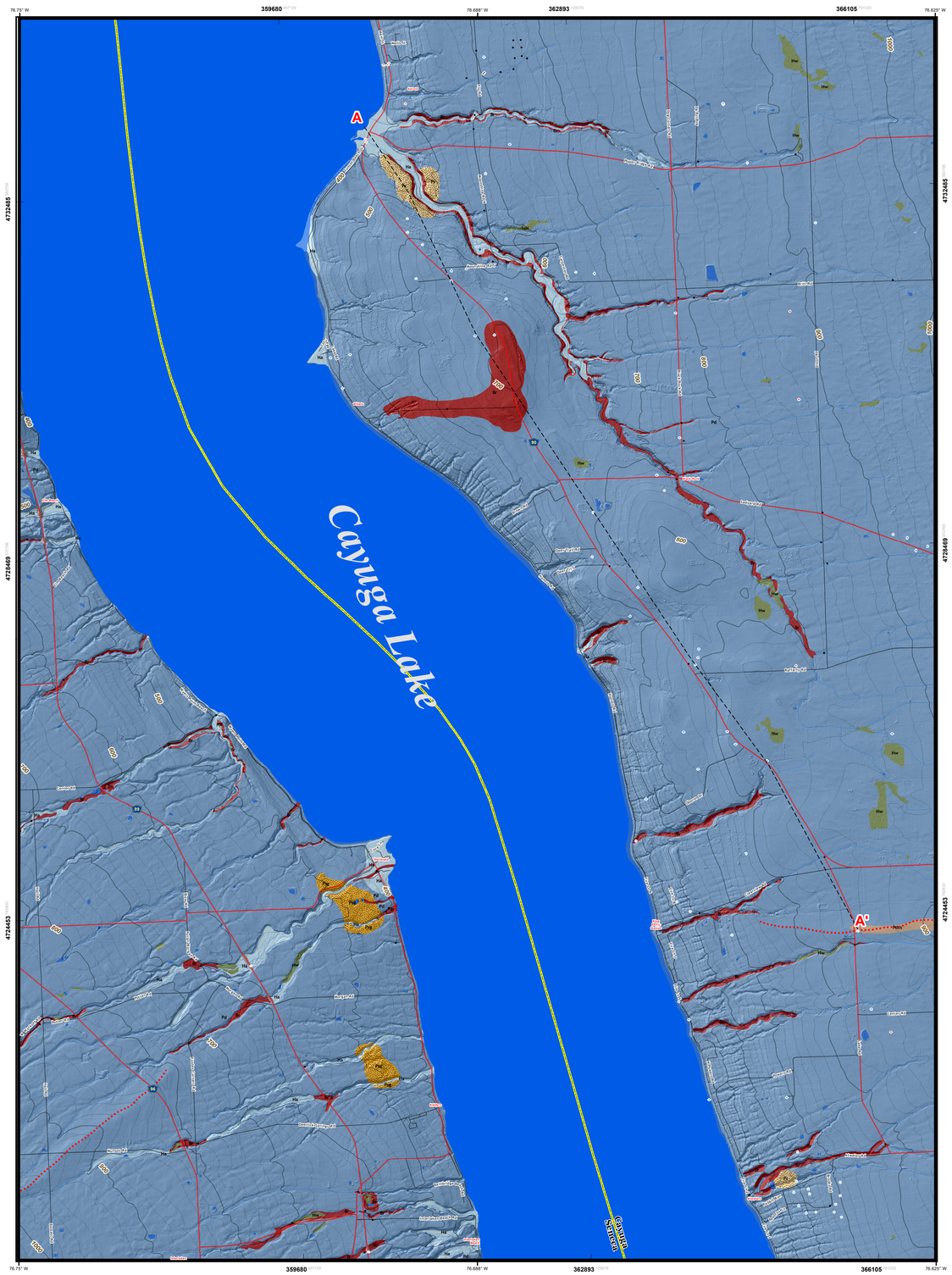
New York State Museum

New York State Geological Survey



Universal Transverse Mercator, Zone 18 N
North American Datum of 1983

Hygrology, and planimetry layers from the
New York State DOT Raster Quadrangle separates for Cayuga and Seneca Counties
(https://gis.ny.gov/gisdata/inventories/member.cfm?OrganizationID=108).
Geographic data layers from 2017 TIGER/Line shapes for transportation
and hydrography (https://www.census.gov/cgi-bin/geo/shapefiles/index.php)

Shaded relief from Seneca Lake Watershed 2m,
NYS 10m DEM, and Cayuga County 2m Lidar data sets
(http://gis.ny.gov/elevation/index.cfm)

Magnetic declination from the NOAA online Declination Calculator:
http://www.ngdc.noaa.gov/geomag-web/#declination

SCALE 1:24,000

1 0,5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0,5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL: 10 FEET

Geologic mapping by A. Kozlowski, J. Leone, C. Porreca 2016
Digital data and cartography, B. Bird, 2016 and 2018

MN 11° 58' 213 MILS GN 1° 9' 20 MILS

UTM GRID AND 2016 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SURFICIAL GEOLOGY OF THE SHELDRAKE 7.5-MINUTE QUADRANGLE, CAYUGA AND SENECA COUNTIES, NEW YORK

Andrew L. Kozlowski, James R. Leone, Brian C. Bird, and Charles J. Porreca
2016

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prepared by
Andrew L. Kozlowski, James R> Leone, Brian Bird, Charles J. Porreca, and Karl J. Backhaus

Supported in part by the U.S Geological Survey's
National Cooperative Geologic Mapping Program STATEMAP Award Number G16AC00293

DESCRIPTION OF MAP UNITS

Holocene

Af — **Artifical Fill (Af)**
Surficial sediment composed of coarse/fine and or crushed rock anthropogenically transported and used for construction purposes.

Ha — **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-glaical alluvium and includes modern channel, over-bank and fan deposits

Hw — **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

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

Psg — **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 ice margins.

Pd — **Diamicton (Pd)**
An admixture of unsorted sediment ranging from clay to boulders. Generally matrix supported, massive and clast-rich.

Pdcs — **Diamicton (Pdcs)**
An admixture of unsorted sediment ranging from clay to boulders. Generally clast supported, massive and clast-rich.

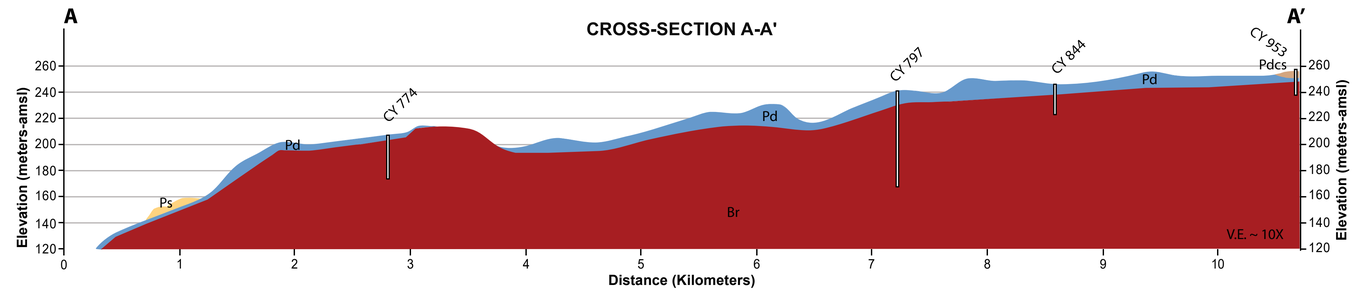
Pre-Pleistocene

Br — **Bedrock (Br)**
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.

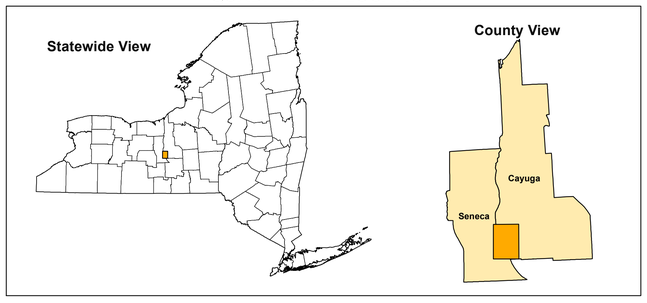
SYMBOLS

Streets
Highways
County Line
Contours
Streams
Water Bodies
Cross-Section Line
NYSGS Soil Sample Location
NYSGS Borehole Location
NYSDEC Water Well Location
NYSDEC Oil & Gas Well Location
NYSDOT Boring Location
Outwash Fan
Ice Margin

CROSS-SECTION A-A'



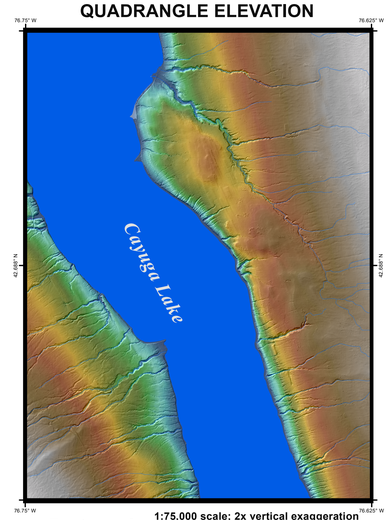
QUADRANGLE LOCATION



ADJOINING QUADRANGLES

Romulus	Union Springs	Scipio Center
Ovid	Sheldrake	Genoa
Lodi	Trumansburg	Ludlowville

QUADRANGLE ELEVATION



Feet-amsl
375 1040

1:75,000 scale; 2x vertical exaggeration

Shaded relief generated from 2012 FEMA Seneca Lake Watershed and the 2000 Cayuga County 2m lidar data sets.

New York State Museum Map & Chart No. 97

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