VIII. SAFETY
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PURPOSE

The citizens of Roseville rely on the City for many of their safety needs, such as fire and crime prevention. They count on the City to plan for and protect them from natural hazards such as flooding, earthquakes, and other potentially dangerous situations. This Element addresses relevant safety concerns and sets forth the goals and policies essential for their resolution.

The City has two important implementing plans for the goals and policies of the Safety Element:

- **Emergency Operations Plan.** The City’s Emergency Operations Plan (EOP) establishes an Emergency Management Organization and assigns functions and tasks consistent with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The EOP was reviewed and approved by representatives from each City of Roseville department, local special districts with emergency services responsibilities in the city, and the County of Placer Operational Area Office of Emergency Services. The content is based upon guidance approved and provided by the State of California and the Federal Emergency Management Agency. The plan provides for the integration and coordination of planning efforts of multiple jurisdictions, emergency functions, continuity of government responsibility, and public awareness. In addition, the
plan provides strategies for operations of police, fire, and health services, and as transportation alternatives, search and rescue, shelter and other required services in the event of an emergency. The EOP is reviewed annually and updated, republished and redistributed every five years.

- **Multi-Hazard Mitigation Plan.** This Plan describes the type, location, and extent of natural hazards that can affect the City; describes the City’s vulnerability to these hazards, including hazards that are related to a changing climate; and includes a mitigation strategy that provides the City’s blueprint for reducing potential losses. The City’s Multi-Hazard Mitigation Plan is subject to Federal Emergency Management Agency (FEMA) review and certification every five years. The Multi-Hazard Mitigation Plan, as amended by the Roseville City Council from time to time, is hereby incorporated into the Safety Element by reference as though it were fully set forth herein. In the event of any conflict between the provisions of the Multi-Hazard Mitigation Plan and the provisions of the Safety Element, the provisions of the Multi-Hazard Mitigation Plan shall control.

It is an underlying goal of the entire Safety Element to protect the life, property, and environment of community residents, enterprises, employees, and visitors.

**SETTING**

The physical setting of the City influences the design of the City’s public safety services and policies, which address seismic and geologic hazards, flood control, police services, fire protection, hazardous materials, and health services. The City is underlain by a relatively stable geology with low seismic shaking potential, but the soil and geologic characteristics still play a role in determining safety procedures. Though urbanized, the City has maintained a system of open space preserves, which include natural areas in oak woodland and riparian environments along the City’s creek systems, as well as floodways and floodplains. The City’s focus on preserving floodplain areas within open space informs flood control policy. The City’s Roseville Police Department provides police services. The City is urban, but shares borders with more rural areas of the County, and major transportation facilities such as Highway 65, Interstate 80, and the Roseville Rail Yard influence the City’s population and need for police services. The Roseville Fire Department provides fire protection services, which focus on the response needs of an urban community that is characterized by gently sloping terrain with areas of steep ravines in the northeast, and relatively flat valley in the western portion of the City. The City is also home to multiple health service providers, including two major hospitals.

**ORGANIZATION**

The Safety Element is comprised of the following components:

- **Seismic and Geologic Hazards** includes goals and policies to protect the City’s residents from danger associated with active faults, liquefaction, ground failure (landslides), and steep slopes. While the potential for seismic and geologic hazard occurrences in Roseville is not high, the soil and geologic characteristics of the City continue to play an important role in determining safety procedures.

- **Flood Control** underscores the need for development standards along the City’s Regulatory Floodplain. The City’s flood-prone areas have been redefined and, in some cases, regulations pertaining to development in these areas are more restrictive to protect life and property.

- **Police Services** addresses protection of persons and property within the City by application of the crime prevention unit, department training program, and streets patrol.

- **Fire Protection** includes goals and policies to prevent and protect against catastrophic fires and minimize the loss of life and damage to property and the environment. Policies are established to achieve baseline response goals as outlined in the Department’s Standards of Cover document.
• **Hazardous Materials** addresses the need for the safe and efficient handling of hazardous materials and hazardous wastes, consistent with state law. This includes requirements for the submittal of a Hazardous Materials Management Plan (HMMP) and Hazardous Materials Release Response Plans and Inventories (Business Plans).

• **Health Services** includes the existing status of health services within the City of Roseville and provides policies that ensure that medical needs are met. Trauma center services and health care for indigents are addressed.

## SEISMIC AND GEOLOGIC HAZARDS

Like any California community, Roseville could be affected by seismic activity. If buildings and other improvements are constructed in areas with potential seismic activity, this could expose people and property to damage related to ground shaking. Damage from strong seismic ground shaking is most likely to occur in areas where older buildings that consist of unreinforced masonry are located. However, the Planning Area is in an area with relatively low seismic activity, and there are no fault traces either within or immediately adjacent to the Planning Area. Furthermore, the nearest active seismic source is 30 miles to the west and other active seismic sources are 45–60 miles to the north, east, and southwest near Lake Oroville, Lake Tahoe, and in the Coast Ranges, respectively (see Figure VIII-1). Other seismic and geologic hazards and soils limitations include:

• **Liquefaction** - This process, involving loose, sandy soil with a high water content, undermines the ground's ability to solidly support building structures during seismic activity. The risk is low in the Planning Area since the groundwater table is relatively deep and since the area is underlain by stable, moderately cemented to very well cemented, older rock formations, and since seismic activity is relatively low.

• **Ground Failure** - The City’s geographic location, soil conditions, and surface terrain combine to minimize risk of major damage from landslides, subsidence (gradual shrinking of the earth's surface due to underground resource extraction), or other geologic hazards resulting from seismic activity and related natural forces.

• **Landslide** - While Roseville is located on relatively level terrain, the land gradually increases in slope to the east and north. The most significant slope areas are located along creeks and ravine areas. However, the Planning Area does not have a history of landslides, is composed of stable geologic units that are moderately to very strongly cemented, and active seismic sources are at least 30 miles away.

• **Soil Erosion** - Most soils can be categorized into soil groups based on runoff characteristics, which are factored into calculations of erosion and stormwater runoff potential when drainage plans are prepared for development. Most of the Planning Area soils are assigned to Hydrologic Group D, which means they have a very slow water infiltration rate and a very high stormwater runoff potential. Water erosion hazards are particularly high in areas of steeper slopes along streambeds.

The California Building Code, which has been adopted by the City, requires an assessment of site conditions and appropriate design features to avoid seismic and geologic hazards in new construction. The State earthquake protection law (Health and Safety Code Section 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Planning Area soils have been rated with moderate limitations for construction of buildings and roads because of a shallow depth to bedrock, low soil bearing strength, and a moderate to high shrink-swell potential. The building code requires engineering practices that reduce or eliminate hazards from construction in unstable and expansive soil, as well as drainage-related requirements to reduce seasonal fluctuations in soil moisture content. Construction in soils of low strength is also addressed in the building code through implementation of soil engineering tests and amending and compacting soils.
GOALS AND POLICIES

SEISMIC AND GEOLOGIC HAZARDS

Goal SAFE1.1  Minimize injury and property damage due to seismic activity and geologic hazards.

Policy SAFE1.1  Continue to monitor seismic activity in the region and take appropriate action if significant seismic hazards, including potentially active faults, are discovered in the Planning Area.

Policy SAFE1.2  Continue to mitigate the potential impacts of geologic hazards through building plan review.

Policy SAFE1.3  Minimize soil erosion and sedimentation through suitable building placement, maximum lot coverage standards, context-sensitive designs, and appropriate construction techniques.

Policy SAFE1.4  Comply with state seismic and building standards in the design and siting of critical facilities, including police and fire stations, school facilities, hospitals, hazardous material manufacture and storage facilities, bridges, and large public assembly halls.

Policy SAFE1.5  Create and adopt slope development standards prior to, or as part of the planning process for, any area identified as having significant slope.

Policy SAFE1.6  Require contour grading, where feasible, and re-vegetation to mitigate the appearance of engineered slopes and to control erosion.
Figure VIII-1 | Regional Fault Map
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FLOOD PROTECTION

The City of Roseville is located within portions of three major drainage basins: the Pleasant Grove Creek Basin, the Curry Creek Basin, and the Dry Creek Basin. Although identified as a separate watershed, Curry Creek is currently considered to be a tributary of the Pleasant Grove Creek basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City north of Baseline Road and the Diamond Oaks Golf Course. Dry Creek and its tributaries drain the remainder of the City from Rocklin to the north, Loomis Basin to the east, Sacramento County to the south, and Placer County to the west. The Dry Creek system has year-round flows in its major watercourses, while the Pleasant Grove system is generally intermittent in its upper reaches with only seasonal flows, and flowing year-round in its lower reaches. For the most part, the primary creek systems in the City have been maintained in their natural state and alignment.

Upstream flows generated elsewhere in Placer County enter Roseville's creeks and tributaries from the east and north. The creek systems, picking up additional natural and storm-water-system-delivered runoff in the City, generally flow in a west-southwestward direction through Roseville. The flows continue to move west-southwestward into Placer, Sacramento, and Sutter Counties, eventually draining through various creeks and canals into the Sacramento and American Rivers.

Flooding is defined as the temporary rising and overflowing of water that results in partial or complete inundation of normally dry land areas. The initial force of flooding and inundation of floodwaters can result in injury, loss of life, and property damage. Damage may include: the shattering or flooding of structures, including homes and businesses, including their contents; uplifting of vehicles and other objects; damage to roadways, bridges, infrastructure and services; and, soil instability, erosion, and landslides.

Flood risk is a major concern in Roseville, along with the remainder of the Sacramento/South Placer region, a risk that will be critically important to monitor in the context of a changed climate. Flooding in Roseville is associated with storm runoff exceeding creek and storm drainage capacities and is generally limited to areas of low elevation adjacent to the creek systems.

Historic Flooding

Reports of flooding along Dry, Antelope, Cirby, and Linda Creeks have been recorded from the 1930s to present time. Flooding that resulted in property damage occurred about every three to five years since 1950, with the exception of the period from 1973 to 1981 when no flooding was reported. A large flood event took place in February 1986, causing substantial damage to property. The flood ranged between a 70 and 100-year event, depending upon the location. In January of 1995, the City was subject to the flooding of Cirby Creek and Linda Creek, a flood event that exceeded that of 1986. A detailed description of the flooding problem in the Dry Creek watershed, which includes Cirby and Linda Creeks, can be found in the "Update to the Dry Creek Watershed Flood Control Plan" by the Placer County Flood Control and Water Conservation District (District), dated November 2011, and in the "Cirby-Linda-Dry Creek Study" by Dames & Moore, dated November 1991. The 1995 flood magnitude reached the 200-year event level in certain portions of creeks in the Dry Creek watershed. The portion of Roseville within the Pleasant Grove Creek/Curry Creek watershed has, until recently, remained mostly undeveloped, so reports of flood damage are limited.

Localized flooding resulting from storm runoff that exceeds piped drainage capacity is primarily limited to street flooding. Few reports have been made regarding piped drainage exceeding its capacity and causing major flood damage. Improvements to the drainage system have been made to most of these areas.
Dam Failure

Dam failure could result in widespread flooding. Although there are no dams within Roseville, the failure of Folsom Lake containment dikes, numbered one through six, could impact the City. The containment dikes are used to close the saddles or low points along the crests of the ridges located along the westerly rim of the reservoir. Dikes two and three store essentially no water at all, except during flood surcharges at the lake. Of these, dikes five and six would result in the largest impacts to Roseville. In the unlikely event of such a failure occurring, a plan of action has been developed and is included in the City of Roseville’s Emergency Operations Plan.

Flood Control Projects

The City of Roseville is involved in several flood control projects and mitigation programs designed to protect residents and lessen the potential for flooding both within the City and within neighboring communities:

- **Drainage Mitigation Fees.** The City collects drainage mitigation fees within the Pleasant Grove Creek/Curry Creek and Dry Creek watersheds to be used to alleviate potential downstream drainage problems in these basins. A Regional stormwater retention basin project at the Al Johnson Wildlife Area is planned within the 1,700-acre city-owned property. The goal is to provide 2,250 acre-feet retention storage for some or all of the incremental increase in runoff volume resulting from existing and future development projects that generate runoff flowing through Sutter County. This retention storage is for the Pleasant Grove Creek/Curry Creek watershed. The Dry Creek watershed uses or plans to use a number of strategies, ranging from regional structural projects (e.g. the Antelope Creek Flood Control Project, Upper Weir), an ALERT Flood Warning Response System, bridge and culvert improvements, LIDs, to non-structural measures (building raises or voluntary buy-outs).

- **Flood Mitigation Plan.** Roseville is also involved through the Placer County Flood Control and Water Conservation District in the Auburn Ravine, Coon Creek, and Pleasant Grove Creek’s Flood Mitigation Plan (also referred to as the “Cross Canal Watershed Flood Control Plan”), dated June 1993, and the Update to the Dry Creek Watershed Flood Control Plan (November 2011).

- **Alert Roseville.** The City has a flood alert system in place. Alert Roseville is an emergency notification system that may be used to deliver alerts when there is a threat to the health and safety of residents. In the event of potential flooding, warnings will also be broadcast on Roseville’s Government Access Channel and on local radio stations. The system is designed to provide residents up to three hours’ advance warning of potential flooding within the regulatory floodplain. Details of this program are described in the City of Roseville’s Emergency Response Plan.

- **Stream Clearing Program.** The City operates a stream clearing program in the flood-prone areas of Roseville each year. Details of this program can be found in the City’s Roseville Creek and Riparian Management and Restoration Plan, dated December 2003, and the City of Roseville Open Space Preserve Overarching Management Plan, dated August 2011.

Federal Guidance

The Federal Emergency Management Agency (FEMA) oversees the delineation of flood hazard zones as it relates to the National Flood Insurance Program (NFIP) and the provision of federal disaster assistance. FEMA manages the NFIP and publishes the Flood Insurance Rate Maps (FIRMs), which show the expected frequency and severity of flooding by area, typically for the existing land use and the type of drainage/flood control facilities that are present. Flood zones are determined by the probability of flooding within a certain time period, such as a 100-year (1 percent annual exceedance probability) flood event.
In most cases, the definitions of the floodplain generated by the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA) encumber less property than those developed for the City. The most recent FEMA information is more consistent with the City data than previous versions.

Minimizing encroachment within the regulatory floodplain has been a primary goal of the City. The boundaries of the regulatory floodplain have been revised over the years due to better data availability. A majority of the damage from the 1986 and 1995 floods occurred within the Infill Area of the City, where properties have historically encroached into what is now recognized as the floodplain.

State Law

The California Legislature enacted six interrelated flood management bills in 2007—Senate Bills (SB) 5 and 17, and Assembly Bills (AB) 5, 70, 156, and 162 to improve flood management by strengthening the linkage between local land use planning decisions and flood management practices. The legislation requires that an Urban Level of Flood Protection (ULOP) be met in specific locations within the Sacramento and San Joaquin river basins.

State legislation (SB-5) defines an ULOP as that which is necessary to withstand flooding that has a 1-in-200 chance of occurring in any given year. Subsequent legislation refined the definition of the urban level of flood protection to exclude areas of shallow flooding (inundation less than three feet deep) or flooding from local drainage (tributary areas of less than 10 square miles) that meets the criteria of the national FEMA standard of flood protection. (Government Code Section 65007(l)[n]).

There are five locational criteria which must all be met in order for the ULOP to apply. While all areas of the City meet two of the criteria (the City is an urban area of more than 10,000 people and the City is within the Sacramento-San Joaquin Valley) only certain areas of the City meet the remaining three location criteria. These areas are:

- Located within a flood hazard zone that is mapped as either a special hazard area or an area of moderate hazard on FEMA’s official (i.e. effective) Flood Insurance Rate Map for the National Flood Insurance Program,
- Located within an area with a potential flood depth above three feet, from sources other than localized conditions, and
- Located within a watershed with a contributing area of more than 10 square miles.

The general boundaries of the ULOP floodplain within Roseville are reflected in Figure VIII-2 and are also shown overlaid upon the General Plan land uses in Figure VIII-3.

The State of California has implemented a State Plan of Flood Control. State law requires all communities to be in compliance with this plan. The City’s current standards for managing new development in or near the floodplain are in compliance with the State Plan. The City will continue to require new development to comply with the latest State Plan of Flood Control.

Regulatory Floodplain

The City of Roseville regulates its floodplain areas through land use, zoning, and other development restrictions. This includes policies requiring the dedication of lands and which prohibit development within the City’s Regulatory Floodplain. Certain exceptions to this policy exist primarily within the infill area and for the construction of essential services. Where encroachments may be permitted, improvements are required to be designed to minimize cumulative upstream and downstream effects.

1 This is based on criteria consistent with, or developed by, the State Department of Water Resources.
The City’s Regulatory Floodplain is a composite floodplain consisting of three data sources: (1) FEMA 1% annual chance (100-year) floodplains (AE and A Zones), (2) the City-developed 1 percent annual chance (100-year) floodplains with the modeling condition that the Pleasant Grove/Curry Creek and Dry Creek watersheds have been fully developed (e.g., at estimated build-out) without mitigation, and (3) the City-developed 0.5 percent annual chance (200-year) floodplains with flood depths 3.0-foot and greater meeting the State’s ULOP criteria. The delineated floodplain boundary of the Regulatory (composite) Floodplain is the most conservative floodplain boundary of the three floodplains.

The general boundaries of the Regulatory Floodplain within Roseville are reflected in Figure VIII-2 and are overlaid upon the General Plan land uses in Figure VIII-3.

The Floodplain combining land use designation is applied to all floodplain areas in the City. This designation is normally combined with open space or park designations, but may be combined with other land uses with existing development. The City is responsible for maintaining its storm drain systems (including the creeks that are part of that system, where they are owned by the City), as well as its existing and planned retention and detention basins.

In addition to the City, there are several other agencies that regulate floodplain areas and/or the resources commonly found within these areas. These agencies include the U.S. Army Corps of Engineers (Section 404 of the Clean Water Act), Central Valley Flood Protection Board, FEMA, and the California Department of Fish and Wildlife (1602 Stream Bed Alteration Agreement). The Placer County Resource Conservation District and the Placer County Flood Control and Water Conservation District provide advice and assistance on floodplain management.

FEMA plays a particularly prominent role in floodplain management. FEMA is charged with overseeing disaster assistance and mapping floodplains. One of its programs is the National Flood Insurance Program (NFIP), which requires owners of insurable buildings within designated A or V flood (100-year) zones to purchase flood insurance (if there is a federally-backed mortgage). Eligible flood zones are designated through engineering studies that are adopted by FEMA. The mapping of the flood zones then becomes the Flood Insurance Rate Map (FIRM) that reflects the expected frequency and severity of flooding by area. The City, in 1990, 2001, and again in November 2018, adopted revised FIRM (maps) and the corresponding Flood Insurance Study (FIS) to ensure continued participation in the National Flood Insurance Program.

As urbanization of western Placer County continues to increase within the Pleasant Grove Creek and Dry Creek Basins, Roseville faces the potential of experiencing increased flooding problems. Land development typically results in increased hard surfaces and decreased vegetation. These conditions limit infiltration opportunities; without adequate mitigation, they can increase storm water runoff rates and volumes and decrease the time required to reach peak discharge.

The goals and policies of this component focus on minimizing damage due to flood hazards. Key to this effort is the clear definition and application of floodplain boundaries, protection of floodplain areas, and commitment to regional cooperation on flooding issues.

A detailed Floodplain Management Plan has been developed and is included in the City’s Multi-Hazard Mitigation Plan.

**Floodplain Designations**

Clear policy on how floodplain areas are defined and regulated is very important in effectively dealing with flood protection. Several different designations have been used to define floodplains in Roseville, including zoning and land use designations for floodplain areas, local flood hazard areas, 100-year FEMA floodplain areas, and the City’s Regulatory Floodplain. It is the intent of the General Plan to establish clear direction to ensure consistent application of floodplain policy in the City.
Figure VIII-2 | City’s Regulatory Floodplain
Figure VIII-3 | Land Use Designations with City’s Regulatory Floodplain

LEGEND
- Planning Area
- Regulatory Floodplain
  - 100-Year Floodplain
  - 200-Year Floodplain (ULOP)
- Land Use Designation
  - Low Density Residential (LDR)
  - Medium Density Residential (MDR)
  - High Density Residential (HDR)
  - Neighborhood Commercial (NC)
  - Community Commercial (CC)
  - Regional Commercial (RC)
  - Business Park (BP)
  - Light Industrial (Li)
  - Industrial (INd)
  - Tech/Business Park (T/BP)
  - Transfer Station (TS)
  - Central Business District (CBD)
  - Public/Quasi-Public (P/QP)
  - Parks and Recreation (PR)
  - Open Space (OS)
  - Urban Reserve (UR)

Note: Floodplain extent subject to change based upon in process and future Drainage Master Plans and Federal Emergency Management Agency map revisions.
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Policy relating to the designation of the floodplain recognizes that there are differences between the infill area and the remainder of the City. Infill areas were developed prior to modern floodplain mapping and policies; consequently there is existing infill development within the floodway fringe. As a result, floodplain policy for the Infill Area is slightly more flexible to account for existing development and to retain some development potential for those undeveloped but entitled properties within the floodplain, provided that compliance with the specified restrictions occurs.

**FLOODPLAIN DESIGNATION POLICY**

In the City of Roseville, floodplain policy focuses on two primary objectives: (1) to minimize the potential for flood damage by providing for the safe movement of flood waters through the City; and (2) to preserve, protect, and enhance the natural habitat, open space, and recreational values found along Roseville’s floodplain and creek environments. The goals and policies within this Element focus primarily on the safety objective. It is intended that these policies be utilized in combination with the policies in the Open Space and Conservation Element to ensure full implementation of the objectives stated above.

**REGULATORY FLOODPLAIN DESIGNATION**

The City of Roseville shall designate the City’s Regulatory Floodplain on its land use map in accordance with the best available floodplain information, as determined by the Public Works Director. The description of the elements within the Regulatory Floodplain were provided within the section “Regulatory Floodplain” above.

Where the City’s Regulatory Floodplain information does not exist, or where it is determined that the City’s Regulatory Floodplain does not represent the best available information, new floodplain information shall be generated by the project proponent. New floodplain information shall generally be developed: (1) consistent with the build-out development assumptions used to develop the City’s Regulatory Floodplain; and (2) in compliance with the most recent District Stormwater Management Manual.

**FLOODPLAIN DEVELOPMENT REGULATIONS**

Development within the City’s Regulatory Floodplain shall be regulated as follows:

- **Infill Areas.** No development is permitted within the regulatory floodway. Development may be permitted by the City within the regulatory floodway fringe. Such development shall be limited to that which cumulatively results in no more than one-foot of rise in the water surface elevation.

- **Remainder of The City (Specific Plans, and the North Industrial Area).** No development is permitted within the City’s Regulatory Floodplain (floodway and floodway fringe). Exceptions may be considered by the City for unusual conditions on a case-by-case basis if the encroachment is limited to only the floodway fringe and would not result in any off-site increase in the water surface elevation.

The above designations are schematically reflected in Figure VIII-4.
Figure VIII-4 | Floodplain Designation Cross Sections

- **Floodway Fringe**
- **Floodway Zone**
- **Floodway Fringe**

**Base Flood Water Surface Elevation**

**Infill Areas**

**Maximum Water Surface of Selected Flood with Encroachment in Fringe Arms**

**Remainder of City**

**Water Surface of Selected Flood Without Encroachment in Fringe Arms**

NOT TO SCALE
ESSENTIAL SERVICES EXCEPTIONS

On-site increases in the water surface elevation and/or fill within the regulatory floodplain, including the floodway, may be permitted by the City on an exception basis if associated with essential facilities and services such as roads, infrastructure, and detention facilities subject to the following criteria:

- No feasible\(^2\) alternatives exist that would eliminate or reduce the need for fill and/or an increase in the water surface elevation and would result in a lesser impact to the environment.
- The facility has been designed to result in the minimum amount of fill and impact necessary to achieve its intended purpose and results in no off-site increase in the water surface elevation.

SECONDARY CHANNELS AND TRIBUTARIES

In general, piping of storm water in a watershed that is less than 300 acres is encouraged for ease of maintenance and for public health and safety reasons.

Channels and tributaries are defined where the existing drainage area is between 300 and 640 acres. These areas may be permitted to be channelized or modified to better serve the needs of the area.

- The modification to the channel or tributary would not result in any off-site increase in the water surface elevation.
- The channel or tributary to be modified is determined to have less than significant vegetation, habitat, visual, recreation, or other open space value.
- If channelization is permitted, the created channels should be designed to: (1) provide adequate open space to safely accommodate the 100-year flow; (2) reflect cross-sections and contours similar to the natural channel with gentle side slopes and be unlined; (3) be compatible with the adjacent system and provide transitions as appropriate; (4) be an integral part and amenity to the area; (5) incorporate habitat enhancement, mitigation, and other resources; and (6) be designed to reduce the need for maintenance.
- If piping is permitted, the 100-year flow must be safely accommodated over land in the case of a blocked pipe and must comply with all other provisions of the City of Roseville Improvement Standards.

\(^2\) Feasible is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.
GOALS AND POLICIES

FLOOD PROTECTION

Goal SAFE2.1 Minimize the potential for loss of life and property due to flooding.

Goal SAFE2.2 Pursue flood control solutions that are cost-effective and minimize environmental impacts.

Policy SAFE2.1 Continue to regulate, through land use, zoning, and other restrictions, all uses and development in areas subject to potential flooding and require new development to comply with the State Plan of Flood Control requirements.

Policy SAFE2.2 Monitor and regularly update City flood studies, modeling, associated land use, zoning, drainage fees and flood management projects, and other development regulations.

Policy SAFE2.3 Continue to pursue a regional approach to flood issues. Participate in efforts to secure adequate flood management funding.

Policy SAFE2.4 Provide flood warning and forecasting information to the community to reduce impacts to private property.

Policy SAFE2.5 Minimize the potential for flood damage to public and emergency facilities, utilities, roadways, and other infrastructure.

Policy SAFE2.6 Require new developments to evaluate potential flood hazards, and provide mitigation to ensure that the cumulative rate of peak run-off is maintained at pre-development levels.

Policy SAFE2.7 Continue to implement the Storm Maintenance Program to keep creeks and storm drain systems free of debris.

Policy SAFE2.8 Establish and maintain flood control assessment districts or consider other funding mechanisms to mitigate flooding impacts.

Policy SAFE2.9 Where feasible, maintain natural stream courses and adjacent habitat and combine flood control, recreation, water quality, and open space functions.
POLICE SERVICES

The City of Roseville Police Department, headquartered at 1051 Junction Boulevard, provides primary law and traffic enforcement services within the City. The guiding principles for the Police Department are: Constitutional Policing, Crime Reduction, Community Care, and Respect. The Roseville Police Department is responsible for patrol duty within the City limits, including parks and open space areas, responding to and investigating crimes and other calls for service, providing animal control services, and ensuring traffic safety (i.e. enforcing the Vehicle Code and responding to traffic collision or traffic hazard calls.) Cooperation with the Union Pacific Railroad’s private police department ensures provision of backup services within the Rail Yard, as needed. The Roseville Police Department employs Animal Control officers, who respond to emergency and routine calls regarding animals and shelters stray, owner-relinquished, or impounded animals through a contract with the Placer County Society for the Prevention of Cruelty to Animals.

The Roseville Police Department staffs and houses its own communications center, which is the 911 public safety answering point for the City. The communications center dispatches for Roseville Police and Fire. The Police Department also staffs an indoor gun range and outdoor shoot house for in-house training, qualification, and testing. The range is rented out to surrounding agencies and mutual aid partners.

Police population ratios, which range from 3.5 officers in large northeastern cities to fewer than 0.75 officers in mid-size, west coast cities, the Roseville Police Department believes that the effectiveness of a police force cannot be determined by police-to-population ratios alone. Adequacy in police protection must account for the community’s demographic characteristics and crime levels. What may be the proper standard for one community may not be suitable for another. Flexibility is key to effective police protection. This allows the police department to better respond to changes in the frequency and nature of crimes in the City.

The Roseville Police Department offers extensive non-traditional police services that are far above the norm for cities of similar size. Currently, the department assigns sworn police officers to every public high school campus, assigns one police officer to service all of the middle-school campuses, and offers numerous low- or no-cost recreational programs for youth through the Roseville Police Activities League (RPAL). The department has a Social Services Unit, which coordinates the department’s response to social service-related challenges, such as unsheltered individuals, delinquent or out-of-control youth, elder abuse, child neglect, and individuals with mental health concerns. The department also staffs a Crime Suppression Unit that focuses on community-specific problems related to drugs, gangs, and human exploitation.

The police department was instrumental in the creation of the Roseville Coalition of Neighborhood Associations, and its members assist neighborhoods and businesses with police issues, and assigns police officers as liaisons to every neighborhood association.
GOALS AND POLICIES

POLICE SERVICES

Goal SAFE3.1  Maintain a professional law enforcement agency that proactively prevents crime; controls crime that the community cannot prevent; and reduces fear and enhances the security of the community.

Policy SAFE3.1  Provide a high level of visible patrol services within the City.

Policy SAFE3.2  Respond to both emergency and routine calls for service in a timely manner consistent with department policy.

Policy SAFE3.3  Ensure that the Police Department utilizes modern technology and provides adequate training to maximize job performance.

Policy SAFE3.4  Establish programs that respond to community concerns of crime, gangs, drug abuse, homelessness, mental health, and traffic.

Policy SAFE3.5  Provide extensive community-based service and education programs designed to prevent crime and emphasize citizen protection and involvement.

Policy SAFE3.7  Design parks that are conducive to surveillance by adjoining residents, security services, and police.

Policy SAFE3.8  Work with other city departments to review public and private development plans, ensuring that crime prevention is addressed.

Policy SAFE3.9  Coordinate with patrol officers in patrolling parks, open space and trails, and continue coordination with other law enforcement agencies.
FIRE PROTECTION

The Roseville Fire Department provides fire protection, fire suppression, emergency medical services, and hazardous materials management within the City. The Roseville Fire Department employs approximately 119 personnel and operates from 8 fire stations within the Planning Area. The Fire Department provides fire code enforcement, fire safety inspections, plan review, hazardous materials enforcement and inspections, hazard abatement, public information, and public education activities, emergency preparedness, and other services.

The City maintains mutual and automatic aid agreements with the Placer County Fire Department, which provides fire protection to areas west of the City; the South Placer Fire Protection District, which provides fire protection to areas east of the City; the Rocklin Fire Department, which provides fire protection to the north; and the Sacramento Metropolitan Fire District, which provides fire protection to the south. Virtually all fire departments and districts, including the City, are part of the statewide mutual aid agreement. This agreement provides that a fire department will help any other fire department when the need arises. A similar agreement exists between all fire agencies in Placer County.

Fire Department responses can generally be grouped into three categories. The first, fire calls, are defined as those related to fires, including structural, vegetation, and vehicle. Emergency medical service calls are identified as those calls related to medical emergencies. Non-fire calls refer to all other calls, such as investigations of possible fire hazards, citizen assists, false alarms, and other miscellaneous calls. As the City grows, the number of incidents requiring the Fire Department has increased, with emergency medical service incidents making up the majority of requests. With improvements to building standards, fire prevention activities, and public education, fires represent approximately five percent of the total call volume.

Fire hazards include those related to structures and those related to vegetation in open spaces. Buildings constructed prior to 1980 pose a relatively greater fire risk since building codes have become progressively more effective, through design and construction standards, in improving fire safety. The California Department of Forestry and Fire Protection (CAL FIRE) has established a fire hazard severity classification system to assess the potential for wildland fires. The Planning Area is designated by CAL FIRE as a Local Responsibility Area, and there are no Very High Fire Hazard Severity Zones. Nevertheless, the Fire Department reviews development that proposes open space or is located adjacent to open spaces to ensure appropriate fire safety provisions are included.

Fire stations are located strategically throughout the community in order to place resources within an acceptable response distance. Response time from these stations is one of the most important measurements of fire department performance. Time is critical: two commonly referred to criteria used to quantify the importance of fire department response time include (1) the time of flashover in a structure fire (where a fire goes beyond the control capability of a single alarm) and (2) the time where irreversible brain damage and chances of survival are greatly reduced for patients that are pulseless and non-breathing. The Fire Department has established response performance measures based on the Fire Department's current capabilities and resources, which are outlined in the Department's Standards of Cover document.

The Insurance Service Office (ISO) rating measures fire departments’ effectiveness, based on available facilities and equipment, personnel, and quantity of water available for firefighting. Roseville rates high for urban areas among its neighboring jurisdictions, with an ISO rating of 2 on a scale of 1 to 10 (the lower the number, the higher the rating). Roseville's supply and availability of water for firefighting needs is sufficient to serve the demands of buildout of the General Plan. Water pressure must be sufficient, but adequate water supply is the key to effective fire suppression.³

³ The specific quantity of water needed for fire protection of individual buildings is set forth in the California Fire Code. (California Code of Regulations Title 24, Part 9).
In the early 2000s, the Roseville Fire Department underwent a rigorous Self-Assessment study process established by the Commission on Fire Accreditation International. This process allowed the department to perform a thorough analysis of all aspects of the organization, including all programs and services provided. The Department obtained full International Accreditation in 2005 and was re-accredited in 2010 and 2015.
GOALS AND POLICIES

FIRE PROTECTION

Goal SAFE4.1  Protect against the loss of life, property, and the environment by the application of appropriate preventative, educational, and operational measures.

Goal SAFE4.2  Provide emergency services in a well-planned, cost-effective, and professional manner through the best utilization of properly trained, equipped, and supervised personnel.

Policy SAFE4.1  Continue to pursue and promote fire prevention programs and standards.

Policy SAFE4.2  Continue to follow service level response times, as listed in the City’s Standards of Cover document.

Policy SAFE4.3  Monitor Fire Department service levels annually, concurrent with the City budget process and via quarterly reports.

Policy SAFE4.4  Provide a comprehensive emergency medical services program to deliver basic and advanced life support services.

Policy SAFE4.5  Provide highly trained personnel to ensure effective suppression of fires and safety for firefighters.

Policy SAFE4.6  Seek to reduce fires by fully investigating the cause, origin, and circumstances of each fire; collect and preserve evidence; coordinate with authorities in detection, apprehension, and prosecution of arsonists; pursue each investigation to its conclusion; and use resultant findings to develop more effective fire prevention programs.

Policy SAFE4.7  Phase the timing of the construction of fire stations to be available to serve the surrounding service area.

Policy SAFE4.8  Continually update the Roseville Emergency Operations Plan and ensure that participants are prepared to efficiently carry out assigned functions.
HAZARDOUS MATERIALS

This component focuses on the storage, transportation, clean-up, and emergency response aspects surrounding the management of hazardous materials. The federal government, under Title 49 of the Code of Federal Regulations, lists thousands of hazardous materials. These include radioactive waste and explosives and more commonly used substances such as gasoline, insecticides, and household cleaning products. The handling of hazardous materials is an element of daily activity that affects all residents within the City.

STORAGE

Proper storage of hazardous materials incorporates a variety of techniques depending on the type of material being stored. Underground storage tanks (USTs) and above-ground storage tanks (ASTs) are commonly used for the storage of hazardous materials, especially petroleum products. These storage devices are found most often at gas stations and businesses operating vehicle fleets. UST leakage has contaminated several sites within the City. As a result of these unauthorized releases, varying on-site mitigation measures have been required to address the contaminated areas. Sites that have adversely impacted underground water due to unauthorized releases of product from tanks are under clean-up orders by the Regional Water Quality Control Board in coordination with the Roseville Fire Department.

Hazardous materials used in many household products (e.g. drain cleaners, waste oil, cleaning fluids, insecticides, and car batteries) are often improperly discarded as a part of normal household trash. Consequently, these hazardous materials can interact with other chemicals to create serious dumpster fires. Furthermore, the community faces risk of exposure or explosion when hazardous waste is deposited in landfills not equipped to handle it.

In order to avoid spills or contamination, the Roseville Fire Department regularly monitors hazardous material generators and storage facilities in the City for compliance with state regulations, including enforcement procedures recognized by California’s Department of Toxics Substances Control.

All hazardous materials handlers, which store more than 55 gallons, 500 pounds or 200 cubic feet of gas, are required to submit Hazardous Materials Management (Business) Plans. From these plans, emergency responders are provided emergency contact information, site-specific chemical inventories, and vicinity and facility maps. Facilities storing materials that are “acutely” hazardous at an amount that exceeds the quantity listed in Title 19, Tables I, II, or III, must submit a more comprehensive Risk Management Plan, which includes off-site consequences analysis, maintenance and training programs, and an executive summary. Owners/operators of aboveground tanks that contain more than 660 gallons of petroleum hydrocarbons (or an aggregate quantity of 1,320 gallons) must comply with the state Aboveground Petroleum Storage Act, which requires the preparation of a Spill Prevention and Countermeasure Plan.

TRANSPORTATION

Hazardous materials are routinely transported by truck over state and federal highways, and local roads (e.g. gasoline tankers). California Vehicle Code Section 31303 requires that hazardous materials be transported via routes with the least overall travel time. Although the choice of routes is left primarily to the discretion of the transporter, the California Vehicle Code prohibits the transportation of hazardous materials through residential neighborhoods. The City has designated truck routes that attempt to divert traffic away from residential areas (see Circulation Element). The California Highway Patrol (CHP) has created plans for the transportation of hazardous materials on state and federal highways, including I-80 and Highway 65. Allowable routes depend on the type of hazardous materials being transported. Hazardous materials are also transported on the Union Pacific Railroad. As a major rail switching yard, rail cars may remain on site for various lengths of time.
CLEAN-UP

Within the Roseville City limits, the Union Pacific Rail Yard presents a challenge to the management of hazardous materials. Defective USTs, lead-contaminated grit waste, and groundwater contamination from diesel fuel are clean-up issues that have required outside assistance. In recognition of significant contamination on the property and in accordance with federal law, the Environmental Protection Agency (EPA) proposed that the site be placed on the National Priorities List, more commonly known as the Superfund Site List. This list identifies, assesses, and provides for clean-up of hazardous sites.

Under a clean-up agreement with EPA, Southern Pacific arranged the removal of 30 USTs and permanently closed eight others by 1990. Upon being removed from the Superfund List in September 1989, the Southern Pacific Railroad arranged with the State Department of Health Services to continue remedial action toward additional clean-up of soil and groundwater.

EMERGENCY RESPONSE

Response to a hazardous waste spill varies according to the circumstances under which it is released. Hazardous materials spills on state and federal highways are the responsibility of Caltrans and the CHP, which provide on-scene management of the spill site and coordinate with the Environmental Health Department, Office of Emergency Services, and the local fire department as part of the City's Hazardous Materials Emergency Response Plan.

The Roseville Fire Department shoulders the primary responsibility for events that occur within the City. The Roseville Fire Department is staffed with its own Hazardous Materials Response Team, which also assists or provides back-up for industry response teams and for the Placer County and Sacramento City Hazardous Materials Response Teams. To ensure proper handling of a hazardous materials release, the Roseville Fire Department has developed its own Hazardous Materials Response Plan. This plan outlines the participants, responsibilities, organization, and operational duties in the event of a hazardous materials emergency, including clean-up and de-contamination procedures.

Evacuation routes are identified in the City’s Multi-Hazard Mitigation Plan.
GOALS AND POLICIES

HAZARDOUS MATERIALS

Goal SAFE5.1  Protect the community’s health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.

Policy SAFE5.1  Require the disclosure, use, storage, and disposal of hazardous materials to comply with local, state, and federal safety standards.

Policy SAFE5.2  Work with Placer County and other public agencies to inform consumers about household use and disposal of hazardous materials.

Policy SAFE5.3  Cooperate fully with both public and private agencies in the event of a hazardous material emergency.
HEALTH SERVICES

Emergency Medical Services (EMS) is provided by the Roseville Fire Department and a private ambulance transport provider. The Roseville Fire Department delivers Advanced Life Support (ALS) via paramedic engine and truck companies.

The private ambulance transport provider, under contract with the County of Placer, delivers ALS service via ambulances staffed with one Paramedic and one EMT. The County has established a response performance measure for the private ambulance provider.

Roseville is served by two hospitals located within the City. Sutter Roseville Medical Center provides several hundred licensed beds and a full array of services and programs. The Kaiser Foundation Hospital also located in Roseville, provides several hundred licensed beds and a full array of services and programs.

GOALS AND POLICIES

HEALTH SERVICES

Goal SAFE6.1 Ensure, to the extent feasible, an adequate level of health care services for all members of the City.

Policy SAFE6.1 The City shall plan for the continued growth and establishment of health services, and expand healthcare access to serve the South Placer region.