

## **MEASUREMENT FREQUENCY AND PERIOD OF RECORD**

Groundwater level monitoring in the Sacramento Valley portion of Butte County is currently being conducted by a number of different private and public agencies. Historically, the Department of Water Resources has maintained the most comprehensive, long-term groundwater level-monitoring grid, with approximately 210 different wells monitored over the last 50 years in the Sacramento Valley portion of Butte County. Within this period of time, the annual size of the monitoring grid has fluctuated from as few as 50 wells, to about 180 wells, depending upon the activity of special studies in the area. Until 1989, the majority of these wells were measured twice per-year, during the spring and fall. Beginning in 1990, the groundwater level monitoring was increased to monthly, before returning to a semi-annual measurement in 1995. In 1997, the Butte County Department of Water Resource and Conservation, in cooperation with the Department of Water Resources, began to expand the number and frequency of groundwater level monitoring in the valley portion of Butte County. Currently 104 wells are monitored in Butte County. These wells consist of a mixture of domestic and irrigation wells, along with dedicated observation wells. Approximately 29 of the 104 wells are equipped to continuously monitor and record changes in groundwater levels. The remaining wells are measured four times per-year, during March, July, August and October. The locations of wells monitored in Butte County are shown in Appendix A.

In addition to the groundwater level monitoring conducted by Butte County and Department of Water Resources, California Water Service Company currently measures monthly groundwater levels in approximately 60 municipal groundwater supply wells in the Chico Urban area. California Water Service wells are typically deep wells that draw from the lower Tuscan Formation aquifer system. The U. S. Bureau of Reclamation and USGS are not currently measuring groundwater levels in Butte County, but has monitored wells in the past.