

**SURFICIAL GEOLOGY OF THE MANLIUS 7.5-MINUTE QUADRANGLE,
MADISON AND ONONDAGA COUNTIES, NEW YORK**

prepared by

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DESCRIPTION OF MAP UNITS

Holocene

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

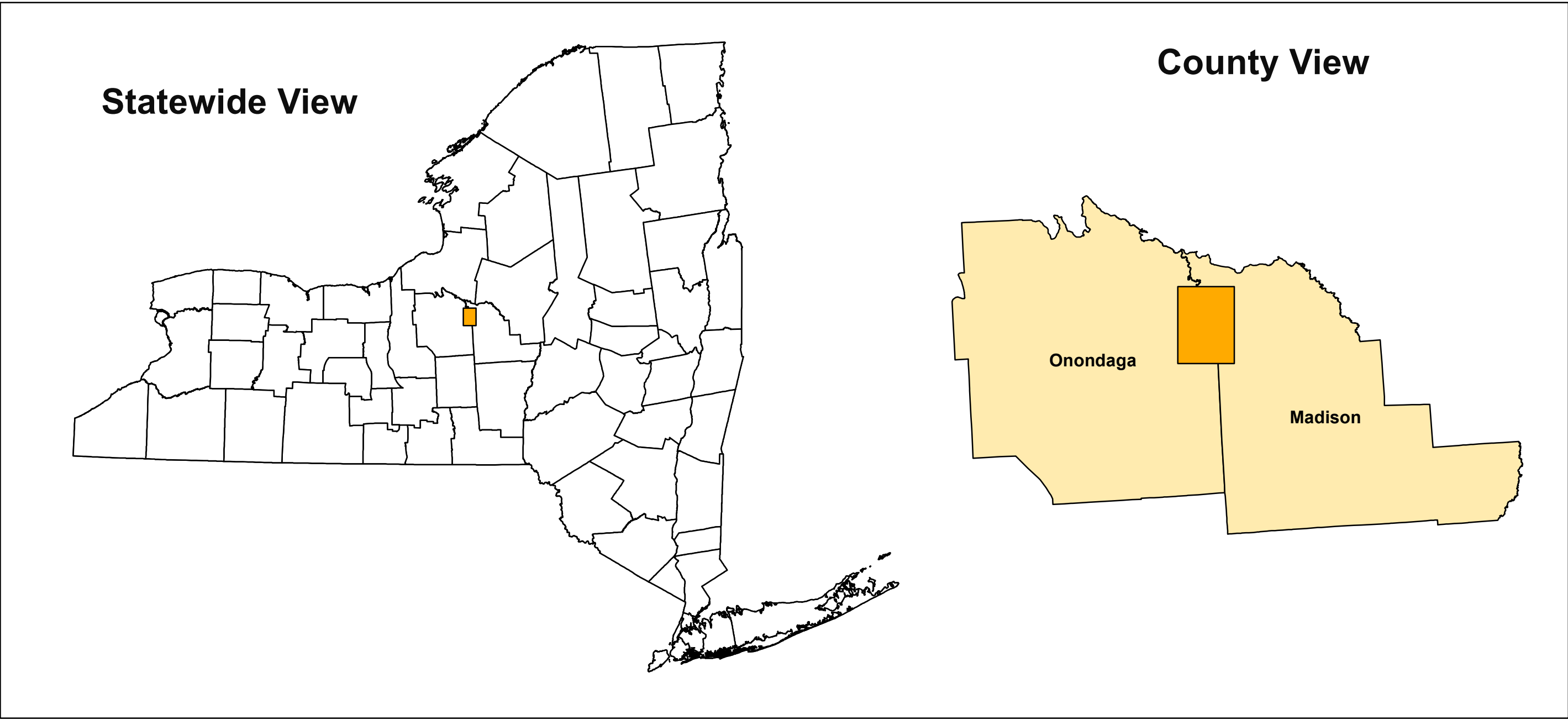
Pleistocene

Ps	Stratified Sand (Ps) Well sorted and stratified sand, deposited by fluvial, lacustrine or eolian processes. Inferred as deposits associated with distal glacial environments.
Plsc	Silt and Clay (Psc) 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 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).
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 former ice margins.
Pd	Diamicton (Pd) An admixture of unsorted sediment ranging from clay to boulders. Generally matrix supported, massive and clast-rich.

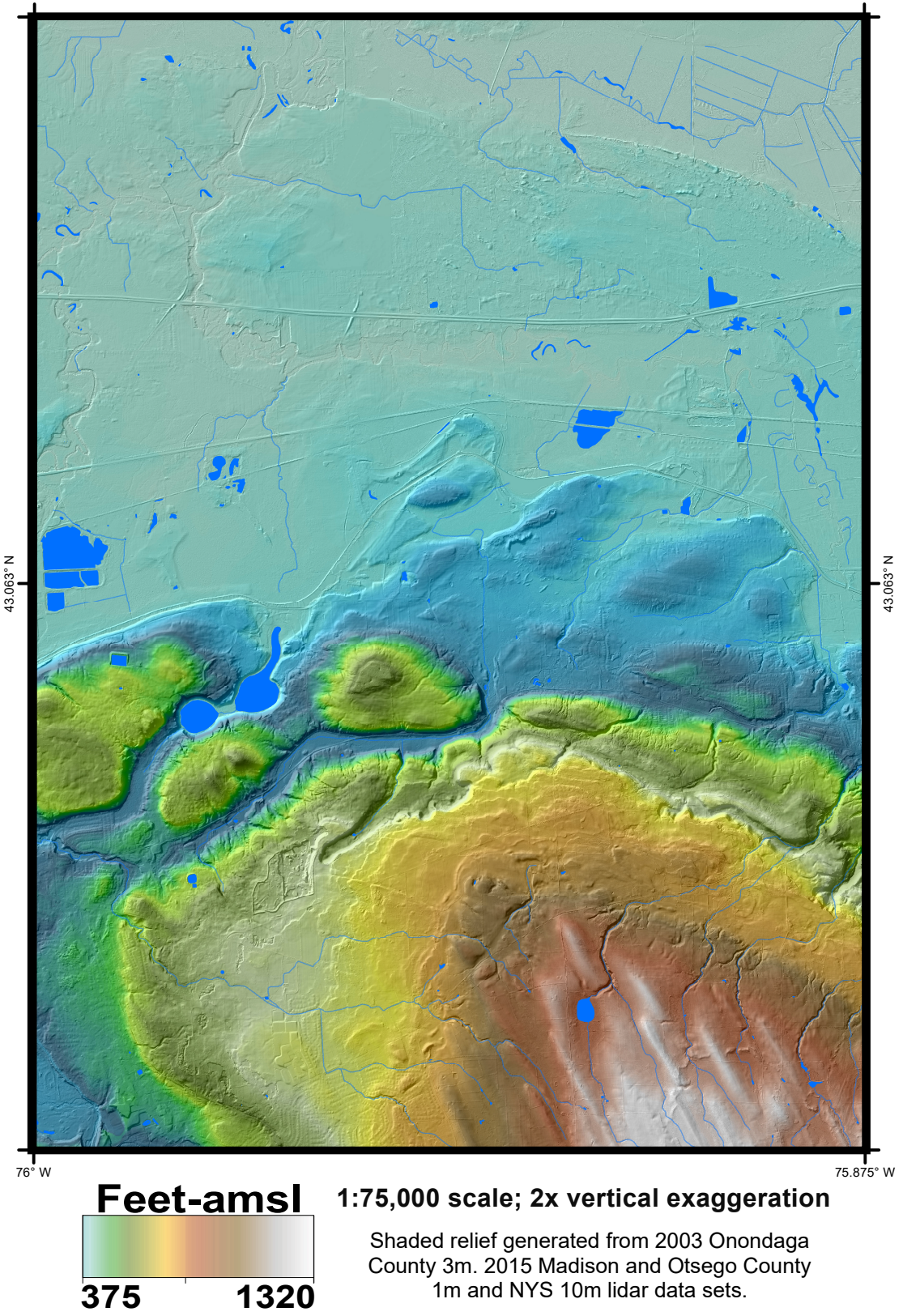
Pre-Pleistocene

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.
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QUADRANGLE LOCATION



QUADRANGLE ELEVATION



ADJOINING QUADRANGLES

Cicero	Cleveland	Jewell
Syracuse East	Manlius	Canastota
Jamesville	Oran	Cazenovia

SYMBOLS

Streets	Water Bodies	Drumlins
Highways	Streams	Ice Margins
Railroads	Contours	Meltwater Channels
County Line	NYSDEC Water Well Location	Dunes
	NYSOT Boring Location	

NOTICE
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