

**Hopewell Valley Community Stewardship Plan  
Friends of Hopewell Valley Open Space**

**Appendix 25.  
Vogler Preserve**

**Acreage:** 11.3

**Block and Lot:** B32, L6.09

**Ownership:** FoHVOS (80%), Hopewell Township (20%)

**Year(s) Purchased:** 2008

**Location & Access:** Preserve is located on the northwestern corner of the intersection of Route 31 and Route 612/ Marshall's Corner-Woodsville Road. Parking access along grassy shoulder of Route 612/ Marshall's Corner-Woodsville Road. Nearest street address: 197 Marshall's Corner-Woodsville Road, Pennington, NJ 08534.

**Structures:** None

Additional property information is summarized in Appendix W. The following Preserve maps are provided at the end of this document:

- Map 1 2007 Aerial Photography
- Map 2 1930 Aerial Photography
- Map 3 Topography
- Map 4 Bedrock Geology
- Map 5 Soils
- Map 6 Land Cover Types (2007)
- Map 7 Protected Lands
- Map 8 Deer Management
- Map 9 Invasive Plant Cover (Relative Infestation Severity for all species)

**Website Description:**

Vogler Preserve, located near FoHVOS' Vales and Thompson Preserves, this land is co-owned with Hopewell Township. The preserve is nearly evenly split between forest and field and was zoned for Highway-Business Office prior to preservation.

**BROAD PROPERTY DESCRIPTION**

The preserve is located in north central Hopewell Township, southwest of Hopewell Borough. The preserve is bounded by residential development, forest, farmland, and a major traffic corridor (Route 31). The topography is primarily flat, sloping down towards the southeast.

Based upon analysis of NJDEP's 2007 Land Use/Land Cover dataset, the preserve contains five broad plant communities: Deciduous Forest (> 50% canopy) - Upland, Deciduous Woodland (10-50% canopy) - Upland, Deciduous Forest (> 50% canopy) - Wetland, Shrubland (< 10% canopy, > 25% shrub cover) - Upland, and Agricultural. Land Use/Land Cover is summarized in Appendix X.

The preserve's forest is young and is comprised of black walnut, ash, red maple, elm, spicebush, poison ivy, round leaved greenbriar, grape species, Virginia creeper, Virginia jumpseed, white snakeroot, clearweed, white geum, and jack-in-the-pulpit. Route 31 and adjacent residential development have rendered a highly fragmented and disturbed forest.

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The preserve's field is currently mowed annually during the growing season. The hedgerows include staghorn sumac, hackberry, blackcaps, ash (some die back). The shrubland is a section of the field that appears to have been abandoned in the past 10 to 20 years.

The preserve has three types of bedrock geology--the Lockatong, Passaic, Passaic Gray Bed formations. See Map 4.

The preserve has five soil types (see Map 5) with Readington and Abbottstown silt loams, 2 to 6 percent slopes; Bucks silt loam, 2 to 6 percent slopes; and Doylestown and Reaville variant silt loams, 0 to 2 percent slopes, being the three most common types. The preserve's soils are described in Appendix Y.

### **CONSERVATION VALUES**

Based on an analysis involving the ranking of ecological values and threats (See Community Stewardship Plan text), the Preserve has a weighted Ecological Value at 50-75%. See Appendix A for a description of ranking factors.

**Forest and Woodland Communities:** The forest serves as suitable habitat for wood turtle. The forest patch found on the Preserve and surrounding area is an important stop-over habitat (spring and fall resting and feeding) for migratory species.

**Old forest:** None. See Map 2.

### **Early Successional Communities:**

**Shrublands:** Shrubland habitat on the preserve is highly invaded. A yellow warbler, which breeds in wet thickets, shrubby areas, and fields was observed on the preserve in late June.

**Meadows/Grasslands:** The field is too small to provide significant habitat.

**Waterbodies:** An unnamed stream passes through the preserve.

### **Rare Species:**

**Rare Plants:** Natural Heritage grid data shows no species.

**Rare Animals:** Forested areas of the Preserve are identified as habitat for State Threatened and Special Concern species.

See Appendix L for a list of species.

### **THREATS**

**Deer:** The understory is severely browsed. Regeneration of the shrub and canopy layer are nearly non-existent.

**Invasive species:** In 2008 staff began walk-through surveys for emerging invasive species on all preserves. Mapping documented each species and its population size. No species were detected. See [www.njisst.org](http://www.njisst.org) for the current status of emerging invasive species at the Preserve.

In 2011 staff completed surveys for invasive plant species on all preserves (see Map 9). Mapping documented each species found and its population size (See Table 1 below). The five species with the highest infestation scores include: Multiflora Rose, Canada Thistle, Japanese Honeysuckle, Common Mugwort, and Garlic Mustard.

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**Other:** N/A

**STRATEGIES and ACTIONS**

**Forest and Woodland Habitat Stewardship:** Annual surveys for and eradication of emerging invasive species is the highest priority at this Preserve. No action is recommended for widespread invasive species. Reduced deer density will allow the native plant communities to recover and compete with the widespread invasive species on a long-term basis.

**Early Successional Habitat Stewardship:** A biannual winter mowing or burning regime is recommended to maintain early successional habitat and remove invasive woody plants. Spot treatment of Canada thistle and common mugwort via foliar spray is recommended (See Table 1 below). Woody invasive species will be controlled through meadow maintenance.

Burning and mowing may improve the species composition, but adjacent development and land use has degraded potential native seed sources. Restoration should be considered via grant funding.

For habitat goals and maintenance schedule see Appendix T & U.

**Deer Management:** The preserve will be enrolled in the Hopewell Township DMP. See Map 8 for delineations of the 150' and 450' safety zones and hunting status.

**Rare Species Management:** Maintain forested riparian areas to protect rare species.

**Neighboring Lands:** See Deer Management. See Map 7 for adjacent protected lands.

**Waterbodies Management:** Maintain forest around the unnamed stream corridor.

**Undesirable Activities Management:** N/A

**Scientific Research Assessment:** The Preserve is available for scientific research.

**Recreational Opportunities Assessment:** The preserve is too small to merit a trail. Currently, there are no opportunities to connect to a regional trail system—none yet exist.

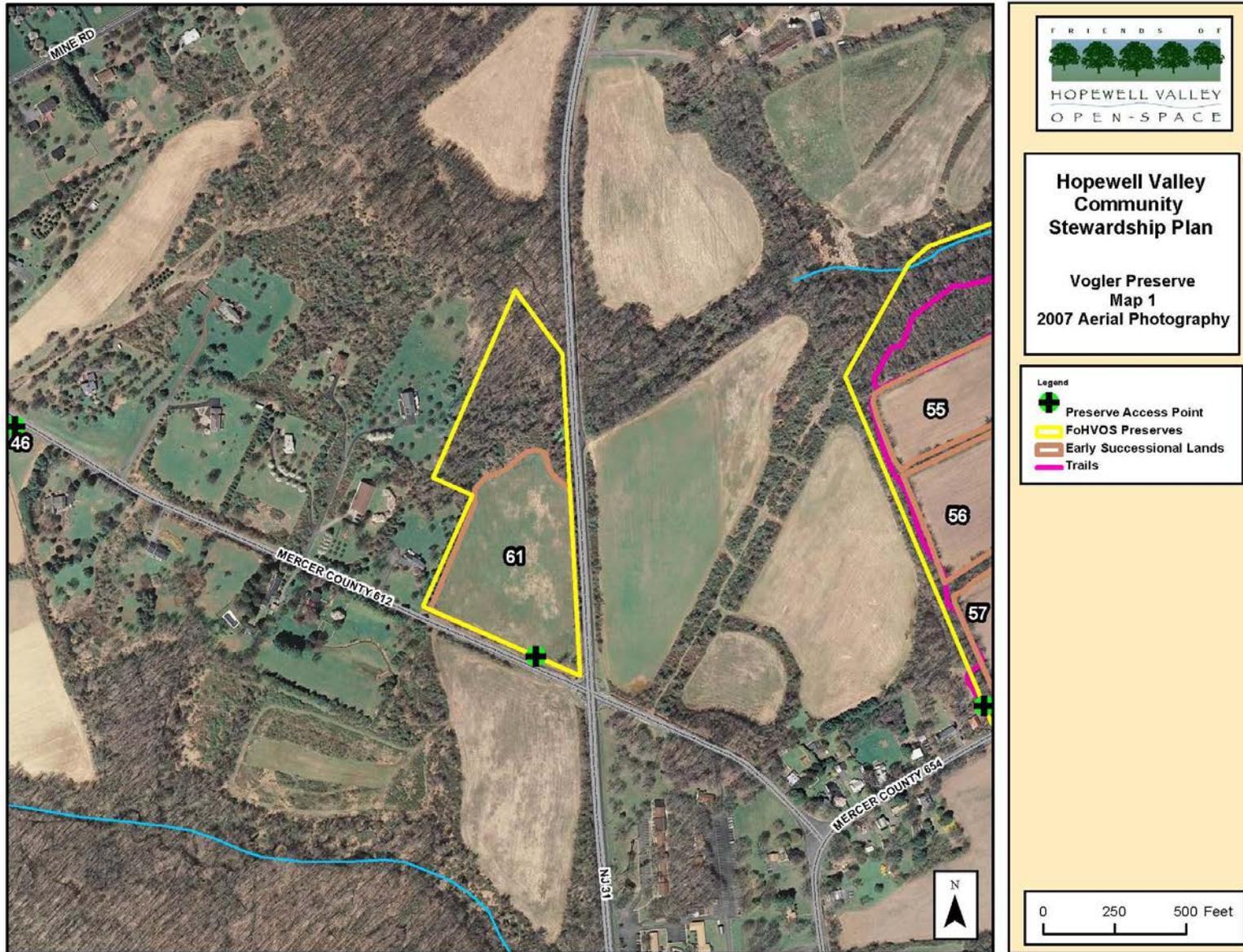
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**Table 1. Invasive Plants – Species Abundance and Treatment Recommendations**

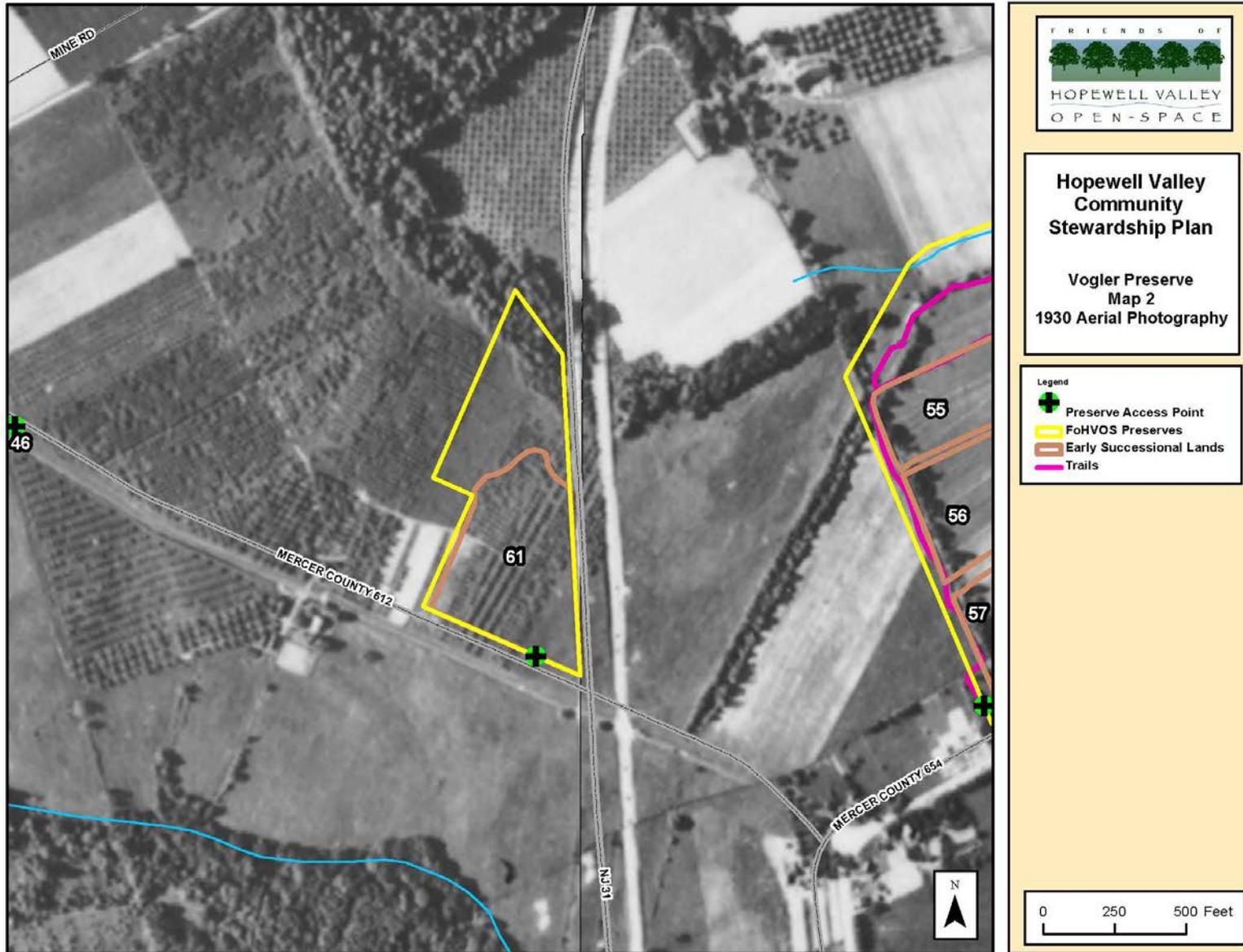
Scientific Name	Common Name	Infestation Index Score <sup>1</sup>	Total Acres Present	Percent of Preserve Area Present	Treatment Recommendation	LOE Estimate (Hours)	Acreage by Percent Ground Cover Categories						
							Category 0: 0%	Category: Trace	Category 1: 1-10%	Category 2: 10-25%	Category 3: 25-50%	Category 4: 50-75%	Category 5: 75-100%
<i>Acer palmatum</i>	Japanese Maple	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Acer platanoides</i>	Norway Maple	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.00	0.0	0.00	0.0
<i>Ailanthus altissima</i>	Tree-of-Heaven	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Alliaria petiolata</i>	Garlic Mustard	4.9	4.0	38.9	None		6.31	0.0	3.6	0.0	0.5	0.0	0.0
<i>Artemisia vulgaris</i>	Common Mugwort	5.5	5.4	52.0	Control - Field Maintenance	Strategy 3B	4.96	0.0	5.3	0.1	0.0	0.0	0.0
<i>Arthraxon hispidus</i>	Small Carpgrass	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Berberis thunbergii</i>	Japanese Barberry	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cardamine impatiens</i>	Narrow-leaved Bittercress	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Catalpa bignonioides</i>	Northern Catalpa	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Celastrus orbiculatus</i>	Asiatic Bittersweet	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.00	0.0	0.0
<i>Centurea sp.</i>	Knawweed sp.	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cirsium arvense</i>	Canada Thistle	13.4	6.0	58.5	Control - Field Maintenance	Strategy 3B	4.29	0.0	0.1	5.4	0.1	0.0	0.5
<i>Dipsacus sylvestris</i>	Teasel	0.0	0.0	0.0	N/A		10.33	0.0	0.00	0.0	0.0	0.0	0.0
<i>Eleaegnus umbellata</i>	Autumn Olive	0.2	0.2	2.0	Control - Field Maintenance	Strategy 3B	10.12	0.0	0.2	0.0	0.0	0.0	0.0
<i>Euonymus alata</i>	Winged Burning Bush	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.00
<i>Iris pseudoacris</i>	Yellow Iris	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lespedeza cuneata</i>	Chinese Bushclover	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ligustrum obtusifolium</i>	Border Privet	0.0	0.0	0.0	N/A		10.33	0.0	0.00	0.0	0.0	0.0	0.0
<i>Lonicera japonica</i>	Japanese Honeysuckle	6.5	4.9	47.1	None		5.46	0.0	3.9	0.4	0.5	0.1	0.0
<i>Lonicera maackii</i>	Amur Honeysuckle	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lonicera morrowii</i>	Morrow's Honeysuckle	4.2	4.2	40.5	None		6.15	0.0	4.1	0.1	0.00	0.0	0.0
<i>Lysimachia nummularia</i>	Moneywort	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lythrum salicaria</i>	Purple Loosestrife	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Malus toringo</i>	Toringo Crabapple	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Microstegium vimineum</i>	Japanese Stiltgrass	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
N/A	Non-native, cool season grass	0.3	0.1	0.5	None		10.28	0.0	0.0	0.0	0.0	0.0	0.1
<i>Phalaris arundinacea</i>	Reed Canary Grass	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Phragmites australis</i>	Common Reed	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Polygonum cuspidatum</i>	Japanese Knotweed	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Polygonum perfoliatum</i>	Mile-a-Minute	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pyrus calleryana</i>	Callery Pear	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ranunculus ficaria</i>	Lesser Celandine	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Robinia pseudoacacia</i>	Black Locust	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Rosa multiflora</i>	Multiflora Rose	26.1	10.2	99.1	Control - Field Maintenance	Strategy 3B	0.09	0.0	0.1	5.5	3.8	0.8	0.1
<i>Rubus pheonculusius</i>	Wineberry	3.6	3.6	34.6	Control - Field Maintenance	Strategy 3B	6.76	0.0	3.6	0.0	0.0	0.0	0.0
<i>Securigera varia</i>	Crown vetch	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Viburnum dilatatum</i>	Linden Viburnum	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Viburnum sieboldii</i>	Siebold's Viburnum	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<i>Wisteria floribunda</i>	Japanese Wisteria	0.0	0.0	0.0	N/A		10.33	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total LOE</b>						<b>0</b>							

<sup>1</sup> The Infestation Index Score combines the extent of acreage infested and the intensity of the infestation. It was derived by multiplying the cover class number by the number of acres within each cover class.

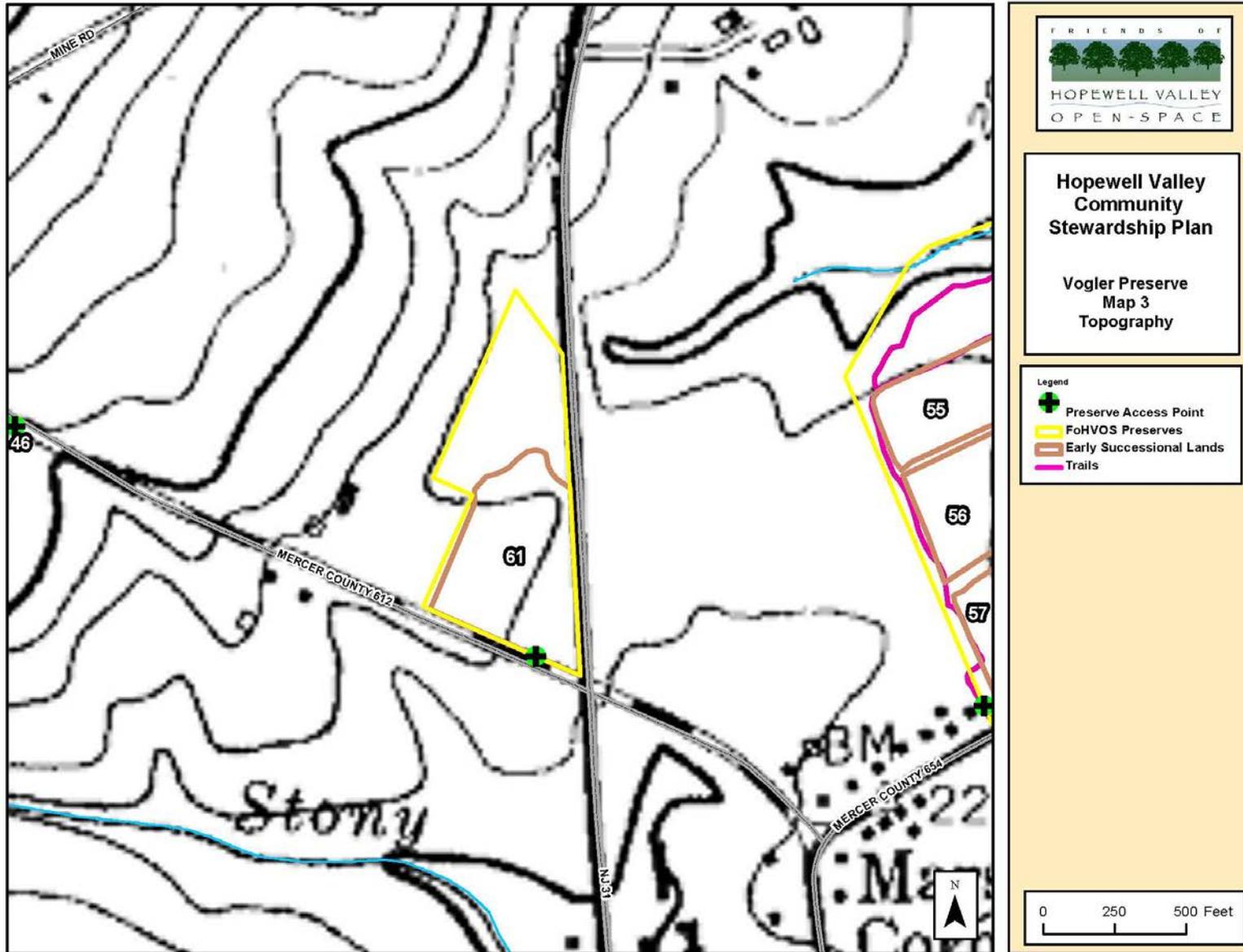
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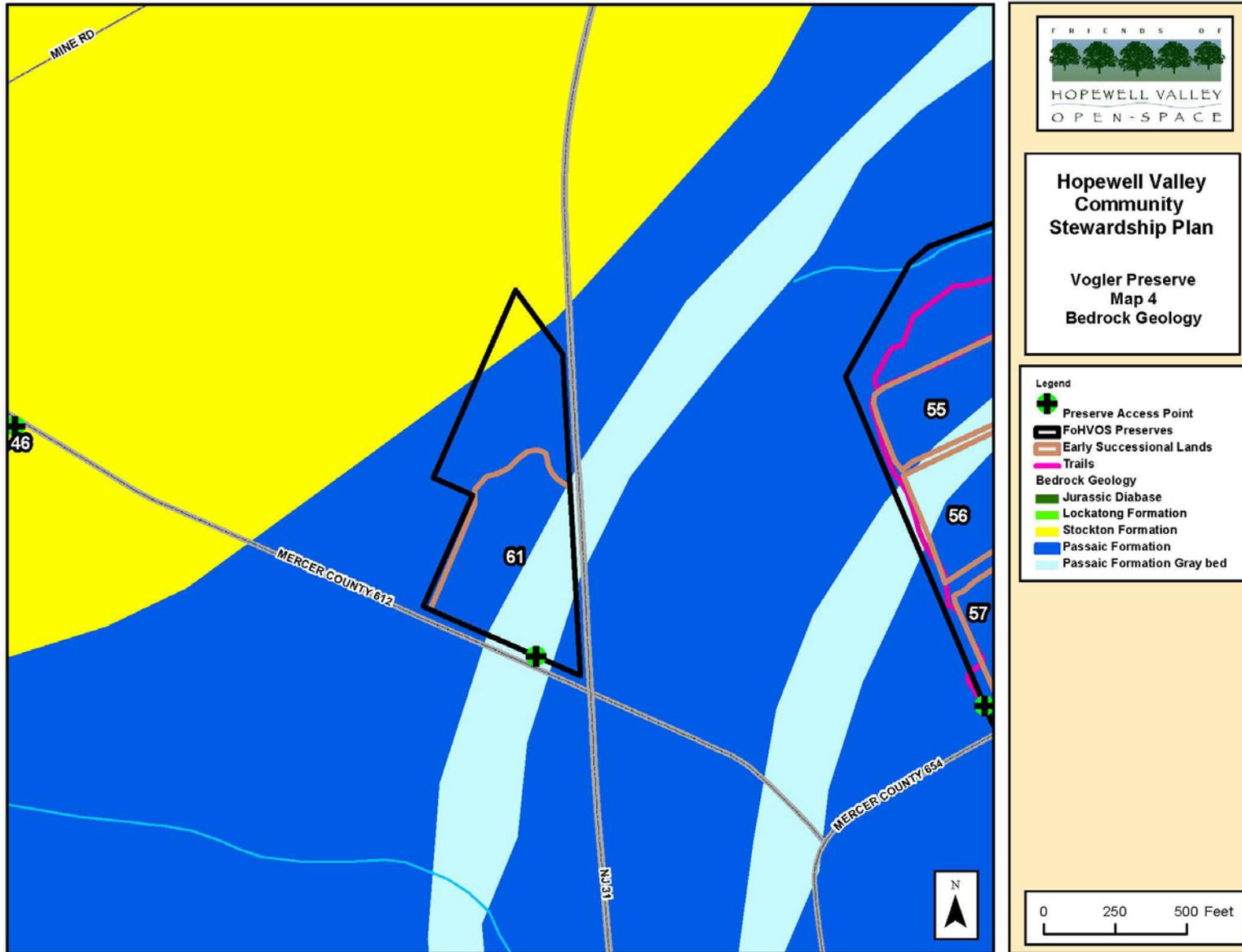
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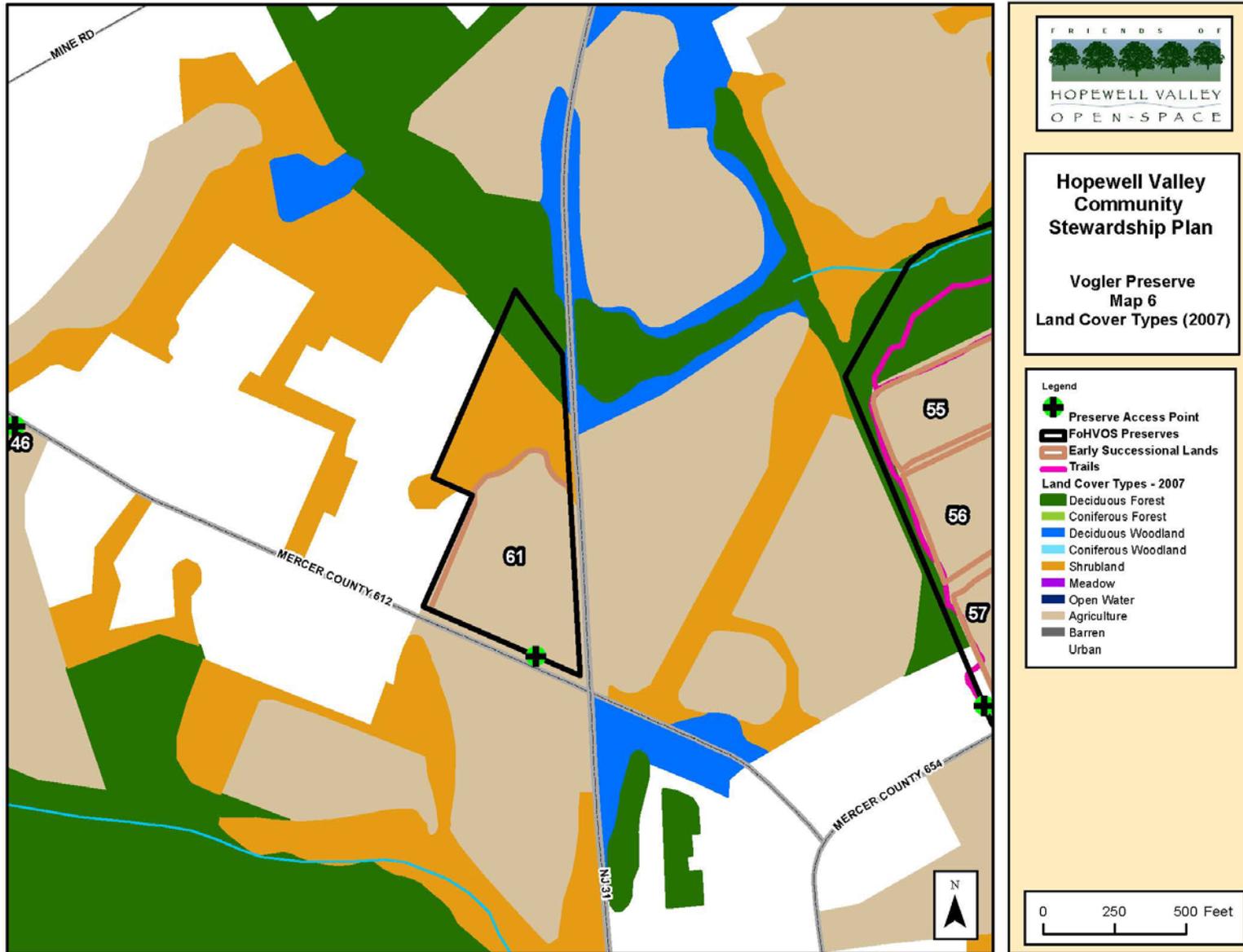


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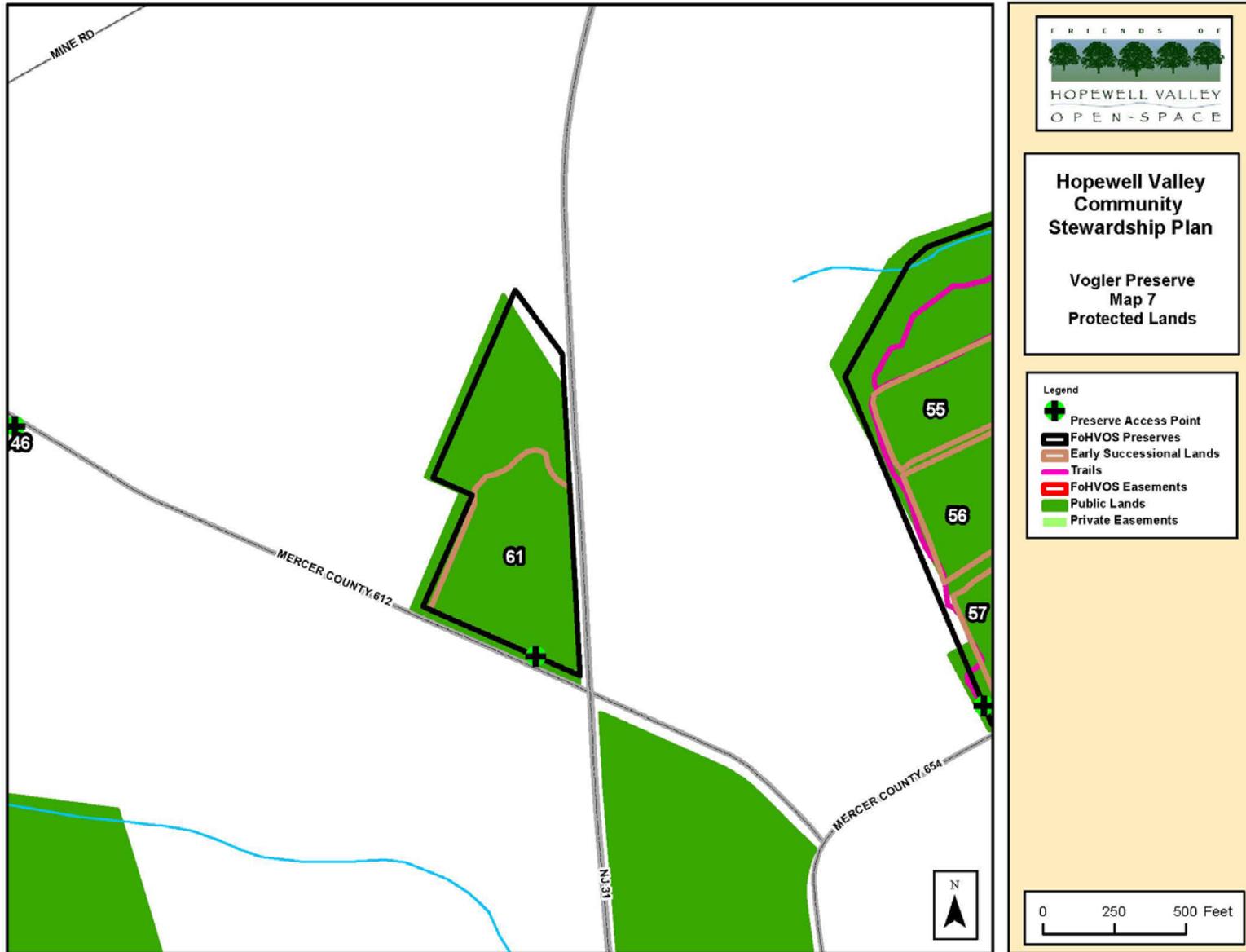




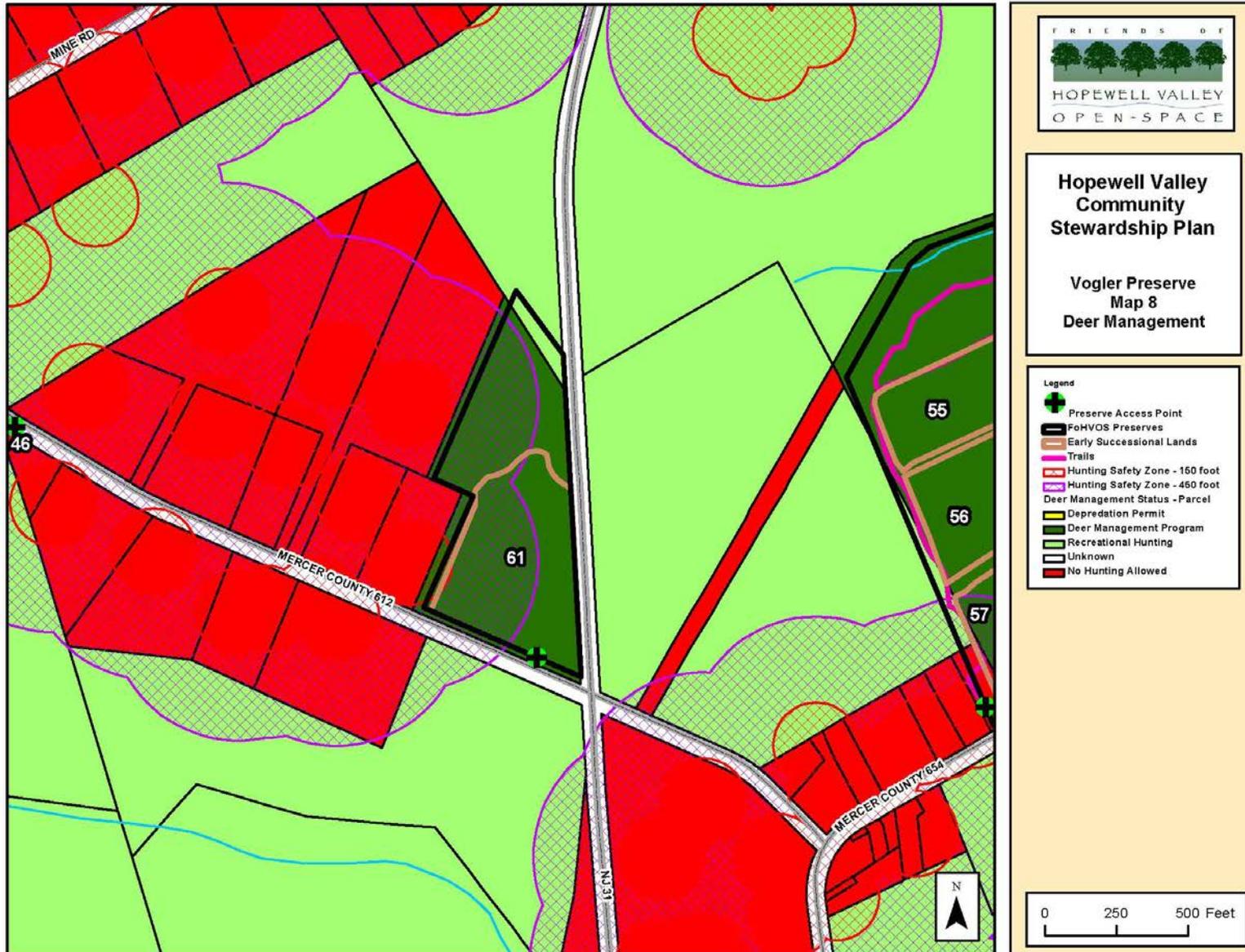
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