

POTENTIOMETRIC SURFACE

By
Richard B. Moore



- EXPLANATION**
- TILL/BEDROCK HILL--surrounded by highly permeable material
 - WATER-TABLE CONTOUR--shows altitude at which water level would stand in shallow wells. Contour interval 20 feet. National Geodetic Vertical Datum, 1929. Arrow indicates direction of ground-water flow.
 - MAJOR INFLOW TO AQUIFER--stream and ground-water flow along main valleys beyond extent of aquifer mapped
 - MAJOR OUTFLOW FROM AQUIFER--stream and ground-water flow along valleys beyond extent of aquifer mapped
 - AQUIFER BOUNDARY--dashed where full extent of aquifer is not shown
 - DRAINAGE DIVIDE (surface-water and ground-water)
 - BOUNDARY OF HIGH PERMEABILITY MATERIAL ADJACENT TO THE AQUIFER--aquifer may partly extend into those areas
 - 01330000 COMMUNITY WATER SYSTEM WELL OR WELL FIELD--numbered by New York State Department of Health (number may be same for widely scattered sites in same system)
 - DATA POINT

NOTE

The contours represent the estimated average altitude of the water table under nonstressed conditions based on water levels in shallow wells and on surface water levels. The water table fluctuates seasonally in response to recharge and discharge. The aquifer is recharged over its entire surface, but especially where the land surface is most permeable, and along the valley margins where runoff from the hillsides is concentrated. It is recharged also from underlying and adjacent till and bedrock and from adjacent high permeability material. The overall drainage area contributing recharge to the aquifer is depicted on the location map. The aquifer is discharged principally to evapotranspiration and streams. Seasonal water-table fluctuations are greatest along the margin of the aquifer and least along major streams and lakes.

REFERENCES CITED

- Leggett, Brashears, and Graham Inc., unpublished well data.
- Perlmutter, N. M., 1959, Geology and ground-water resources of Rockland County, New York, with special emphasis on the Newark Group (Triassic); New York State Power and Control Commission Bulletin GN-42, 133 p.

