




PASS 16.3 Require proposed development projects, which are subject to flood hazards, surface ponding, high erosion potential or sheet flow, to be submitted and approved by the Riverside County Flood Control and Water Conservation District.

### Wildland Fire

Due to the vast amounts of undeveloped, sloping terrain and the presence of certain types of vegetation such as the oak woodlands and chaparral habitat, much of the Pass is subjected to a high risk of fire hazards. The highest danger of wildfires can be found in the National Forest, rural areas, and along the 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, use of low fuel landscaping, and careful application of fire retardant 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.



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


#### Policies:



PASS 17.1 Protect life and property from wildfire hazards through adherence to the Fire Hazards section of the General Plan Safety Element.

### Seismic

The Pass is one of the most densely faulted areas in Riverside County, as can be seen on Figure 12, Seismic Hazards. Most of the faults are located in the steep slopes of the surrounding mountain ranges. The San Andreas and the San Jacinto fault zones are two of the most active fault systems in southern California. The San Bernardino Mountain segment of the San Andreas fault, while not within the boundaries of this area plan, does have enormous influence on the seismic activity of the region. The Banning fault has a central segment that extends from Calimesa to Whitewater Canyon. Other smaller faults associated with the San Andreas fault system also have the potential for generating earthquakes that would result in strong ground shaking, and perhaps surface rupture in the western portion of the Pass.



*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.*

The San Gorgonio fault zone consists of a series of faults dissipating from the mountain westward into the Cherry Valley vicinity. The San Jacinto fault zone, west of the Pass, is part of the San Andreas fault system. The two systems separate near the San Gabriel mountains where the San Jacinto fault extends southeastward toward the San Jacinto Mountains and the San Timoteo Badlands. Additional faults in the area include the Beaumont Plain fault zone, Pinto Mountain fault, and the Crafton Hills fault zone.

A further complication associated with fault activity is liquefaction, which can occur with groundshaking, and in areas where certain soil conditions and shallow groundwater level exist. The valley between the San Bernardino and the San Jacinto Mountain ranges is prone to moderate liquefaction around Calimesa and