SUMMARY

Based upon the water level measurements taken in 2003, the following points can be made relative to the status of groundwater in Butte County:

- Groundwater levels in many of Butte County's groundwater dependant sub-areas have steadily declined since the late 1990's. Groundwater levels in the North Yuba, Thermalito, Pentz, Esquon, M&T, Durham-Dayton, Vina, and the California Water Service (Chico) Sub-areas are now at comparable levels to those during the drought of the early 1990's.

- The rate of decline in the groundwater levels varied from about 0.8 to 2.0 feet per-year. It is believed that these declines are mostly climate related and not the result of increased groundwater use. An examination of key hydrographs from these areas suggests that once precipitation returns to a more normal pattern that groundwater levels should recover. However, the situation should be evaluated closely over the next few annual updates.

- One exception may be the California Water Service (Chico) Sub-area where the groundwater level in one key well is now at a historic low. Declining groundwater levels are expected to continue in the California Water Service (Chico) Sub-area as a result of increased water demand from urban growth.

- The annual groundwater level fluctuation in the two key wells within the California Water Service (Chico) Sub-area varied from about 60 to 150 feet below the ground surface during 2003.

- No land subsidence was detected in the County from an evaluation of the extensometer records in the Western Canal and M&T Sub-areas. Extensometers were installed in the Richvale and Biggs-West Gridley Sub-area in 2003. Records from these instruments will be evaluated in the 2004 annual update.