S 7.11 Coordinate with the Public Utilities Commission (PUC) and/or utilize the Capital Improvement Program, to strengthen, relocate, or take other appropriate measures to safeguard high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits that (AI 4):

- extend through areas of high liquefaction potential;
- cross active faults; or
- traverse earth cracks or landslides.

S 7.12 Require extra design considerations for lifelines across subsidence areas.

Earthquake Response System

Half of the magnitude 5.0 and greater earthquakes in California are preceded by immediate foreshocks (earthquakes within 72 hours and 10 kilometers of their mainshock). In 1991, using this information, a group of scientists developed an earthquake preparation system based on anomalous earthquake activity along the southern San Andreas fault. This system could be adapted by the County of Riverside to respond to short-term increases in hazard from the San Andreas fault.

Certainly, thoughtfulness and care must be exercised to construct a system that will enhance public safety without promoting rumors or fear. Also, the system must not be a substitute for long-term mitigation efforts. Such potential difficulties do not reduce the usefulness of short-term, pre-event response plans. Over time, new data and additional research should allow similar systems to be developed for other major southern California faults.

Policies:

S 7.13 Develop a system to respond to short-term increases in hazard on the southern San Andreas fault, based on probabilities associated with foreshocks. (AI 85)

Emergency Evacuation

The State of California Government Code Section 65302 (g) requires local governments to assess the potential impact that flooding, and failure of dams or other water retention structures, might have on their jurisdiction. Safety Elements of General Plans must assess the impact of flooding from storm activity such as a 100-year flood event. A 100-year flood event is a flood that has a 1/100 chance of occurring in any one year, and a 26% chance of occurring during a typical 30 year home mortgage. Smaller-scale flooding generally associated with overburdened storm drain and canal systems can damage property and hinder emergency activities such as fire department access or evacuation.

Policies:

S 7.14 Regularly review and clarify emergency evacuation plans for dam failure, inundation, fire and hazardous materials releases. (AI 88)

State Seismic Hazard Zones:
The Alquist-Priolo Earthquake Fault Hazards Zones Act addresses only the hazard of surface fault rupture - a phenomenon that only accounts for a relatively small percentage of earthquake losses. The Seismic Hazards Mapping Act was enacted to address the other 95% of earthquake losses. This Act requires the State Geologist to: 1) compile maps identifying seismic hazard zones, for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes; 2) submit these maps to all affected cities, counties, state agencies, and the State Mining and Geology Board for review; and 3) provide official maps to affected cities, counties, and state agencies.

For additional information regarding Seismic Hazard Zones, please visit the Division of Mines & Geology at: http://www.consrv.ca.gov/dmg/.