DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
NEW YORK STATE DEPARTMENT OF HEALTH

OPEN-FILE REPORT 82-85
(SHEET 2 OF 6)

WATER-INFILTRATION POTENTIAL OF SOIL ZONE

By

Todd S. Miller

EXPLANATION

Map Units	Classification	Infiltration rate, in inches per hour
1	Very low	less than 0.20
2	Low	0.20 to 0.63
3	Moderate	0.63 to 2.0
3/1	Thin (1-40 in), moderately permeable, irregular occurring soil derived from weathered bedrock or thin till, but very low permeable bedrock frequently crops out at surface or is usually at a depth of about 20-40 in.	
4	Moderate to high	0.63 to 6.3
5	Too variable to estimate	

NOTE

Range of infiltration rates are derived from a soil survey of Steuben County (1978) and are estimates of the range in rates that water moves in the B horizon of soils (usually 10-40 inches below land surface). The estimates are based on infiltration and permeability tests, soil texture and structure, porosity, and drainage observations.

The boundaries of the units of soil permeability may not always coincide with the geologic units. For example, in the formation of soil in till, the B horizon may be several times more permeable than the parent material due to disturbances such as freeze-thaw, root penetration, and burrowing by animals and insects. Also, a permeable sand and gravel unit will usually develop a less permeable B horizon due to the accumulation of clay, iron, aluminum, and other compounds leached from the A horizon.

LOCATION MAP

AQUIFER

DRAINAGE AREA

BOUNDARY OF UNITS OF SOIL PERMEABILITY--approximately located

AQUIFER BOUNDARY

00498000 COMMUNITY WATER SYSTEM WELL OR WELL FIELD--numbered by New York State Department of Health

REFERENCE CITED

French, L. M., and others, 1978, Soil survey of Steuben County, New York: Washington, D.C., U.S. Soil Conservation Service, 161 p.

BASE FROM NEW YORK STATE DEPARTMENT OF TRANSPORTATION ADDISON, N.Y., 1977; BIG FLATS, N.Y., 1978; CAMPBELL, N.Y., 1977; CATON, N.Y., 1977; CORNING, N.Y., 1977; SEELEY CREEK, N.Y., 1978. 1:24,000

GEOHYDROLOGY OF THE VALLEY-FILL AQUIFER IN THE CORNING AREA, STEUBEN COUNTY, NEW YORK

1982

HYDROLOGY MAPPED IN 1981; BOUNDARIES MODIFIED FROM L.M. FRENCH AND OTHERS (1978)