



Hazards

Hazards are natural and man made conditions that must be respected if life and property are to be protected as growth and development occur. As the ravages of wildland fires, floods, dam failures, earthquakes and other disasters become clearer through news, public awareness and sound public policy combine to require serious attention to these conditions.

Portions of the Southwest planning area may be subjected to hazards such as flooding, dam inundation, seismic occurrences, and wildland fire. These hazards are depicted on the hazards maps, Figure 10 to Figure 14. These hazards are located throughout the Southwest planning area at varying degrees of risk and danger. Some hazards must be avoided entirely while the potential impacts of others can be mitigated by special building techniques. The following policies provide additional direction for relevant issues specific to the Southwest planning area.

LOCAL HAZARD POLICIES

Flooding and Dam Inundation

As shown on Figure 10, Flood Hazards, three dams pose a flood hazard in the Southwest planning area. Failure of the 51,000-acre-foot Vail Lake facility could cause flooding in the Pauba and Murrieta Valleys as well as a three-mile area adjacent to Interstate 15. Failure of the 43,000-acre-foot Lake Skinner Facility could result in flooding along Tualota and Warm Springs Creeks, and eventually the Murrieta Creek. According to the Federal Emergency Management Agency (FEMA), failure of the 800,000-acre-foot Diamond Valley Lake, which is located immediately north in the Harvest Valley/Winchester Area Plan, could result in flooding in the French Valley and eventually the Santa Margarita River.

In addition to hazards posed by dam failures, hazards to life and property could result from a significant flood event on the Santa Margarita River, as well as Murrieta, Temecula, Warm Springs, Santa Gertrudis, and Pechanga Creeks. The areas within the 100 and 500 year flood events can be found on Figure 10, Flood Hazards. Floodplains follow existing creeks and mostly affect lowland areas. The flood plains may also contain rare and significant ecosystems such as riparian habitats or vernal pools.

Many techniques may be used to address the danger of flooding, such as avoiding development in floodplains, altering water channels, applying specialized building techniques, elevating structures that are in flood plains, and enforcing setbacks. This set of policies address the hazards associated with flooding and dam inundation.

Policies:



SWAP 17.1 Protect life and property from the hazards of potential dam failures and flood events through adherence to the Flood and

 Since 1965, eleven Gubernatorial and Presidential flood disaster declarations have been declared for Riverside County. State law generally makes local government agencies responsible for flood control in California.



Inundation Hazards section of the General Plan Safety Element.



SWAP 17.2

Reduce flooding damage through adherence to design and density standards contained in the Master Drainage Plan for Murrieta Creek Area and the Murrieta Creek Drainage Plans.



SWAP 17.3

Adhere to the flood proofing, flood protection requirements, and flood management review requirements of the Riverside County ordinance regulating flood hazards.



SWAP 17.4

Require proposed development projects, which are subject to flood hazards, surface ponding, high erosion potential or sheet flow, be submitted and approved by the Riverside County Flood Control and Water Conservation District.

Wildland Fire Hazard

Due to the rural and mountainous nature and some of the flora, such as the oak woodlands and chaparral habitat, much of the Southwest planning area is subjected to a high risk of fire hazards. These risks are greatest in rural areas and along urban edges. Methods to address this hazard include techniques such as avoidance of high-risk areas, creating setbacks that buffer development from hazard areas, maintaining brush clearance to reduce potential fuel, low fuel landscaping, and building techniques. In still other cases, safety oriented organizations such as Fire Safe can provide assistance in educating the public and promoting practices that contribute to improved public safety. Refer to Figure 11, Wildfire Susceptibility, to see the locations of the wildfire zones within the Southwest planning area.



Fire Fact:
Santa Ana winds create a special hazard. Named by the early settlers at the Santa Ana River valley, these hot, dry winds enhance fire danger throughout southern California.

Policies:

SWAP 18.1

Protect life and property from wildfire hazards through adherence to the Fire Hazards section of the Safety Element of the General Plan.

Seismic

A number of seismic and related hazards are present in the Southwest planning area. The most significant seismic hazard is the Elsinore fault, which runs north-south through the center of the Southwest planning area. Threats from seismic events include ground shaking, fault rupture, liquefaction, and landslides. The use of building techniques, the enforcement of setbacks, and practical avoidance measures will help to mitigate potentially dangerous circumstances. Refer to Figure 12, Seismic Hazards, for the location of faults and liquefaction areas within the Southwest planning area.

Policies:

SWAP 19.1

Protect life and property from seismic-related incidents through adherence to the Seismic Hazards section of the General Plan Safety Element.



Liquefaction occurs primarily in saturated, loose, fine to medium-grained soils in areas where the groundwater table is within about 50 feet of the surface. Shaking causes the soils to lose strength and behave as liquid. Excess water pressure is vented upward through fissures and soil cracks and a water-soil slurry bubbles onto the ground surface. The resulting features are known as "sand boils", "sand blows" or "sand volcanoes." Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures or slumping.