FIGURE 1. – SOILS TYPES AND MAPS

Soils

There are 14 major soil series located within the Shawangunk Mountains Study Area: Arnot, Bernardston, Chenango, Darien, Farmington, Hoosic, Mardin, Nassau, Palms, Rhinebeck, Sloan, Varysburg, Wayland, and Wellsboro. Below are the official soil series descriptions provided by the Natural Resources Conservation Service.[1]

Arnot Series: The Arnot series consists of shallow, somewhat excessively to moderately well drained soils formed in loamy till. Bedrock is at depths of to 10 to 20 inches. Slope ranges from 0 to 70 percent. Mean annual temperature is 47 degrees F, and mean annual precipitation is 38 inches.

Bernardston Series: The Bernardston series consists of very deep, well drained soils formed in till derived mainly from dark gray phyllite, slate, or schist. The soils are moderately deep to dense till. They are nearly level to very steep soils on uplands. Saturated hydraulic conductivity is moderately high or high in the solum and low to moderately high in the substratum. Slope ranges from 0 to 50 percent. The mean annual temperature is about 49 degrees F. and the mean annual precipitation is about 45 inches.

Chenango Series: The Chenango series consists of very deep, well and somewhat excessively drained soils formed in water-sorted material on outwash plains, kames, eskers, terraces, and alluvial fans. Slope ranges from 0 to 60 percent. Mean annual temperature is 47 degrees F, and mean annual precipitation is 36 inches.

Darien Series: The Darien series consists of very deep, somewhat poorly drained soils formed in Wisconsinan age till on till plains, drumlins, and moraines. Permeability is moderately slow in the subsoil and slow in the substratum. Slope ranges from 0 to 25 percent. Mean annual temperature is about 49 degrees F, and mean annual precipitation is about 36 inches.

Farmington Series: The Farmington series consists of shallow, well drained and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated uplands. Bedrock is at a depth of 10 to 20 inches. Slope ranges from 0 to 70 percent. The mean annual temperature is 49 degrees F. and the mean annual precipitation is 37 inches.

Hoosic Series: The Hoosic series consists of very deep, somewhat excessively drained soils formed in glacial outwash. They are nearly level to very steep soils on outwash plains, terraces, kames, eskers, and moraines. Slope ranges from 0 to 60 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 38 inches.

Mardin Series: The Mardin series consists of very deep, moderately well drained soils formed in loamy till. They are in glaciated uplands, mostly on broad hilltops, shoulder slopes and backslopes. The Mardin soils have a dense fragipan that starts at a depth of 14 to 26 inches below the soil surface. Slope ranges from 0 to 50 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 38 inches.

Nassau Series: The Nassau series consists of shallow, somewhat excessively drained soils formed in till. They are nearly level to very steep soils on bedrock controlled glacially modified landforms. Bedrock is at

a depth of 10 to 20 inches. Slope ranges from 0 to 70 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 40 inches.

Palms Series: The Palms series consist of very deep, very poorly drained soils formed in herbaceous organic material 16 to 51 inches thick and the underlying loamy deposits in closed depressions on moraines, lake plains, till plains, outwash plains, and hillside seep areas, and on backswamps of flood plains. Permeability is moderately slow to moderately rapid in the organic material, and moderate or moderately slow in the loamy material. Slope ranges from 0 to 6 percent. Mean annual precipitation is about 35 inches, and mean annual temperature is about 50 degrees F.

Sloan Series: The Sloan series consists of very deep, very poorly drained soils formed in loamy alluvium on flood plains. Slope ranges from 0 to 2 percent. Mean annual precipitation is about 914 mm (36 inches), and mean annual air temperature is about 11 degrees C (51 degrees F).

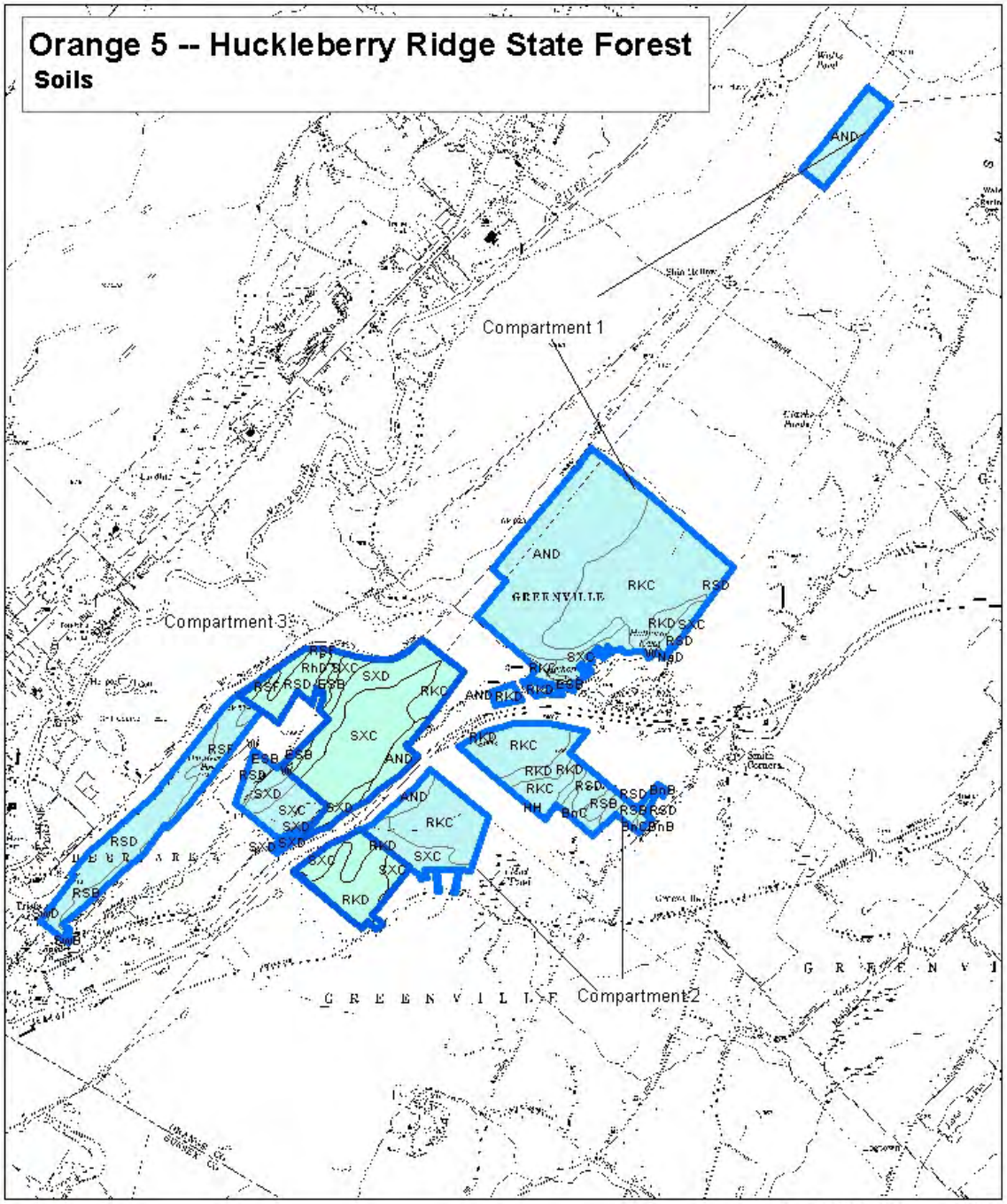
Varysburg Series: The Varysburg series consists of very deep, well drained and moderately well drained soils on dissected lake plains. They are nearly level to steep soils formed in gravelly outwash material and the underlying very slowly permeable clayey lacustrine sediments. Slope ranges from 0 to 50 percent. Permeability is moderate to moderately rapid in the gravelly mantle and very slow in the clayey lacustrine material. Mean annual precipitation ranges from 30 to 40 inches, mean annual air temperature from 45 to 49 degrees F., and mean growing season from 130 to 180 days.

Wayland Series: The Wayland series consists of very deep, poorly drained and very poorly drained, nearly level soils formed in recent alluvium. These soils are in low areas or slackwater areas on flood plains. Saturated hydraulic conductivity is moderately high or high in the mineral soil. Slope ranges from 0 to 3 percent. Mean annual temperature is 49 degrees F. and mean annual precipitation is 36 inches.

Wellsboro Series: The Wellsboro series consists of very deep moderately well and somewhat poorly drained soils formed in till derived from red sandstone, siltstone, and shale. Slope ranges from 0 to 50 percent. Permeability is moderate in the surface and upper subsoil layers and slow or very slow in the lower subsoil and substratum. Mean annual precipitation is 41 inches. Mean annual temperature is 48 degrees F.

Rhinebeck Series: The Rhinebeck series consists of very deep, somewhat poorly drained soils formed in clayey lacustrine sediments. They are on glacial lake plains and uplands mantled with lake sediments. Slope ranges from 0 to 15 percent. Mean annual temperature is 48 degrees F, and mean annual precipitation is 39 inches.

1. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online WWW]. Available URL: "http://soils.usda.gov/technical/classification/osd/index.html" [Accessed 10 February 2004]. USDA-NRCS, Lincoln, NE.



Legend

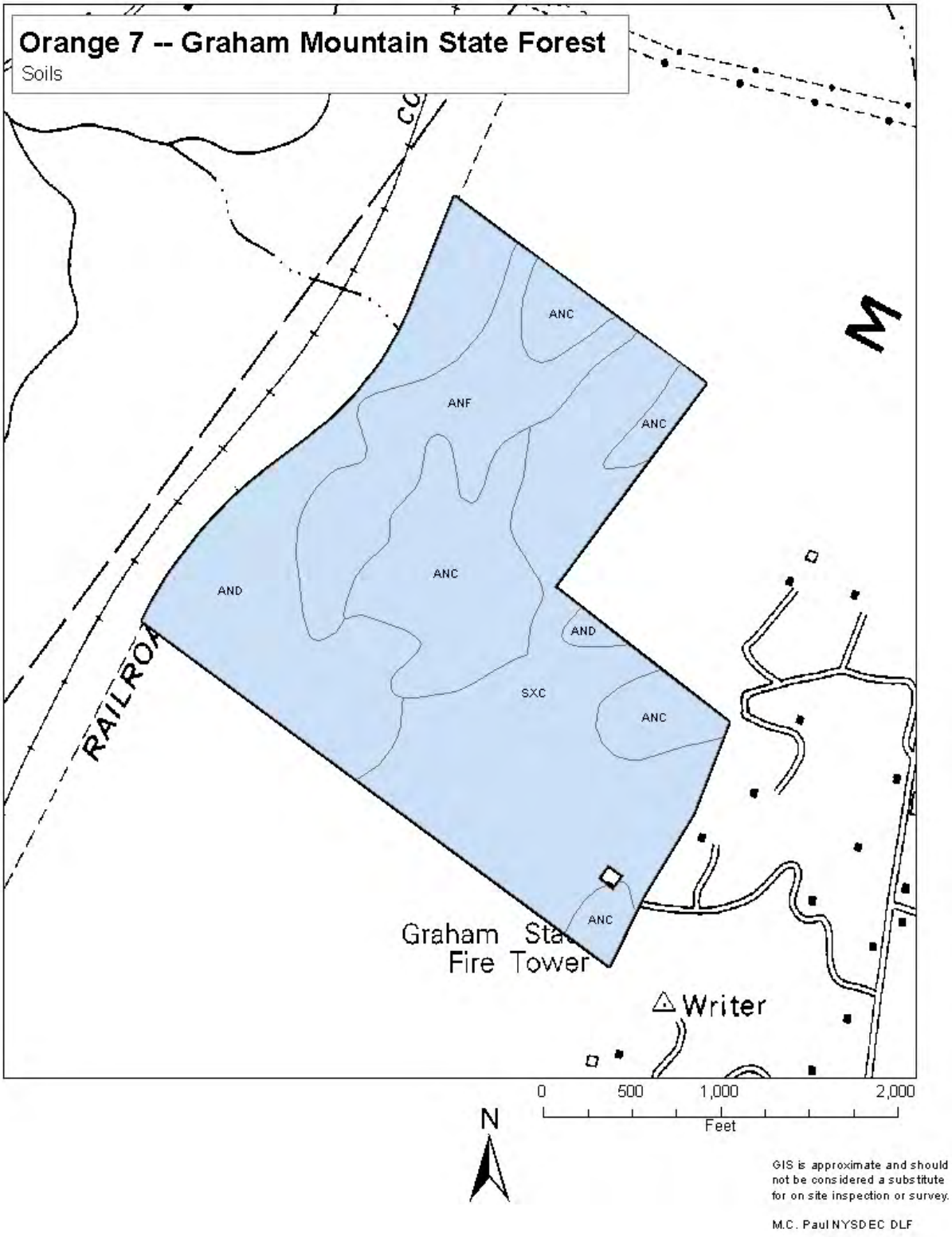
DEC Lands

N

0 1,250 2,500 5,000
Feet

GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF


Orange 7 -- Graham Mountain State Forest
Soils
ANC
ANF
ANC
ANC
AND
AND
SXC
ANC
ANC
RAILROA
Graham Sta
Fire Tower
Writer
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500
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2,000
Feet
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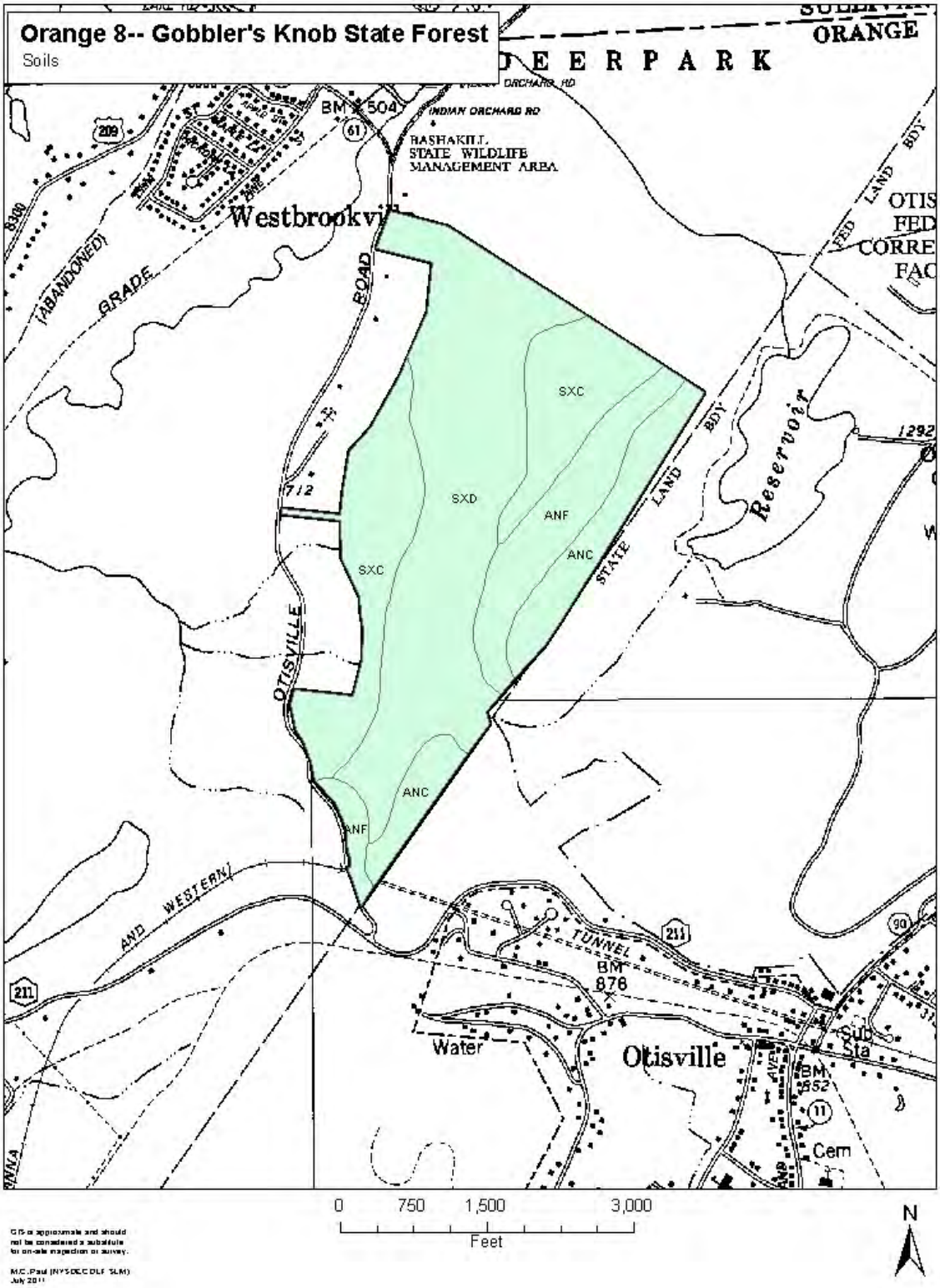
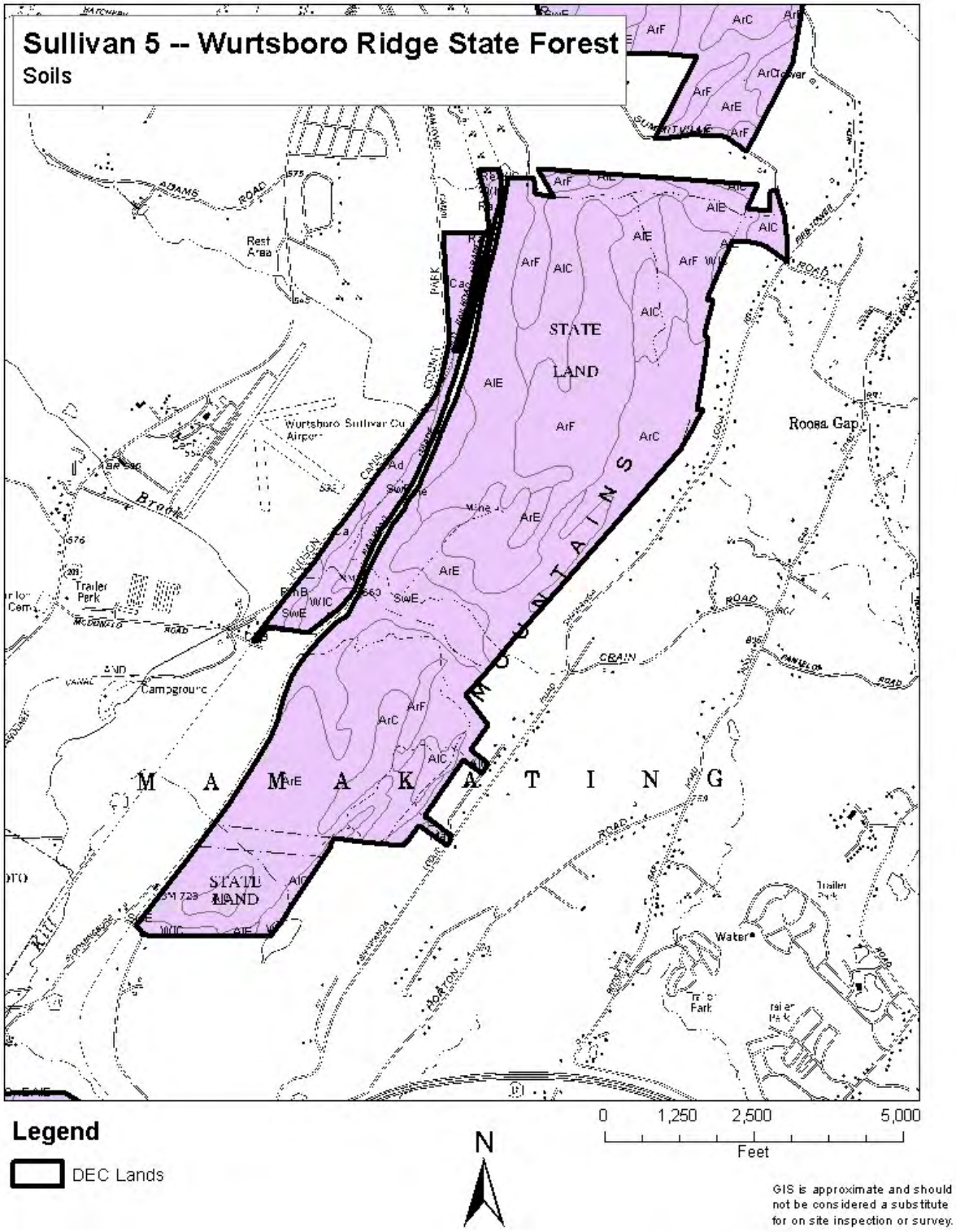
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF



GIS is approximate and should not be considered a substitute for on-site inspection or survey.

M.C.Paul (NYSDEC DLF SLM)
July 2011



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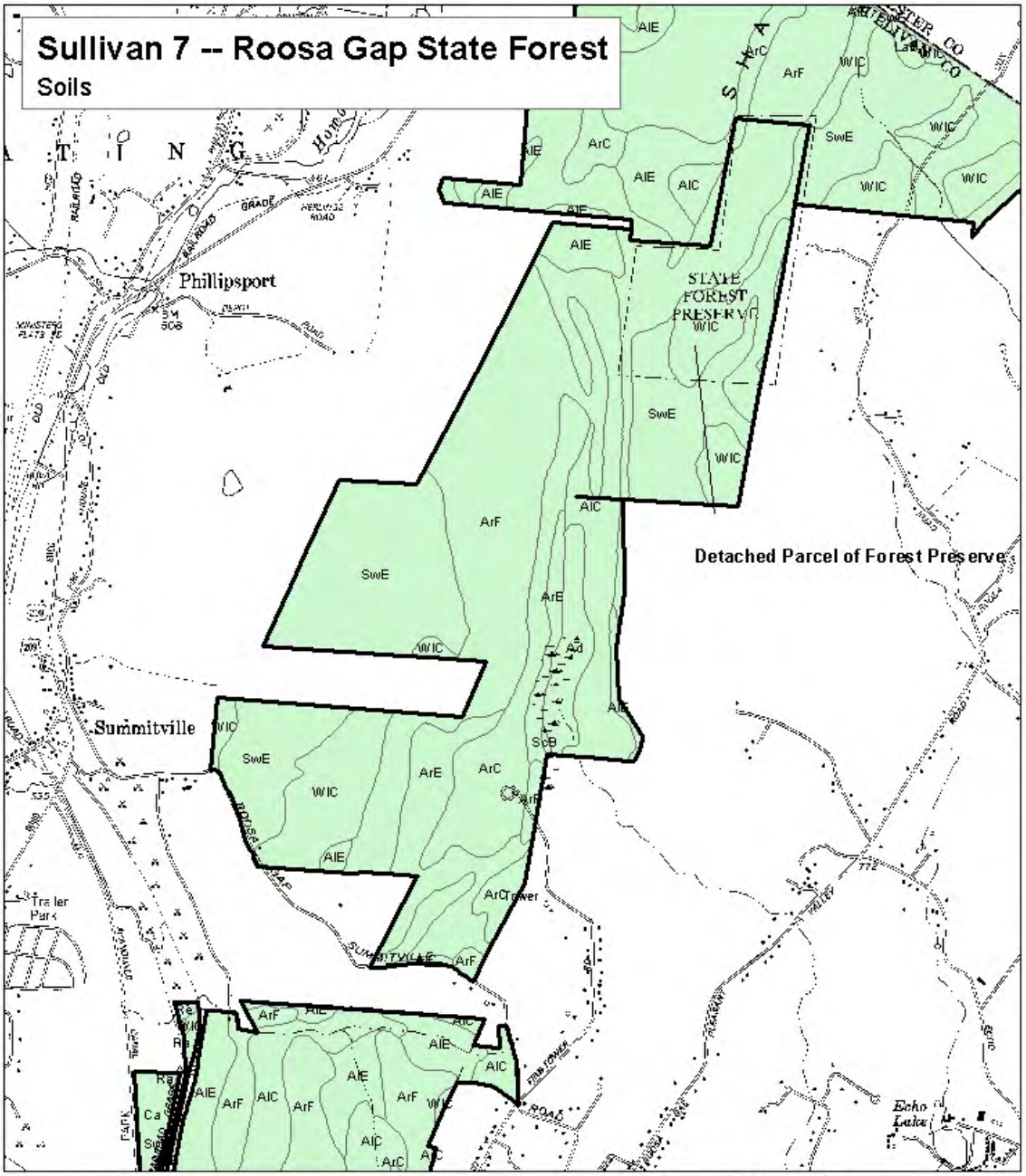
DEC Lands

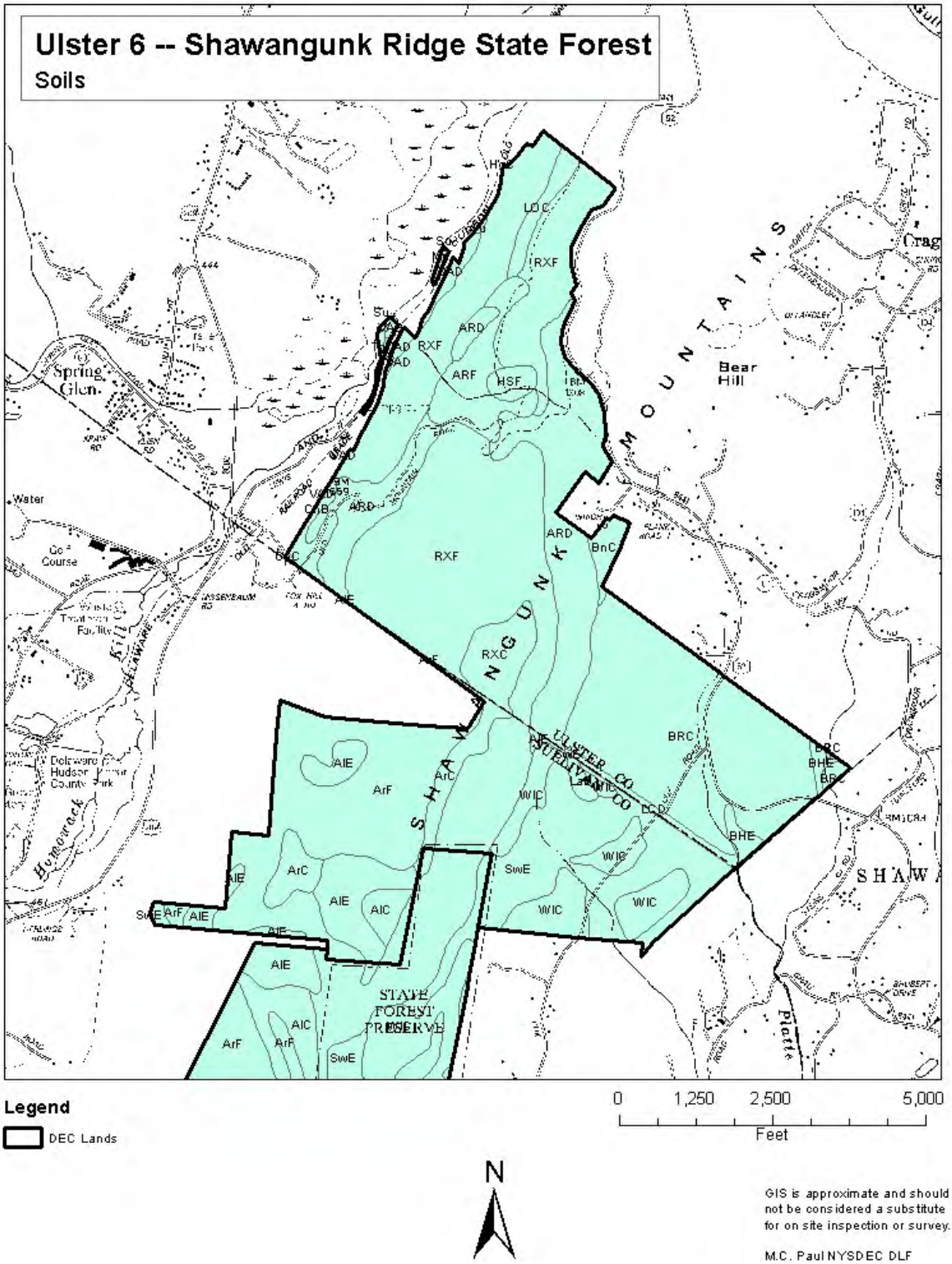
GIS is approximate and should not be considered a substitute for on site inspection or survey.

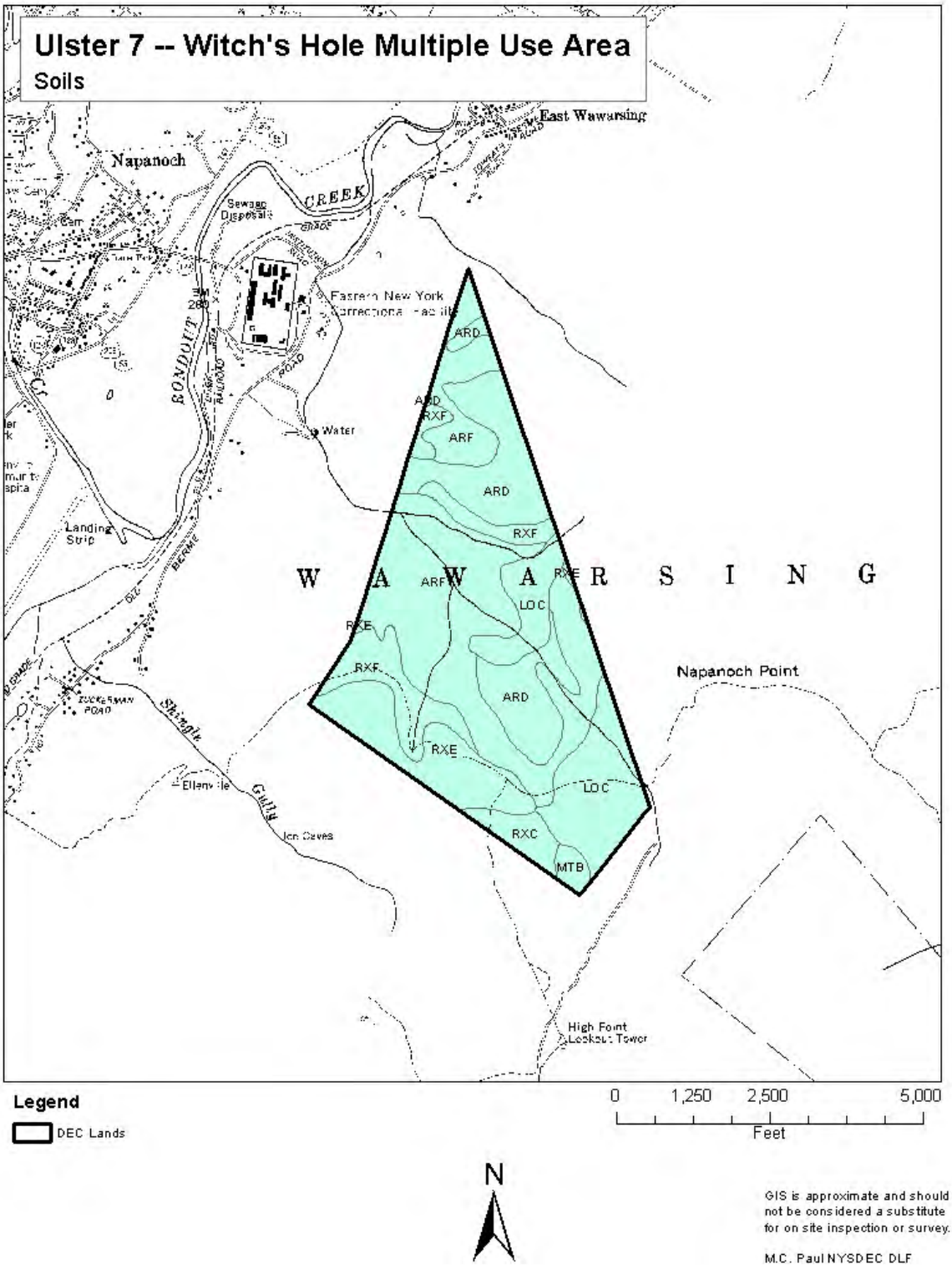
M.C. Paul NYSDEC DLF



GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF


Ulster 6 -- Shawangunk Ridge State Forest
Soils
Legend
DEC Lands
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF
SHAWANGUNK MOUNTAINS
Bear Hill
Spring Glen
Water
Golf Course
Delaware Hudson Power County Park
Homowack Kill
STATE FOREST PRESERVE
ULSTER CO
SULLIVAN CO
LOC
RXF
ARD
ARF
HSF
BnC
RXC
BRC
BHE
AIE
ArF
ArC
AIC
WIC
SwE


Ulster 7 -- Witch's Hole Multiple Use Area
Soils
East Wawarsing
Napanoch
CREEK
Sewage Disposal
Eastern New York Correctional Facility
BONDOUT
Water
Landing Strip
W A W A R S I N G
ARD
ARF
RXF
LOC
RXE
RXC
MTB
Napanoch Point
Shingle Gulch
Ice Caves
High Point Lookout Tower
Legend
DEC Lands
0
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2,500
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Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

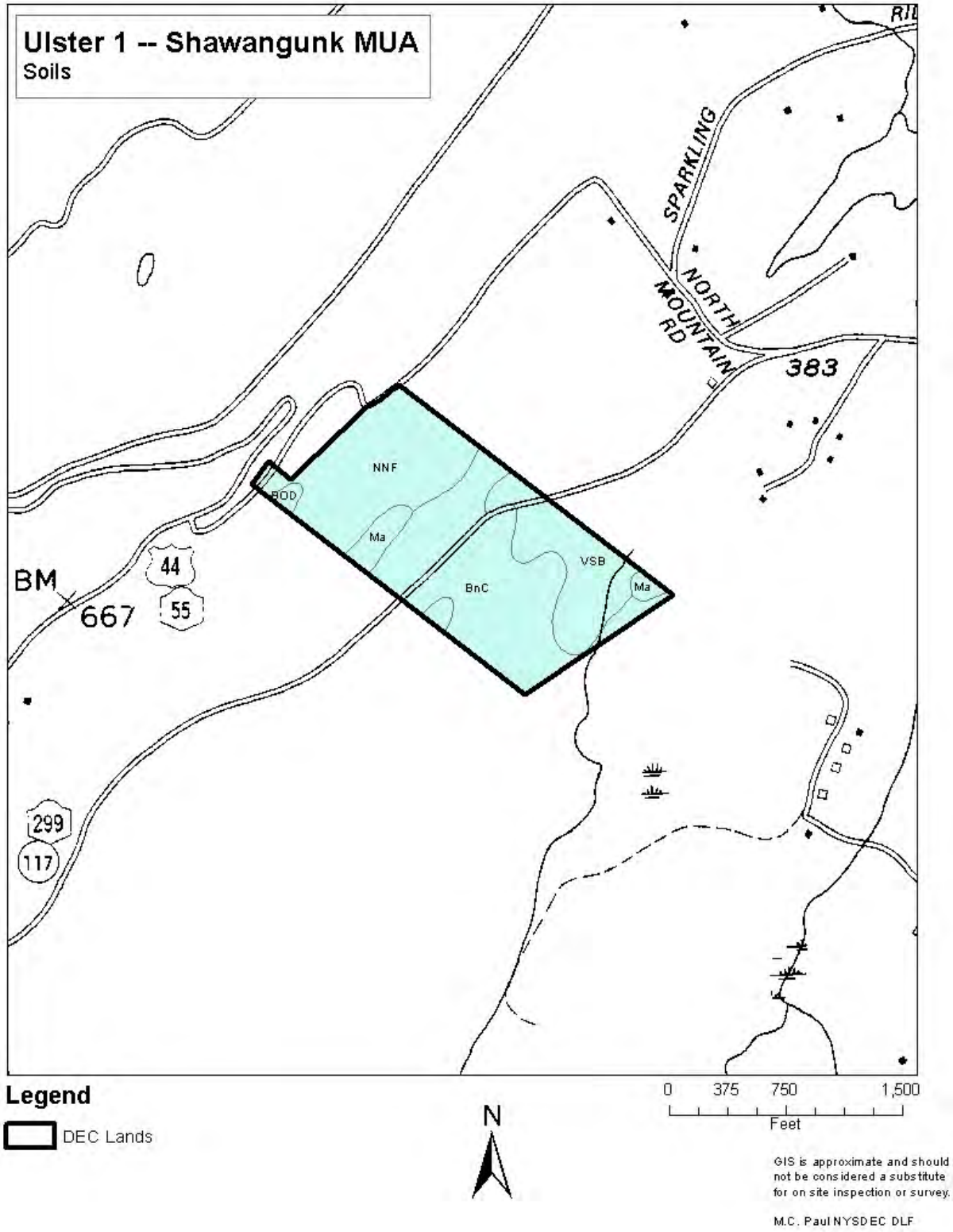
Ulster 1 -- Shawangunk MUA
Soils
SPARKLING
NORTH MOUNTAIN RD
383
NNF
BOD
Ma
VSB
BnC
Ma
BM
667
44
55
299
117
Legend
DEC Lands
N
0 375 750 1,500
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

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FIGURE 2 – WATER RESOURCES

DRAFT

WETLANDS AND DEEPWATER ABITATS CLASSIFICATION

System	M - Marine							
Subsystem	1 - Subtidal				2 - Intertidal			
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RF – Reef	AB – Aquatic Bed	RF – Reef	RS – Rocky Shore	US – Unconsolidated Shore
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud	1 Algal 3 Rooted Vascular	1 Coral 3 Worm	1 Algal 3 Rooted Vascular	1 Coral 3 Worm	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic

System	E - Estuarine											
Subsystem	1 - Subtidal				2 - Intertidal							
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RF – Reef	AB – Aquatic Bed	RF – Reef	SB – Streambed	RS – Rocky Shore	US – Unconsolidated Shore	EM – Emergent	SS – Scrub-Shrub	FO – Forested
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 3 Rooted Vascular 4 Floating Vascular	2 Mollusk 3 Worm	1 Algal 3 Rooted Vascular 4 Floating Vascular	2 Mollusk 3 Worm	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Mud 6 Organic	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Persistent 2 Non-persistent 5 *Phragmites australis*	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen

System	R - Riverine						
Subsystem	1 - Tidal	2 – Lower Perennial	3 – Upper Perennial	4* - Intermittent	5** – Unknown Perennial		
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	SB*** – Streambed	AB – Aquatic Bed	RS – Rocky Shore	US – Unconsolidated Shore	EM – Emergent
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Mud 6 Organic 7 Vegetated	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent

* **Intermittent** is limited to the **Streambed** Class
** **Unknown Perennial** is limited to **Unconsolidated Bottom**
*** **Streambed** is limited to **Tidal** and **Intermittent** Subsystems

Classification of Wetlands and Deepwater Habitats of the United States, Cowardin *et al.* 1979

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

System: L - Lacustrine

Subsystem: 1 - Limnetic

Class	Subclass
RB – Rock Bottom	1 Bedrock 2 Rubble
UB – Unconsolidated Bottom	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic
AB – Aquatic Bed	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular

Subsystem: 2 - Littoral

Class	Subclass
RB – Rock Bottom	1 Bedrock 2 Rubble
UB – Unconsolidated Bottom	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic
AB – Aquatic Bed	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular
RS – Rocky Shore	1 Bedrock 2 Rubble
US – Unconsolidated Shore	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated
EM – Emergent	2 Nonpersistent

System: P - Palustrine

Class	Subclass
RB – Rock Bottom	1 Bedrock 2 Rubble
UB – Unconsolidated Bottom	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic
AB – Aquatic Bed	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular
US – Unconsolidated Shore	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated
ML – Moss-Lichen	1 Moss 2 Lichen
EM – Emergent	1 Persistent 2 Nonpersistent 5 *Phragmites australis*
SS – Scrub-Shrub	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen
FO – Forested	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen

MODIFIERS

In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

Water Regime			Special Modifiers	Water Chemistry			Soil
Nontidal	Saltwater Tidal	Freshwater Tidal		Coastal Halinity	Inland Salinity	pH Modifiers for all Fresh Water	
A Temporarily Flooded	L Subtidal	S Temporarily Flooded-Tidal	b Beaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organic
B Saturated	M Irregularly Exposed	R Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Mineral
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	l Alkaline	
E Seasonally Flooded/ Saturated	P Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impounded	4 Polyhaline	0 Fresh		
F Semipermanently Flooded			r Artificial	5 Mesohaline			
G Intermittently Exposed			s Spoil	6 Oligohaline			
H Permanently Flooded			x Excavated	0 Fresh			
J Intermittently Flooded							
K Artificially Flooded							

Page 2 of 2

Classification of Waters

All waters of the state are provided a class and standard designation based on existing or expected best usage of each water or waterway segment.

- The classification AA or A is assigned to waters used as a source of drinking water.
- Classification B indicates a best usage for swimming and other contact recreation, but not for drinking water.
- Classification C is for waters supporting fisheries and suitable for non - contact activities.
- The lowest classification and standard is D.

Waters with classifications A, B, and C may also have a standard of (T), indicating that it may support a trout population, or (TS), indicating that it may support trout spawning (TS). Special requirements apply to sustain these waters that support these valuable and sensitive fisheries resources.

Small ponds and lakes with a surface area of 10 acres or less, located within the course of a stream, are considered to be part of a stream and are subject to regulation under the stream protection category of Protection of Waters.

To determine the classification and standard of a given watercourse, contact the Department of Environmental Conservation regional office responsible for the area in which the watercourse is located (see page vi of this guide for addresses and phone numbers).

Certain waters of the state are protected on the basis of their classification. Streams and small water bodies located in the course of a stream that are designated as C(T) or higher (i.e., C(TS), B, or A) are collectively referred to as "protected streams," and are subject to the stream protection provisions of the Protection of Waters regulations.

The Environmental Resource Mapper (ERM), a new web based interactive mapping application developed by DEC, can be used to identify protected streams based on their classification. ERM can also be used to create simple maps that can be submitted as part of the Protection of Waters Permit Application process.

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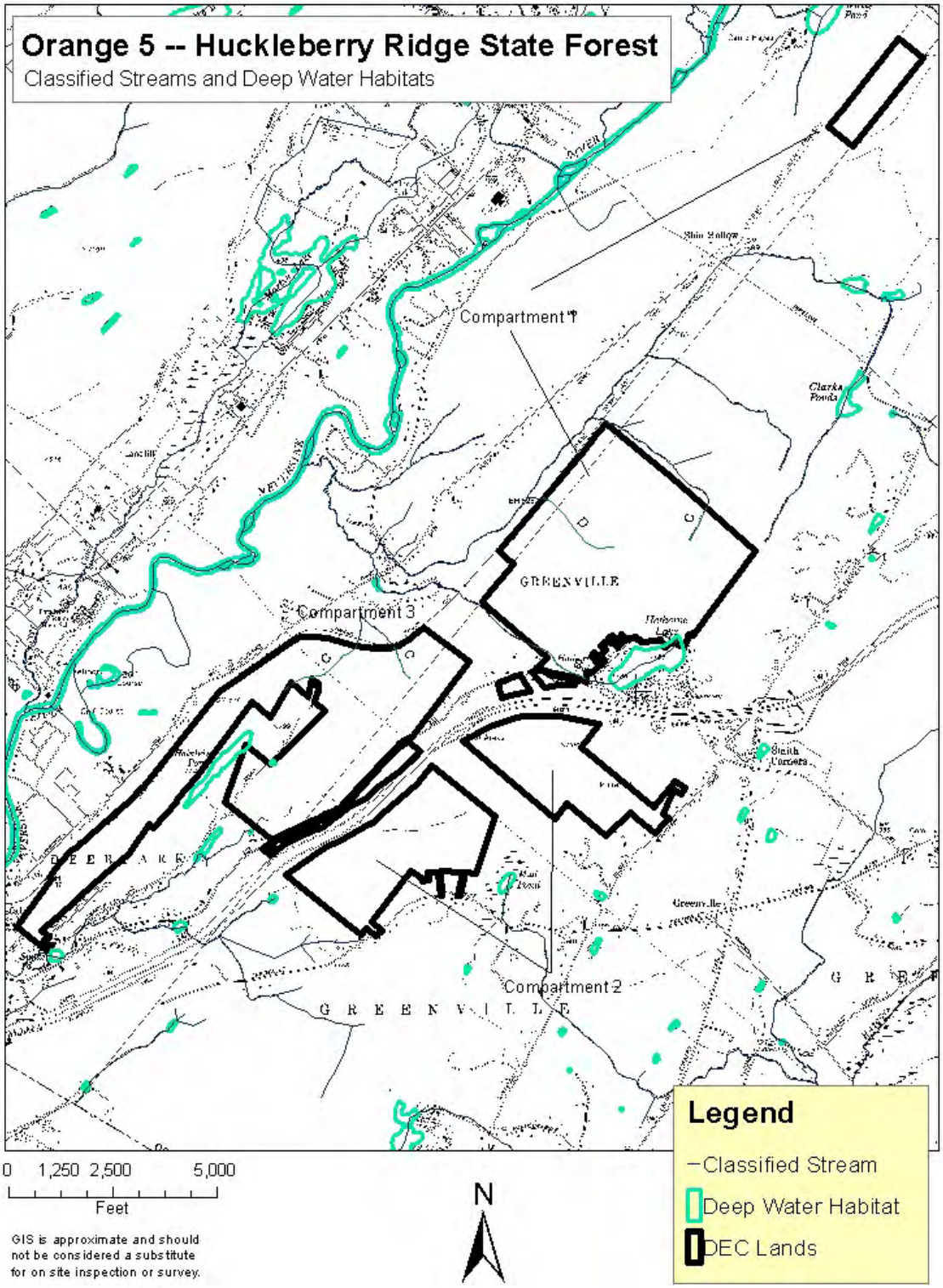

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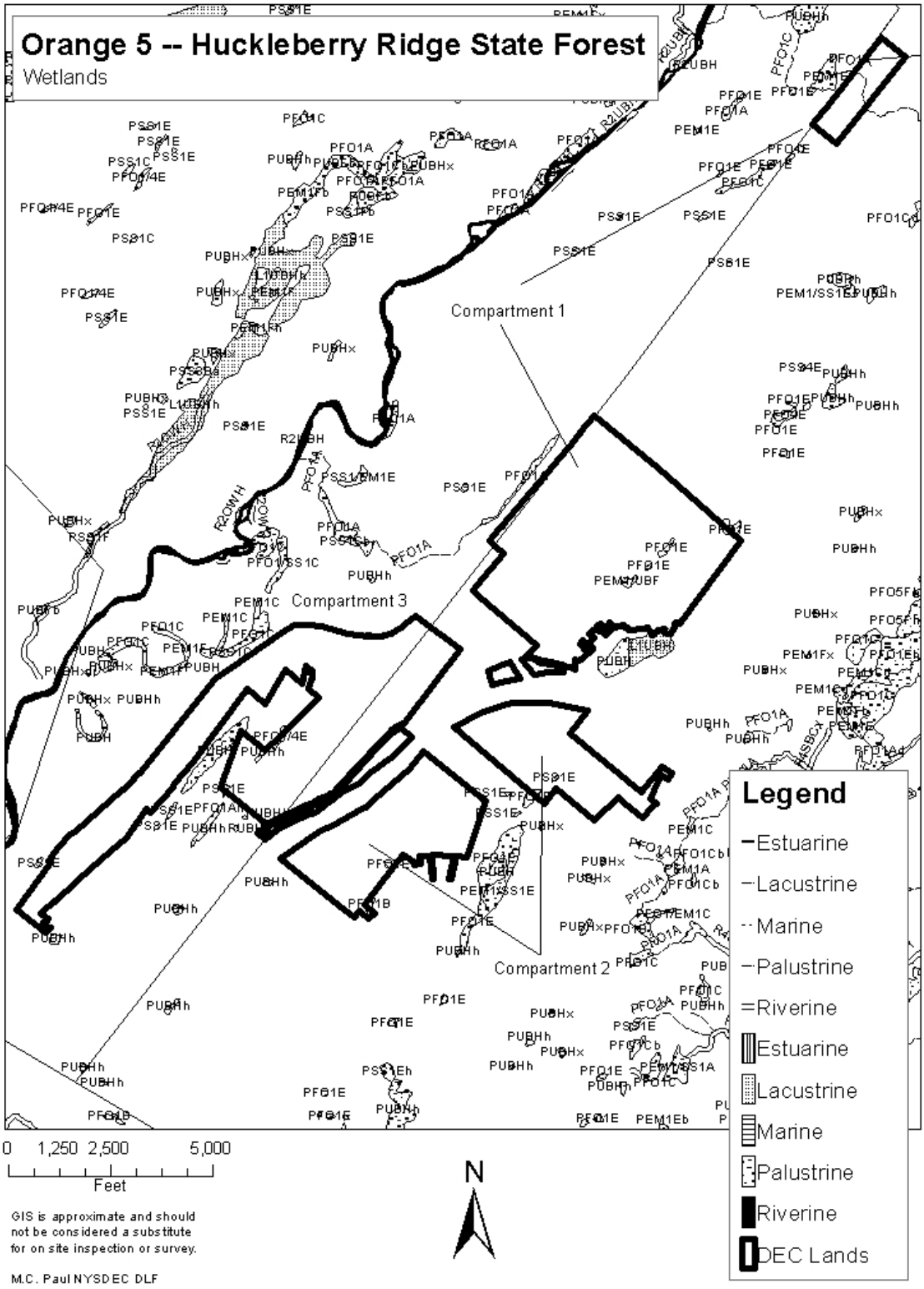
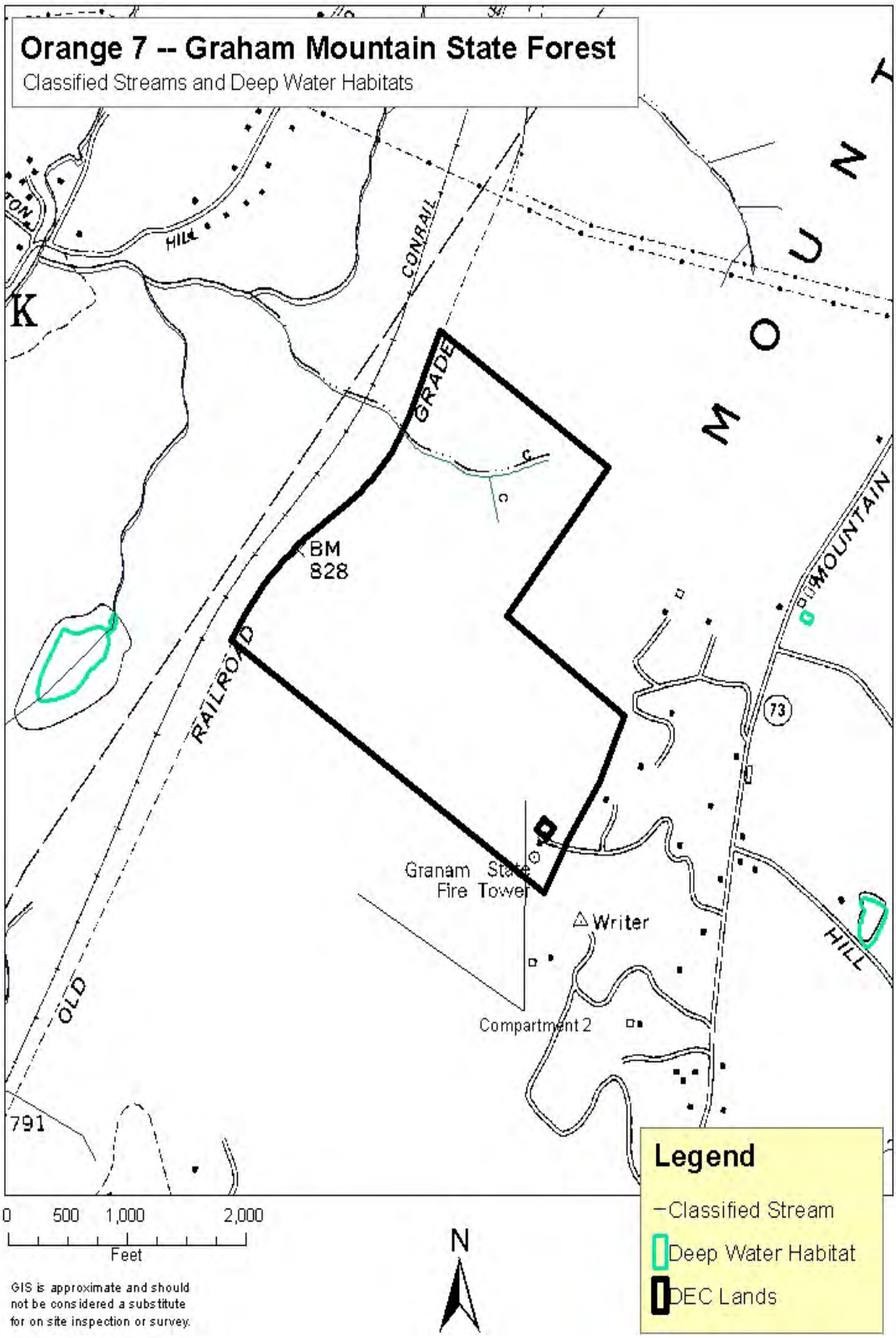
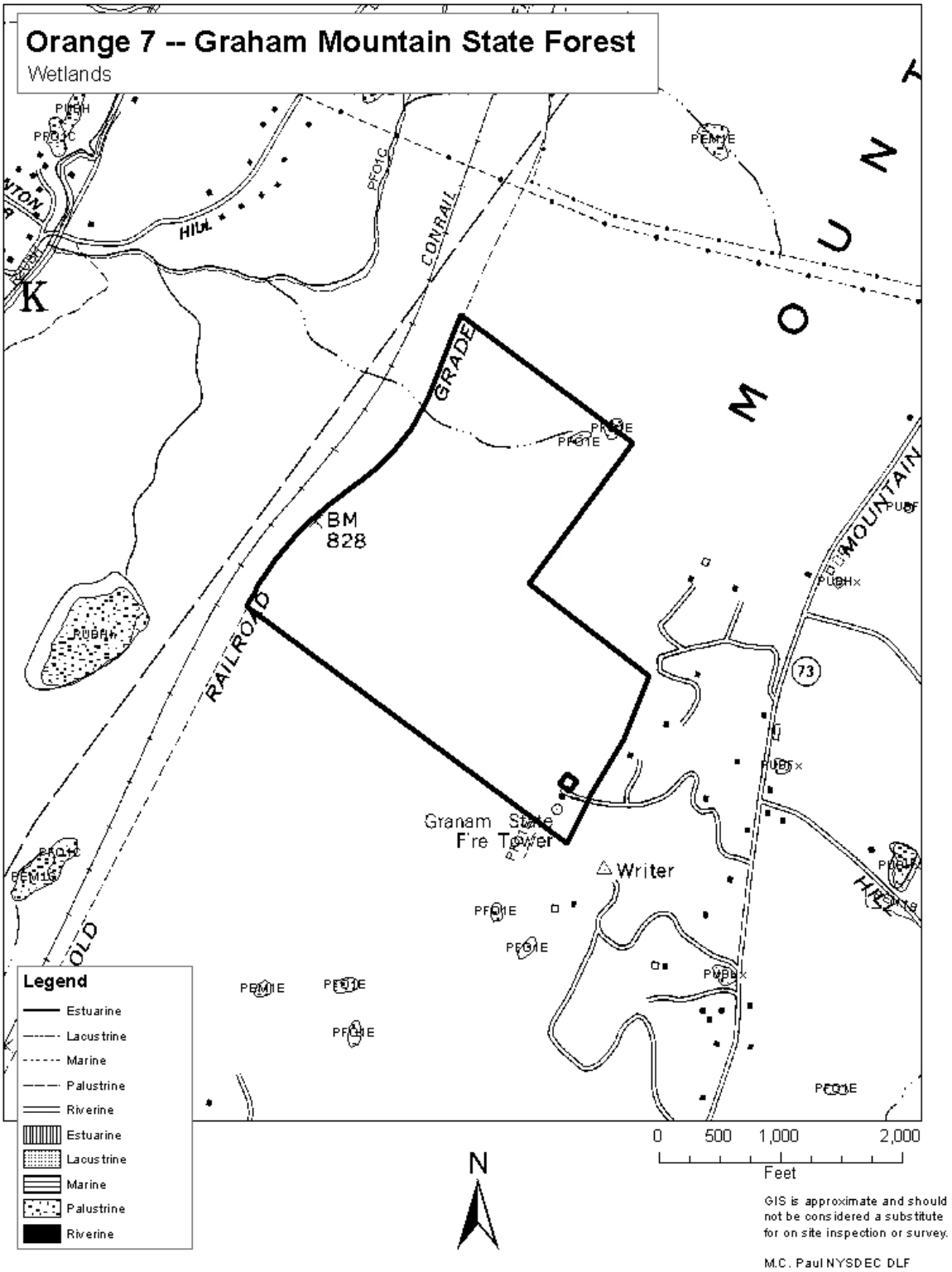
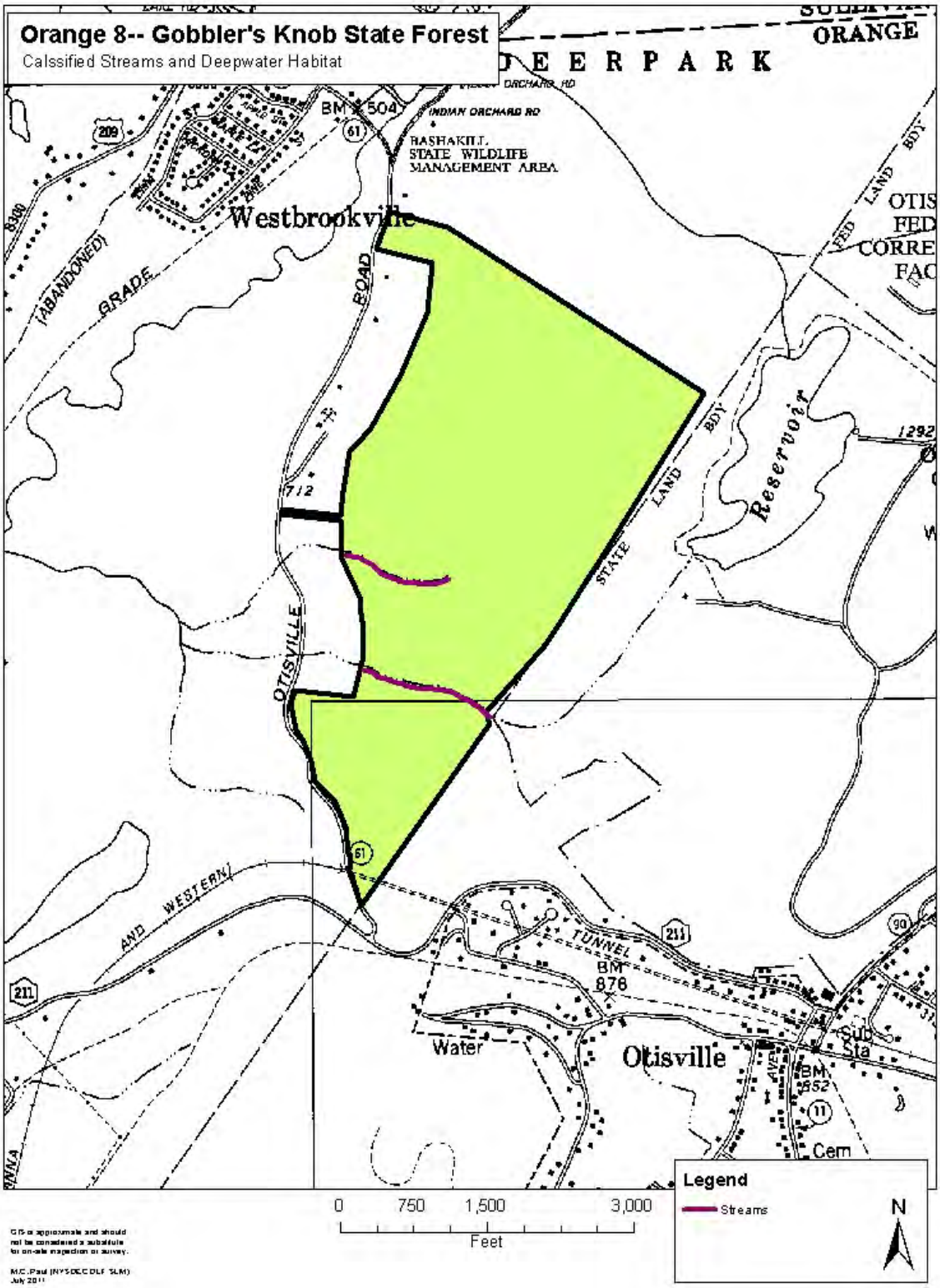
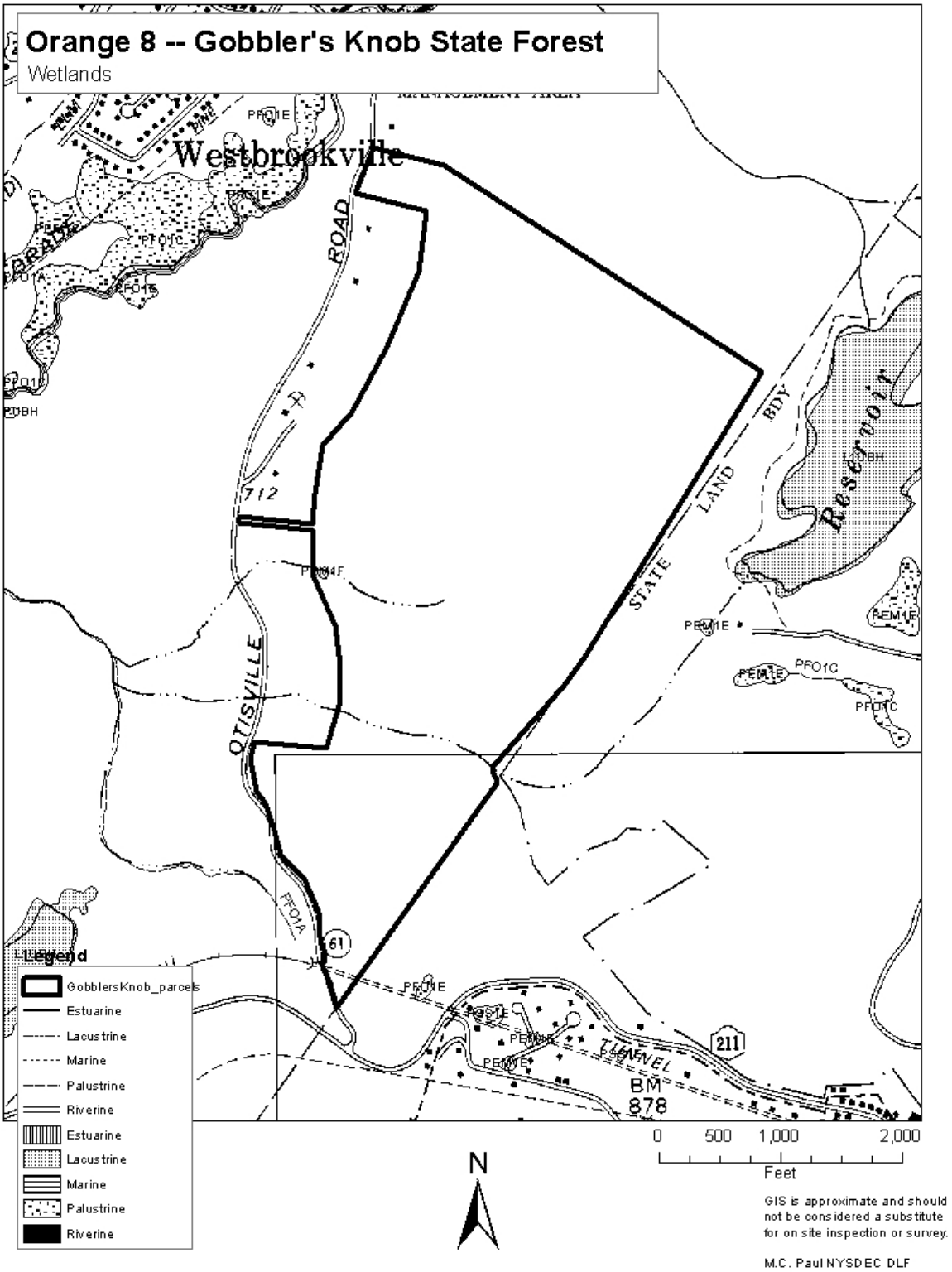
M.C. Paul NYSDEC DLF

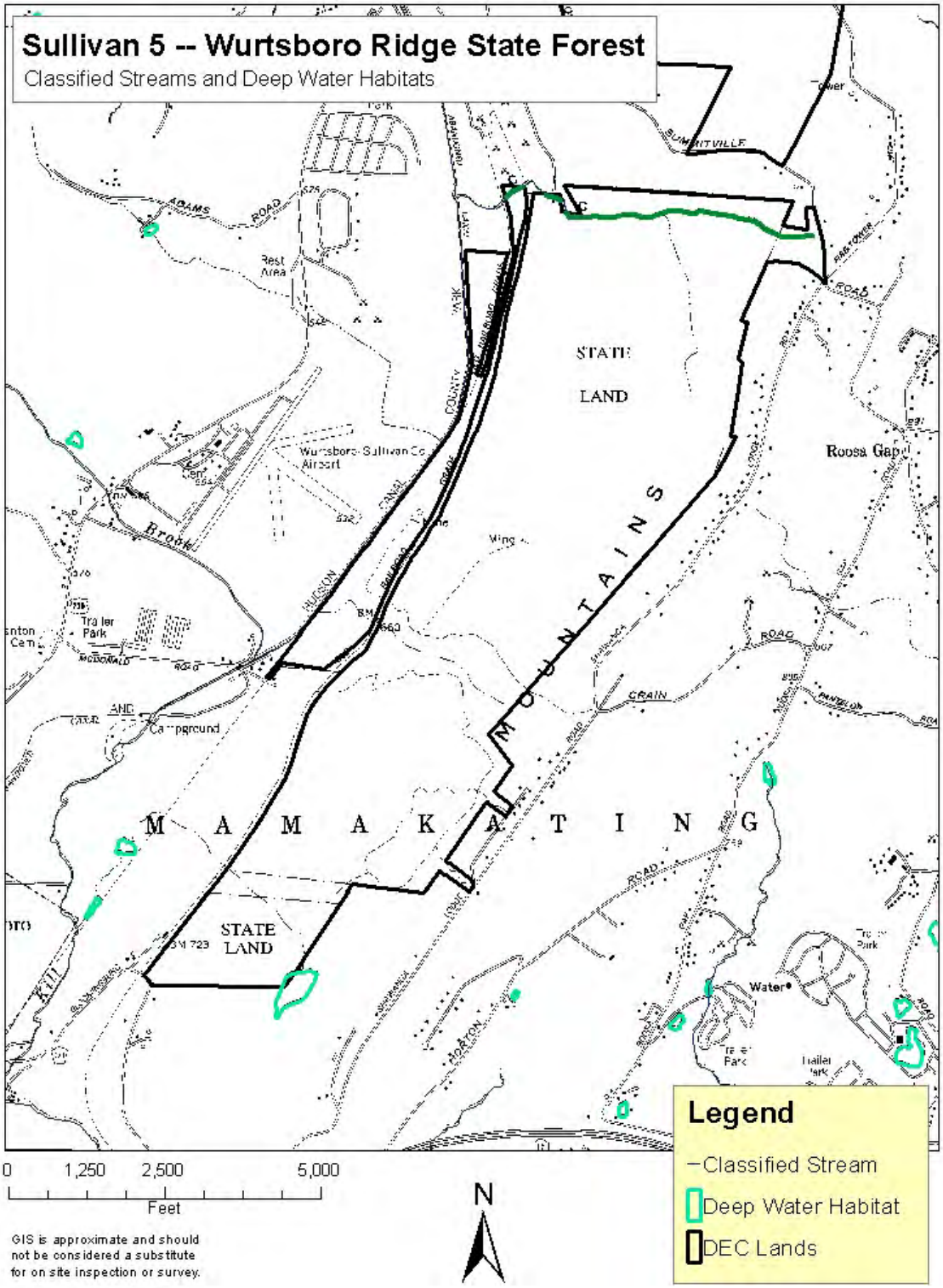

Orange 5 -- Huckleberry Ridge State Forest
Wetlands
Compartment 1
Compartment 2
Compartment 3
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
DEC Lands
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

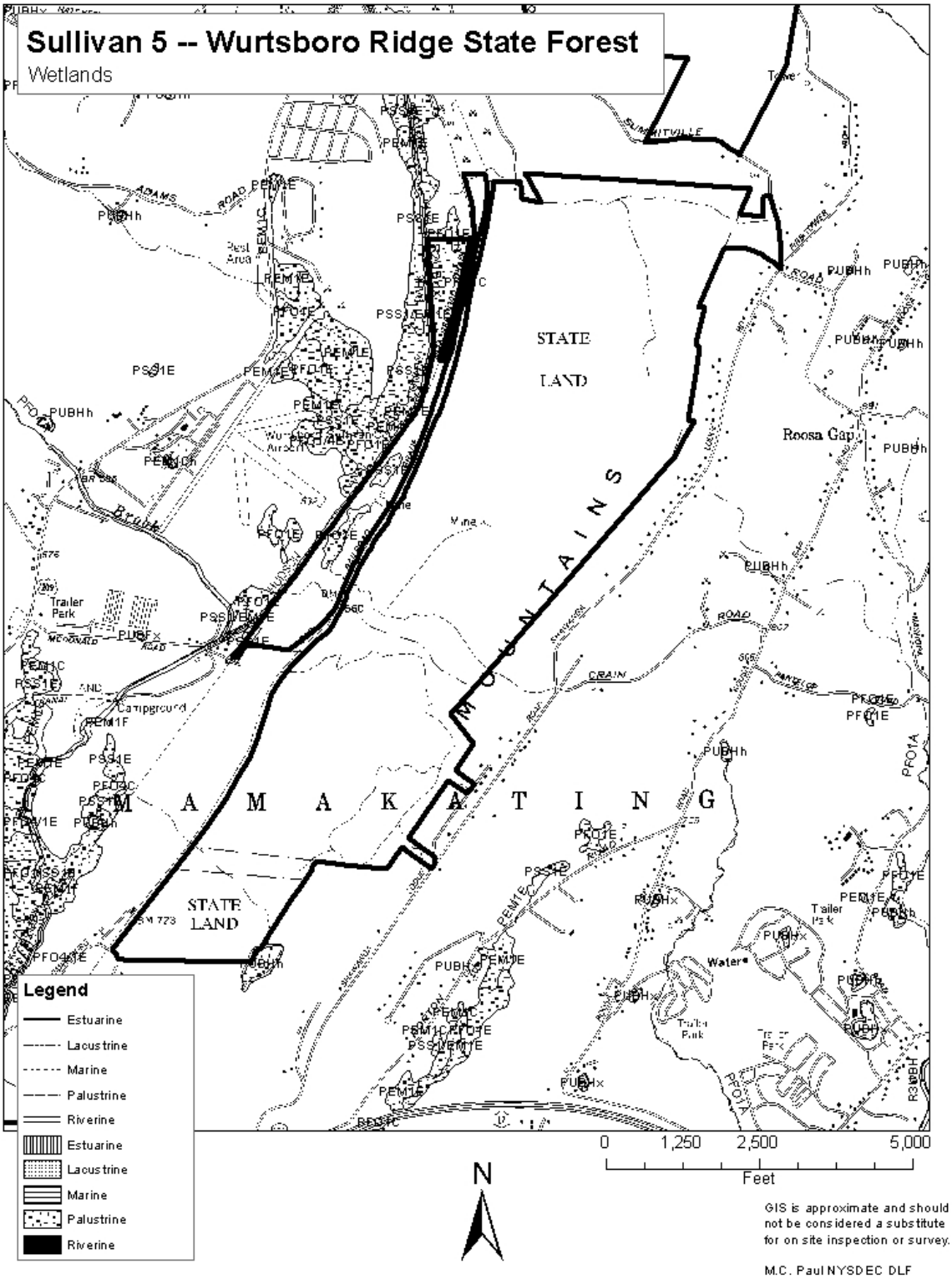

Orange 7 -- Graham Mountain State Forest
Classified Streams and Deep Water Habitats
CONRAIL
GRADE
BM
828
RAILROAD
OLD
MOUNTAIN
HILL
73
Granam State
Fire Tower
Writer
Compartment 2
791
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0 500 1,000 2,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

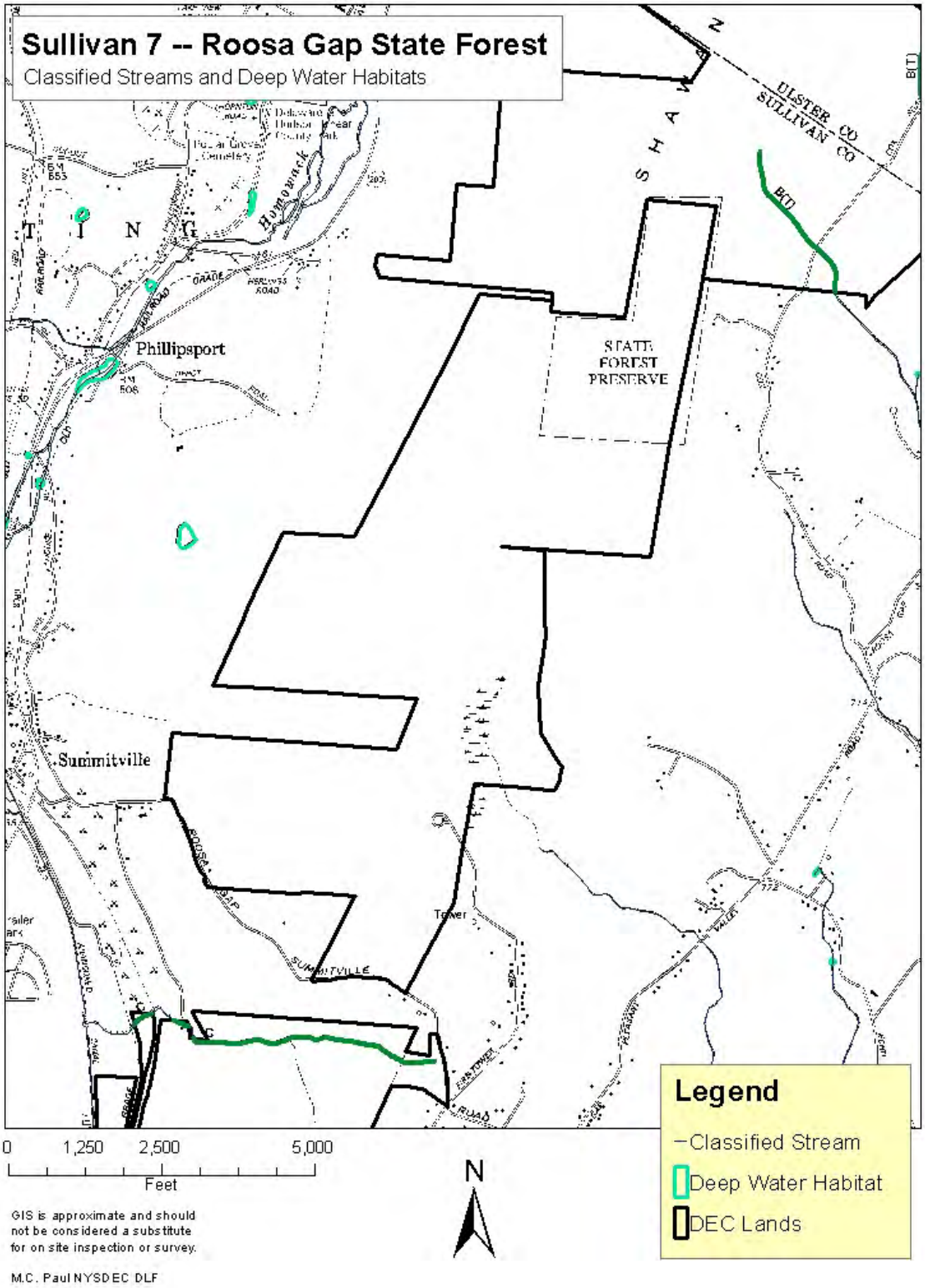

Orange 7 -- Graham Mountain State Forest
Wetlands
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
BM 828
Granam State Fire Tower
Writer
RAILROAD
GRADE
CONRAIL
MOUNTAIN
HILL
73
0 500 1,000 2,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

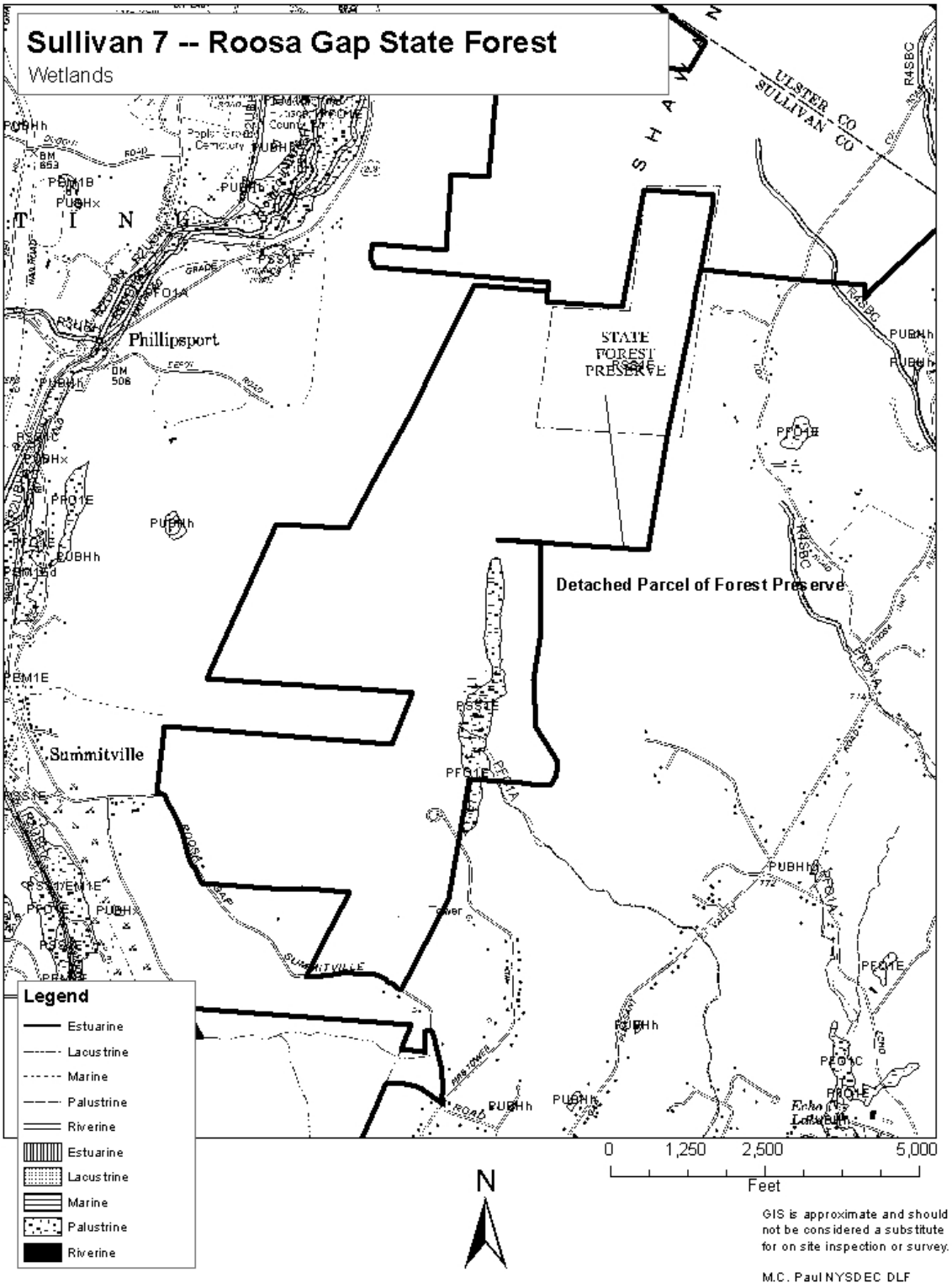

Orange 8-- Gobbler's Knob State Forest
Calssified Streams and Deepwater Habitat
ORANGE
DEERPARK
INDIAN ORCHARD RD
BASHAKILL STATE WILDLIFE MANAGEMENT AREA
Westbrookville
(ABANDONED)
GRADE
ROAD
OTISVILLE
STATE LAND BDY
Reservoir
OTIS
FED
CORRE
FAC
AND WESTERN
TUNNEL
Water
Otisville
Sub Sta
Cem
Legend
Streams
N
0 750 1,500 3,000
Feet
GIS is approximate and should not be considered a substitute to on-site inspection or survey.
M.C.Paul (NYSDEC DLF SLM)
July 2011

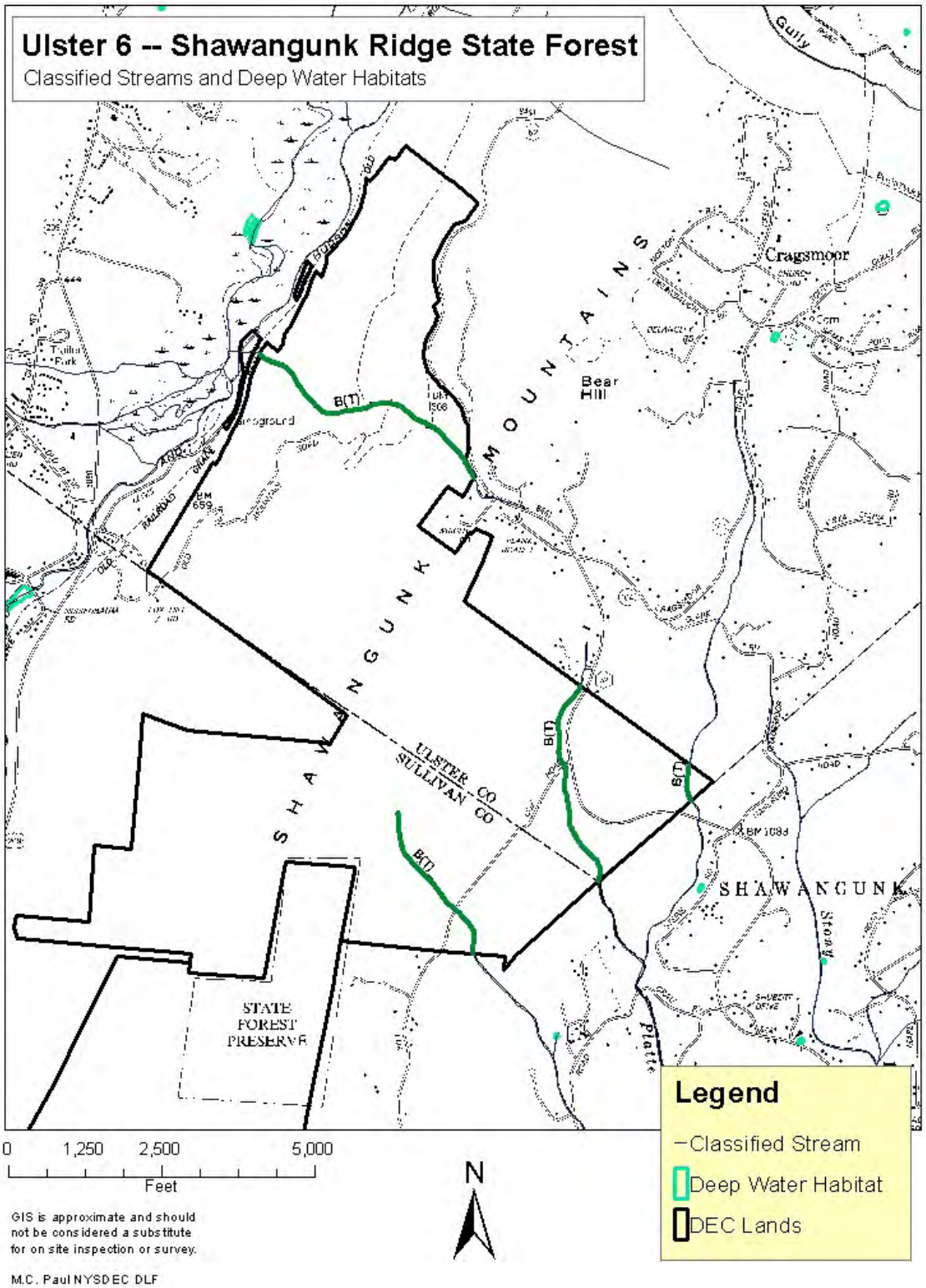

Orange 8 -- Gobbler's Knob State Forest
Wetlands
Westbrookville
ROAD
OTISVILLE
STATE LAND BDY
Reservoir
TUNNEL
BM 878
712
61
211
Legend
GobblersKnob_parcels
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
N
0 500 1,000 2,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

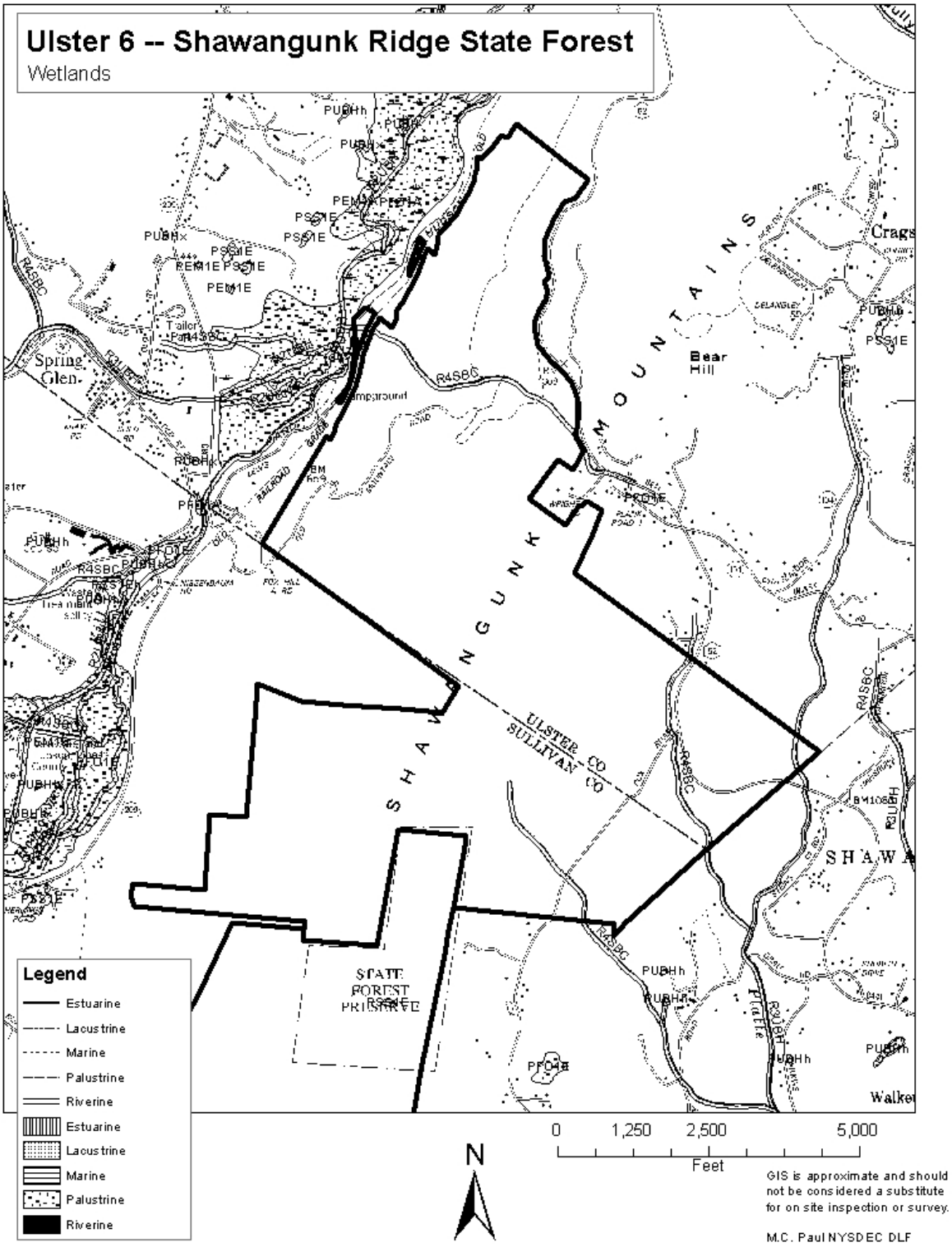

Sullivan 5 -- Wurtsboro Ridge State Forest
Classified Streams and Deep Water Habitats
STATE
LAND
M A M A K A T I N G
MOUNTAINS
STATE
LAND
Roosa Gap
Wurtsboro-Sullivan Co
Airport
Rest
Area
Trailer
Park
Campground
Water
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should
not be considered a substitute
for on site inspection or survey.
M.C. Paul NYSDEC DLF

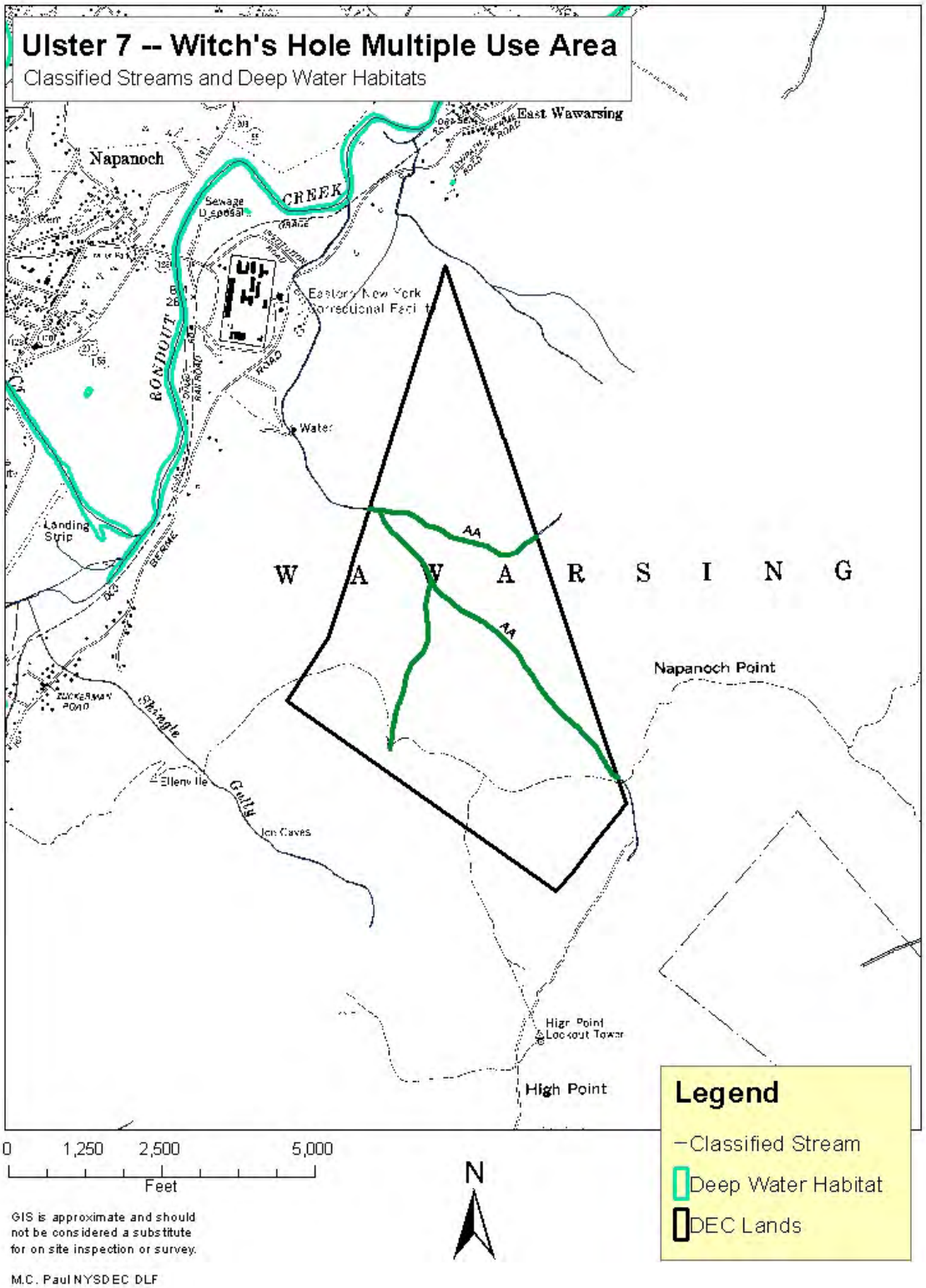

Sullivan 5 -- Wurtsboro Ridge State Forest
Wetlands
STATE LAND
STATE LAND
M A M A K A T I N G
MOUNTAINS
Roosa Gap
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

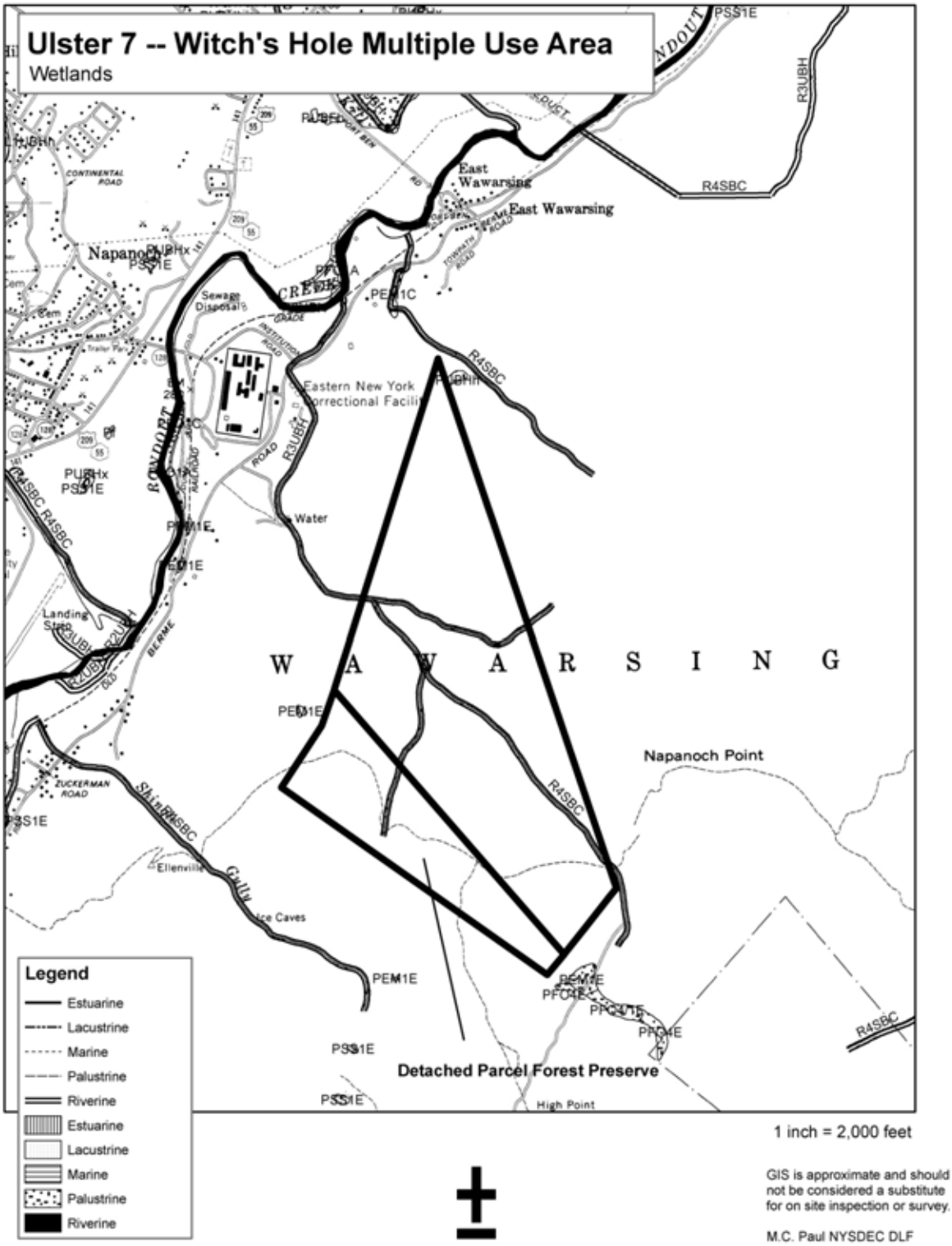

Sullivan 7 -- Roosa Gap State Forest
Classified Streams and Deep Water Habitats
Phillipsport
Summitville
STATE FOREST PRESERVE
ULSTER CO
SULLIVAN CO
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

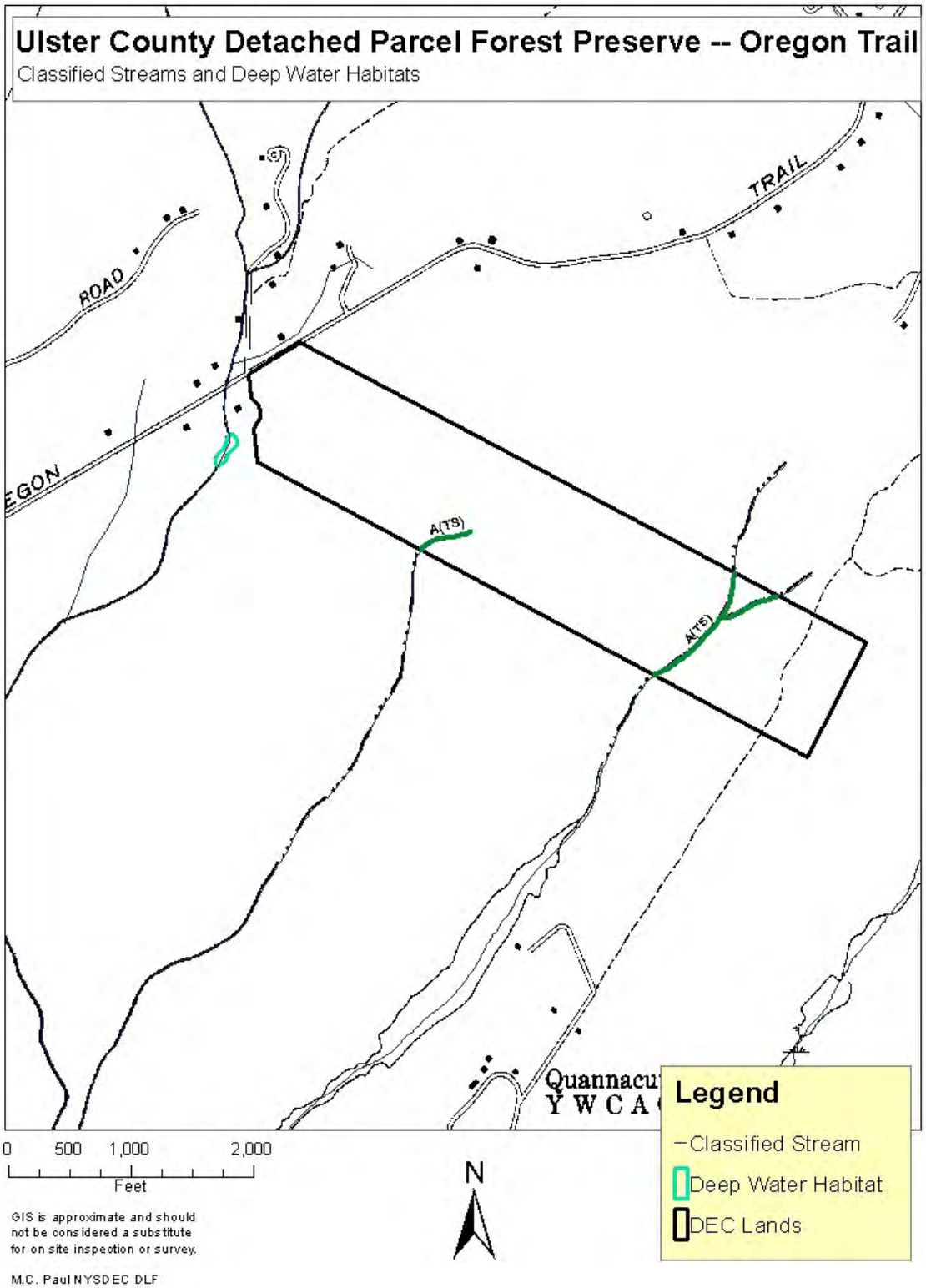

Sullivan 7 -- Roosa Gap State Forest
Wetlands
Phillipsport
Summitville
STATE FOREST PRESERVE
Detached Parcel of Forest Preserve
ULSTER CO
SULLIVAN CO
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

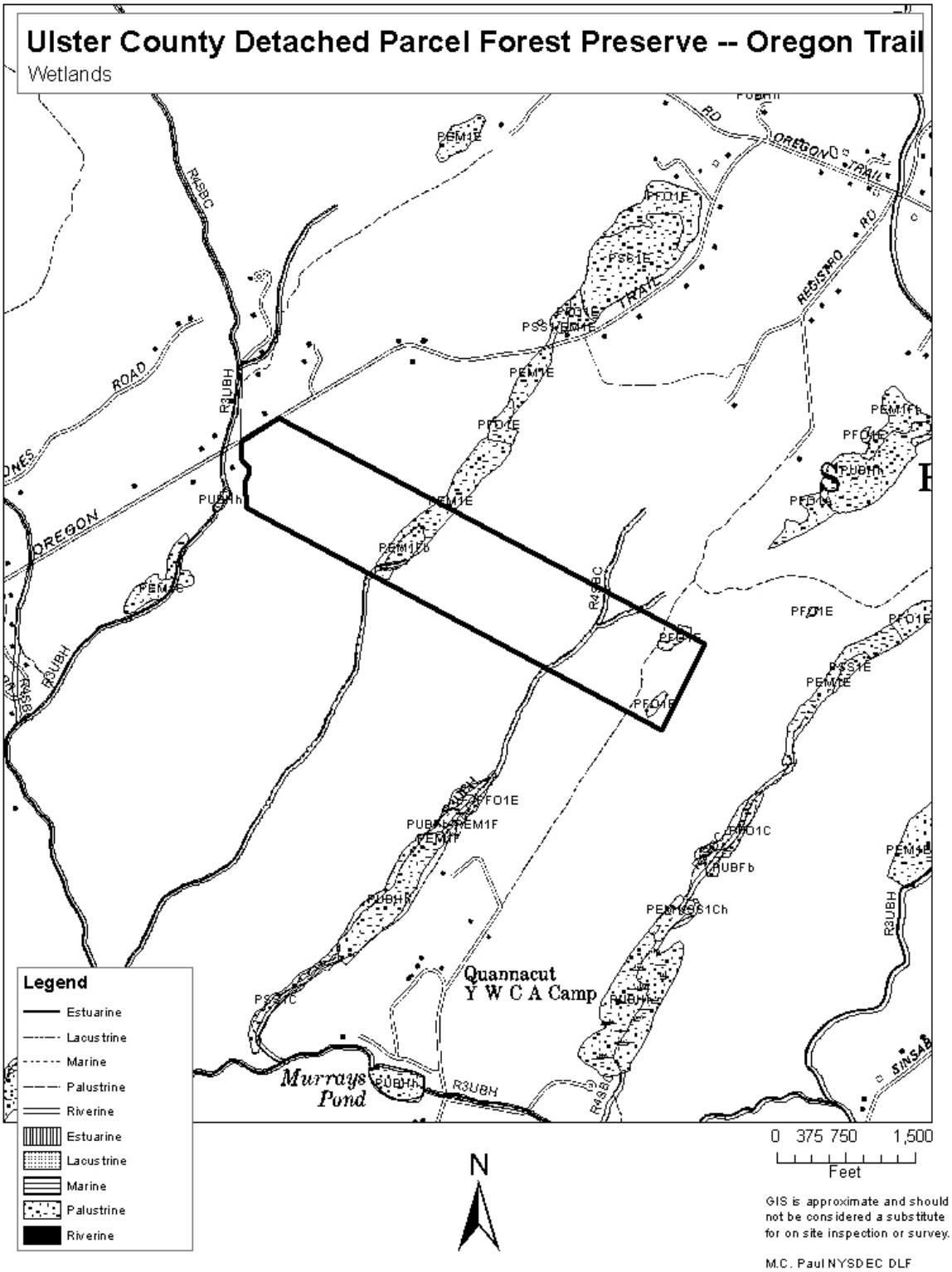

Ulster 6 -- Shawangunk Ridge State Forest
Classified Streams and Deep Water Habitats
Cragsmoor
Bear Hill
SHAWANGUNK MOUNTAINS
SHAWANGUNK
ULSTER CO
SULLIVAN CO
STATE FOREST PRESERVE
B(T)
B(T)
B(T)
B(T)
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

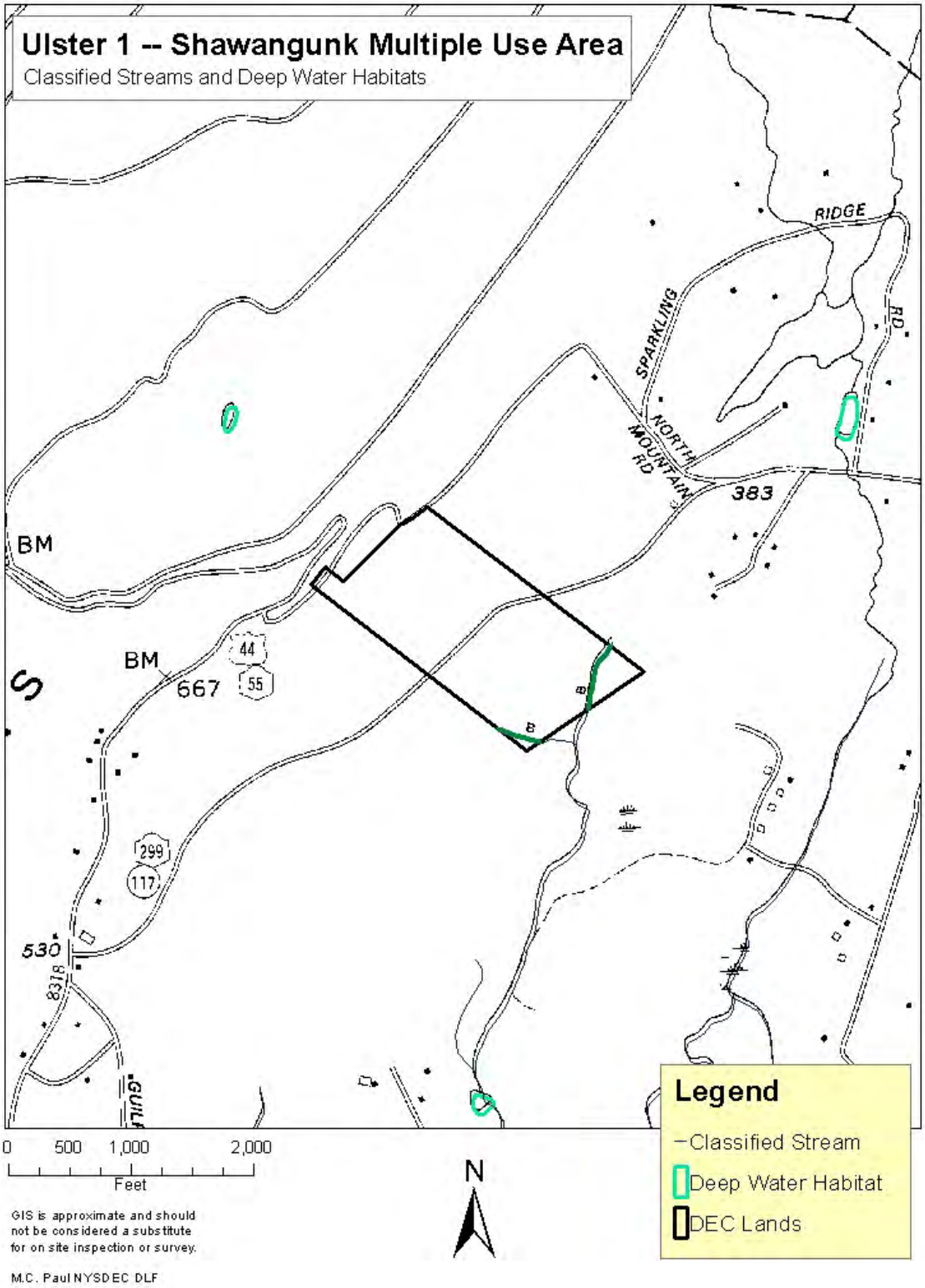

Ulster 6 -- Shawangunk Ridge State Forest
Wetlands
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
SHAWANGUNK MOUNTAINS
Bear Hill
Spring Glen
Crags
ULSTER CO
SULLIVAN CO
STATE FOREST PRESERVE
Walker
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster 7 -- Witch's Hole Multiple Use Area
Classified Streams and Deep Water Habitats
East Wawarsing
Napanoch
CREEK
Sewage Disposal
Eastern New York Correctional Facility
RONDOUT
Water
Landing Strip
AA
AA
W A W A R S I N G
Napanoch Point
Shingle Gully
Ellenville
Ice Caves
High Point Lookout Tower
High Point
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0 1,250 2,500 5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster 7 -- Witch's Hole Multiple Use Area
Wetlands
East Wawarsing
Napanoch
Sewage Disposal
Eastern New York Correctional Facility
Water
Landing Strip
W A W A R S I N G
Napanoch Point
Ellenville
Ice Caves
Detached Parcel Forest Preserve
High Point
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
1 inch = 2,000 feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster County Detached Parcel Forest Preserve -- Oregon Trail
Classified Streams and Deep Water Habitats
ROAD
TRAIL
EGON
A(TS)
A(TS)
Quannacu
Y W C A
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0 500 1,000 2,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster County Detached Parcel Forest Preserve -- Oregon Trail
Wetlands
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Quannacut
Y W C A Camp
Murrays
Pond
OREGON
TRAIL
ROAD
REGISTRO
RD
R3UBH
R4SBC
PEM1E
PFO1E
PSS1E
PUBHh
PEM1Fb
PFO1C
PUBFb
PEM1F
PSS1C
0 375 750 1,500
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster 1 -- Shawangunk Multiple Use Area
Classified Streams and Deep Water Habitats
RIDGE
RD
SPARKLING
NORTH MOUNTAIN RD
383
BM
BM
667
44
55
299
117
530
831B
Legend
Classified Stream
Deep Water Habitat
DEC Lands
0
500
1,000
2,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

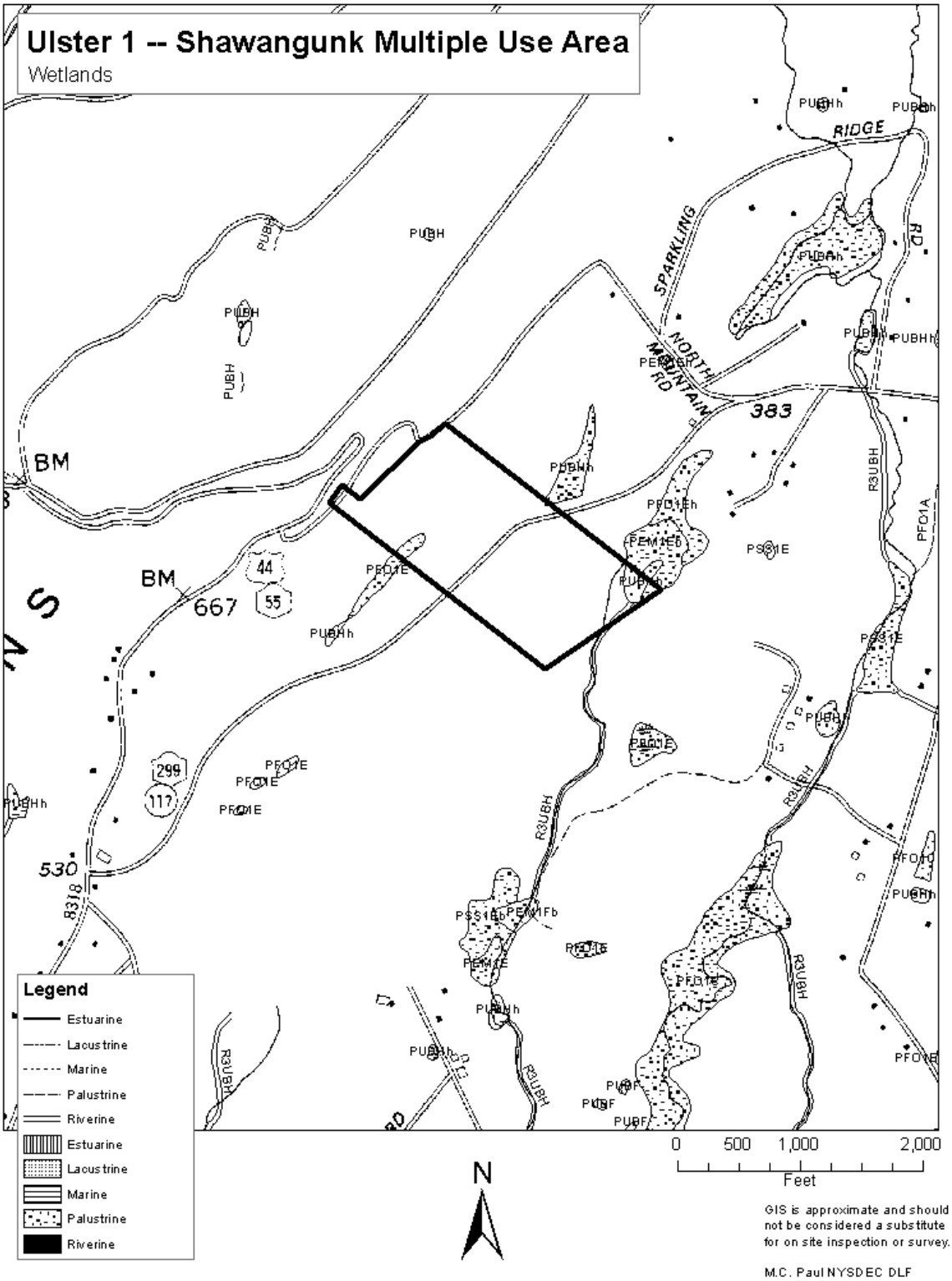
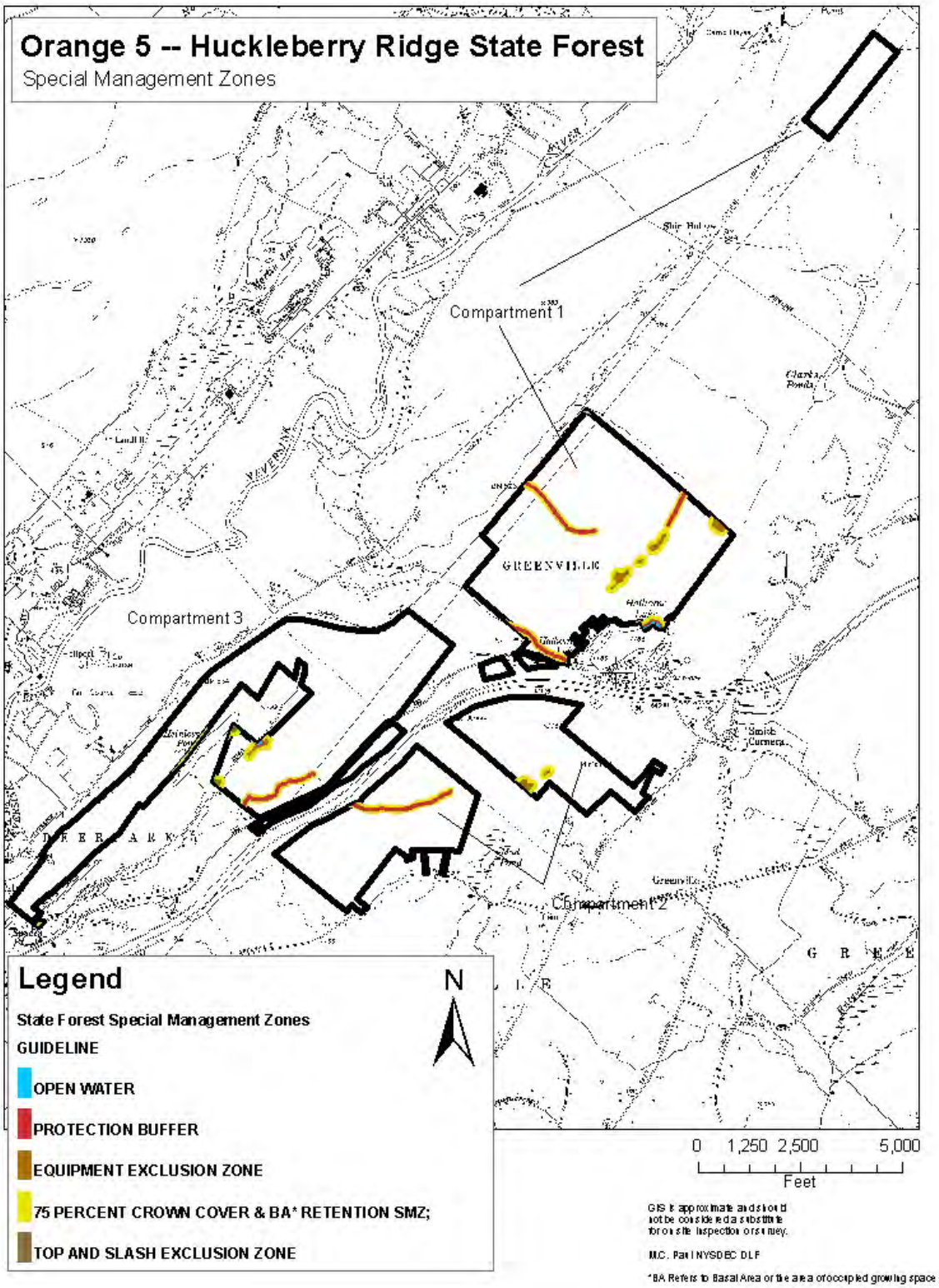
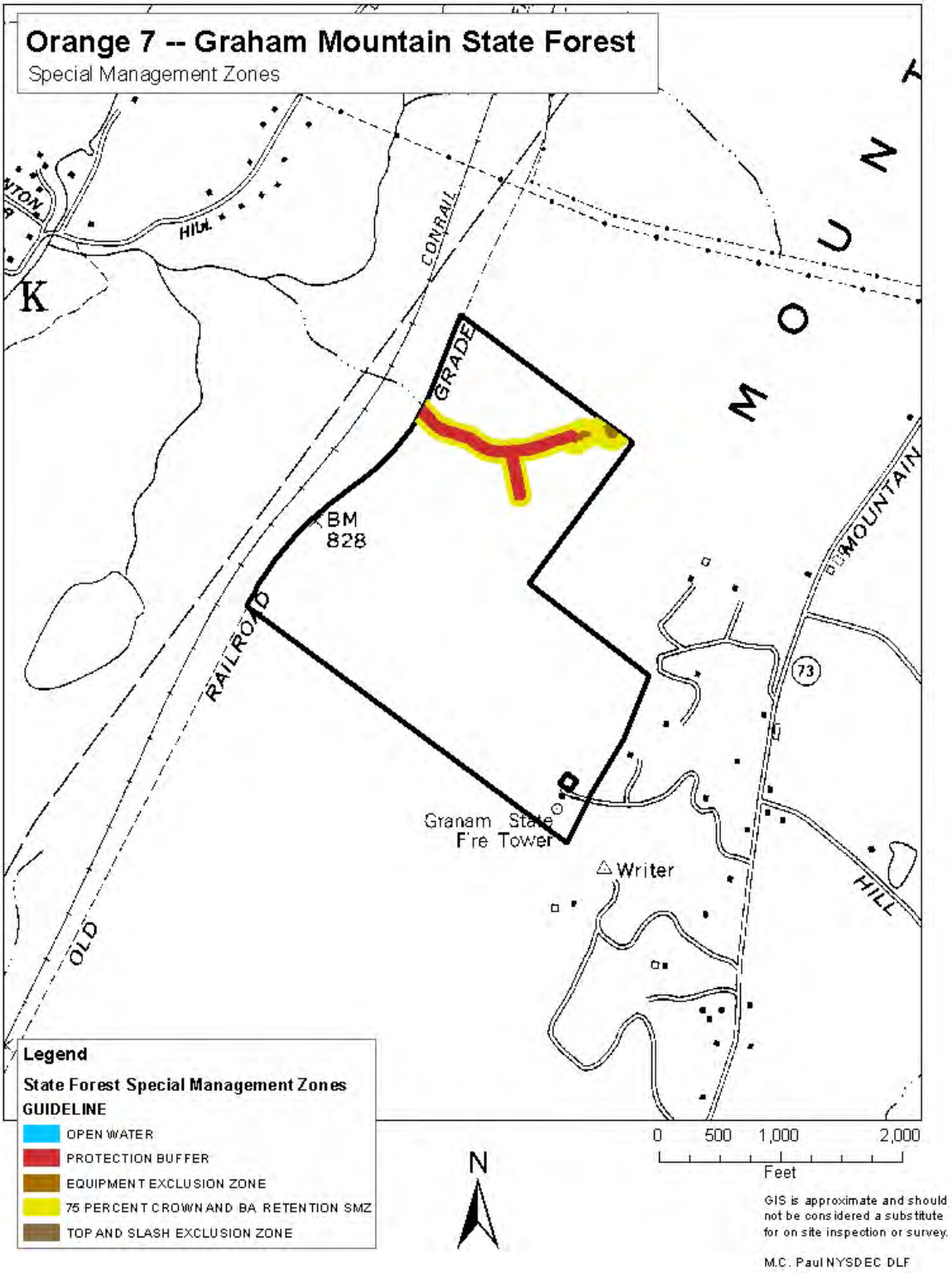
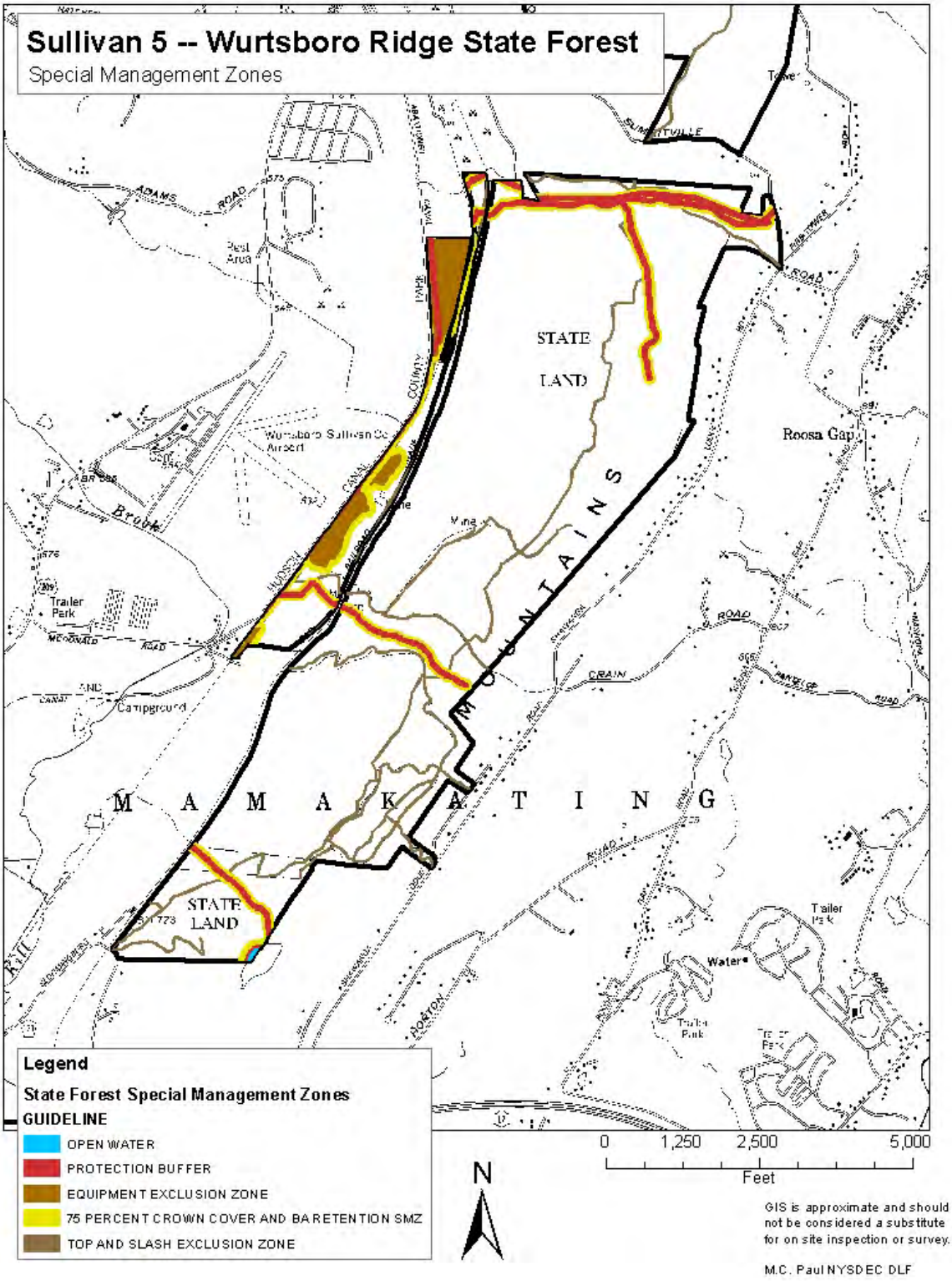
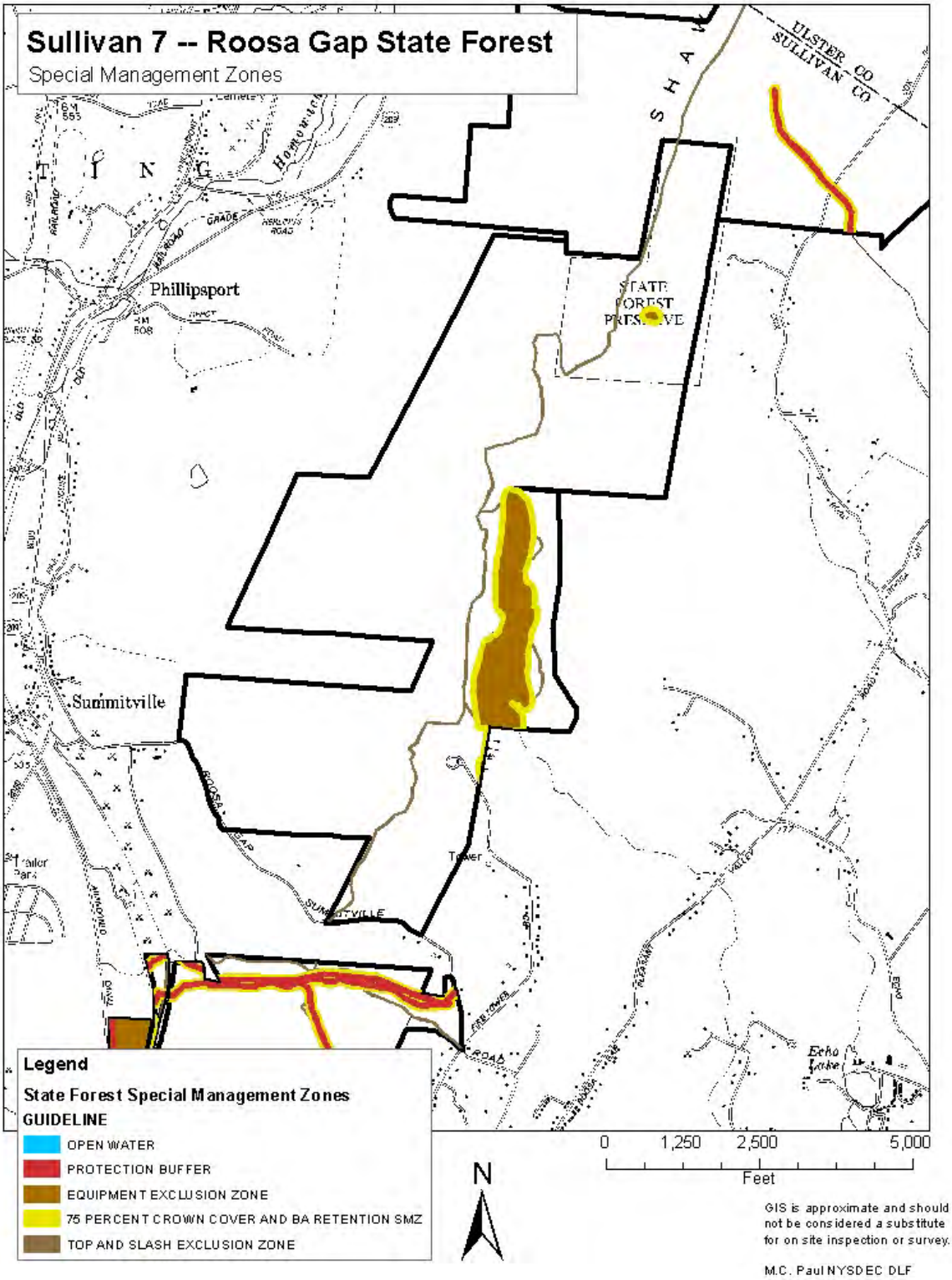

Ulster 1 -- Shawangunk Multiple Use Area
Wetlands
Legend
Estuarine
Lacustrine
Marine
Palustrine
Riverine
Estuarine
Lacustrine
Marine
Palustrine
Riverine
0 500 1,000 2,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF
SPARKLING RIDGE RD
NORTH MOUNTAIN RD
383
BM
667
44
55
299
117
530
8318
R3UBH
PFO1A
PUBH
PUBHh
PFO1E
PSS1E
PEM1Eb
PEM1Fb
PUBF

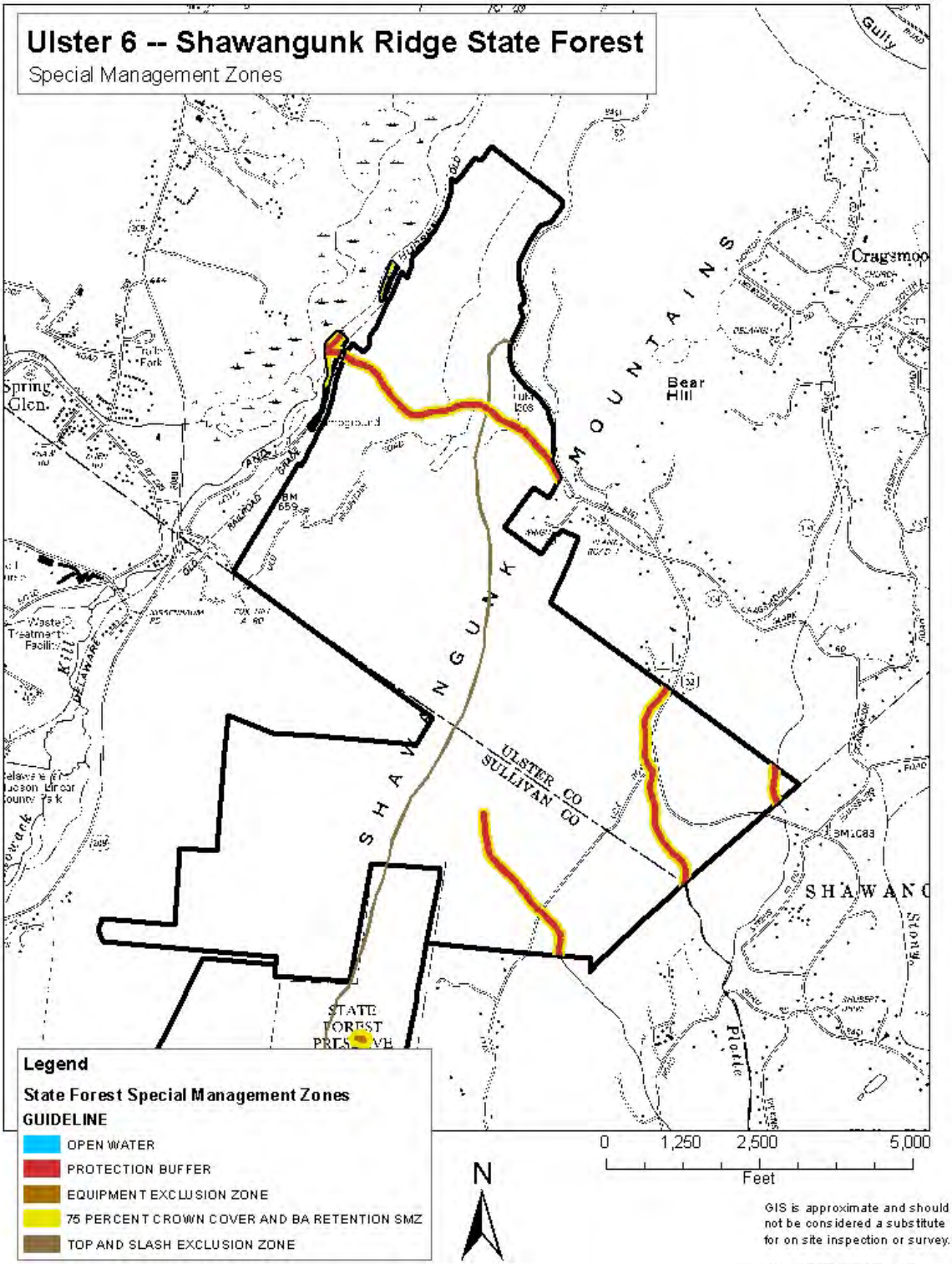
FIGURE 3 –SPECIAL MANAGEMENT ZONES

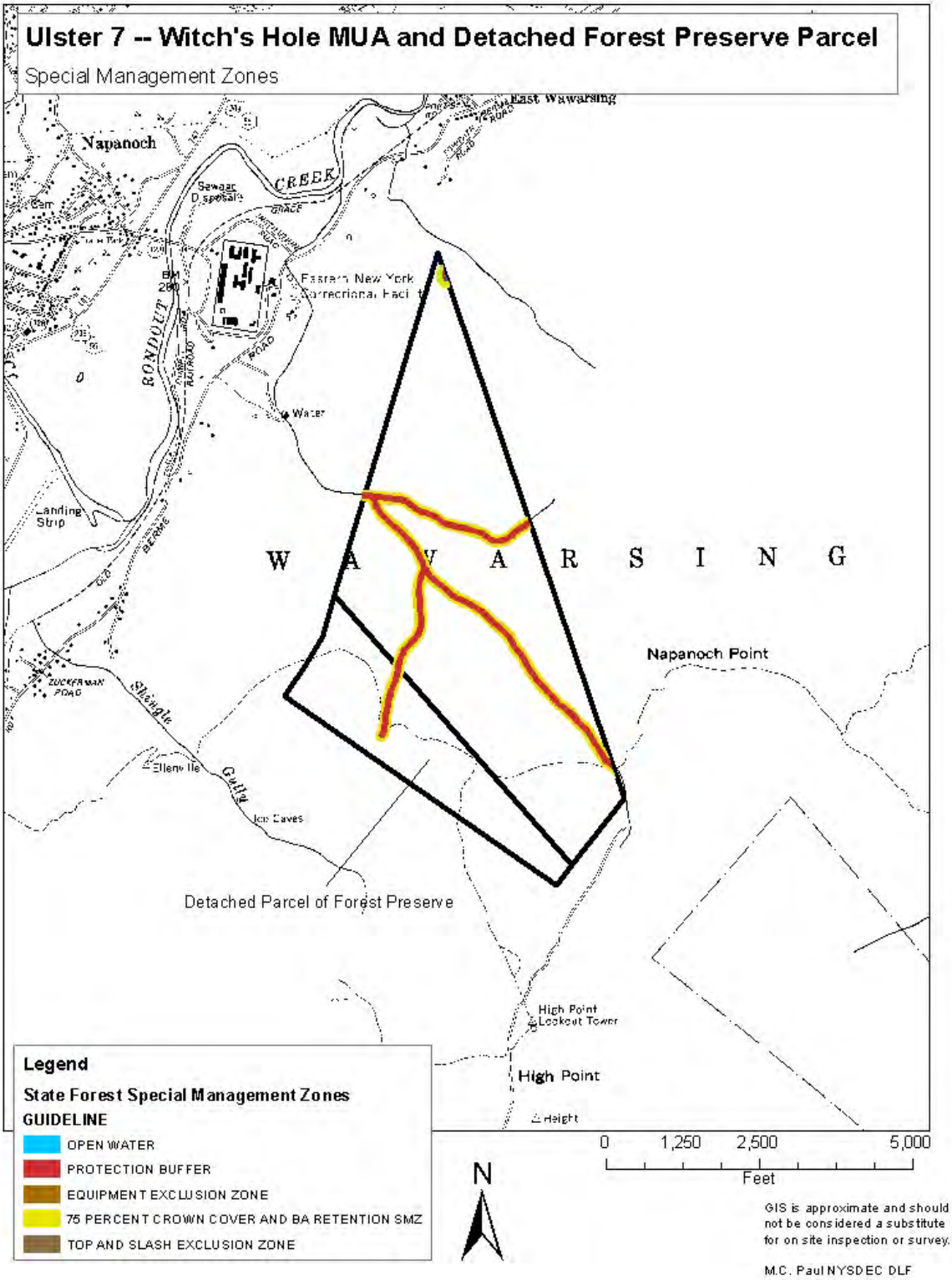



Orange 7 -- Graham Mountain State Forest
Special Management Zones
CONRAIL
GRADE
BM
828
RAILROAD
OLD
MOUNTAIN
HILL
73
Graham State
Fire Tower
Writer
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
N
0 500 1,000 2,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Sullivan 5 -- Wurtsboro Ridge State Forest
Special Management Zones
STATE
LAND
Roosa Gap
M A M A K A T I N G
MOUNTAINS
STATE
LAND
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Sullivan 7 -- Roosa Gap State Forest
Special Management Zones
Phillipsport
Summitville
ULSTER CO
SULLIVAN CO
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF


Ulster 6 -- Shawangunk Ridge State Forest
Special Management Zones
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
0
1,250
2,500
5,000
Feet
N
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF
SHAWANGUNK MOUNTAINS
ULSTER CO
SULLIVAN CO
Bear Hill
Cragsmoo
Spring Glen
Waste Treatment Facility
STATE FOREST PRESERVE
SHAWANG
Plotte
Gully


Ulster 7 -- Witch's Hole MUA and Detached Forest Preserve Parcel
Special Management Zones
Napanoch
East Wawarsing
CREEK
Eastern New York Correctional Facility
RONDOUT
Water
Landing Strip
W A W A R S I N G
Napanoch Point
Shingle Gully
Detached Parcel of Forest Preserve
High Point Lookout Tower
High Point
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
N
0 1,250 2,500 5,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

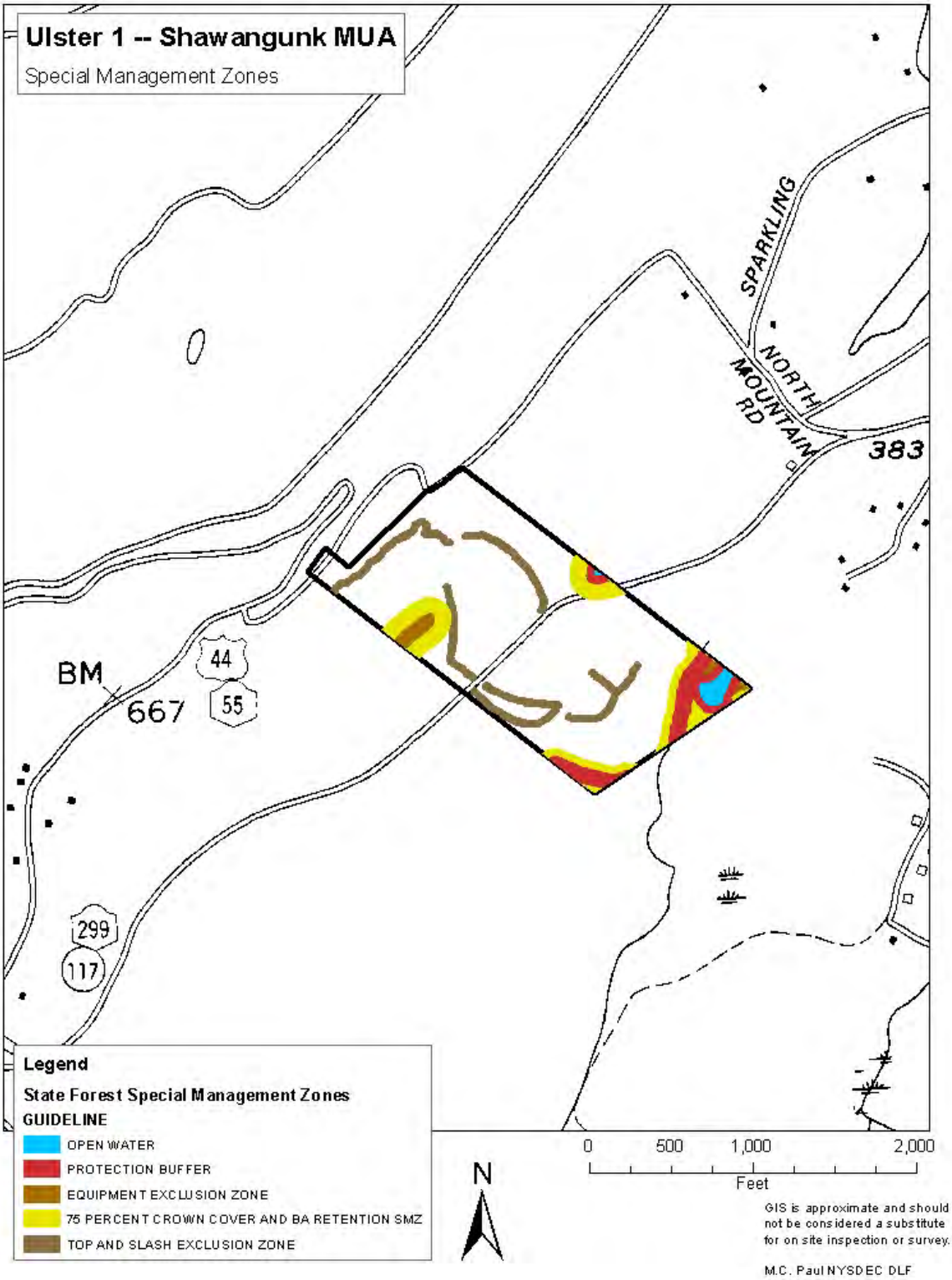
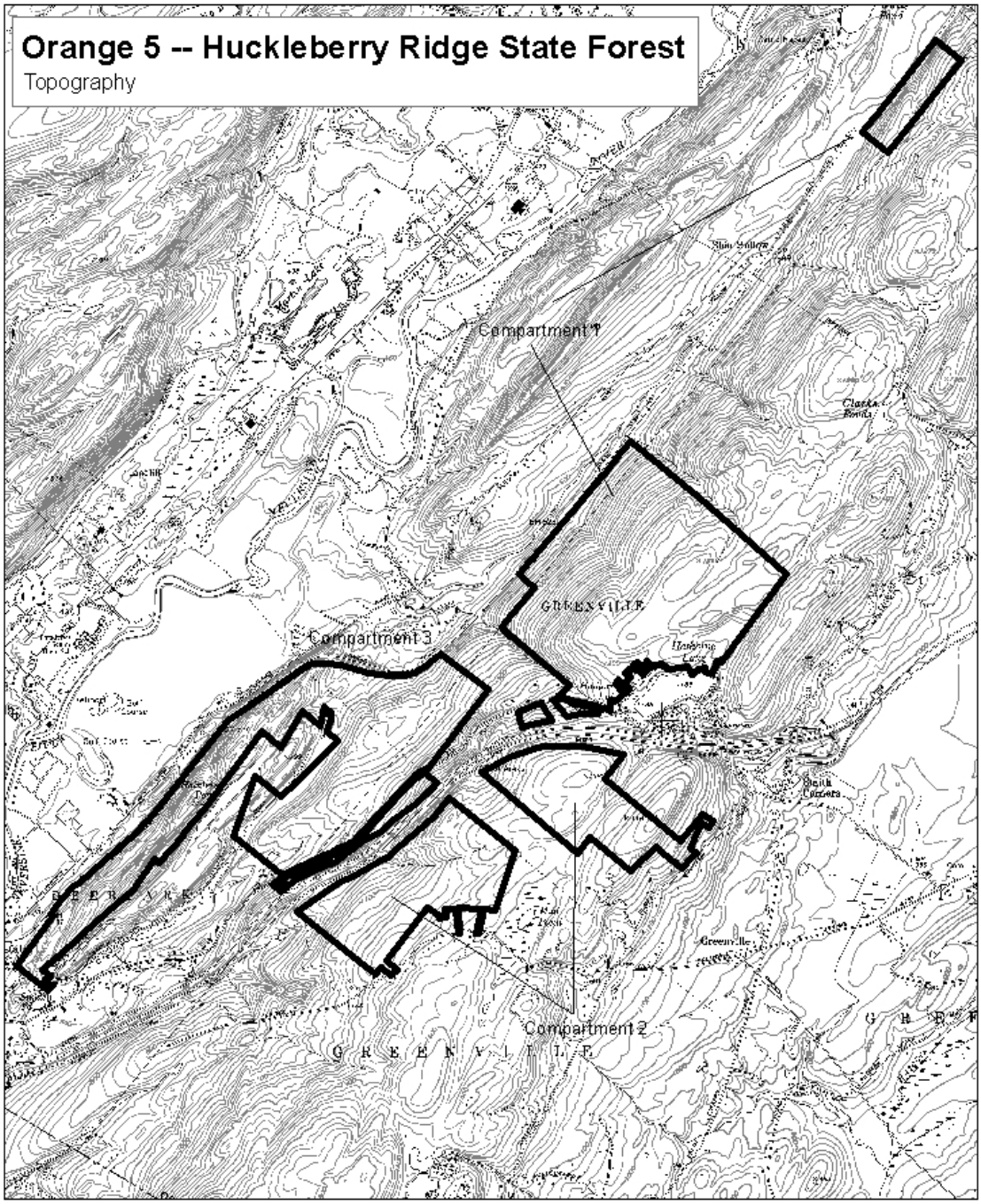
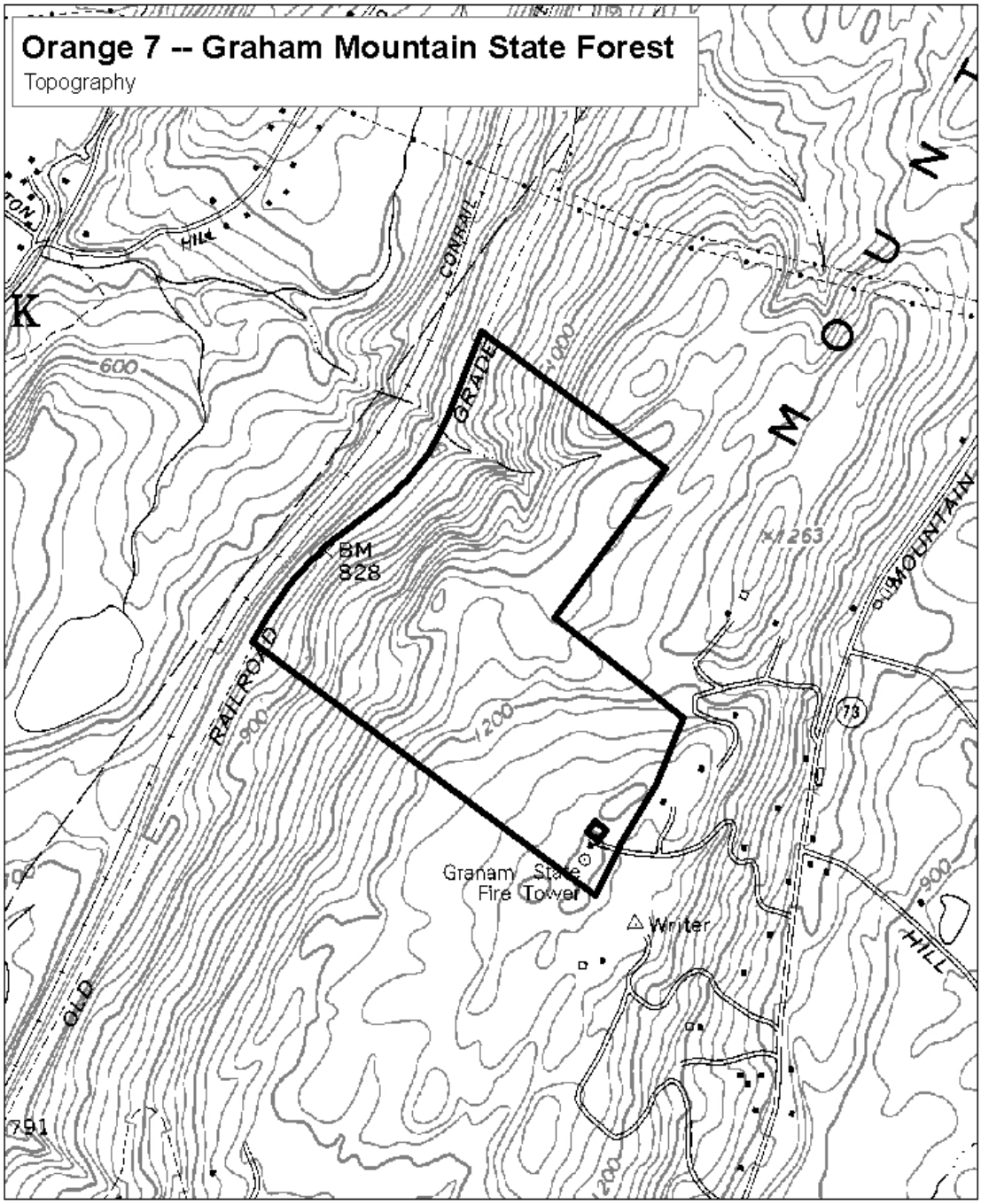

Ulster 1 -- Shawangunk MUA
Special Management Zones
SPARKLING
NORTH MOUNTAIN RD
383
BM
667
44
55
299
117
Legend
State Forest Special Management Zones
GUIDELINE
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER AND BA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
N
0
500
1,000
2,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF

FIGURE 4 – TOPOGRAPHY MAPS





0 500 1,000 2,000
Feet

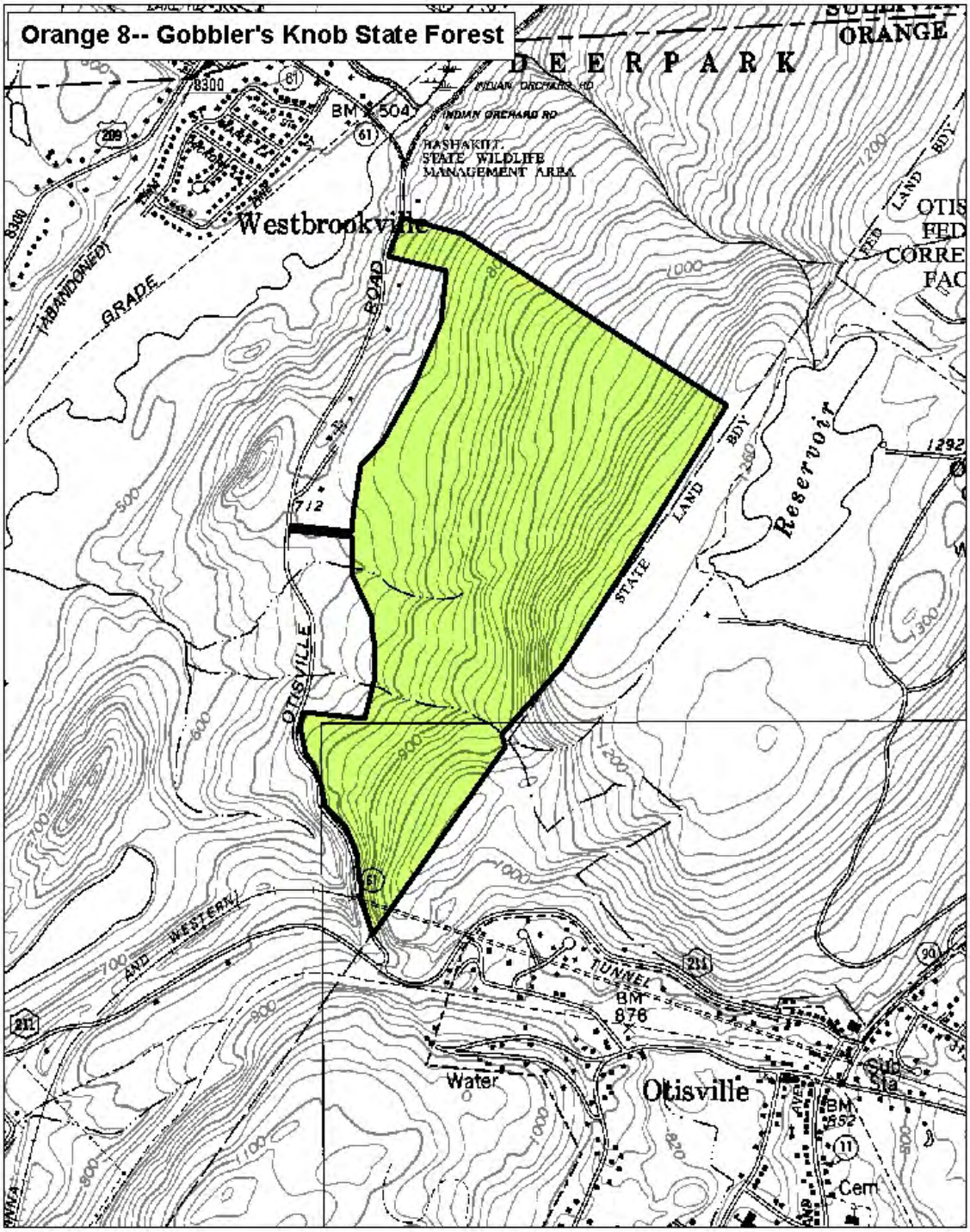
GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF

N

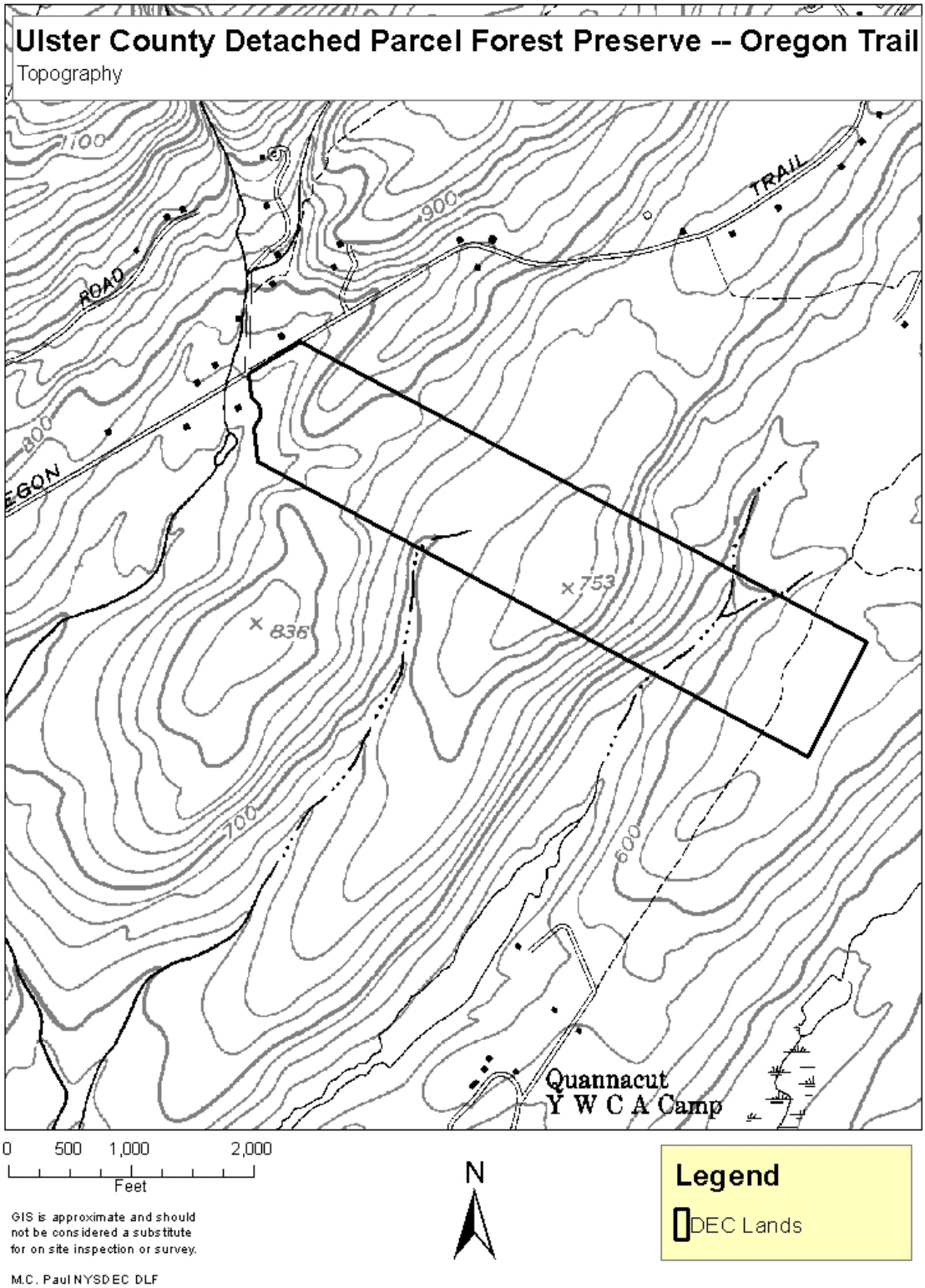
Legend

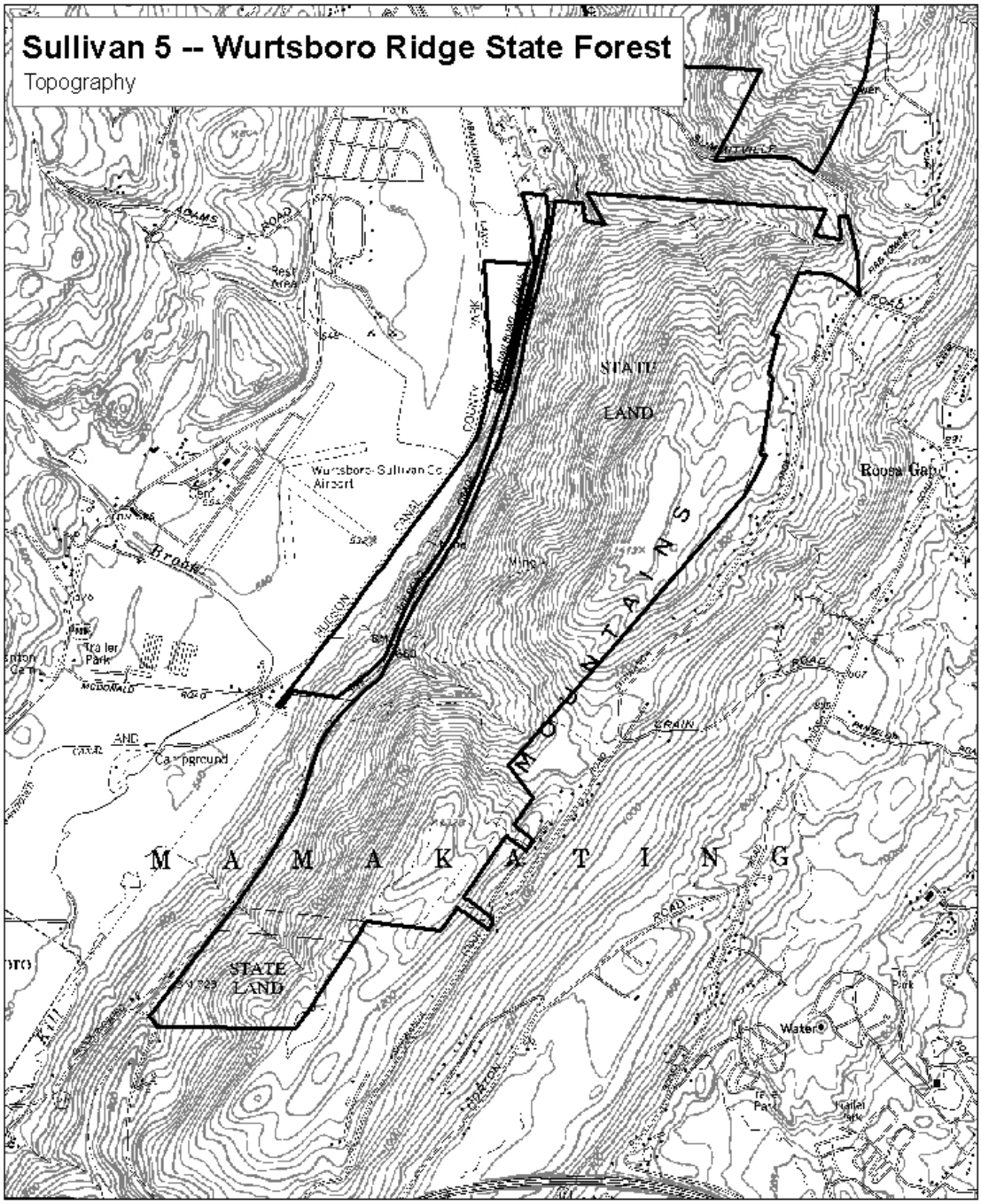
DEC Lands



GIS is approximate and should not be considered a substitute to on-site inspection or survey.

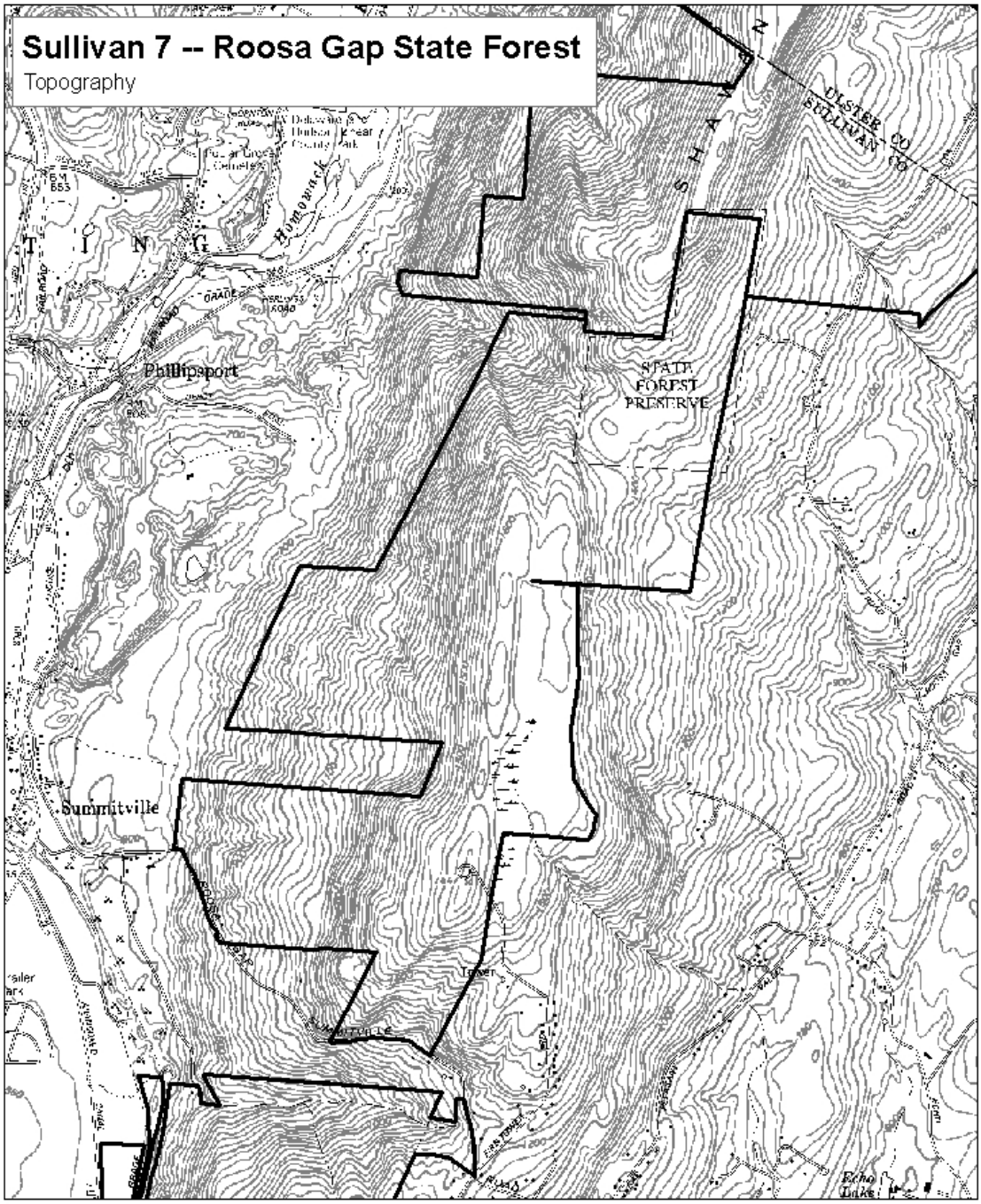
M.C.Paul (NYSDEC DLF SLM)
July 2011


Ulster County Detached Parcel Forest Preserve -- Oregon Trail
Topography
1100
900
800
700
600
ROAD
TRAIL
EGON
753
836
Quannacut
Y W C A Camp
0 500 1,000 2,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF
N
Legend
DEC Lands



GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF



0 1,250 2,500 5,000
Feet

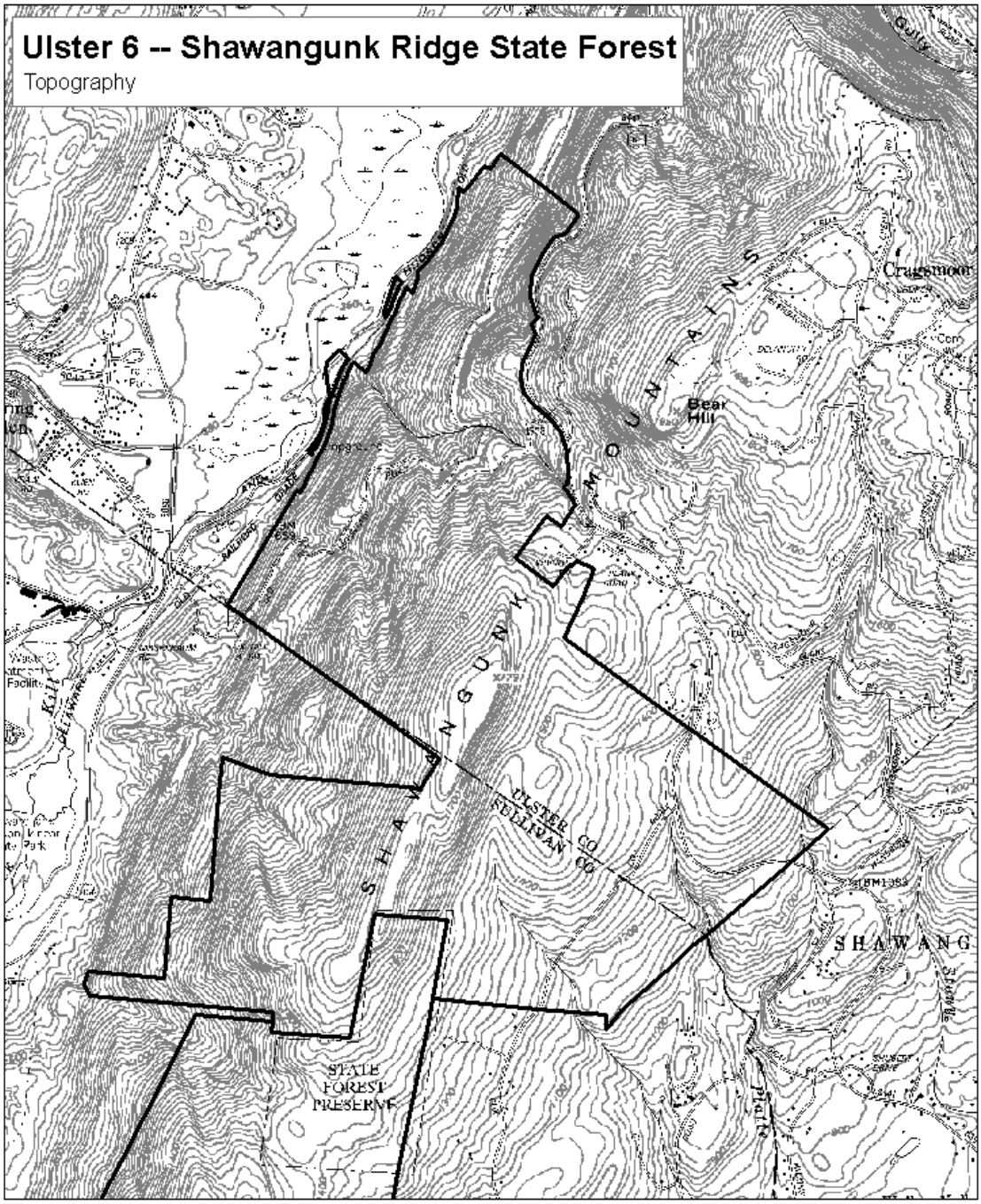
GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF

N

Legend

DEC Lands



0 1,250 2,500 5,000
Feet

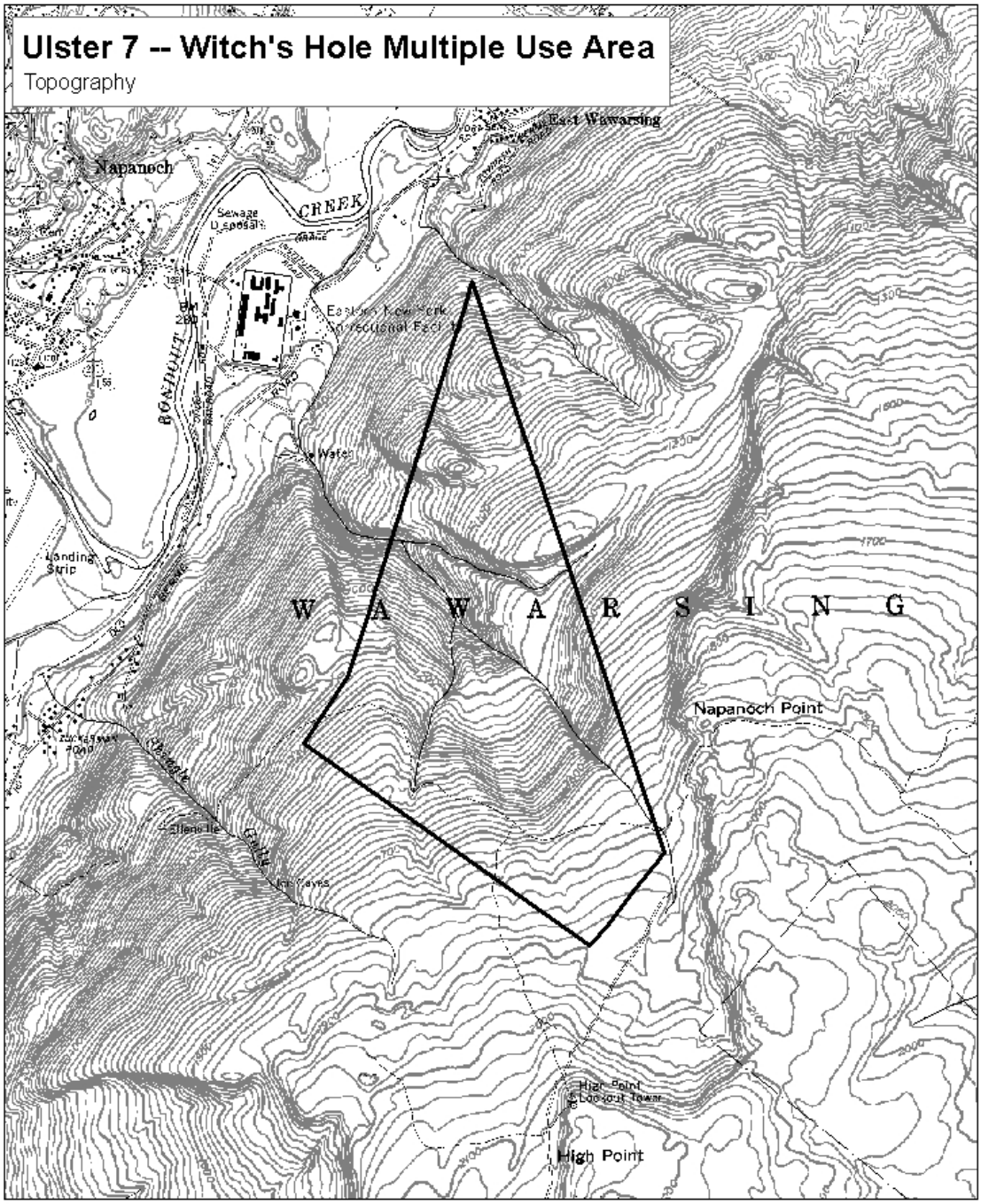
GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF

N

Legend

DEC Lands



0 1,250 2,500 5,000
Feet

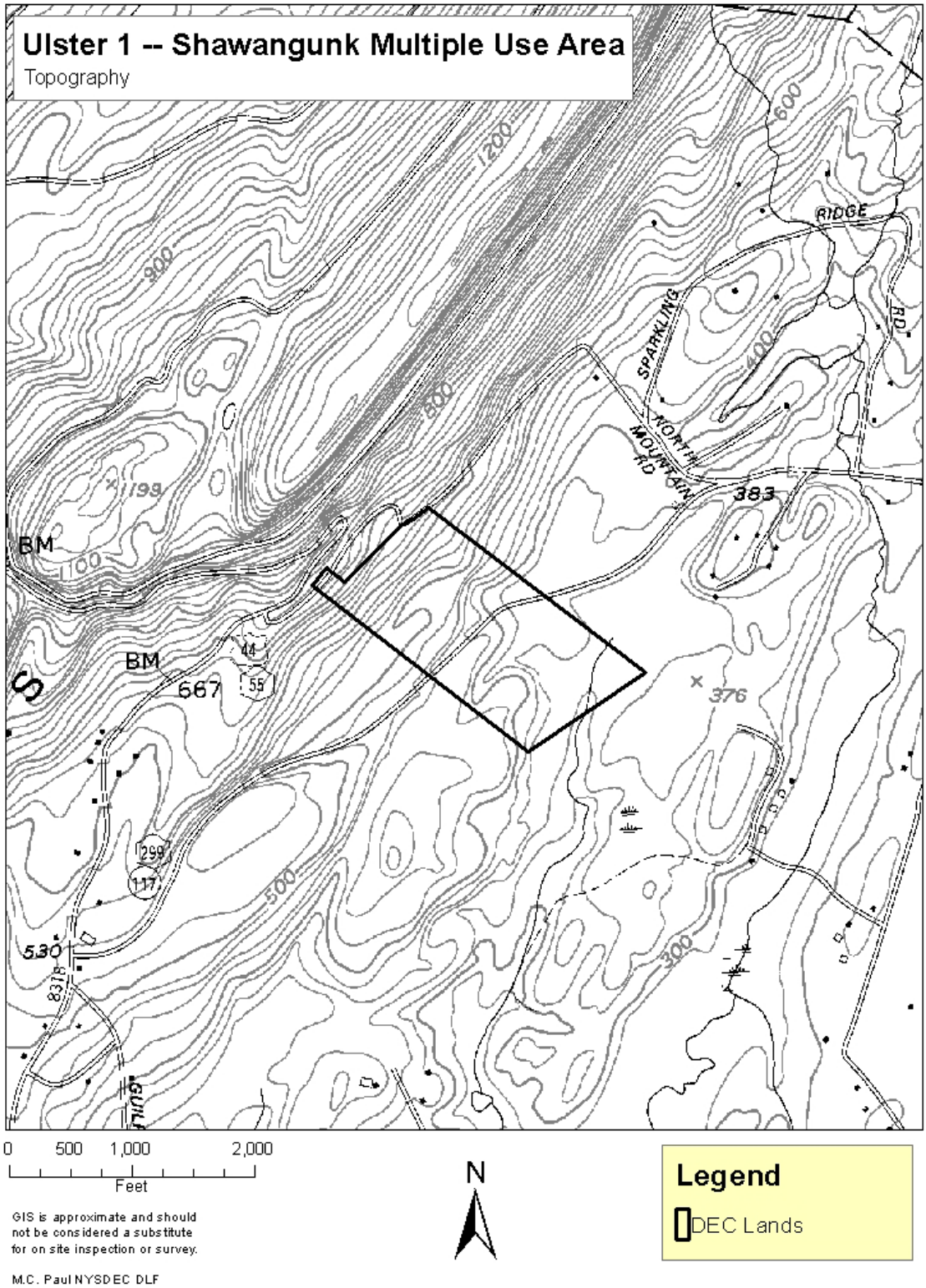
GIS is approximate and should not be considered a substitute for on site inspection or survey.

M.C. Paul NYSDEC DLF

N

Legend

DEC Lands


Ulster 1 -- Shawangunk Multiple Use Area
Topography
1200
900
600
RIDGE
SPARKLING
RD
400
NORTH
MOUNTAIN
RD
383
1199
BM
1100
BM
667
44
55
376
299
117
500
530
8318
300
0
500
1,000
2,000
Feet
GIS is approximate and should not be considered a substitute for on site inspection or survey.
M.C. Paul NYSDEC DLF
N
Legend
DEC Lands