AQUIFER THICKNESS

By

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EXPLANATION

TOWN LINE—surrounded by aquifer

LINE OF EQUILIBRIUM BETWEEN ZONES OF AQUIFER—dashed where approximately known; dotted, if known, and where approximately located

AREA LACKING SUBSURFACE DATA

HIDDEN OFFSHORE—area offshore, approximately bounded, indicated by dots

AQUIFER MEGABOUND—contains aquifer material but is study area, dashed where approximately located

AQUIFER MEGABOUND—contains largely the ground-water divide

OBSERVATION CONCRETE WATER TOWER WELL OR WELL FIELD—unpublished; also New York State Department of Health

WELL IN TOWN—with records of latitude-longitude from well conducted by U.S. Geological Survey used by

X WELLS IN TOWN—used for general

NOTES

Aquitier thicknesses represent the vertical distance between the water table and the top of the sediments. The aquifer is represented by the zone of ground water that is entirely within the sediments and contains the water that is stored within the sediments. The thickness of the aquifer is determined by the difference in elevation between the water table and the top of the sediments.

Geologically, the aquifer is part of the glacial lacustrine sediments that are deposited in lake basins and other depressions during the last glacial period. These sediments are typically fine-grained and contain a high proportion of clay and silt, which results in a low permeability. The thickness of the aquifer varies across the area, with the thickest sections occurring in the lake basins and thinner sections occurring in the upland areas.

The map shows the location of wells and observations conducted by the U.S. Geological Survey and the New York State Department of Health. These data provide information on the location and thickness of the aquifer, as well as the water quality and flow conditions within the aquifer.