



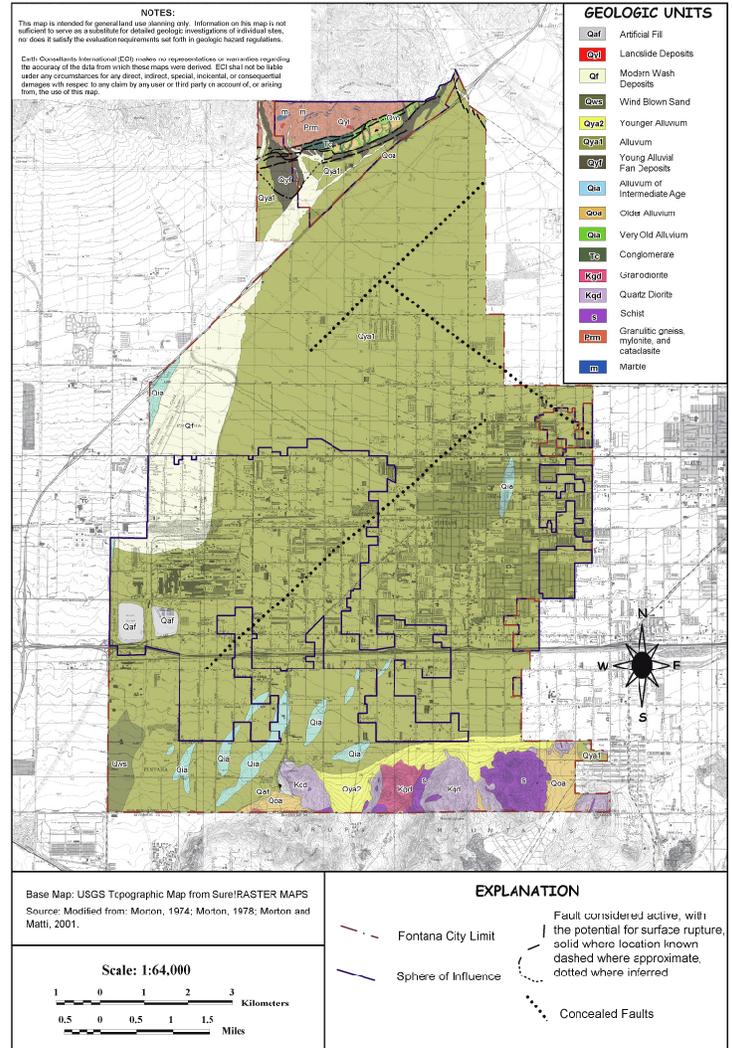
# HAZARD ASSESSMENT ANALYSIS FOR THE SAFETY ELEMENT OF THE GENERAL PLAN City of Fontana, California

## PROJECT DESCRIPTION

The City of Fontana lies in the central part of the Upper Santa Ana River Valley, at the base of the San Gabriel Mountains. Located in the western portion of San Bernardino County, Fontana is one of the fastest growing areas in all of California. Historically an agricultural area, commercial and industrial development within the City is rapidly increasing and residential projects are expanding into the foothills. Most of the City is located on gently sloping alluvial fans consisting of alluvial soils and wind-blown sand. These areas are susceptible to settlement from compressible and/or collapsible soils, and possibly liquefaction where shallow ground water is present. Alluvial fan environments are also vulnerable to flooding, sedimentation, and subsidence from groundwater withdrawal. Newer communities that encroach upon the base of the mountains are susceptible to slope instability hazards such as rockfall, debris flows, and landsliding. Finally, a major active fault zone, the Cucamonga fault, passes through the northern part of the City. This fault zone poses a ground rupture hazard, and therefore requires special geologic studies to determine appropriate structural setbacks. The presence of this fault zone, in addition to several other major faults in the region, including the San Andreas, have the potential to produce moderate to large earthquakes, making the City of Fontana vulnerable to strong seismic shaking.

## SOLUTION

*Earth Consultants International* completed a study that addresses the geologic conditions that pose a hazard to Fontana, including fault rupture, strong ground shaking, liquefaction, slope instability, subsidence, and storm flooding. Our technical report also discusses man-induced hazards associated with the release of hazardous substances into the ground, air or water, and inundation due to catastrophic rupture of dams and reservoirs. The report summarizes the various types of mitigation measures available to reduce the impact of natural and man-made hazards to the City, which can be utilized in the formulation of hazard reduction plans and policies, as well as emergency response and recovery plans.



**Geologic map of Fontana, California showing surficial sediments, bedrock, and faults within City limits.**

