

## D. Community Safety Element

## D. COMMUNITY SAFETY ELEMENT

### INTRODUCTION

The Community Safety Element identifies potential natural and human-created hazards, and describes activities and services that provide protection from these hazards. Topics addressed in this Element include emergency preparedness, homeland security, flooding, hazardous materials/contaminated sites, fire hazards, seismic and geologic hazards, and other hazards.

The purpose of the Community Safety Element is to reduce the potential risk of death, injuries, property damage, environmental, economic, and social dislocation resulting from hazards such as fires, floods, earthquakes, landslides and other hazards. Each of these topics is addressed as it applies to the City of Rocklin. Although not large in area, the Rocklin planning area is characterized by slopes, open space areas subject to wildland fires, and potential for localized flooding. Other safety issues unique to Rocklin include the existence of quarries and bulk petroleum storage and transmission pipelines.

Homeland security is a relatively new issue not addressed in the 1991 General Plan. The City of Rocklin serves in the role of first responder to any local threat to homeland security. As with all safety issues, it is essential that the City coordinate with nearby cities, Placer County, and other local and regional agencies in responding to hazardous situations.

The City of Rocklin is traversed by Interstate 80 (I-80), a major east-west freeway, State Route 65 (SR 65), which borders portions of the western boundary of the City, and railroad tracks that carry both freight and passenger traffic. Each of these routes regularly carries hazardous materials or hazardous wastes that could create significant harm to residents if released. Because such materials are traveling in interstate shipment, the ability of the City to control the manner or time of shipment is substantially limited. Setbacks may be considered, but are probably not feasible, because most areas along the major routes are already developed. Nonetheless, the fact that such shipments occur, and are a source of at least some hazard to Rocklin residents, raises the issue for discussion. The General Plan includes policies supporting Police and Fire Department preparation for response, improved resident education and communication regarding hazards, and similar measures.

Brush and wildland fires still pose a threat. If severe weather conditions occur, involving high temperatures and winds, sparks from even distant fires can pose a threat to lives and structures. There is little that can be done to control such risks themselves, other than clearing vegetation in appropriate areas, maintaining vigilance, and requiring adequate access and fire safe construction materials.

In some cases, residential and other urban uses are located in the foothills adjacent to unimproved property. The fire risk for such development is significantly greater than for other urbanized uses in the community, due to the proximity of high fuel areas.

General Plan policies promote access at regular intervals for Fire Department personnel and equipment. This is an area in which policies relating to fire safety provide mutual support for

policies supporting open space corridors and linear parks. Such uses can be consistent with the application of appropriate policies. For example, one of the key issues is vehicular access, and General Plan policies provide guidance with regard to the expectations of the community.

Development in known wildfire areas increases exposure and the likelihood of emergency response. Fire and other emergency personnel, as a result, plan for such emergencies through training, and in some cases acquiring new equipment and hiring additional personnel. The City currently requires owners of large areas of grasslands that are annexed to the City to pay the costs for the City to contract with the California Department of Forestry and Fire Protection (CalFire) to provide fire suppression. The General Plan includes a policy that calls for these additional costs to be borne by the development creating the additional impact.

The City of Rocklin currently has a total of six public railroad crossings, including one above-grade road crossing on Sunset Boulevard. Highway 65 also crosses over the railroad tracks, but is located in the City of Roseville just west of Rocklin. Interstate 80 provides the closest unimpeded crossing of the railroad tracks to the east of Rocklin, in Newcastle.

Due to the lack of over/undercrossings of the railroad tracks, portions of the city are isolated each time a train passes. This could pose an obstacle to emergency vehicles, especially in the event a train stalls or derails. The General Plan provides for adequate services to be maintained on both sides of the mainline track in the event of a stoppage or derailment along the tracks; however, the City Council has contemplated another grade separation over the railroad tracks. The City has conducted a study which looked at the feasibility of constructing a railroad undercrossing or an overcrossing at Midas Avenue. Both options are considered viable depending upon the availability of funding. The City has submitted information to the State Grade Separation Funding Program and has also included the project in Rocklin's Capital Improvement Program (CIP).

## DESCRIPTION OF EXISTING CONDITIONS

### GEOLOGIC HAZARDS

The City of Rocklin is located in the Central Valley, in Placer County. The Central Valley is bounded by the Sierra Nevada Range on the east and the Pacific Coast Ranges on the west.

The Rocklin planning area is located within the Loomis Basin, which is situated in the western foothills of the Sierra Nevada Range. The Sierra Nevada is a large fault block composed of granitic and metamorphic rocks tilted gently from the summit near Donner Lake to the west, where the block dips under sedimentary and alluvial units of the Sacramento Valley. Most of the surface of the Loomis Basin consists of granitic rocks.

Throughout much of geologic time, the Sierra Nevada has experienced mountain uplift, deep erosion off the crest of the mountains, and sporadic volcanic activity from vents near the crest, or in Nevada. Stream erosion during the periods of uplift, combined with the effects of volcanic activity, has produced a variety of sedimentary rock units present in the Loomis Basin.

Deepening erosion and sedimentation within the Loomis Basin within the past million years have resulted in alluvial deposits now present along former and existing stream channels. The soils within the Rocklin planning area are predominantly of the Exchequer-Inks units. These soils are undulating to steep, well-drained and somewhat excessively drained soils that are shallow and found over volcanic rocks. Soils of the Andregg-Caperton-Sierra and Cometa-Ramona units are also found in the Rocklin area. Andregg-Caperton-Sierra soils are undulating to steep, well-drained and somewhat excessively drained soils that are deep to shallow over granitic rock. Cometa-Ramona soils are undulating, deep and very deep, well-drained soils found on terraces. These soils are of poor quality, and do not support agricultural uses, with the exception of cattle grazing.

The Soil Survey of Placer County, Western Part, identifies soil types in portions of the planning area that may require special review and consideration where construction of foundations, structures, roadways and underground infrastructure are proposed. These include Alamo Variant Clay (wetness, shrink-swell potential, and low strength); Exchequer very stony loam (depth to rock); Inks-Exchequer Complex (slope, depth to rock); and Fiddyment-Kaseberg loams (depth to rock, cemented pan, shrink-swell potential, and strength).

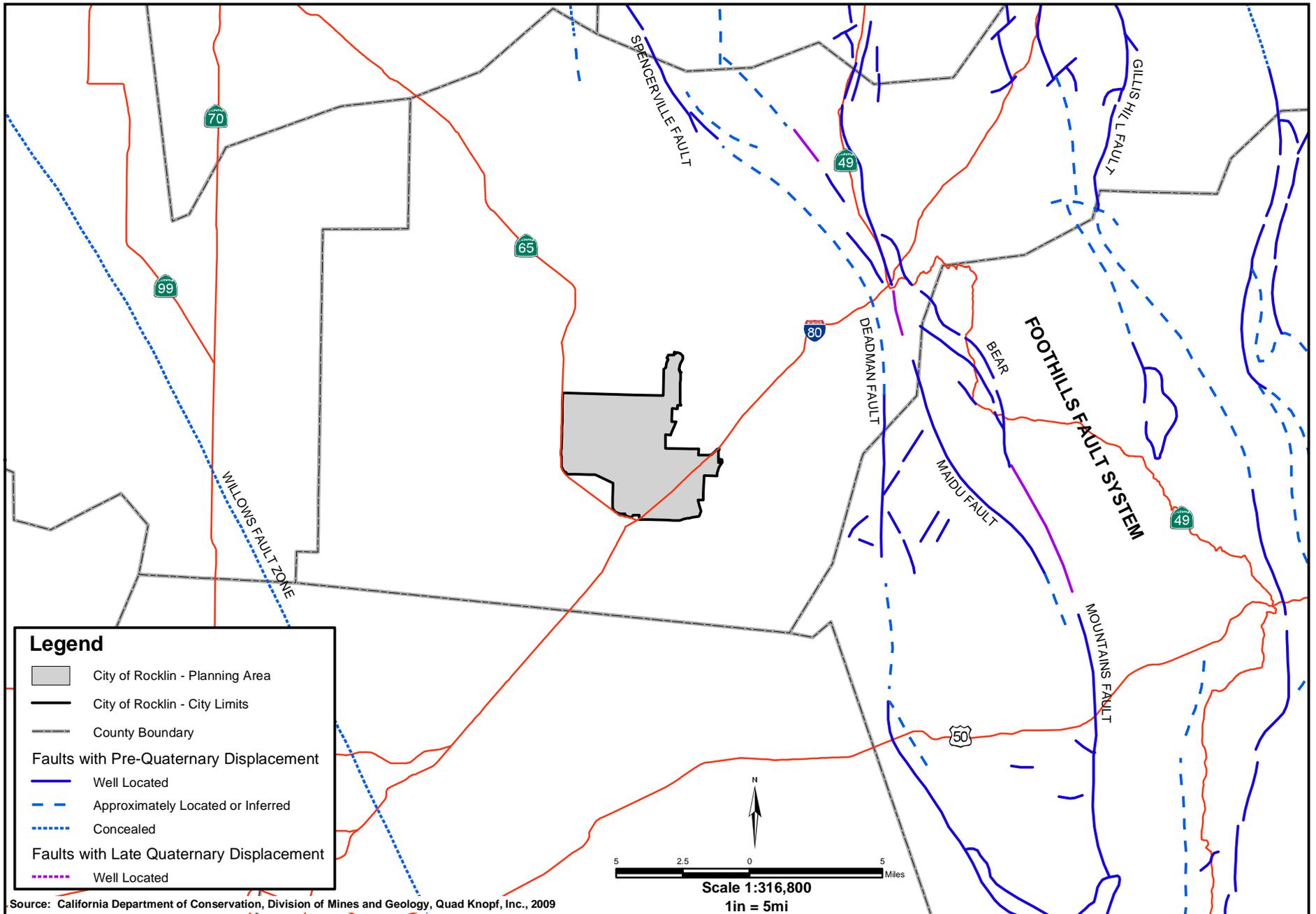
Geologic hazards include ground shaking from seismic events, erosion, landslides, and seiches. Seiches (an earthquake generated wave in an enclosed or partially enclosed body of water) are not a significant risk, because of the absence of a body of water that could pose a threat as a result of seismic activity. The risk of erosion of most soil types found in the planning area is slight to moderate, though the risk of erosion increases as the slope increases, and erosion control should be practiced in connection with any development.

## SEISMIC SAFETY

The City of Rocklin is located in an area that has a relatively low risk of seismic activity. While the seismic risk may not be considered substantial, seismic activity may affect development in the planning area and cannot be completely discounted as a planning factor.

There are no known active faults in Placer County. The distance to major regional faults and general stability of the underlying geology of the planning area combine to minimize the potential localized impact of seismic events that may occur elsewhere. Figure 4-10 illustrates the known and inferred active faults in the vicinity of the City of Rocklin. The Alquist-Priolo Earthquake Fault Zoning Act, enacted in 1972, provides for the identification of special study zones near active fault areas. No Alquist Priolo zones have been established in Placer County (Special Publication 42, 1997, California Geological Survey).

The Rocklin area could be subject to moderate to strong ground shaking from earthquake or fault zones located in the area near the boundary of the Sierra Nevada and the Sacramento Valley, and near the Coast Ranges and the San Francisco Bay Area. There are other fault zones in the Sierra Nevada foothills that could also produce seismic effects in the planning area. The nearest well-defined fault zone is a portion of the West Branch of the Bear Mountains Fault Zone, a portion of the Foothills Fault System, which follows the eastern side of the Sacramento Valley through El Dorado, Placer and Amador Counties. The closest recently active fault in the western Sierra



Nevada foothills is the Cleveland Hills fault, which is situated approximately 40 miles north of Rocklin. This fault was the source of the 1975 Oroville earthquake, which was felt strongly in Placer County and neighboring areas. Within the Sierra Nevada foothills, the maximum credible earthquake has been estimated at a magnitude of 6.5 and the maximum probability earthquake has been estimated at a magnitude of 5.0 to 5.5 (Rocklin Civic Center Plan DEIR, 12/1994).

All development in Rocklin is subject to the effects of potential seismic activity. The Uniform Building Code (UBC) has undergone continuing review and revisions to ensure that building safety issues are adequately addressed in the design and construction of structures in areas subject to seismic activity, including Rocklin.

## FLOOD HAZARDS

Flood hazards in Rocklin occur due to overflows from the existing stream drainage system (see Figure 4-11). Drainage in the planning area is characterized by a variety of watersheds that flow westward from the Sierra Nevada foothills, and ultimately discharge into the Sacramento River southwest of the city.

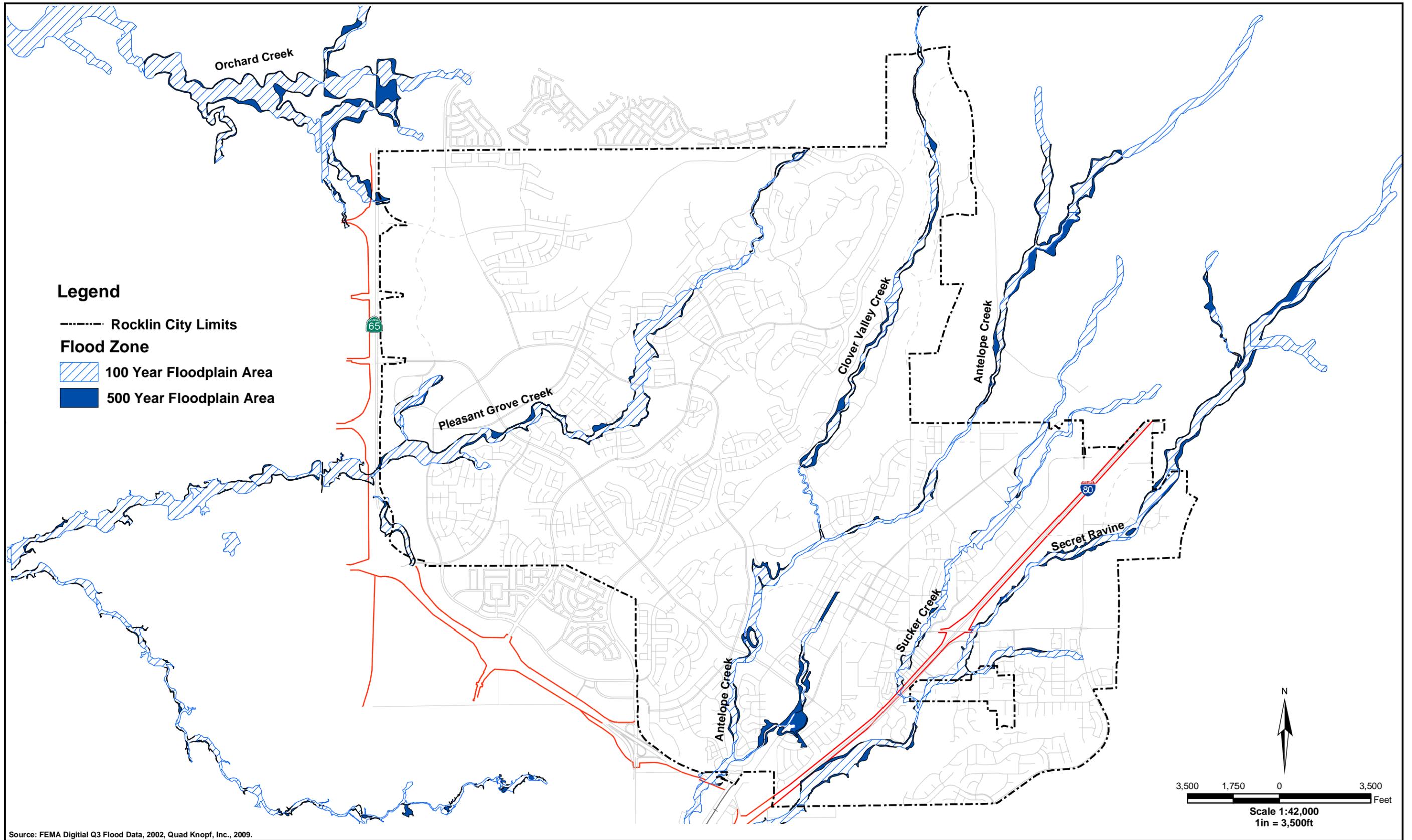
The City's urban drainage system discharges into the creeks that transect the community. These include Antelope Creek, Secret Ravine Creek, Clover Valley Creek, Sucker Creek, and Pleasant Grove Creek (see Figure 4-3 in Chapter IV (B) of this document). All of these ultimately discharge into Dry Creek. The Pleasant Grove Creek watershed flows to Sutter County, where it discharges into the Sacramento River (see Figure 4-12).

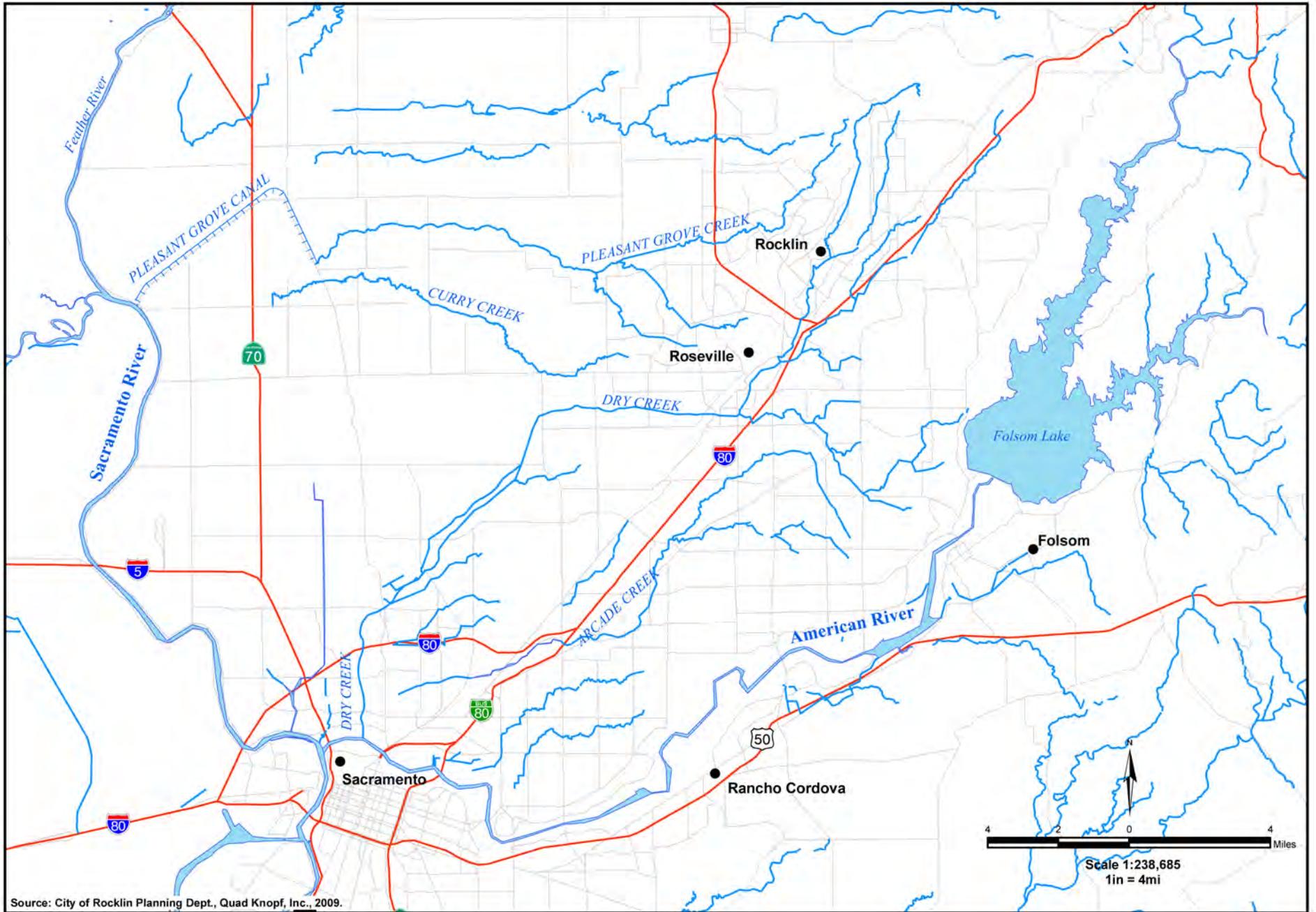
The major contributors to flooding are Antelope Creek, Secret Ravine Creek, Clover Valley Creek and Sucker Creek. These perennial streams can overflow during storm events, but flooding is typically of a local nature.

The City of Rocklin participates in the federally sponsored Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). FEMA has mapped known floodplains in Rocklin and surrounding areas. The maps show 100-year and 500-year floodplains and floodways located primarily along the channels of the creeks listed above (see Figure 4-11). A 100-year floodplain is an area that experiences a 1-in-100 chance of flooding in any given year; a 500-year floodplain is an area that experiences a 1-in-500 chance of flooding in any given year. Floodways are areas subject to much more frequent flooding and are necessary to carry the normally expected flows of the various waterways.

The soils in Rocklin typically have a subsurface hardpan layer that inhibits the infiltration of rainwater. Surface soils frequently become saturated following periods of rainfall, and areas of standing water are common during such periods. Inadequate storm drainage in the Central Rocklin area also contributes to the problem of standing water. The City has developed a Master Plan for the Central Rocklin area to address drainage issues and is in the process of implementing the recommended improvements contained within the Master Plan.

The City participates in the Placer County Flood Control and Water Conservation District, which was formed to solve flood and water conservation problems in Placer County. In addition, the





City has adopted a Flood Hazard Ordinance to restrict or prohibit unsafe land uses in flood-prone areas, to control alteration of natural floodplains, control development activities that would increase flood danger, and control the diversion of flood waters (Rocklin Municipal Code, Chapter 15.16).

## **HAZARDOUS MATERIALS MANAGEMENT**

Hazardous material incidents may occur anywhere and at any time in the City of Rocklin. Containment, identification and cleanup of hazardous materials are mandated by law. Hazardous materials spills on state and federal highways are the responsibility of Caltrans and the California Highway Patrol, which provide on-scene management of the spill site and coordinate with the Environmental Health Department, California Emergency Management Agency, and the local fire department.

Incident command and management responsibility at the scene of hazardous materials incidents within the City of Rocklin have been assigned to the Rocklin Fire Department (City of Rocklin Resolution No. 2004-226). For all hazardous materials incidents occurring in the Rocklin Fire Protection District, Placer County Sheriffs Department will assume scene management responsibilities.

All City of Rocklin Fire Department personnel have been trained to the First Responder Operational (FRO) level. In addition, several personnel have been trained to the Hazardous Materials Specialist level. The Rocklin Fire Department is staffed with its own Mass Decontamination Response Teams which provides mutual aid support to Hazardous Materials Response Teams within Placer County and to surrounding areas.

Hazardous materials incidents, even minor ones, usually require a multi-agency response. City of Roseville Fire Department and Placer County Interagency Hazardous Materials Response Teams provide mutual-aid response to the City of Rocklin when requested.

The City has enacted a Hazardous Materials Cleanup ordinance that would allow it to require reimbursement for cost incurred from those responsible for hazardous waste spills (Rocklin Municipal Code, Chapter 8.20).

## **EMERGENCY PREPAREDNESS**

Emergency procedures in the City are guided by the Emergency Operations Plan (Rocklin Municipal Code, Chapter 2.32). The Emergency Operations Plan provides a framework to guide the City's efforts to mitigate and prepare for, respond to, and recover from major emergencies or disasters.

The City has established a Disaster Council, which is responsible for reviewing and recommending emergency operations plans for adoption by the City Council. The Disaster Council plans for the protection of persons and property in the event of fires, floods, storms, epidemics, riots, earthquakes and other disasters.

## FIRE HAZARDS

The Rocklin Fire Department provides fire protection services in the City of Rocklin. The Rocklin Fire Protection District, through a contract with the City of Rocklin, serves the Greenbrae unincorporated “island.” Fire protection outside the planning area is provided by Placer County, under a contract with the California Department of Forestry and Fire Protection (Cal Fire).

Rocklin belongs to a statewide mutual aid system, through which fire suppression assistance is provided to a member agency requesting assistance when it has exhausted its own resources and needs assistance. Bordering fire jurisdictions participate with Rocklin in the statewide mutual aid system.

There are currently three fire stations in the city. Fire Station No. 1 is located at 4060 Rocklin Road, Fire Station No. 2 is located at 3401 Crest Drive and Fire Station No. 3 is located at 2001 Wildcat Blvd. A fourth station is planned at the future intersection of Park Drive and Valley View Parkway, but is currently being postponed until adequate funding for construction and staff needs is identified.

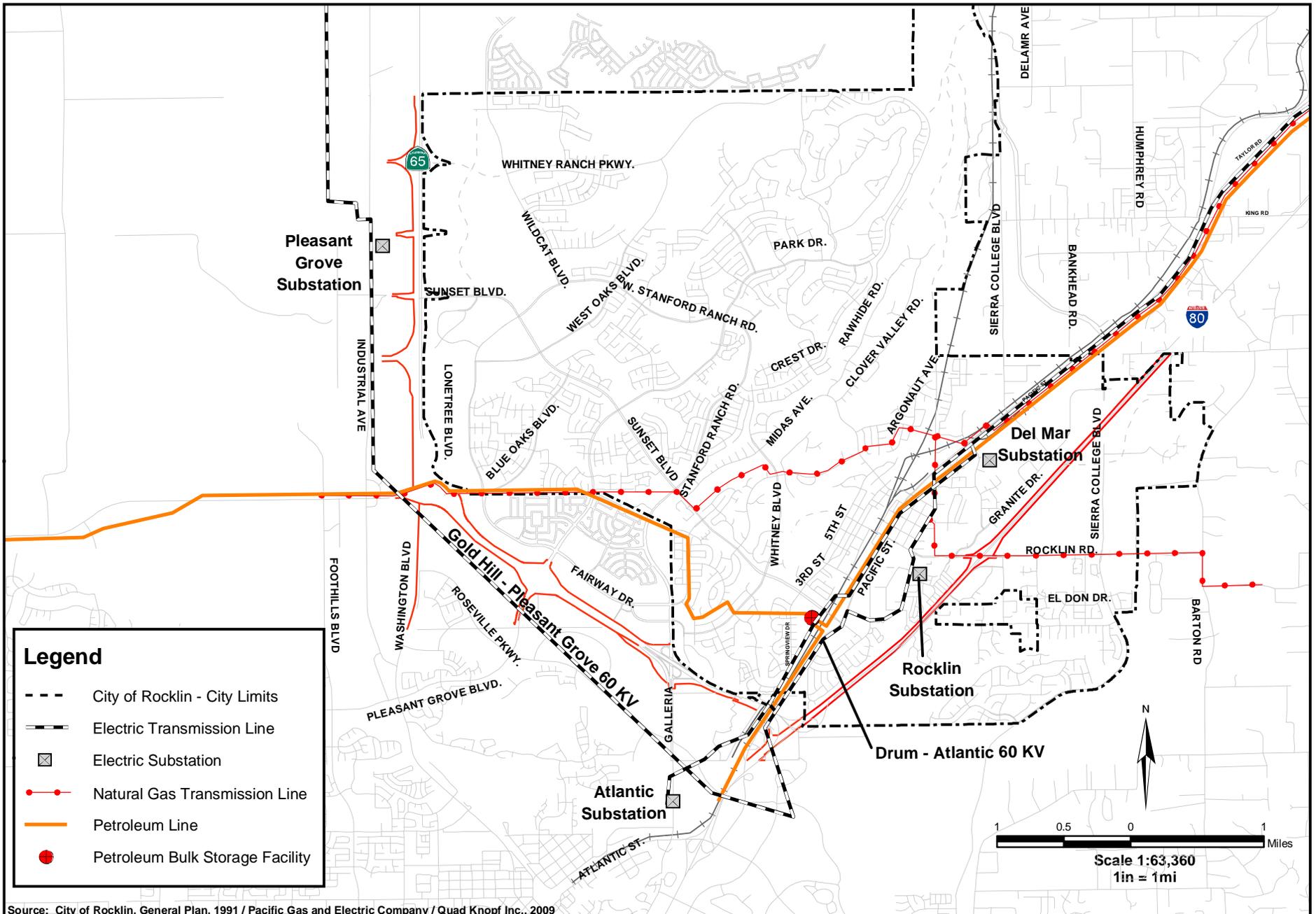
While the major fire threat in the city is related to urban development, annexations in the early 1990’s brought land into the city that contains large areas of grassland and is subject to a threat of wildfire. These areas include Clover Valley, areas at the southern end of China Garden Road, portions of Whitney Oaks, the Croftwood/Dias Lane area, Whitney Ranch and, open-space easements and recreational properties.

The City has adopted the California Fire Code as part of its building regulations. The Code governs the fire safety requirements in building and construction (Rocklin Municipal Code, Chapter 15.04).

## OTHER HAZARDS

Additional potential hazards within the Rocklin planning area include hazardous materials spills or other accidents on I-80, SR 65 or the Union Pacific Railroad. All are major transportation corridors of regional or national significance. Vehicles and rail cars may carry explosives, military ordnance, chemicals and a variety of petroleum products. Cleanup where accidents occur involving these facilities would be the responsibility of Caltrans or the Union Pacific Railroad. Two derailments have occurred in the City of Rocklin, but were confined to the railroad right-of-way, and no injuries or hazardous materials spills occurred.

Figure 4-13 shows natural gas, petroleum and major electric transmission lines in the Rocklin planning area. Refer to the Public Services and Facilities Element (Chapter IV (F)) for a discussion of electrical and natural gas services.



Source: City of Rocklin, General Plan, 1991 / Pacific Gas and Electric Company / Quad Knopf Inc., 2009

CITY OF ROCKLIN

Natural Gas, Petroleum and Electric Transmission Lines

Figure 4-13



## PETROLEUM BULK STORAGE FACILITY AND PIPELINES

A petroleum bulk storage facility known as the Roseville Station began operations in 1957 at the northwest corner of Pacific Street and Sunset Boulevard. The facility operates 24 hours a day, 7 days a week. The facility receives incoming petroleum product via a 12-inch line from Concord. The product is then pumped north to Chico via an 8-inch diameter line and east to Sparks, Nevada through 6-inch, 8-inch and 12-inch diameter lines. There is also a 4-inch line supplying the Roseville rail yards (see Figure 4-13 for pipeline locations within the planning area). The types of products passing through the facility include gasoline, diesel, commercial jet fuel and military jet fuel. The total capacity of all storage tanks on the site is approximately 455,000 barrels or 19-million gallons. The Kinder-Morgan Energy Company now owns the pipelines and bulk storage facility. The Southern Pacific Transportation Company originally owned the facility. Pipelines to the northeast of the facility are located primarily within railroad rights-of-way) and pipelines to the northwest are generally located on private properties.

The facility grounds are controlled with security fencing, and guard dogs patrol the interior fenced area. Entry to the facility is through either locked gates off Sunset Boulevard or a checkpoint off Pacific Street. Kinder-Morgan has developed local response teams, should a product release occur, and has also upgraded the containment system surrounding the tanks. The dike area is designed to hold full release from the largest tank, should failure occur.

## COMMUNITY SAFETY ELEMENT GOALS AND POLICIES

**GOAL FOR COMMUNITY SAFETY:** To minimize danger from hazards and to protect residents and visitors from earthquake, fire, flood, other natural disasters, and human-created hazards such as train derailment, industrial accidents, acts of war or terrorism, and accidental release of harmful materials.

### General Policies

- S-1 Require engineering analysis of new development proposals in areas with possible soil instability, flooding, earthquake faults, or other hazards, and to prohibit development that cannot mitigate the applicable hazard.
- S-2 Maintain a City Emergency Operations Plan to include the National Incident Management System (N.I.M.S.)
- S-3 Coordinate with local and State Emergency Management agencies utilizing the Standardized Emergency Management System (S.E.M.S.) and National Incident Management System (N.I.M.S.) in order to facilitate multi-agency emergency response.
- S-4 Identify in the Emergency Operations Plan evacuation routes and shelter locations for use in case of disasters or emergencies.
- S-5 Maintain appropriate standards for minimum road widths and turnarounds.
- S-6 Coordinate with State and Federal agencies regarding homeland security, recognizing the City's role as first responder to local incidents.

### Flooding Policies

- S-7 Consult with the Placer County Flood Control and Water Conservation District and other appropriate entities regarding regional approaches for the planning, construction, operation and maintenance of drainage and flood control facilities.
- S-8 Maintain and implement the City's Ordinance regarding "Flood Hazard Areas."
- S-9 Ensure that the 100-year floodplain, based upon the most current information, both upstream and downstream, is not adversely affected by new development.
- S-10 Require that new development detain on-site drainage such that the rate of runoff flow is maintained at pre-development levels, except where detention is not recommended in plans and policies adopted by the Placer County Flood Control and Water Conservation District (PCFCWCD), and to require coordination with other projects' master plans to ensure no adverse cumulative effects. In lieu of detention, the City may require retention and/or off-site drainage improvements that are more beneficial to the community's overall drainage system.

- S-11 Ensure that new development does not result in on-site flooding or increase flooding of off-site properties.
- S-12 Require new development to annex into an existing drainage maintenance district where warranted.

#### Hazardous Materials/Contaminated Sites Policies

- S-13 Require existing and new commercial and industrial uses involving the use, handling, transport or disposal of hazardous materials within the City to disclose their activities in accordance with Placer County guidelines and the requirements of State law.
- S-14 Require that construction activities cease if contamination is discovered on construction projects until the contamination is reported, and its extent is assessed, delineated, and isolated, as appropriate. Remediation shall occur to the satisfaction of the appropriate responsible agency (such as the Placer County Environmental Health Services, the Central Valley Regional Water Quality Control Board, the Department of Toxic Substances Control, or the City of Rocklin, depending on the type of contamination).
- S-15 Require site-specific hazard investigations to be conducted, if determined to be necessary by the City, to confirm potentially contaminated soils prior to approval of new discretionary development projects.

#### Fire Hazards Policies

- S-16 Require new development and projects proposing land use changes to annex into existing or new Community Facilities Districts for fire prevention/suppression and medical response, or to create other financing mechanisms as necessary.
- S-17 Require substantially vacant newly annexed areas containing wildland fire potential to bear additional costs associated with contracting to CalFire for fire suppression or provide other means of mitigation approved by the Fire Department until such time as urban services become available.
- S-18 Incorporate fuel modification/fire hazard reduction planning (e.g., weed abatement, open space management plans, firebreaks, planting restrictions) on lands (both public and private) that contain terrain and vegetative features such as grass, woodlands and severe slopes.
- S-19 Maintain inter-jurisdictional cooperation and coordination, including automatic aid agreements with fire protection/suppression agencies in Placer County.

#### Seismic and Geologic Hazards Policies

- S-20 Provide for seismic safety and structural integrity in residential, commercial, industrial and public facilities through Building Code enforcement.

S-21 Require site-specific geotechnical studies of development proposals in areas subject to landslide potential, erosion, and/or slope instability.

#### Other Hazards Policies

S-22 Require a risk analysis, as appropriate, when reviewing new projects located in close proximity to bulk hazardous material facilities, bulk petroleum transmission pipelines, and railroad travel routes.

S-23 Require quarry safety protection measures prior to the development of any property containing or bordering on an existing quarry. The quarry safety protection measures shall identify public safety hazards associated with quarries and shall specify the protection methods that will be implemented to ensure public safety.

S-24 Reduce the exposure of sensitive receptors to potential health risks from toxic air contaminants (TACs).

#### COMMUNITY SAFETY ELEMENT ACTION PLAN

Please refer to Chapter II, Summary of Goals and Policies and Action Plans, for the Community Safety Element Action Plan.