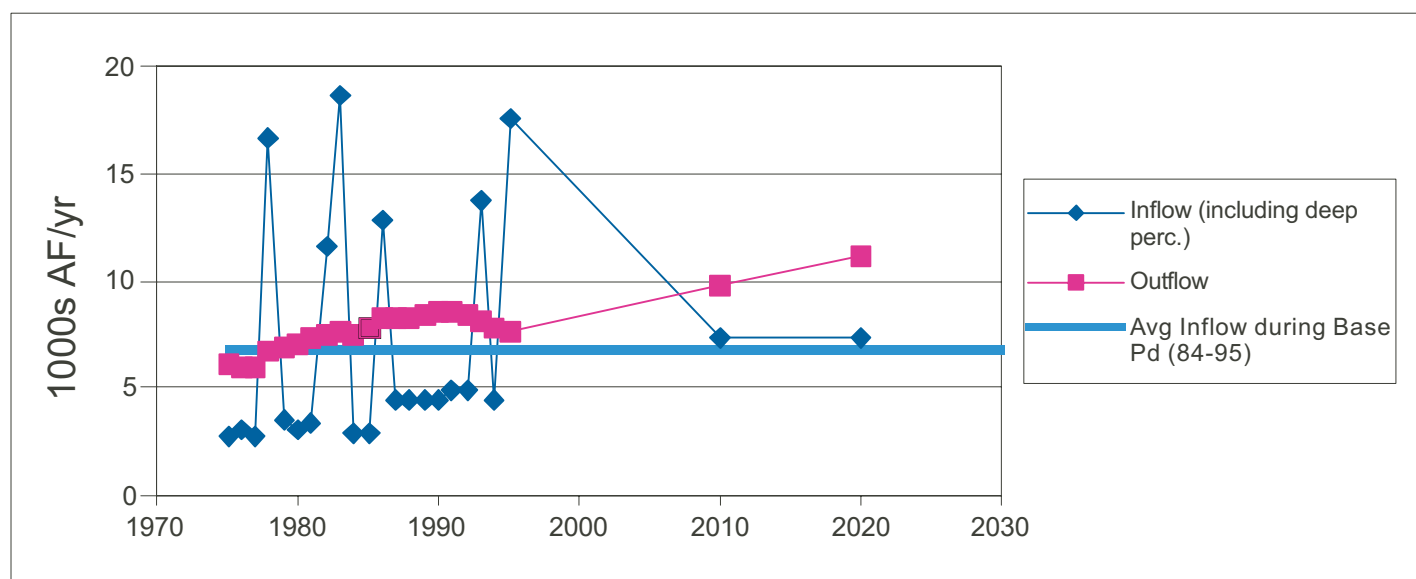
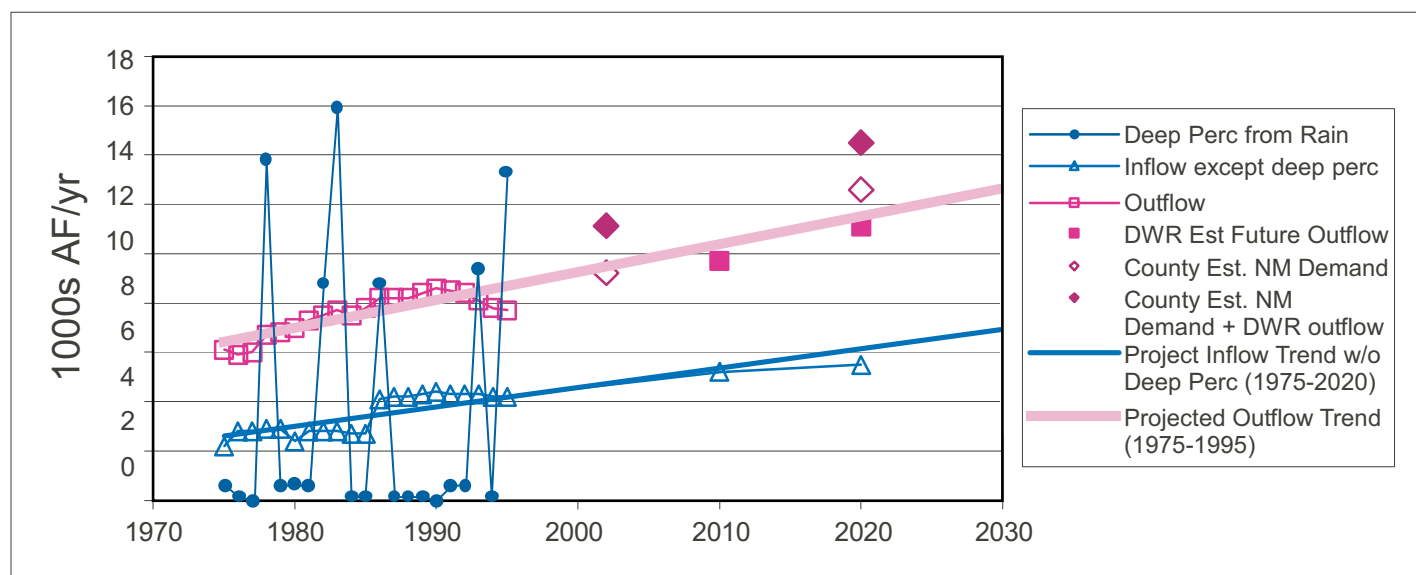


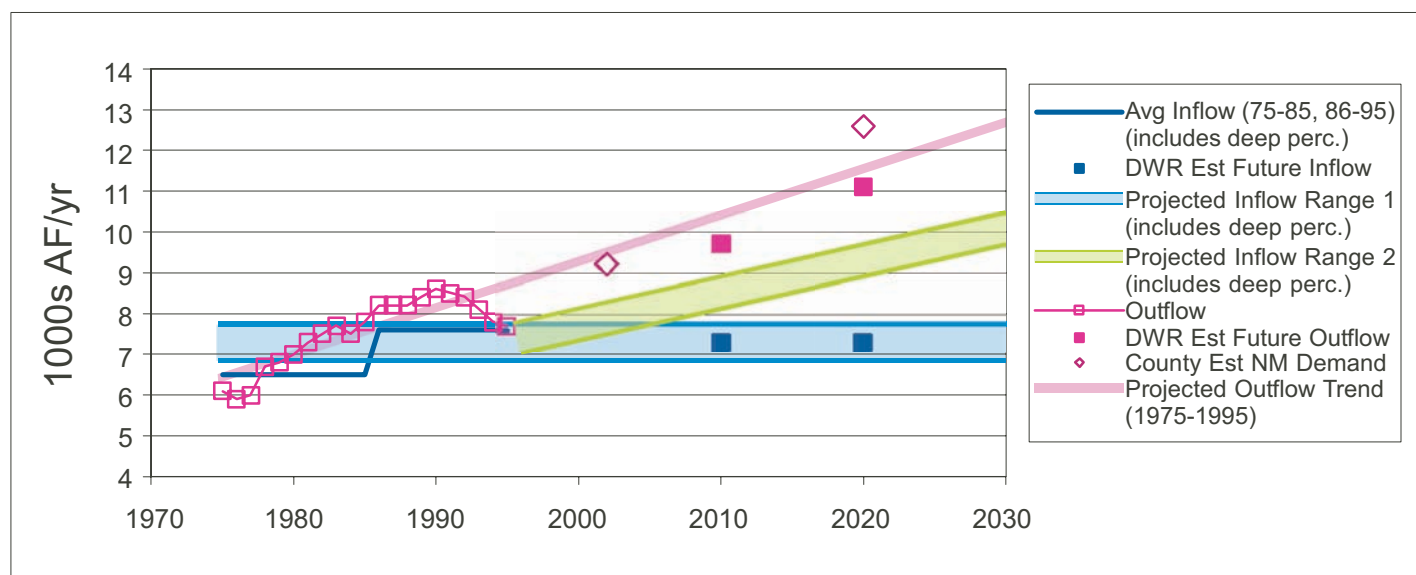
A.



B.



C.



Notes:

Graph A shows estimates by DWR (2002) of annual values for total inflow and outflow for Nipomo Mesa for the 20-year period from 1975 to 1995 and projected estimates for years 2010 and 2020. Inflow includes deep percolation of rainfall, which is the reason for the large variation. Average annual inflow during the study base period (1984-1995) is also shown. This graph shows that DWR's estimates of total outflow have exceeded average inflow since 1980 with an apparent increase in deficit with time.

Graph B provides details for the components of the annual water budget annual by DWR (2002). Components of inflow other than deep percolation, 60 percent of which is groundwater inflow from Santa Maria River Valley, are more stable and show two nearly flat trends during the 20-year period of analysis: 1975 to 1985 and 1986 to 1995. We fitted a line through these data and the DWR inflow estimates for 2010 and 2020, which account for more subsurface inflow in response to greater hydraulic gradient toward Nipomo Mesa with increases in pumping.

Graph B also shows a trend line fitted to the 20-year period of outflow values to provide an estimate of outflow rates in the future. DWR's estimated values of outflow for years 2010 and 2020 are close to this projected trend. The open diamond symbols are estimates of Nipomo Mesa water demand for years 2002 and 2020 from the County Master Water Plan Update (January, 2003). The filled diamond symbols at 2002 and 2020 are Nipomo Mesa demand estimates by the County with the DWR estimates subsurface outflow added (Table 26, DWR, 2002).

Graph C shows projected outflow and two ranges of estimated inflow to Nipomo Mesa based on DWR water budget components. One inflow range is constant with time. The other inflow range increases with time as a consequence of increase in rate of groundwater flow from Santa Maria Valley to Nipomo Mesa estimated by DWR (2002). Additional explanation is provided in the text of Section 4.4 to this report.

