

Hydrology - Open-File Report 38

Potentiometric Surface of the Upper Floridan Aquifer, Beaufort, Colleton, Hampton, and Jasper Counties, South Carolina

March and July 1990

By
Constance E. Gawne
1990

ABSTRACT

Potentiometric levels measured in about 180 wells during March and July 1990 were corrected for tidal effects where necessary, and used to prepare maps of the potentiometric surface. The potentiometric surface for March was not notably low, reflecting near-average fall and winter precipitation. The map for July shows the regional decline of the potentiometric surface that would be expected in a summer of drought. In Beaufort County and northern Hampton County, the decline was approximately the same as in the summer of 1986. In southern Hampton County and northern Jasper County the decline was greater, exceeding any previously recorded. Steepening of hydraulic gradients in Hampton County is evidence that the additional decline was caused by increased withdrawals of water from the aquifer. Summer water-level declines in southern Hampton County and northern Jasper County have been increasing since 1984. Levels in most wells have been recovering during the fall and winter recharge period. Levels in a few wells have failed to recover completely since 1986.

Copies of this report are available in the SCDNR's Columbia office.