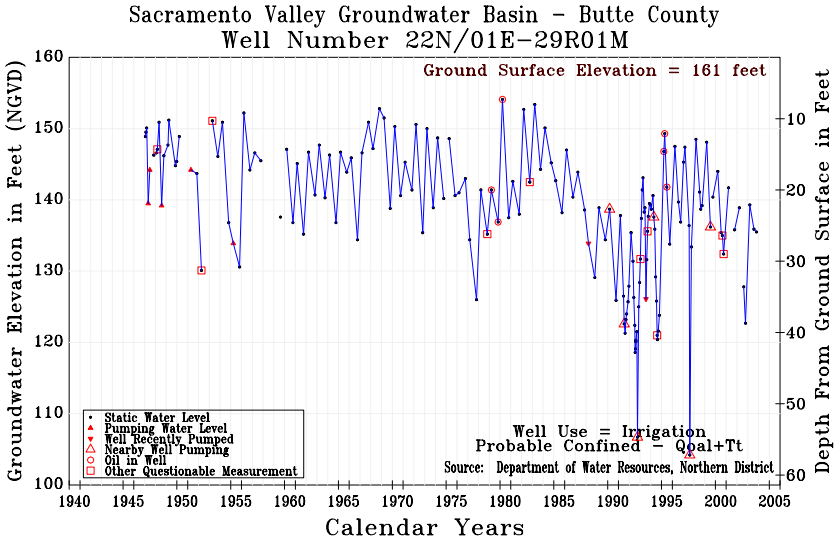
M & T Sub-Area (Well Number 22N/01E-29R01M):

The figure below is a hydrograph for well 22N/01E-29R01M, located just south of Big Chico Creek in the northern portion of the M&T Sub-area. The well is surrounded by agricultural orchard production, supported by groundwater extraction. This well is an active irrigation well of intermediate depth, with a groundwater level measurement record dating back to the late-1940s. Groundwater levels in this well represent the confined portion of the aquifer. The groundwater levels in this well were monitored on a semi-annual basis until 1991 and on a monthly basis from 1991 to about 1994. Since 1994, the groundwater levels have been monitored four times a year during March, July, August and October.

The figure shows that the average seasonal fluctuation in groundwater levels is about 10 feet during years of normal precipitation and up to 20 feet during years of drought. Long-term comparison of spring to spring groundwater levels show a small decline in groundwater levels associated with the 1976-77 drought, followed by a larger decline associated with the 1986-94 drought. Overall comparison of spring to spring groundwater levels associated with this confined portion of the aquifer system, during years of normal precipitation, have changed little since the early 1960s.



Hydrograph for Well 22N/01E-29R01M

Groundwater levels in this well have declined on average about two feet per-year since 1999. The reason for the decline is probably two fold. First climate is probably partly responsible for the groundwater level decline. Secondly, the well is in proximity to the city of Chico so there may be an influence from the municipal groundwater extraction occurring in the California Water Service area. The relative impact of these two factors is currently unknown. The overall record would suggest that when precipitation returns

to a more normal pattern, that groundwater levels should recover somewhat. Currently, groundwater levels are near those recorded during the drought of the early 1990's. An examination of the overall record, however, reveals that long-term depletion of groundwater in storage is probably not occurring at this time. This is an sub-area that needs to be watched carefully in the future.