New York State Geological Survey New York State Museum Mark Schaming, Director

SURFICIAL GEOLOGY OF THE PHOENICIA 7.5-MINUTE QUADRANGLE, GREENE AND ULSTER COUNTIES, NEW YORK

CONTOUR INTERVAL: 10 FEET

0 KILOMETERS

Universal Transverse Mercator, Zone 18 N

New York State DOT Raster Quadrangle separates for Ulster and Greene Counties

(https://gis.ny.gov/gisdata/inventories/member.cfm?OrganizationID=108). Geographic data layers from 2020 TIGER/Line shapes for transportation

Shaded relief from 2014 3 County 1m, 2009 West Hudson 2m and NYS 10m DEM (http://gis.ny.gov/elevation/index.cfm) Magnetic declination from the NOAA online Declination Calculator:

http://www.ngdc.noaa.gov/geomag-web/#declination

North American Datum of 1983

David Desimone

Geologic mapping by D. Desimone, 2009

K. Backhaus, 2009, 2021

Digital data and cartography, J. Manchester and

UTM GRID AND 2019 MAGNETIC NORTH **DECLINATION AT CENTER OF SHEET**

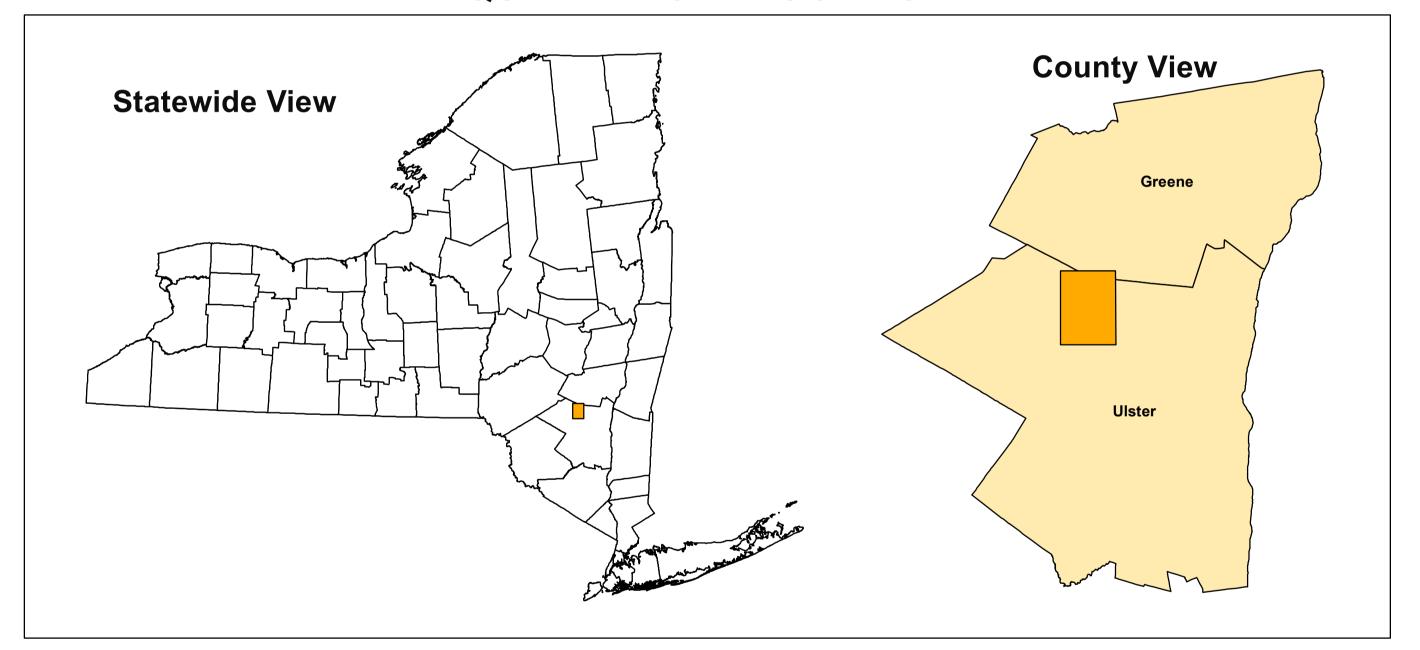
SURFICIAL GEOLOGY OF THE PHOENICIA 7.5-MINUTE QUADRANGLE, GREENE AND ULSTER COUNTIES, NEW YORK

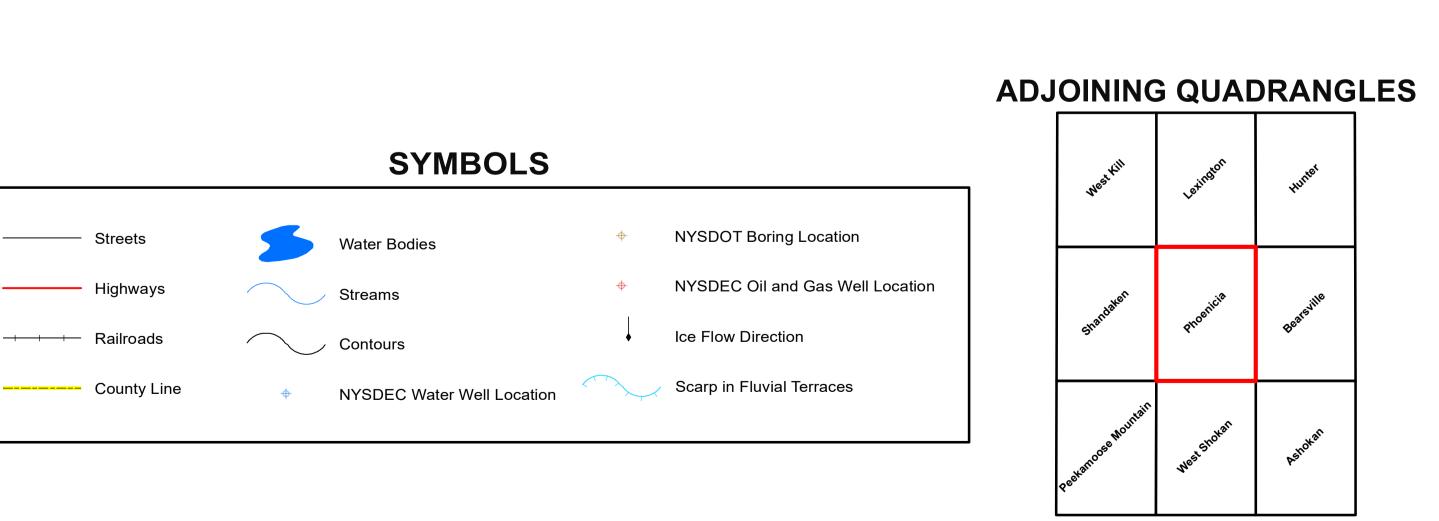
prepared by
David D. Desimone, Janet Manchester and Karl J. Backhaus

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DESCRIPTION OF MAP UNITS		
Af	Artifical Fill (Af) Surficial sediment composed of coarse/fine and or crushed rock anthropogenically transported and used for construction purposes.	
На	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	
Hdc	Diamict Colluvium (Hdc) Unsorted and unstratified deposit of gravel, sand, silt, clay, with boulders/cobbles possible. Described as a mass-wasting deposit at the base of steep hillslopes and cliffs as part of a slump or hillslope failure.	
Pleistoc	Pleistocene	
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.	
Pdcs	Diamicton (Pdcs) An admixture of unsorted sediment ranging from clay to boulders. Generally clast supported, massive and clast-rich.	
Pre-Plei	stocene	
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.	

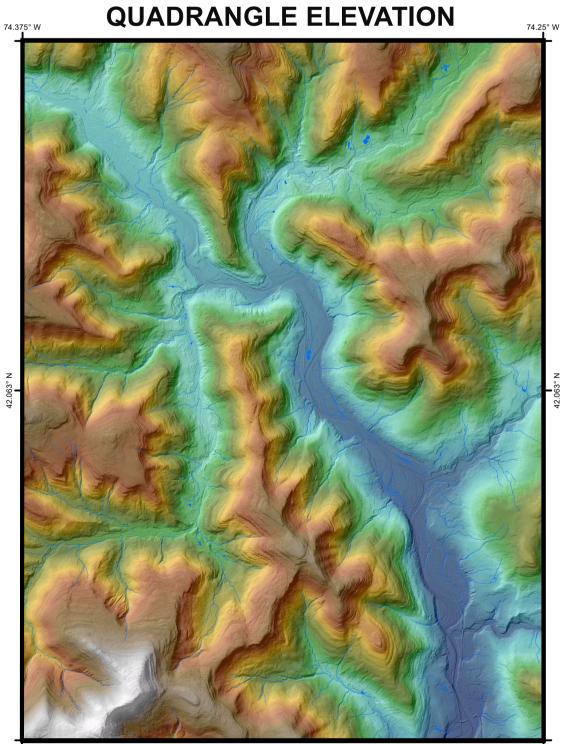
QUADRANGLE LOCATION





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1:75,000 scale; 2x vertical exaggeration Shaded relief generated from 2007 West Hudson 2m, 2014 3 County 1m and NYS 10m lidar data