

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

prepared by
Andrew L. Kozlowski, Karl J. Backhaus and Brian C. Bird

Supported in part by the U.S Geological Survey Cooperative Agreement Number G10AC00561
National Cooperative Geologic Mapping Program (Great Lakes Geologic Mapping Coalition)

DESCRIPTION OF MAP UNITS

Holocene

- Af** **Artificial 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-glacial 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

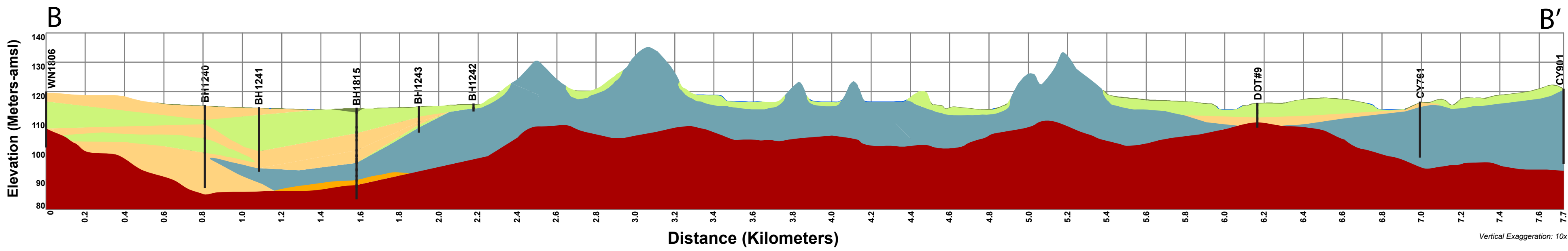
Pleistocene

- Ps** **Stratified silt, sand gravel (Ps)**
Well sorted and stratified sand and gravel, deposited by rivers and streams. May include cobbles. Inferred as deposits associated with glacial meltwater flow.
- Plsc** **Silt and Clay (Plsc)**
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.
- Pics** **Cobbles to Sand (Pics)**
Stratified ice contact 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).
- Pdmm** **Diamicton (Pdmm)**
An admixture of unsorted sediment ranging from clay to boulders. Generally matrix 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.

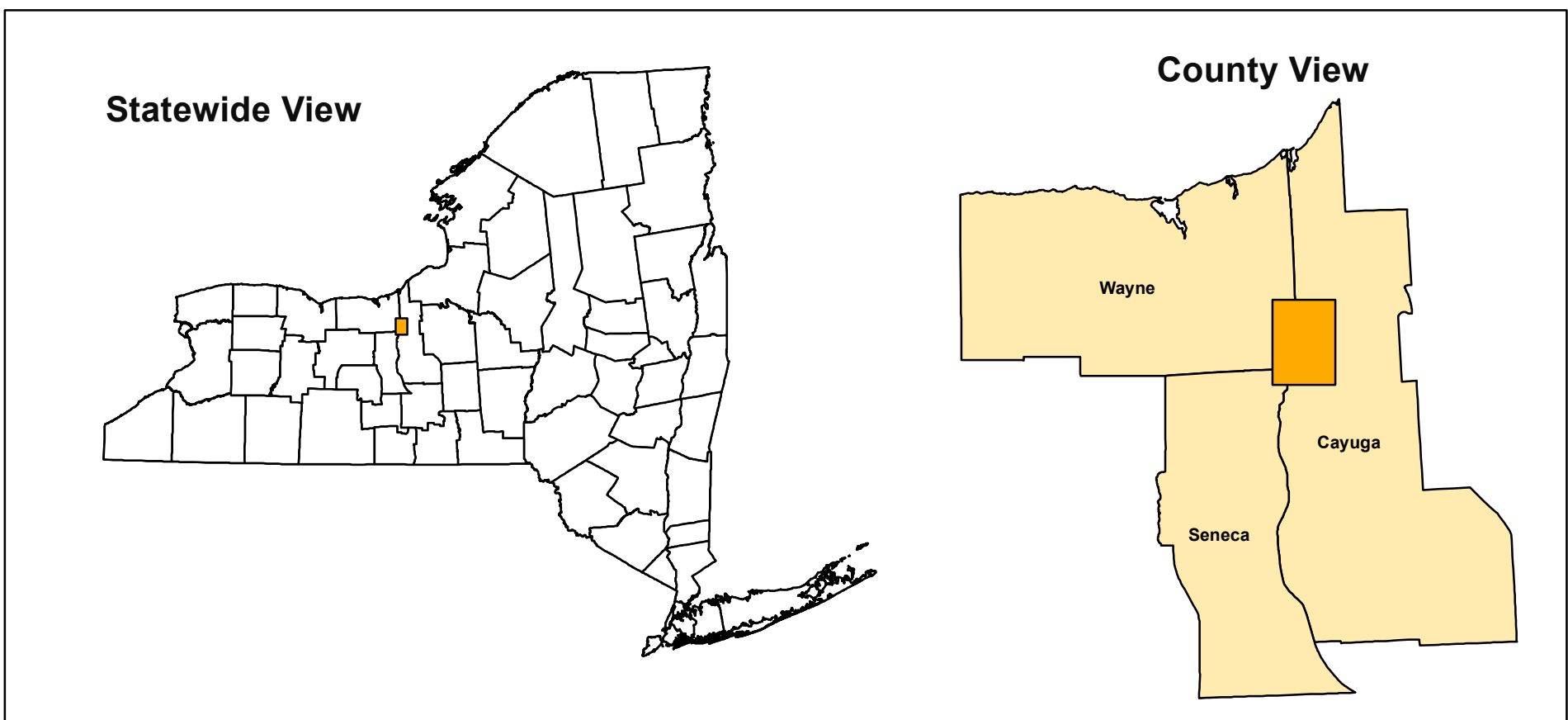
CROSS-SECTION A-A'



SYMBOLS

Highways	Water Bodies	NYSGS Boring Location	Drumlins
Streets	Streams	NYSDC Water Well Location	Ice Margins
Railroads	Contours	NYSDOT Boring Location	Meltwater Channels
County Line	Cross-Section Line	NYSTA Boring Location	Eskers
	NYSGS Sample Location	NYSDPW Boring Location	Glacial Lake Shoreline

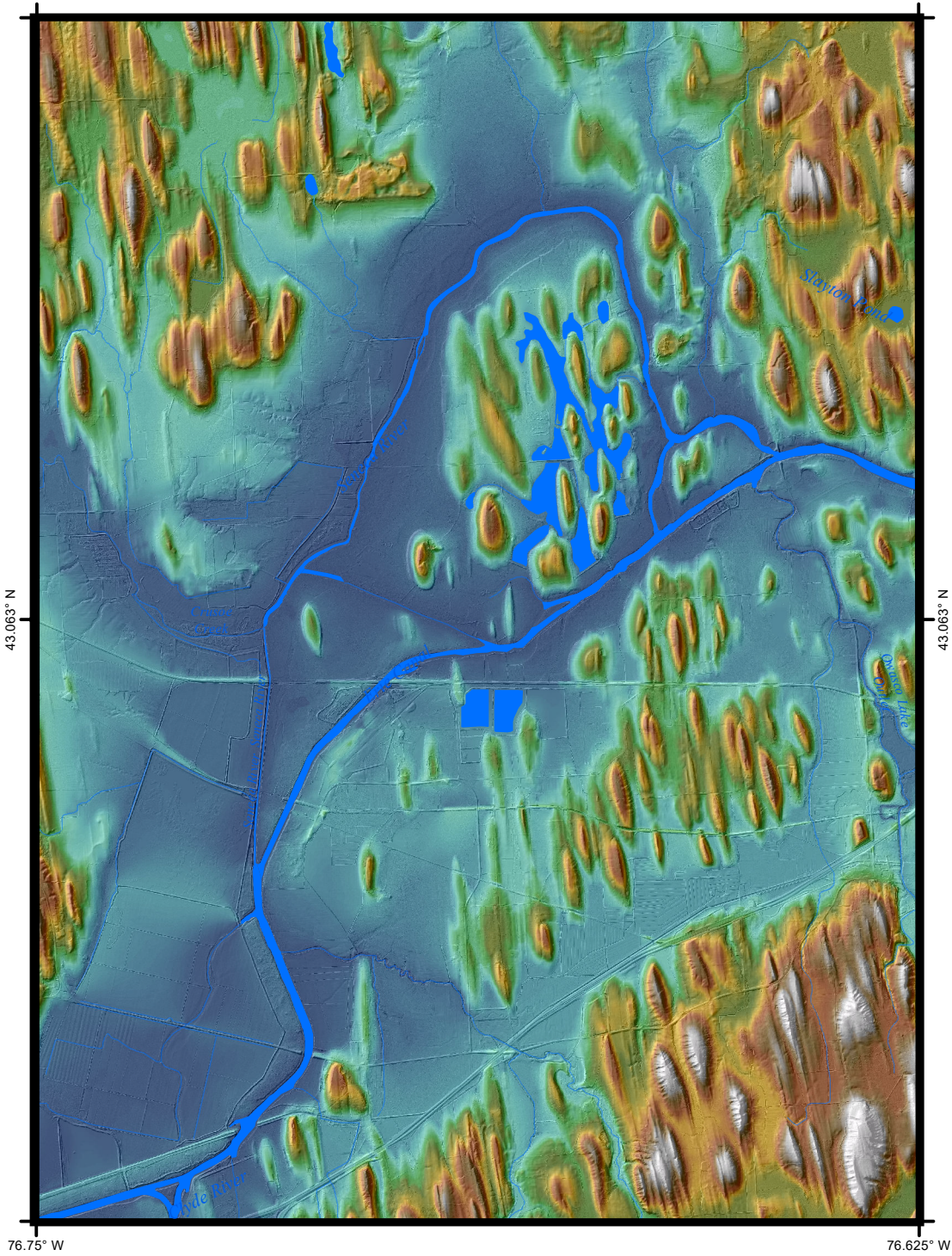
QUADRANGLE LOCATION



ADJOINING QUADRANGLES

Wolcott	Victory	Cato
Savannah	Montezuma	Westport
Seneca Falls	Cayuga	Auburn

QUADRANGLE ELEVATION



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

Andrew L. Kozlowski, Karl J. Backhaus and Brian C. Bird
2021

NOTICE
This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program Great Lakes Geologic Mapping Coalition award number G10AC00561 in the year 2010.
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 NYSED.

Feet-amsl
375 675
1:75,000 scale; 2x vertical exaggeration
Shaded relief generated from 2008 Cayuga County 1m, 2012 Seneca Watershed 2m and NYS 10m lidar data sets.

New York State Museum Map & Chart No. 77
ISSN:0097-3793 ; ISBN:978-1-55557-342-3