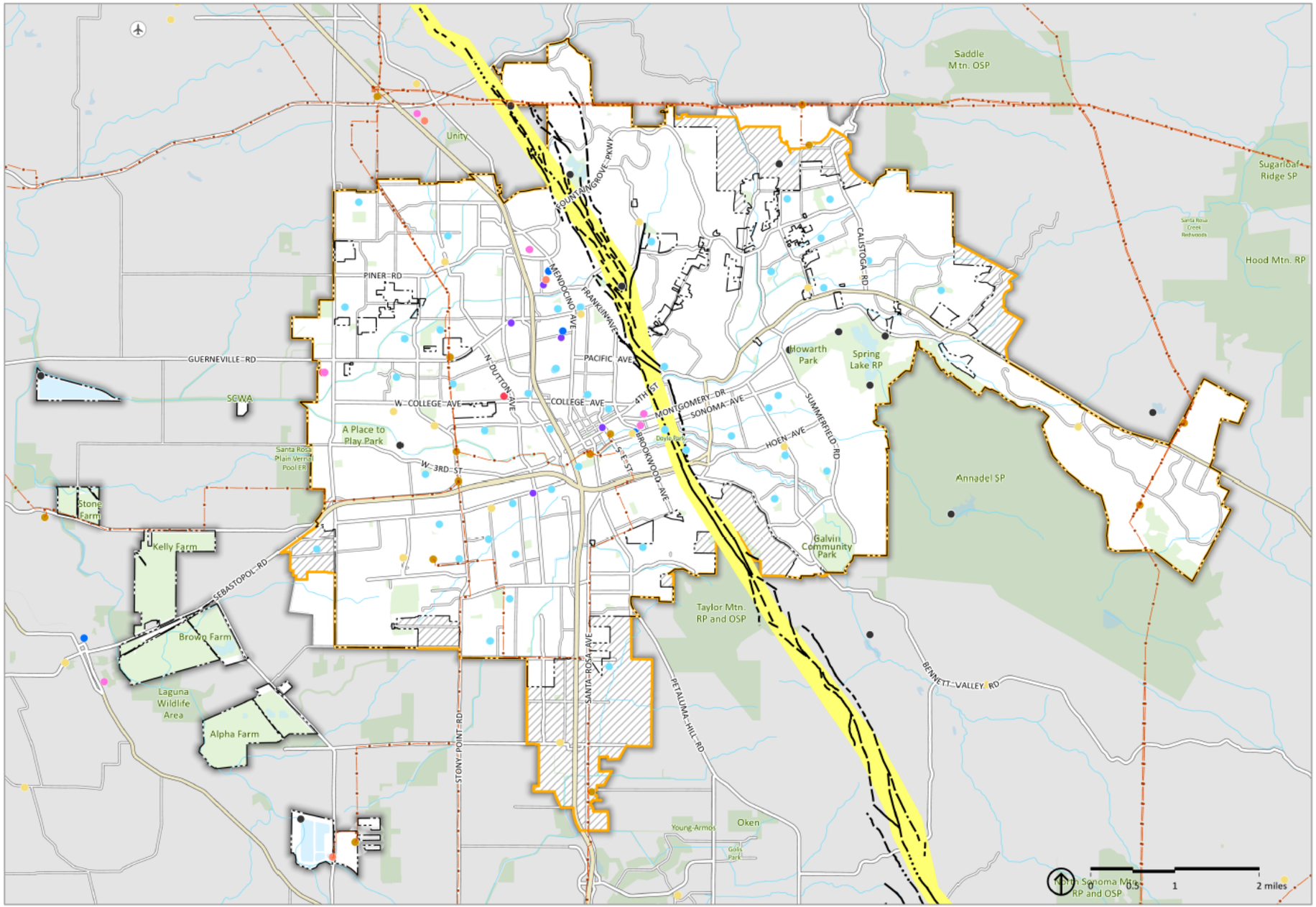

Figure 5-2

Regional Fault Lines

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Alquist-Priolo Fault Zone

Alquist Priolo (Rogers Creek) Fault Traces

- Accurately Located
- Approximately Located
- Inferred
- Concealed

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Figure 5-3: Landslide Susceptibility Areas

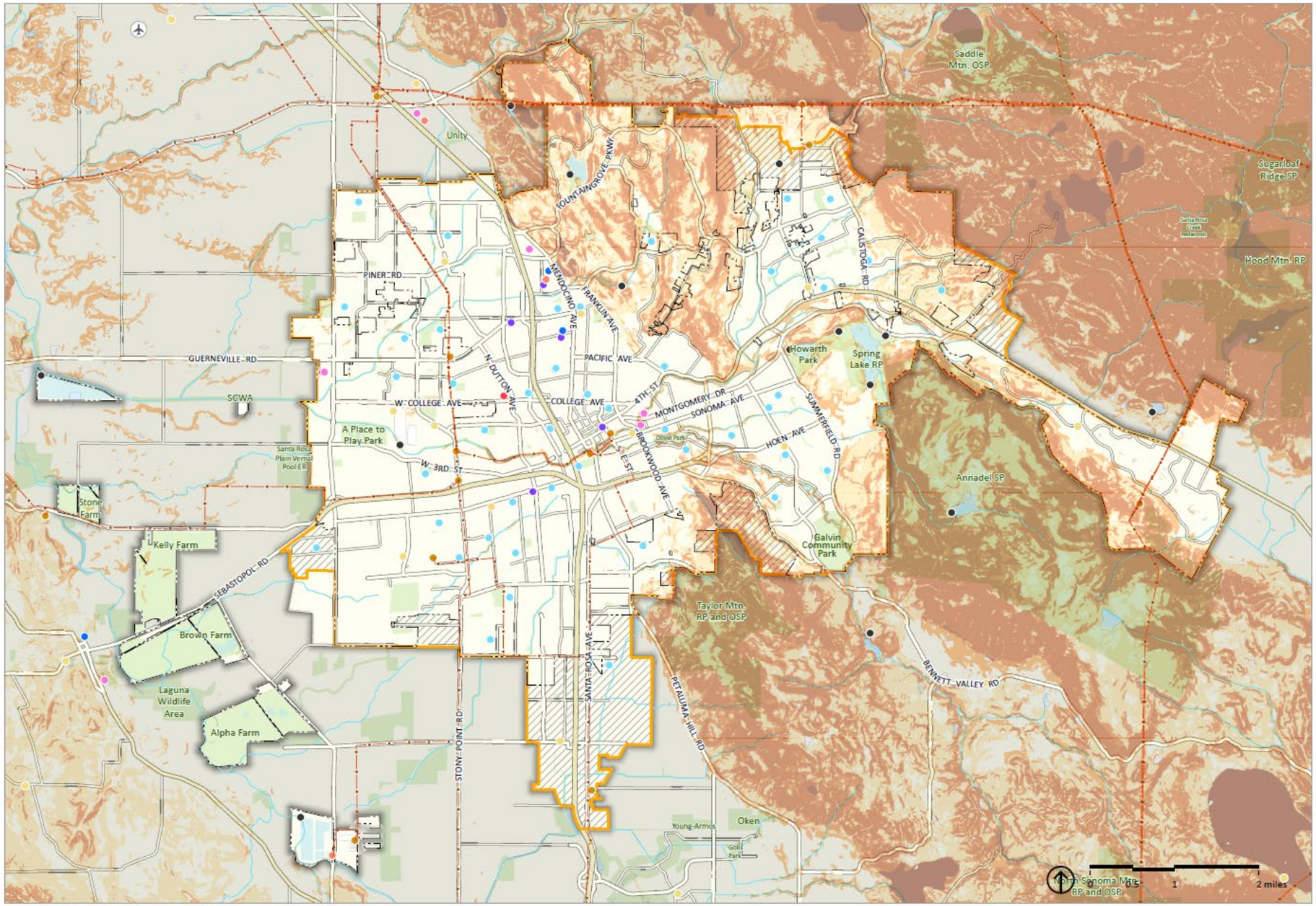

Figure 5-3

Landslide Susceptibility Classes

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

Landslide Susceptibility Classes

- 0 (Less Susceptible)
- 3
- 5
- 6
- 7
- 8
- 9
- 10 (More Susceptible)

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Source: CGS, 2018; California Department of Water Resources, 2020; CalOES, 2021

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Figure 5-4: Liquefaction Zones

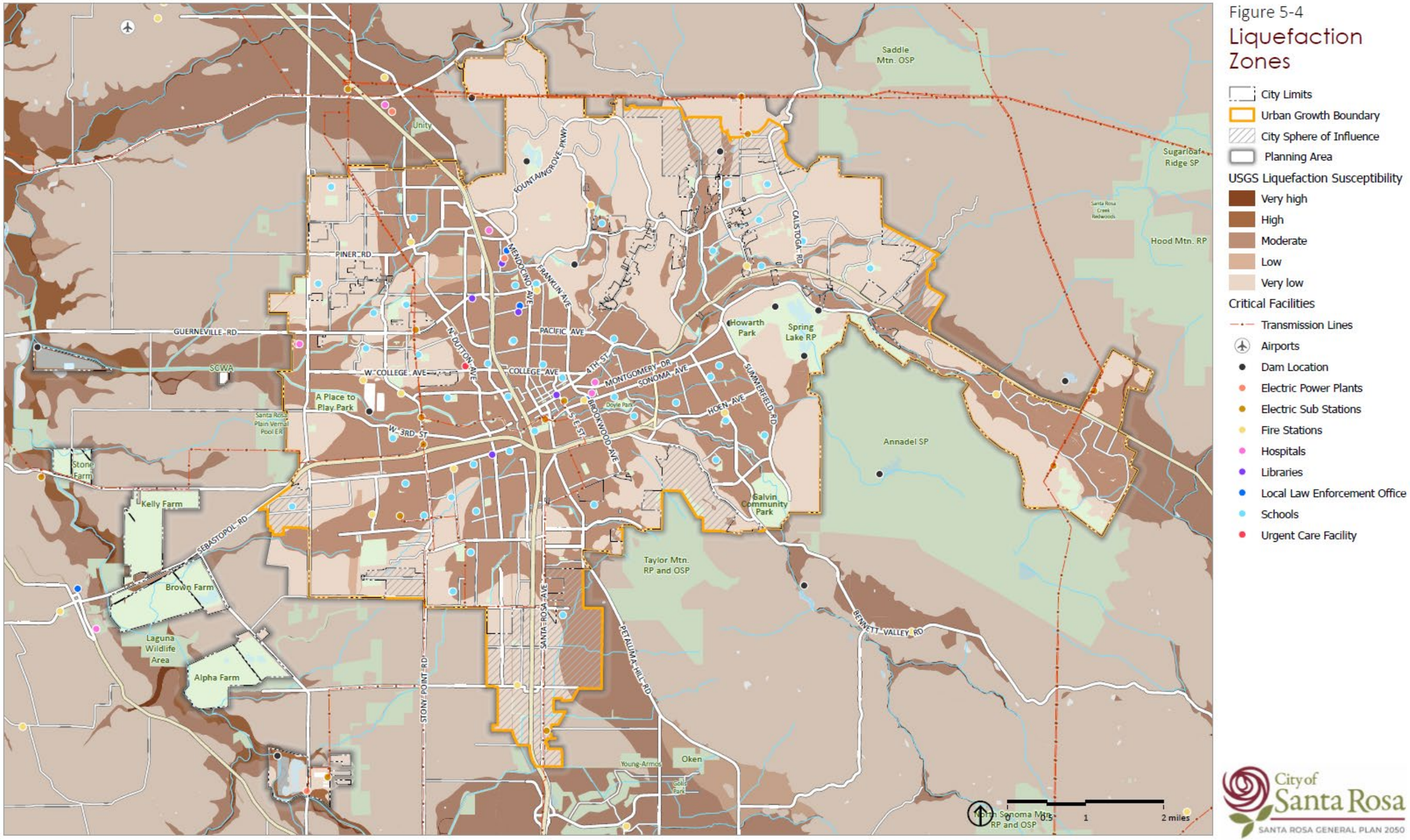

Figure 5-4
Liquefaction Zones

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

USGS Liquefaction Susceptibility

- Very high
- High
- Moderate
- Low
- Very low

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Flooding and Dam Failure

Santa Rosa is in the Russian River watershed and has experienced flooding in the past. Rain events can overwhelm local drainages, especially the low-lying areas in the southwest part of the city, where critical sewer treatment facilities are located. When flooding occurs, creeks in the watershed can erode, which can lead to mudslides and landslides. As shown on **Figure 5-5**, **Flood Hazard Zones,** the Federal Emergency Management Agency (FEMA) has mapped many of the drainages in the city (Spring Creek, Matanzas Creek, Colgan Creek, Naval Creek, Roseland Creek, and Kawana Springs Creek) within 100- and 500-year flood hazard zones. Santa Rosa Creek and key tributaries can also flood, and FEMA periodically updates the flood hazard maps.

Proximity to these creeks and drainages increases the risks of flooding. Many of these drainages are also susceptible to inundation from dam failure. The California Division of Safety of Dams (DSOD) regulates 11 dams in or near the city that could inundate portions of Santa Rosa if they fail. Although the DSOD regulates the Santa Rosa Creek Reservoir as one dam/reservoir, there are actually three separate outlets along the reservoir (Main Dam, Saddle Dam 1, and Saddle Dam 2) that produce different dam inundation areas. The Warm Springs Dam is regulated by the US Army Corps of Engineers. **Figure 5-6** depicts these dam inundation areas. The dams that pose the greatest risk to the city are Annadel No. 1, Fountain Grove, Lake Ralphine, Matanzas Creek, Santa Rosa Creek Reservoir, and Warm Springs.

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Figure 5-5: Flood Hazard Zones

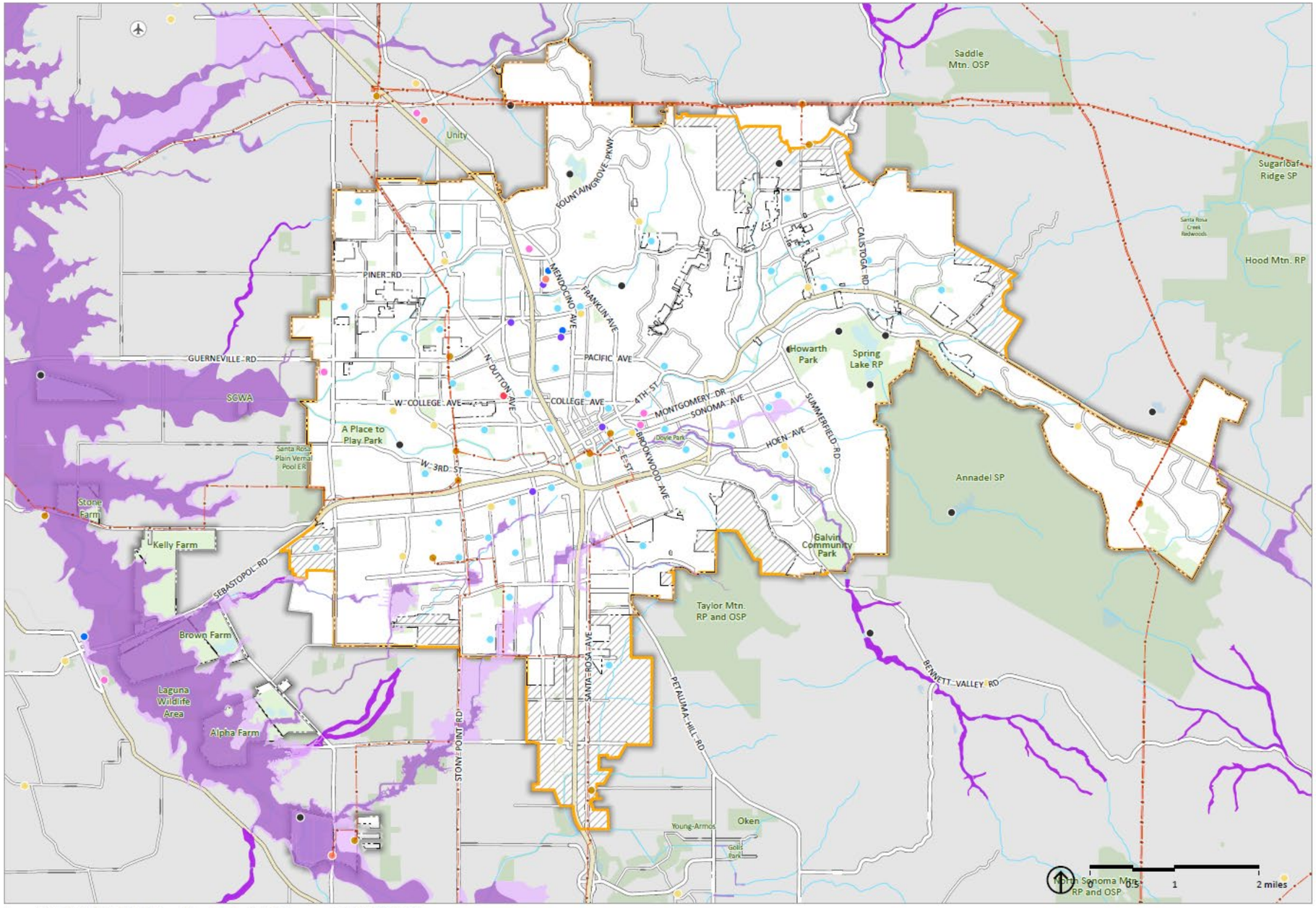

Figure 5-5

Flood Hazard Zones

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

Flood Zones

- FEMA 500 Year Flood Zone
- FEMA 100 Year Flood Zone
- DWR Awareness 100 Year Flood Zone

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Source: USGS, 2023; CGS, 2023; California Department of Water Resources, 2020; CalOES, 2021.

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Figure 5-6: Dam Inundation Areas

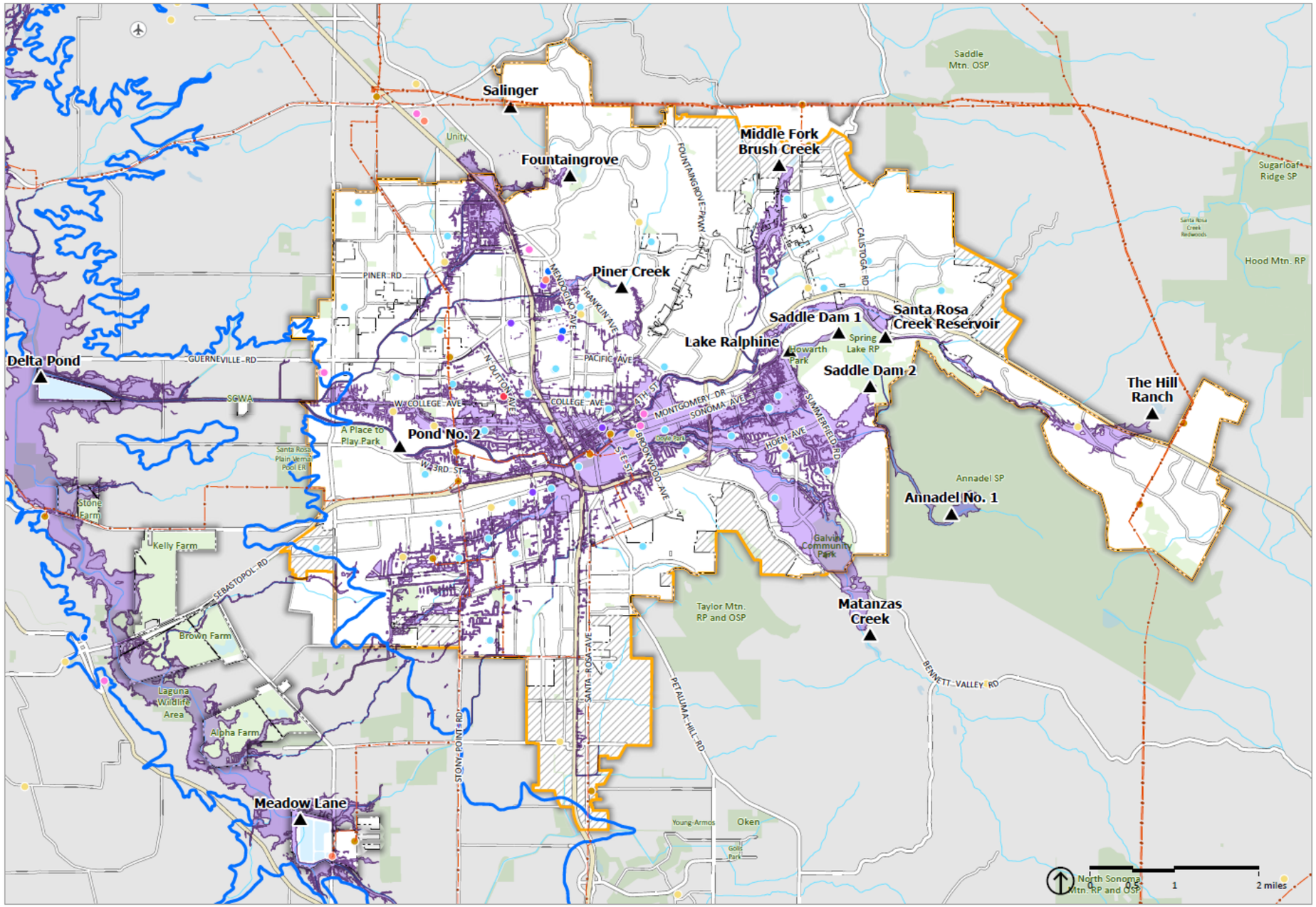

Figure 5-6

Dam Inundation Areas

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Warm Springs Dam Inundation Boundary
- Other Dam Inundation Areas
- Dam Location

Critical Facilities

- Transmission Lines
- Airports
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Goals, Policies, and Actions

Goal 5-2: Effectively manage the potential effects of flooding and dam failure.

Policy 5-2.1: **Ensure land use strategies consider flood impacts and stormwater management tactics to reduce the effects of future inundation.**

Action 5-2.1: *Incorporate flood management strategies into land use analysis and development review.*

Action 5-2.2: *Complete and implement the Storm Drain Master Plan.*

Action 5-2.3: *Coordinate with Sonoma Water regarding flood zones, land use, and flood mitigation strategies.*

Action 5-2.4: *Employ flood mitigation strategies in the development of plans and projects along creeks and waterways.*

Policy 5-2.2: **Promote the enhancement and expansion of open space for flood management and passive recreation where appropriate and safe.**

Action 5-2.5: *Protect floodplains by retaining and expanding, as feasible, open space areas that can retain stormwater, recharge groundwater/aquifers, and prevent/reduce flooding.*

Action 5-2.6: *Limit the use of areas designated for flood control to passive recreation activities (e.g., hiking, fishing, bike riding), consistent with requirements to maintain the integrity of these areas to protect public safety.*

Low-impact development "refers to systems and practices that use or mimic natural processes that result in infiltration, evapotranspiration, or use of stormwater to protect water quality and associated aquatic habitat."

- United States Environmental Protection Agency, 2024

Policy 5-2.3: **Comply with all applicable FEMA flood-management regulations and requirements.**

Action 5-2.7: *Continue to maintain and periodically update flood hazard data, and coordinate with federal, State, and local agencies responsible for flood hazard analysis and management activities.*

Action 5-2.8: *Continue to incorporate into public works projects features and appropriate standards that reduce flooding hazards, including daylighting culverts in urban areas such as downtown.*

Policy 5-2.4: **Ensure that the design of new development in a flood zone provides adequate flood protection without negatively impacting adjacent or downstream properties.**

Action 5-2.9: *Require an evaluation of flood hazards and appropriate on-site mitigation options by a qualified professional for any project in a FEMA- and Department of Water Resources (DWR)–designated flood zone during the development review process.*

Policy 5-2.5: **Protect public and private properties from dam inundation.**

Action 5-2.10: *Coordinate with dam owners/operators to ensure that dam safety inspections are conducted annually, as required by the California Division of Safety of Dams (DSOD).*

Action 5-2.11: *Prioritize investment in flood-control mitigation that also reduces impacts associated with dam failure.*

Policy 5-2.6: Manage, maintain, and improve stormwater drainage and capacity.

Action 5-2.12: *Require dedication, improvement, and ongoing maintenance of stormwater management and retention areas as a condition of development approval.*

Action 5-2.13: *Identify and collect development impact fees needed to pay for mitigation of stormwater management impacts for new development.*

Action 5-2.14: *Require improvements that maintain and improve the storm drainage system citywide and prioritize areas needing significant investment, consistent with the Santa Rosa Citywide Creek Master Plan goals of preserving natural conditions of waterways and minimizing channelization of creeks. (EIR)*

Action 5-2.15: *Ensure creek-side paths and trails are consistent with the Citywide Creek Master Plan and Active Transportation Plan and are incorporated into stormwater improvement projects along creek corridors. (EIR)*

Policy 5-2.7: Provide storm drainage facilities that accommodate increased development and enhanced water quality.

Action 5-2.16: *Cooperate with Sonoma Water and the Northern California Regional Water Quality Control Board on assessments of stormwater drainage facilities to ensure adequate capacity to accommodate increases in residential and commercial development.*

Action 5-2.17: *Require implementation of best management practices for all new development to reduce discharges of nonpoint-source pollutants to the storm drain system. (EIR)*

For additional policies and actions addressing stormwater management using green infrastructure and low-impact development best practices, see **Chapter 3, Circulation, Open Space, Conservation, and Greenhouse Gas Reduction**.

Wildland and Urban Fire

Santa Rosa and Sonoma County are prone to wildfire. Wildfires in the region can be intense and uncontrollable and many large-scale fires have started in other locations and burned into Santa Rosa. **Figure 5-7** identifies historic wildfire perimeters in and around the city.

In addition to responding to wildfire threat and environmental changes, the City of Santa Rosa has and will continue to provide emergency response to all-hazard incidents, including emergency medical services, structure fires, vehicle crashes, and technical rescues. The City of Santa Rosa has not built additional fire stations or added response units since 2009. Since that time, the population has increased significantly, and the risks have changed, leading to a 150 percent increase in Fire Department call volume over the last decade.

During the summer of 2024, the Fire Department placed two advanced life support (paramedic staffed) squads into service. This was the first time the Fire Department has added additional staffed apparatuses since 2009 when the Fire Department responded to just over 19,000 incidents annually. With over 30,000 incidents in 2023, the squads will enable the Fire Department to provide a higher level of service to our community, 24 hours a day. These lighter, more agile units are each staffed with a crew of two, can respond to any emergency, and will improve our ability to comply with NFPA 1710.

NFPA 1710 is the National Fire Protection Association (NFPA) standard that specifies requirements for effective and efficient organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments to protect the community and the occupational safety and health of fire department employees.

Although many responses by the new squads will be to medical emergencies, they can and will respond to fires, vehicle crashes, and rescues to enhance the standard Fire Department response. The use of the squads can also help keep fire engines and ladder trucks available for additional emergency responses that occur simultaneously. These efforts will help reduce response times to critical incidents during peak hours.

The California Department of Forestry and Fire Protection (CAL FIRE) has identified Very High Fire Hazard Severity Zones in the city (Local Responsibility Areas) and surrounding county (State Responsibility Areas), shown on **Figure 5-8,** and in the areas identified by the City of Santa Rosa as the Wildland-Urban Interface Fire Area (WUIFA), shown on **Figure 5-9.** The City has taken steps to regulate fire-prone areas, which includes properties in the Very High Fire Hazard Severity Zone as well as the WUIFA. These areas have a significant risk of wildfire and therefore must conform to higher standards for protection under the California Fire Safe Regulations.

Figure 5-10 shows General Plan Land Uses in the WUIFA. A key risk management strategy is to regulate the location and intensity of uses in high-risk areas and ensure that new developments address wildfire risks during planning and development review. Ensuring access and evacuation potential for existing development in these areas is essential to emergency response and can help reduce the need for recovery activities.

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The **Wildland-Urban Interface Fire Area (WUIFA)** is a geographical area in the City of Santa Rosa at significant risk from wildfires. The WUIFA includes Very High Fire Hazard Severity Zones recommended by the Director of the California Department of Forestry and Fire Protection pursuant to Public Resource Code Sections 4201 - 4204 and Government Code Sections 51175 - 51189.

The Santa Rosa Community Wildfire Protection Plan, approved in 2020, is intended to enhance protection of human life and reduce wildfire threat to community assets in the city.

Key goals of the plan are:

- Minimize the wildfire threat to safety.
- Reduce the wildfire threat to at-risk assets.
- Develop priorities to mitigate risks and hazards.
- Determine potential impacts of climate change on the local fire environment and how they could change wildfire hazard and risk in the mid-twenty-first century.
- Establish a plan to track and monitor implementation of action items.

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Figure 5-7: Historic Wildfire Perimeters

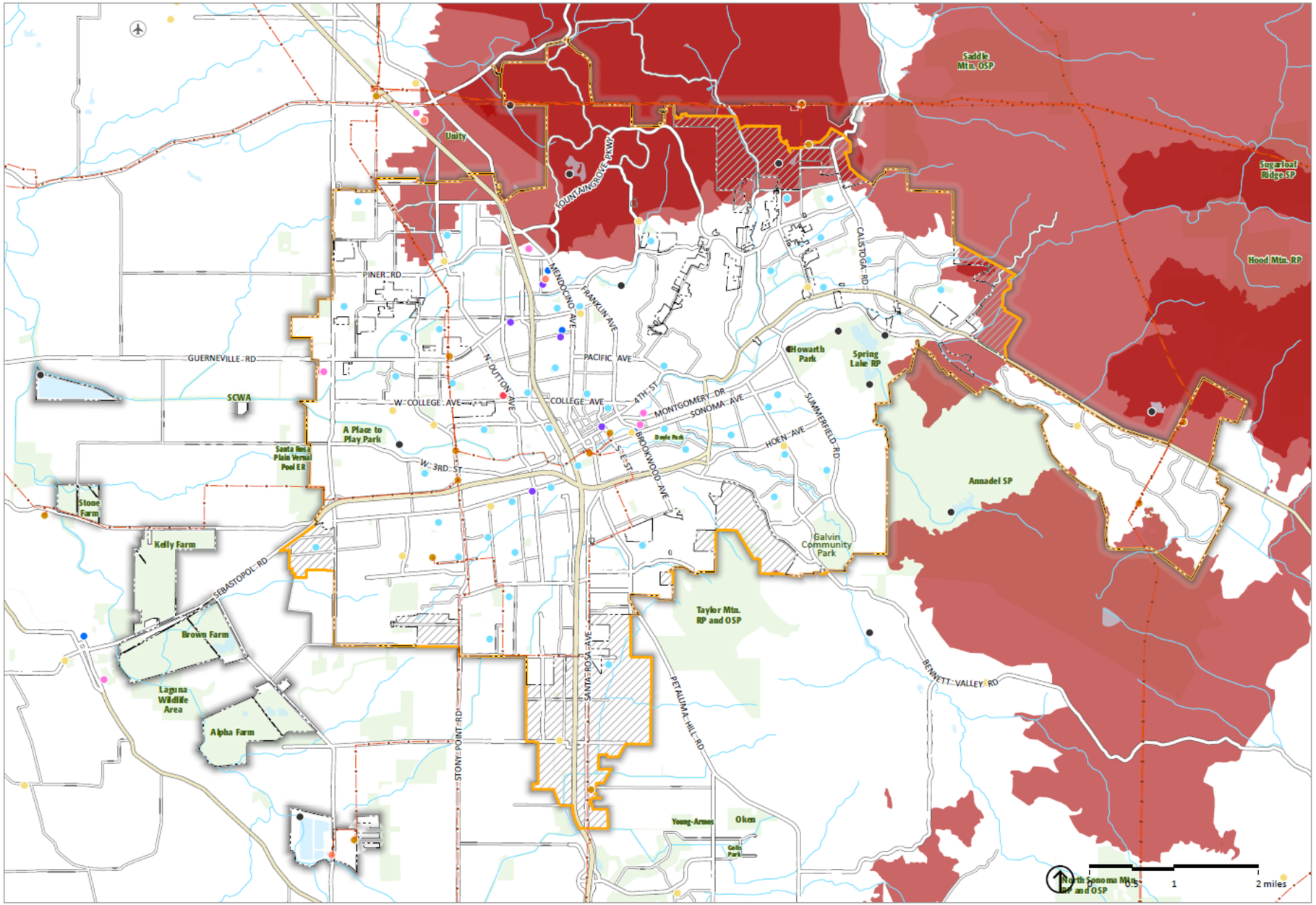

Figure 5-7
Historic Wildfire Perimeters

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Historic Fire Perimeters after 195(

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

* Darker shades of red indicate fire recurrence.

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Source: CalFire. 2023: CalOES. 2021.

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Figure 5-8: Fire Hazard Severity Zones

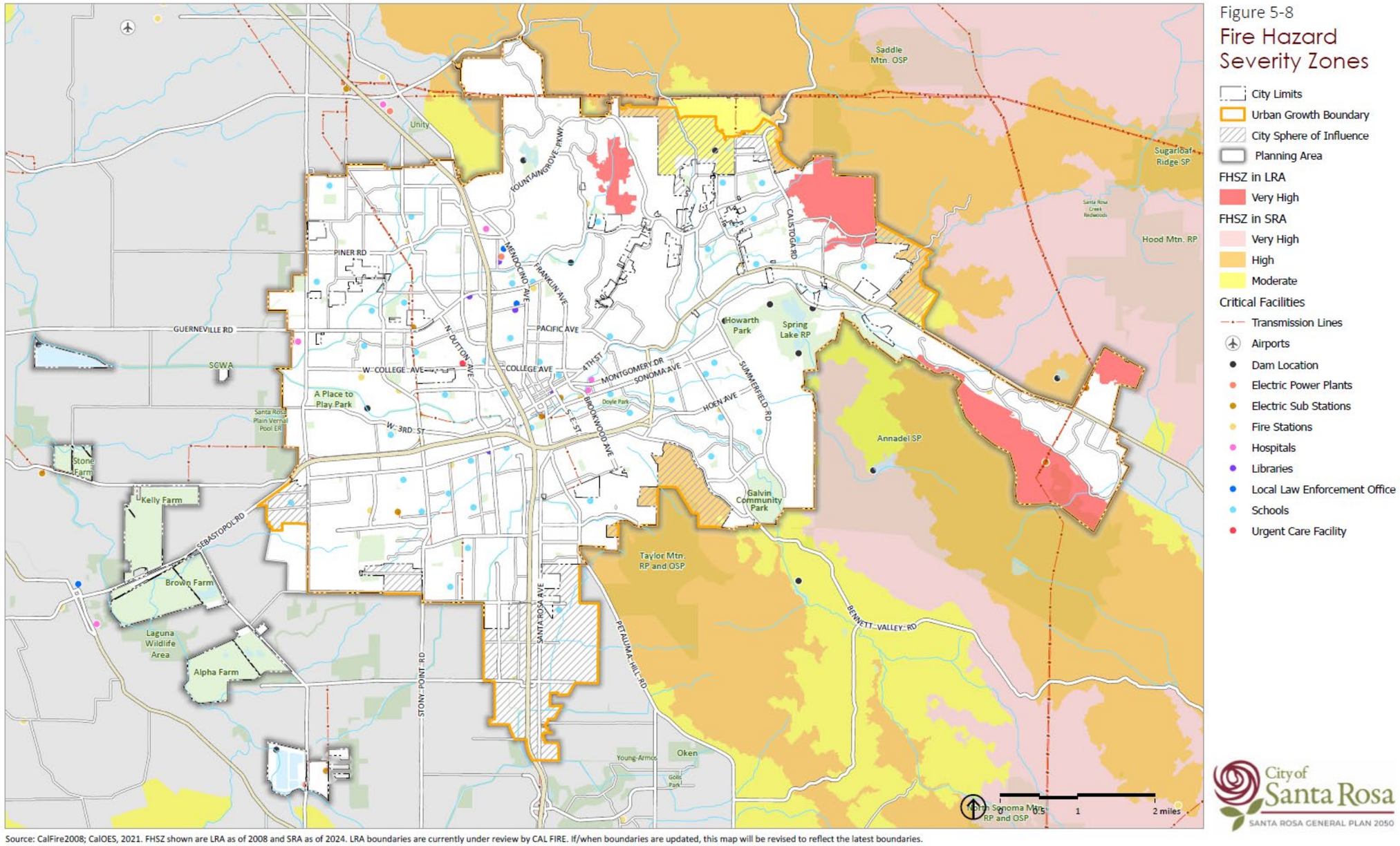

Figure 5-8
Fire Hazard Severity Zones

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

FHSZ in LRA
- Very High

FHSZ in SRA
- Very High
- High
- Moderate

Critical Facilities
- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Source: CalFire2008; CalOES, 2021. FHSZ shown are LRA as of 2008 and SRA as of 2024. LRA boundaries are currently under review by CAL FIRE. If/when boundaries are updated, this map will be revised to reflect the latest boundaries.

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Figure 5-9: Wildland-Urban Interface Fire Areas

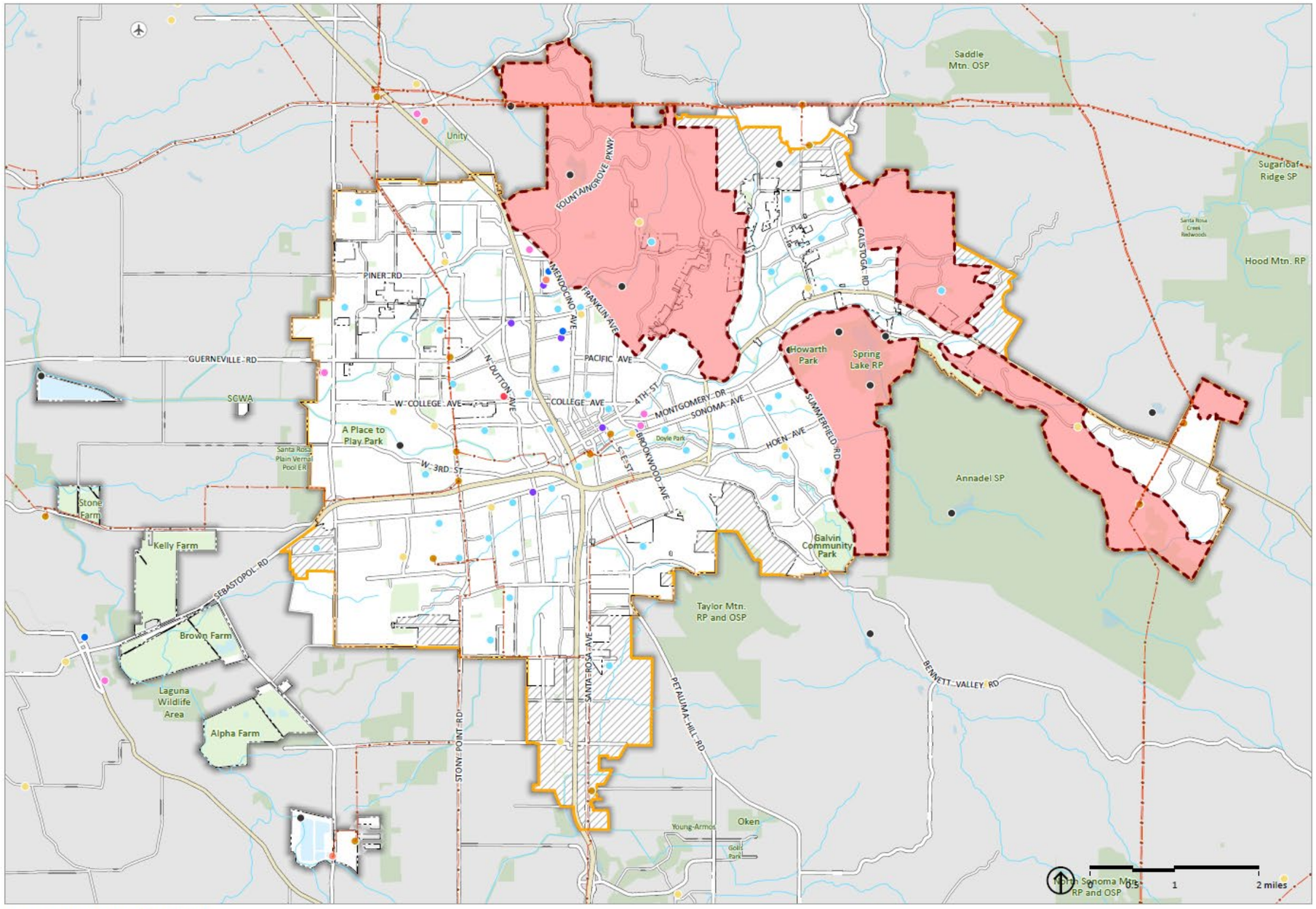

Figure 5-9
Wildland-Urban Interface Fire Areas

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Wildland-Urban Interface Fire Areas

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Source: City of Santa Rosa, 2021; CalOES, 2021.

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Figure 5-10: General Plan Land Uses in Wildland-Urban Interface Fire Areas

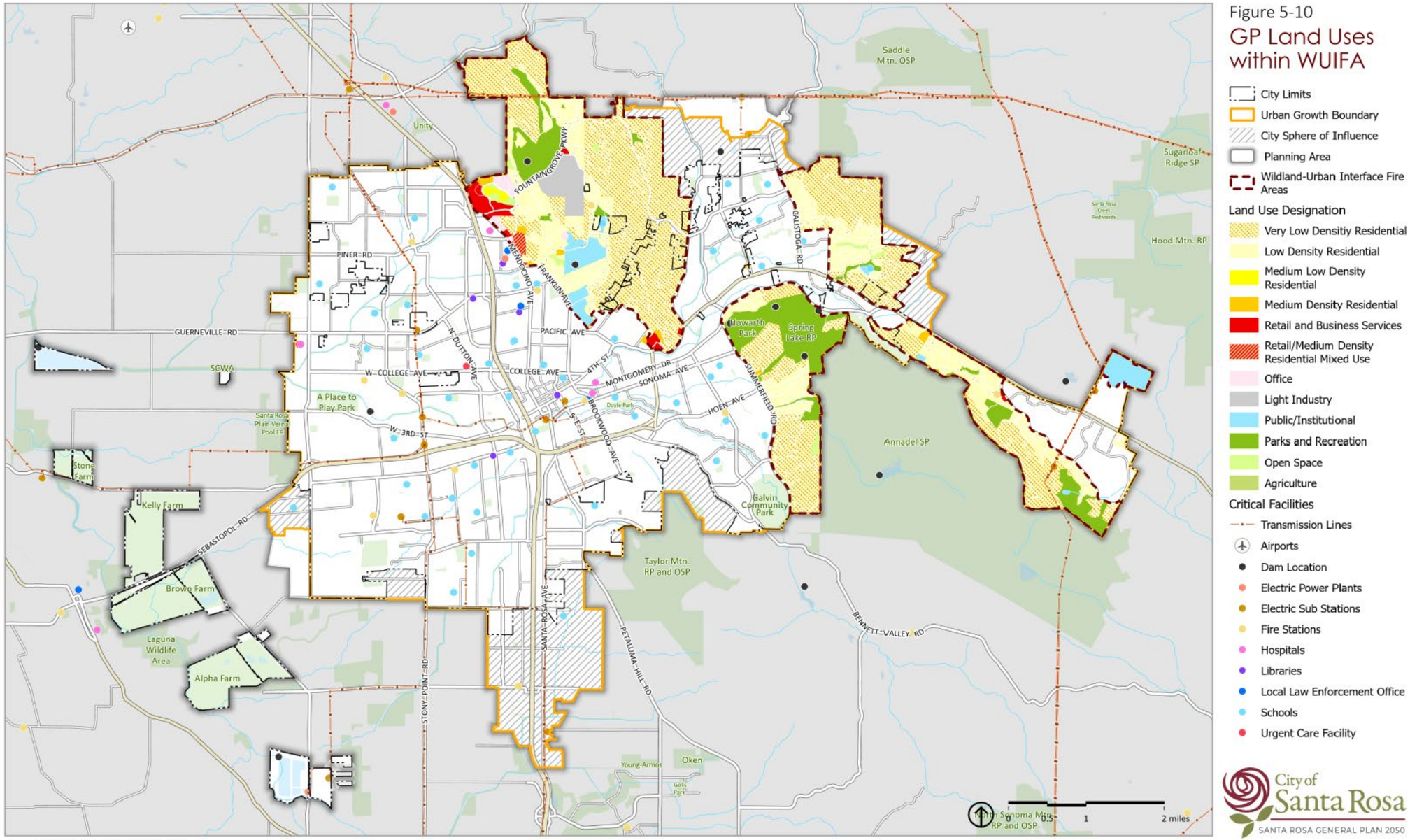

Figure 5-10
GP Land Uses within WUIFA

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Wildland-Urban Interface Fire Areas

Land Use Designation

- Very Low Densitiy Residential
- Low Density Residential
- Medium Low Density Residential
- Medium Density Residential
- Retail and Business Services
- Retail/Medium Density Residential Mixed Use
- Office
- Light Industry
- Public/Institutional
- Parks and Recreation
- Open Space
- Agriculture

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

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Source: USGS, 2023; CGS, 2023; CalOES, 2021.

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Goals, Policies, and Actions

Goal 5-3: Increase community resilience to future wildfire threats.

Policy 5-3.1: **Encourage greenbelts as nature-based solutions to enhance climate resilience and reduce hazards in and around Santa Rosa.**

Action 5-3.1: *Consider ways that new development can incorporate greenbelt zones into the design to reduce wildfire risk and enhance climate resilience.*

Action 5-3.2: *Work with land use applicants to locate development relative to landscape features that can act as buffers from oncoming wildfires (like maintained parks and greenbelts).*

Action 5-3.3: *Seek provision of land management plans or alternative methods to fund vegetation management efforts, support defensible space maintenance on private property, and create fire breaks, greenbelts, and staging areas in strategic locations in conformance with Title 14 of the California Code of Regulations (based on the latest fire hazard severity zone maps released by CAL FIRE) and local ordinances for all existing and new development.*

Policy 5-3.2: **Increase wildfire resiliency using required and voluntary risk reduction regulations and strategies in addition to Title 14 of the California Code of Regulations (based on the latest fire hazard severity zone maps released by CAL FIRE).**

Action 5-3.4: *Adhere to the most current State and local regulations and recommendations of the Community Wildfire Protection Plan that address wildfire risk and vulnerabilities and adopt the latest versions of the fire hazard severity zone maps released by CAL FIRE.*

Action 5-3.5: *Continue to require new development, redevelopment, and remodels to comply with adopted codes and standards and promote implementation of recommendations for fire-safe design in the Community Wildfire Protection Plan.*

Action 5-3.6: *Continue to require conformance with Title 14 of the California Code of Regulations (based on the latest fire hazard severity zone maps released by CAL FIRE) and local ordinances for existing nonconforming properties in the Wildland-Urban Interface Fire Area (includes the Very High Fire Hazard Severity Zone).*

Action 5-3.7: *Continue improving the City's previously developed post-wildfire recovery framework to assist with future post-wildfire redevelopment activities.*

Action 5-3.8: *Require the preparation of fire protection plans for new development and major remodels in the City's Very High Fire Hazard Severity Zone and Wildland-Urban Interface Fire Area (WUIFA). Require that fire protection plans be consistent with requirements of the California Fire Code and include a risk analysis, fire response capabilities, fire safety requirements (e.g., defensible space, infrastructure, and building ignition resistance), mitigation measures,*

design considerations for non-conforming fuel modifications, wildfire education maintenance and limitations, and evacuation plans. (EIR)

Policy 5-3.3: **Promote new development in areas of the community that have lower risk of wildfire hazards (outside of the WUIFA and the very high fire hazard severity zone).**

Action 5-3.9: *Consider updating the Zoning Code to prohibit land uses in the WUIFA that serve mobility-limited persons, such as assisted care facilities and additional uses recommended by the State.*

Action 5-3.10: *Explore the development of a pilot program to transfer rights for current or new development from fire hazard areas to less fire-prone areas and consider managed retreat, which could move people and existing structures away from wildfire risk.*

Action 5-3.11: *Explore prohibiting increased land use densities or intensities in the WUIFA and Very High Fire Hazard Severity Zone in accordance with State guidance.*

Policy 5-3.4: **Implement the vegetation management strategies and enhanced roadway standards in fire-prone areas through the City's Community Wildfire Protection Plan.**

Action 5-3.12: *Require properties in the WUIFA to adhere to the City's Hazardous Vegetation and Fuel Reduction Ordinance, and all properties in the WUIFA and Very High Fire Hazard Severity Zone to comply with California Fire Safe Regulations (Title 14 of the California Code of Regulations).*

Action 5-3.13: *Implement the fire mitigation projects in the Community Wildfire Protection Plan.*

Action 5-3.14: *Establish a maintenance and monitoring program to track the effectiveness and long term financial capabilities of Community Wildfire Protection Plan fuel-treatment activities, such as community fire breaks, and roadway (public/private) clearance.*

Action 5-3.15: *Update the Community Wildfire Protection Plan every five years to reflect the needs of the community and the changing risks in the WUIFA.*

Action 5-3.16: *Ensure each update to the Community Wildfire Protection Plan identifies slope stability and wildfire hazard areas and mitigation strategies to reduce post-wildfire erosion.*

Policy 5-3.5: **Ensure all community members and businesses are informed and empowered to address hazard vulnerabilities, considering the specific needs of Equity Priority Populations.**

Action 5-3.17: *Continue to conduct multilingual and culturally appropriate education and outreach campaigns that assist property owners with defensible space, fire-safe landscaping, home hardening, and wildfire preparedness, as identified in the Community Wildfire Protection Plan.*

Action 5-3.18: *Prioritize wildfire mitigation, education, and outreach efforts to vulnerable populations who may not receive typical outreach.*

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Action 5-3.19: *Work with local and regional partners to assist low-income households with maintaining defensible space around their homes and properties.*

Action 5-3.20: *Identify at-risk populations and developments in the WUIFA and ensure that emergency management planning and training include efforts to increase resilience in these areas.*

Hazardous Materials

The California Health and Safety Code defines a hazardous material as one that poses a significant present or potential hazard to human health and safety or the environment if released into the workplace or environment due to quantity, concentration, and/or physical or chemical characteristics. Substances that are flammable, corrosive, reactive, oxidizing, radioactive, combustible, or toxic are considered hazardous. Hazardous materials can be found throughout the community, and though their presence may not be a significant hazard, their release in an uncontrolled manner or in a certain location could threaten life, property, or the environment. Uncontrolled releases can go unnoticed or cause impacts that are not known or understood until years later.

The Santa Rosa Fire Department has regulatory oversight of hazardous materials in the city. It is the Certified Unified Program Agency (CUPA), which manages and monitors the use, storage, and disposal of hazardous materials and hazardous wastes. The Fire Department staffs a Hazardous Materials Response Unit to mitigate uncontrolled releases of hazardous materials and hazardous waste to ensure the safety of community members and businesses when needed. Human error is the most common cause of hazardous materials releases, but events like wildfires, earthquakes, and floods can also cause a release. In addition, accidental releases on major transportation routes through the city can pose a risk to the community.

As a CUPA, the Fire Department must maintain an Area Plan that local government agencies use to respond to and minimize impacts from a release or threatened release of a hazardous material. The CUPA establishes an Area Plan in coordination with local emergency response agencies to:

- Identify hazardous materials that pose a threat to the community.
- Develop procedures for emergency response.
- Provide for notification and coordination of emergency response personnel.
- Provide for public safety, including notification and evacuation.
- Establish training for emergency response personnel.
- Identify emergency response supplies and equipment.
- Provide feedback and follow-up after a major incident.

Goals, Policies, and Actions

Goal 5-4: Protect all community members and businesses from hazardous materials exposures and releases.

Policy 5-4.1: **Reduce the potential for hazardous materials exposure to community members, visitors, and employees.**

Action 5-4.1: *Continue to coordinate with the North Coast Regional Water Quality Control Board on remediation, cleanup, and risk evaluation prior to changes in site use in areas where hazardous materials and petroleum*

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products have impacted soil or groundwater

Action 5-4.2: *Continue to require that hazardous materials used in business and industry be used, handled, transported, and stored in accordance with federal, State, and local regulations.*

Action 5-4.3: *Continue to restrict future siting of businesses—including hazardous waste repositories, incinerators, or other hazardous waste disposal facilities—that use, store, process, or dispose of large quantities of hazardous materials or wastes in areas subject to seismic fault rupture or significant ground shaking.*

Action 5-4.4: *Require that fire and emergency personnel can easily access routes needed for response to spill incidents.*

Policy 5-4.2: **Minimize risks to human health from hazardous materials.**

Action 5-4.5: *Inventory brownfield sites and identify necessary measures to remediate hazards.*

Action 5-4.6: *Work with landowners and support funding identification and cleanup of identified brownfield sites, particularly in Equity Priority Areas.*

Action 5-4.7: *Seek funding and technical assistance to facilitate brownfield redevelopment, including federal tax incentives for brownfield sites, Department of Toxic Substances Control (DTSC) Revolving Loan Fund Program, Cleanup Loans and Environmental Assistance to Neighborhoods Loan Program, Brownfields Tax Incentives, and the U.S. Environmental Protection Agency brownfields grant and loan programs.*

Policy 5-4.3: **Ensure adequate capacity and safeguards on routes used to transport hazardous materials to prevent or minimize impacts from accidental release.**

Action 5-4.8: *Where applicable, ensure regional and local routes for transportation of hazardous materials and waste are adequately marked and unsafe conditions are adequately addressed, where feasible.*

Evacuation Constrained Parcels: parcels of land that are located on single ingress/egress roadways or in locations that require extended travel to access an evacuation route

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Emergency Preparedness and Evacuation

A key City function is preparing for and responding to emergency events, and a central concern is being able to use identified routes during an evacuation, shown in **Figure 5-11**, including for locations with constrained access, shown in **Figure 5-12.**

The City has established designated evacuation zones to facilitate organized and efficient evacuations during large-scale emergencies. Residents can identify their specific zones using the interactive Evacuation Zone Look-Up Tool, enabling them to respond promptly to evacuation orders. Santa Rosa evacuation zones are coordinated with the Sonoma County system, ensuring consistency across the region. Residents can cross-reference their zones using the Sonoma County Evacuation Map, which provides interactive features to look up evacuation status and road closures (Sonoma County Evacuation Zone Map), and the City has developed enhanced evacuation zone and road closure maps. During active wildfires, the City coordinates and communicates directly with the Sonoma County Department of Emergency Management Ensuring effective and efficient evacuation throughout the county and city.

The Sonoma County Multi-jurisdictional Hazard Mitigation Plan (MJHMP) identifies hazard conditions, analyzes risk to people and facilities, and provides mitigation actions to reduce or eliminate hazard risks in the county. The MJHMP "City of Santa Rosa Annex" describes hazards, capabilities, and mitigation actions specific to Santa Rosa, in accordance with the federal Disaster Mitigation Act of 2000 and FEMA Local Hazard Mitigation Plan guidance and serves as the City's Local Hazard Mitigation Plan (LHMP). The mitigation actions in the MJHMP address similar issues as covered in the General Plan, but the Safety Element framework of goals, policies, and actions has broad application across the whole city over the next 20 years, while the MJHMP focuses on more specific and short-term actions. The current MJHMP, adopted by FEMA, is incorporated into this chapter by reference per California Government Code Section 65302.6; the MJHMP is on the City's website at: https://www.srcity.org/540/Local- Hazard-Mitigation-Plan.

The City is collaborating with Sonoma County on the 2026 MJHMP to assess and enhance evacuation capabilities. This plan will evaluate current strategies, identify infrastructure improvements, and integrate best practices for various evacuation scenarios, including wildfires, earthquakes, and floods. As part of the City's annex to the MJHMP, Santa Rosa will conduct a detailed evacuation analysis. This study will evaluate current evacuation strategies, identify potential improvements, and integrate best practices to ensure the safety and well-being of the community during emergencies.

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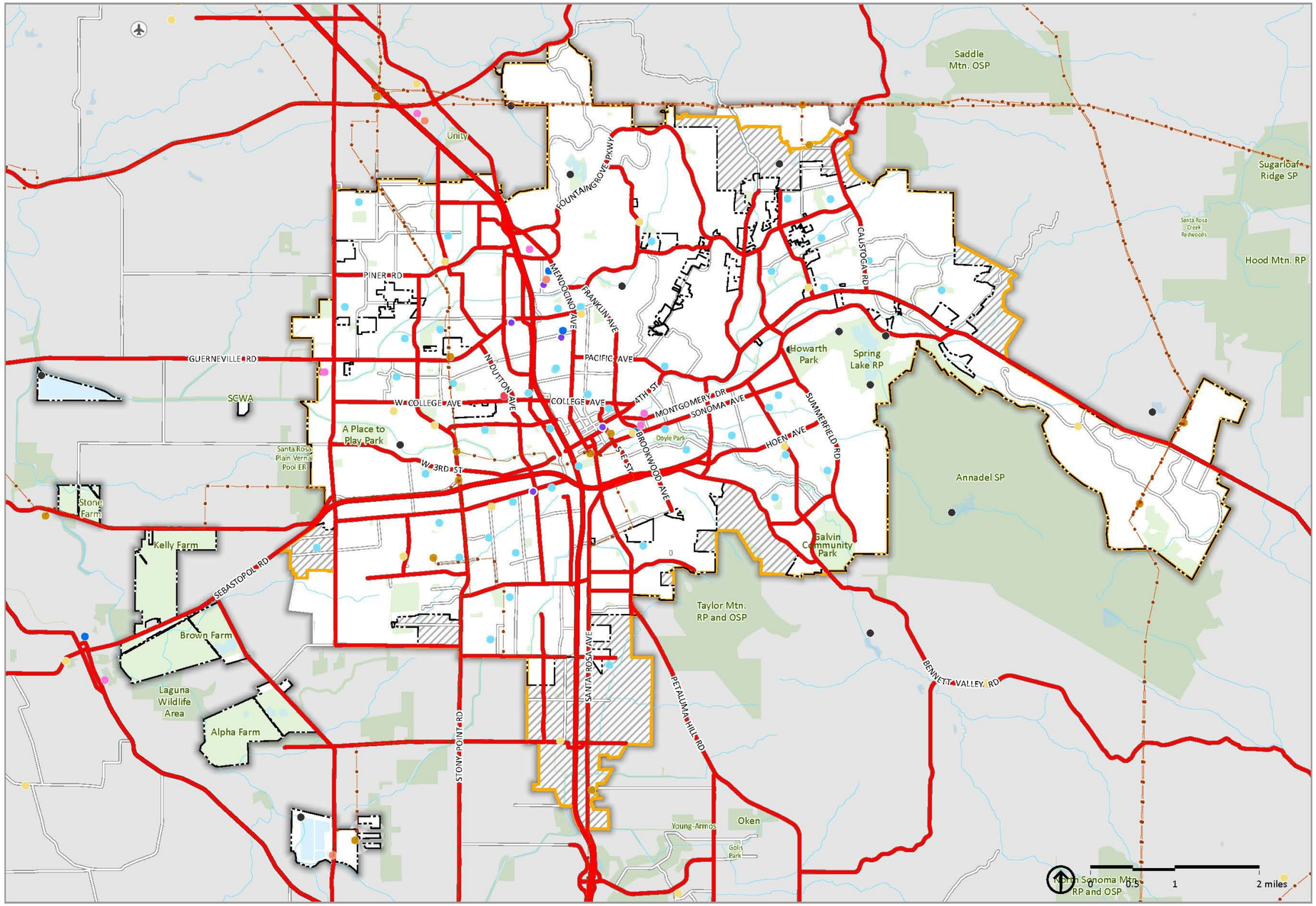

Figure 5-11

Major Routes and Thoroughfares that can Potentially be used for Evacuation*

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

Potential Evacuation Routes

Critical Facilities

- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

* Depending on conditions, check with Authorities regarding particular conditions on routes.

Source: USGS, 2023; CGS, 2023; CalOES, 2021.

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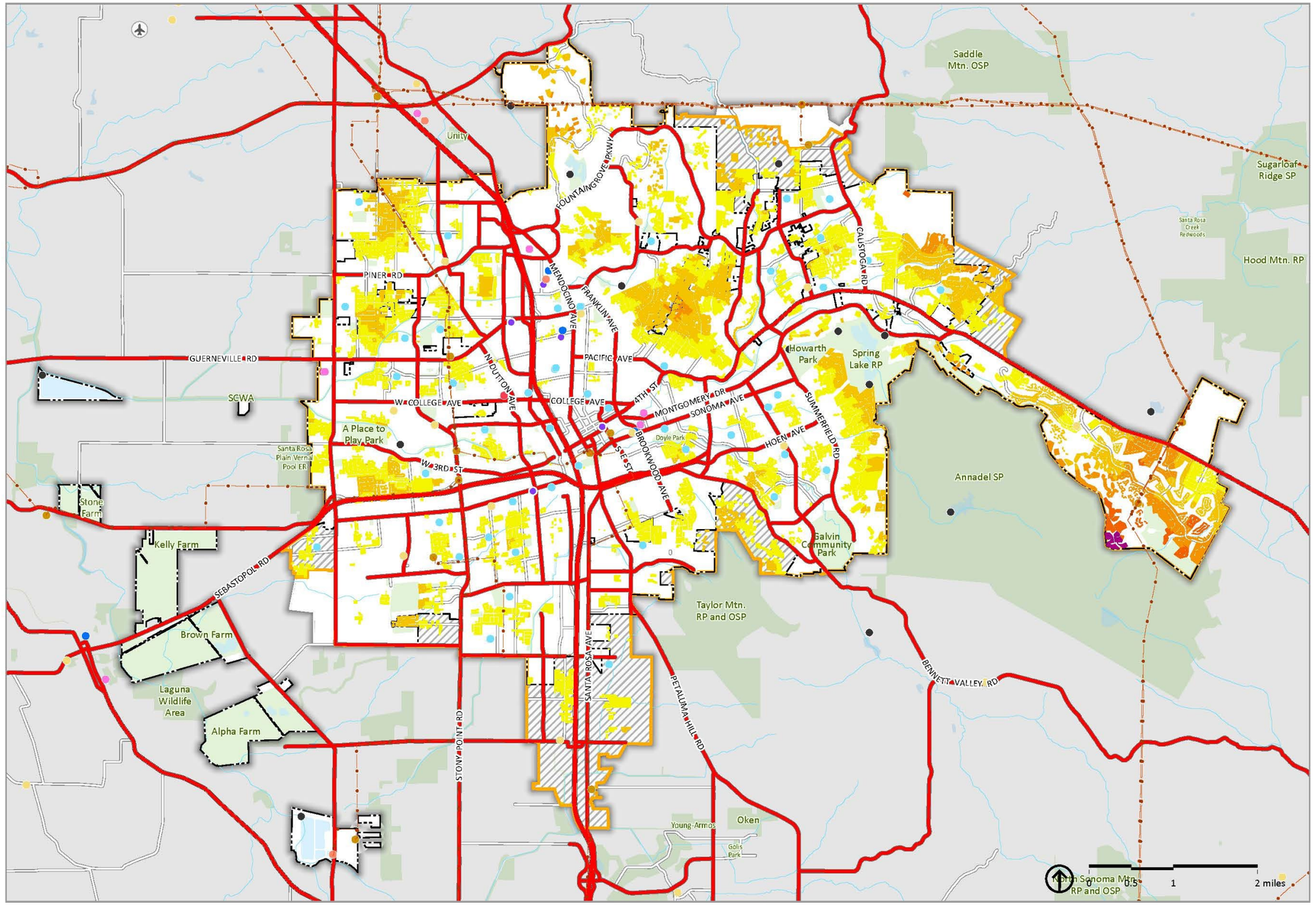

Figure 5-12

Evacuation Constrained Parcels

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area

Potential Evacuation Routes

Distance from nearest Major Primary Intersection

[<= 0.25mi not shown]
- 0.25 to 0.5mi
- 0.5 to 1mi
- 1 to 1.5mi
- 1.5 to 2mi
- 2+mi

Critical Facilities
- Transmission Lines
- Airports
- Dam Location
- Electric Power Plants
- Electric Sub Stations
- Fire Stations
- Hospitals
- Libraries
- Local Law Enforcement Office
- Schools
- Urgent Care Facility

Source: City of Santa Rosa, 2023; CalOES, 2021, PlaceWorks, 2023.

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Goals, Policies, and Actions

Goal 5-5: Ensure that Santa Rosa is prepared for future emergencies.

Policy 5-5.1: **Encourage City staff and community members to be prepared for and capable of responding to emergency events.**

Action 5-5.1: *Maintain and periodically update the City's Emergency Operations Plan.*

Action 5-5.2: *Coordinate with staff of the Sonoma County Operational Area (which consists of the cities, special districts, and unincorporated areas of the county) to update joint emergency response and disaster response plans, as needed.*

Action 5-5.3: *Promote public awareness of the natural hazards and potential effects of disasters in the Planning Area through community and volunteer organizations.*

Policy 5-5.2: **Ensure all community members and businesses are informed and empowered to address hazard vulnerabilities, including Equity Priority Populations.**

Action 5-5.4: *Provide multilingual and culturally appropriate educational materials to increase awareness of hazard risks/vulnerabilities and strategies that community members and businesses can employ to mitigate risks/vulnerabilities.*

Action 5-5.5: *Incorporate strategies from the Community Wildfire Protection Plan, Local Hazard Mitigation Plan, and other resilience-building plans into outreach and educational information.*

Policy 5-5.3: **Promote emergency response and preparedness training for City staff, community members, and businesses to increase community resilience.**

Action 5-5.6: *Participate in emergency response exercises in the Operational Area that involve key hazards of concern for the city.*

The **Operational Area** is defined by the California Emergency Services Act as an intermediate level of the state emergency services organization consisting of a county and all political subdivisions in the county area.

Source: Government Code Section 8559(b)

Policy 5-5.4: **Prioritize projects and strategies that mitigate hazards and increase community resilience.**

Action 5-5.7: *Update the Local Hazard Mitigation Plan per State and federal requirements and implement action items as feasible.*

Action 5-5.8: *Integrate hazard mitigation and climate resilience actions and strategies into the City's Capital Improvement Program and annual budgeting process.*

Action 5-5.9: *Develop a tracking methodology for potential funding sources to support retrofitting publicly and privately owned structures.*

Action 5-5.10: *Locate new essential public facilities outside of identified hazard areas (wildfire hazard zones, flood zones, fault rupture zones) whenever possible, and design, locate, and construct any facilities that must be sited in hazard areas to withstand identified hazards.*

Policy 5-5.5: **Ensure that coordination between the City and Operational Area continuously improves to meet the changing risks of the community.**

Action 5-5.11: *Continue to implement mutual aid, automatic aid, and California's Mutual Master Aid System to provide effective emergency response.*

Action 5-5.12: *Maintain effective mutual-aid agreements with neighboring cities and Sonoma County to support emergency management.*

Action 5-5.13: *Continue to execute mutual-aid agreements with public and private entities to support community emergency management.*

Policy 5-5.6: **Prioritize investments that expand and enhance evacuation capacity and capabilities.**

Action 5-5.14: *Require all new development projects to provide adequate access for fire and emergency response personnel. (EIR)*

Action 5-5.15: *Prohibit the creation of new single ingress/egress roadway conditions in the city. (EIR)*

Action 5-5.16: *Retrofit existing single-access residential neighborhoods to include additional access routes or other provisions to increase evacuation safety. (EIR)*

Action 5-5.17: *Analyze the capacity, viability, and safety of evacuation routes and evacuation locations throughout the city under a range of emergency scenarios and incorporate the results, as necessary, into the Safety Element of the General Plan. This analysis will be completed as part of the City's Annex to the Sonoma County Multi-Jurisdictional Hazard Mitigation Plan in 2026.*

Climate Resilience

Scientists expect climate change to increase the frequency and intensity of natural hazards in the future. Santa Rosa has already experienced changes in precipitation patterns—severe storms and drought, urban flooding, extreme heat, and wildfires. According to California's Fourth Climate Change Assessment,[1] these changes will continue, including in Santa Rosa.

In 2021, the City conducted a Climate Change Vulnerability Assessment (see **Appendix B**) to investigate how climate change may affect people, buildings, infrastructure, and other key community assets pursuant to California Government Code Section 65302(g)(4) and in accordance with the California Adaptation Planning Guide.

Table 5-1 shows how the primary climate stressors—changes to precipitation patterns and higher average temperatures—will cause secondary climate stressors at the regional and local level. The assessment evaluates how climate change exacerbates eight natural hazards (agricultural and ecosystem pests and diseases, drought, extreme heat, climate-sensitive health risks, landslides, severe wind, severe storms, and wildfire) and the effects on 65 different population groups and community assets. Each population or asset received a score ranging from low to high vulnerability for each relevant hazard. The Climate

[1] Bedsworth, Louise, Dan Cayan, Guido Franco, Leah Fisher, Sonya Ziaja. (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, California Public Utilities Commission). 2018. *Statewide Summary Report: California's Fourth Climate Change Assessment*. Publication number: SUMCCCA4-2018-013.

Change Vulnerability Assessment indicates that among all natural hazards exacerbated by climate change, Santa Rosa populations and assets are most vulnerable to wildfire. Additional details on the method, population, and assets evaluated, and results are in the General Plan **Appendix B**. The results of the Climate Change Vulnerability Assessment are integrated into the Safety and Climate Resilience sections of this element.

Table 5-1
Climate Stressors

Primary Climate Stressors	Secondary Climate Stressors	Climate Stressor Impacts
Increase in Average Temperatures	Increased frequency and intensity of extreme heat days and warm nights.	• Increased heat-related illness and death, particularly among vulnerable populations. • Greater demand for emergency services, public spaces that provide relief from extreme heat (e.g., libraries, community centers), and water-dependent recreation. • Increased frequency of preemptive power outages for wildfire prevention, resulting in the loss of air conditioning, greater risk of food/medication spoilage, disruptions to public services, and other impacts.
	Increased evaporation and evapotranspiration rates.	• Reduced growth and productivity of agricultural crops and native vegetation due to heat stress and increases in evapotranspiration. • Decreased vegetation moisture leading to increased susceptibility of a wildfire.
	Earlier snow melt throughout the state and more precipitation falling as rain instead of snow.	• Less water available later in the water-year for agricultural and domestic uses.
	Increased human and ecosystem pests and diseases.	• Harm to agriculture, public health, plants, and wildlife.
	Fewer, more intense precipitation events.	• Increased risk of injuries/death and property damage or loss during extreme flooding and landslides.
Changes in Precipitation Patterns	Increased frequency and intensity of drought.	• Reduced water availability due to declining surface water supplies and groundwater recharge combined with increased demand for agricultural and household use. • Increased cost of food and water. • Increased stress and mortality in agricultural crops and native vegetation. • Economic losses due to crop failures and loss of tourism associated with water-dependent activities.

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Table 5-1
Climate Stressors

Primary Climate Stressors	Secondary Climate Stressors	Climate Stressor Impacts
	Increased frequency of flooding and landslides	• Increased runoff during heavy rainfall events that follow dry periods, resulting in greater risk of landslides and flash floods. • Damage to roadways and/or temporary loss of access to isolated neighborhoods. • Interruption of public services and possible public health impacts following damage to utilities. • Economic impacts of damage to businesses and agricultural operations.
	Decreased moisture content of wildfire fuel	• Increased potential for wildfire. • Increased risk of injuries and death due to burns and smoke inhalation, as well as longer-term health impacts related to eye and respiratory issues. • Damage and loss of homes, businesses, and other infrastructure, particularly in the Wildland-Urban Interface Fire Area (WUIFA). • Possible disruption of critical supply chains, access to public services, and other linkages. • Economic losses due to direct damage (i.e., to businesses) as well as declines in tourism and recreation following fire. • Increased potential for wildfire. • Increased risk of injuries and death due to burns and smoke inhalation, as well as longer-term health impacts related to eye and respiratory issues. • Damage and loss of homes, businesses, and other infrastructure, particularly in the WUIFA. • Possible disruption of critical supply chains, access to public services, and other linkages. • Economic losses due to direct damages (i.e., to businesses) as well as declines in tourism and recreation following fire.

Source: EcoAdapt, "Projected Climate Changes and Associated Impacts For Santa Rosa, CA," Workshop Handout, 2020.

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Agricultural and Ecosystem Pests and Diseases

The 2021 Sonoma County Agricultural Commissioner Crop Report indicates that agriculture and livestock production had a value of $811 million in 2021 and supported roughly 8,500 agricultural laborers. The largest-grossing crops include wine grapes and milk. Agricultural pests and diseases can affect crop plants, livestock, and nurseries, as measured in terms of pest and disease incidents, which are likely to increase because higher temperatures allow insects to reproduce more rapidly and lengthen the activity window for pests and diseases. Pests and diseases can slow the growth of and inflict damage on agricultural crops and ecosystems, harming economic drivers and people who depend on them.

Droughts

Emerging climate change projections show that Sonoma County, along with the rest of California, will experience an increase in the intensity and severity of extreme hazard events. We can expect longer, more severe droughts, which will likely strain agribusinesses, habitats, and water supplies. Droughts may be twice as frequent by 2050 than they were in the past, and precipitation will come in fewer, more intense storms with longer dry seasons. Although Santa Rosa will likely experience an increase in overall annual precipitation levels compared to historic averages, the wet season will be shorter because of climate change, which will cause droughts to last longer and be more intense.[2]

Extreme Heat and Warm Nights

Extreme heat happens when temperatures rise significantly above normal levels. The Sonoma County Office of Emergency Management defines extreme heat as an extended period of intense heat and humidity with temperatures above 90 degrees Fahrenheit. Maximum temperatures are projected to increase by 7.5 degrees Fahrenheit by 2100, causing an increase of 20 days per year of extreme heat and 29 additional frost-free nights.[3] Extreme heat poses a significant human health risk to Equity Priority Populations, especially to those without air conditioning, seniors, young children, pregnant women, persons with chronic diseases, outdoor workers, indoor workers in settings that do not provide adequate ventilation or cooling, immigrant communities, and persons experiencing homelessness. Very high temperatures also can damage energy delivery and rail infrastructure and services, constraining their ability to meet community needs.

Extreme daytime temperatures intensify human health risks when there is a lack of cooling overnight. With warmer nighttime temperatures, heat stress continues to build and increases the risk of heat illnesses and death. Heat waves kill more people in the United States than any other natural disaster.[4]

Other Climate-Influenced Health Risks

Climate influences the infection rates of various diseases, including vector-borne and water-borne diseases.

The World Health Organization defines vector-borne diseases as human illnesses caused by parasites, viruses, and bacteria, transmitted by living organisms between humans, or from animals to humans. Examples of vector-borne diseases found in Sonoma County include Lyme disease and Rocky Mountain Spotted Fever, which are spread by ticks; West Nile Virus, Zika Virus, and Dengue Fever, which are spread by

[2] EcoAdapt, 2021, "Climate Vulnerability and Adaptation Report for Santa Rosa."
[3] EcoAdapt, 2021, "Climate Vulnerability and Adaptation Report for Santa Rosa."
[4] National Weather Service, 2022. "Weather Related Fatality and Injury Statistics." https://www.weather.gov/hazstat/.

mosquitoes; and hantavirus, which is spread by rats and mice. Warmer weather and increases in the frequency and intensity of heavy rainfall events will result in increased vector survival and reproduction rates, which may lead to greater risk of vector-borne illnesses.

Higher incidences of water-borne illnesses, such as illnesses caused by Aeromonas, may occur due to warmer temperatures and heavy rainfall events. Droughts can also concentrate pathogens and lead to harmful algae blooms, as well as viruses, protozoa, and bacteria polluting groundwater and surface water.

Severe Winds and Storms

Severe winds and storm events, such as thunderstorms, hail, heavy rainfall, and flooding, have become more frequent and intense as a result of climate change. In Santa Rosa, most severe storms are linked to "atmospheric rivers," which are long, narrow storm systems that carry water vapor from the tropics to higher latitudes. Once over land, an atmospheric river system can quickly blanket a region in heavy precipitation. These storms are likely to become more extreme in the future because of warmer temperatures and changes in precipitation patterns.

Severe wind events have sustained winds of 40 miles per hour, or wind gusts of 58 or more miles per hour. The types of dangers posed by severe winds and storms vary widely and include injury and death from flooding, mudslides, road closures, fallen trees, and damage to buildings and structures.

Severe winds and storms also can cause secondary hazards, such as economic disruption and Public Safety Power Shutoffs (PSPS). A PSPS is an operational practice whereby energy companies intentionally turn off power to avoid catastrophic utility-caused wildfires. Energy companies make the decision to turn off power by monitoring local fire conditions, such as warm weather, low fuel moisture, and severe winds.

While PSPS events protect the public from health risks associated with wildfire, they can also harm those who rely on electricity to refrigerate medications and power life-sustaining equipment.

Public Safety Power Shutoffs or **PSPS** are preemptive measures taken by utility providers, and not the City, to reduce the risk of fire caused by electric infrastructure during extreme weather events because high winds can blow tree branches and debris into energized lines and cause fires.

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Wildfires

Warmer temperatures, an increase in drought conditions, and severe wind events are likely to create faster-moving and hotter-burning wildfires. Climate change is also expected to extend the fire season throughout much of the year, creating an overlap with high-velocity wind events. In addition to immediate impacts, wildfires can lead to landslides and debris flows due to the loss of trees and other vegetation that help stabilize hillsides and absorb water.

Additionally, the first plants that move into an area that has burned are wildflowers, weeds, grasses, and vegetation that can create additional wildfire fuel if not properly maintained.

Goals, Policies, and Actions

Goal 5-6: Ensure Santa Rosa is a resilient city able to adapt to, recover from, and thrive under changing climate conditions.

Policy 5-6.1: **Support legislative and regulatory efforts that further climate resilience.**

Action 5-6.1: *Ensure all current and future City plans and updates include climate change considerations—including specific plans, Active Transportation Plan, Design Guidelines, Local Hazard Mitigation Plan, Citywide Creek Master Plan, Municipal Climate Action Plan, Urban Water Management Plan, Water Shortage Contingency Plan, "Our Water Future" Water Supply Alternatives Plan, Community Wildfire Protection Plan, and others.*

Action 5-6.2: *Continue to update the City's Climate Change Vulnerability Assessment with new climate projections and data during each Safety Element update.*

Policy 5-6.2: **Support neighborhood resilience during extreme weather events.**

Action 5-6.3: *Continue to offer community pre-disaster planning efforts and exercises.*

Policy 5-6.3: **Elevate extreme heat to a major hazard of concern in Santa Rosa.**

Action 5-6.4: *Continue to implement the City's existing policy for cooling center activation, weatherize City buildings, and participate in cooling strategies for persons engaged in outdoor work and persons experiencing homelessness.*

Action 5-6.5: *Continue to build public awareness about extreme weather events through multilingual targeted communications campaigns focusing on Equity Priority Areas and Equity Priority Populations.*

Action 5-6.6: *Coordinate with Sonoma County Transit, Santa Rosa Transit, and CityBus, and SMART to increase shading and heat-mitigating materials on pedestrian pathways, at and around transit centers, transit stops, and train stations.*

Action 5-6.7: *Increase the number of Santa Rosa Transit stops with shade cover and shelters to provide protection from extreme heat and severe storms.*

Policy 5-6.4: **Encourage collaboration among City departments and with nonprofit organizations to create a network of equitably located resilience centers throughout the city.**

Action 5-6.8: *Work to establish a network of equitably located, well-advertised,*

and universally accessible community resilience centers throughout Santa Rosa that are situated outside of areas at risk from hazard impacts to the extent possible.

Action 5-6.9: *Seek grant funding to identify and map facilities that can serve as community resilience centers and support people with access and functional needs during hazard events, in collaboration with community partners.*

Action 5-6.10: *Seek funding to upgrade existing warming and cooling centers to offer refuge from extreme heat events and poor air quality due to regional wildfire smoke and be equipped with renewable energy generation and backup power supplies.*

Action 5-6.11: *Continue to provide backup power and emergency supplies at critical City facilities, emergency shelters, community resilience centers, and cooling centers in case of power and water outages. Transition to carbon-free backup power sources as available and appropriate.*

Action 5-6.12: *Coordinate with transit providers to identify and advertise ways for individuals with restricted mobility to reach resilience centers, cooling centers, and alternate care sites.*

Action 5-6.13: *Work with employers to allow outdoor workers to shift working hours to earlier or later in the day, or alternative days, between May and September to reduce heat-related illnesses.*

Action 5-6.14: *Evaluate Zoning Code provisions and Public Improvement Standards to expand requirements for drought-tolerant green infrastructure, including street trees and landscaped areas, as part of cooling strategies in public and private spaces.*

Policy 5-6.5: **Support the preservation and restoration of natural landscapes to reduce the heat island effect, improve air quality, and improve community health.**

Action 5-6.15: *Increase the city's urban tree canopy, starting with Equity Priority Areas, and expand urban greening throughout the city to reduce the heat Island effect.*

Action 5-6.16: *Seek resources to conduct a community-wide tree canopy assessment to quantify how much of the City's land area is covered by trees, including streets with street tree canopy cover; identify the location of those trees; and identify opportunities to plant trees.*

Action 5-6.17: *Update the Santa Rosa Street Tree list so that it is consistent with the list developed by the City's Water Use Efficiency Team and the Master Gardeners, and identify native, drought-tolerant, and low-water-use tree species that are appropriate for street landscaping.*

Action 5-6.18: *Work with the Water Team and Master Gardeners to refine guidelines on specific tree species and management procedures that integrate carbon sequestration, ecosystems services, and biodiversity.*

Action 5-6.19: *Where woody vegetation is appropriate, maximize planting of coast live oak and other native trees and shrubs in the public realm.*

Action 5-6.20: *Work to complement the street tree network by increasing the number of street trees in the sidewalk and tree wells.*

Action 5-6.21: *Preserve mature trees during infrastructure modifications using solutions to retain them, such as curb extensions, basin expansion, and sidewalk re-routing.*

Action 5-6.22: *Require tree planting and other landscaping in all new development and redevelopment that supports other community benefits, such as shade for walking and biking, and include greening elements as a primary project scoring criteria for bicycle improvements.*

Action 5-6.23: *Seek resources to create and regularly update an Urban Greening Plan to increase the urban tree canopy, open spaces, and green roofs to reduce the heat island effect, giving priority to areas of the city with vulnerable populations.*

Action 5-6.24: *Explore incentives for shading features, such as large eaves and cantilevers on south- and west-facing walls to reduce air conditioning requirements and heat island effects that contribute to the entire community's reduced quality of life, but especially those living in high-density, low-income neighborhoods.*

Policy 5-6.6: **Reduce the spread of human health hazards, including pests, diseases, and viruses.**

Action 5-6.25: *: Coordinate with the Marin/Sonoma Mosquito and Vector Control District to minimize mosquitos, ticks, and other vectors.*

Policy 5-6.7: **Strengthen the community's ability to respond to the risks and negative effects of power outages, including public safety power shutoffs (PSPS) and other climate-related threats.**

Action 5-6.26: *Support efforts to underground electrical transmission infrastructure throughout the city, including substations, prioritizing high-voltage transmission lines and areas in the WUIFA.*

Action 5-6.27: *Collaborate with PG&E, Sonoma Clean Power, and nonprofit organizations to ensure that those who depend on electricity supply for medical devices and refrigerated medication have backup energy supplies during outages, including extreme heat and wind events.*

Policy 5-6.8: **Increase the resiliency of City-owned buildings and structures to severe weather events and support home and business owners to increase the resilience of their buildings and properties.**

Action 5-6.28: *Identify and promote resources related to retrofit, weatherization, and other home improvement programs.*

Action 5-6.29: *Seek funding for backup power, preferably from renewable energy sources, and water resources at emergency shelters, resilience centers, and cooling centers.*

Noise

In most of Santa Rosa, noise can be characterized as routine background sound and unusual or intermittent events. Cars, trucks, buses, trains, air conditioning systems, and aircraft generate background noise. Intermittent and sometimes excessive noise can come from leaf blowers, helicopters, train whistles at grade crossings, chainsaws, car, truck, and motorcycle engines, unmuffled motor vehicles, sirens, and similar sources. Excessive noise can cause annoyance, health problems, economic loss, and even hearing impairment.

Sound waves traveling outward from a source exert a sound pressure level usually measured in decibels (dB). Environmental noise is usually measured in A-weighted decibels (dBA), a metric corrected for the human ear response to various frequencies (some animals can hear sounds outside the human range). Most people can detect a change in sound level of about 3 dBA, and an increase of 10 dBA is perceived by the human ear as a doubling of loudness.

Projected Noise Sources

The major sources of noise in Santa Rosa throughout the General Plan time frame include:

U.S. Highway 101 and State Route 12. Highway 101 and Route 12 generate significant noise levels because of high traffic volumes and speeds. Tire interaction with the roadbed and truck engines create noise. In terms of sound energy, noise from one truck is equivalent to 20 autos.

Regional/arterial streets. Major regional/arterial streets with high noise levels include Fulton Road, Guerneville Road, Bellevue Avenue, Stony Point Road, Mendocino Avenue, Fountaingrove Parkway, Calistoga Road, Summerfield Road, and College Avenue. In general, automobile traffic volumes will increase by 2050 along with noise levels.

Railroad operations. Railroad noise is most noticeable from horn soundings and at-grade crossings. The city has 13 at-grade crossings—Bellevue Avenue, Hearn Avenue, Barham Avenue, Sebastopol Avenue, W. 3rd Street, W. 6th Street, W. 7th Street, W. 9th Street, W. College Avenue, Guerneville Road, W. Steele Lane, Piner Road, and San Miguel—and 1 potential at-grade crossing at Jennings Avenue.

Emergency medical helicopters and vehicles. Emergency medical helicopters and vehicles with sirens create intermittent but significant noise.

Charles M. Schulz-Sonoma County Airport. Airport operation is addressed in the Sonoma County General Plan and the Comprehensive Airport Land Use Compatibility Plan (ALUC) though aircraft noise can affect Santa Rosa.

Industrial and commercial facilities. Industrial and commercial facilities are sometimes noise sources, particularly auto wrecking and commercial loading operations. The City receives occasional complaints about noise generated by these types of businesses.

Landscaping equipment. On a smaller scale, landscaping equipment, such as leaf blowers and lawn mowers, can also generate noise that bothers nearby residents.

Downtown and other mixed-use areas. The operation of resident and tourist-oriented land uses, including live entertainment venues, bars, and nightclubs, generate sound, particularly at night as three downtown Zoning Districts allow extended hours of operation by right, and a fourth allows extended hours of operation with the approval of a Minor Conditional Use Permit. The City has received complaints both from residents concerned with noise generated from downtown nightlife, and from business operators concerned that the citywide noise standards are overly restrictive. As the downtown core and other mixed-use areas become denser with residential development, it will be even more important to

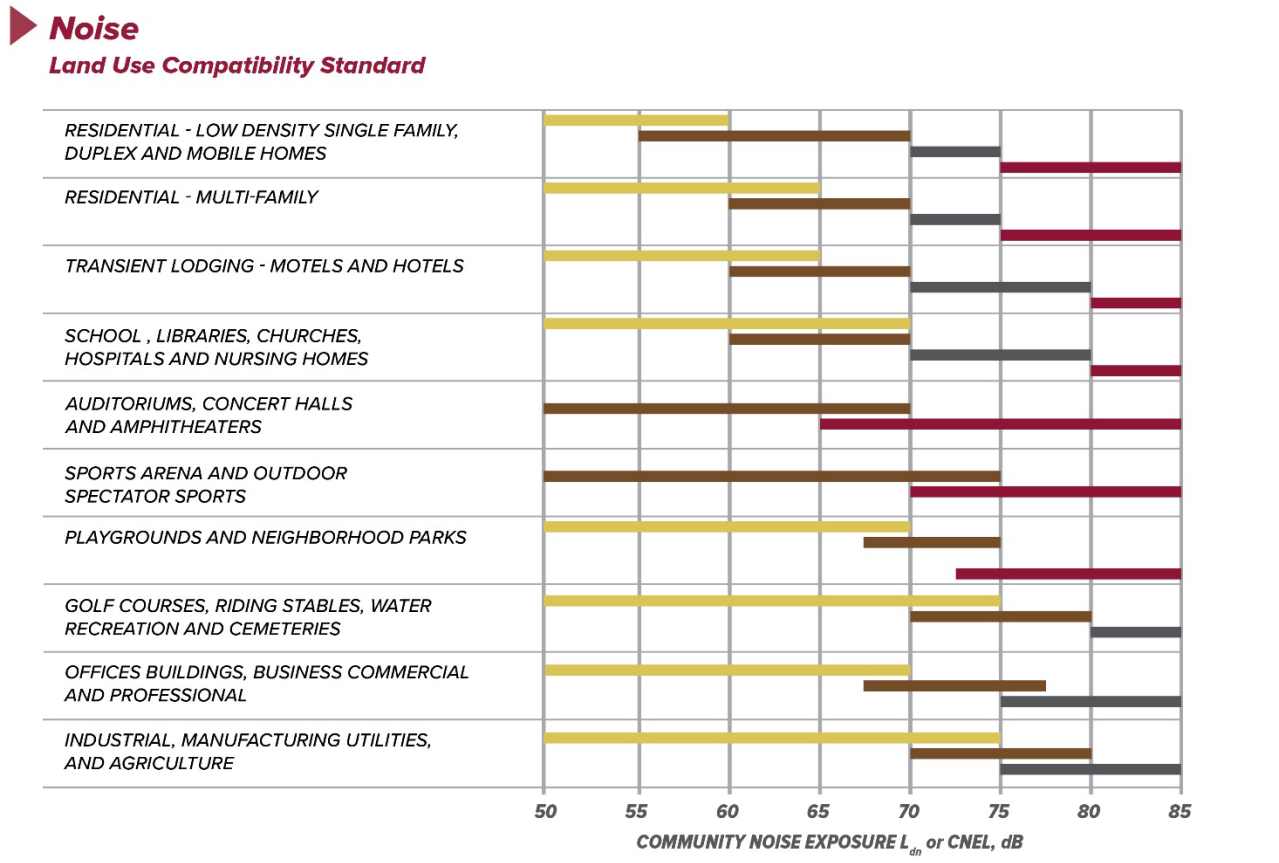
strike a balance between land uses that respect reasonable enjoyment of a residence and accommodate a viable business model for business operators.

Figure 5-13 shows land uses in the city with compatible noise levels. **Figure 5-14** offers comparative examples of dBA noise levels. **Figure 5-15** shows the existing traffic noise levels in the city. **Figures 5-16** and **5-17** show the projected traffic noise levels; **5-16** shows future noise levels assuming there are no changes in the city beyond those planned, and **5-17** accounts for changes anticipated outside of Santa Rosa through 2050.

Noise Standards

State law requires general plans to use the Community Noise Equivalent Level (CNEL) or the Day/Night Average Sound Level (Ldn) to describe the community noise environment (in dBA) and its effects on the population; Santa Rosa uses Ldn. The noise standards used by the City include the Land Use Compatibility Standards for community noise environment, depicted in **Figure 5-13**, State of California Noise Insulation Standards (California Code of Regulations, Title 24, Part 2), and applicable standards in the City of Santa Rosa Noise Ordinance. General Plan policies and actions address noise attenuation along major regional/arterial streets through location of land uses, site design, architectural standards, barriers, and street materials.

Figure 5-13: Noise Land Use Compatibility Standards



NORMALLY ACCEPTABLE: *Specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.*

CONDITIONALLY ACCEPTABLE: *New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.*

NORMALLY UNACCEPTABLE: *New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design*

CLEARLY UNACCEPTABLE: *New construction or development should generally not be undertaken.*

Figure 5-14: Comparative Examples of dBa Noise Levels

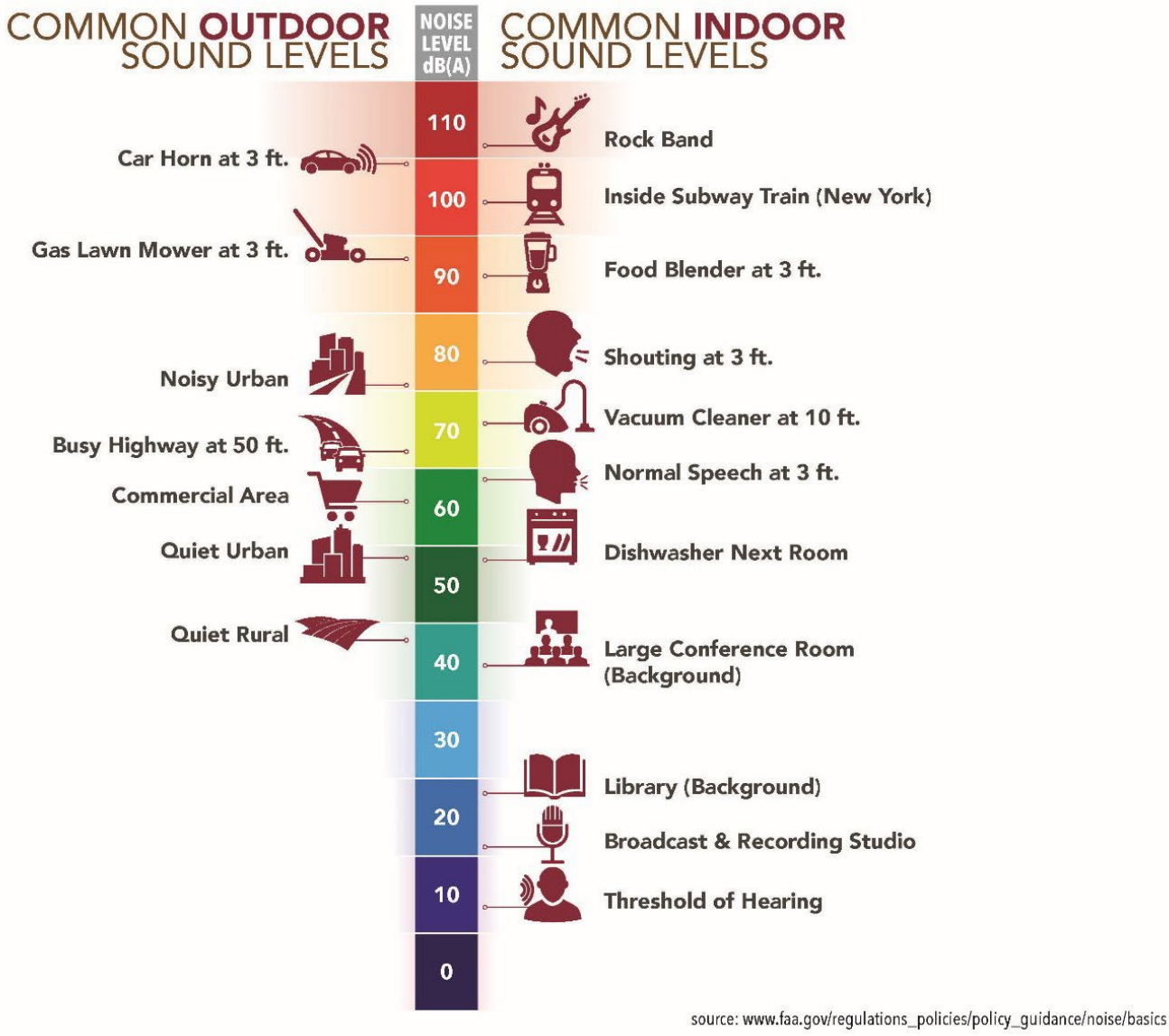


Figure 5-15: Existing Traffic Noise Levels, 2019

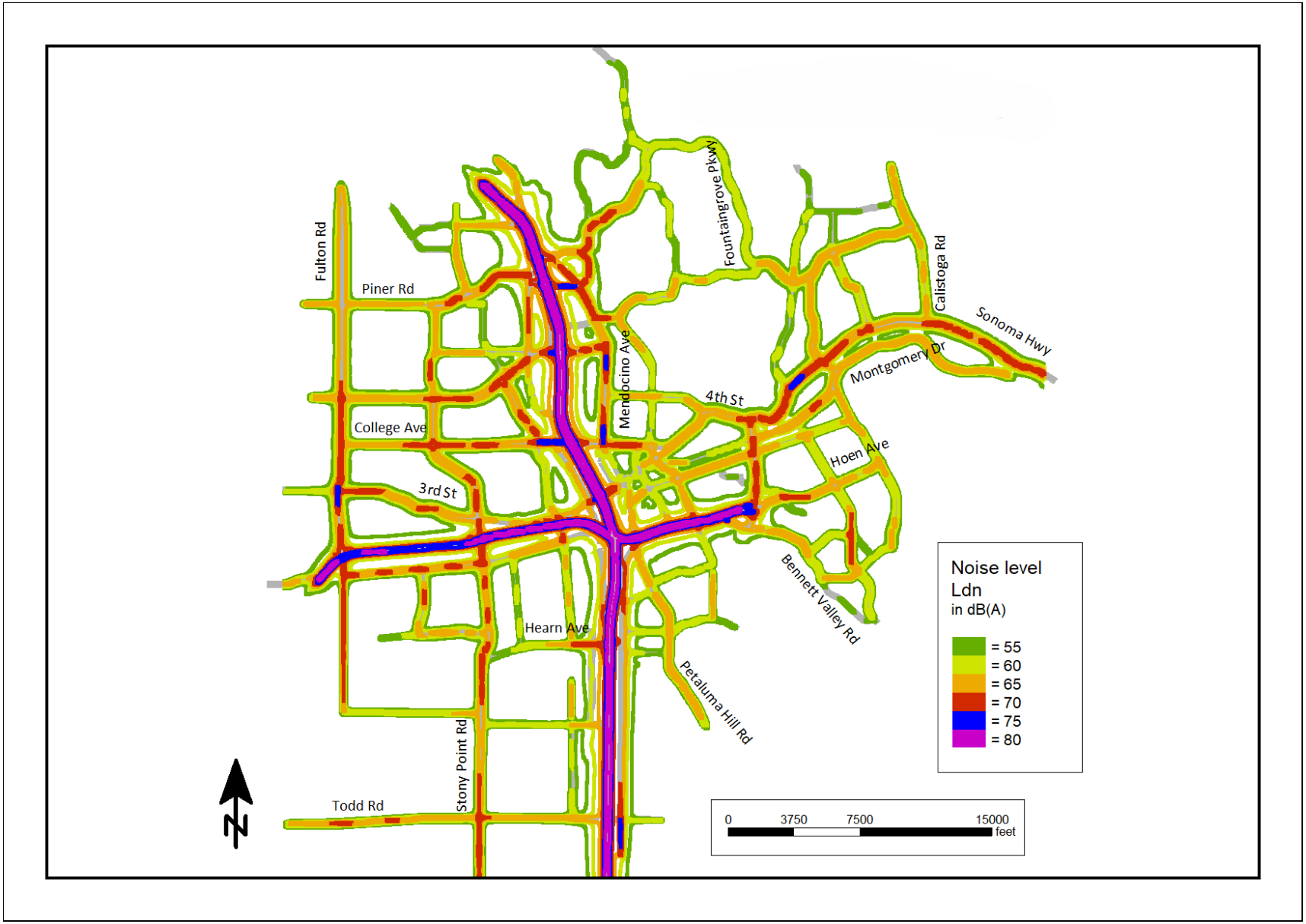


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Figure 5-16: Existing Plus General Plan 2050 Traffic Noise Levels

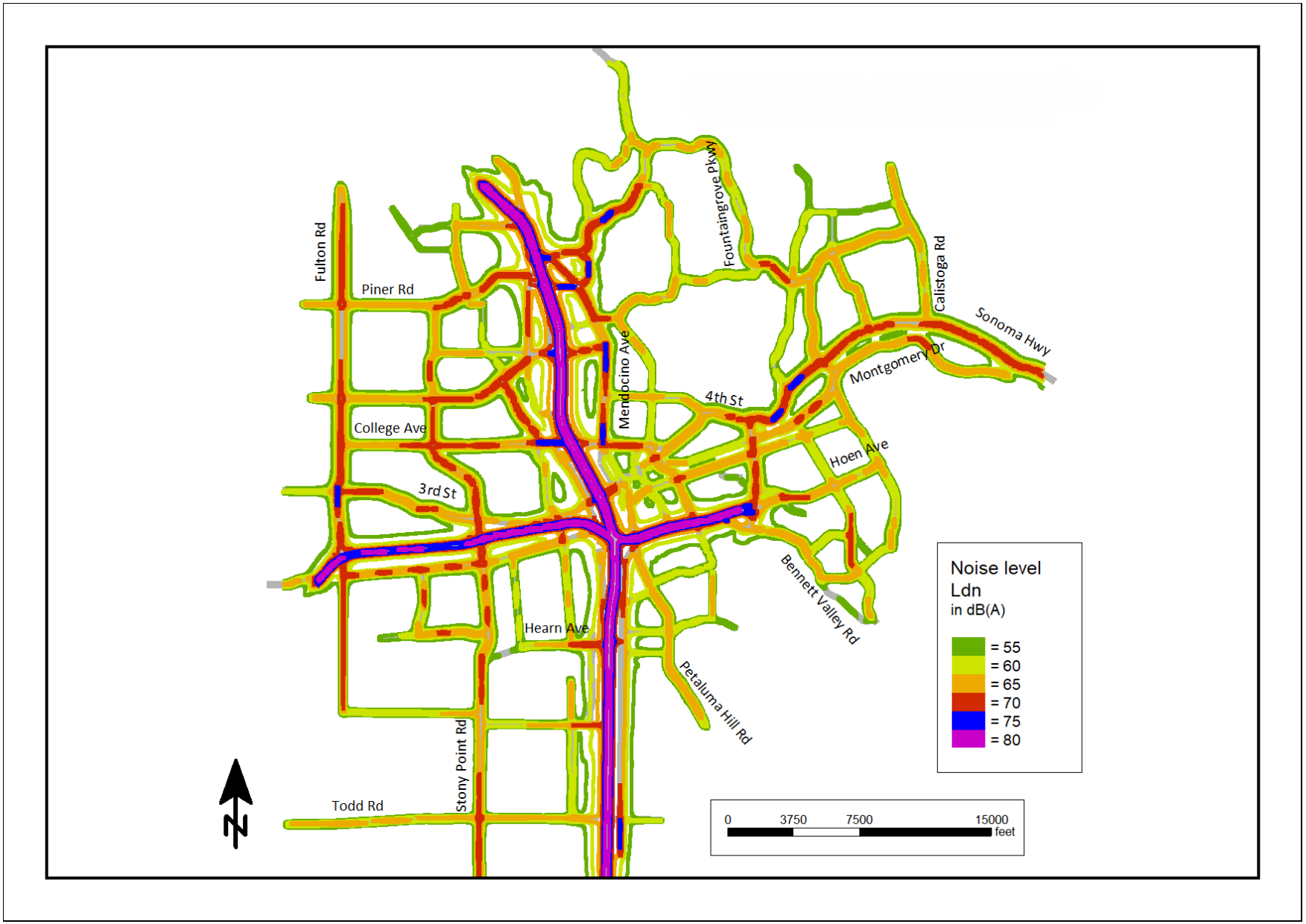

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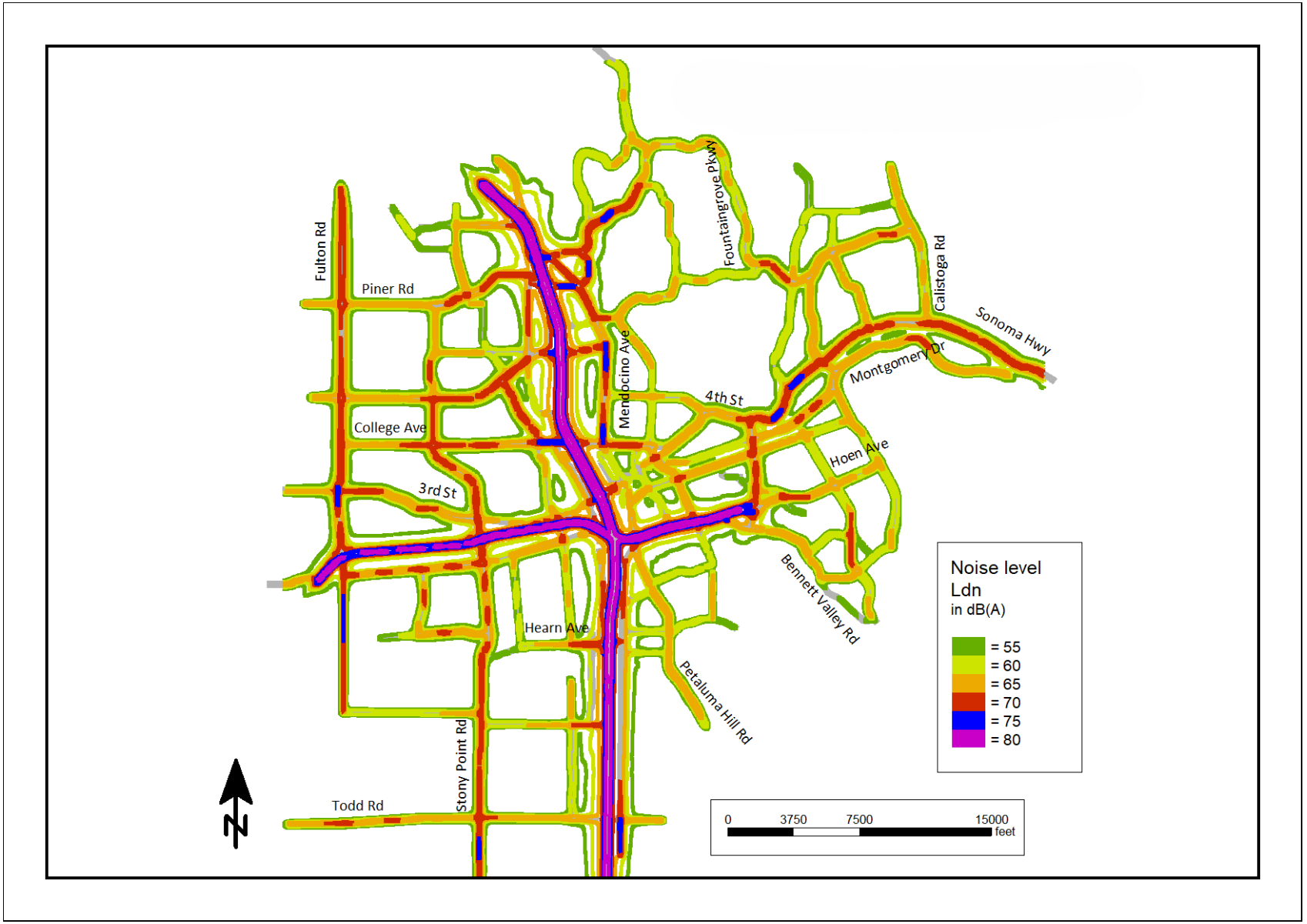
Figure 5-17: Cumulative Plus General Plan 2050 Traffic Noise Levels, 2050



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Goals, Policies, and Actions

Goal 5-7: Protect the community from adverse noise impacts that can decrease quality of life.

Policy 5-7.1: **Maintain and enforce the City's Noise Ordinance to protect the health and comfort of people living, working, going to school, and recreating in Santa Rosa.**

Action 5-7.1: *Continue to require acoustical studies prepared by qualified acoustical consultants in accordance with Municipal Code standards. (EIR)*

Action 5-7.2: *Use the Federal Transit Administration's construction noise and vibration thresholds as applicable to assess impacts to surrounding land uses and identify mitigation during the project approval process. (EIR)*

Action 5-7.3: *Require conditions of approval or mitigation to reduce noise exceeding normally acceptable levels, as identified in Figure 5-13, unless the activities are specifically exempted by the City Council, on the basis of community health, safety, and welfare, such as emergency medical vehicles, helicopters, and sirens. (EIR)*

Action 5-7.4: *Work with private parties to reduce or eliminate noise exceeding allowed levels from industrial and commercial sources that impact nearby residential areas.*

Action 5-7.5: *Consider ways to reduce roadway noise to normally acceptable levels in areas where noise standards may otherwise be exceeded (e.g., where homes front regional/arterial streets and in areas of mixed-use development).*

Action 5-7.6: *Consider updating the Municipal Code to require new development to provide buffers other than sound walls and allow sound walls only when other techniques would not prevent projected noise levels from exceeding adopted land use compatibility standards.*

Action 5-7.7: *Work with Caltrans to evaluate and develop traffic noise mitigation programs along Highway 101 and State Route 12. (EIR)*

Action 5-7.8: *Prohibit new helipads that do not provide a significant benefit for community health, safety, and welfare.*

Action 5-7.9: *Use conditions of approval to achieve measures to reduce noise and vibration impacts primarily through site planning, and avoid engineering solutions for noise and vibration mitigation, such as sound walls, if possible. (EIR)*

Action 5-7.10: *Update the Noise Ordinance to incorporate construction best management practices, to minimize construction noise. (EIR)*

Goal 5-8: Proactively plan for noise from new community-serving land uses in appropriate areas.

Policy 5-8.1: **Promote opportunities for local activities and entertainment, such as music, theater, sports, and other entertainment activities.**

Action 5-8.1: *Consider an update to the Noise Ordinance to add conditions that would allow for temporary increases in noise in certain locations, such as downtown, mixed-use areas, construction zones, and areas near rail lines.*

Action 5-8.2: *Consider an update to the Noise Ordinance to identify noise mitigation measures and other strategies to allow the establishment, growth, and/or continuation of music, sports, and entertainment venues. Encourage and allow these uses with appropriate noise thresholds.*

Public Services and Facilities

Water, Wastewater, Recycled Water, Stormwater, and Solid Waste

Water Supply

The Russian River watershed supplies the majority of the city's potable water supply, and Sonoma Water delivers the water under contractual agreement. Sonoma Water is the primary provider of potable water in Sonoma County and holds water rights to divert 92 million gallons of water per day (mgd) from the Russian River, with an annual maximum of 75,000 acre-feet per year. Sonoma Water also has three groundwater wells in the Santa Rosa Plain that provide an additional supply averaging 3,870 acre-feet per year. Sonoma Water uses its transmission and delivery system to serve eight major water contractors, of which, Santa Rosa is the largest.

Under its current agreement with Sonoma Water, Santa Rosa is entitled to receive 56.6 mgd (average day peak month) up to an annual volume of 29,100 acre-feet.

Santa Rosa also has two active production wells that together can pump up to 2,300 acre-feet per year to supplement the city's potable water supply. The City operates these wells for up to eight months per year, typically between April and October. These wells produce an average of 1,300 acre-feet of drinking water per year, which is about 6 percent of the city's total annual water supply. The City also owns and operates the Regional Water Reuse System, which provides about 140 acre-feet per year of recycled water for urban landscape irrigation. Population and employment increases under General Plan 2050 could result in a water

demand of 6,484 acre-feet per year beyond 2019 demands in the Planning Area. The 2020 Urban Water Management Plan projects water supply (potable and recycled water), as far out as 2045, of 31,540 acre-feet per year for normal hydrological years (average rainfall), and projects water demand of 25,097 acre-feet per year by 2045, meaning that the projected demand will not surpass projected supply through buildout of the General Plan 2050 in normal hydrologic years.

Water Distribution

The City's water distribution system includes 20 booster pump stations, 24 storage tanks, 624 miles of water mains, and more than 54,000 water service connections. The City evaluated this system in 2014 as part of the Water Master Plan (WMP) update for its ability to meet established water system service and performance standards under various existing water demand conditions. In general, the evaluation found deficiencies in meeting peak-hour and maximum-day demand flows to some higher-elevation service locations. Mitigation for these peak-hour and maximum-day demand deficiencies involves the installation of individual or localized booster pumps in the affected low-pressure areas. The WMP update also identified fire-flow deficiencies at some booster pump stations in high-elevation pressure zones, where mitigation would involve the replacement of the existing booster pumps. Pipeline capacity issues under fire-flow conditions were also noted at several locations on a court or other dead-end roadway. Many of the identified deficiencies have subsequently been corrected through the City's Capital Improvement Programs.

Wastewater

The City's wastewater system collects sewage from residential, commercial, and industrial uses in the city and transports it to the Laguna Regional Wastewater Treatment Plant (WTP) for treatment and reuse. The City wastewater collection system includes approximately 610 miles of sewer mains and 17 sewer lift stations.

The Laguna WTP is currently permitted to treat up to 25.9 mgd, and average dry weather flow of wastewater is 13.1 mgd. The WTP existing and planned capacity is sufficient to meet Santa Rosa's wastewater needs through 2050.

Recycled Water

The City of Santa Rosa manages the Laguna WTP, which also receives wastewater from the cities of Cotati, Rohnert Park, and Sebastopol, and portions of unincorporated Sonoma County. Depending on the amount of rainfall in any year, an average of 95 percent of the wastewater treated at the Laguna WTP is recycled for urban and agricultural irrigation and to replenish the Geysers steam fields to produce clean, green energy.

Stormwater

The City of Santa Rosa storm drain system consists of more than 340 miles of piped infrastructure and over 100 miles of open channels, ditches, and creeks. The system also has detention facilities that attenuate peak flows and allow sediment to settle before flows continue downstream.

Santa Rosa Creek is a part of the city's largest drainage basin and flows westward through the city, collecting runoff from the east-central portion of the city as well as the downtown area. Northeastern Santa Rosa is drained by Brush Creek and its tributaries. Matanzas Creek and Spring Creek collect runoff from the southcentral portion of the city. Piner Creek and Paulin Creek collect runoff from the northern portion of the city. The Southern Santa Rosa Creeks subwatershed, which includes Roseland Creek, Kawana Springs Creek, and Colgan Creek, conveys runoff directly to Laguna de Santa Rosa. The Western Creeks watershed

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includes Gravenstein and Naval Creeks and discharges directly into Laguna de Santa Rosa.

Solid Waste

Santa Rosa contracts with Recology Sonoma Marin to provide weekly solid and organic waste and recyclable material collection to Santa Rosa community members. The California Department of Resources Recycling and Recovery (CalRecycle) sets the target per-capita disposal rate for jurisdictions and reported a statewide average of 5.2 pounds of waste per person per day. In 2021, the city's disposal rate was 4.6 pounds of waste per person per day (well below the CalRecycle target).

Santa Rosa complies with the goals of the 2018 Santa Rosa Zero-Waste Plan to achieve at least 75 percent diversion of waste from landfill disposal by 2030 and decrease per-capita disposal of waste collected by Recology by 10 percent each year through 2030. By 2040, the City seeks to decrease the diversion rate to less than 1 pound of waste per-capita, per day by reducing the amount of waste created at the source and reusing materials already in the existing waste stream.

Goals, Policies, and Actions

Goal 5-9: Provide adequate and high-quality city services for water, wastewater, recycled water, stormwater, and solid waste.

Policy 5-9.1: **Ensure water quality, water service delivery, and wastewater treatment are sufficient to meet the needs of current and future residents.**

Action 5-9.1: *Continue to use high-quality water from the Sonoma Water aqueduct system as the primary water supply.*

Action 5-9.2: *Continue to require that water supply capacity and infrastructure are in place prior to occupancy of new development.*

Action 5-9.3: *Maintain water, wastewater, and recycled water system integrity and capacity by continuing to prioritize maintenance and preserve funding for maintenance, rehabilitation, and replacement of existing infrastructure.*

Action 5-9.4: *Evaluate cost and other implications of new initiatives to avoid impacting funding and resources needed for proper management of existing infrastructure.*

Action 5-9.5: *Ensure that new programs and infrastructure do not impact funding of existing infrastructure maintenance, rehabilitation, and replacement.*

Action 5-9.6: *Study the impacts of potential future annexations on water delivery and on the collection and treatment of wastewater.*

Action 5-9.7: *Decline requests for extension of water beyond the Urban Growth Boundary, except in cases of existing documented health hazards and in areas where the City has entered into prior contractual agreements to provide services, in collaboration with the County and Local Agency Formation Commission (LAFCO).*

Action 5-9.8: *Evaluate the City's long-term water supply strategies, including development of new sources of water supply, enhanced water-efficiency*

programs, and implementation of appropriate growth-control measures, if deemed necessary by the City.

Action 5-9.9: *Work with State agencies to identify water quality issues and apply for remediation funds, as needed.*

Action 5-9.10: *Implement the Water Supply Alternatives Plan to mitigate potential impacts of climate change, drought, and natural or human-caused catastrophic events by enhancing water supply resiliency and reliability.*

Action 5-9.11: *Continue working with the Santa Rosa Plain Groundwater Sustainability Agency to implement the Groundwater Sustainability Plan and achieve sustainability of local groundwater resources.*

Policy 5-9.2: Maintain water quality and encourage Santa Rosa Water customers to save water.

Action 5-9.12: *Regularly monitor water quality to maintain high levels of water quality for human consumption and for other life systems in the region.*

Action 5-9.13: *Require new development projects to provide water-efficient landscaping in accordance with the City's Water Efficient Landscape Ordinance.*

Action 5-9.14: *Continue to comply with statewide regulations for long-term urban water use efficiency.*

Action 5-9.15: *Promote water efficiency through public education, incentives, rebates, technical assistance, customer programs, and information about indoor and outdoor water use efficiency measures.*

Action 5-9.16: *Provide information and explore incentive opportunities to encourage property owners to install catchment, graywater systems, and other water recycling systems; remove paving; and install low-impact development features, such as permeable pavers, bioswales, and other green infrastructure components.*

Policy 5-9.3: Ensure that water distribution lines are adequate for existing and future populations.

Action 5-9.17: *Continue to require that developers improve water distribution infrastructure if needed to serve the demands of new development.*

Action 5-9.18: *Continue to identify funding sources for water infrastructure projects on the Capital Improvement Program list.*

Action 5-9.19: *Evaluate both the upfront (capital) and ongoing maintenance cost commitments of new projects and/or programs prior to approval.*

Action 5-9.20: *Evaluate costs and benefits of new and existing water projects before diverting funding/resources needed for proper management of existing infrastructure.*

Action 5-9.21: *Actively maintain an inventory of existing infrastructure and operations and maintenance requirements (staffing and budget) in addition to capital, operations, and maintenance needs of planned infrastructure.*

Policy 5-9.4: Ensure that adequate wastewater capacity is available to serve existing and future needs of the city.

Action 5-9.22: *Maintain existing levels of wastewater service by preserving and improving infrastructure, including replacing sewer mains, as necessary.*

Action 5-9.23: *Decline requests for extension of sewer services beyond the Urban Growth Boundary.*

Action 5-9.24: *Implement the Sewer Master Plan via projects identified in the Capital Improvement Program.*

Action 5-9.25: *Regularly review wastewater treatment and biosolids management strategies to accommodate growth over the life of the General Plan.*

Action 5-9.26: *Work with regional partners (notably the Cities of Rohnert Park, Cotati, and Sebastopol, and Sonoma Water) to build consensus on maintenance, rehabilitation, modernization, and resilience improvements for facilities that provide service to them, such as the Laguna Treatment Plant.*

Action 5-9.27: *Complete and implement the Storm Drain Master Plan.*

Action 5-9.28: *Improve stormwater management to increase infiltration, provide treatment, promote groundwater recharge, reduce flood risk, capture trash, and enhance the environment.*

Action 5-9.29: *Implement mitigation measures to mimic the pre-development water balance through infiltration, evapotranspiration, and capture and reuse of stormwater.*

Action 5-9.30: *Evaluate stormwater capture and reuse consistent with goals of the Santa Rosa Citywide Creek Master Plan and the MS4 National Pollutant Discharge Elimination System (NPDES) permit to preserve natural conditions of waterways, minimize channelization of creeks, and protect water quality, and identify, educate, and label to promote community awareness that storm drains flow untreated into creeks. (EIR)*

Action 5-9.31: *Maintain an inventory of storm drain facilities and maintenance needs.*

Action 5-9.32: *Employ a multi-benefit "one-water" approach for new capital projects to include stormwater quality (low-impact development features) on a large scale, flood mitigation, creek restoration, and increased groundwater recharge.*

Policy 5-9.5: Meet the city's solid waste disposal needs while maximizing opportunities for waste reduction and recycling.

Action 5-9.33: *Continue to implement and update the City's Zero Waste Master Plan and Program.*

Action 5-9.34: *Continue public education programs about waste reduction, including recycling, composting, yard waste, wood waste, and household hazardous waste.*

Action 5-9.35: *Continue to enforce the City's Zero-Waste Food Ware Ordinance and share information and resources with food facilities to help facilitate compliance.*

Action 5-9.36: *Continue to implement and update the City's Environmentally Preferable Purchasing policies and identify opportunities to reduce use of single-use plastics in municipal operations and at City events.*

Action 5-9.37: *Promote non-plastic packaging alternatives to local businesses.*

Action 5-9.38: *Provide and maintain public drinking fountains and bottle fillers in high traffic and outdoor recreation areas to reduce demand for bottled water.*

Policy 5-9.6: Identify and work with partners to address impacts from groundwater threats and solid waste.

Action 5-9.39: *Consult with appropriate regional, State, and federal agencies to monitor water quality and address local sources of groundwater and soil contamination, including underground storage tanks, septic tanks, and industrial uses, as necessary, to achieve State and federal water quality standards.*

Action 5-9.40: *Monitor the Solid Waste Information System (SWIS) and Closed, Illegal, and Abandoned (CIA) Disposal Sites Program to identify solid waste sites and facilities that are illegal, abandoned, or have not met the standards for closure, and work with State agencies to investigate and enforce standards for sites, prioritizing sites in and near Equity Priority Areas.*

Action 5-9.41: *Identify solid waste and hazardous waste facilities that do not comply with standards for preventing contamination of air, water, and soil with hazardous waste, and work with owners to upgrade those facilities to meet those standards, prioritizing facilities in Equity Priority Areas.*

Policy 5-9.7: Facilitate residential, commercial, and industrial compliance with the Sonoma County Countywide Integrated Waste Management Plan.

Action 5-9.42: *Provide educational materials regarding waste management, control, and recycling, including the Sonoma County Household Hazardous Waste Management Plan.*

Education and Learning

Schools

As shown on **Figure 5-18**, the Planning Area is served by 8 public school districts, a community college, and 27 private schools ranging from nursery/preschool to college. Public school districts cover the entire Planning Area, and private schools are sprinkled throughout the community offering alternative religious, special-needs, and other specialized programs. Santa Rosa Junior College also offers continuing education programs. The City is not responsible for administration of any schools but works cooperatively with each district and school to support student success. The City provides many educational opportunities through its recreation, cultural, and civic programs, though City government is independent from the schools.

Libraries

The Sonoma County Library serves the Santa Rosa community and operates four branches in the Planning Area: Central Library, Northwest Santa Rosa Library, Rincon Valley Library, and Roseland Community Library, as shown on **Figure 5-17.**

These facilities are critical to supporting public education, supplementing local school library resources, and providing access to the internet for members of the public, including those who may lack those resources at home.

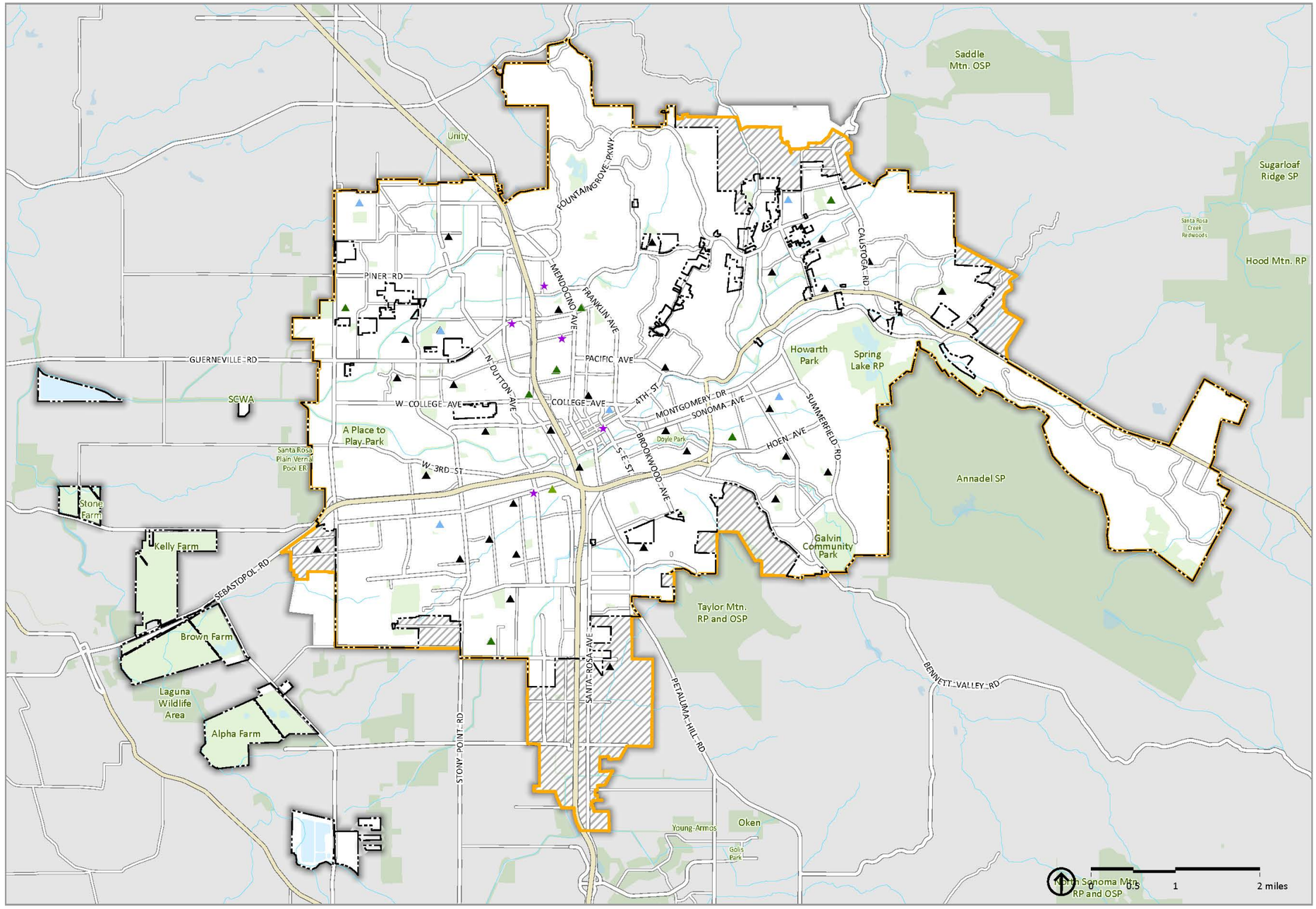

Figure 5-18
Schools and Libraries

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Libraries

Schools

- Adult
- Elementary
- Elementary-High Combination
- Elementary-Intermediate/Middle School
- High School
- Intermediate/Middle School
- Midde-High Combination
- Preschool

Source: CalOES, 2021.

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Goals, Policies, and Actions

Goal 5-10: Help provide superior and lifelong educational opportunities for all community members.

Policy 5-10.1: **Continue City/school partnerships to support a safe learning environment and high-quality educational opportunities for all members of the community, especially children, youth, and seniors.**

Action 5-10.1: *Work with schools to locate sites and facilities to serve all neighborhoods and the educational needs of all sectors of the population, including:*

- *Safe pedestrian and bicycle access and traffic-management planning and traffic-calming measures in the vicinity*
- *Attractive design that contributes to neighborhood identity and pride*
- *Greening to mitigate extreme heat and provide shaded, vegetated areas that facilitate healthy living, learning, and play*

Action 5-10.2: *Continue cooperation with providers of higher education to improve accessibility and quality of services.*

Action 5-10.3: *Partner with schools to use school spaces for community uses, such as local sports activities.*

Action 5-10.4: *Engage school administrators in conversations regarding new development that could substantially impact student enrollment and the need for additional infrastructure.*

Action 5-10.5: *Work with school administrators to increase and better coordinate school transit options and ensure that all students have access to high-speed internet.*

Policy 5-10.2: **Support the ability of physical library facilities and online platforms to meet the needs of the community.**

Action 5-10.6: *Continue to work with County library officials to provide a wide range of library services through a strong central facility plus local branches that equitably serve a growing and diverse population.*

Action 5-10.7: *Support the development of additional library facilities, especially where needed to serve Equity Priority Populations, and assist the library administration in attempts to secure State and federal funds for facilities and services.*

Police and Fire

Police Services and Facilities

The Santa Rosa Police Department (SRPD), Sonoma County Sheriff's Office (Sheriff), California Highway Patrol, and on-campus Santa Rosa Junior College District Police provide law enforcement services in the Santa Rosa Planning Area. The SRPD has primary responsibility within the city limits, the Sheriff's Office provides services to unincorporated areas of the Planning Area, and the California Highway Patrol provides traffic enforcement on State and local freeways and unincorporated county roadways. Mutual-aid agreements between these agencies allow for joint responses to emergencies.

The Police Department is responsible for safeguarding lives and property, preserving constitutional rights, and maintaining quality of life to promote a safe and secure community for Santa Rosa. The department handles a wide range of calls for service and provides numerous community support and outreach programs to promote police/community partnerships.

The three major divisions that carry out these core functions are Field Services, Special Services, and Technical Services, which are all supported by Administration.

Field Services – The most visible components of the department are the patrol teams, whose primary function is to provide a rapid response to emergency and non-emergency calls for service 365 days a year, 24 hours a day. Field Services also include traffic safety and enforcement and is comprised of Motorcycle Officers and Accident Investigators, Field and Evidence Technicians, Community Service Officers, the SWAT team, Hostage Negotiation Team, Mobile Field Force, Canine Team, and the Downtown Enforcement Team.

Special Services – Includes the Special Enforcement Team and five detective teams: Domestic Violence and Sexual Assault, Narcotics, Property Crimes, Gangs Crime Team and Violent Crimes. These units investigate homicides, robbery, sexual offenses, aggravated assault, narcotics, child abuse, domestic violence, gang crimes, embezzlements, elder abuse, and vehicle theft. The Forensic Team supports these units and is responsible for higher-level processing and analysis of evidence related to investigations.

The Professional Standards Team has a dedicated Lieutenant and Sergeant who track and investigate all community complaints and reports of staff misconduct. The Professional Standards Team works closely with the Independent Police Auditor to ensure that all complaints are thoroughly investigated and that mandated reports and information are released to our community in a timely manner.

The Support Bureau is a critical part of the special services division responsible for Recruitment and Hiring, Training and Employee Wellness; and the Volunteers in Police Services (VIPS) program. The Police Department requires continuous hiring and recruitment that necessitate dedicated staff. There is also mandatory training for staff, requiring a team to coordinate and track to ensure compliance.

Technical Services – Provides critical services for the community and the entire department, including the 911 Communications Center, Records Division, Property and Evidence, Crime Analysis, and Information Technology.

Administration – Manages the preparation and monitoring of the budget and oversees all contracts, purchases, grants, Human Resources, department equipment, facilities, and administrative support staff.

The main SRPD station (shown with other law enforcement offices on **Figure 5-19**) is next to Santa Rosa Fire Department Station 1. This complex is commonly referred to as the Public Safety Building.

Although SRPD does not have plans to expand its facilities, the Public Safety Building is aging and needs extensive repairs and updates. Based on current conditions and anticipated growth, SRPD has stated that it needs:

- A larger facility with an on-site training center in the next 10 years.
- Two additional substations, one in east Santa Rosa and one in the Roseland neighborhood.

To better serve the community, the City recently formed a new crisis response program— inRESPONSE: Mental Health

Support Team—that works in partnership with SRPD to answer calls for service with a "mental health first" approach. The team consists of a licensed mental health clinician, a paramedic, and a homeless outreach specialist, with multiple supporting service providers available to assist.

Fire Protection Services and Facilities

Santa Rosa Fire Department (SRFD) is responsible for protecting life, property, and the environment from fire, explosion, and hazardous materials incidents. SRFD responds to calls involving structure, wildland, and other fires; alarm responses; medical emergencies; rescues; hazardous materials incidents; automobile crashes; and resident calls for assistance.

The City operates 10 fire stations throughout the city to expedite response times, as shown on **Figure 5-20.** In addition, SRFD has service agreements and automatic aid with the Sonoma County Fire District, Sonoma Valley Fire Protection District, and CAL FIRE in some areas of the city. To continue to provide high service levels in the future, SRFD has identified the need to add two new fire stations and relocate two existing stations.

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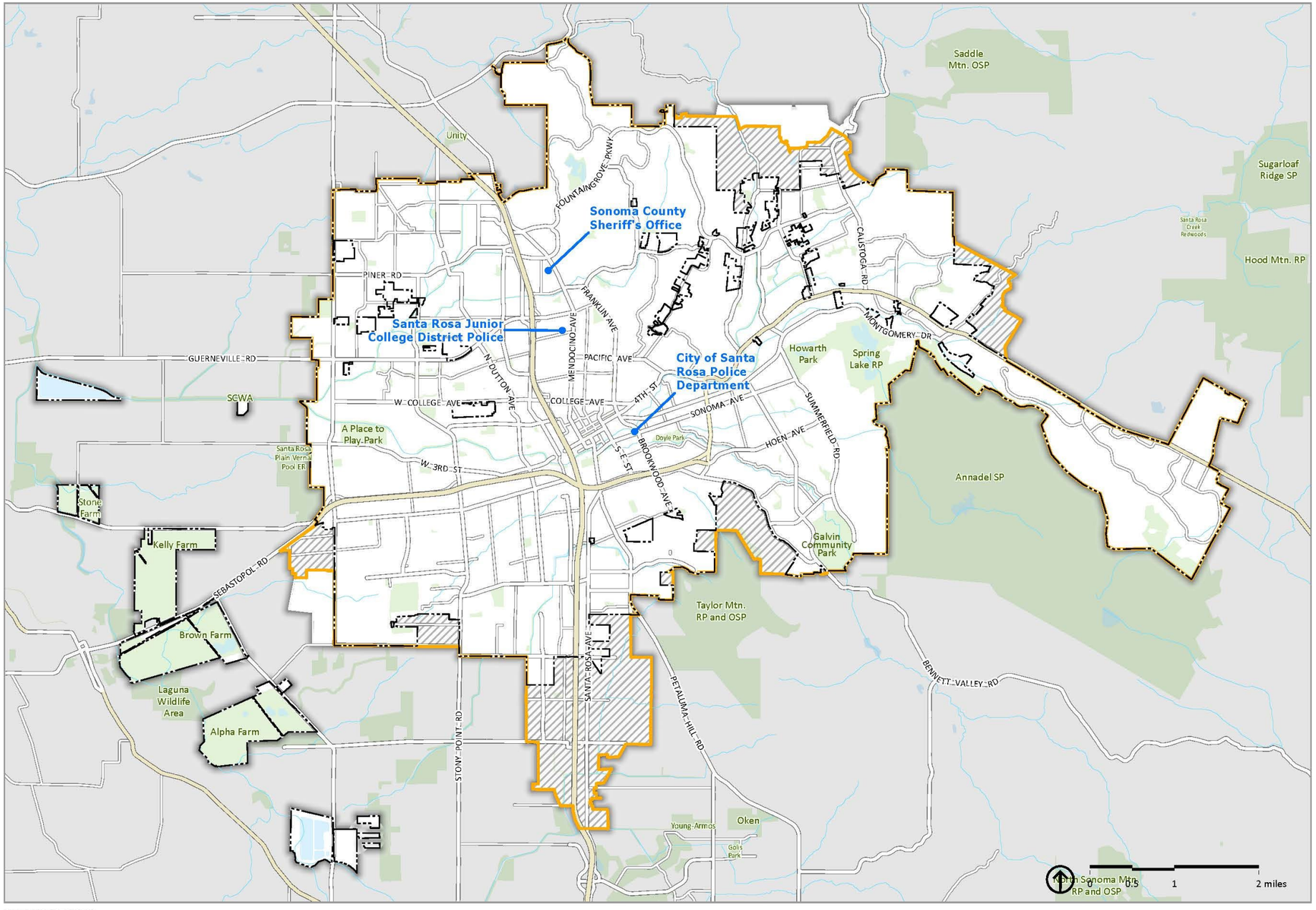

Figure 5-19
Law Enforcement Stations

- City Limits
- Urban Growth Boundary
- City Sphere of Influence
- Planning Area
- Police Stations

Source: CalOES, 2021.

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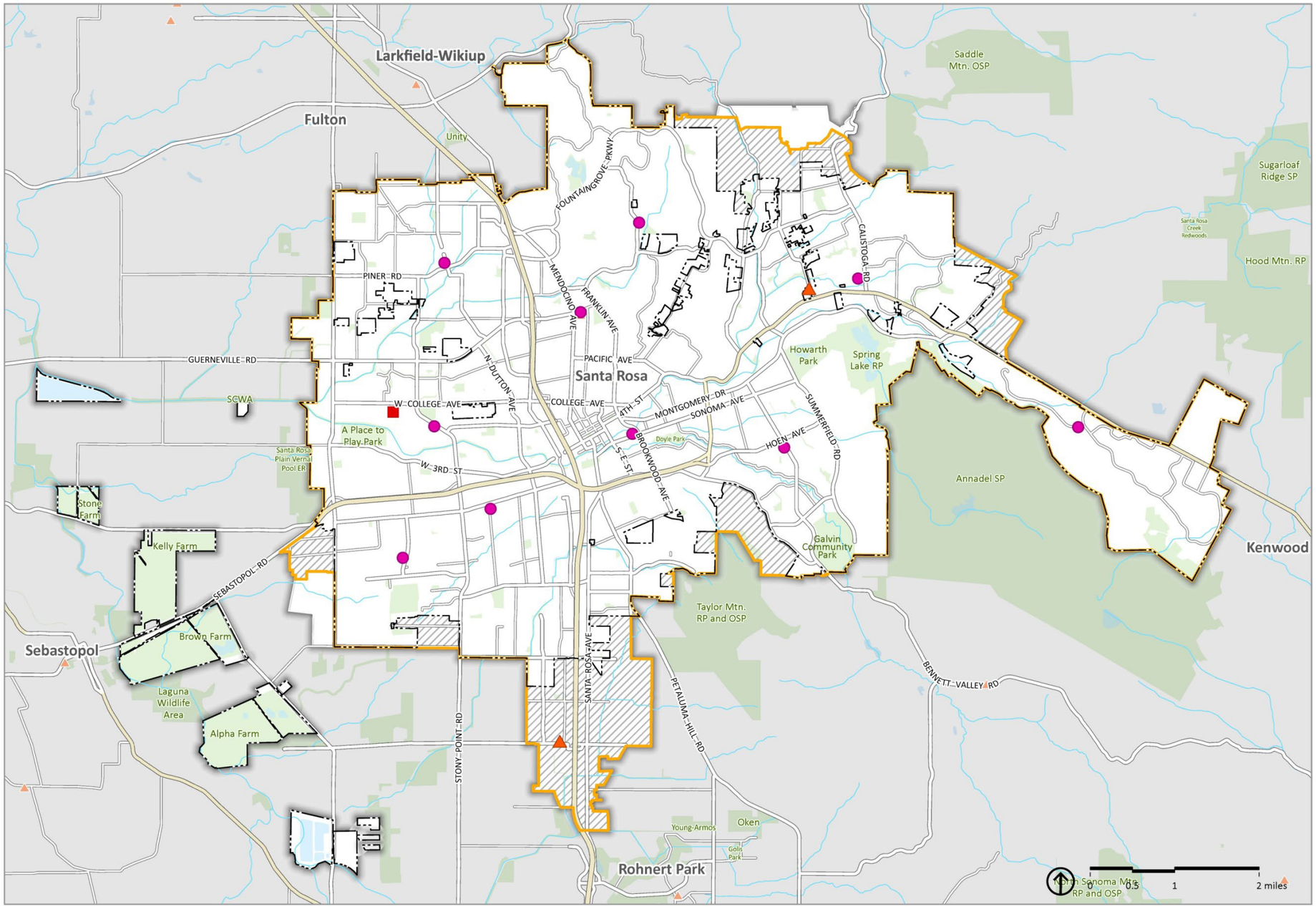

Figure 5-20
Fire Stations

Source: CalOES, 2021.

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Goals, Policies, and Actions

Goal 5-11: Provide efficient and effective police and fire services for all members of the community.

Policy 5-11.1: Increase investments in community safety.

Action 5-11.1: *Maintain an efficient, well-trained, and adequately equipped police and fire personnel.*

Action 5-11.2: *Increase and maintain a staffing model, station construction schedule, and apparatus/equipment purchasing program that enables a ratio of at least 1 career firefighter per 1,000 population per National Fire Protection Association recommendations.*

Action 5-11.3: *Periodically review and update the Fire Department Strategic Plan and Standards of Coverage, and the Police Department Strategic Plan to address the following needs:*

- *Staffing levels*
- *Station location/placement*
- *Equipment needs*
- *Training requirements*
- *Response time criteria*
- *Areas lacking adequate service*
- *Projection of future emergency service needs (EIR)*

Action 5-11.4: *Continually update first responder training requirements to meet local, State, and federal standards.*

Action 5-11.5: *Identify and provide necessary enhancements and/or resource needs to achieve a response time of under six minutes anywhere in the service area.*

Action 5-11.6: *Pursue infrastructure improvements, including new police and fire stations (outside of high hazard risk areas) and new emergency vehicles and equipment.*

Action 5-11.7: *Enhance workplace equity and expand the diversity of emergency personnel to better reflect the makeup of the city.*

Action 5-11.8: *Enhance employee wellness and mental health support to enable better service to the community by all personnel.*

Action 5-11.9: *Coordinate with Sonoma County on police and fire services to achieve cost-effective improvements to service levels.*

Action 5-11.10: *Ensure all properties have visible street addresses and signage to ensure effective emergency response activities.*

Policy 5-11.2: Focus policing efforts on community-based solutions.

Action 5-11.11: *Assist neighborhoods and increase community contact through the Community-Oriented Policing Program.*

Action 5-11.12: *Enhance and explore ways to expand mental health support partnerships with police to provide a high level of mental health support to the community.*

Action 5-11.13: *Enhance police services using innovative technology and an equitable approach for resource allocation.*

Action 5-11.14: *Prioritize violent crime reduction and traffic safety solutions through innovative strategies and partnerships with key stakeholders.*