

76°30'

27°30"

25'

22°30"

20'

76°17'30"

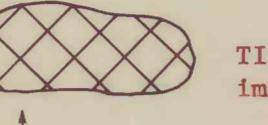
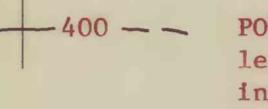
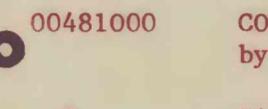
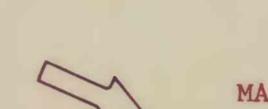
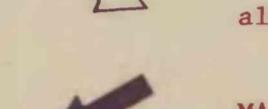
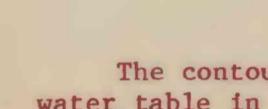
43°22'30"

## POTENIOMETRIC SURFACE

By

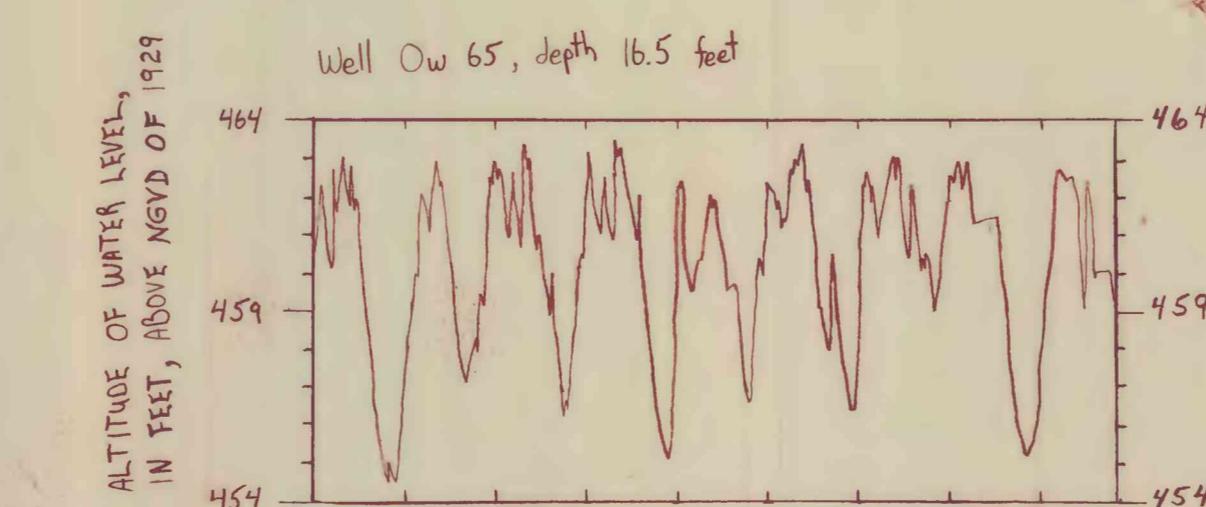
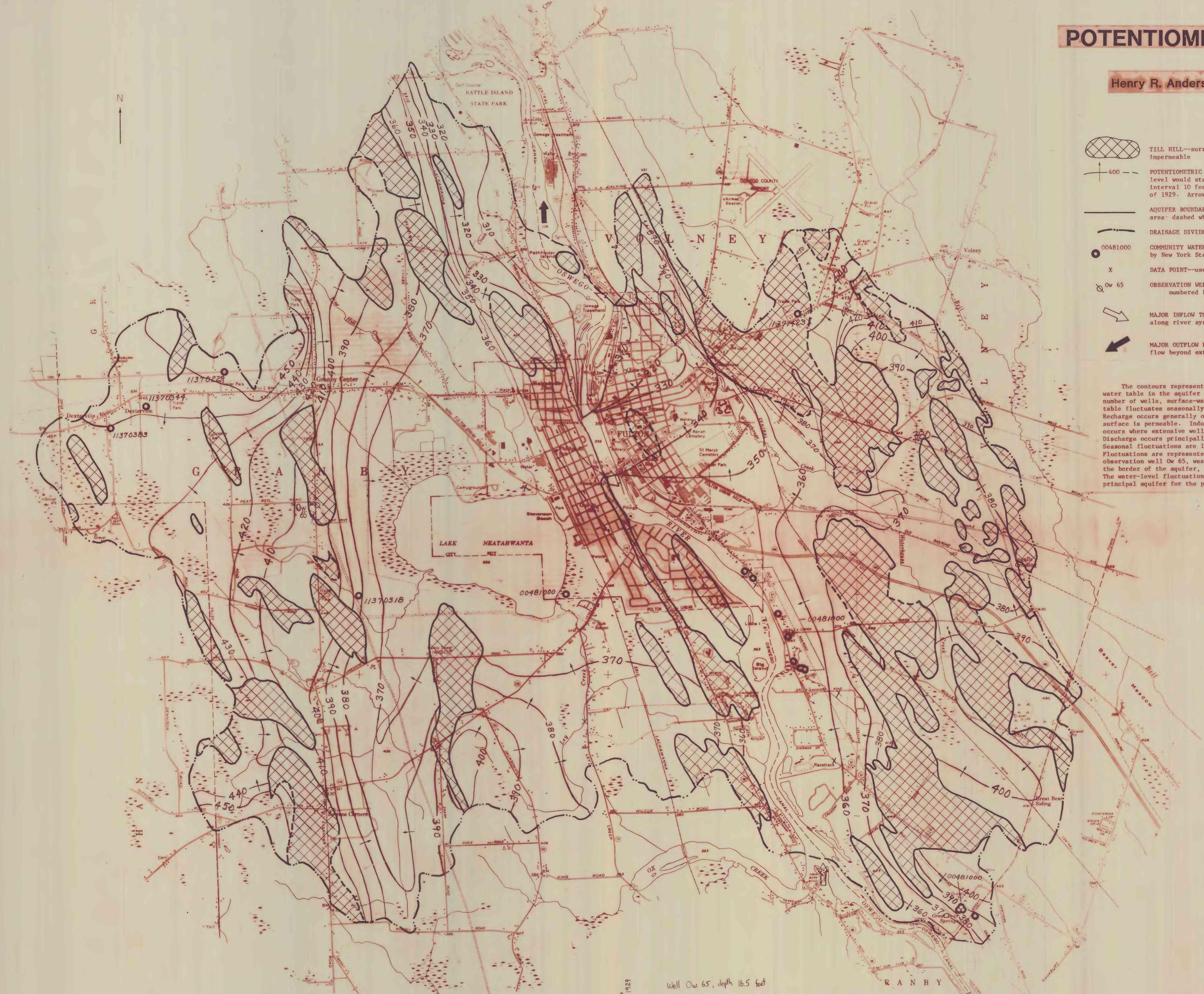
Henry R. Anderson and Ronald V. Allen

### EXPLANATION

-  TILL HILL—surrounded by aquifer that is relatively impermeable
-  POTENIOMETRIC CONTOUR—shows altitude at which water level would stand in tightly cased wells. Contour interval 10 feet. National Geodetic Vertical Datum of 1929. Arrow indicates direction of flow
-  AQUIFER BOUNDARY—delineates aquifer material in study area; dashed where approximately located
-  DRAINAGE DIVIDE—approximates the ground-water divide
-  00481000 COMMUNITY WATER SYSTEM WELL OR WELL FIELD—numbered by New York State Department of Health
-  X DATA POINT—used for control
-  OW 65 OBSERVATION WELL—well for which hydrograph is shown, numbered by U.S. Geological Survey
-  MAJOR INFLOW TO AQUIFER—stream and ground-water flow along river system
-  MAJOR OUTFLOW FROM AQUIFER—stream and ground-water flow beyond extent of aquifer mapped

### NOTE

The contours represent the estimated average altitude of the water table in the aquifer based on water levels in a limited number of wells, surface-water levels, and topography. The water table fluctuates seasonally in response to recharge and discharge. Recharge occurs generally over the entire surface; however, the land surface is permeable. Induced recharge from streams and lakes occurs where extensive well pumping causes reversed gradients. Discharge occurs principally to streams and to pumping wells. Seasonal fluctuations are least along major streams and lakes. Fluctuations are represented by the hydrograph of the discontinued observation well OW 65, west of Lake Neatahwanta. The well is at the border of the aquifer, tapping permeable parts of a till hill. The water-level fluctuations are probably representative of the principal aquifer for the period of record.



Hydrograph of Water Levels in an Observation Well West of the City of Fulton

