

Schematic diagram, not to scale

Figure 10. Pumping from ground water can affect discharge to nearby surface-water bodies. In the prepumping condition (*A*), water flows to the surface-water body. Pumping at a low rate (*B*) reduces discharge to the surface-water body. When the pumping rate is increased (*C*) the flow direction reverses and water from the surface-water body is pumped directly from the well (modified from Alley and others, 1999).