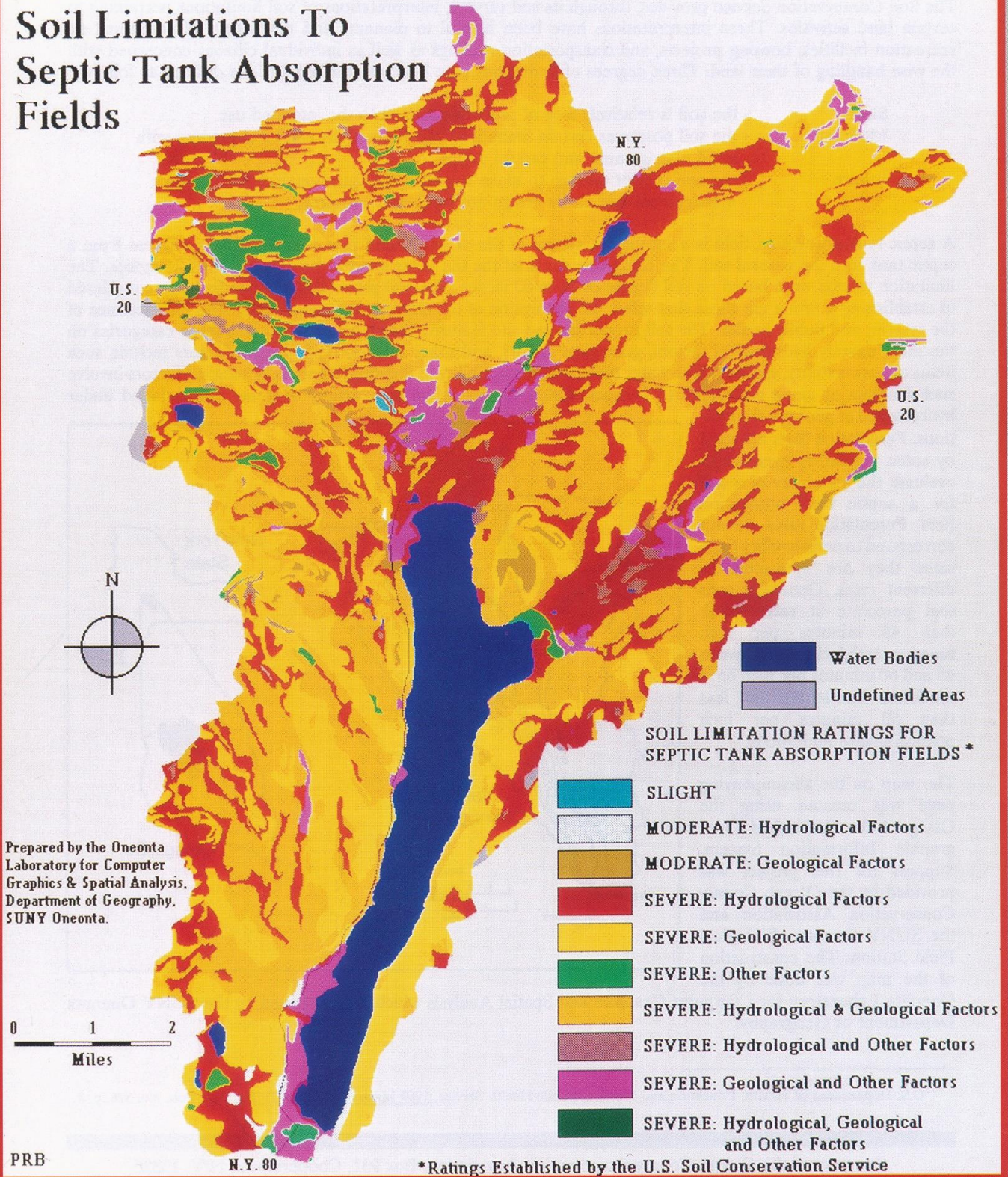


OTSEGO LAKE WATERSHED

Soil Limitations To Septic Tank Absorption Fields



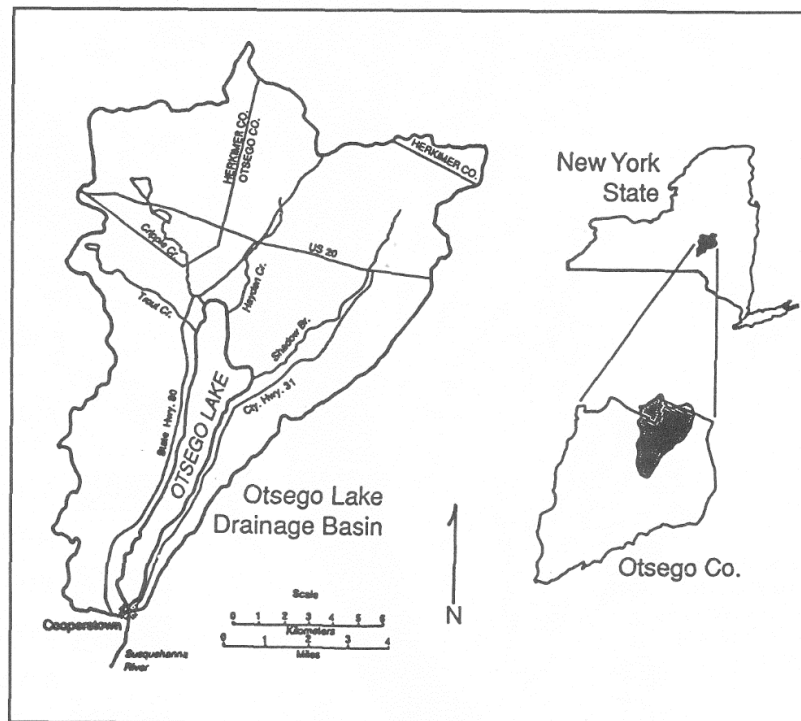
Septic Tank Absorption Fields

The Soil Conservation Service provides, through its soil surveys, interpretations of soil limitations pertaining to certain land activities. These interpretations have been helpful to planners and developers of communities, recreation facilities, housing projects, and transportation routings as well as individual citizens concerned with the wise handling of their land. Three degrees of limitations have been established and are defined as follows:

- | | |
|----------|--|
| Slight | - the soil is relatively free of problems related to the intended use. |
| Moderate | - the soil possesses certain limitations which generally can be overcome with good management and careful design. |
| Severe | - the soil is poor enough to make intended use questionable, and extreme management and costly design are frequently required. |

A septic tank absorption field is a subsurface system of tile or perforated pipe that distributes effluent from a septic tank into the natural soil. The centerline depth of the tile is assumed to be at a depth of 24 inches. The limitation ratings were based on soil depths of 24 to 60 inches. The soil properties and site features considered in establishing a rating are those that affect the absorption of the effluent, the construction and maintenance of the system, and public health. The soil properties and site features have been grouped into three categories on the map, namely hydrological factors, geological factors, and other factors. Hydrological factors include such items as permeability, seasonal high water table, and susceptibility to flooding; whereas, geological factors involve such features as slope and depth to bedrock. Other factors relate to a variety of items not included under hydrological or geological conditions. Percolation tests are used by some regulatory agencies to evaluate the suitability of a soil for a septic tank absorption field. Percolation rates do not correspond to permeability rates since they are measured by different rates. Generally soils that percolate at rates faster than 45 minutes per inch function satisfactorily, between 45 and 60 minutes per inch have moderate limitations, and less than 60 minutes per inch possess severe limitations.¹

The map on the accompanying page was created using the Otsego Lake Watershed Geographic Information System. Support for this project was provided by the Otsego County Conservation Association and the SUNY Oneonta Biological Field Station. The construction of the map was done by the Oneonta Laboratory for Computer Graphics and Spatial Analysis which is maintained by the SUNY Oneonta Department of Geography.



¹U.S. Department of Health, Education and Welfare, Public Health Service, 1969 Manual of Septic Tanks, PHS Pub. No. 526, p. 8.