

SURFICIAL GEOLOGY OF THE CLEVELAND 7.5-MINUTE QUADRANGLE, MADISON, ONEIDA, ONONDAGA AND OSWEGO COUNTIES, NEW YORK

Donald L. Pair, Brian C. Bird and Karl J. Backhaus

SURFICIAL GEOLOGY OF THE CLEVELAND 7.5-MINUTE QUADRANGLE, MADISON, ONEIDA, ONONDAGA AND OSWEGO COUNTIES, NEW YORK

prepared by Brian C. Bird and Karl J. Backhaus

Supported in part by the New York State Museum's Research and Collections Division

DESCRIPTION OF MAP UNITS

Holocene

Stratified silt, sand and gravel (Ha)

Sorted and stratified silt, sand, and gravel, deposited by rivers and streams. May include cobbles and boulders. Inferred as post-glacial alluvium and includes modern channel, over-bank and fan deposits

Wetland Deposit (Hw)

Peat, muck, marl, silt, clay or sand deposited in association with wetland environments. Various sediments can be present at transitional boundaries from one facies to another

Pleistocene

Stratified Sand (Ps) Well sorted and stratified sand, deposited by fluvial, lacustrine or eolian processes. Inferred as deposits associated with distal glacial environments.

Silt and Clay (Psc) PISC Stratified, fine-grained sediment consisting of fine sand, silt and clay size particles. Inferred to be deposited in mid shore to deepwater

settings of glacial lakes. May include marl, rythmites, and varves. Cobbles to Sand (Pics)

Stratified ice contacted deposits, variable coarse-grained sediment consisting of boulders to sand size particles. Inferred to be deposited along an ice-margin. May include, interbedded coarse lenses of gravel and clast supported diamictons (flow tills).

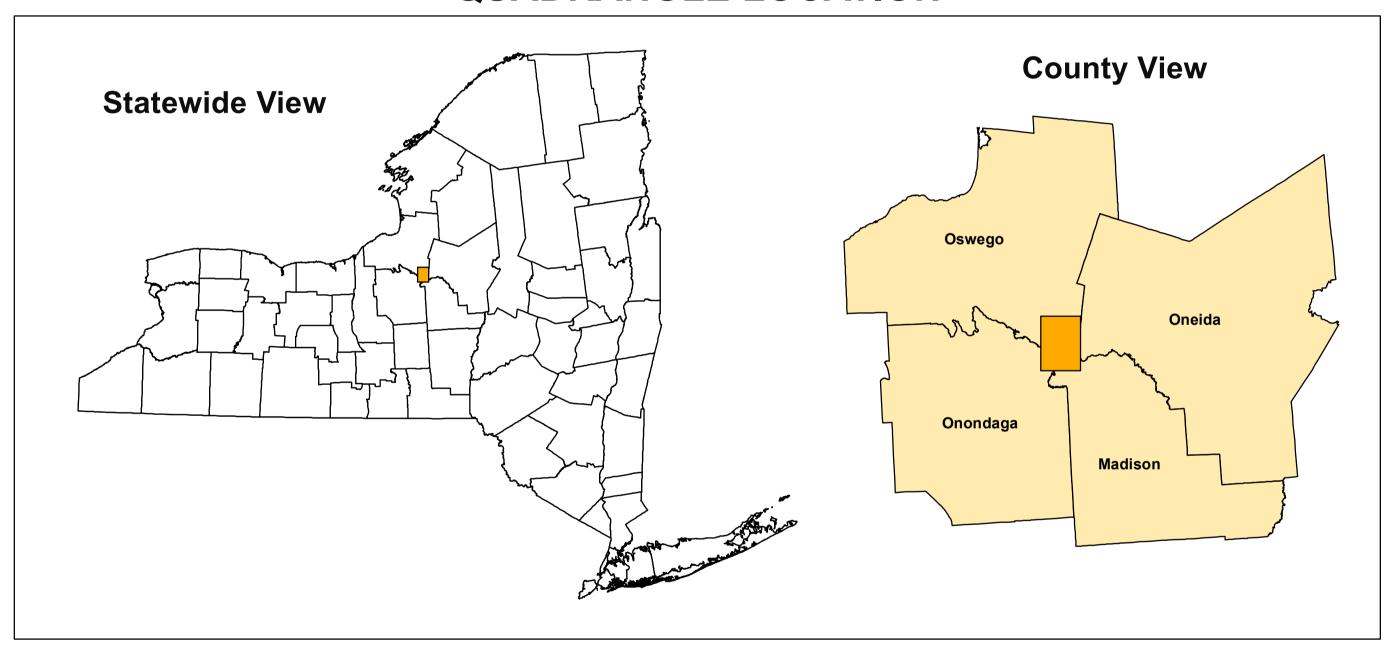
Stratified sand and gravel (Psg) Well-sorted and stratified sand and gravel. May include cobbles and boulders. Inferred to be delta, fan or lag deposits in glacial channels or near former ice margins.

An admixture of unsorted sediment ranging from clay to boulders. Generally matrix supported, massive and clast-rich.

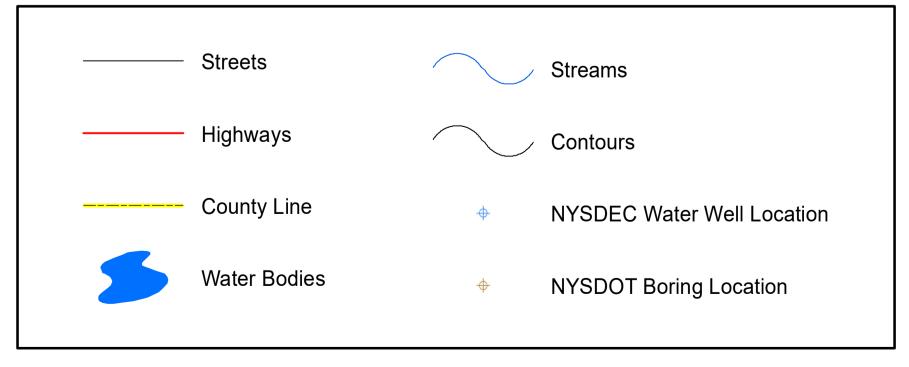
Pre-Pleistocene

Non-glacially derived, hard rock, pre-pleistocene in age. May be covered up to a meter in diamicton, sand and gravel, or sand and clay in areas marked as Br.

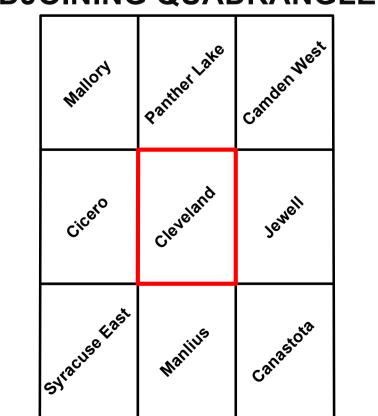
QUADRANGLE LOCATION

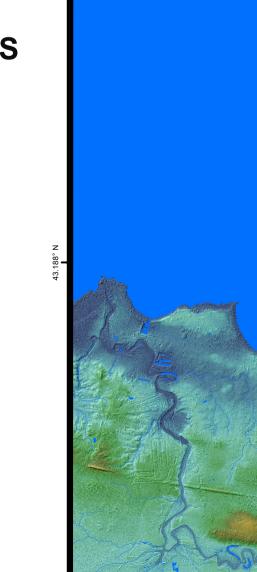


SYMBOLS



ADJOINING QUADRANGLES





Feet-amsl

1:75,000 scale; 2x vertical exaggeration Shaded relief generated from 2018 Madison Otsego Counties 1m, 2017 Oneida Subbasin 1m and NYS 10m lidar data sets.

This geologic map was funded in part by the New York State Museum's Research and Collections Division in the year 2016. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily presenting the official policies, either expressed or implied, of the U.S. Government. While every effort has been made to ensure the integrity of this digital map and the factual data upon which it is based, the New York State Education Department ("NYSED") makes no representation or warranty, expressed or implied, with respect to its accuracy, completeness, or usefulness for any particular purpose or scale. NYSED assumes no liability for damages resulting from the use of any information, apparatus, method, or process disclosed in this map and text, and urges independent site-specific verification of the information contained herein. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by

QUADRANGLE ELEVATION