

Currently, groundwater recharge in the Coachella Valley area is minimal. The Coachella Valley Water District operates a pilot recharge facility south of Lake Cahuilla near Avenue 62 and Madison Street, in the city of La Quinta. The facility has been in operation since 1996 and has shown that recharge is feasible there (Steve Robbins, personal communication, 1999). Design of a full-scale facility at this location will likely begin within the next several years.

#### **2.6.4 Development of a GIS Subsidence Hazard Map for Riverside County**

A digital Subsidence Hazard Map for Riverside County was prepared at a scale of 1:250,000 (Plate 2-4). The accuracy of the Subsidence Hazard Map is about 1:100,000. Plate 2-4 focuses on land subsidence initiated exclusively by the withdrawal of ground water from alluvial valleys. As discussed in preceding sections, this is a widespread problem which has been implicated in several areas of documented subsidence.

Surface Classification - To facilitate the subsidence analysis and prediction, the ground surface of the study area was divided into three categories based upon the data collected (Plate 2-4):

- 1) Areas of documented subsidence
- 2) Areas of potential subsidence
- 3) Areas of low to no potential for subsidence.

Areas of potential subsidence are generally underlain by Holocene- and Pleistocene-age alluvial sediments, with the potential for the presence of groundwater. The concept is that alluvial valleys, especially is underlain by thick sediment sequences, have the potential to subside.