

Map 2—This map provides the location of major drainage basin divides in Genesee County (Oatka, Black, Tonawanda, and Oak Orchard Creek drainage basins) and the location of all wells used in the carbonate-rock aquifer study and wells located north or south of the study area. The locations of wells within the study area were verified using office methods, or by field verification; however, the locations of wells outside the study area were not verified. Therefore, bedrock surface contours represent a generalized surface, especially outside the study area. Anthropogenic features (quarries and mines) are also shown on this map. The location of agricultural land uses (cropland, hay and pasture, in light brown shading), and the “shallow-to-bedrock” soils are shown using a hachured pattern. These “shallow-to-bedrock” soils have an infiltration rate of 1.42 to 5.67 inch per hour (in/hr), and bedrock with associated solution-widened fractures or karst features may be present at or just below the land surface. Four additional “shallow-to-bedrock” soils (Aurora, Benson, Wassaic, and Rubbleland) that have lower infiltration rates but have been associated with manure application and groundwater contamination in Genesee County also are shown.

EXPLANATION

MAP SERIES 2

- Aurora, Benson, Wassaic, and Rubbleland soils
- Shallow soils with infiltration rates ranging from 1.42 to 5.67 inches per hour
- Cropland/hay/pasture
- Carbonate-rock aquifer study area boundary
- 700- Altitude of bedrock surface, in feet above sea level (NAVD 88); intermediate contours are 25-foot intervals
- Basin boundary, hydrologic unit code, and name

Bedrock data source

- GS434 NYS Department of Environmental Conservation
- GS281 NYS Department of Transportation
- GS231 NYS Thruway Authority
- SSURGO exposed bedrock
- GS242 USGS GWSI

Number is well number assigned by U.S. Geological Survey; two-letter prefix denotes Genesee County.

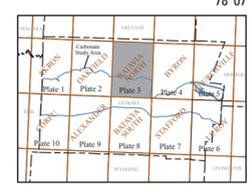
Anthropogenic features

- Mine or quarry
- Sand or gravel pit
- Inactive quarry

Base from NYSDOT Mapping and GIS Section, 1998, accessed in 2009 at <http://www.nysgis.state.ny.us/gisdata/>
Land use from National Land Cover Data 2001, Resolution 1 arc-second (approx. 30m)
Soils from United States Department of Agriculture, Soil Survey Geographic (SSURGO) Database accessed in 2009 at <http://soildatamart.nrcs.usda.gov>
State Plane Coordinate System, Zone 3103, North American Datum 1983

Hydrogeologic and Geospatial Data for the Assessment of Focused Recharge to the Carbonate-Rock Aquifer in Genesee County, New York

By
James E. Reddy and William M. Kappel
2010



BATAVIA NORTH, NY