

Green-Lining

Your Community: Planning for a Community-wide Greenway System

Summary of resource-based greenway
delineation process and development of
conceptual greenway map

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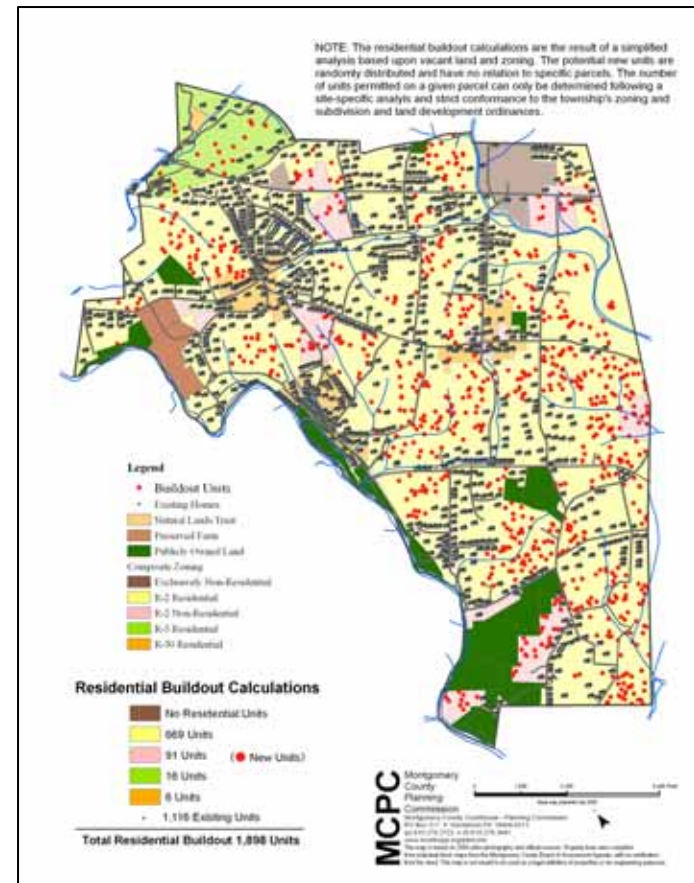
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A Municipal Case Study

- An existing rural community
- Upper Salford Township
 - 3,114 people and 1,136 homes
 - Projected to add roughly 25 dwellings per year
 - Zoning will allow 1,900 units at buildout (2070)
- Expect incremental growth in mostly small, scattered developments





A Solid Foundation to Build Upon

- Past Planning in support of greenway preservation
 - Adopted Regional Comprehensive Plan
 - Completed Greenway-oriented Open Space Plan
 - Developed Rural Residential Zoning using NLTs *Growing Greener* Ordinances

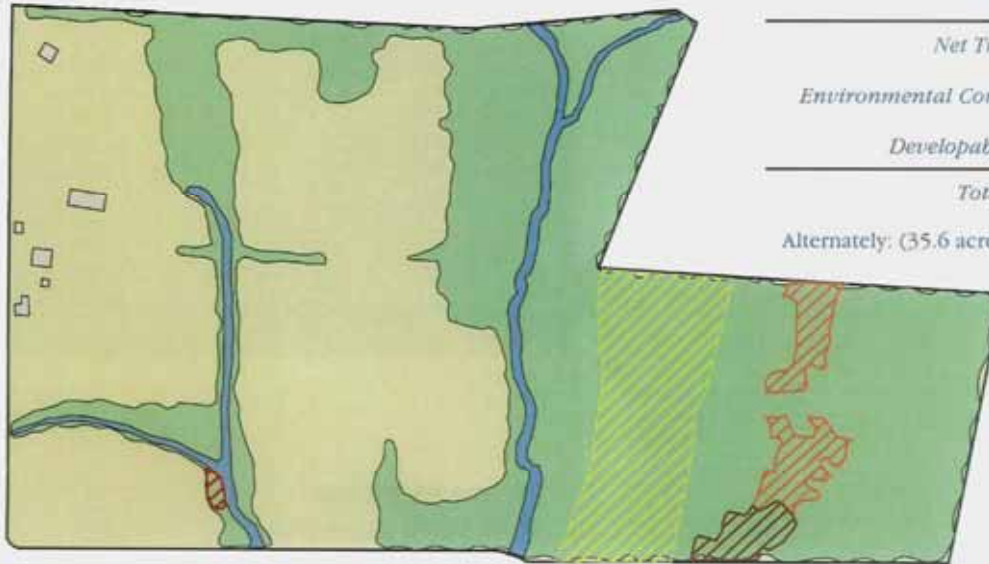
Rural Residential Zoning

- Required on parcels > 10 acres
- Creates a choice
 - Rural subdivision of 4-acre lots
 - Conservation subdivision with minimum lot size of 15,000 sq. ft. (at 2-acre density)
- Density determined by site capacity calculations
 - Subtract a portion of natural features from gross site area
 - Density based upon net buildable area

<p>Growing Greener <i>Conservation by Design</i></p>	
	<p>Communities across Pennsylvania are realizing that they can conserve their special open spaces, greenways and natural resources at the same time they achieve their development objectives. How? Conservation through local zoning and subdivision ordinances, an approach we're calling <i>Growing Greener: Conservation by Design</i>. If you want your community to take control of its destiny and ensure that new development creates more livable communities in the process, the <i>Growing Greener: Conservation by Design</i> approach might be right for you.</p>
	

How to Calculate Site Capacity

Simplified Example of a Density Calculation



Gross Tract Area: 48.3 acres

Net Tract Area: 47.5 acres






Environmental Constraints: -11.9 acres

Developable Area: =35.6 acres

Total Units Allowed: 19

Alternately: $(35.6 \text{ acres} \times 43,500) / 80,000$

Acres of Most Restrictive Environmental Constraint x Adjustment Factor = Acres to Subtract from Net Tract Area

Environmental Constraint	Acres of Environmental Constraint	Acres That Do Not Overlap With More Restrictive Constraints	Adjustment Factor	Acres of Constraint to Subtract
 Floodplain	1.3	1.3	1.0	1.3
 Wetlands	0.1	0.1	1.0	0.1
 Woodlands	21.6	18.4	0.50	9.2
 Steep Slopes of 15-24%	1.4	1.4	0.67	0.9
 Steep Slopes of 25% or more	0.4	0.4	1.0	0.4
 Soils with Seasonal High Water Table 18"-36"	3.6	0	0.33	0
Total Constraints to be Subtracted				11.9

Rural Residential Zoning

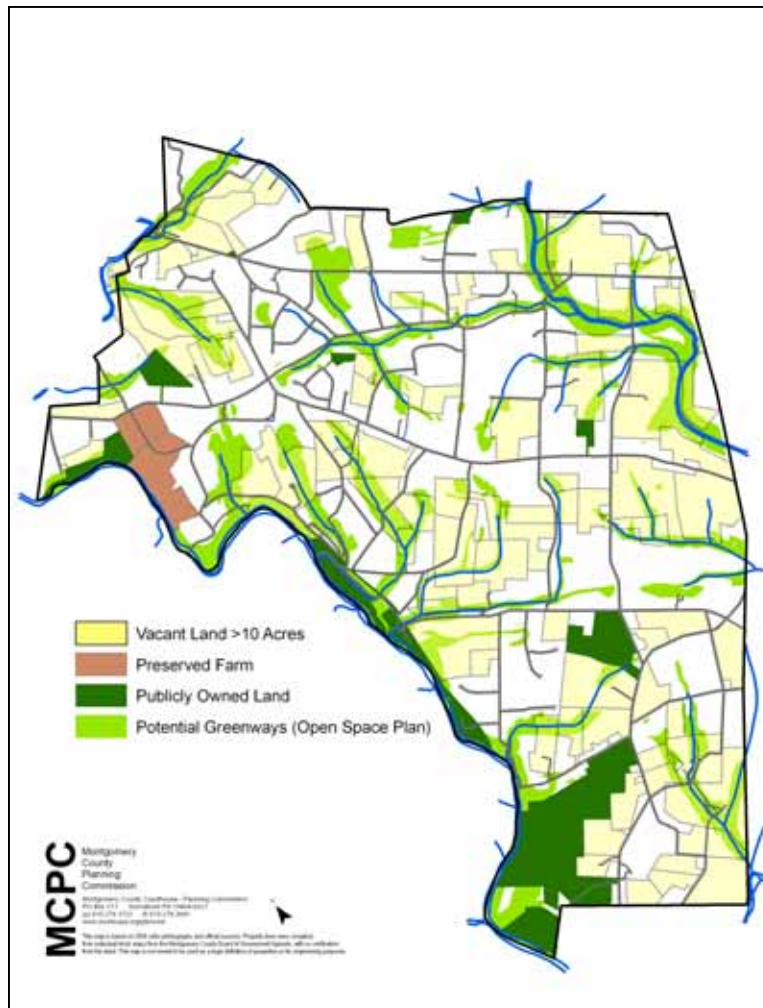
- Requires 60-percent open space
 - Average lot size \approx 23,000 square feet
- Greenway delineation standards in SALDO
 - Preserve all primary resources
 - Preserve secondary resources priority order



Rural Residential Zoning

- Approval process often focuses heavily on property to be developed
 - May consider adjacent properties
 - Importance of site-specific resources can be overstated
- Need to understand bigger picture of “give and take” (i.e what are we giving up)
 - Create Greenway Preservation Guidebook

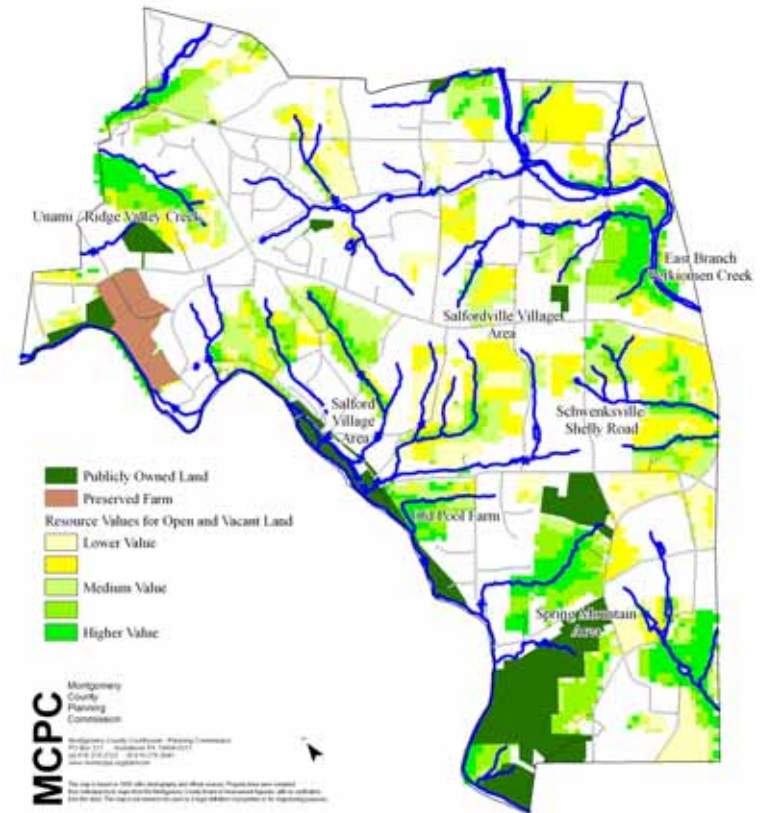
Greenway Preservation Guidebook



- Develop a conceptual layout of an interconnected greenway system
- Only on parcels >10 acres
- Significant opportunities remain
- Maximize residential quality of life

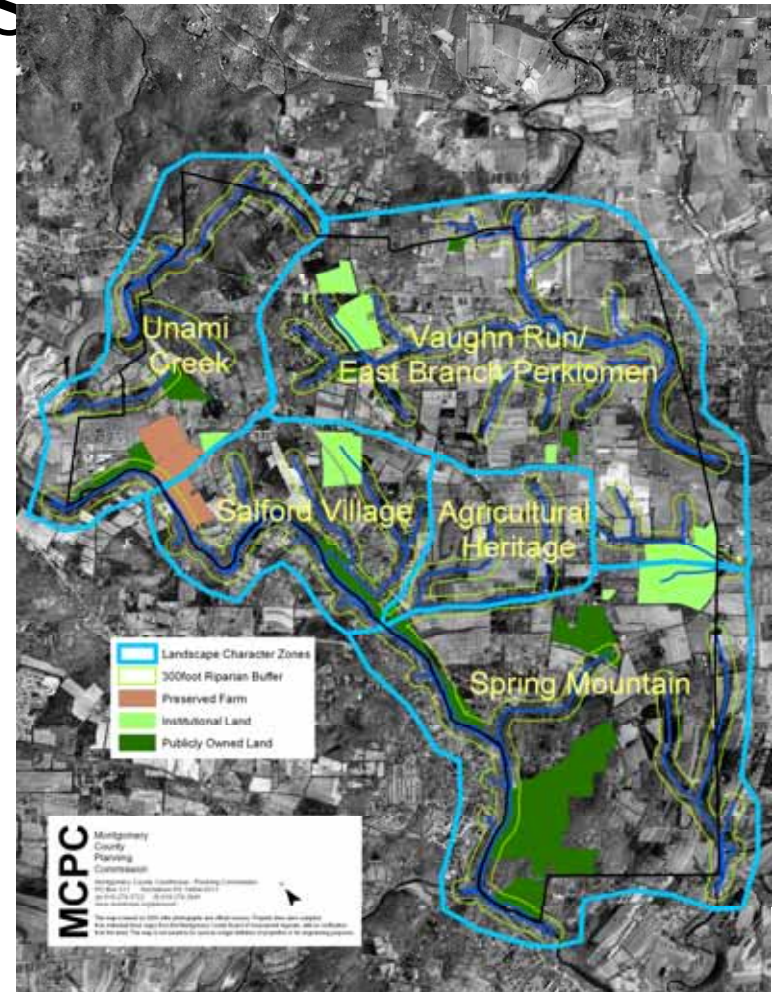
Greenway Delineation Process

- Preserve Primary Resources first
 - Wetlands, steep slopes, floodplain
- Consider priority resource lands from Open Space Plan
- Recognize spatial distribution of resources for secondary priorities



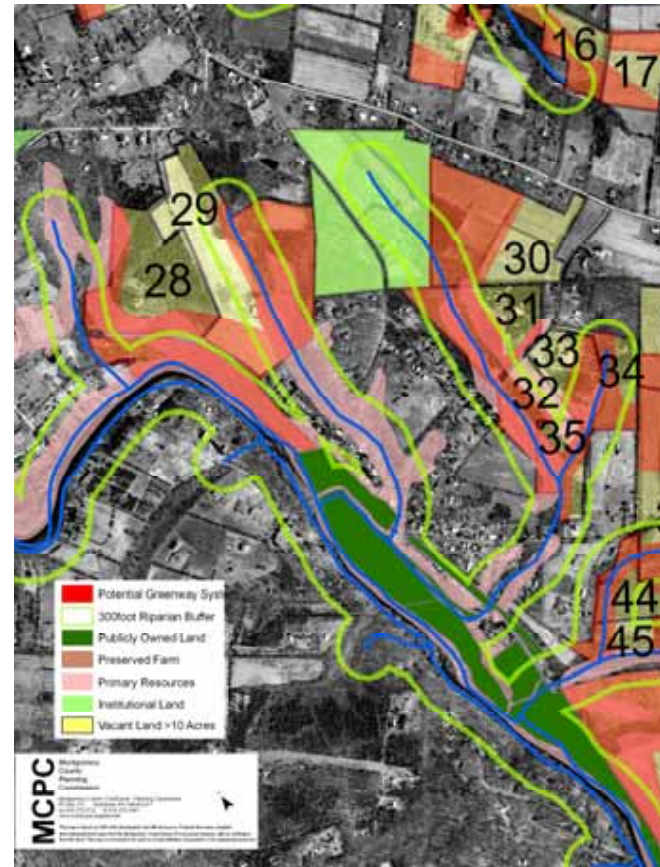
Establishment of Landscape Character Zones

- Watershed-based
- The zones reflect diversity of greenway types
 - Woodlands, agricultural, scenic road, stream corridor
- Specific delineation criteria established for each zone

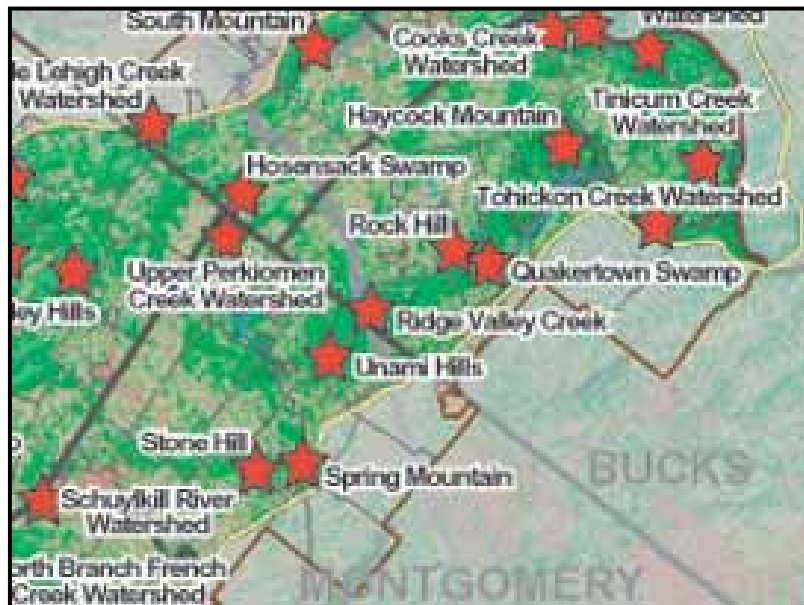


Criteria for Greenway Delineation

- Contiguous blocks of resource land
- Protect overlapping resources (two-for-one)
- Buffer and expand existing open space and institutional lands
- Relate development areas to each other
- Limit long no-load entrance roads

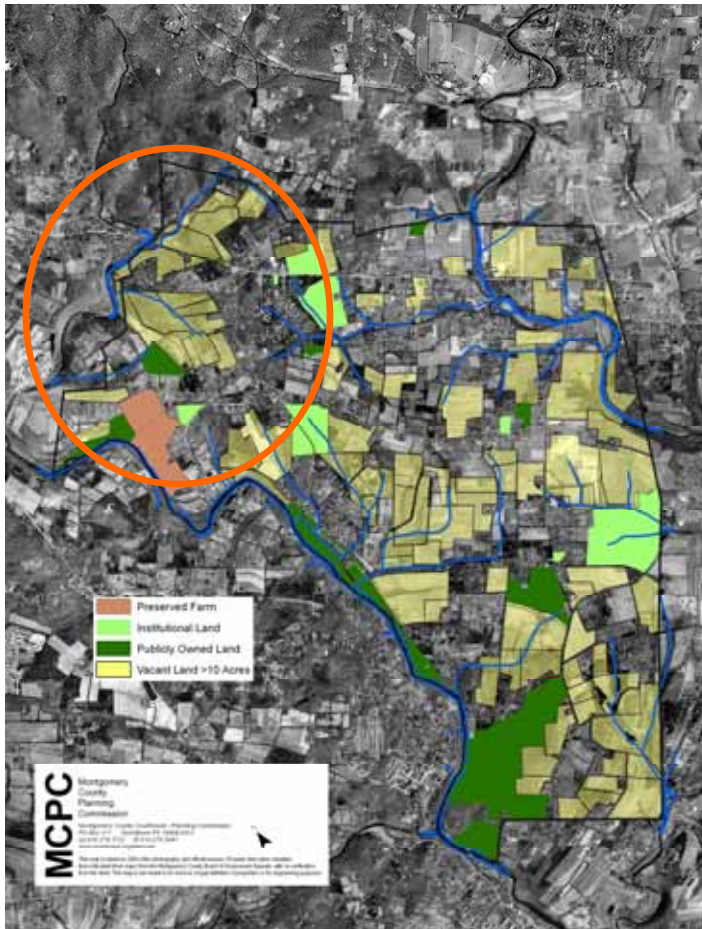


Unami Creek Landscape Character Zone



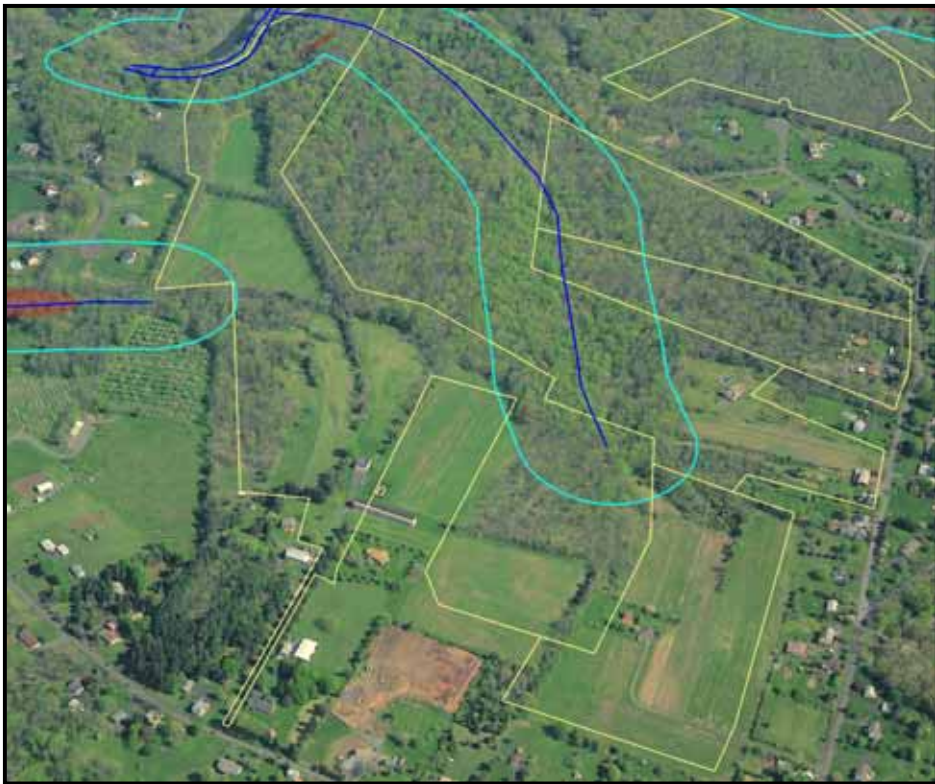
- Part of Highlands Region in Pennsylvania
 - “Landscape of national significance”
- Specific design criteria
 - Maintain contiguous woodlands
 - Protect high infiltration soils
 - Integrate pathway connections

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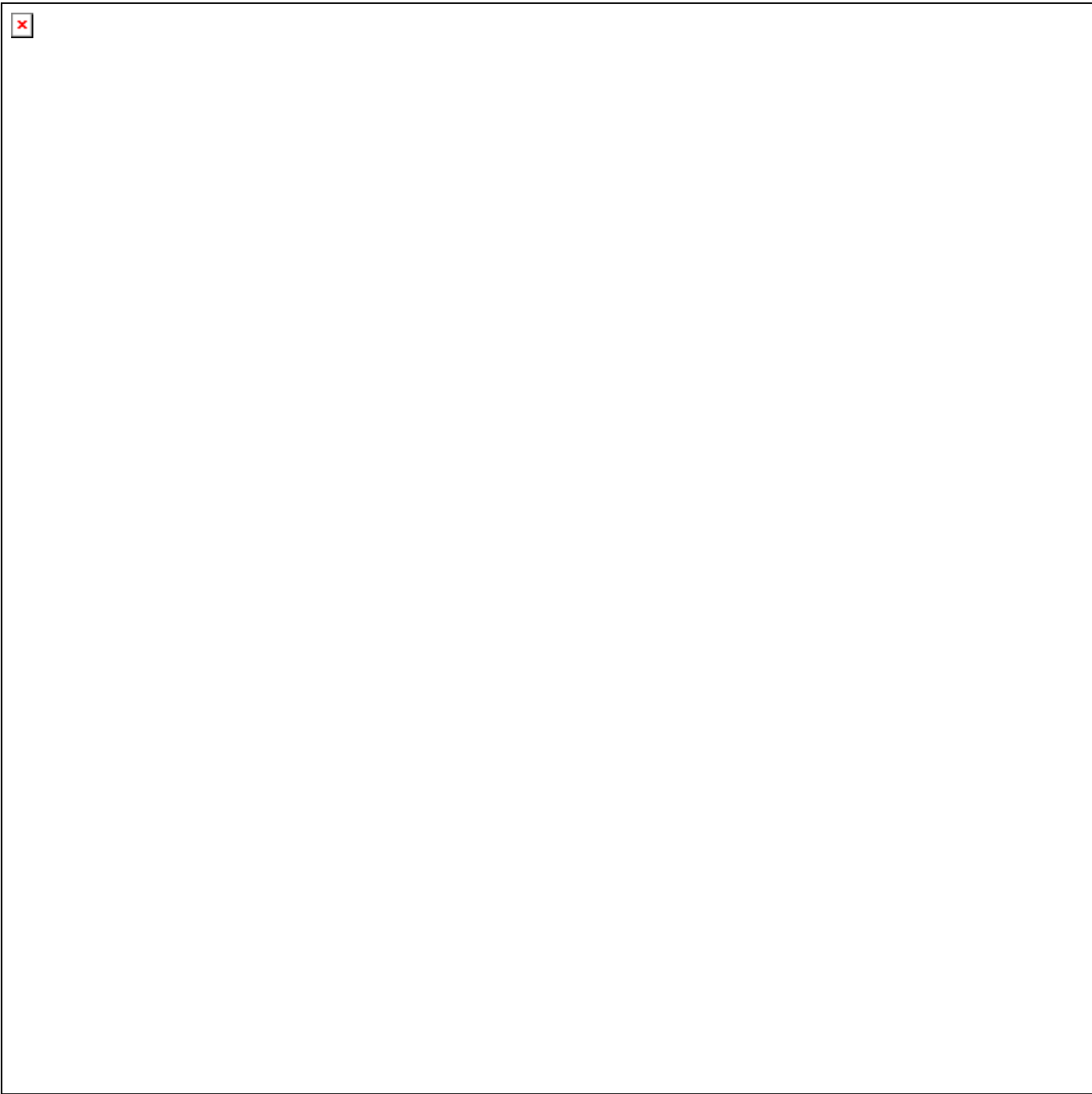
Unami Creek Landscape Greenway Delineation



Greenway Parcels and Riparian Corridor



Delineated Greenway Across Parcels



Agricultural Heritage Landscape Character Zone



- Largest cluster of farmland remaining
- Soils of Statewide importance
- Specific design criteria
 - Create large block of agricultural land
 - Maintain farmland features
 - Consider circulation
 - Protect headwater streams

Agricultural Heritage Landscape Greenway Delineation

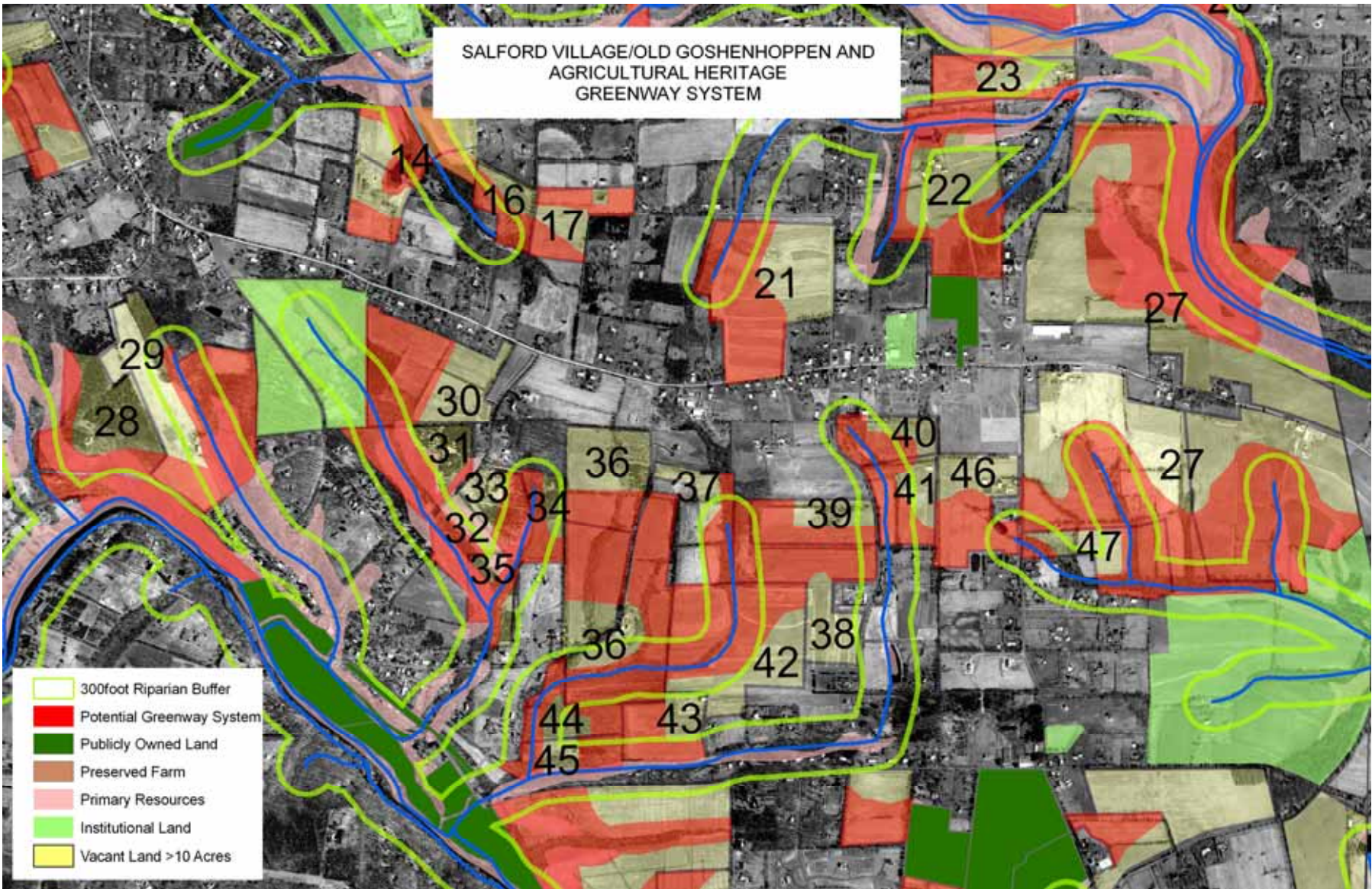


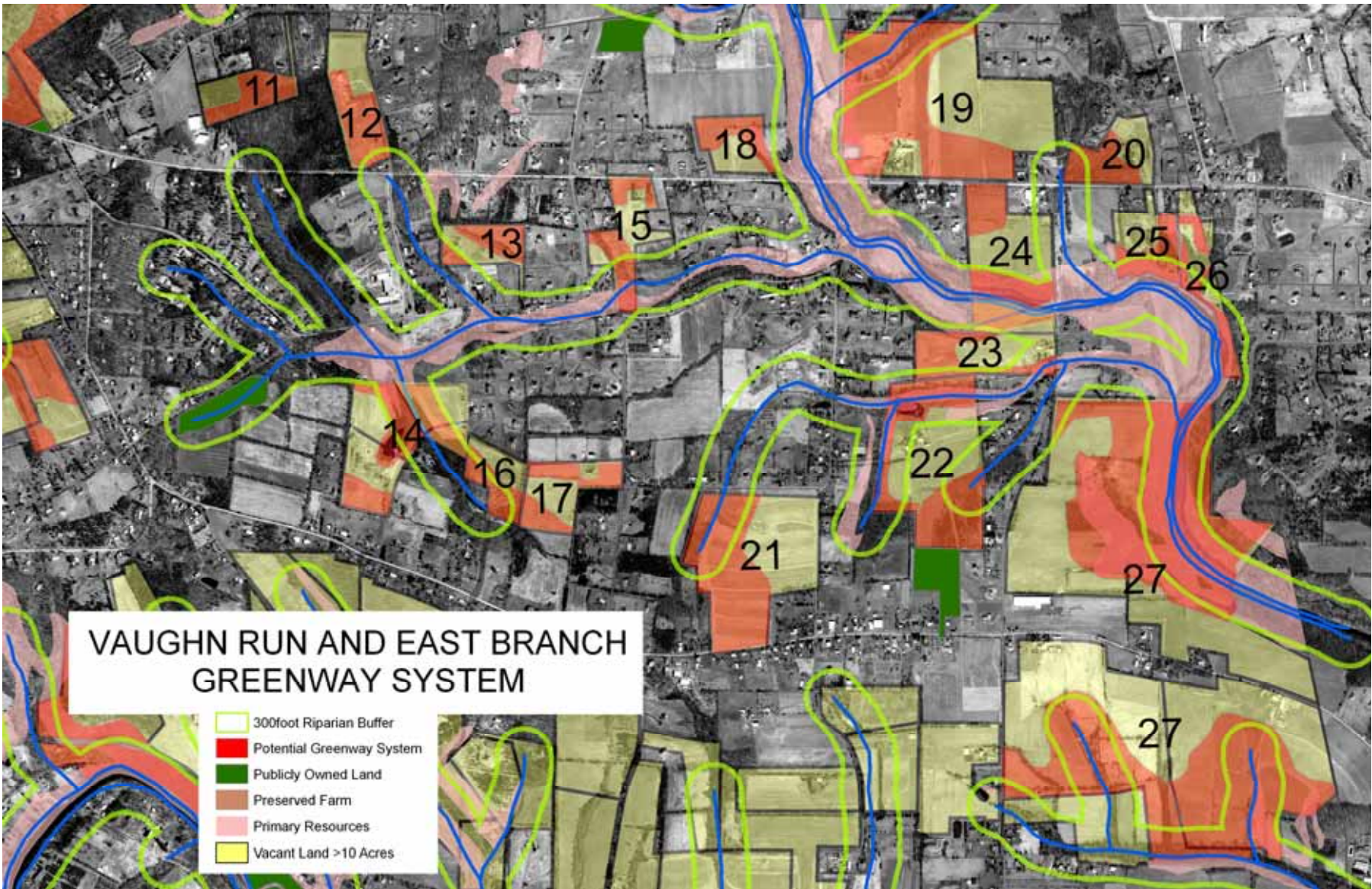
Greenway Parcels and Agricultural Land

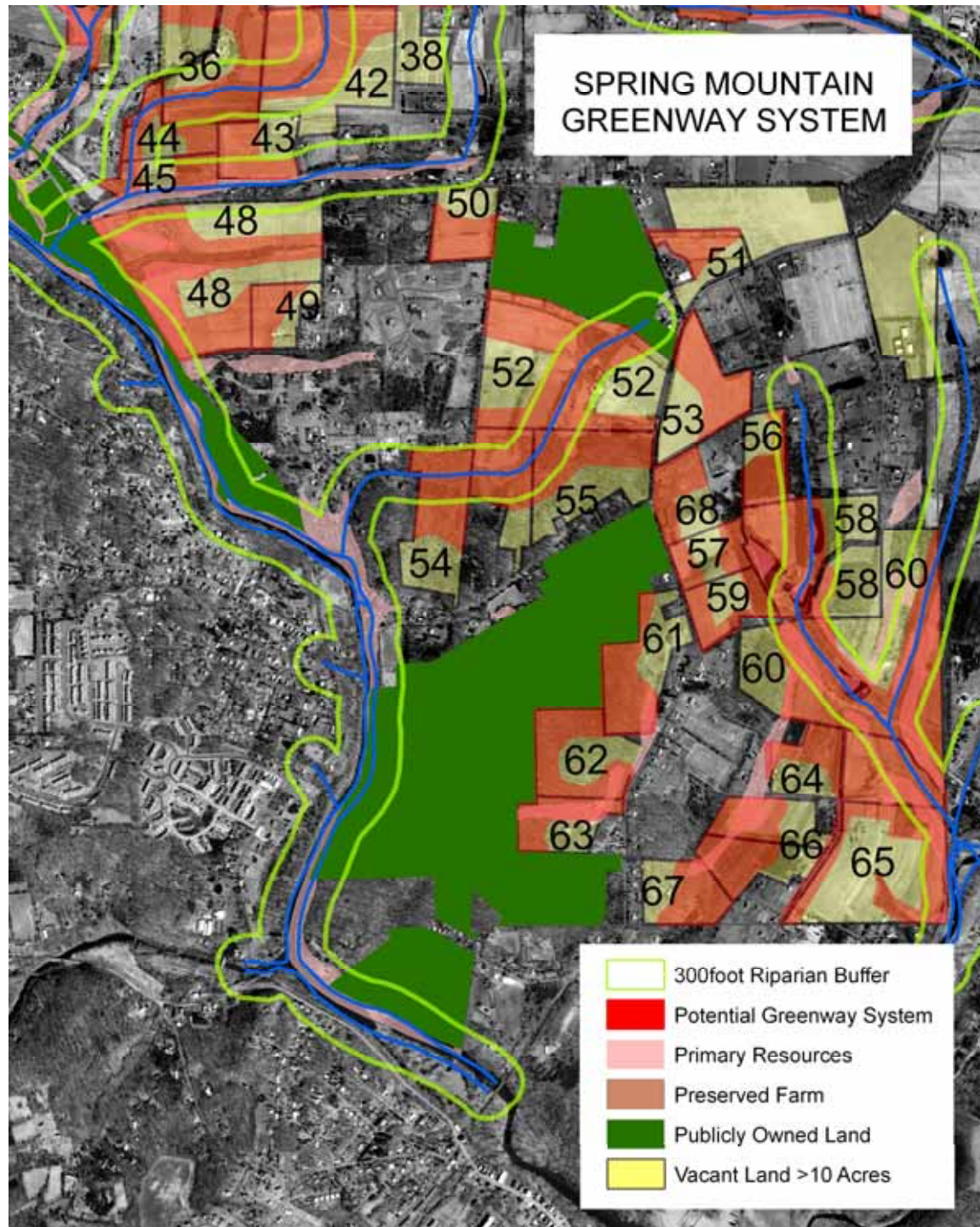


Delineated Greenway Across Parcels

SALFORD VILLAGE/OLD GOSHENHOPPEN AND
AGRICULTURAL HERITAGE
GREENWAY SYSTEM







Use of the Greenway Preservation Guidebook

- Guidebook generally available and distributed with zoning ordinance
- Conservation subdivisions must preserve greenway as devised, recognizing...
 - Conceptual greenway system
 - Adjusted to site-specific resource analysis
 - Reflect engineering/site design realities
- Help streamline review process

Next Steps: Develop Criteria for Development Areas

- Conservation Subdivision (not “cluster”)
 - Rural, low density area
 - 60% open space
 - Lot sizes > 23,000 square feet
- Goals for development areas
 - Don’t create an isolated suburbia
 - Replicate the experience of a 2-acre lot
 - Protect rural character from internal as well as external roads

Next Steps: Develop Criteria for Development Areas

- Maintain rural road setbacks (80 feet v. 20 feet)
- Create roadside open space (60 feet)
 - Improve as hedgerows, low walls, or split rail
 - Allow creative stormwater BMPs
- Provide flexibility in home sites
 - Maximize separation
 - No need to orient to the street

