

9. Safety

Safety is a basic human need and is required for a community to thrive. The goals, policies, and implementation measures in this element are designed to protect and enhance the public health and safety of Manteca residents, property, and environment. Manteca is susceptible to several kinds of hazards, and the policies in this element are intended to address these hazards. This element also protects the community from the unwanted impacts of excessive noise.

This element addresses emergency preparedness and critical facilities, geologic and seismic hazards, flood hazards, hazardous materials, and noise.

Existing conditions associated with flood and dam inundation risks, hazardous materials, and community noise are discussed in Chapter 4 of the Existing Conditions Report and existing conditions related to geology and seismic concerns are addressed in Chapter 5 of the Existing Conditions Report.



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Emergency Procedures and Critical Facilities

Goal S-1

Ensure that City emergency procedures, ~~and~~ critical facilities, ~~and~~ [energy systems](#) are adequate in the event of potential natural or man-made disasters.

Policies

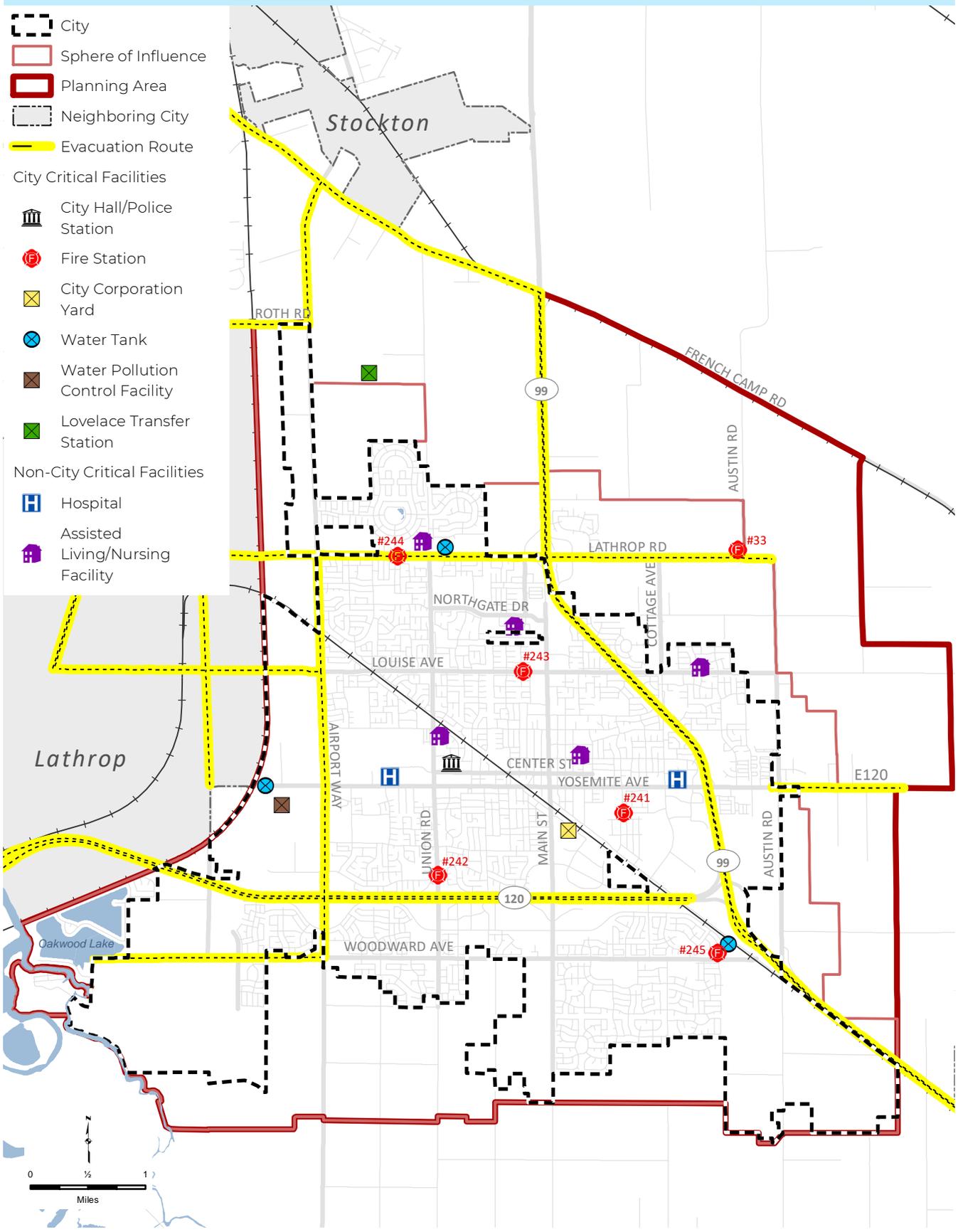
- S-1.1 Maintain and periodically update the City's Emergency Plan.
- S-1.2 Ensure the availability and functionality of critical facilities during flooding events.
- S-1.3 Locate new critical City facilities, and promote the location of non-City critical facilities, including hospitals, emergency shelters, emergency response centers, and emergency communications facilities, outside of flood hazard zones and geologic hazard areas where feasible. Critical facilities that are, or must be, located within flood hazard zones or areas with geologic hazards should incorporate feasible site design or building construction features to mitigate potential risks, including those associated with geologic, seismic, and flood events, to ensure accessibility, operation, and structural integrity, during an emergency and to minimize damage to the facility.
- S-1.4 Encourage community awareness of seismic, flooding, and other disaster safety issues, including building safety, emergency response plans, and understanding steps to take for safety during and after a disaster, including identified evacuation routes.
- S-1.5 Continue to cooperate with San Joaquin County and other public agencies in implementing the Countywide Emergency Preparedness Plan and Local Hazard Mitigation Plan.
- [S-1.6 Provide community resources, including information and education related to disaster, climate adaptation, and evacuation planning and resources, to address disasters, hazardous events, and climate resiliency planning](#)
- [S-1.7 Increase energy reliability and prepare for power outages, including planning for public safety power shut offs and increasing backup power options.](#)

Implementation

- S-1a Regularly conduct periodic emergency response exercises to test the effectiveness of City emergency response procedures.
- S-1b Regularly review County and State emergency response procedures

Critical Facilities
 The term 'critical facilities' refers to all essential public facilities, such as emergency communications facilities, hospitals, fire stations, and emergency shelters identified for disasters. Critical facilities are shown on Figure S-1.

Figure S-1: Critical Facilities and Evacuation Routes





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- S-7c Cooperate with San Joaquin County OES, Manteca Fire Department, Lathrop Manteca Fire District, Manteca Police Services, the reclamation districts, and other agencies with responsibility for emergency management in emergency response and climate adaptation planning, training and provision of logistical support.
- S-7d Support participation by City staff, the Police Services, Manteca Fire Department, and Lathrop Manteca Fire District in emergency response demonstrations and training where feasible.
- S-7e Periodically coordinate with local flood protection agencies, including the reclamation districts, to discuss the status of flood protection facilities and improvements, strategize future improvements, consider potential climate change effects, financing for improvements, emergency response plans, and worker training for emergency response situations.
- S-7f Review and maintain critical City facilities to ensure the accessibility and structural and operational integrity of essential facilities during an emergency.
- S-7g Ensure that adequate disaster preparedness services, evacuation routes, and emergency communications are provided and disseminated that are accessible to all residents, including communications in multiple languages and formats (e.g., social media, text alerts, phone calls), to reduce confusion in the event of an emergency.
- S-7h Consider the creation of and/or the participation in Enhanced Infrastructure Financing Districts (EIFD) in all areas of the city to generate tax increment funding for safety infrastructure improvements of communitywide significance that support new and infill development.
- S-7i Incorporate the potential for climate change impacts into City emergency response planning and training.
- S-7j Encourage and implement smart grids, microgrids, solar, and/or community power to improve energy reliability.
- S-7k Install back-up power sources, where feasible, to ensure that electric transit can provide regular service or assist in evacuation as needed during power outages.

Geologic and Seismic Hazards

Goal S-2

Prevent loss of lives, injury, and property damage due to geological hazards and seismic activity and prevent disruption of essential services in the event of an earthquake.

Policies

- S-2.1 Enforce adopted regulations to identify and address potential hazards relating to seismic, geologic, and soils conditions.
- S-2.2 Regulate development in areas of seismic and geologic hazards to reduce risks to life and property associated with earthquakes, liquefaction, erosion, and expansive soils.
- S-2.3 Require new development to mitigate the potential impacts of geologic and seismic hazards, including uncompacted fill, liquefaction, and subsidence, through the development review process.
- S-2.46 Continue to require professional inspection of foundation, excavation, earthwork, and other geotechnical aspects of site development during construction on those sites specified in geotechnical studies as being prone to moderate or greater levels of seismic or geologic hazard.
- S-2.57 Maintain an inventory of unreinforced masonry buildings and soft-story buildings. No change in use to a higher occupancy or more intensive use shall be approved in such structures until an engineering evaluation of the structure has been conducted and any structural deficiencies corrected.
- S-2.68 Ensure that all public facilities, including buildings, water tanks, and reservoirs, are structurally sound and able to withstand seismic shaking and the effects of seismically-induced ground failure, consistent with the California Building Standards Codes and other applicable standards.
- S-2.79 Require compliance with the State's building standards in the design and siting of critical facilities, including police and fire stations, school facilities, hospitals, hazardous materials manufacturing and storage facilities, and large public assembly halls.

Implementation

- S-2a *Continue to require preparation of geotechnical reports for proposed development projects, public projects, and all critical structures. The reports should include, but not be limited to: evaluation of and recommendations to mitigate the effects of fault displacement, ground shaking, uncompacted fill, expansive soils, liquefaction, subsidence, and settlement. Recommendations from the report shall be incorporated into the development project to address seismic and geologic risks*



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identified in the report.

- S-2b *Review development proposals to ensure compliance with the current State building standards.*
- S-2c *Review development proposals to ensure compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.*
- S-2d *Review and update the City's inventory of potentially hazardous buildings and require any development or change in occupancy proposals to address hazards, through measures such as strengthening buildings, changing the use of the buildings to an acceptable occupancy level, or demolishing or rehabilitating the building.*

Flood Hazards

Goal S-3

Protect life and property from flood events through providing a planning framework for flood protection and risk management consistent with Federal and State law and pursuing flood control solutions that minimize environmental impacts.

Policies

- S-3.1 Annually review and, when necessary, update the General Plan Safety Element goals, policies, and implementation measures in order to maintain compliance with applicable Federal and State requirements.
- S-3.2 Maintain and periodically update, City flood safety plans, floodplain management ordinances, zoning ordinance, building codes and other related sections of the Municipal Code to reflect Safety Element goals, policies and standards, applicable Federal and State law, and National Flood Insurance Program requirements.
- S-3.3 Require evaluation of potential flood hazards prior to approval of development projects to determine whether the proposed development is reasonably safe from flooding and consistent with California Department of Water Resources Urban Level of Flood Protection Criteria (ULOP). The City shall not approve the execution of a development agreement, a tentative map, or a parcel map for which a tentative map is not required, or a discretionary permit or other discretionary entitlement that would result in the construction of a new building, or construction that would result in an increase in allowed occupancy for an existing building, or issuance of a ministerial permit that would result in the construction of a new residence for property that is located within a 200-year flood hazard zone, unless the adequacy of flood protection as described in Government Code §65865.5(a), 65962(a), or 66474.5(a), has been demonstrated.

Flood Safety

Flooding affects a part of the Planning Area, primarily the areas affected by the San Joaquin River hydrology in the western and southwestern portions of the Planning Area that are within the 100- and 200-year flood zone (see Figure S-2). A **100-year flood zone** estimates inundation areas based on a flood that has a 1 percent chance of occurring in any given year and is typically mapped by the Federal Emergency Management Agency. A **200-year flood zone** estimates inundation areas based on a flood that has a 0.5 percent chance of occurring in any given year and is mapped by the California Department of Water Resources based on best available data.

Government Code Sections 65007, 65300.2, 65302.9, 65302, 65303.4, 65584.04, 65584.06, 65865.5, 65962, and 66474.6, as well as portions of Chapter 4 of the California Water Code relating to flood management, as amended by Assembly Bill 162 (2007) and Senate Bill 5, are part of the State laws that set a higher standard for flood protection for the Sacramento-San Joaquin Valley area, which covers the entire Delta region and includes the Manteca area. These laws established a requirement for jurisdictions to attain an **urban level of flood protection**, which means the level of protection that is necessary to withstand a flood with a 1 in 200 chance of occurring in any given year. This urban level of flood protection requirement applies to areas developed or planned to have a population of at least 10,000 (these areas are referred to as **'urban'** and **'urbanizing'** areas, respectively). The urban level of flood protection requirements do not apply to areas of shallow flooding or areas of flooding from local drainage equivalent to less than 3 feet in depth. Jurisdictions are required to demonstrate **adequate progress**, which includes confirming the scope, schedule, and cost of the completed flood protection system, adequate revenues to fund the improvements, and that critical features of the system are under construction, on an annual basis.

The California Department of Water Resources (DWR) and the Central Valley Flood Protection Board adopted a Central Valley Flood Protection Plan (CVFPP) in 2012 and updated the CVFPP in 2017. The CVFPP identifies a range of improvements and requirements to address flooding at the state, regional, and local levels, including improvements associated with the San Joaquin River/Delta region that includes the Planning Area. The CVFPP is incorporated herein by reference. The City has worked with the Cities of Lathrop and Stockton, San Joaquin County, and Reclamation District 17 (RD 17) to identify major drainage facility improvements, including improvements to existing levees and development of new levees, necessary to provide an urban level of flood protection to urban areas or areas planned for urban levels of development within the City's Planning Area. These improvements are planned to be in place by 2025 and the City confirms that adequate progress is occurring on an annual basis to ensure that an urban level of flood protection will be achieved by 2025.

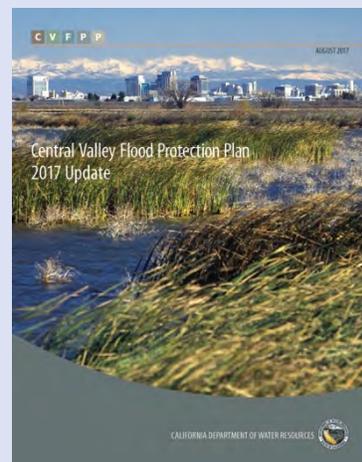
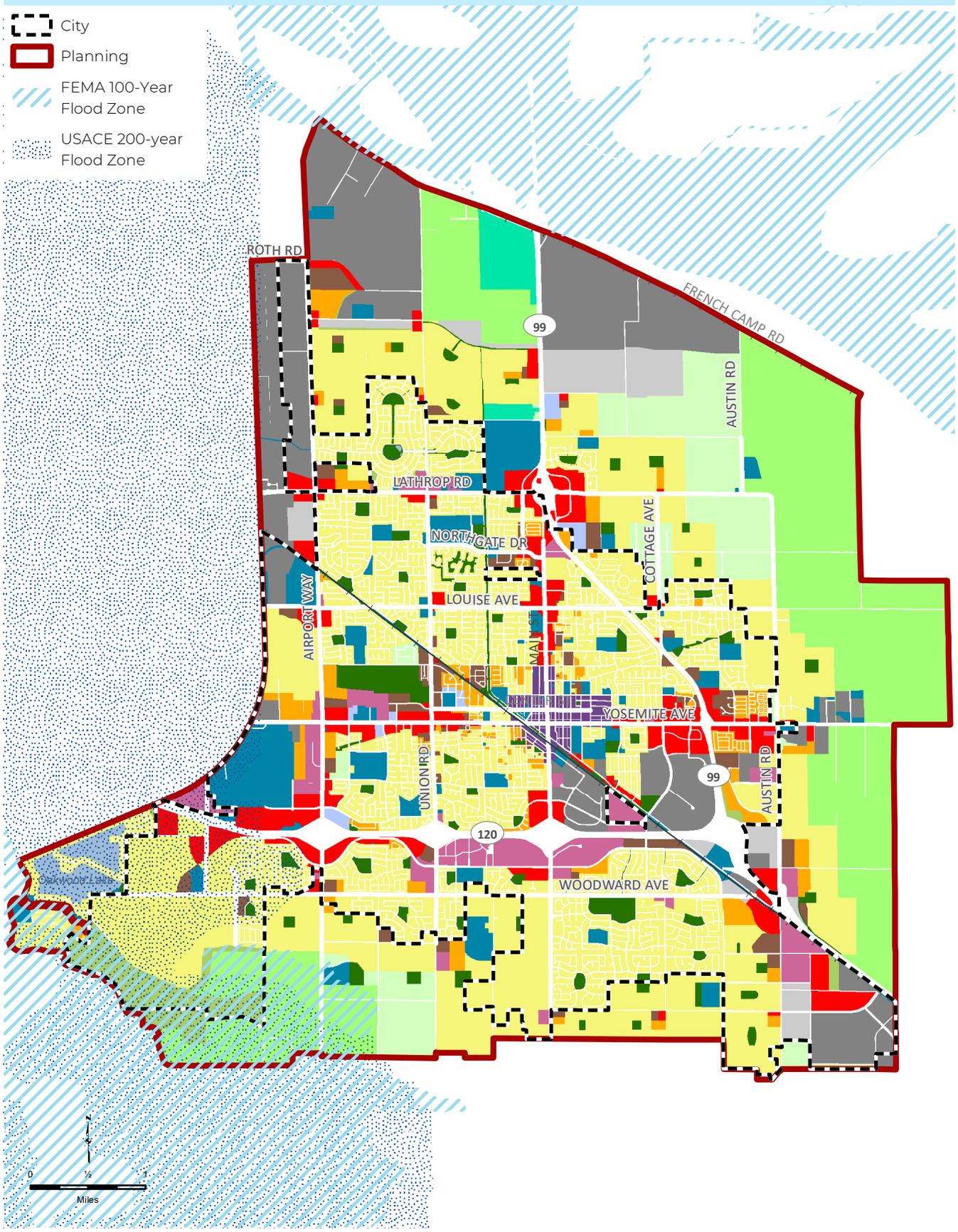


Figure S-2: Flooding

-  City
-  Planning
-  FEMA 100-Year Flood Zone
-  USACE 200-year Flood Zone



- S-3.4 New development may be permitted in areas not identified as "urban" or "urbanizing" provided that:
- 1) Such areas are protected from 100-year flooding by FEMA-accredited levees or equivalent flood protection as shown on an adopted FEMA Flood Insurance Rate Map, a FEMA-approved Letter of Map Revision or a Conditional Letter of Map Revision, subject to conditions specified in the letter; or
 - 2) Where not protected by FEMA-accredited 100-year levees, such areas are subject to all applicable requirements of Municipal Code Chapter 8.30 (Floodplain Management), the California Building Standards Code as adopted by the City, and the latest promulgated FEMA standards for development in the 100-year floodplain, provided that new development approval will not cause the project site or area to be defined as "urban" or "urbanizing."
- S-3.5 Continue to work closely with the Cities of Lathrop and Stockton, San Joaquin County, and the local reclamation districts to improve levee systems as required to provide ULOP for urban and urbanizing areas in Manteca by 2025, including ensuring that findings of "adequate progress" will continue to be made until improvements are in place to provide ULOP.
- S-3.6 Analyze flood risks for existing neighborhoods based on Department of Water Resources Best Available Maps and existing local information regarding flooding under future climate scenarios and develop mitigation strategies, including participation in regionally coordinated levee improvement projects, to reduce risk of areas in the 100- and 200-year flood hazard areas, areas with the potential for increased flooding due to climate effects, and areas with known flooding issues, and implement projects to reduce or eliminate significant risks, prioritizing low income, disadvantaged communities, older neighborhoods, and senior communities, and in coordination with the community to receive their input.
- S-3.7 Ensure flooding is addressed as quickly as possible, especially in senior and vulnerable neighborhoods, and promote infrastructure and facility improvements to reduce such flooding.
- S-3.~~86~~ Continue to cooperate with local, regional, State, and Federal agencies in securing funding to obtain the maximum level of flood protection that is practical, with a goal of achieving 200-year flood protection for all areas of the City.
- S-3.~~87~~ Maintain active participation in the National Flood Insurance Program.
- S-3.~~98~~ Maintain eligibility in the FEMA's Community Rating System (CRS) program, which gives property owners discounts on flood insurance.
- S-3.~~109~~ Provide technical assistance and encourage landowners within the



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- FEMA Special Flood Hazard Area (100-year floodplain) to purchase and maintain flood insurance.
- S-3.110 Ensure that the impacts of potential flooding are adequately analyzed when considering areas for future urban expansion.
- S-3.124 Provide opportunities for review of and comment by the reclamation districts, Manteca Police Services, Manteca Fire Department, and the Lathrop Manteca Fire District for comment during new development project review.
- S-3.132 Consider the risks of catastrophic dam failure and excessive releases by reservoirs, such as during heavy rainfall events, in the planning and environmental review of new development projects.
- S-3.143 Design flood protection improvements to include, where feasible, resiliency features, such as withstanding overtopping, compartmentalization of flood protection to reduce the extent of flooding in the event of a failure to reduce, and/or to incorporate riparian habitat conservation.
- S-3.154 Combine flood control, recreation, water quality, and open space functions where feasible.
- S-3.165 Discourage large continuous paved areas unless provided with engineered drainage facilities and encourage the use of pervious paving materials.
- S-3.176 When improvements to existing developments are made costing at least 50 percent of the current market value of the structure before improvements, structures shall be brought into compliance with relevant FEMA standards.
- S-3.187 In areas protected by levees, require all new developments to include a notice within the deed that the property is protected from flooding by a levee and that the property can be subject to flooding if the levee fails or is overwhelmed by floodwater flow.
- S-3.198 Update flood hazard maps as necessary to reflect impacts from climate change in terms of long-term flood safety and long-term flood event probabilities.
- S-3.2019 Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for offsite flooding.

Implementation

- S-3a *Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code, including but not limited to Chapter 8.30, Chapter 15.56, and Title 17, the City's Emergency Operations Plan, and building codes as required and ensure that the City's regulations continue to require that new development within flood hazard zones is consistent with this Safety Element and is required to meet the flood protection requirements of State law, including but not limited to Government Code Sections 65007, 65865.5, 65962 and 66474.5.*
- S-3b *Evaluate the consistency of the Safety Element with applicable laws, regulations and plans in conjunction with its annual review of the General Plan. The City shall determine whether and when an amendment of the Safety Element is required.*
- S-3c *Continue to participate in the FEMA CRS program, including dissemination of information to the public and annual reviews of its participation in the program and improve the program as feasible to maintain or improve effects on flood insurance costs.*
- S-3d *Consider, in the review of plans for new development, the need for levee setbacks, dam failure risks, and the views of the local flood protection and emergency response agencies.*
- S-3e *Require applications for development in areas subject to 200-year flooding to indicate the depth of predicted 200-year flooding on the basis of official maps approved by the City of Manteca or Floodplain Administrator.*
- S-3f *Maintain an official 200-year Floodplain Map, including predicted flood depths, for reference when making land use determinations.*
- S-3g *Amend Chapter 8.30 (Floodplain Management) of the Municipal Code to reflect flood protection requirements specified in the Safety Element as well as any relevant updates to Federal or State requirements.*
- S-3h *Consider potential effects of climate change in planning, design, and maintenance of levee improvements and other flood control facilities.*
- S-3i *Coordinate with RD 17 and RD 2094 as required for the purpose of ensuring that ULOP is available as soon as possible and that "adequate progress" findings can be made.*
- S-3j *Encourage the reclamation districts to incorporate riparian habitat protection and/or enhancement in levee improvement plans where feasible.*
- S-3k *Circulate development proposals to reclamation districts, Manteca Police Services, and the applicable fire department (Manteca Fire*



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Department, Lathrop Manteca Fire District, or Ripon Consolidated Fire District) for comment as part of the project review process.

Hazardous Materials

Goal S-4

~~The City shall~~ protect the health, safety, natural resources, and property of the community through regulation of use, storage, transport, and disposal of hazardous materials.

Policies

- S-4.1 Maintain an awareness of hazardous materials throughout the Manteca region.
- S-4.2 Strictly regulate the production, use, storage, transport, and disposal of hazardous materials in compliance with local, federal, and State requirements to protect the health and safety of Manteca residents.
- S-4.3 As part of the development review process, consider the potential for the production, use, storage, transport, and/or disposal of hazardous materials and provide for appropriate controls on such hazardous materials consistent with federal, state, and local standards.
- S-4.4 Use the environmental review process to comment on Hazardous Waste Transportation, Storage and Disposal Facilities proposed in the Manteca Planning Area and throughout the County to request a risk assessment and ensure that potentially significant, widespread, and long-term impacts on public health and safety of these facilities are identified and mitigated, as such impacts do not respect jurisdictional boundaries.

Implementation

- S-4a *As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.*
- S-4b *Review development proposals to address proximity of users and transporters of significant amounts of hazardous materials relative to sensitive uses, such as schools and residential neighborhoods, and to ensure adequate measures are in place to reduce risks to an acceptable level.*
- S-4c *Continue to require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to the Manteca Fire Department.*
- S-4d *Annually coordinate with the Manteca Fire Department and 911 dispatch center to ensure that the City maintains a current database of*

hazardous materials.

- S-4e *Coordinate with the Manteca Fire Department, other local agencies, and Union Pacific Railroad to strictly regulate and enforce the use, storage, transport, and/or disposal of hazardous materials under California Administrative Code Title 19 requirements.*
- S-4f *Continue to work with San Joaquin County and other public agencies to inform consumers about household use and disposal of hazardous materials.*
- S-4g *Cooperate fully with Union Pacific Railroad and other agencies, such as the California Highway Patrol, in the event of a hazardous material emergency.*
- S-4h *Continue the City hazardous waste pick-up program for household hazardous materials.*

Climate Adaptation and Resilience

Goal S-5

Build community resilience, support community-led adaptation, and strengthen collaboration and resources to reduce public health and safety risks to life, property, the economy, and the environment from climate hazards.

Policies

- ~~RC-4.1~~S-5.1 Prepare for and respond to the expected impacts of climate change, prioritizing funding, adaptation measures, and improvements for vulnerable, disadvantaged, underserved, and underrepresented areas.
- ~~RC-4.2~~S-5.2 Assess and monitor the effects of climate change and the associated levels of risk in order to adapt to changing climate conditions and be resilient to negative changes and impacts associated with climate change.
- S-5.3 Participate in regional collaboration and coordination efforts, including inclusive community engagement and education opportunities, collaboration and partnerships with local and regional agencies, and community and service organizations, including the Climate Action Corps, to identify funding sources, develop vulnerability assessments, and implement adaptation measures, including regional hazard mitigation planning efforts to identify severe and significant impacts and hazards due to climate change and measures to address climate-related hazards and vulnerabilities.
- S-5.4 Identify and implement measures to protect local residents from health and safety impacts associated with climate hazards, such as providing free transit to cooling centers on extreme heat days.



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Implementation

- S-5a *When updating master plans for infrastructure, including water supply, flood control, and drainage, and critical facilities, review relevant climate change scenarios and ensure that the plans consider the potential effects of climate change and include measures to provide resilience.*
- S-5b *Participate with SJCOG and local partners in regional efforts create a public education campaign to ensure that the public understands climate change projections, impacts, adaptation strategies, and the terminology surrounding these topics. The public education campaign should include information about disaster preparedness, evacuation planning, and local and regional public safety programs.*
- S-5c *Review climate planning, adaptation, and resilience efforts of other regional and progressive agencies to identify best practices and learn from projects that other jurisdictions are conducting in terms of responses to extreme weather events, high temperature days, prolonged drought, water supply effects, wildfires, evacuations, flood events, and other climate-related hazards.*

Noise

Goal S-56

Protect the quality of life by protecting the community from harmful and excessive noise.

Policies

- S-56.1 Incorporate noise considerations into land use, transportation, and infrastructure planning decisions, and guide the location and design of noise-producing uses to minimize the effects of noise on adjacent noise-sensitive land uses, including residential uses and schools.
- S-56.2 Ensure that Downtown noise levels remain acceptable and compatible with a pedestrian-oriented environment and higher density residential land uses.
- S-56.3 Areas within Manteca exposed to existing or projected exterior noise levels from mobile noise sources exceeding the performance standards in Table S-1 shall be designated as noise-impacted areas. Figure S-3 identifies noise contours anticipated at General Plan buildout.
- S-56.4 Require residential and other noise-sensitive development projects to satisfy the noise level criteria in Tables S-1 and S-2.
- S-56.5 Require new stationary noise sources proposed adjacent to noise sensitive uses to ~~incorporate noise-attenuating measures~~ ~~be mitigated~~ so as to not exceed the noise level performance standards in Table S-2, or a substantial increase in noise levels established through a detailed ambient noise survey.
- S-56.6 Regulate construction-related noise to reduce impacts on adjacent uses to the criteria identified in Table S-2 or, if the criteria in Table S-2 cannot be met, to the maximum level feasible using best management practices and complying with the MMC Chapter 9.52.
- S-56.7 Where the development of residential or other noise-sensitive land use is proposed for a noise-impacted area or where the development of a stationary noise source is proposed in the vicinity of noise-sensitive uses, an acoustical analysis is required as part of the ~~environmental-development~~ review process so that noise mitigation may be considered in the project design. The acoustical analysis shall:
- Be the responsibility of the applicant.
 - Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
 - Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.

Measuring Noise

Sound is a pressure wave that travels through the air. It is described in terms of loudness, frequency or pitch, and duration. The standard measurement unit for loudness is the decibel (dB). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually indiscernible. A change of 5 dB is readily discernable to most people in an exterior environment. The human ear is not equally sensitive to all frequencies. In the context of environmental noise, the A-weighted decibel, or dBA, is used to adjust sound levels to reflect the way humans hear. Because people are more sensitive to noise during the evening and at night, state law requires additions to the measured noise levels during these times for planning purposes. The Community Noise Equivalent Level (CNEL) averages sound over 24 hours, with 5 dB added from 7 pm to 10 pm and 10 dB added from 10 pm to 7 am.

- Estimate existing and projected (20 years) noise levels in terms of the standards of Table S-1 or Table S-2, and compare those levels to the adopted policies of the Noise Element.
- Recommend appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.
- Estimate noise exposure after the prescribed mitigation measures have been implemented.
- If necessary, describe a post-project assessment program to monitor the effectiveness of the proposed mitigation measures.

S-56.8 Apply noise level criteria applied to land uses other than residential or other noise-sensitive uses consistent with noise performance levels of Table S-1 and Table S-2.

S-56.9 Enforce the Sound Transmission Control Standards of the California Building Code concerning the construction of new multiple occupancy dwellings such as hotels, apartments, and condominiums.

S-56.10 Ensure that new equipment and vehicles purchased by the City comply with noise level performance standards consistent with the best available noise reduction technology.

S-56.11 Require the Manteca Police Department to actively enforce requirements of the California Vehicle Code relating to vehicle mufflers and modified exhaust systems.

S-56.12 For new residential development backing on to a freeway or railroad right-of-way, the developer shall be required to ~~provide~~ incorporate appropriate ~~mitigation~~ noise-attenuation measures to satisfy the performance standards in Table S-1.

S-56.13 It is recognized that the City and surrounding areas are considered to be urban in nature and rely upon both the industrial and agricultural economy of the area. Therefore, it is recognized that noise sources of existing uses may exceed generally accepted standards.

S-56.14 Carefully review and give potentially affected residents an opportunity to fully review any proposals for the establishment of helipads or heliports.

S-56.15 Recognizing that existing noise-sensitive uses may be exposed to increase noise levels due to circulation improvement projects associated with development under the General Plan and that it may not be feasible to reduce increased traffic noise levels to the criteria identified in Table S-1, the following criteria may be used to determine the significance of noise impacts associated with circulation improvement projects:

- Where existing traffic noise levels are less than 60 dB Ldn at the

Noise-sensitive land uses include residential neighborhoods, places of worship, schools, and hospitals.



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outdoor activity areas of noise-sensitive uses, a +5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and

- Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and
- Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant.

S-56.16 Work with the Federal Railroad Administration and passenger and freight rail operators to reduce exposure to rail and train noise, including establishing train horn "quiet zones" [and/or wayside horns](#) consistent with the federal regulations.

Implementation

S-65a *Require an acoustical analysis that complies with the requirements of S-5.7 where:*

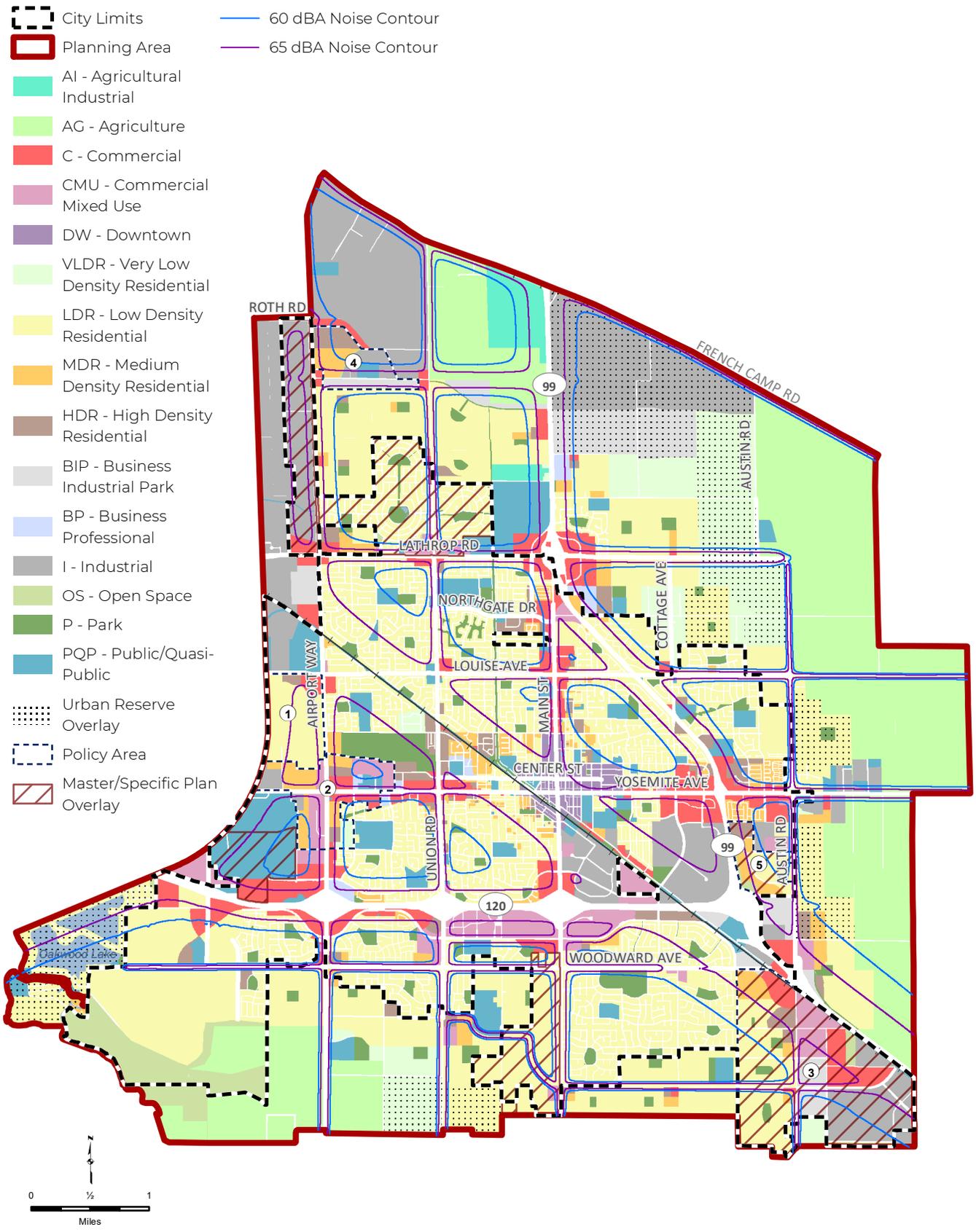
- *Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels exceeding the levels specified in Table S-1 or S-2.*
- *Proposed transportation projects are likely to produce noise levels exceeding the levels specified in Table S-1 or S-2 at existing or planned noise sensitive uses.*

S-65b *Assist in enforcing compliance with noise emissions standards for all types of vehicles, established by the California Vehicle Code and by federal regulations, through coordination with the Manteca Police Department and the California Highway Patrol.*

S-65c *Update the City's Noise Ordinance (Chapter 9.52) to reflect the noise standards established in this ~~Noise-Safety~~ Element and proactively enforce the City's Noise Ordinance, including requiring the following measures for construction:*

- *Restrict construction activities to the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction shall be permitted outside of these hours or on Sundays or federal holidays, without a specific exemption issued by the City. [No exemption shall be issued for construction within 200 feet of residential uses.](#)*
- *A Construction Noise Management Plan shall be submitted by the applicant for construction projects [that exceed ambient noise levels by more than 12dBA or produce perceptible vibrations at any off-site structures](#), ~~when determined necessary by the City.~~ The Construction Noise Management Plan shall include proper posting*

Figure S-3: Future Noise Contours



of construction schedules, appointment of a noise disturbance coordinator, ~~and~~ methods for assisting in noise reduction measures, and shall establish allowed truck routes to access the site that minimize exposure of residential areas to heavy truck traffic.

- Noise reduction measures ~~may~~shall include, but are not limited to, the following:
 - a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) wherever feasible.
 - b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. This muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available. ~~this~~This could~~would~~ achieve a reduction of up to 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
 - c. Temporary power poles or zero-emission power sources shall be used instead of generators where feasible.
 - d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City ~~of~~to provide equivalent noise reduction.
 - e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.
 - f. Delivery of materials shall observe the hours of operation described above.
 - g. Truck traffic ~~should~~shall avoid residential areas to the greatest extent ~~possible~~feasible.

S-~~6~~5d In making a determination of impact under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels are have a substantial increase. Generally, a 3 dB



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increase in noise levels is barely perceptible, and a 5 dB increase in noise levels is clearly perceptible. Therefore, increases in noise levels shall be considered to be substantial when the following occurs:

Transportation Noise

- When existing noise levels are less than 60 dB, a 5 dB increase in noise will be considered substantial;
- When existing noise levels are between 60 dB and 65 dB, a 3 dB increase in noise will be considered substantial;
- When existing noise levels exceed 65 dB, a 1.5 dB increase in noise will be considered substantial.

Non-Transportation Noise

- An 5dB increase in noise will be considered substantial.

Construction Noise

- An increase in 12dBA in noise will be considered substantial.

~~Additional or alternative criteria can be used for determining a substantial increase in noise levels. For instance, if the overall increase in noise levels occurs where no noise-sensitive uses are located, then the City may use their discretion in determining if there is any impact at all. In such a case, the following alternative factors may be used for determining a substantial increase in noise levels:~~

- ~~• the resulting noise levels;~~
- ~~• the duration and frequency of the noise;~~
- ~~• the number of people affected;~~
- ~~• conforming or non-conforming land uses;~~
- ~~• the land use designation of the affected receptor sites;~~
- ~~• public reactions or controversy as demonstrated at workshops or hearings, or by correspondence; and~~
- ~~• prior CEQA determinations by other agencies specific to the project.~~

S-65e Control noise at the source through use of insulation, berms, building design and orientation, buffer space, staggered operating hours, and similar techniques. Where such techniques would not meet acceptable levels, use noise barriers to attenuate noise associated with new noise sources to acceptable levels.

S-65f Require that all noise-attenuating features, including soundwalls and quieter pavements, are designed to be attractive and to minimize maintenance.

S-65g Evaluate new transportation projects, such as truck routes, rail or public transit routes, and transit stations, using the standards contained in Table S-1. However, noise from these projects may be allowed to exceed

the standards contained in Table S-1, if the City Council finds through the CEQA process that there are ~~special~~ special—overriding considerations~~circumstances~~.

- S-65h Work with the Federal Rail Authority and passenger and freight rail service providers to establish a Quiet Zone and/or Wayside Horns at at-grade crossings in the City. Where new development would be affected by the train and rail noise, require project applicants to fund a fair-share of: a) studies associated with the application for a Quiet Zone and/or Wayside Horns, and b) alternative safety measures associated with the Quiet Zone (including, but not limited to signage, gates, lights, etc.).
- S-65i Work in cooperation with Caltrans, the Union Pacific Railroad, San Joaquin Regional Rail Commission, and other agencies where appropriate to maintain noise level standards for both new and existing projects in compliance with Table S-1.
- S-65j The City shall require new residential projects located adjacent to major freeways, truck routes, hard rail lines, or light rail lines to follow the FTA screening distance criteria to ensure that groundborne vibrations do not exceed acceptable levels.

Table S-1: Maximum Allowable Noise Exposure from Mobile Noise Sources

Land Use ¹	Outdoor Activity Areas ^{2,3}	Interior Spaces	
		Ldn/CNEL, dBA	Leq, dBA ⁴
Residential	60	45	-
Motels/Hotels	65	45	-
Mixed-Use	65	45	-
Hospitals, Nursing Homes	60	45	-
Theaters, Auditoriums	-	-	35
Churches	60	-	40
Office Buildings	65	-	45
Schools, Libraries, Museums	70	-	45
Playgrounds, Neighborhood Parks	70	-	-
Industrial	75	-	45
Golf Courses, Water Recreation	70	-	-

¹Where a proposed use is not specifically listed, the use shall comply with the standards for the most similar use as determined by the City.

²Outdoor activity areas for residential development are considered to be the back yard patios or decks of single family units and the common areas where people generally congregate for multi-family developments. Where common outdoor activity areas for multi-family developments comply with the outdoor noise level standard, the standard will not be applied at patios or decks of individual units provided noise-reducing measures are incorporated



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(e.g., orientation of patio/deck, screening of patio with masonry or other noise-attenuating material). Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities; not all residential developments include outdoor activity areas.

³*In areas where it is not possible to reduce exterior noise levels to achieve the outdoor activity area standard w using a practical application of the best noise-reduction technology, an increase of up to 5 Ldn over the standard will be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table*

⁴*Determined for a typical worst-case hour during periods of use.*

Table S-2: Performance Standards for Stationary Noise Sources, Including Affected Projects^{1,2,3,4}

Noise Level Descriptor	Daytime	Nighttime
	7 am to 10 pm	10 pm to 7 am
Hourly Leq, dBA	55	45

¹Each of the noise levels specified above should be lowered by 5 dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered to be particularly annoying and are a primary source of noise complaints.

²No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.

³Stationary noise sources which are typically of concern include, but are not limited to, the following:

- | | |
|----------------------|---------------------------------------|
| HVAC Systems | Cooling Towers/Evaporative Condensers |
| Pump Stations | Lift Stations |
| Emergency Generators | Boilers |
| Steam Valves | Steam Turbines |
| Generators | Fans |
| Air Compressors | Heavy Equipment |
| Conveyor Systems | Transformers |
| Pile Drivers | Grinders |
| Drill Rigs | Gas or Diesel Motors |
| Welders | Cutting Equipment |
| Outdoor Speakers | Blowers |

⁴The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities, pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.



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