## Western Canal Sub-Area (Well Number 20N/01E-35C01M):

The figure below is a hydrograph for an active domestic well 20N/01E-35C01M, in the central portion of the Western Canal Sub-area. The area surrounding this well is characterized as rural agricultural. Agricultural cultivation in this area consists of rice production supported by surface water in normal years and a mixed source in drought years. The well is constructed in the uppermost aquifer system. The groundwater level measurement for this well record dates back to the mid-1960s. 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, this well has been monitored four times a year during March, July, August and October.

The figure shows that the spring to summer fluctuation in groundwater levels averages only 2 to 3 feet during years of normal precipitation and 4 to 8 feet during years of drought. Summer groundwater level monitoring indicates that the upper aquifer recharges during summer months due to flood irrigation for rice production. In areas of flood irrigation, it is important that domestic wells have an adequate annular seal in order to restrict potential contamination from surface sources and maintain a high quality source of domestic groundwater. Long-term comparisons of spring-to-spring groundwater levels show almost no change associated with the 1976-77 drought and only a small decline associated with the 1986-94 drought. Further long-term analysis of spring-to-spring groundwater levels indicates very little change since the late 1940s.



Hydrograph for Well 20N/01E-35C01M