

Town of Rochester Natural Heritage Plan

Created under the Rochester and Wawarsing Intermunicipal
Open Space/Natural Heritage Planning Project

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TOWN OF ROCHESTER NY

NATURAL HERITAGE PLAN

INTRODUCTION

Executive Summary

The Town of Rochester, in partnership with the Town of Wawarsing, has completed an Intermunicipal Open Space/Natural Heritage Plan Project. This Plan is presented as an amendment and supplement to the previously adopted 2006 Comprehensive Plan. With grant support from the Hudson River Estuary Program of the New York State Department of Environmental Conservation (NYSDEC) the Town worked with a citizen committee, professional consultants, a wide range of advisors, and peers in the neighboring Town of Wawarsing. This work builds on the 2016 *natural heritage and open space inventory* of the Town. Included is an audit of existing town polices and codes relevant to open space and natural resources, a comprehensive analysis with maps of town resources – collectively known as Conservation Open Area Maps, part of the Open Space Index. In addition, a set of *recommended actions* that the town should consider are included, which, if enacted individually and collectively can serve to protect and enhance the important open spaces and natural heritage of the town while respecting other priorities of the town including elements of the adopted Town Comprehensive Plan.

Project Team and Acknowledgements

This Project was funded in part by a grant from the New York State Environmental Protection Fund through the Hudson River Estuary Program of the New York State Department of Environmental Conservation. A central **Project Team** was appointed by the Town Boards of Rochester and Wawarsing to direct this project, in partnership with the 2 hired consultants. Members, three from each town, included:

- Rochester:
 - Carl Chipman, Town Supervisor
 - Laura Finestone, Town Environmental Conservation Commission, Chair
 - Rick Jones, Town Environmental Conservation Commission & Planning Board member
- Wawarsing

- Jack Grifo, Town Environmental Conservation Commission & Rezoning Committee member
- Jorge Gomes, Ellenville – Wawarsing Parks & Recreation Committee
- Terry Houck – Wawarsing Town Board member

In addition, there was strong and regular ongoing participation from a wide range of members of each of the Towns Environmental Conservation Commissions and other boards, including:

- Rochester
 - Judith Karpova - Town of Rochester Environmental Conservation Commission member (who also served as alternate to the Project Team)
 - Larry Dewitt – Town of Rochester Planning Board member
 - Angela Doris – Town of Rochester Environmental Conservation Commission vice-chair
- Wawarsing
 - Hank Alicandri – Town of Wawarsing Environmental Conservation Commission – Chair
 - John Adams, Town of Wawarsing Environmental Conservation Commission member and Colony Farm project coordinator
 - Sarah Underhill, Town of Wawarsing Environmental Conservation Commission member
 - Hank Bartosik, Town of Wawarsing Environmental Conservation Commission member
 - Jamie Deppen - Town of Wawarsing Environmental Conservation Commission member

Advisors and consultants to this Plan were:

- John Mickelson, Geospatial & Ecological Services, West Hurley, New York
- David Church, AICP, consultant land use planner, Pine Bush, New York
- Laura Heady, Conservation and Land Use Coordinator, Hudson River Estuary Program

Acknowledgements:

The Project Team would like to thank Larry Dewitt for his important work in conceptualizing this project and seeking funds to support it. We also want to thank Supervisor Carl Chipman for his leadership from the beginning and throughout the project, Laura Heady of the NYSDEC Estuary Program for her steady and enthusiastic support, and Jack Grifo from Cragmoor whose volunteer work exceed all expectations and showed what a true intermunicipal project this is.

BACKGROUND

The Town of Rochester, in partnership with the Town of Wawarsing, has completed this Intermunicipal Natural Heritage Plan. It is presented as an amendment and supplement to the previously adopted 2006 Comprehensive Plan. With grant support from the Hudson River Estuary Program of the New York State Department of Environmental Conservation (NYSDEC) a broad, two-town Project Team coalition was convened, led by a team of consultants, to complete the Plan. The work builds on the 2006 draft *natural resource inventory* (Chazen) and the 2016 *open space inventory* of the town. The detailed *open space inventory* project outlined and identified the major town-wide resources: open space, cultural, historical, recreational and natural heritage systems and included a mile-wide buffer area around the town. The open space inventory still holds great value for readers wishing to understand the baseline components of the town and we refer readers to it for specific details. Deliverables of the Inventory included over 100 component data layers that were converted into KML format, for use by anyone with Google Earth. These data allow analysis of the greater Rochester area at scales ranging from neighborhoods to watersheds. Training for Rochester staff in the use of Google Earth was also included in that project. The design of the resulting database is to allow updates, edits and changes to the base layers, such as those being included with this plan, which greatly expand the utility of printed paper maps.

Along with existing Town polices and codes relevant to local open space and natural resources, an analysis of related Ulster County and New York State open space plans are included. Map graphics, collectively known as the *Conservation Open Area Maps*, all part of the final *Open Space Index* are included (*Appendix A*). Lastly, a set of detailed *recommended actions* the town may consider jointly with Wawarsing and/or alone are presented. They are designed to protect and enhance the important open spaces and natural heritage of the town.

This Plan is presented both as an outline of how the two towns can work as partners to better protect important features, resources and places that they share in common as well as how they can individually address their own unique assets. The Plan uses the best available science-based information and stakeholder-based collaborations to provide the background and recommendations for the Town of Rochester to pursue consensus- building across municipal lines. Such a regional approach more broadly and effectively protects the important natural and open spaces resources of each town at a scale not available to either town alone.

Additionally, when considering important resources such as landscape corridors, habitats and watersheds, intermunicipal approaches are needed when these resources cross borders. Plans and programs to preserve important cultural and historical features such as robust agricultural systems, recreational rail/bike/ski trails, and flood control measures all benefit greatly from a broad, regional approach.

The purpose of this Plan is to first define the “what do you have.” What are the unique natural, cultural, historical, land and water characteristics that exist within the Town of Rochester. Then the Plan identifies and outlines “how best to protect it” actions -- those best suited for protecting

and enhancing these components, now and for future generations. These two terms “what” is important to protect and “how” can it be protected will figure prominently.

Like all settings, the Town of Rochester is unique and ever changing. Open space must be defined by the current town settings, as presented through the *Conservation Open Area maps* and the *Open Space Index* found in this Plan. The various suite of items considered for the plans were termed “components”. These include the region-wide built and natural-infrastructure, cultural and physical systems, and the detailed features and site-specific resources of a given locality. Through this process, we sought to understand any background that a topic or cause had previously undergone within the public discourse. It is useful to know of any failed or attempted “cause célèbre” or effort to mobilize public opinion around the conservation of an asset that either fell flat or for which “it just wasn’t the right time”.

Also acknowledged is that nearly 32% of the land area of Rochester is already in permanently protected status— notably through New York State Park and State Forest designations. There are significant private conservation lands as well. Though conditions and priorities related to natural heritage and open space will shift through time, the roles and needs of Town residents remain a priority in defining what is open space and how best to protect or address these resources.

One of the key concepts built into the project was the importance of the role that the Environmental Conservation Commissions (ECCs) and Boards play in understanding and weighing the eventual tradeoffs of any proposed conservation or development plan brought before a town. An engaged Environmental Conservation Board (ECB) can bring indispensable information and analytical resources to bear when considering any development or protection project. Through investing in an ECB, delicate and sometimes complex perspectives can be better understood and effectively reconciled by the Towns in the same way that Town Planning and Zoning Boards help shape the trajectory of a Town’s growth pattern. Elevating the ECC to a Conservation Board could provide invaluable oversight, information and perspectives that can support the Town’s commitment to a resilient and sustainable future.

Review of Plans, Policies and Codes – Summary of the Town Audit

This Town Natural Heritage Plan is written to directly support two key documents. They are the 2006 Town of Rochester Comprehensive Plan and the 2007 Ulster County Open Space Plan.

The Town of Rochester Comprehensive Plan

The Town Comprehensive Plan has a set of essential, consensus-based goals which directly relate to the purpose of this Natural heritage plan. First, the Comprehensive Plan has eight (8) lead goals which this new Plan shall be consistent with:

- Growth can take place without compromising the quantity or quality of drinking water available
- New development is sited and designed to minimize the amount of taxes that must be raised town-wide to provide new facilities and services

- Town government expands its ability to collaborate and share services ... with a variety of other governments....
- Rochester may take advantage of changes in the national and regional economy to build the Town's economic base by encouraging small business, tourism, arts, agriculture and historic preservation.
- To the greatest extent possible, the Town remains an affordable place to live.
- Development complements and strengthens Rochester's small-town quality and character.
- Growth occurs in a way that minimizes loss of open spaces or scenic views.
- As part of this approach, eminent domain and condemnation of property will not be used in implementing the recommendations of this plan.

Additionally, this Plan shall be consistent with the “Plan Concept” as depicted in Figure 2 page 11 of the Comprehensive Plan.

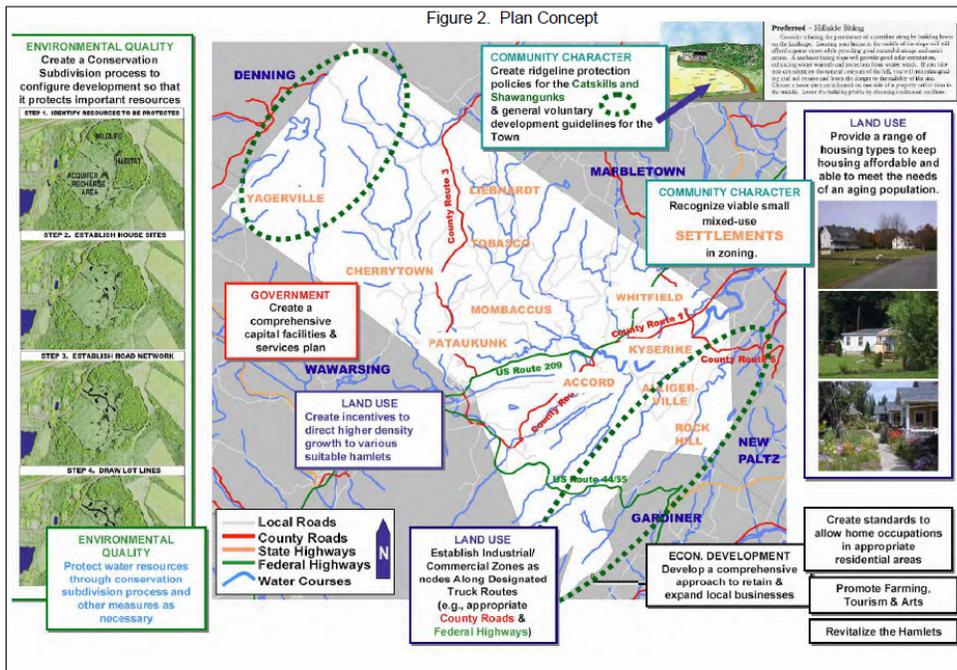


Figure 1. Plan Concept from Town of Rochester Comprehensive Plan (2007)

This Natural Heritage Plan also addresses many objectives and policy recommendations stated in the Town Comprehensive Plan under six (6) Plan Elements: *Environmental Quality, Land Use, Economic Development, Community Character, Infrastructure, and Government Services*. This consistency between Plans is summarized later under the specific recommended actions.

The Ulster County Open Space Plan

A second, and essential guidance document for this Town Plan is the 2007 Ulster County Open Space Plan. That document focuses on what the County can do as a leader as well as a partner with Towns and Municipalities. It also provides context and examples for the Town on the history of open space protection within the region. Included are the potential risks in seeking some protections as well as lead definitions and inventory of resources within the broader region (County), and a set of principles for next steps that have informed this new Town Plan.

In particular to Rochester, the Ulster County “Principles of the Open Space Plan” provided a framework for completion of this Town Plan, and they are summarized here:

1. Identify critical natural resource “systems”.
2. Preserve and protect open space, unique natural areas and heritage areas and sites, wetlands, water and woodland resources, scenic views, areas of natural beauty, and the rural character....
3. Integrate and link planning, development and environmental goals and efforts by creating a coordinated policy and management framework.
4. Integrate considerations of community well-being economic prosperity, and ecological integrity.
5. Protect water resources and critical watershed areas....
6. Enhance the viability of existing farming operations and agricultural businesses, and encourage new ones to be formed.
7. Protect and enhance ... the most valuable open space landforms and natural features with coordinated planning and safeguard policies.
8. Safeguard priority biological diversity areas by promoting biologically-sensitive land use and increasing research and understanding.
9. Create, preserve enhance and provide managed access to parks, hiking trails, active and passive recreation facilities, and historic resources.
10. Balance consideration of present and future generations through sustainable development.

As a preliminary support for the Plan, an independent audit of codes and policies in both the Towns of Rochester and Wawarsing was conducted. The team received feedback and reviews from the Project Team as well as additional officials and stakeholders from both towns and from the region. These findings complement an audit matrix documented for each of the two Towns and on file. This summary emphasizes findings deserving attention in and shared by both Rochester and Wawarsing.

Policy\Code Audit: General Lead Findings.

- Water Quality & Visual / Scenic Resources a common thread. There is significant recurring interest and policy in support of these resources
- Trails are important and anchor the regional recreational system. There remains strong, consistent interest in enhancing a trail system, and improving regional links.
- Agriculture – as both a landscape/open space feature but also a critical economic activity – needs more organized support building on Rondout Valley Growers initiatives.
- Both Towns have unique and important relationships with state land management overseen by both New York State Department of Environmental Conservation (NYSDEC) and New York State Office of Parks, Recreation and Historic Preservation / Palisades Interstate Park Commission (NYSOPRHP/PIPC).
- There is a known set of location-defined resource areas (including corridors) and sites that are identified and inventoried as important and need to be prioritized and matched to a set of tools for protection.

Technique Specific Lead Findings

- TDR. Transfer of Development Rights is prioritized and available for use in both Towns but has not been used. TDR use needs to be researched and reviewed.
- Incentive Zoning. This tool in zoning is not currently used and should be evaluated.
- Conservation Subdivisions – Right Size for use. Both Towns emphasize this tool in policy, and authorize its use in zoning and subdivision regulations. But the tool has yet to be used. Feedback suggests overall lack of development may play a role.
- Active Land Conservation – building on Cragmoor Conservancy etc. County senior staff and others have expressed the need and opportunity for the Towns with property owners and with conservation organization partners to step up stronger on actual land preservation financing and grant applications. A particular note has been made regarding farmland preservation. This should be reviewed to determine what is needed to grow interest in financing land conservation.
- Shawangunk Mountain Scenic Byway Management Plan & Design Guidance. Take steps to implement these documents including incorporation of design guidance into Town codes.
- Research for enhancement 480a Forest Management programming in Towns
- Roles for CACs in project application reviews. Implement best options for each Town to incorporate smart comments from respective CACs when considering planning and zoning permit reviews.

Geographic Focus

- Both Towns share strong interest in further protection of the following important and iconic geographic areas: Shawangunk Ridge, Shawangunk Mountains Scenic Byway, Catskill – Shawangunk open space and ecological Link/Corridor, stream corridors including the Rondout Creek, rail/canal corridor, etc.
- Both Towns recommend complementing land and environmental protection with targeted support for development and redevelopment in the existing hamlets.

Project Specific

There is a set of specific properties or projects that are of interest to both Towns as well as key individuals or groups. These include

- Colony Farm; both as important agricultural area and key connection region for the valuable Catskill Shawangunk Greenway Corridor
- Lundy property (being considered for protection by NY State agencies)
- Rondout Creek corridor
- D & H rail trail corridor, (O&W canal path), etc.
- This listing of special places is being actively developed and prioritized and matched to most effective tools and techniques for protection and enhancements.

OUTREACH & EDUCATION EFFORTS

Over the past eighteen (18) months, outreach, discussion, and public input has been undertaken on how best to understand, define, protect and connect the important ecological, cultural, scenic and recreational place and resources in the Town of Rochester and surrounding regions. A focus has been to have complementary and parallel efforts in the neighboring Town of Wawarsing, to strengthen conservation effectiveness through collaborative efforts.

The expanded Project Team met on a monthly basis to advise this work. All meetings were open to the public. Additionally, public information meetings were held in Accord and in Ellenville (October 2016), to provide updates on the project and solicit guidance from the public of both Town partners. On March 1, 2017 a half-day symposium was held to seek input and support on one of the major components of the Town Plans. Some thirty (30) regional stakeholders joined State, County and municipal officials and staff to collectively review the Catskill Shawangunk Greenway Corridor and Colony Farm project. This regionally important feature contains critical environmental areas and regionally identified ecological corridor resources. Spanning the

boundary of the two towns, it's been identified as a generational opportunity to help reconnect the Catskills with the greater Shawangunk systems, two of the most important biodiversity regions of the mid-Hudson region. (*See Appendix B for Symposium Summary*)

An extended Project Team group, including members of both Towns' Planning, Zoning and Town Board members (in addition to the ECC members) were provided several half-day, hand-on computer training sessions in "conservation applications of Google Earth Pro". All of the hundred-plus Open Space Inventory geospatial (GIS) layers from the respective towns' previous projects have been converted into KML format for use within Google Earth. The intention of the consultants was to help establish critical place-based analytical skills within the Project Team and the respective Environmental Conservation Commission members. Static map compositions, such as the Conservation Open Area Maps, are an important and integral part of any such inventory and planning process. However, they lack the ability to help the user access, query, and ultimately understand the sometimes-complex interactions of the layers, across scales. Google Earth can provide both 3D (X,Y,Z) and 4D (time) access to virtually unlimited sets of any of the hundreds of geospatial layers made available for the project. They also provide much quicker and more effective updates, as any new layer can be easily modified and added to the Towns comprehensive databases.

To ensure that the perspectives and inputs of important stakeholders and industry representatives regarding natural heritage and open space protection were heard, the Project Team sought out and interviewed numerous people. Personal interviews of key members of a wide range of groups were conducted, including:

- the *agricultural community* and farmers, including:
 - US USDA Farm Bureau
 - NYS Ag & Markets agency
 - Ulster County Soil & Water Conservation Service
 - Rondout Valley Growers association & member farmers
- regional *environmental, ecological and forest-resource* agencies:
 - NYS DEC – Division of Lands and Forestry
 - Shawangunk Ridge Biodiversity Partnership
 - The Nature Conservancy
 - NY Natural Heritage Program
 - Open Space Institute
 - Catskill Center
 - Mohonk Preserve
 - Riverkeeper
 - NYC DEP
 - Watershed Ag Council
 - Local land protection and land trust agencies
- Ulster County Planning
- Ulster County Department of the Environment
- the Historical Preservation Commissions from both towns
- each town's Planning board
- each towns Town board

- NY-NJ Trail Conference (recreation)
- Rondout Valley Business Association

SHARED REGIONAL RESOURCES

The dramatic and scenic landscapes of western Ulster County support an impressive diversity and vast expanse of high-quality private forest, park, and protected recreational lands. The geological underpinnings of the region, largely slate and shale (Catskill region) and quartz-conglomerate (Shawangunks) form the striking ridges, escarpments and broad, undulating plateaus that draw so many to the area. Water has and continues to play a major role over the ages in acting upon successive periods of deposition, erosion, scouring, and material transport mixed with physical uplifting and deformation. All share similar timing and attribution in forming the northern section of the Appalachian Mountains.

As the rains, creeks, and rivers slowly eroded the region, they left behind fertile, alluvial (river fed) soils as well as the abundant surface water systems, rivers and trout streams that we see today. These modern-day tributaries, such as the Vernooy, Peters and Bear Kill (kill = Dutch word for creek) and the Sandburg, Mill, and Rochester Creeks, all contribute to one of the regions defining features: the Rondout Creek.

The intact and iconic forest and park blocks that the region sustains are due in no small part to the extensive State, public and private conservation land holdings. The peaceful Catskill forest and the associated Park and Preserve stretch across the stream-carved plateaus to the north/northwest of Wawarsing and Rochester. The scenic ridges, unique habitats, and abundant recreational opportunities of the Shawangunk Ridge form the southerly wall of the area. Nestled in between is the fertile, river-fed agricultural lands of the Rondout Creek valley. This central region contains the important Rt. 209 transportation corridor, much of the commercial enterprises of the two Towns as well as a majority of the known groundwater aquifers supporting the municipalities.

Many of these geographic resources are shared in common by the two towns, such as the Rondout Creek valley, Rt. 209 transportation and commercial corridor, running northeast towards Kingston. The rich alluvial soils of the region support important farms and farming operations across both municipalities and within much of the Rondout Valley. The historic path of the Ontario & Western railroad is actively being developed as a regional recreational rail-trail through this same general region, paralleling the geography of the old Delaware & Hudson (D&H) canal. Prominent streams and creeks span both towns, such as the Vernooy Kill and the Peters Kill, before emptying into the Rondout Creek. With the relative lack of public water supply systems, both towns share the responsibility of monitoring and safeguarding the groundwater aquifers and drinking water supplies that many residents depend upon for the hundreds of individual wells. Public and private conservation lands (parks, forests, forest

preserves, easements, etc...) represent nearly 33% of the land area of Wawarsing and 32% of Rochester. Much of the unique shared biological and recreational resources of the Shawangunk Ridge enjoy a level of protection, falling along the south-easterly boundaries of both towns. The Catskill State Park and associate forest preserve extends south through the northern sections of Rochester on down along the municipal boundary the two towns share. Combined, the remaining intact Catskill forested lands (Vernooy Kill State Forest) stretching close to a northern section of the Shawangunks (Minnewaska State Park), represent a unique, generational opportunity to maintain a corridor of ecological connectivity linking these two important regional biodiversity reservoirs. Coincidentally, the region representing the critical connecting zone between the two greenway systems is occupied by an historic farm property; the Colony Farm. These lands have been identified as important by multiple resource agencies as critical to the success of the greenway corridor, as well as for their current and historical agricultural value.

Ranked Components & Outline

Establishing ranked priorities -- which components might be protected, one above another -- clarified things greatly and began with a fairly logical approach. For example, some team members agreed that the abundant forest lands and green spaces bringing tourism to the town and providing residents with a high quality of life would be critically important to include. Other members suggested that clean, available water was essential for life in the Town of Rochester and for nature alike. So water and places that water is found seemed a fairly clear priority for protection.

This process proceeded on down the range of grouped components, using an online questionnaire tool to capture and order the results. While the category summaries and constituents shifted somewhat, and while all were considered important, the resulting rank order array would hold throughout the rest of the planning process.

This final ranked summary of “REGION-WIDE COMPONENTS” included:

- A. ECOLOGICAL RESOURCES\TERRESTRIAL HABITATS
- B. HYDROLOGICAL RESOURCES\AQUATIC HABITATS
- C. AGRICULTURE & AGRO-RELATED CULTURAL RESOURCES
- D. RECREATIONAL RESOURCES
- E. SCENIC RESOURCES
- F. HISTORIC & CULTURAL RESOURCES
- G. OTHERS

Expanded, each of these groups is composed of a range of related, although individual features, facilities, and place-based resources:

- A) AGRICULTURE & AGRO-RELATED CULTURAL RESOURCES, included:
 - a. Farms & farmlands (active and fallow), row crops, dairy, vegetable, orchards, pastures, vineyards and hops cultivators, (livestock farms – largely not present in region) , etc...
 - b. Sustainably harvested private forest lands (especially those >50 ac.) (480a lands) though these were eventually eliminated

- c. Important agricultural soils (future\potential farmlands)
 - i. Prime
 - ii. Soils of Statewide Importance
 - d. Agricultural Districts (Ulster County)
 - e. Farm stands, agro-tourism related facilities,
 - f. Pick-your own, Christmas tree farms, maple syrup operations
- B) ECOLOGICAL RESOURCES\TERRESTRIAL HABITAT, including:
- a. Natural vegetated areas
 - i. Forests, fields, post-ag, scrub, unmanaged grass and woodlands
 - b. Corridors and landscape connectivity\linkage features
 - c. Important wildlife habitats and biodiversity areas
 - i. Significant biodiversity areas
 - ii. Habitats important for species of greatest conservation need (SGCN)
 - iii. Regions supporting rare and endangered species and communities
 - iv. Large contiguous, intact matrix systems
 - d. Biophysical resources critical to ecological functioning
 - i. Soils, geology, (surface, bedrock), terrain, etc...
 - e. Frequently includes existing:
 - i. protected Parks and park lands (County, State & Town public & private protected lands)
 - ii. conservation lands (nature and wildlife preserves)
 - iii. Private lands with easements
- C) CULTURAL & HISTORIC RESOURCES
- a. Historic, cultural and heritage resources
 - i. Hamlets
 - ii. Historic homes, landmarks, farmsteads, and estates:
 - 1. Especially those listed within Historical Registry and Districts
 - 2. Cemeteries
 - iii. Favorite Places – that are significant to residents as well as tourists
 - 1. Small parks, picnic areas, swimming holes, features “the region is known for”.
 - 2. Hunting and fishing lands and places and endemic areas
 - iv. Rural Character
 - 1. Fuzzier to define, includes:
 - a. Integration of multiple other components such as:
 - i. Agricultural landscapes
 - ii. Green spaces: forested\fields
 - iii. Both built and unbuilt places
 - iv. Scenic vistas and ridges
 - v. Lack of:
 - 1. Strip-mall, high-visual impact developments
 - a. Such as along Rt. 209
- D) HYDROLOGICAL RESOURCES\AQUATIC HABITAT including:
- a. Surface waters: lakes, ponds, streams, rivers (including the Rondout Creek) etc..., important to human uses
 - b. Riparian corridors (de facto reserves, when protected)

- c. Ground waters: aquifers, drinking water wells and resources, etc...
 - d. Wetlands, springs, seeps and vernal pools
 - e. Watershed basins and floodplains
 - f. Water and aquatic systems (necessary to sustain terrestrial and aquatic life)
- E) RECREATIONAL RESOURCES, includes:
- a. Parks
 - i. State, county, local (also part of Ecological Resource category)
 - ii. Picnic areas, day use areas
 - iii. Ice caves
 - b. Golf courses, play grounds, ball and play fields, mini-golf
 - c. Trails
 - i. hiking\biking\ski trails
 - ii. rail trails
 - iii. rock climbing areas
 - iv. linear parks (Canal)
 - v. Natural areas access points, parking lots
 - vi. Off-road vehicles (motorized and non-motorized)
 - d. Glider, hang-gliding
 - e. Boating, canoeing, kayaking, fishing\hunting\game clubs etc...
- F) SCENIC RESOURCES, including:
- a. Scenic character of region
 - b. Scenic roads, trails, and by-ways (Shawangunk Mountain Scenic Byway)
 - c. Ridgelines, ridges, vistas, overlooks, view points and viewsheds
 - d. Gateway areas (entry ways via major road corridors)
 - e. Unpolluted nighttime skies (light)
 - f. See also: rural character
- G) MISC. OPEN SPACE FEATURES (of recognized value to consider, protect and maintain)
- a. Small local airports
 - b. Non-buildable lands\building constraints
 - i. Steep slopes
 - ii. Wetlands
 - iii. Riparian corridors (defacto reserves)
 - c. Utility right-of-ways
 - d. Vacant lots
 - e. Landfills, brownfields, etc...

In addition to the region-wide set of “systems”, the team was also asked to include any detailed, site-specific features, places, or landmarks that they felt their town, collectively, should consider for long-term protection. The list of specific “components” suggested by the Project Team included:

- Colony Farm and the surrounding region (as vital agricultural area as well as connection point for the Catskill Shawangunk Greenway Corridor) - 6 votes
- Catskill Shawangunk Greenway Corridor – regional connectivity feature - 5 votes
- Shawangunk Mountains, ridges, scenic resources and ridge protection issues – 5 votes

- Scenic resources within entire region, including: views along Rt. 209, around the Shawangunk Mountain Scenic Byway (SMSB), near Kelder Farm, the Nevele, Witches Hole State Park – 5 votes
- Rondout Creek and watershed – 4 votes
- Iconic wetlands and significant wetland complexes in each town, including: Cedar Swamp (Wawarsing) and Great Pacama Vly (Rochester) - 4 votes
- NYS DEC, OPRHP and private Parks and forest lands and preserves including: Minnewaska State Park, Sam’s Point Preserve, Mohonk Preserve, Lake Maratanza – 4 Votes
- O&W Rail Trail system and regional restoration project, D&H Canal structures and associated historical farms – 4 votes
- A range of single vote suggestions, including:
 - Vernoooy Kill
 - Barns at Kelly Farm
 - Bear Hill Preserve
 - The Long Path
 - Stonykill Falls
 - Dark skies (light pollution)
 - Indian Hill
 - And several others

Obviously, there is clear and frequent overlap between categories as many components serve multiple functions and offer manifold human and ecological services. For instance - forested systems hold value from the perspective of virtually all of the major groupings, including:

- the **timber** and financial value of the commercial **forest products** resources (agro-forestry) within the town, now and into the future, if managed sustainably
- the **habitat**, cover, food, shelter, nesting and other irreplaceable services utilized by myriad wild plant and animal species
- the **hydrological** and soil-related functions of keeping rain water “in place” to recharge local aquifers, as well as filtering and purifying it and keeping overland flow from sweeping sediment into stream systems
- the **cultural, recreational, scenic**, aesthetic, artistic and spiritual renewal sense of place and quality of life functions that draw so many to the region parks and excellent trail networks
- the **climate and global warming** functions of sequestering carbon (above and below ground) and helping to keep us cool in the mean time
- forests can actually generate their own **micro-weather patterns**, slowing down winds and helping to keep airborne dust and soil in place.
- despite recent articles indicating how some trees in certain conditions can give off terpenes and other volatile organic compounds, within our region, trees and forests are still a source of **net air cleaning**, contributing major amounts of oxygen to the atmosphere and taking up CO2 and pollutant gases such as: nitrogen oxides, ammonia, sulfur dioxide and ozone
- in many areas, living near trees have been shown to statistically lower ones risk of dying as well as increasing the health and birth weight of babies born to mothers living near green spaces (refs). So it’s still fairly widely held that: **trees = good!!!**

The Project also adopted a “place-based” perspective with the realization that multiple components shared or had overlapping “footprints” (geographic position or landscape) This is also an effective way of considering appropriate protection measures for a range of overlapping components. For example: conserving places where abundant, high-quality, and healthy forest lands are found would *at the same time* provide water and air quality, flood mitigation, recreational and forest product benefits, as well give a boost to trout habitat.

TOWN-SPECIFIC RESOURCES - ROCHESTER

Focus on Rochester Resources - Forests

Of the region-wide systems that contribute immensely to local economies as well as quality of life, none are more important than the matrix forests and woodlands. From a 2011 satellite-derived landcover analysis perspective, forests appeared to cover some 76% of the Town of Rochester and the figure is closer to 85% if forested wetlands are included. (**Figures 2 & 3**)

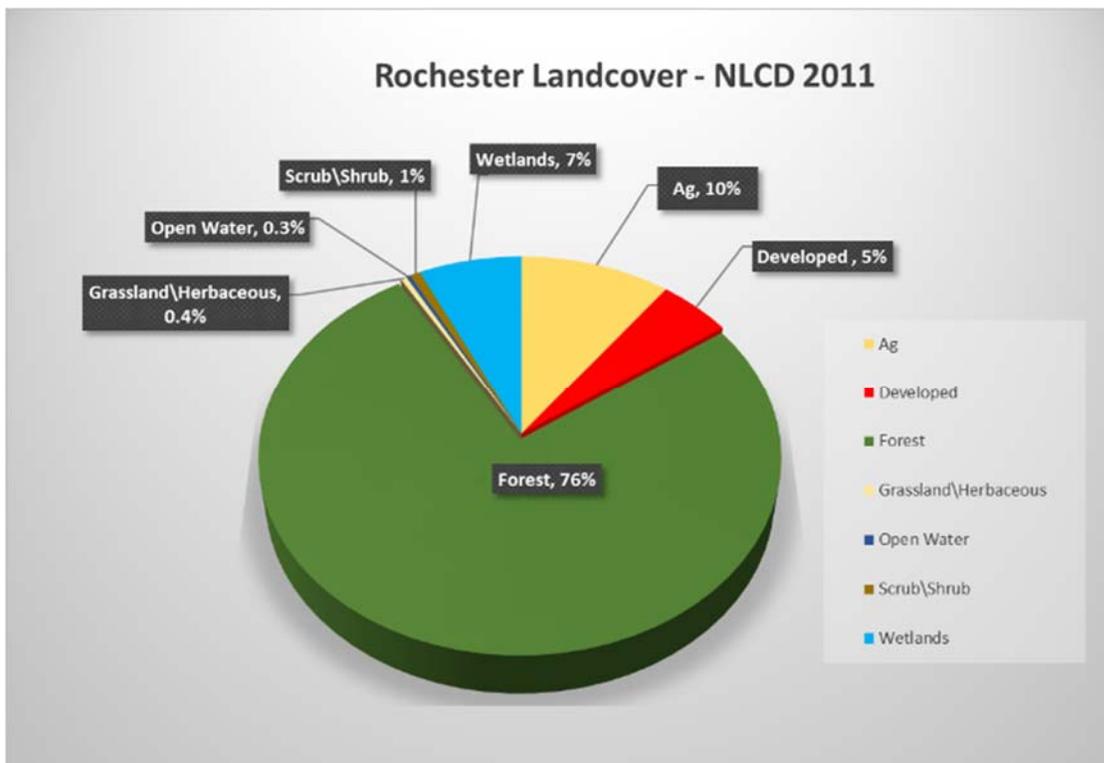
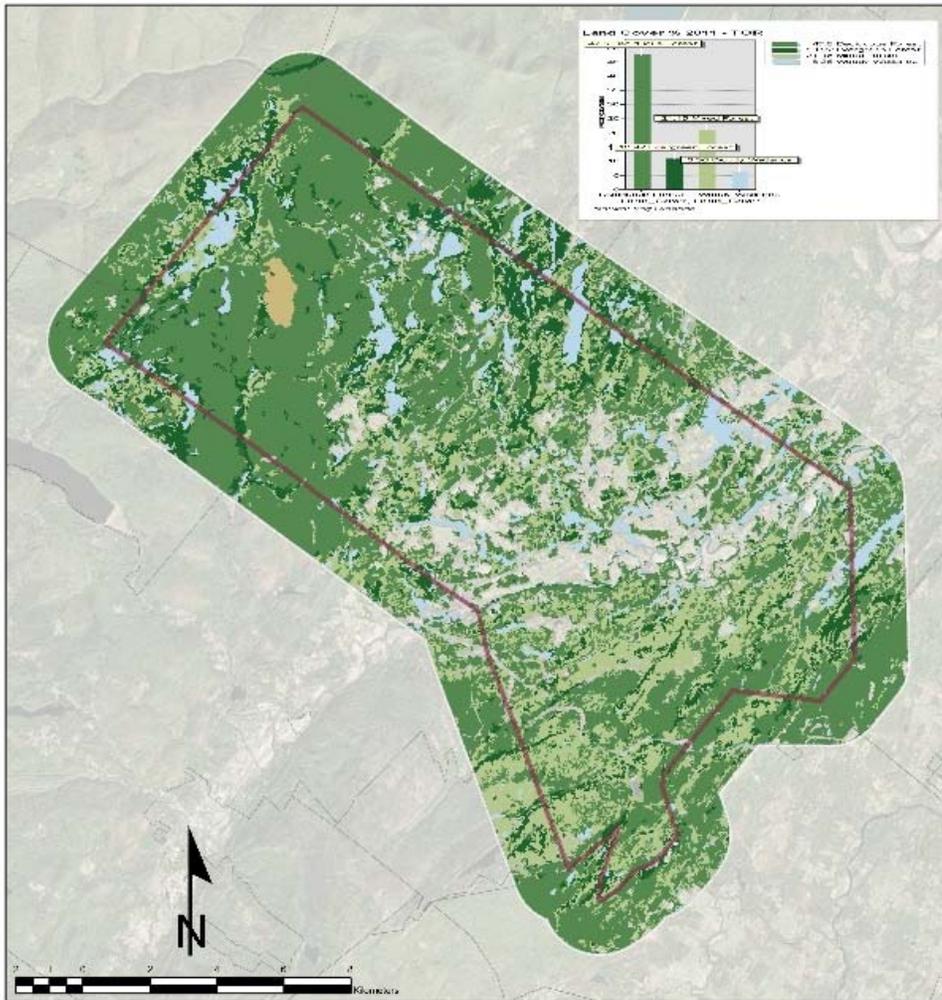


Figure 2 From a Landsat satellites' perspective, Rochester land cover appears ~85% forested, if forested wetlands are included. (National Land Cover Data 2011)

Though looking at a *functional* perspective of these matrix systems, where the fragmentation of roads, transportation, utility and built-land developments is considered, (**Figure 3&4**) the remaining “core area” forest blocks represent just 44% of the Towns land area. Core Area is a well used metric of forest function and productivity that is related to the size of remnant forest

patches and the distance to the edge of the patch. Patch function is sensitive to the size, shape, distribution and other spatial patterns of each individual patch and research has shown that the smaller the patch size, the less able the forests are to deliver the ecological services that larger, intact systems can. *The species contained, the ability to provide food, shelter, and landscape linkages, all tend to be diminished with smaller patches.* The Green Infrastructure Center (GIC) of Virginia, with the support of the US EPA, developed such a CORE layer for the entirety of Ulster county in 2013 and built a range of metrics into each individual patch. Components such as: habitat geometry, diversity, and water quality\quantity all provided aspects that were summarized and assigned a rank. The “top” combined ranking is “Outstanding” followed by: “Very High”, “High”, Medium and “General”.



Town of Rochester, NY
 Open Space Inventory 2015
 TOR ~85% Forested (2011 estimate)



Ecological & Habitat Resources
 examples:

- NLCD2011 FstShrubWetland
- Land_Cover
- Deciduous Forest
- Forest
- Mixed Forest
- Shrub/Scrub
- Woody Wetlands

Figure 3. National Land Cover Database (NLCD) 2011. Image of all Forest Classes (combined)

Rochester enjoys a clear majority of forest blocks falling in the “Outstanding” combined rank, though the remaining classes possess fairly low amounts of forest cover.

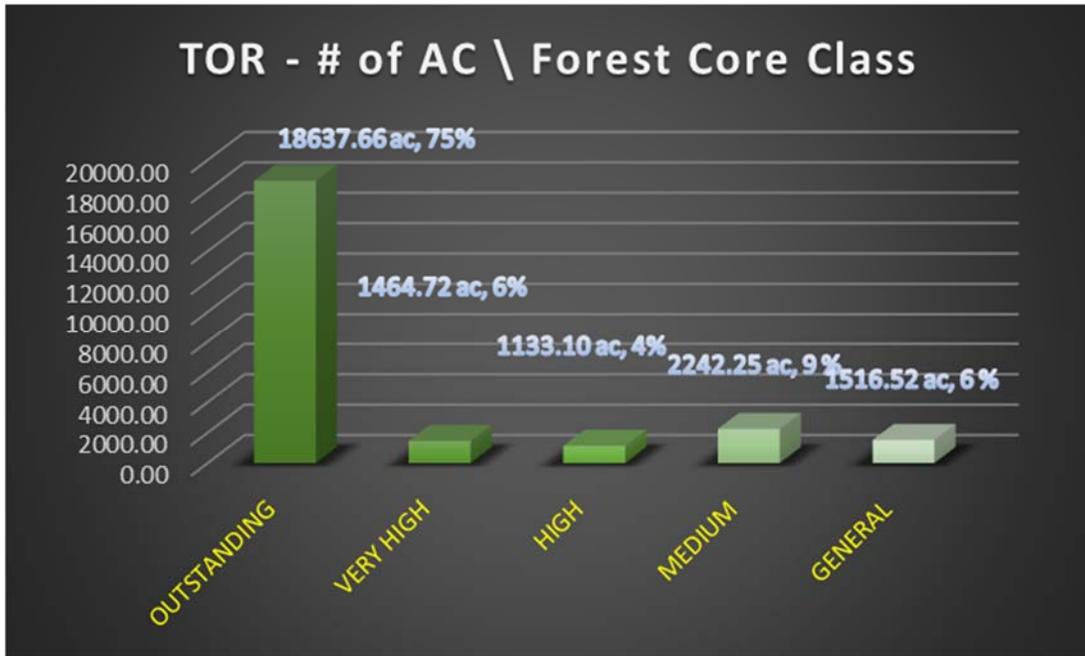
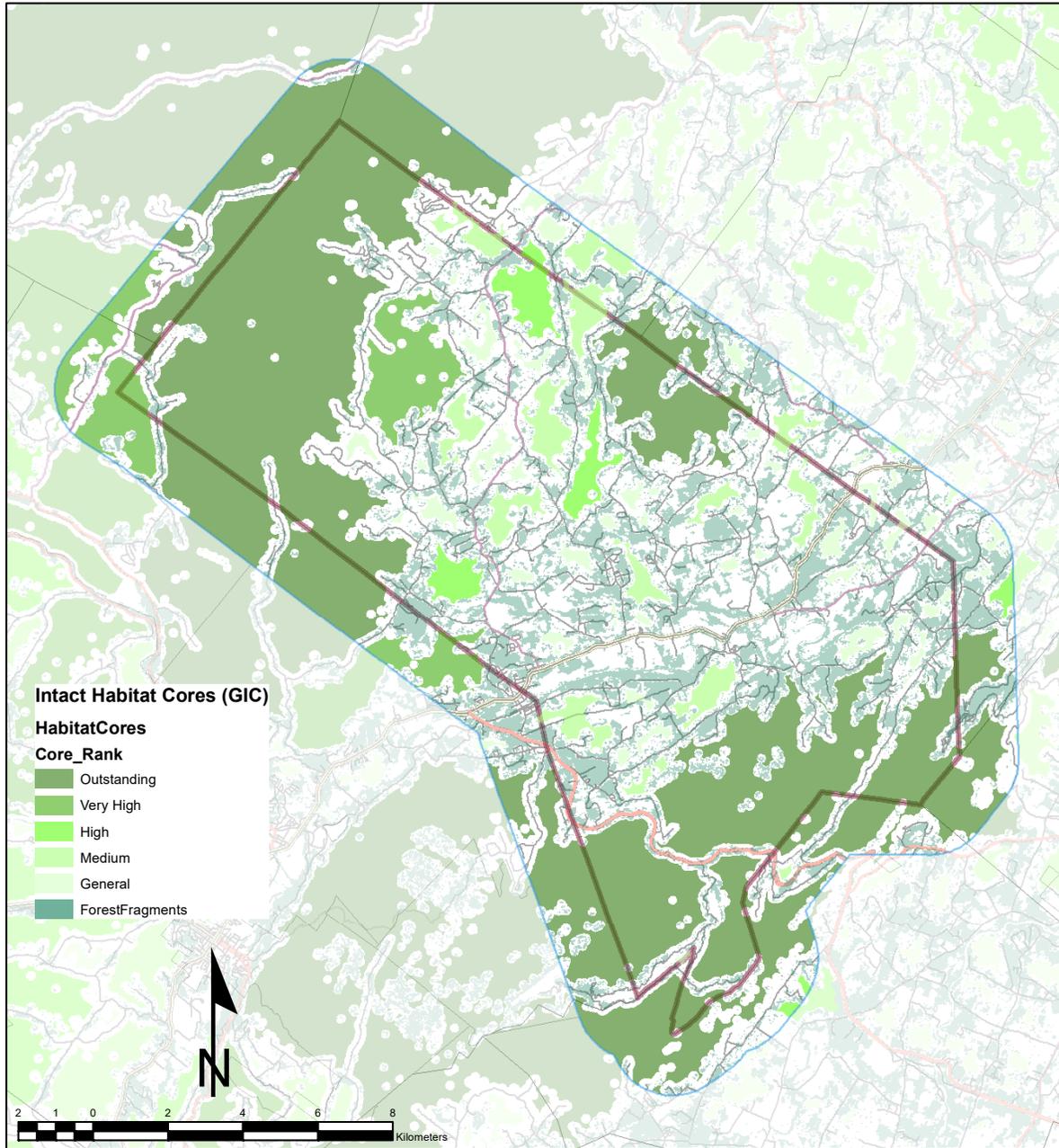


Figure 4. Quality ranking of "Core Areas" within Rochester forest blocks (2013 Green Infrastructure study of Ulster County). 75% of the remaining, intact forest blocks are ranked “OUTSTANDING”

Rochester (forest cover estimates)
% Forested land cover – 76.4 % - using 2011 NLCD satellite image
% “Functional Forest” - 43.8 %- using 2013 GIC “Cores” analysis

So while forested systems will likely continue to provide immensely valuable services to the Town and region, their overall health, integrity, resilience (ability to adapt to change) and overall number of services should not be taken for granted. Many habitats and the plant and animal species dependent upon them have been killed by what is known as “death by 1,000 cuts”. And it is seldom known if it will be 590th or the 741st cut that will be the decisive one, but the concepts

of tipping points and complex systems urge us to err in favor of proactive and conservative approaches to protection.



Town of Rochester, NY

Ecological & Habitat Resources
examples:

Open Space Inventory 2015

TOR Habitat Connectivity
Forest Fragmentation and
UC GIC CORES Areas



Figure 5. Map of Rochester “CORES” forest patches, from a “functional” perspective; forest cover closer to 44% of town using this metric. From 2013 Ulster County\EPA study by Green Infrastructure Center. >76% of patches were ranked “OUTSTANDING” by the study. Cor

Focus on Rochester Resources – Water & Aquatic Habitats

Water, both surface and ground, for both human and habitat uses, also plays an important role in the life of Rochester. While the majority of smaller, local stream systems in Rochester fall within the NYS DEC higher water quality rankings: “AA” or “A”, the central Rondout Creek receives sufficient levels of pollutants to give it a “C” or “D” classification across the region. Maintaining adequate water quality monitoring, field surveying and remediation programs will go a long way to helping the Town maintain the integrity of this most precious resource.

The excellent and very detailed ground water protection plan performed for Rochester in 2006 by the NY Rural Water Association (NYRWA) should become a seminal and often-referenced data source, as the town plans for the future. The detailed spatial analysis provides assessments of local ground water resources, bedrock and surficial geology as well as public and private water sources and wells, supplying the town. Considering the plans’ recommendations and suggested strategies for zoning and development can save valuable time and monies, through protecting this most precious commodity.

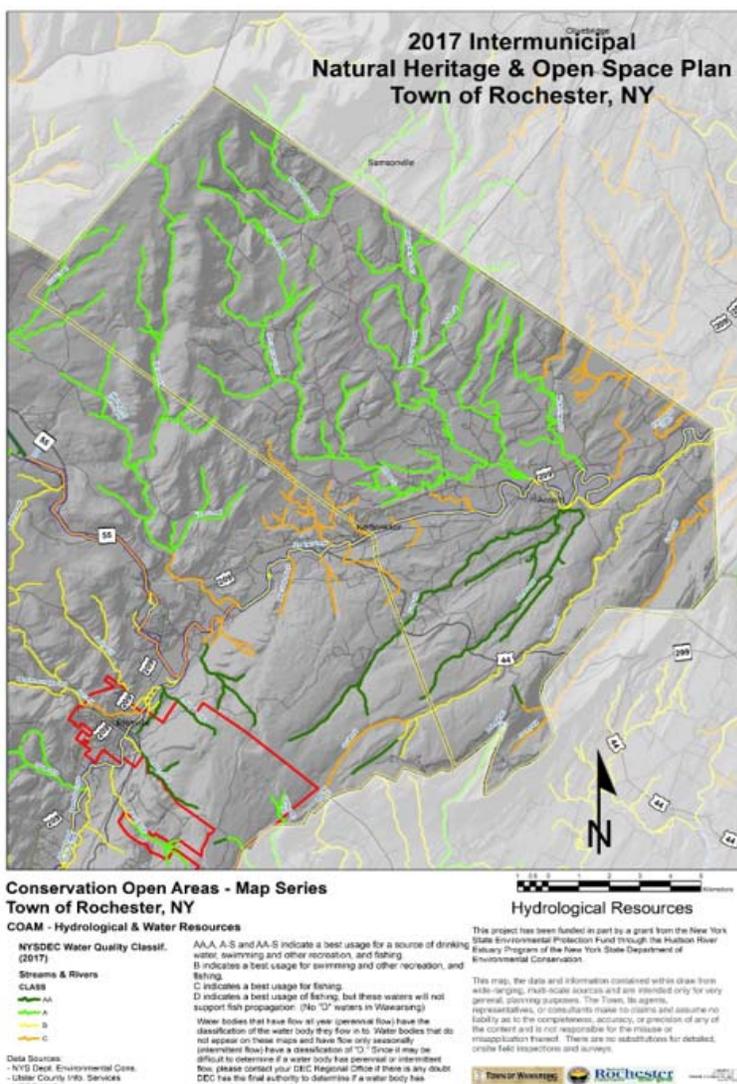
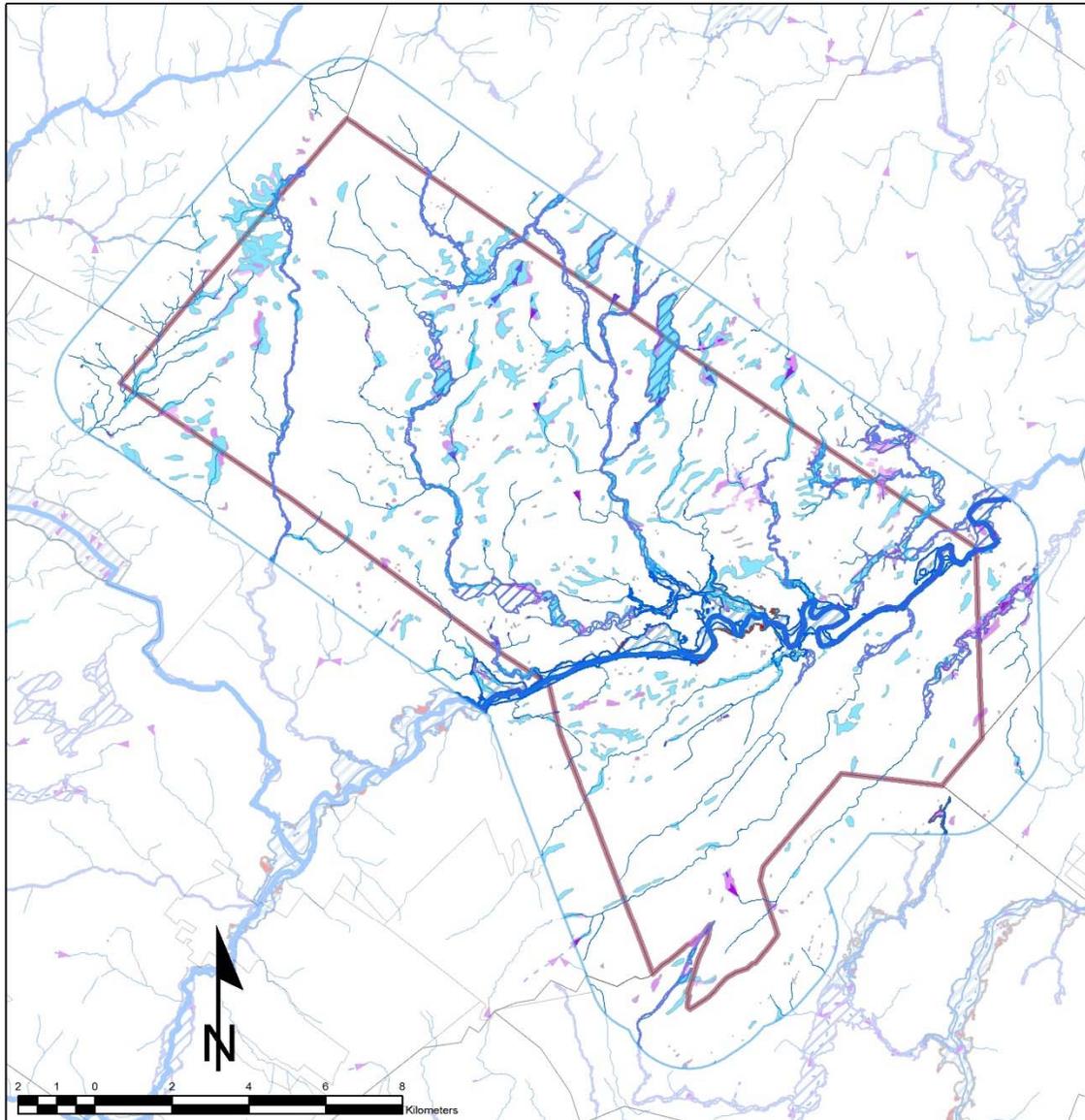


Figure 6. Water Quality Patterns of Surface Waters – NYS DEC

Maintaining adequate and healthy riparian and wetland buffer systems (areas adjacent to streams and wetlands) will both help protect the systems themselves as well as the down-stream portions of the watershed in providing flood protection and aiding on-site water recharge.



Town of Rochester, NY

Open Space Inventory 2015

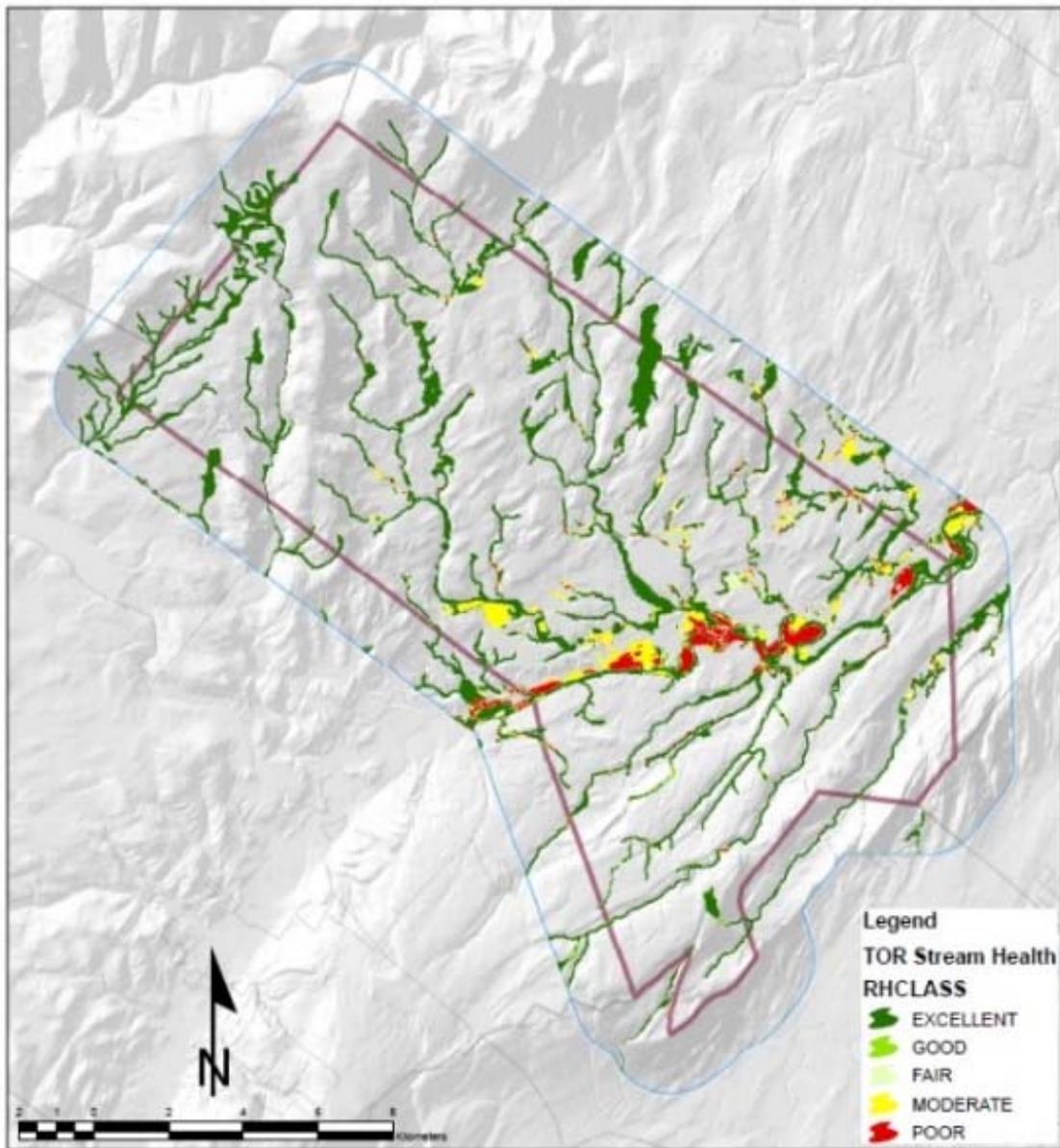
Hydrological & Water Resources
examples:

TOR Surface Water Systems
Rivers, Streams, Lakes, Ponds
Wetlands, Floodplains



Figure 7. Surface water, wetlands, floodplains (see also Conservation Open Area Maps)

Maintaining adequate monitoring, field surveying and remediation programs will go a long way in helping the Town maintain the integrity of this most precious resource.



Town of Rochester, NY
Open Space Inventory 2015

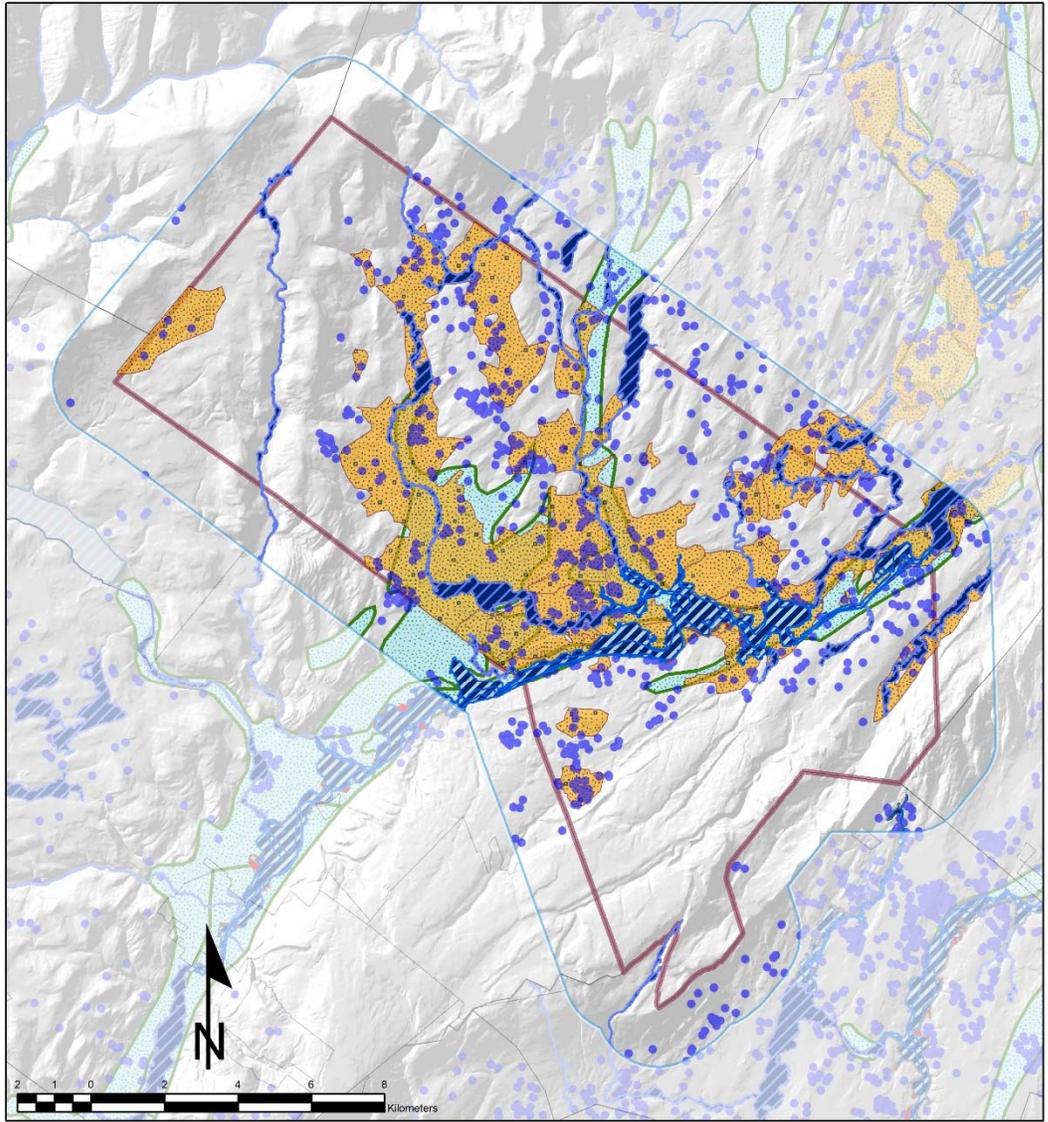
Hydrological & Water Resources
examples:

Results of 2015 SH/SV Model
Relative Health Metric
Stream/Riparian Zones



Figure 8. Estimates of Stream Health (2016) from Open Space Inventory project

Details from the NYRWA 2006 study can and should steer and inform development patterns within and around the town for years to come. Note especially the convergence of both high-density drinking water demand around the Rt. 209 transportation and commercial-focused region.



Town of Rochester, NY
Open Space Inventory 2015

TOR: FEMA Flood Hazard Zones
 100 & 500 Year
 Aquifers (general, detailed)
 Private Wells



Hydrological & Water Resources

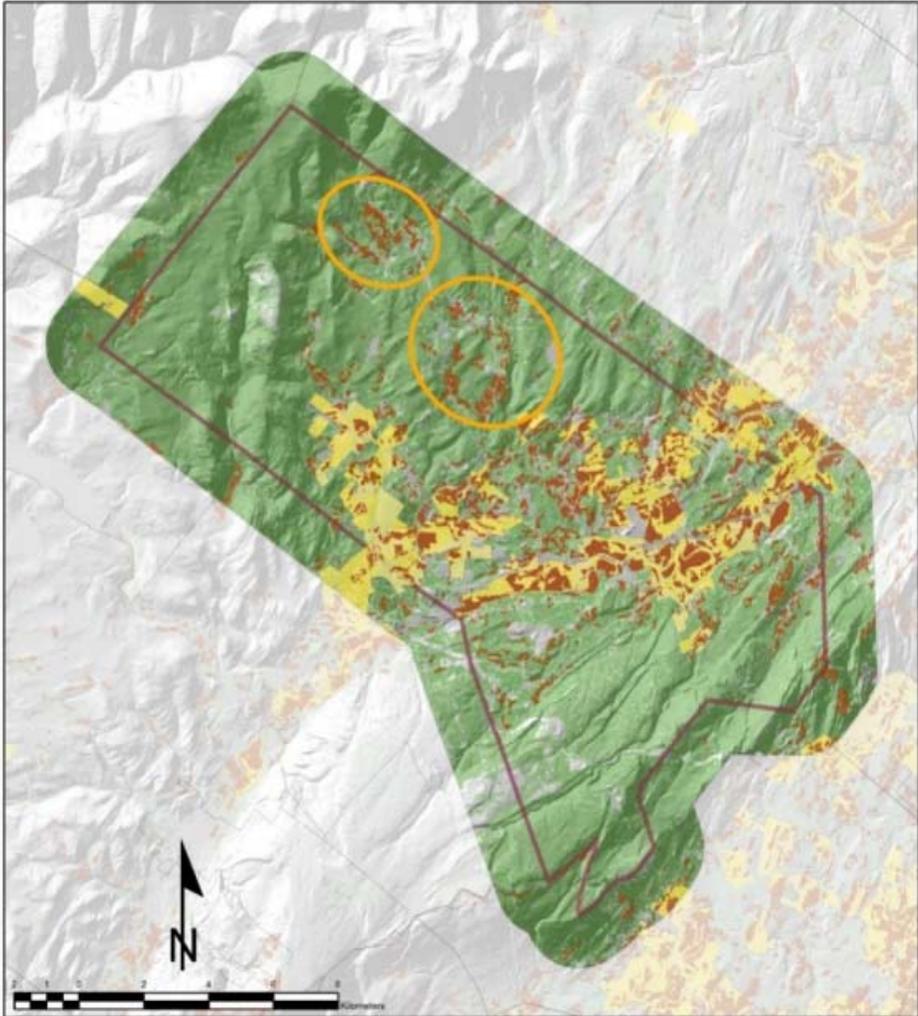
examples:

- Private Well
- Detailed Aquifer (NYRWA)
- Generalized Aquifer (NYS)
- A 1% Flood Risk
- AE 1% Flood Risk (est)
- X 500 .2% Flood Risk

Figure 9. Surface water, wetlands, floodplains (see also Conservation Open Area Maps)

Focus on Rochester Resources – Agriculture

Agriculture and farming have long formed the foundation of cultural life in and around Rochester. The rich soils within the Rondout floodplain as well as many further upslope (within circled areas of the map below) would benefit from protection. Many of the Prime and Soils of Statewide Importance do currently fall within the County Agricultural Districts.



Town of Rochester, NY

Open Space Inventory 2015

Highlighted Regions:
with valuable soils and few
current farms.



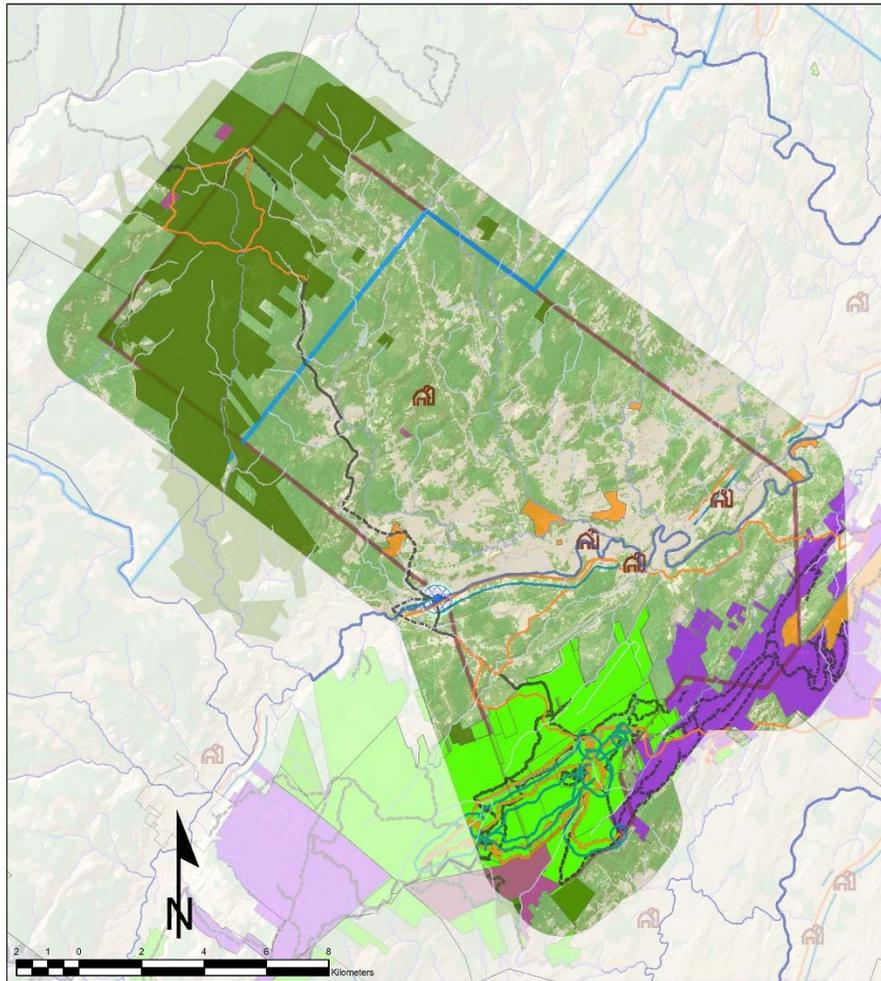
Ag & Cultural Resources
examples:

-  Soils - Prime & Statewide Importance
-  Farmlands 2010 (SH)
-  UC Ag Districts

Figure 10. Important agricultural regions of Rochester. Note regions of unprotected ag soils (in ovals)

Focus on Rochester Resources – Recreational

Recreational resources of the town and region include everything from small, private fishing locations to State parks and forest preserves thousands of acres across. Dozens of miles of high-quality hiking, skiing and rail-trails abound and there are numerous private recreational facilities, retreats and golf courses.



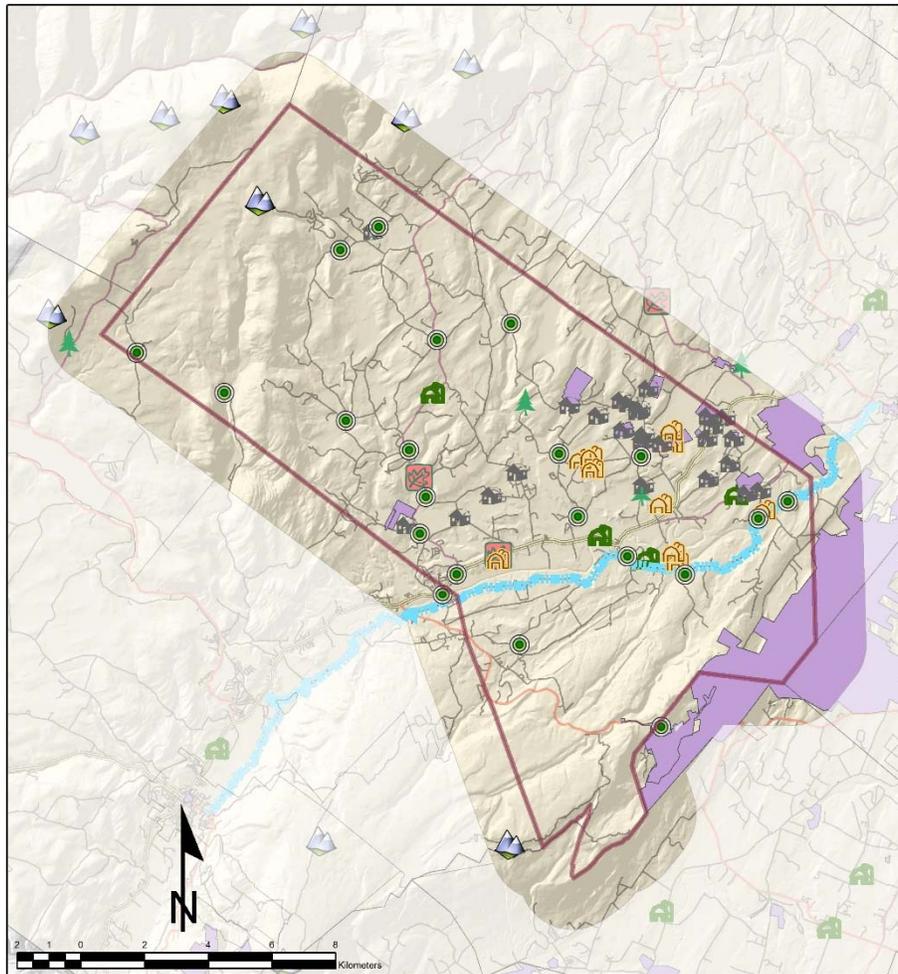
Town of Rochester, NY
Open Space Inventory 2015



Figure 11. Recreational services flourish across the town and form an important growth area to the economy.

Focus on Rochester Resources – Scenic, Historical

The scenic and historical resources of Rochester may be too easily taken for granted. Formal and detailed assessment studies of each would help to quantify and clarify the precise spatial dimensions and aid in establishing specific programs to ensure that their value is extended well into the future.



Town of Rochester, NY

Open Space Inventory 2015

Locations & Features
drawn from TOR HCP
materials (online)



Cultural & Historical Resources

examples:



Figure 12. Scenic & Historical resources contribute immeasurably to the local economy, character and quality of life in Rochester

FINAL ROCHESTER COMPONENTS & RECOMMENDED ACTIONS

This chapter presents the final “components” or the “what do you have” that the Project Team selected for protection within the plan. It also includes the *recommended actions*, the “how” to effectively and comprehensively protect and conserve those resources. ***Recommended actions*** are based on a set of activities and research outlined in the Introduction to this Plan. These activities and research include; an Audit of existing (2016) Town policies and codes, research on a wide range of protection tools available to towns, the consensus of the Plan Project Team after consultation with various Town officials and the full Environmental Conservation Commission, and outreach to a variety of constituents, professionals and organizations. The recommended actions also were discussed in public information sessions and during a half-day public Symposium when citizens, property owners, farmers, conservationists, and public officials discussed the future of the Catskill – Shawangunk region and connection relevant to the towns of Rochester and Wawarsing.

A wide range of nearly one hundred potential actions and tools for protection were itemized and considered that match the landscape values of the Town. These actions were the result of an inventory, mapping and discussion of the Town’s natural heritage and open space resources and a review of the Town’s existing programs and codes that support open space and natural heritage protection. These potential actions were tracked and presented to the Project Team in a regularly updated matrix that is included in the documentation and provided to the Town in support of this Plan.

The Final “Matrix” titled **Town of Rochester Natural Heritage & Open Space Ranked Components & Selected Protection Options** is included at the end of this Chapter. A complementary matrix outlining all the Components and Tools considered along with findings of the Audit is on file with the Town.

This Chapter summarizes those Recommended Actions - with strong consensus and agreement that the Town should act promptly when ready – where draft code, resolutions, or program language were written for review and action by the Town. Reference should be made to the attached Matrix for fuller set of recommended actions, many of which do not require code amendments or formal Town approvals. Appendix C includes specific draft land use code, resolutions, or program language for Town consideration that lead to implementation of most of the recommended actions found below.

Final Components

This list defines the following components: places, features or systems as lead priorities for protection within the Rochester Plan:

- **Town-wide Water quality and flood management**
 - Focusing on riparian (stream side) areas and wetlands through tighten design standards and riparian zone building\disturbance set-backs to help eliminate degradation of filtering and recharge capacity of the systems

- Perform town-wide point and non-point pollution assessment to better understand what types of pollutants are commonly introduced into the water cycles and where, so that remediation efforts can be more effectively targeted.
 - Develop education, outreach and information tools and partnerships, including ongoing education programs to town citizens and public agencies on the value of and effective methods for protecting riparian zones to improve water quality and flood control capacity.
 - Leverage and enhance the town Environmental Conservation Commission or Board's role in providing informed guidance, input, oversight, geospatial and technical support when conservation and/or development proposals are presented to the town.
- **Protection of the Rondout Creek**
 - Support, continue and enhance ECC-led water quality sampling programs to help establish regional baselines and trends
 - Establish public education, outreach and stewardship programs to highlight value of Rondout Creek and to facilitate increased awareness of and concern for the river through direct access programs, such as: creek cleanups, paddling and kayaking programs etc.
 - Enhance access to Rondout Creek convening a River Access group, to:
 - Identify current and potential access points
 - Establish and further efforts by town to develop incentive programs for landowners who own properties that could provide easy and safe access to the river
 - Increase sport fishing and boating access with appropriate signage and parking
 - Seek program funding assistance to support increased river access, supporting and leveraging development of local river-centric businesses (outfitters, bait shops, boat rentals, etc....)
- **Agriculture and Heritage Farm Protection**
 - Help to ensure that this cornerstone of the Rochester economic and cultural life remains healthy and prosperous for generations to come
 - Pursue Federal, State and local grants to support the development of a regional Ag Advisory Council and an Ag projection plan for Rochester, similar to what the town of Marbletown has.
 - Engage local farmers in regular education meetings with the town ECC.
 - Perform an inventory and expand signage for significant regional farms
 - Work with farmers to formalize scenic road design guidelines to both sustain the remarkable visual resources in a way that also benefits farmers
 - Establish program to protect at least 50% of important agricultural soils within the town (Prime and of Statewide Significance)
- **Catskill Shawangunk Greenway Corridor and Colony Farm**

- Promote generational, intermunicipal opportunity to protect the remaining critical ecological corridor and agricultural regions shared by Rochester and Wawarsing along their common boundary
 - Preserve the integrity of the lands falling within the corridor, that lie outside of already protected parcels
 - Develop program of tax incentives for landowners of such property
 - Continue to actively participate and take leadership role in partnership with Wawarsing and associate agencies who are developing a feasibility study for the extended Colony Farm region
- **O&W Rail Trail Project**
 - Continue to support regional historical, recreational and connectivity project, helping to draw recreation and outdoors enthusiasts to and through the region
 - Participate in study to identify and help resolve obstacles and gaps in proposed linear park route.
 - Work with Rochester boards to ensure clarity of project details, needs and opportunities
 - Develop, distribute and present educational and promotional materials helping to see the regional project through to completion
- **Biodiversity Protection**
 - Promote integrity and continuity of regions ecological systems and habitats; work to reduce fragmentation
 - Protect ridge tops and steep slope areas
 - Separate Ridge Top Protection assessment recommended
 - Refine understanding of detailed plant, animal, habitat/community occurrences within the town and greater region
 - Separate biodiversity and site-specific natural resource mapping assessment recommended
 - Actively develop, distribute and engage ecologically-based public education materials
 - Continue to support and work with regional efforts of NY Department of Environmental Conservation (DEC) – Hudson River Estuary Program
 - Rochester ECC to assume and play major role in all of the above
- **Scenic Viewsheds & Gateways**
 - Highlight importance, value and detailed plans for preserving the integrity of these irreplaceable and too often taken for granted regional resources
 - Create plan for all scenic resources and gateways into the town, centered along Rt. 209 corridor, integrated with ridge protection plan with specific design guidelines and participant incentives
 - Protect against light pollution and promote and educate town Boards and stakeholders on the value of “natural” night skies.
 - Augment local codes to help forward retrofitting of light producing infrastructure, as they are updated.
 - Encourage use of LED streetlights.

Recommended Actions

Priority Recommended actions are presented below specific to the Town of Rochester. These Actions are all important and mutually supportive, but they are listed in general order of priority. Each action also has some specific notes. First, because this Plan was researched in partnership with the adjoining Town of Wawarsing, note is made wherever an action recommended for Rochester has also been recommended to Wawarsing. Second, because this Plan is intended to supplement and be in accordance with the adopted Town Comprehensive Plan, note is also made to references in the Comprehensive Plan in support of any action recommended here.

- Adopt Open Space & Natural Heritage Plan as Amendment of Town Comprehensive Plan.

As a complement and supplement to the 2006 Town Comprehensive, the Town should define this Plan as official policy by amendment of the Town Comprehensive Plan per NYS Town Law §272-a. The effect of such amendment is that all land use regulations must be in accordance with this Plan, and capital investments by any agency in the Town must take this Plan into consideration. Additionally, such adoption can position the Town to be more competitive when seeking outside public and private sector assistance in the implementation of Town priorities.

This action is specifically recommended in the Town Comprehensive Plan (pages 23 and 26) under the Plan Element: Community Character. This action is also recommended for the Town of Wawarsing.

- Complete an Environmental Assessment of this Plan and Recommended Actions

Adoption of this Plan as well as adoption of many of the recommended codes and policies are subject to environmental assessment under the State Environmental Quality Review Act prior to any adoption. This action is also recommended for the Town of Wawarsing.

- Accept and Approve the Conservation Open Area Map & Open Space Inventory as part of the Town Open Space Index.

The Town is authorized to adopt an Open Space Index as per NYS General Municipal §239-y. The map set, inventory and other analysis completed with this Plan is expected to meet any standards for such an Index. This index can be an important tool when reviewing development applications as well as considering other Town actions including commitment of funds or resources. The Index is also an essential component of a thorough Open Space Plan. This action is supported in the Comprehensive Plan, page 26. This action is also recommended for the Town of Wawarsing.

- Adopt Resolution / Bylaws for Re-designation of the Environmental Conservation Commission (ECC) as a Conservation Board.

With the adoption of the previously discussed Plan and Index, the Town can option to designate the ECC to fuller Board status as per NYS General Municipal Law §239-y (2). This Plan envisions a clear and strengthened role for the ECC as a Conservation Board to both provide research, assistance and education, as needed, on environmental, conservation, and open space matters of interest to the Town. It also envisions that such a Board will participate more consistently in providing advice to other Town officials and Boards when considering permit applications, grants, and other commitments. This action is also recommended for the Town of Wawarsing.

- Designation of the Catskill-Shawangunk Greenway Connection as a Critical Environmental Area (CEA) See Figure 9 (Page 68).

The Town shares with the Town of Wawarsing an important natural and recreational corridor connection linking the Catskill and Shawangunk regions. The corridor connection is recognized by many professionals and organizations and is highlighted in the New York State Open Space Conservation Plan. The designation of a CEA does not add regulation. However, it does highlight the resource and the need for thorough assessment if an “Action” (such as a permit application) within the CEA mapped area is already subject to environmental review under the New York State Environmental Quality Review Act. A Resolution has been provided, with supporting justification and map, for Designation of the Catskill-Shawangunk Greenway Connection as a Critical Environmental Area (CEA) as per 6 CRR-NY 617.14(g) (also known as SEQRA). This designation is also recommended for the Town of Wawarsing.

- Designation of the Great Rondout Wetlands including Great Pacama Vly as a Critical Environmental Area (CEA). See Figure 10, (Page 69)

This mapped unique habitat and wetlands complex is also recognized by the New York State Open Space Conservation Plan as well as the New York State Natural Heritage Program. The area includes habitat and species found nowhere else in the State. A Resolution, with supporting justification and map, for Designation of the Great Rondout Wetlands including Great Pacama Vly as a Critical Environmental Area (CEA) as per 6 CRR-NY 617.14(g) (also known as SEQRA).

- Amend Town subdivision regulations to strengthen conservation subdivisions and dedication of parkland option

With the preparation of an Open Space Index for this Plan, and recommended adaptation of that Index, the Town Subdivision Regulations should be amended to encourage and even require Conservation Subdivisions where key resources have been identified. Additionally, an amendment clearly authorizing dedicated of parkland or a payment in lieu of with subdivision applications is recommended, particularly where the Index

identifies high value lands associated with a proposed subdivision. This action is supported in the Comprehensive Plan, page 12-14. This action is also recommended for the Town of Wawarsing.

- Amend Town Zoning relevant to Stream and Wetland setbacks as well as Dark Sky Protection

These protective measures emerged as an early priority of the Project Team and other Town representatives. Proposed Code language has been provided enhancing existing code language by amending Town Zoning relevant to Stream and Wetland Setback Regulations as well as Dark Sky Protection. This action is supported in the Comprehensive Plan, page 12-14, 23. This action is also recommended for the Town of Wawarsing.

- Add an Overlay Zone Protection for Certain Stream Corridors.

Both enhanced protection of water bodies and streams, along with smart use of overlay zoning provisions has been a priority of this Plan as well as a recommendation in the adopted Town Comprehensive Plan. A proposed Local Law for enhanced Stream Corridor Protection as a Stream Corridor Overlay has been provided. Options of stream protection are provided in this proposal for Town consideration. This approach would provide additional design standards for development within defined stream corridors while not impacting existing underlying zoning permitted uses. The action is supported in the Comprehensive Plan, pages 12-14. This action is also recommended for the Town of Wawarsing.

- Town Endorsement of the Ulster County Community Design Manual

Adopted Town Comprehensive Plan includes a set of ‘Plan Elements’ that support the Town use of essential and available guidance documents when considering approval of development permits or capital investments. In particular, it is recommended the Town support, by Resolution, accepting the Ulster County Community Design Manual (Ulster County Planning Board 2017) as a guidance document when applying for planning or zoning permits. Also, the Shawangunk Mountains Scenic Byway Guide for Planning Boards (see <http://mtnscenicbyway.org/pdf-guides/SMSB-Planning-Board-Guide.pdf>) should be used as guidance for applications including lands on or substantially contiguous to this Scenic Byway along the Route 44/55, and 209 corridors. This action is supported in the Comprehensive Plan under Plan Elements for Environmental Quality, Land Use, and Community Character. This action is also recommended for the Town of Wawarsing.

- Establish a Formal Agriculture Advisor to the Town

Agriculture remains a critical aspect of the Town's economy and landscape. The Town has options for insuring that leaders gain regular advice as needed on agricultural issues including appointment of an agricultural member on the Town Planning Board. Another suggestion is to establish an Agricultural Advisory Committee. The Town can also look to collaborate with the established Rondout Growers Association. This action is supported in the Comprehensive Plan under Plan Element for Economic Development, notably as related support for existing businesses, agro-tourism, and farmland protection (see Town Comprehensive Plan, pages 16-19). The action is also recommended for the Town of Wawarsing.

- Need for Fuller Evaluation of Town Scenic and Biodiversity Resources.

Scenic and biodiversity resources remain important to many Town constituents and leaders, but the definition of what resources are important and how best to recognize and protect these should be done carefully, and ideally with the assistance of qualified professionals. That research was beyond the scope of this Plan, but is recommended as a future Action. This new research would best be coordinated by the ECC – or new Conservation Board, at the request and direction of the Town Board.

- Expand the Town efforts for outside Grant Applications.

Towns with approved plans and policies are known to gain a competitive edge when seeking outside financial and technical assistance. With the existence of an approved Comprehensive Plan along with this Natural Heritage Plan, the Town is better positioned to take advantage of grant opportunities to support priority actions. One example is to advance to the NYS Department of Agriculture and Markets a request for a Farmland Protection Implementation Grant to examine and improve use of Transfer of Development Rights (TDR) and other Zoning tools in support of agriculture. This is highlighted given the importance of agriculture to the Town, the emphasis of TDR in the Town Comprehensive Plan, and the generic authorization in current Town code of TDR but lack of any use of this tool to date. This action would best be presented as an inter-municipal effort with the Town of Wawarsing.

- ~~○ Reorganize or invigorate a Rondout Creek Watershed Alliance or Council.~~

The Rondout Creek and the Rondout Valley are a prominent, shared resource of the highest value. There have been prior efforts to organize attention to these resources that has been shared across several municipal boundaries. Recommended is to revisit or refresh collaboration of shared Rondout Creek Watershed priorities with both municipal, County, and non-governmental agency partners. Provided is a draft intermunicipal agreement in support of a possible Rondout Creek Watershed Intermunicipal Council.

- Local Law Amending Zoning §140-12E & 125-22 Regarding Streams and Stream Protection. (DRAFT PROVIDED)

Appendix 1. Town of Rochester: Natural Heritage & Open Space Component Matrix

TOWN OF ROCHESTER NATURAL HERITAGE & OPEN SPACE RANKED COMPONENTS & SELECTED PROTECTION TOOL OPTIONS

The first several months of our project focused on reviewing the major natural, cultural, built and historical systems spanning the region, that drew from and built upon the work of the respective Town Comprehensive Plans and Open Space Inventories.

This matrix portrays the breakout and details of the various system-wide natural heritage and open space components that the Project Team prioritized for protection, matched with the range of codes, protection tools and recommended actions that were developed during the second part of the project. They are presented here with links to those protection tools (as Tabs) as well as the range of Conservation Open Area Maps (COAM) that will form the core natural resource and open space reference for the Town, as the the Open Space Index. It is hoped that the adoption of this Open Space Index, together with the respective Natural Heritage and Open Space Plans will at the same time see the advancement of each Towns Environmental Conservation Commissions (ECC) to that of an Conservation Board. It is through the understanding of the importance and engagement of such capacity within each Towns conservation and development policies and protocols that will ultimately ensure the long-term protection of those features, places, life-supporting resources and unique heritage critical to the long-term future of each municipality.

REGION-WIDE COMPONENT SYSTEMS (Ranked)		TOOL LEGEND			
A. ECOLOGICAL RESOURCES\TERRESTRIAL HABITAT		CODE\ORDINANCE APPROACH	- to be enacted officially by the Towns and it's Boards and agents		
B. HYDROLOGICAL RESOURCES\AQUATIC HABITAT		NON-CODE APPROACH (ECC activity, Partners)	- to be undertaken over time, by the ECCs and eventually, Conservation Boards		
C. AGRICULTURE & AGRO-RELATED CULTURAL RESOURCES		"TOR_RA1" Refers to Recommended Action (code/policy, etc...)			
D. RECREATIONAL RESOURCES		#1 for TOR (see corresponding Tab TOR_RA1_StreamsWetlands)			
E. SCENIC RESOURCES		"TOR_COAM_xxxxxx" refers to Conservation Open Area Map sets (see corresponding Tab)			
F. HISTORIC & CULTURAL RESOURCES					
G. MISCELLANEOUS					
COMPONENTS	RECOMMENDED ACTIONS	RA1	RA2	RA3	SUPPORTING MAPS
Resource\Goal		RA1	RA2	RA3	COAM Components
PLAN GOAL: Protect and ensure Town-wide water quality, ground water and storm water management		Adopt measures to help secure public welfare, water quality, flood control costs, aquatic habitat and stream/wetland integrity.			
Actionable Aspect: Water Quality Protection		Stream & Wetland Setback proposal (TOR_RA1)	Work with farmers & RVGA to reduce non-point erosion and runoff pollution	Suggest Town consider: adding National Wetland Inventory (NWI) wetlands to NYS Protected Wetlands for protection in near future.	TOR_COAM_Hydro (3 map set) TOR_COAM_AgResources
Actionable Aspect: Water Quality Protection		Stream & Wetland Setback proposal (TOR_RA1, TOR_RA1.1)	Perform town-wide point and non-point source and drawdown studies, within context of improved riparian protection code	Support reviving the Rondout Creek Watershed Alliance	TOR_COAM_Hydro (3 map set)
Actionable Aspect: Flood Management		See: stream corridor protection code	Buffer\Development Setback	Strengthen site plan review to steer disturbance, filling, crossing of wetlands and/or streams	TOR_COAM_Hydro (3rd map panel)
		Highlight importance of riparian buffers for pollution and flood control	Tighten environmental standards in plan reviews	Look to how other NY Towns have approached it: Pawling, New Paltz, Poughkeepsie, Phillipstown, New Castle, Coxsackie, Woodstock, Ullyses	As above
Actionable Aspect: Public Engagement & Education		Establish tools & education methods on the use and preservation of riparian buffers as flood and pollution control (esp. in woodland farming). (TOR_RA1)	Partnerships		
Actionable Aspect: Expand conservation information access		Educate Town Boards on Conservation Open Areas Maps (COAM) and Open Space Index (OSI) (TOR_RA2)	Expand and enhance role of TOR ECC in TOR conservation & development concerns (TOR_RA2)		Full set of COAM Maps
PLAN GOAL: Protection of the Rondout Creek		Protection of one of the defining regional features is vital			
Actionable Aspect: Protect Water Quality		Continue and expand ECC-led water quality sampling to establish baselines and trends	ECC to develop and expand partnerships; Revive RCWA	Acknowledge that all local water quality improvements (streams, wetlands) will immediately affect the Rondout, locally and downstream	TOR_COAM_Hydro (3rd map panel)
Actionable Aspect: Enhance and Expand Public Stewardship of River Through Engagement & Education		Tax incentives for property owners containing desirable access locations. (TOR_RA3)	Recreation access - Enhance identification with River, expand access and use, identify and facilitate access points (in process). Obtain capital improvement \$.		TOR_COAM_Hydro (3 map set) TOR_COAM_TerrainScenicRec
		Ensure long-term use and integrity of the River as an economic draw, for sports fishing, boating, swimming. (TOR_RA3)	Support from COAM Maps		
		Solicit assistance (State, Federal, County) for increasing recreational use (kayaking, fishing, etc...). Local canoe\kayak outfitters taking local school outings.	Partnerships	ECC Initiatives	
PLAN GOAL: Agriculture & Heritage Farm Protection		Maintain health, vitality of this large TOR economic base	Pursue NYS Ag & Farms ag plan grant		
Actionable Aspect: Help ensure long-term viability of healthy and prosperous ag community		Engage local farmers in regular education meetings; support their acquiring UC grant assistance to aid the development of a Regional Ag Advisory Council.	Right to farm law (in place) (TOR_RA4)		TOR_COAM_AgResources
Actionable Aspect: Protect at least 50% of important TOR farm soils (Prime, Statewide Importance)		Inventory and expand signage for significant regional farm operations	Partnerships		
Actionable Aspect: Quantify and formalize coherent Ag protection plan for TOR		Protect cultural heritage & rural character	Design Guidelines (TOR_RAS)		
		Work with Rondout-Esopus Land Conservancy to identify potential easement program			TOR_COAM_AgResources
		Seek grant \$ to replicate Ag Protection Plan similar to Town of Marletown (TOR_RA4)			TOR_COAM_AgResources
PLAN GOAL: Catskill-Shawangunk Greenway Corridor		Promote generational opportunity to protect critical environmental and agricultural regions spanning the two towns			
Actionable Aspect: Preserve integrity of parcels within corridor and outside of protected lands		Overlay zones for target parcels (within corridor/outside protected areas), & CEA (TOR_RA6)	Tax incentives to help protect parcels (TOR_RA3)	Include within COAM maps	TOR_COAM_CEA_ColonyFarm
Actionable Aspect: Actively participate in and support feasibility study for Colony Farm region		Symposium held March, 2017	Summary report to become appendix to NH&OSP	Take leadership role in CSGC advisory committee	TOR_COAM_CEA_ColonyFarm
PLAN GOAL: O&W Canal		Include in Official map\COAM Map			
Actionable Aspect: Support and ensure completion and success of project through region, helping to attract recreation & tourism dollars to TOR		Participate in study to identify and help resolve obstacles to gaps in proposed linear park route.	Regional partnerships	ECC (internal) and partnership driven	TOR_COAM_TerrainScenicRec
		Ensure TOR Boards are up to speed on details, needs, and opportunities of project	Expand educational materials (PPT, PDF, graphics and maps) to distribute, update regularly		
		Help identify linear park access points and secure capital funding to develop parking & related services			
PLAN GOAL: Biodiversity Protection		Promote integrity and continuity of ecological systems and habitats; reduce fragmentation			
Actionable Aspect: Protect ridge top areas and steep slopes		Consider density adjustment for protecting steep slopes	Development Guidelines (TOR_RAS)	Additional Study and RA suggested	TOR_COAM_TerrainScenicRec
Actionable Aspect: Refine understanding of detailed plant, animal and habitat\community occurrences within Town.		Conduct detailed, field-based biodiversity study.	Apply to HREP grant program	CAC to play prominent role	TOR_COAM_EcoHabitat
		Actively enhance public engagement and education and appropriate recreational access			
		Elaborate plans for acquisition of a setting aside of properties contiguous to CSGC see also Open Space Index (TOR_RA7)	Open space park setaside/ payment in lieu (TOR_RA3)	Open Space Index (OSI)	
		Establish critical environmental areas for discrete (e.g. mappable) areas and zones (Pacama Vly) (TOR_RA8)	Partnerships		TOR_COAM_CEO_GPV
PLAN GOAL: Scenic Viewsheds		Highlight & bring attention to currently taken-for-granted and irreplaceable resources and locations			
Actionable Aspect: Ensure integrity, access to and long-term future of scenic areas and vistas		Plan for scenic development along the Rt. 209 Corridor	Conduct scenic resource & gateway study	Route 209 design standards (TOR_RAS)	TOR_COAM_TerrainScenicRec
		Ridge protection	Map overlay zones and develop scenic route design guidelines		
Actionable Aspect: Help protect dark night sky resources		Augment local codes to help forward retrofitting of light producing infrastructure as they are updated (TOR_RA9)			

Town of Rochester

Proposed new stream and wetland setback regulations

Delete current Zoning Article 3, Subsection 140-12 E. Waterfront Yards, and Replace with the following:

Stream and Wetland Yard Setbacks.

A. Streams and wetlands are prominent features and their condition directly affects the health of the Town's water supply, flood control, and the fauna that depend on the water for sustenance. It is the intent of these regulations to ensure the continued preservation and health of these water resources for current and future generations.

B. For the purposes of this section, wetlands are defined by both state and federal governing regulations. Buffer areas apply to federally protected wetlands greater than 0.1 acre.

C. For the purposes of this section, protected streams are depicted on United States Geological Survey maps or are defined as streams and small water bodies with a surface area of 10 acres or less that are located in the course of a stream with a NYSDEC classification of AA, A, or B, or C with or without a standard of (T) or (TS).

D. No buildings, structures, paved areas, storage of machinery, or disturbance of more than 50% of the vegetation and trees shall be allowed within the following buffer areas:

- (1) 50 linear feet from the bank of any unnamed stream
- (2) 100 linear feet from the bank of any named and/or protected stream
- (3) 100 linear feet from any wetland.

(4) Unless superseded by state or federal regulations these buffer areas may be increased or decreased by up to 50% at the discretion of the Planning Board provided that the water quality from the impacts of erosion and sedimentation will not be compromised.

E. During the site plan approval or subdivision process where there is evidence of a wetland, the Planning Board may require a wetland delineation study to determine the exact boundaries and to evaluate potential impacts of development on said wetland.

TOR_RA1.1 – STREAM CORRIDOR PROTECTION LOCAL LAW

Town of Rochester

Stream Corridor Overlay Local Law

1. Title

This Local Law shall be known and may be cited as the “Stream Corridor Protection Local Law of the Town of (Rochester).” [If applied to zoning – This Local Law shall amend the Zoning Local Law of the Town of _____ to add Article (section) entitled “Stream Corridor Protection Requirements.”]

2. Findings

The Town of _____ hereby finds that the encroachment of development activities into stream corridors could create a public and private nuisance, degrade the natural environment, and be harmful to the public health, safety, and welfare. Such activities can increase the risk of flooding in the stream corridor, damage water quality in the surface waters within and downstream of the Town, harm the aesthetic qualities of the Town, damage wildlife and vegetative habitat, pose additional threats to rare, threatened and endangered species that depend on riparian habitats, and tend to depreciate the value of properties in the Town. The Town finds that these problems can be diminished by applying a primary and a secondary riparian buffer to all stream corridors within the Town in keeping with the standards established in this Local Law.

3. Purpose

The purpose of this Local Law (article) is to establish requirements for creating and maintaining buffers to protect the water quality in the streams of the Town of _____, Ulster County, and the natural environment around them, thereby protecting public health, safety and welfare in this Town. This Local Law (article) promotes the prevention of sediment, nutrient and pollutant loads from entering streams by maintaining stream buffers measured from the top of the stream bank with a width to be determined by the conditions adjacent to the stream corridor. Research has shown that the distances set forth within this local law are effective at filtering nutrients and pollutants to protect water quality.[1] Additionally, creating buffers for structures and improvements from highly erodible streams will help minimize future property damage and other impacts associated with streambank erosion. Although it is not mandated in this Local Law (article), the Town strongly encourages landowners to maintain stream buffers of 330 feet from the top of stream bank, on undeveloped land where feasible, in order to protect wildlife and vegetative habitat.

4. Definitions

Below is a list of terms used in this code that should be defined in the municipality's local land use regulations. If any of the following terms are not defined in the existing local land use regulations, or if the municipality wishes to refine their definition of a term, definitions are included in Appendix A of this section.

- Bank
- Buffer
- Development Activities
- Green Infrastructure Practices
- Highly Erodible Soils
- Improvement
- Intermittent Stream
- Impervious Surface
- Parcel
- Perennial Stream
- Pollutant
- Riparian
- Steep Slope
- Stream
- Structure
- Top of Bank
- Wetlands

5. Applicability

These requirements do not supersede or replace any greater applicable requirements established under state, federal or local law and are applicable to all land within the Town of _____. This Local Law (article) shall apply to all proposed actions requiring approval by a staff member, board, or other party or entity acting on legal behalf of Town. The Riparian Buffer Area, both Primary and Secondary, shall be acknowledged and displayed graphically on all plans and relevant materials that are submitted to Town as part of any land use approval process, including approvals for subdivisions, site plans, building permits and appeals for variances.

6. Requirements

6.1. Protection Requirements for Perennial Streams

A buffer shall be required for all development activities that occur in proximity to perennial streams [2] with additional considerations for wetlands, highly erodible soils, 100-year floodplains and steep slopes. Protection shall be divided into a Primary Riparian Buffer and a Secondary Riparian Buffer that protects overall water quality by limiting development in accordance with the adjacent land's ability to filter sediment, nutrients and other pollutants. This protection will provide stability to the stream and stream bank. The minimum total buffer width for all perennial streams is 100 feet (Additional Protection Option: 200 feet) as measured from the top of the stream bank. There is no established maximum buffer width.

The Town shall require the delineation of any applicable Primary or Secondary Riparian Buffers on all subdivision plats, site plan applications, special permits, special approval and variance applications, building permit applications, and excavation or fill permit applications, even in the event that a stream is not located within the subject parcel but either the Primary Riparian Buffer or the Secondary Riparian Buffer is located on the subject parcel. This delineation shall be subject to review and approval by the appropriate board or officer. Said delineation shall also be referenced in any deed for any parcel located wholly or partly within any Primary or Secondary Riparian Buffers, which shall state that:

The premises hereby conveyed are subject to a Primary and/or Secondary Riparian Buffer established pursuant to the "Stream Corridor Overlay Local Law of the ____ (municipality), as shown on _____ (plat or other map or permit) recorded in the Office of the Orange County Clerk on ____ (date) in ____ (book/page/file/drawer)." Prior to any soil-disturbing activity resulting from a permit or approval by the ____ (municipality), the Primary Riparian Buffer and Secondary Riparian Buffer shall be clearly delineated on site and shall be left undisturbed or otherwise protected throughout the construction phase.

6.1.1 Riparian Buffer Area. SELECT ONE OF THE FOLLOWING OPTIONS:

Protection Option A: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 100 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 50' from the stream bank and a Secondary Riparian Buffer extending 50' from the outward edge of the Primary Riparian Buffer OR

Protection Option B: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 200 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer

extending 100' from the stream bank and a Secondary Riparian Buffer extending 100' from the outward edge of the Primary Riparian Buffer.

OR

Protection Option C: The Primary Riparian Buffer will begin at the top of the stream bank and extend a minimum of 100 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 50' from the stream bank and a Secondary Riparian Buffer extending 50' from the outward edge of the Primary Riparian Buffer. Should a wetland or a 100-year floodplain exist at least partially within the Secondary Riparian Buffer, the entirety of that area will be included within the Secondary Riparian Buffer and will be subject to the restrictions afforded to the Secondary Riparian Buffer. Should a steep slope or highly erodible soils exist partially within the Secondary Riparian Buffer, that steep slope or highly erodible soil area up to a maximum of 400 feet from the stream bank shall be included within the Secondary Riparian Buffer. OR

Protection Option D[3]: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 200 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 100' from the stream bank and a Secondary Riparian Buffer extending 100' from the outward edge of the Primary Riparian Buffer. Should a wetland or a 100-year floodplain exist at least partially within the Secondary Riparian Buffer, the entirety of that area will be included within the Secondary Riparian Buffer and will be subject to the restrictions afforded to the Secondary Riparian Buffer. Should a steep slope or highly erodible soils exist partially within the Secondary Riparian Buffer, that steep slope or highly erodible soil area up to a maximum of 400 feet from the stream bank shall be included within the Secondary Riparian Buffer.

6.1.2 Primary Riparian Buffer

a. Purpose: The function of the Primary Riparian Buffer is to protect the physical and ecological integrity of the portion of the riparian corridor in closest proximity to the stream through protection and enhancement of the vegetation. Vegetation provides erosion protection, shade, leaf litter, woody debris, wildlife habitat, and filtering of sediment, nutrient and pollutant loads to the stream.

b. Permitted Uses. Development and use within the Primary Riparian Buffer are restricted to the following, the entirety of which may not modify or interrupt more than 10% of the entire Primary Riparian Buffer unless more area is necessary for the protection of human health, utility usage, public infrastructure, or the betterment of the riparian corridor.

- Benches or seating;
- Implementation of educational and scientific research activities that enhance or otherwise do not negatively impact the composition or health of the existing vegetation;

- Flood control structures, bioretention areas or other green infrastructure storm water management practices, and stream bank stabilization measures approved by the Ulster County Soil and Water Conservation District, Natural Resource Conservation Service, Army Corps of Engineers, or NYS Department of Environmental Conservation;
- Maintenance of roadways or impervious surfaces existing at the time of the adoption of this provision;
- Culverts or other stream crossings necessary to construct a driveway, transportation route, or utility line to provide access and utilities to a parcel, which are designed to minimize negative impacts to the stream and Primary Riparian Buffer;
- Public water supply infrastructure, including wells, or public wastewater outfall structures and associated pipes;
- Public access and public recreational facilities that must be on the water including boat ramps, docks, foot trails leading directly to the stream, fishing platforms and overlooks;
- Public sewer lines and/or other utility easements;
- Techniques to remove invasive species;
- Non-paved recreational trails no wider than 10 (Additional Protection Option: 5) feet that either provide access to the stream or are part of a continuous trail system running roughly parallel to the stream;
- Storage of recreational watercraft measuring less than 15 feet in length.
- Temporary use of erosion control measures such as silt fencing;
- Limited tree cutting, forestry or vegetation management done in accordance with a Forest Stewardship Plan prepared by the Department of Environmental Conservation, a forester who is certified by the Society of American Foresters or such successor organization as is later created, or a Cooperating Consulting Forester with the New York State Department of Environmental Conservation. Any harvest must furthermore be done in accordance with the New York State Forestry Best Management Practices for Water Quality – BMP Field Guide. Vegetation management may not compromise the integrity of the stream bank or negatively impact the function of the Primary Riparian Buffer. Tree cutting within 25 (Additional Protection Option: 50) feet of the top of stream bank is prohibited. Any such activity must retain at a minimum 60% (Additional Protection Option: 95%) of the preexisting tree canopy in the Primary Riparian Buffer at all times. Removal of trees in any location shall be permitted provided the tree or trees pose an immediate threat to property or public safety.

6.1.2. Secondary Riparian Buffer

a. Purpose The function of the Secondary Riparian Buffer is to filter sediment, nutrients and pollutants in runoff and slow the rate at which runoff enters the Primary Riparian Buffer.

b. Permitted Uses. Within the Secondary Riparian Buffer development uses are restricted to the following:

- All development and uses permitted in the Primary Riparian Buffer;
- Minor recreational structures and improvements to allow passive recreation in the Secondary Riparian Buffer such as decks, picnic tables, playground equipment, and small concrete slabs, the total area of which is not to exceed 200 square feet each and in aggregate occupy no more than 10% of the Secondary Riparian Buffer area on the parcel;
- Fences, provided such structures do not impede floodwaters;
- Landscaping, planting or routine maintenance activities that do not encroach upon or negatively impact the integrity of the Primary Riparian Buffer.

6.2 Prohibited Activities in the Riparian Buffer

The following activities are explicitly prohibited in both the Primary and Secondary Riparian Buffers.

6.2.1. Storage or placement of any hazardous materials. All sewage systems, both drain fields and raised systems, must adhere to a 100- foot buffer from perennial streams, in compliance with the New York State Codes, Rules and Regulations, Title 10. (Additional Protection Option: All sewage systems, both drain fields and raised systems shall adhere to a 150-foot buffer from perennial streams.)

6.2.2. Purposeful introduction of invasive vegetative species that may impact or reduce the persistence of other vegetation present within the stream corridor. For a listing of invasive vegetation to avoid, refer to the New York State Department of Environmental Conservation (NYS DEC) Advisory Invasive Plant List (periodically updated; most recent version dated 14 May 2012) and the NYS DEC Division of Materials Management Bureau of Pest Management. If invasive or nuisance species are present on your property, NYS DEC may have developed a protocol to combat that species. Refer to the NYS DEC website for additional information.

6.2.3. Waste storage and disposal including but not limited to disposal and dumping of snow and ice, recyclable materials, manure, hazardous or noxious chemicals, used automobiles or appliances, and other abandoned materials.

6.2.4. Any combination of allowed or exempt activities that may compromise or alter more than 10% of the total Primary and Secondary Riparian Buffer that lies within a parcel.

6.2.5. Mining or removal of soil, sand and gravel, and quarrying of raw materials.

6.2.6. Widening, straightening or any such alteration of the beds and banks of streams except where the New York State Department of Environmental Conservation has issued a permit expressly allowing such activities on the parcel.

6.2.7. Application of herbicides, pesticides, fertilizers, or other chemicals that contain hazardous substances as defined by Chapter V of the New York State Department of Environmental Conservation, §597.2 Hazardous Substance List, as amended.

6.2.8. Parking of motorized vehicles, including watercraft.

6.2.9. Construction or replacement of private wells within 100 feet of perennial streams, in keeping with Title 10 of the New York State Codes, Rules and Regulations.

6.2.10. Altering habitat of rare, threatened or endangered species.

6.3 Protection Requirements for Intermittent Streams

Although seasonal or temporary in nature, ephemeral and intermittent streams provide the same ecological and hydrological functions as perennial streams by moving water, nutrients, and sediment through watersheds. These streams provide hydrological connections across the landscape, absorb high volumes of water during storm events and other high-water flows to reduce erosion and improve water quality. For those streams classified as intermittent, only the Primary Riparian Buffer shall apply and it shall be measured in the same manner as dictated for a perennial stream. All provisions applicable to the Primary Riparian Buffers for perennial streams shall apply to intermittent streams.

7. Exemptions

The following specific activities are exempt from the requirements of this Local Law (article).

7.1. Agricultural activities on parcels that meet New York State Department of Agriculture and Market's definition of a farm operation shall not be subject to the requirements of this local law.

7.2. Work consisting of the repair or maintenance of any lawful use of land that was approved for such parcel on or before the effective date of this Local Law, or if no approval was required for such use, was lawfully in existence as of said date.

7.3 (Language re: pre existing non-forming uses being exempt can be included; or a cross-reference to the municipal code regarding same should be included)

8. Administration and Enforcement (Delete if added to a Zoning Local law that already contains such provisions.)

8.1 This Local Law shall be administered by Town Code Enforcement Officer or other official as designated.

8.2 Provisions of this Local Law apply to all subdivision, site plan, and special use permits. A development activity requiring such permit shall not be approved, and therefore a building permit shall not be issued, unless the development satisfies the requirements of this Local Law. The Town may deny, suspend, or revoke any permit for development activity if the plan violates this Local Law.

8.3. The Town may cancel or revoke any approval or issued permit date after the effective date of this Local Law if the permittee or property owner fails to comply with the requirements of this

Local Law; and may take legal action to stop, revoke or cancel the approval or the building permit, to enjoin any violation of this Local Law, and to require remediation of any damage resulting from such violation.

9. Severability (Delete if added to a Zoning Local law that already contains such provisions.)

9.1 If any section or specific part or provision or standard of this Local Law/article or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law/article or the application thereof to other persons or circumstances, and the Town hereby declares that it would have enacted this Local Law/article or the remainder thereof had the invalidity of such provision or application thereof been apparent. The other portions of these regulations not affected by the decision of the court shall remain in full force and effect.

DEFINITIONS:

- Bank: the lateral confines of a stream, river, or other watercourse which contains the normal flow of the watercourse.
- Buffer: land on each side of a stream that shall be left vegetated to provide riparian corridor functions. Buffers are measured horizontally from the top of the stream bank in a direction directly perpendicular to the bank and in the horizontal plane.
- Development Activities: the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure or improvement that requires a permit or approval from the _____ (municipality) including that intended for agricultural use; any mining excavation, landfill, or land disturbance, including grading and filling.
- Green Infrastructure Practices—stormwater management practices that maintain or restore natural stormwater flow pattern by allowing the water to permeate slowly into the ground and be used by plants; green infrastructure practices generally incorporate better site design and low impact development design techniques.
- Highly Erodible Soils: Soils that have a maximum potential for erosion that equals or exceeds eight times the tolerable erosion rate[4].
- Improvement: alterations to the land that enhance the utility or value of any structure placed on the site.
- Intermittent Stream: surface water drainage channels with definite bed and banks in which there is not a permanent flow of water (and may be represented as a dashed line

on United State Geological Survey (USGS) 7.5 Minute Quadrangle maps). Sometimes referred to as “ephemeral stream.”

- **Impervious Surface:** any paved, hardened or structural surface including, but not limited to, buildings, dams, decks, driveways, parking areas, patios, streets, swimming pools, tennis courts, walkways, and other non-permeable structures and improvements. Hardened surfaces shall include compacted shale, gravel, and packed dirt, as well as other materials that become impervious when compacted.
- **Parcel:** a designated tract or area of land established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed, or built upon.
- **Perennial Stream:** a stream that typically flows continuously throughout the year in a natural or man-made channel (which may be represented as a solid blue line on United States Geological Survey (USGS) 7.5 Minute Quadrangle maps).
- **Pollutant:** dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials other than those regulated under the Atomic Energy Act of 1954 as amended (42 USC 2011 et seq.), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.[5]
- **Riparian:** of, inhabiting or situated on the bank of a natural course of water such as a river.
- **Steep Slope:** any slope of 15% grade or greater.
- **Stream:** the full length and width, including the bed and banks, of any watercourse that has a channel which periodically or continuously contains moving water. It further has a defined bed, and has banks that serve to confine water at low to moderate flows (and may be represented as either a solid or dashed blue line on United States Geological Survey (USGS) 7.5 Minute Quadrangle maps). For the purpose of this Local Law, constructed drainage-ways, including water bars, swales, and roadside ditches, are not considered streams, unless they were constructed by channelizing or otherwise modifying a natural stream, wetland, or water body of any kind.
- **Structure:** anything constructed or erected on or under the ground or upon another structure or building.
- **Top of Stream Bank:** the primary edge of the ordinary high-water mark, or break in slope for a watercourse, which maintains the integrity of the watercourse.
- **Wetlands:** lands, including submerged lands, saturated by water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions. For the purpose of this Local Law, wetlands are limited to those lands that meet any of the following criteria: 1) are categorized as wetlands by the New York State Department of Environmental Conservation (DEC), 2) have been documented and mapped as part of

an officially adopted community wetlands inventory, or 3) meet the US Army Corps of Engineers' definition of a wetland.

References:

[1] Stream buffer widths were determined using scientific guidance set forth in Conservation Thresholds for Land Use Planners, published by the Environmental Law Institute in 2003, and Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways, published by the United States Department of Agriculture in 2008.

[2] The term perennial stream could be replaced by the term "named" stream as per Town of Rochester current code, and could also include a listing of named streams as well as unnamed streams as an option.

[3] Protection Option D is recommended for all Class A streams.

*[4] The maximum potential erosion rate for any given soil can be determined by using the following formula: $R * K * LS / T < 8$, where R= rainfall, K= erodibility value of the soil, LS= the slope factor, and T= the tolerable erosion rate; factors K, LS, and T are established by the Natural Resources Conservation Service. Highly erodible soils must be verified in the field; a list of highly erodible soils is available from the Orange County Soil and Water Conservation Service.*

[5] Definition of "pollutant" taken from the federal Clean Water Act, 40 CFR 122.2

TOR_RA2 – ESTABLISHING A CONSERVATION BOARD

Town of Rochester Establishing a Conservation Board

ATTACHMENT - LOCAL LAW FILING - Establishing a Conservation Board

BY-LAWS TOWN OF _____ CONSERVATION BOARD

I. PREAMBLE: A resolution to establish by-laws for the Conservation Board of the Town of _____.

II. SECTION 1. INTENT: The preservation and improvement of the quality of the natural environment within the Town of _____, in the face of population growth, urbanization and technological change with their accompanying demands on natural resources, are found to be of increasing and vital importance to the health, welfare and economic well-being of present and future inhabitants and require forthright action by the governing body of the Town of _____. It is recognized that the biological integrity of the natural environment on which people are dependent for survival and the natural beauty of our surroundings which condition the quality of our life experience cannot be protected without the full cooperation and participation of all the people of the Town of _____ working in partnership with local and state officials and with various public and private institutions, agencies and organizations. Establishment of a board for conservation of the environment is a necessary step in fostering unified action on environmental problems.

III. SECTION 2. ESTABLISHMENT OF THE BOARD: The Town Board of the Town of _____ has heretofore created a board which shall be known as the Conservation Board of the Town of _____ for the conservation of the environment, hereinafter called the "Board."

IV. SECTION 3. MEMBERSHIP: (1) The Board shall consist of nine members who shall be appointed by the Town Board. The term of appointment shall be for two years. Persons residing within the Town of _____ who are interested in the improvement and preservation of environmental quality shall be eligible for appointment as members of the Board. Vacancies on the Board shall be filled in the same manner as the original appointment. (2) The Supervisor of the Town of _____, one councilman appointed by the Town Board as Liaison, the Chair of the Planning Board, the Town Engineer, the Town Attorney, and the Superintendent of Highways shall be ex-officio members of the Board without vote. (3) One member of the Planning Board shall be appointed by the Town Board as liaison between the Planning Board and this Board without vote. V.

V. SECTION 4. OFFICERS, MEETINGS AND COMMUNITIES: A. Officers 1. Chair: The Town Board shall appoint the Chair. 2. Vice-Chair: the Chair will designate the 1st and 2nd vice-chairmen, subject to the approval of the members of the Board. The Vice-Chairmen will be chosen from the membership of the Board. 3. Secretary: The Secretary shall be appointed by the Town Board. The Secretary shall not be a member of the Board.

B. Duties of the Officers 1. The Chair: The Chair shall preside at all meetings of the Board. He/she shall be ex-officio member of any committee of the Board. He/she is responsible for the review of all reports and studies coming from the work of the committees. He/she must sign all memoranda and reports submitted by the Board to the Town Board and to any other agency, official, or Board of the Town, county, state and federal government, and must sign all correspondence to non-governmental groups and individuals. Likewise, he/she must approve any news releases sent to the news media. The Chair will approve all authorized expenditures of the Board within the appropriations set in the Board budget approved by the Town Board. The Chair will make out budget and financial statements on a quarterly basis to all members of the Board. The Chair will appoint a budget committee to draw up a proposed annual budget covering operating and capital costs of all projects of the Board and its administration. The Chair will be ex-officio chair of the budget committee.

C. Duties of the Secretary: The Secretary shall issue all calls and notices of meetings of the Board and shall write such letters as the Chair or, in his/her absence, the 1st Vice-Chair; or in the absence of the 1st Vice-Chair, the 2nd Vice-Chair; or the majority of the Board might designate. The secretary may assist the Chair in the drawing up of the quarterly financial statement. The Secretary shall keep full minutes of all business done in the meetings of the Board, with the exact wording of every motion and whether it carried or was lost. The minutes shall show the names of persons appointed to the Board committees.

D. Meetings: There shall be ten (10) meetings a year of the full Conservation Board. These meetings shall be called for conducting such business as the Chair, the Vice-Chair, or a majority of the members deem necessary. Special meetings of the Board may be called at any time at the pleasure of the Chair or a majority of the Board. A quorum of the Board shall be a majority. A favorable vote of a majority of these members present and voting at a meeting shall be required for the adoption of any advice, provided, however, that no motion shall be adopted unless it shall receive at least four (4) affirmative votes.

E. Committees: The Chair shall establish such committees as are necessary to carry out the purposes of the Board. The committees shall make reports to the Board at each regular meeting describing their activities and accomplishments for the preceding period. The committees have no right to incur debt or involve the Board in any way unless authorized by the Chair, or in the absence of the Chair, the 1st Vice-Chair, or in the absence of the Chair and the 1st Vice-Chair, the 2nd Vice-Chair.

VI. SECTION 5. POWERS AND DUTIES OF THE BOARD: The powers and duties of the Board shall be to carry out the intent and the purposes of the State of New York General Municipal Law Article 12F, Sections 239x and 239y.

VII. SECTION 6. EFFECTIVE DATE: This resolution shall take effect immediately.

TOR_RA3 – RESERVATION OF PARKLAND OR PAYMENT IN LIEU

Town of Rochester

Proposed Amendment to Town Subdivision Regulations

Reservation of Parkland or Payment in Lieu

Pursuant to New York State Town Law § 277, the Town :

XX. Reservation of parkland on subdivision plats containing residential units. (a) Before the planning board may approve a subdivision plat containing residential units, such subdivision plat shall also show, when required by such board, a park or parks suitably located for playground or other recreational purposes.

(b) Land for park, playground or other recreational purposes may not be required until the planning board has made a finding that a proper case exists for requiring that a park or parks be suitably located for playgrounds or other recreational purposes within the town. Such findings shall include an evaluation of the present and anticipated future needs for park and recreational facilities in the town based on projected population growth to which the particular subdivision plat will contribute.

(c) In the event the planning board makes a finding pursuant to paragraph (b) of this subdivision that the proposed subdivision plat presents a proper case for requiring a park or parks suitably located for playgrounds or other recreational purposes, but that a suitable park or parks of adequate size to meet the requirement cannot be properly located on such subdivision plat, the planning board may require a sum of money in lieu thereof, in an amount to be established by the town board. In making such determination of suitability, the board shall assess the size and suitability of lands shown on the subdivision plat which could be possible locations for park or recreational facilities, as well as practical factors including whether there is a need for additional facilities in the immediate neighborhood. Any monies required by the planning board in lieu of land for park, playground or other recreational purposes, pursuant to the provisions of this section, shall be deposited into a trust fund to be used by the town exclusively for park, playground or other recreational purposes, including the acquisition of property.

Model Agricultural Advisory Committee Resolution

Purposes

The purpose of the Agricultural Advisory Committee is twofold: first, to advise the Town Board, Planning Board and other Town agencies on matters pertaining to the preservation, promotion, and ongoing operation of agricultural activity in the Town of _____; and second, to implement, or guide the implementation of, the recommended actions in the plan. Of particular importance are 1) help educate non-farmers; 2) promote and market local agricultural products and services; 3) offer regulatory guidance to the Town Board or Planning Board related to agriculture; 4) promote the economic viability of farming; 5) to assist in conflict resolution; and 7) assist farmers by serving as the agricultural navigator to goods, services, and agencies working on behalf of agriculture in the Town.

Committee; Personnel; Appointment; Organization.

There is hereby established in the Town of _____ a permanent committee to be known and designated as the "Town of _____ Agricultural Advisory Committee" which shall consist of five (5) residents of the Town of _____ who are engaged in farming, agri-business, or a vocation related to agriculture; and three (3) residents of the Town of _____ who shall serve as ex-officio members, one of whom shall be a Town Board member, one who shall be a Planning Board member, and one who shall be an Environmental Conservation Commission or Conservation Board member. Ex-officio members shall only be eligible to serve on the committee while they hold the other cited Town office. The members of the said committee first appointed shall serve for terms as follows: two (2) appointees for three (3) year terms; two (2) appointees for four (4) year terms and one (1) appointee for a five (5) year term. Thereafter, all appointments shall be for terms of five (5) years and vacancies shall be filled for the unexpired term only. The members shall serve until their respective successors are appointed. The members of the committee shall receive no compensation for their services.

The committee shall select from among its members a chairperson and such other officers as it may deem necessary and establish rules of order to conduct their business. The Agricultural Advisory Committee shall report to the Town Board at least annually setting forth and detailing the activities and operations of the committee during the preceding year.

Committee Assistance and Funding.

The Agricultural Advisory Committee may request technical assistance and/or specialized advice from any resource it may deem appropriate, including but not limited to other local residents; other Town of _____ officials; local farmers and farm business owners; County Planning Board; County Cooperative Extension; County Soil and Water Conservation; County Agriculture and Farmland Protection Board; NY Farmland Trust and NYS Agriculture and Markets. However, no contracts for payment for services or other expenditure of Town funds may be entered into by the Committee.

As a citizen advisory committee, the Agricultural Advisory Committee may not authorize any expenditure of Town funds. Funds necessary for proper committee operation may be requested by the committee from the Town Board

and, in accordance with customary procedures, the Town Board may authorize such funds and approve the expenditure thereof.

Responsibilities of Committee. The responsibilities of the committee shall be as follows:

1. To recommend methods, review proposals, and develop proposals and strategies for the implementation of the agricultural goals of the Town of _____, and report their findings to the Town Board. This includes, but is not limited to communication with local farmers, interact with other government agencies, facilitate local presentation of educational programs, to encourage and assist applications to farmland preservation programs, to encourage appropriate farmland protection activities, to study and comment on government proposals that may have an impact on local farms and to write and administer grant applications when approved by the Town Board.
2. To, from time to time, work with the Town to amend and update local plans and laws as needed to reflect the needs of agriculture and refer such updates and amendments to the Town Board.
3. To identify methods whereby the Town Board, County or State governments can encourage existing farmers to continue in active agricultural operation.
4. To, when requested by the Town Board or other agencies engaged in an environmental review of proposed private or public development projects and/or infrastructure projects, provide input regarding the impacts on agriculture of such projects.
5. To recommend to the Town Board, Town Planning Board and/or other agencies techniques that will help preserve large, contiguous and economically viable tracts of agricultural land.
6. To recommend to the Town Board reasonable and desirable changes to this listing of responsibilities or to accomplish any other tasks referred to it by the Town Board or other local agencies having to do with agricultural related activities.

Town of Rochester
Proposed Amendment to Zoning
Adoption of Non-binding Design Standards

§ xxx. Design Standards. By reference The Community Design Manual published by the Ulster County Planning Board (dated March 2017 including any subsequent updates or editions) should be used by the Planning Board and by any applicant to the Planning Board as non-binding, advisory guidelines. These guidelines are particularly relevant for use of lands or property along, contiguous to, or within view of New York State Routes 209, 44, and 55 as well as within or at the edges near the hamlets of the Town.

TOR_RA6 – CRITICAL ENVIRONMENTAL AREA – CATSKILL SHAWANGUNK GREENWAY CORRIDOR AT COLONY FARM

Town of Wawarsing (with Town of Rochester?), Ulster County, New York Draft Critical Environmental Area Catskill – Shawangunk Greenway Connection (including Colony Farm)

Purpose

In order to assist in the protection of important community resources, the Town of Wawarsing (Rochester) has designated the Catskill – Shawangunk Greenway Connection as a Critical Environmental Area (CEA) as defined under the New York State Environmental Quality Review Act (6 NYCRR 617.14). The effective date of this designation, by resolution of the Town Board, is _____, 2017.

If you are initiating an Action which is subject to review under the State Environmental Quality Review Act (SEQRA) and includes property which is within or substantially contiguous to the Catskill – Shawangunk Greenway Connection as defined below, then the potential impact of any such Type 1 or Unlisted Action, as defined in SEQRA, on the environmental characteristics of the CEA is now a relevant area of environmental concern and must be evaluated in the determination of significance pursuant to 6 NYCRR 617.7. Applicants for relevant Town or other public agency approvals are advised as part of their application to complete the Full Environmental Assessment Form available in Town Hall or www.dec.ny.gov/permits.

Location and Boundary Description

See attached map.

Justification and Significance

The designation of this Critical Environmental Area (CEA) is consistent with the exceptional or unique character criteria for this specific geographic area as defined in 6 NYCRR 617.14(g)(1). The defined, relevant criteria are:

(i) A benefit or threat to human health.

n/a

(ii) A natural setting. Fish, wildlife habitat, forest and vegetation, open space, areas of important aesthetic or scenic quality.

This area provides unique opportunities such as ecological corridors and connections between the significant protected lands of the Shawangunk Ridge to the east and the Catskill Park and Forest Preserve to the west. This may be the only remaining land complex that can provide for flora and fauna habitat connection between two of the most prominent conservation areas in New York State. The protection and conservation of this connection, as well as both the Catskills Unfragmented Forest and the Shawangunk Mountains Region, are recognized as Priorities in the 2016 New York State Open Space Conservation Plan (see Appendix A, Lower Hudson Valley Region 3).

(iii) Agricultural, social, cultural, historic, archaeological, recreational, or educational

values.

The CEA area includes the full and unique Agricultural Development Area defined within the Town of Wawarsing's adopted Comprehensive Plan. This area is also anchored by the historic Colony Farm, a former NYS Department of Corrections working farm that offers significant potential for continued agriculture, agri-business, and agro-tourism uses. Such potential has been formally recognized by the Town and through supportive financing from both NYS and USDA-NRCS. The area also includes the majority of prime and statewide significant agricultural soils found in the Town. In order to keep agriculture stable, a critical mass in production and ancillary enterprises must be maintained.

The Comprehensive Plan also recognizes the NYS Route 209 corridor and the Long Path regional recreational trail in this CEA as a priority for protection through a variety of actions. Here Route 209 is the primary gateway to the Town and to the southern Rondout Valley. It is also formally part of the NYS designated Shawangunk Mountains Scenic Byway.

This Greenway Connection serves as an important recreational connection between the two prominent conservation regions of the Catskills and Shawangunks as evidenced here by the presence of the regional Long Path Recreational Trail. Mapped and maintained by the NY-NJ Trails Conference, this trail is designed to link NYC to the Adirondacks with a trail reach directly through this CEA connection. The Long Path is also a Priority Project within the 2016 New York State Open Space Conservation Plan (see Appendix A, pages 77-78).

The Greenway Connection has also been the focus of important discussion and policy through the combined efforts of both private and public entities. In March 2017, nearly three dozen representatives of these entities convened for a Catskill – Shawangunk Greenway Corridor Symposium to define importance and the shared value of the setting of this CEA, and to also support further initiatives for ecological protection with support for recreation and.

(iv) An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

This Greenway Connection offers a unique and substantial ecological and biodiversity corridor between the Catskill Park and Forest Preserve and the Shawangunk Ridge and Mountain complex – both of which offer large, contiguous, unfragmented forest habitat. A connection can be functional to allow ease of habitat, flora and fauna movement between the conservation areas of the Shawangunk Ridge to the east and the Catskill Park and Forest Preserve to the west.

The Wawarsing and the Rochester Town Comprehensive Plans, along with Ulster County and New York State open space plans, recognize this need for connection. These policy documents also recognize the trends and challenges from mixed use development along and near the central NYS Route 209 corridor bisecting the Greenway Connection. In the context of inevitable road corridor development, there remains the importance of the need to address the balance between development trends and connectivity .

TOR_RA7 – RESOLUTION TO ADOPT CONSERVATION OPEN AREAS MAPS

RESOLUTION # _____

**TO ADOPT THE CONSERVATION AREA MAP AND INVENTORY OF LANDS
AS THE TOWN OF _____ OPEN SPACE INDEX**

Motion by: _____

Seconded by: _____

WHEREAS the Town of _____ Environmental Conservation Commission has prepared and presented to the Town Board a Conservation Area Map (Map) and a Conservation Open Areas Inventory (Inventory), and

WHEREAS the New York State General Municipal Law 239-y authorizes the Town Board to accept and approve such Map and Inventory as the official Town Open Space Index, and

WHEREAS this Map and Inventory are supported by the Town Open Space and Natural Heritage Plan completed in 2017, therefore be it,

RESOLVED that the Conservation Area Map (Map) and a Conservation Open Areas Inventory (Inventory) are accepted and approved by the Town Board as the official Town Open Space Index.

ADOPTED: VOTE – AYES: _____ **NAYS:** _____

Town of Rochester, Ulster County, New York

Draft Critical Environmental Area

Great Pacama Vly

Purpose

In order to assist in the protection of important community resources, the Town of Rochester (Rochester) has designated the Great Pacama Vly as a Critical Environmental Area (CEA) as defined under the New York State Environmental Quality Review Act (6 NYCRR 617.14). The effective date of this designation, by resolution of the Town Board, is _____, 2017.

If you are initiating an Action which is subject to review under the State Environmental Quality Review Act (SEQRA) and includes property which is within or substantially contiguous to the Great Pacama Vly as defined below, then the potential impact of any such Type 1 or Unlisted Action, as defined in SEQRA, on the environmental characteristics of the CEA is now a relevant area of environmental concern and must be evaluated in the determination of significance pursuant to 6 NYCRR 617.7. Applicants for relevant Town or other public agency approvals are advised as part of their application to complete the Full Environmental Assessment Form available in Town Hall or www.dec.ny.gov/permits.

Location and Boundary Description

See attached maps.

The Critical Environmental Area (CEA) in the Town of Rochester hosts the majority of this wetland complex and habitat. The CEA includes over 300 acres of NYS regulated wetlands as well as the recommended 100 buffer to these wetlands, along with an additional buffer recommended by the New York State Heritage Program. The CEA also includes the drainage basin (aka watershed) serving this wetlands complex. Note should be made that contiguous habitat with identical characteristics can be found in the immediately adjoining towns of Marletown and Olive.

Justification and Significance

The designation of this Critical Environmental Area (CEA) is consistent with the exceptional or unique character criteria for this specific geographic area as defined in 6 NYCRR 617.14(g)(1). The defined, relevant criteria are:

(i) A benefit or threat to human health.

n/a

(ii) A natural setting. Fish, wildlife habitat, forest and vegetation, open space, areas of important aesthetic or scenic quality.

The Great Pacama Vly area and CEA is part of a complex large, mostly privately owned, unprotected wetlands that occur within the Rondout River watershed. These wetland areas are known to contain unique or rare species and communities, and are surrounded and/or bordered by extensive tracts of undeveloped or sparsely developed forest land that can act as buffer areas to the core wetlands. The Great Pacama Vly is part of the Great Rondout Wetlands. These protection and conservation of these Wetlands is a Priority Project in the 2016 New York State

Open Space Conservation Plan (see Appendix A, Lower Hudson Valley Region 3)

Specifically, the Great Pacama Vly is considered one of most biologically diverse areas in the Catskill region. Including over 300 acres in the north central portion of the Town of Rochester, this area is contiguous to similar area and habitat in the immediately adjoining towns of Marbletown and Olive. This area includes the only, or one of the only NYS locations where Black Spruce can still be found, and the CEA includes habitat with rare species and communities found nowhere else in NYS. There is currently an approximate 50-acres parcel of detached NYS Catskill Forest Preserve in the center of this area.

The New York State Natural Heritage Program identifies and maps this as “Important Area” given its exemplary occurrence of unique and diverse plant community, large and well preserved Hemlock-hardwood swamp, and several “critically imperiled” plant species.

(iii) Agricultural, social, cultural, historic, archaeological, recreational, or educational values.

n/a

(iv) An inherent ecological, geological, or hydrological sensitivity to change that may be adversely affected by any change.

see ii above. Because the area is recognized in both the 2016 NYS Open Space Conservation Plan as well as by the NYS Natural Heritage Program as a habitat and location with unique rare, and critically imperiled habitat and species, actions which could substantially disturb lands or waters in the CEA have the potential to impact such sensitive habitat. Recognizing that the large majority of the area is privately owned, actions requiring Town or other public agency reviews and approvals should include assessment that mitigates or avoids adverse impacts to these wetland habitats. Actions which enhance or protect such habitats should be encouraged.

Wetland health is intrinsically tied to the hydrological surface and groundwater systems of an immediate watershed. Any changes to these systems, in terms of water quality, quantity or temporal variation have the potential for adverse impacts.

TOR_RA9 – NIGHT SKY LIGHTING

Town of Rochester (Wawarsing) Night Sky Lighting

In the interest of maintaining its historic character, and preventing further reduction of visibility of the night sky, insuring efficient use of lighting, and reducing unsafe or annoying lighting conditions, the Town has adopted the following lighting regulation:

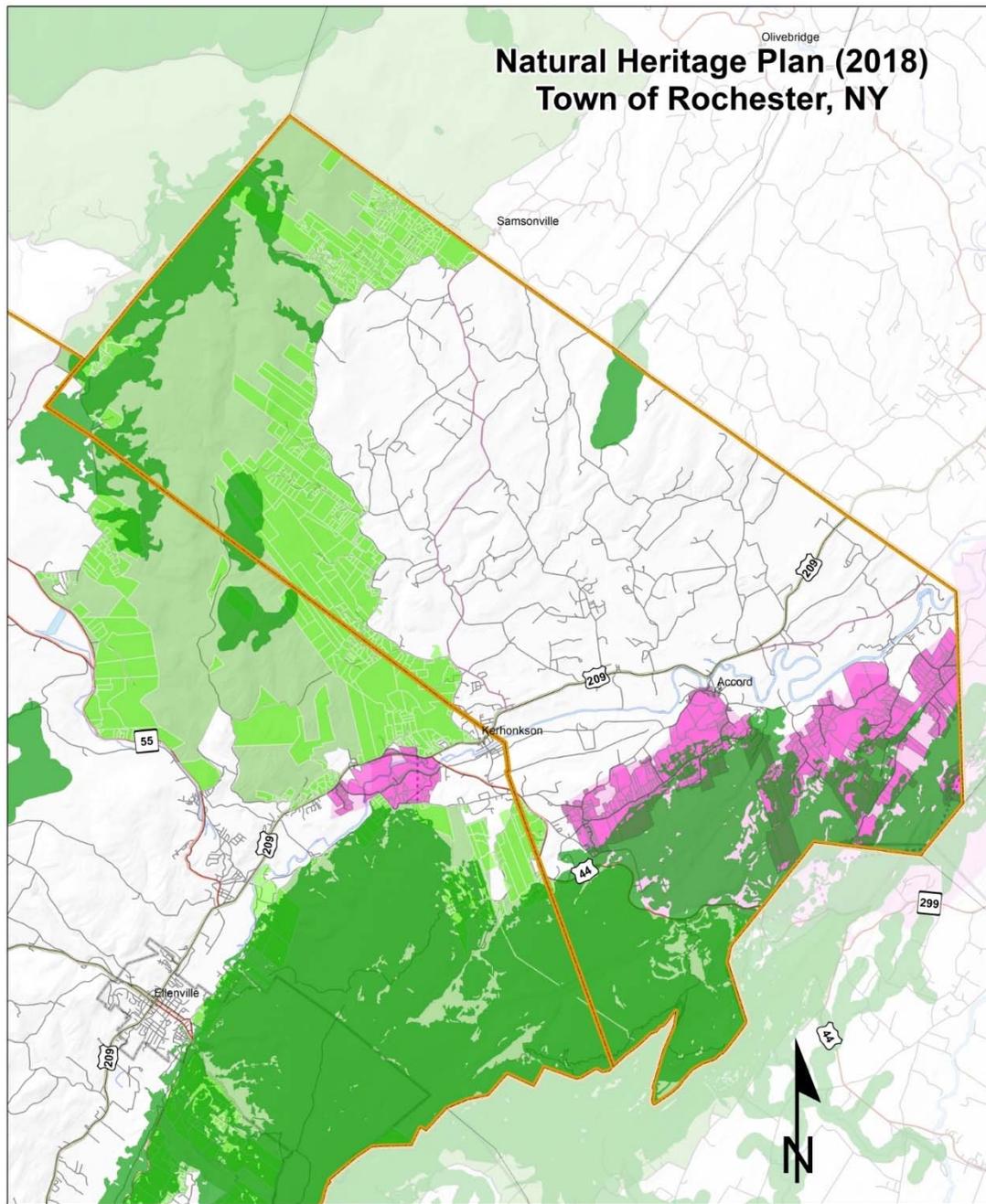
Any new outside lighting whether for area illumination, sign illumination, building illumination, or other purpose, will project no more than 3 percent of its light rays above the horizon from the lamp, its lens structure or any associated reflector.

New signs or newly lit signs may be illuminated only by continuous indirect white light, with illumination from above, and with light sources shielded so that they will not constitute a nuisance or hazard caused by glare to neighbors, pedestrians, or drivers. An exception to overhead sign lighting can be made if the illumination is confined to the area of the sign.

Exceptions:

- A. All temporary lighting required for construction projects, related to road construction and repair, installation of sewer and water facilities, and other public infrastructure.
- B. All temporary emergency lighting needed by the police or fire departments or other emergency services, as well as all vehicular luminaires, shall be exempt from the requirements of this article.
- C. All hazard warning luminaires required by Federal regulatory agencies are exempt from the requirements of this article, except that all luminaires used must be red and must be shown to be as close as possible to the Federally required minimum lumen output requirement for the specific task.
- D. Seasonal/decorative lighting displays using multiple low wattage bulbs are exempted from this regulation.

APPENDIX A: Conservation Open Area & Critical Environmental Areas Maps



Conservation Open Area Map Series

- Important Areas - Plant Communities**
 - Important Areas - Plant Communities
- Corridor: Unprotected Parcels**
 - Corridor: Unprotected Parcels
- Corridor Linkage: Unprotected Parcels**
 - Corridor Linkage: Unprotected Parcels
- CSG Corridor: Linkages**
 - Linkage
 - Linkage continues
- CSG Corridor: Linkage Zones**
 - Linkage Zone
 - Zone continues
- CSG Corridor: Matrix Forest Blocks**
 - Tier 1

Data Sources:
 -NYS Natural Heritage Pgm.
 -The Nature Conservancy
 -NYS Dept. Env. Conservation



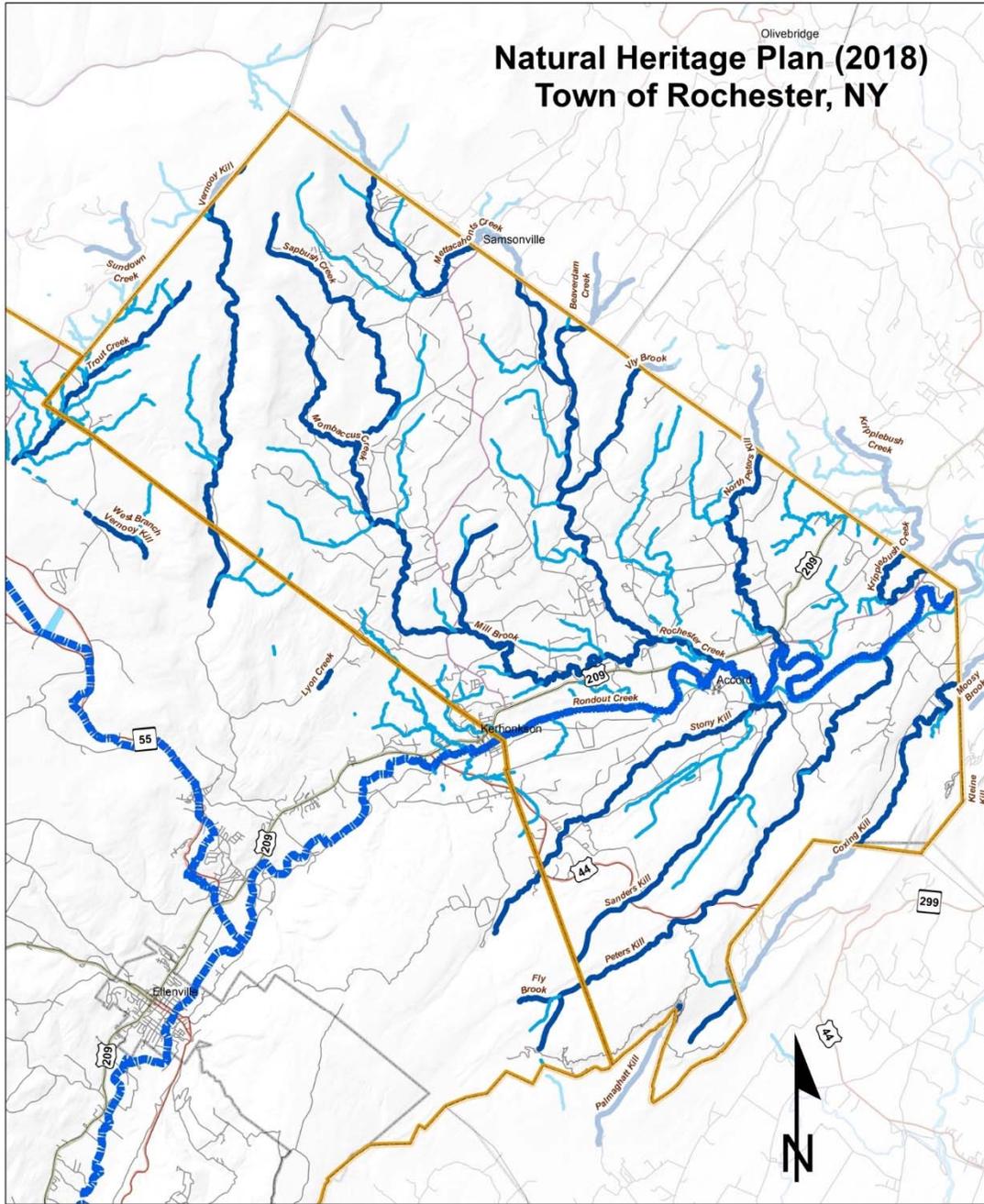
Ecological Resources & Terrestrial habitat

This project has been funded in part by a grant from the New York State Environmental Protection Fund through the Hudson River Estuary Program of the New York State Department of Environmental Conservation.

This map, the data and information contained within draw from wide-ranging, multi-scale sources and are intended only for very general, planning purposes. The Town, its agents, representatives, or consultants make no claims and assume no liability as to the completeness, accuracy, or precision of any of the content and is not responsible for the misuse or misapplication thereof. There are no substitutions for detailed, onsite field inspections and surveys.



Image 1.. Important Ecological Resources & Terrestrial Habitat



Conservation Open Area Map Series

Water Resources

- NHD Area (Lakes, ponds)**
 NHD Area (Lakes, ponds)
- NHD Named Streams 100' Buffer**
 NHD Named Streams 100' Buffer
- NHD Unnamed Streams 50' Buffer**
 NHD Unnamed Streams 50' Buffer
- Rondout Sanburg Creek**
 Rondout Sanburg Creek

Data Sources:
 - US Geological Survey
 - NYS Dept. Env. Conservation

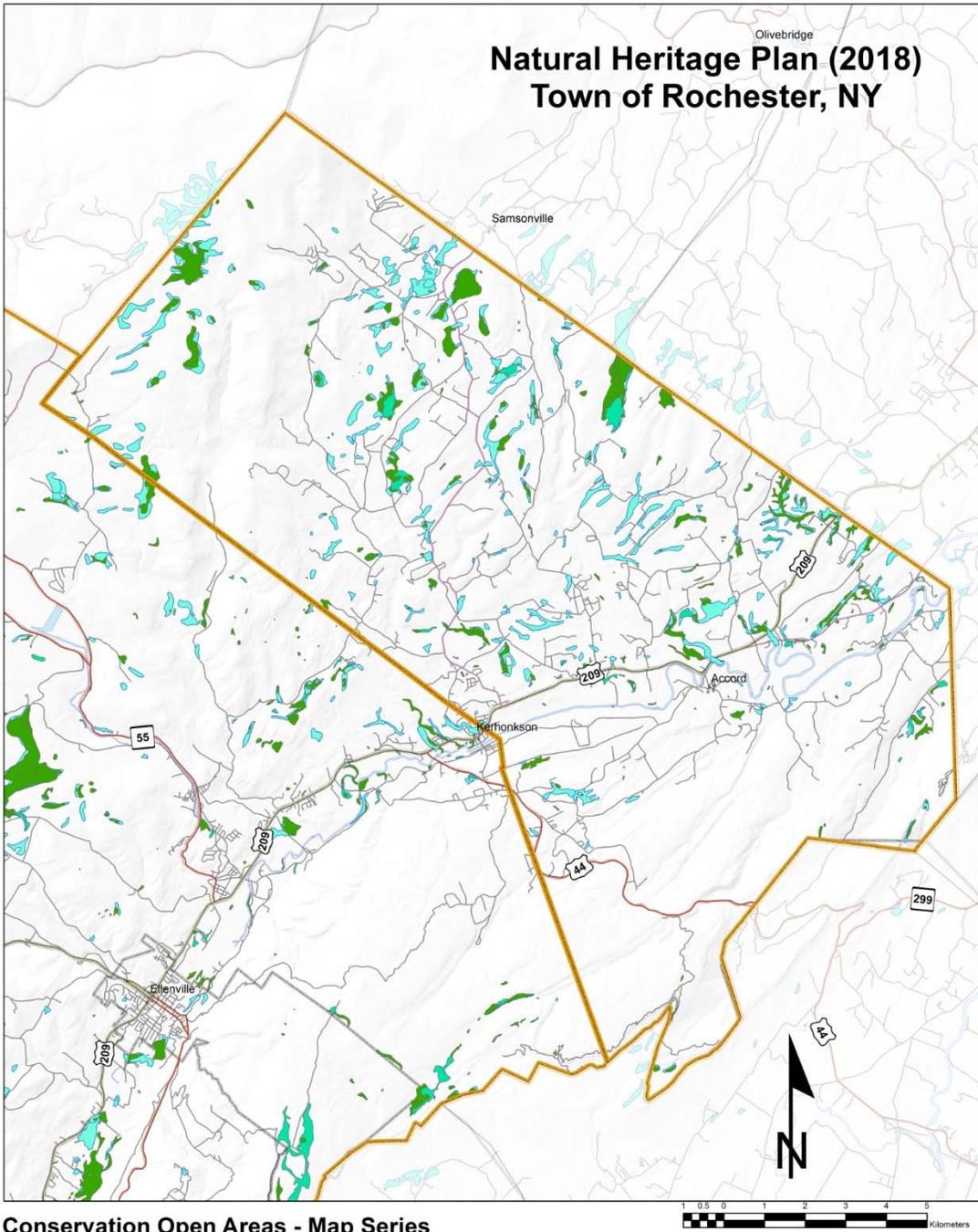


Surface Water - Rivers, Streams, Ponds

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Image 2.. Important Surface Water Systems: River, Streams, Ponds



**Conservation Open Areas - Map Series
Town of Rochester, NY**

Water Resources

NYS Regulated Wetlands

 NYS Regulated Wetlands

NWI Federal Wetlands

WETLAND TYPE

 Freshwater Emergent Wetland

 Freshwater Forested/Shrub Wetland

Hydric Soils

 Hydric Soils

Data Sources:
 - NYS Dept. Env. Conservation
 - USDA Natural Resource Cons. Svce.
 - USFWS - Natl. Wetlands Inventory

Prepared by:
John McManus
Consultant & Ecological Services
June 2011

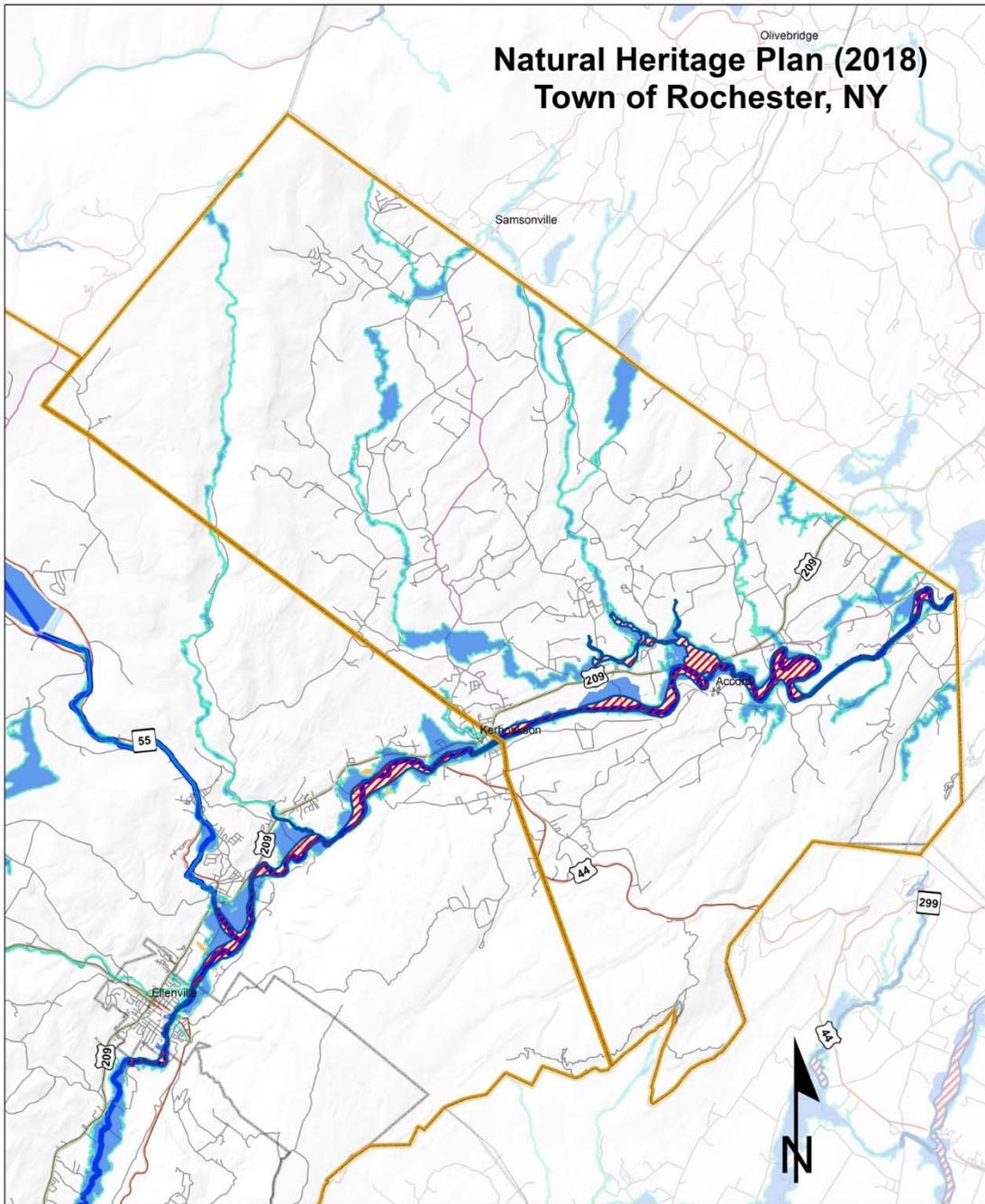
Wetlands, Hydric soils, Aquatic habitat

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Image 3. Important Sub-surface Water Systems: Wetlands, Hydric Soils, Aquatic Habitat



Conservation Open Area Map Series

Water Resources

FEMA FHL 2016

Flood Zone

-  Regulatory Floodway
-  1% Annual Chance Flood Hazard
-  0.2 % Annual Chance Flood Hazard

Rondout & Sanburg Creeks

-  Rondout & Sanburg Creeks

FEMA Floodways & Flood Hazard Layers

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Data Sources:
 - FEMA Flood Hazard Data
 - Ulster County Info. Services

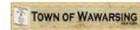
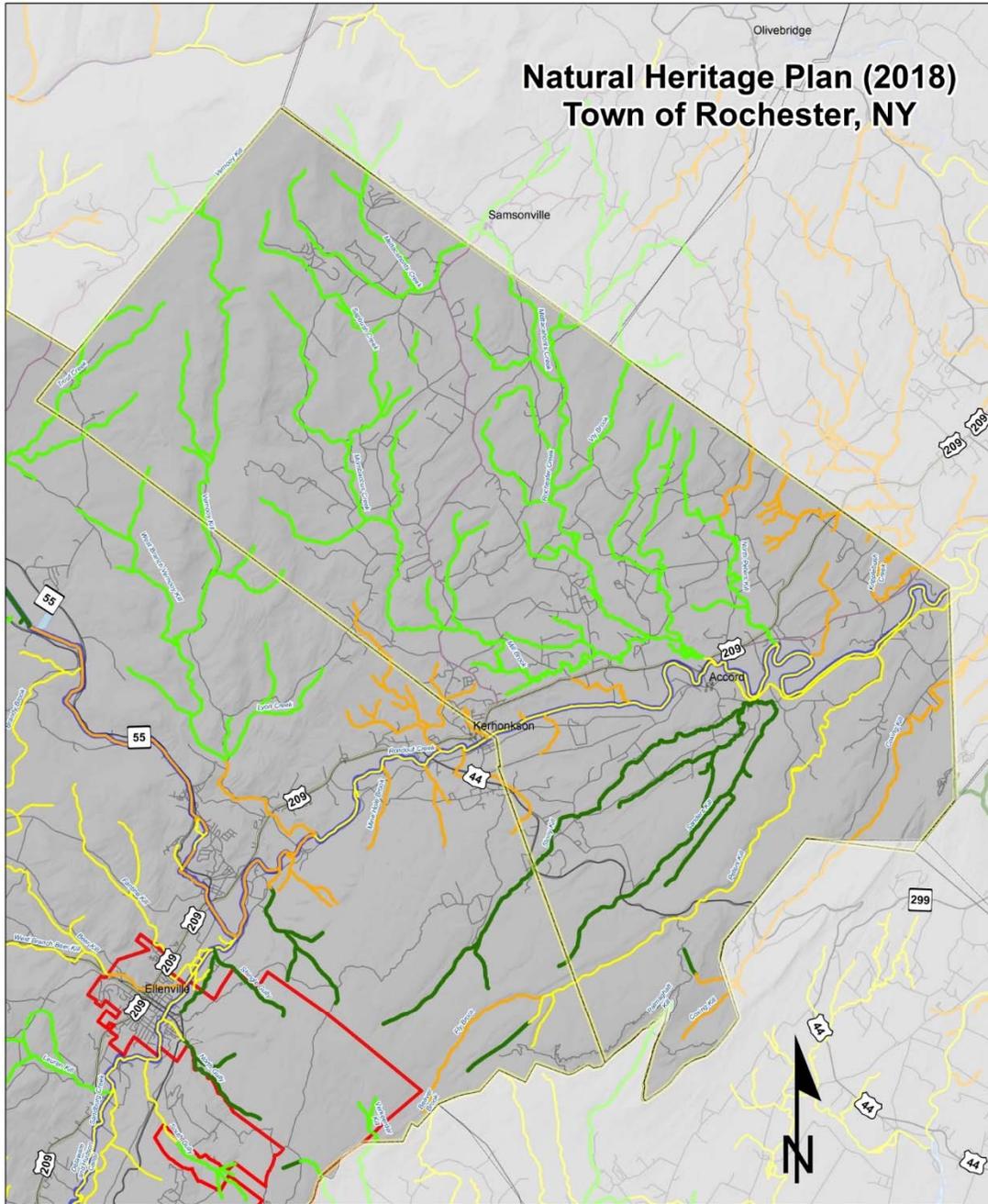


Image 4. Important Water Systems: Regions Prone to Flooding (FEMA)



Natural Heritage Plan (2018) Town of Rochester, NY

Conservation Open Areas Map Series

Water Resources

NYSDEC Water Quality Classif. (2017)

Streams & Rivers

CLASS

AA

A

B

C

Data Sources:

- NYS Dept. Environmental Conservation
- Ulster County Info. Services
- US Geological Survey

AA, A, A-S and AA-S indicate a best usage for a source of drinking water, swimming and other recreation, and fishing.
 B indicates a best usage for swimming and other recreation, and fishing.
 C indicates a best usage for fishing.
 D indicates a best usage of fishing, but these waters will not support fish propagation. (No "D" waters in Wawarsing)

Water bodies that have flow all year (perennial flow) have the classification of the water body they flow in to. Water bodies that do not appear on these maps and have flow only seasonally (intermittent flow) have a classification of "D." Since it may be difficult to determine if a water body has perennial or intermittent flow, please contact your DEC Regional Office if there is any doubt. DEC has the final authority to determine if a water body has perennial or intermittent flow.

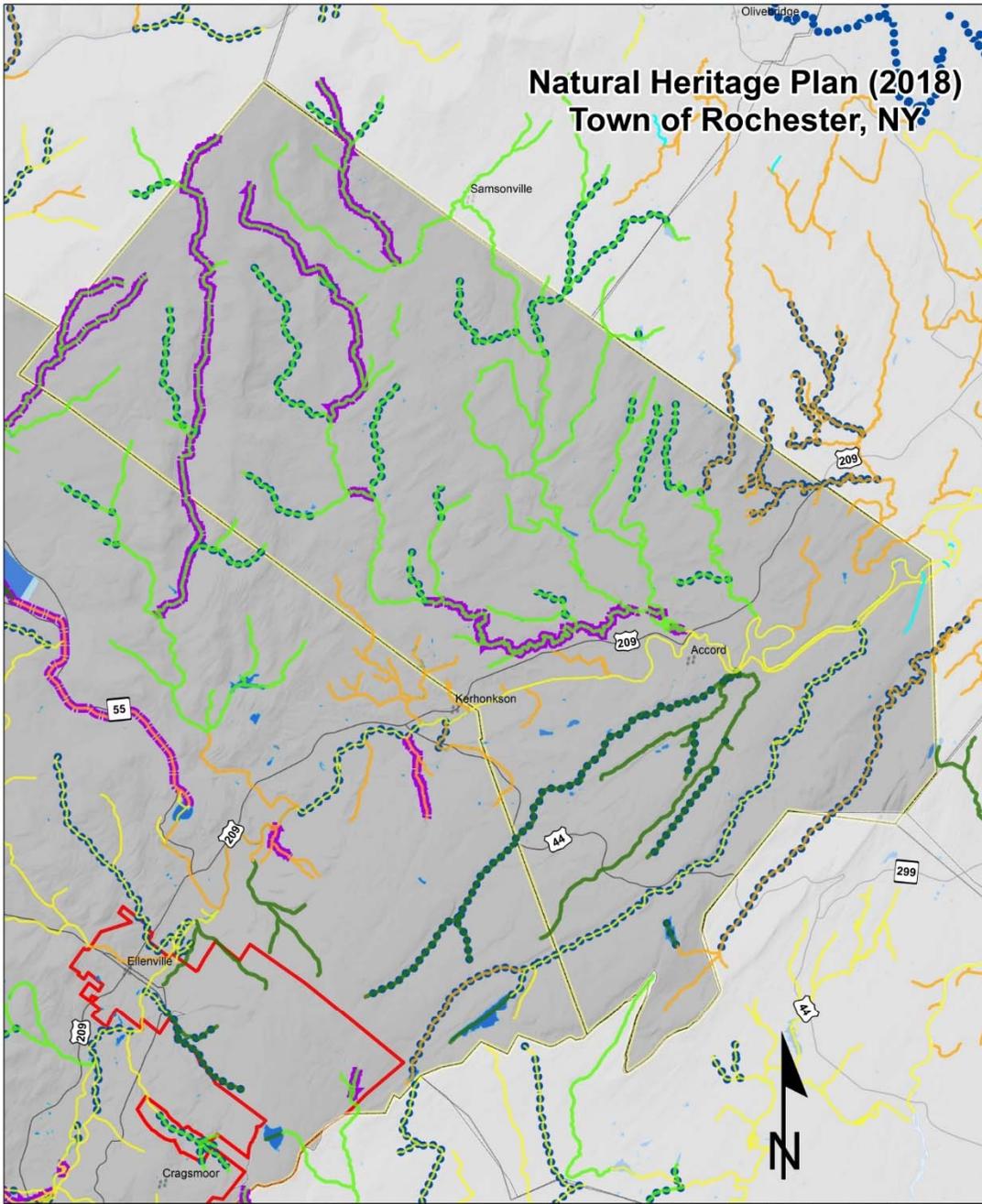
Water Quality (streams) 2017

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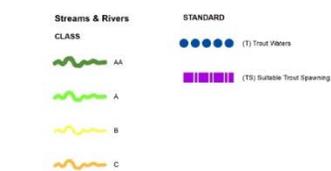
Image 5. Important Surface Water Systems – Surface Water -Water Quality Classification



Natural Heritage Plan (2018) Town of Rochester, NY

Conservation Open Areas Map Series

Water Resources



Data Sources:
 - NYS Dept. Environmental Conservation
 - US Geological Survey

A, AA, A-S and AA-S indicate a best usage for a source of drinking water, swimming and other recreation, and fishing.
 B indicates best usage for swimming, other recreation & fishing.
 C indicates best usage for fishing.
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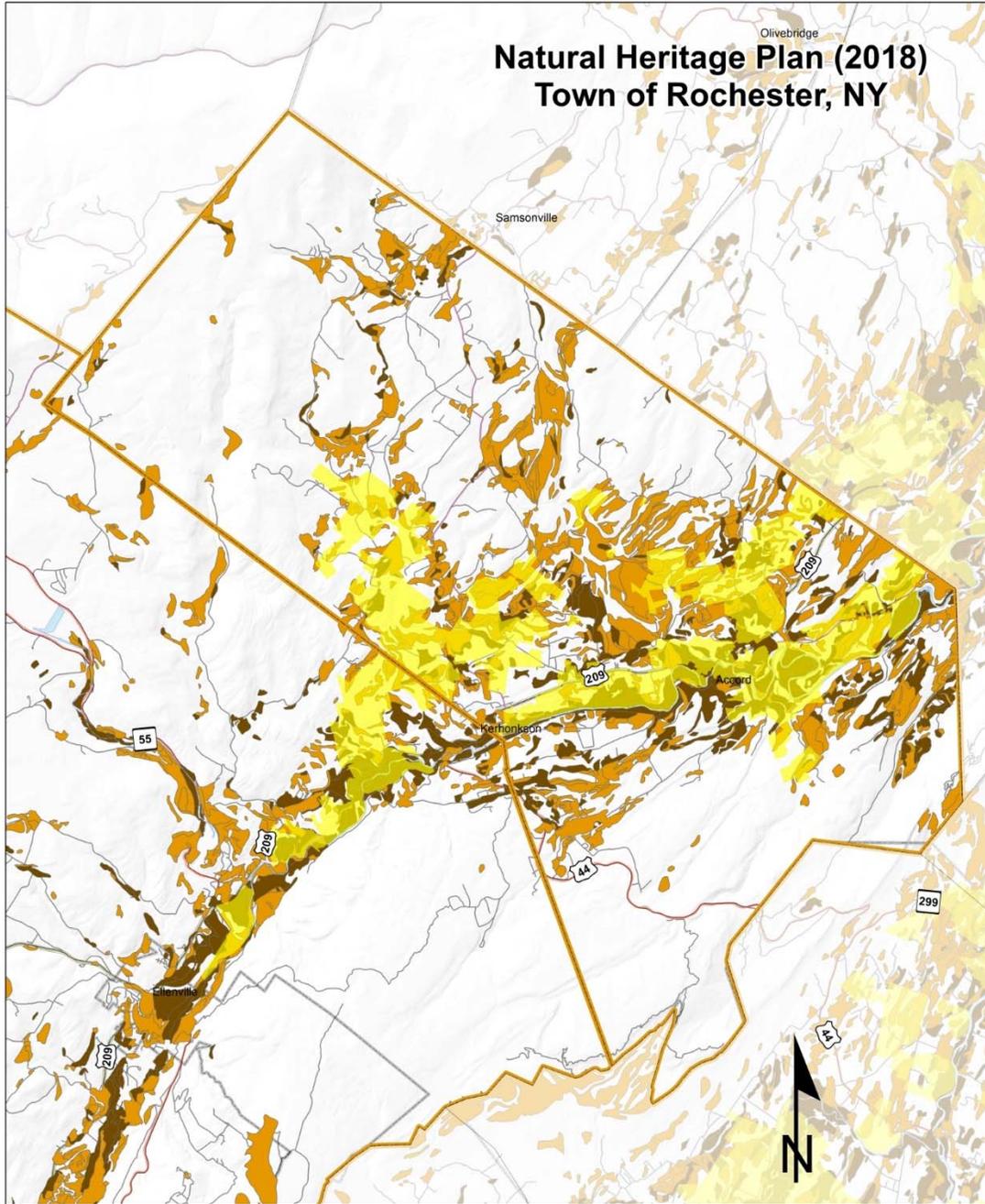
Known Trout Streams (water quality std. 2017)

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Image 6. Important Surface Water Systems - Surface Water Quality & Known Trout Streams



Natural Heritage Plan (2018) Town of Rochester, NY

Conservation Open Areas Map Series

Important Farmland Soils

-  Prime
-  Statewide importance

UC Ag Districts

-  UC Ag Districts

Data Sources:
 - USDA NRCS
 - Ulster County Info. Svces

Agricultural Resources

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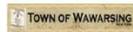
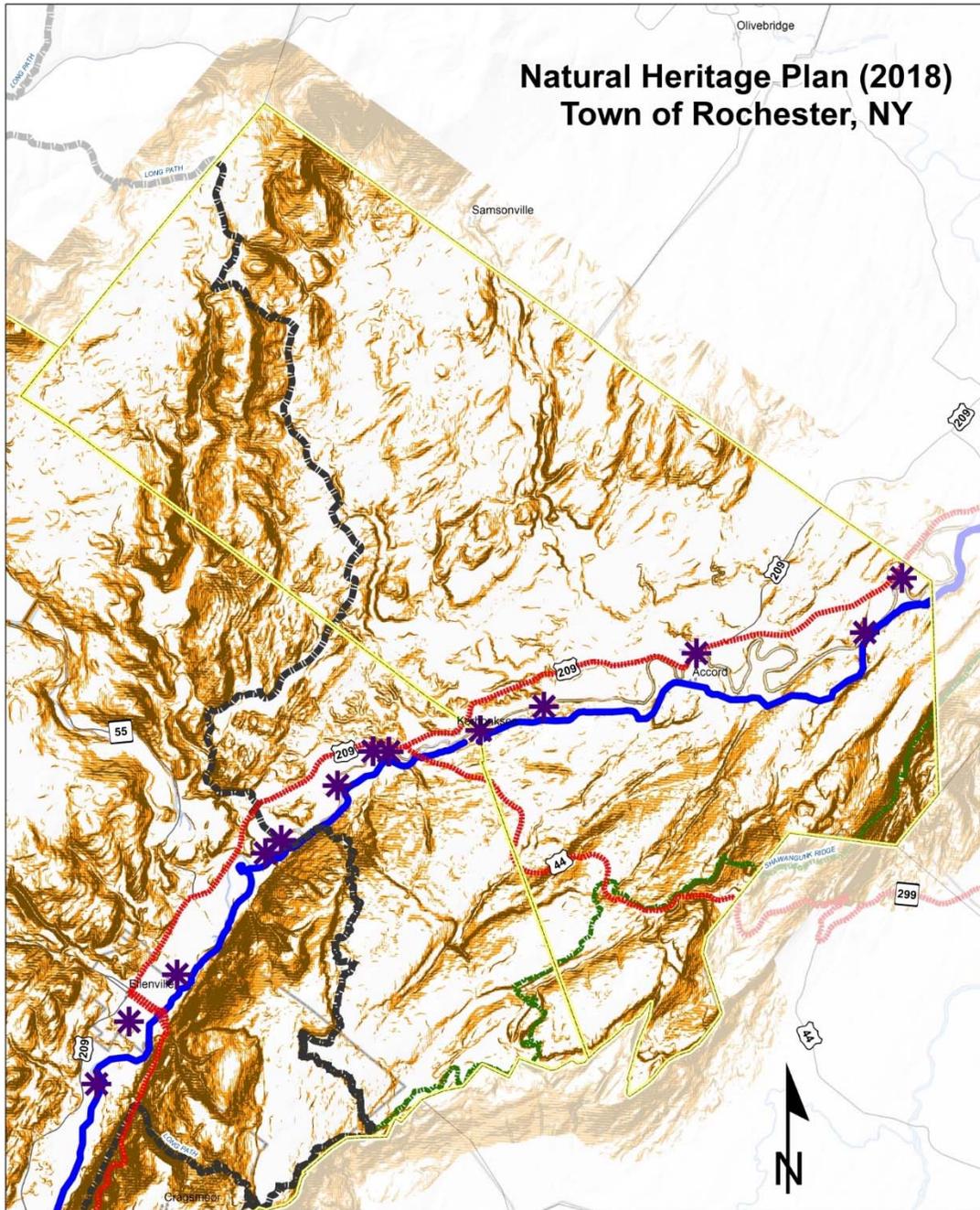


Image 7. Important Agricultural Areas and Resources



Conservation Open Area Map Series

- | | |
|--------------------------------------|---|
| Scenic Route (SMS Byway) | Slope Classes (%) |
| Scenic Route (SMS Byway) | Percent Slope |
| Long Path 2017 (hiking trail) | 15-25% |
| TRAIL_NAME | >=25% |
| LONG PATH | Potential River & Rec. Access Points |
| SHAWANGUNK RIDGE TRAIL | Potential River & Rec. Access Points |
| O&W Rail Rail (proposed) | Data Sources: |
| O&W Rail Rail (proposed) | - USGS NED |
| | - NYNJ Trail Conference |
| | - Shawangunk-Mtn Scenic Byway |
| | - Ulster County Info. Services |
| | - Consultant Developed Layers |

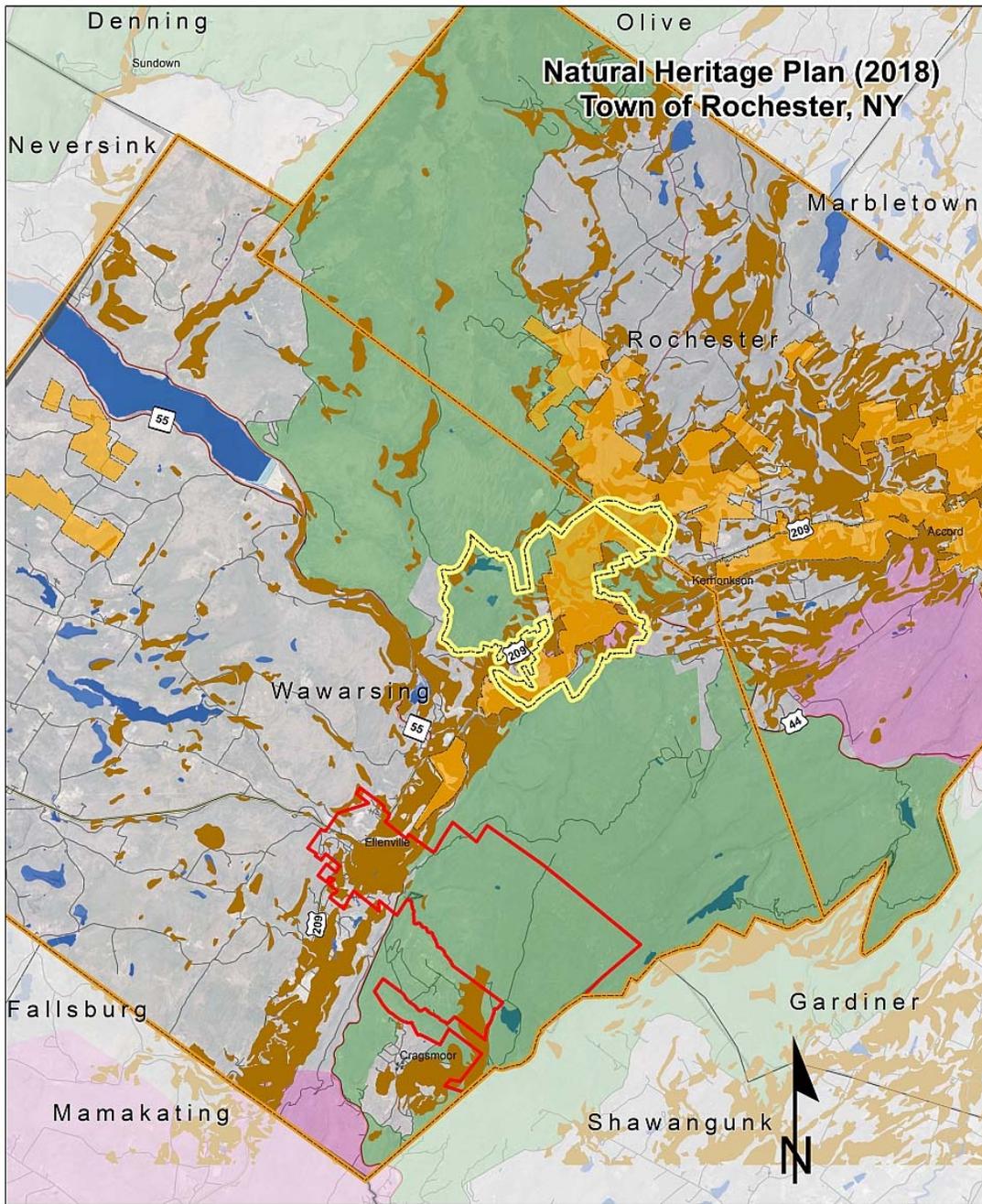
Terrain, Scenic & Recreational Resources

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Image 8. Important Features: Terrain, Scenic & Recreational



Conservation Open Area Map Series

Critical Environmental Areas - (CEA)

- | | |
|---------------------|---|
| CSGC CEA | UC Ag Districts |
| Town Boundaries | Important NYS: Matrix Forest Blocks/Corridors |
| Ellenville Boundary | FOREST TIERS |
| Important Ag | Tier 1 (prime importance) |
| Important Ag Soils | Linkage Zones |
| | Linkage Zone |

Data Sources:
 - USDA NRCS Soils
 - The Nature Conservancy
 - Ulster County Info. Services
 - Town of Rochester & Wawarsing ECC

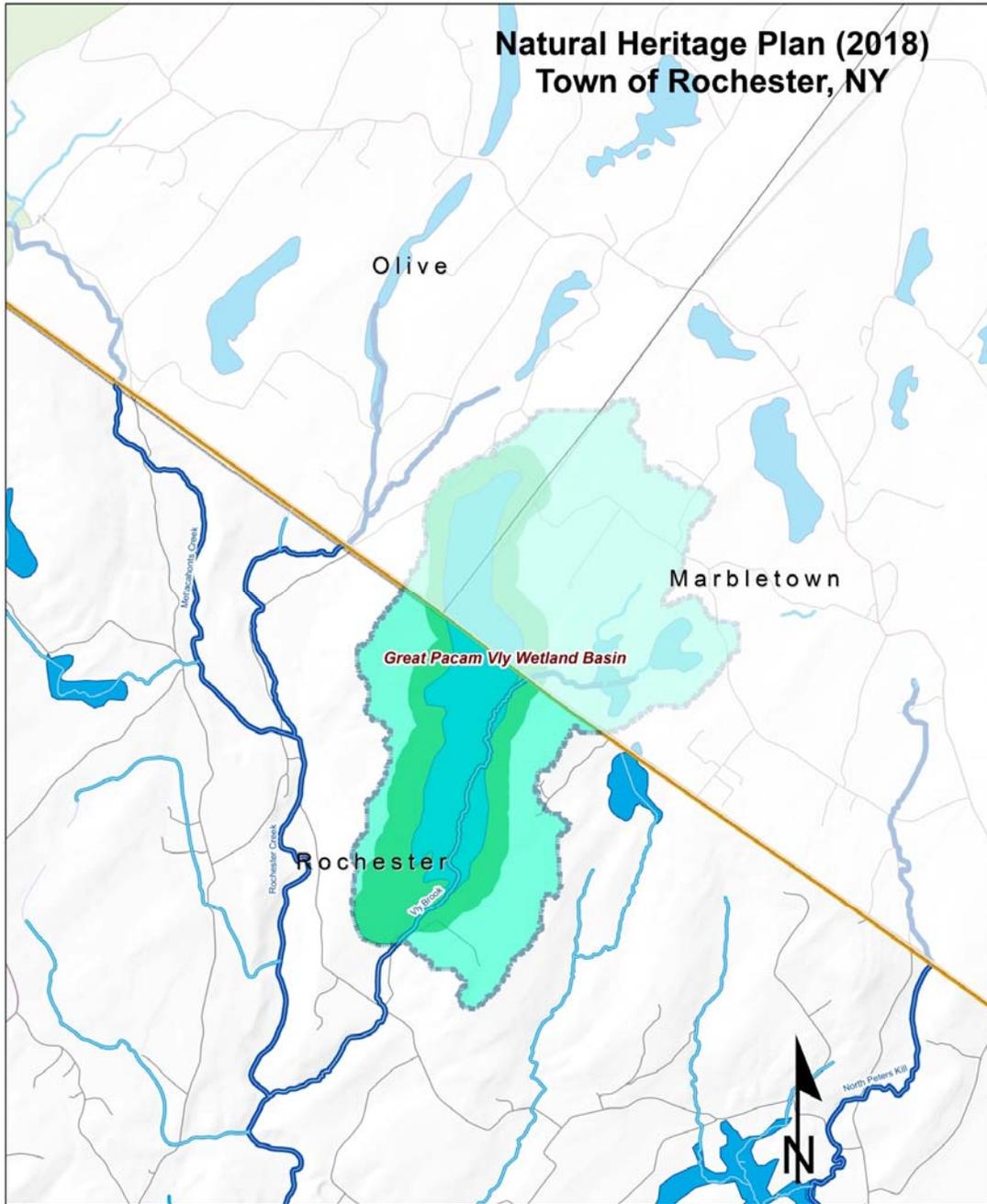
Catskill-Shawangunk Greenway Corridor CEA

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Image 9. Critical Environmental Areas (CEA): Catskill-Shawangunk Greenway Corridor at Colony Farm



Conservation Open Area Map Series
Critical Environmental Areas - CEA

-  NYS Regulated Wetlands
-  NYSNHP Import. Areas Plant Communities
-  Great Pacama Vly Sub-Basin
-  NHD Unnamed Streams 50' Buffer
-  NHD Named Streams 100' Buffer

Data Sources:
 - NYS Natural Heritage Program
 - NYS Dept. Environmental Cons.
 - USGS NHD

Great Pacama Vly - Wetland Basin

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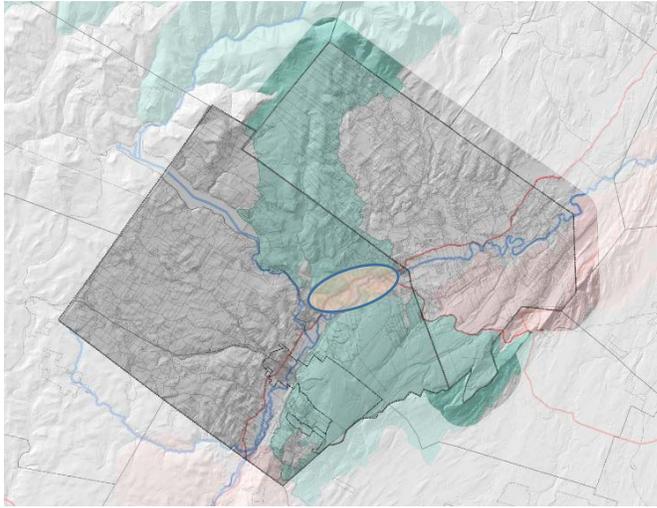
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Image 10. Critical Environmental Areas (CEA). Great Pacama Vly

APPENDIX B:

Catskill Shawangunk Greenway Corridor (CSGC) Symposium Summary Report



Catskill – Shawangunk Greenway Corridor – 2017 Symposium

Wednesday, March 1, 2017

1:00 – 5:00 p.m.

Rondout Municipal Center, 1915 Lucas Ave. Cottekill, NY 12419

Introduction

The Towns of Rochester and Wawarsing, in developing an intermunicipal natural heritage and open space plan, have prioritized for protection the Catskill-Shawangunk Greenway Corridor (CSGC). This large forested region spans the Towns shared boundaries and encompasses the ~500-acre Colony Farm complex along Rt. 209. (*see Figure above*).

This region has long been considered of high value on several fronts, by multiple conservation and resource agencies. The greenway corridor represents a generational opportunity to connect the intact, large-block forest matrix lands of the Catskills with the ecologically important Shawangunk region. In addition, the central Colony Farm area holds great promise both as a critical connection region for any corridor but also as the nexus of an agro-tourism feature, providing vital economic life and resources to the region.

The concept for this Catskill-Shawangunk Greenway Corridor (CSGC) has been studied in some depth over many years and John Adams, a local farmer and long-term project veteran, has recently worked with the Town of Wawarsing to obtain funding to undertake a feasibility study for the agricultural lands of Colony Farm.

SYMPOSIUM

Our project convened a half-day symposium to gather existing information, data, maps and insight to help inform actions that the two Towns might take within their current planning efforts. In addition, we hoped to both renew and sustain interest in the ongoing topic as well as gather materials for the feasibility study. Several dozen regional stakeholders were invited and some thirty County, State, municipal, conservation, recreation and agricultural leaders volunteered their time and energy to the efforts (*Table 1*). Following an overview of the project by Mr. Adams, the contributors broke out into working groups to consider and refine a SWOT analysis (*Strengths, Weaknesses, Opportunities, Threats*) for four main topics, relating to the corridor and the Colony Farm connecting area:

- Agriculture and Agro-tourism
- Ecology and Corridor Science
- Regional Recreation
- Economic Factors

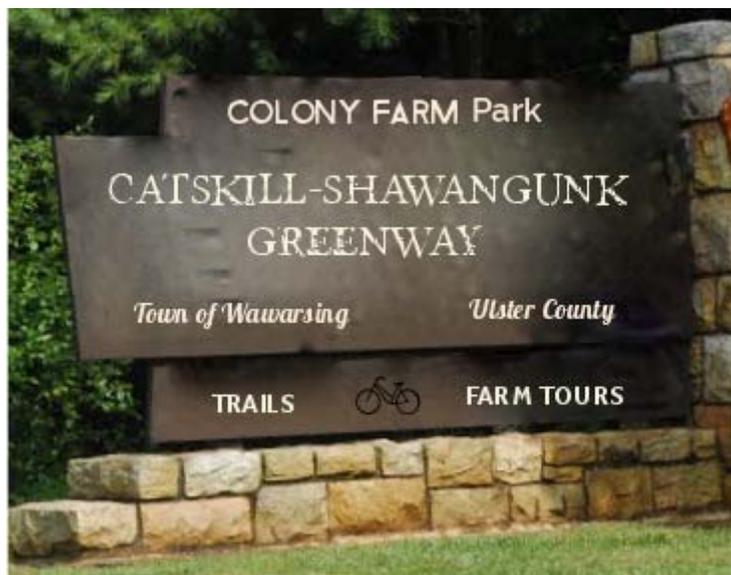
John Adams introduction set the stage for the group activities, using the theme of the Catskill-Shawangunk Greenway as a central gateway to the Catskills and the Rondout Valley, through the Shawangunks Mountain region.

BACKGROUND\VISION

John outlined, how, in 2015, Gov. Andrew Cuomo traveled to Minnewaska State Park to announce state funding of improvements of over \$7 million dollars to the gateway of the park, and “putting the spotlight on the State’s unparalleled recreational opportunities”. After the ceremony, the Governor led a motorcycle procession down Rt. 44-55 to Kerhonkson. It was pointed out that the motorcade did not stop in the Town of Wawarsing because the state land along the way has not been developed for tourism. In future visits, we envision the Governor riding down into the Rondout Valley to see a crosswalk sign announcing the O&W Rail Trail, with abundant trailhead parking for tourists who might like to visit shops in old downtown Kerhonkson, or go on to Main St. in Accord or the Town of Rochester’s Veterans’ Park. John proceeded to provide details of his vision for the greenway and the Colony Farm, in a virtual walk-through of the region. His narrative took us through:

- At the intersection of Rt. 44-55 & Rt. 209, a roundabout or attractively landscaped island could welcome visitors to the Rondout Valley with signage and installations of native plants. The experience could be dramatic, and people would realize that they had arrived at the gateway to a special place- a unique and engaging destination.
- Turning left, they would see that the NYS DOT lands were similarly welcoming them to the Catskill-Shawangunk Greenway, with old Rt. 209 transformed into a bike path and trailhead with a monument sign, lawns and flowers. On the east side of the highway, DEC lands would be improved into a park-like setting and access to the Rondout Creek for fishing boats and canoes. The path, filled with hikers and cyclists would parallel Rt. 209 on the west side of the highway to Colony Farm, passing scenic farms along the way.
- The bike path would continue to the south of Colony Farm with a crosswalk at Foordmor Rd. to trailhead parking at the corner of Foordmor Rd. & Rt. 209. The “Catskill Shawangunk Greenway Trail along Foordmor Rd. would lead cyclists to the Rondout Creek and the O&W Rail Trail, Long Path and Point Lookout in the Shawangunks.
- A monument sign would welcome folks to Colony Farm.

- The farm lane at Colony Farm would be transformed into the western leg of the “Catskill-Shawangunk Greenway Trail” and pass the hang gliding practice hill visible from the highway.
- Farm tours would be available at the farm. A retail farm stand, possibly including a *Taste of NY Store*, a cafe and ice cream stand would be a destination. Artisan cheeses, ice cream and Greek yogurt could be manufactured, sold and distributed from there.
- Colony Farm, with 1300 linear feet of road frontage on the Shawangunk Mountains Scenic Byway to the public lands of the Catskills would be the central gateway to that mountain range.
- Its trails would join with Lippmann Park and its mountain biking trails and the Vernooey Kill State Forest and Catskill Park beyond.
- On future visits, the Governor would stop at Colony Farm for a tour and a photo op to showcase New York State’s dedication to revitalizing the old Borscht Belt with tourism and agriculture, which together are already a \$1,000,000,000 industry in Ulster County.



Inspired by the vision and long-term opportunities of the region, the participants broke out into the respective Working Groups, to collectively pool their respective experience, knowledge, insight and critical talents. At the end of the session, the Groups came back together to share and review with the full symposium, the materials, thoughts, framework concepts and detailed assessments of what the potential SWOT analysis might look like. Several groups went beyond that scope and included additional suggestions and approaches that might help further the evolution of the topic area and the project.

RESULTS

The results of the Working Group SWOT analysis and suggestion summaries are presented below (Tables 2,3,4,5).

Some of the more immediately significant and actionable items that our project drew from the gathering:

- Strong support continues for the concepts and opportunities that the project represents, across a wide range of stakeholder groups and agencies
- There will be great ecological value in extending the corridor concept to include the entire riparian, floodplain region of the greater Rondout Creek, along its length through both Towns.

- Protection of the areas wetlands and riparian zones will serve multiple, overlapping purposes helping both human protection, flooding, civil and infrastructure, economic, ecological and recreational areas.
- Review of and, if possible, refinement of the Zoning and protection approach within the Town of Wawarsing for the greater Colony Farm area could help a great deal.
- Spatial information for Trails and Recreation resources need updating and revision.
- Aiding support for priority growth areas (e.g. Hamlets), as already mentioned within the comprehensive plans of both towns, as well as conservation development (within identified important biological areas) can ease pressure on development within sensitive and irreplaceable zones where connectivity and resilience can protect the regions long-term ecological integrity and ecosystem services.
- Regional collaborations and partnerships will continue to greatly enhance the effectiveness of both conservation as well as development efforts.
- Agriculture and agro-tourism will likely continue to expand and serve as a foundation for the regional economic health. This and future planning efforts should continue to support and enhance these constituents.

Table 1. CSGC Symposium Attendees

AGENCY	FNAME	LNAME
Project Manager - CSGC	John	Adams
OSI	Bob	Anderberg
TOR Planning Chair	Mike	Baden
Benjamin Center at SUNY New Paltz	Gerald	Benjamin
TOR Supervisor	Carl	Chipman
NH&OSP Consultant	David	Church
RVGA	Deborah	Dewan
TOR Planning Bd. Member	Larry	Dewitt
UC Planning Director	Dennis	Doyle
Hudson Valley Agribusiness Development Corp.	Todd	Erling
Center for Bioregional Living	Andrew	Faust
TOR ECC Chair	Laura	Finestone
NYNJTC	Andy	Garrison
TOW ECC Member	Jorge	Gomes
TOW ECC Member	Jack	Grifo
NYS DEC HREP	Laura	Heady
TOR ECC Member	Rick	Jones
TOR ECC Member	Judith	Karpova
TNC	Cara	Lee
NYNJTC	Sonya	Mason
NYS DEC	Evan	Master
Town of Wawarsing	Paul	McAndrews
NH&OSP Consultant	John	Mickelson
Rondout-Esopus Land Conservancy	Gloria	Mirsky



RVGA\Local farm-to-table advocate	John N.	Novi
Graphic artist	Maria	Reidelbach
NYS DEC	Jeff	Ryder
Catskill Center\CRISP	John	Thompson
RVBA	Richard	Travers
TOW ECC Member	Sarah	Underhill

Table 2. Ag Working Group: SWOT Analysis & Suggestions

Agriculture & Agro-tourism Working Group

Group leader: John Adams - Port Ben Farm			
<u>STRENGTHS</u>	<u>WEAKNESSES</u>	<u>OPPORTUNITIES</u>	<u>THREATS</u>
17,000 acres of farmland in Ag Districts with an increase in farmland across the Rondout Valley	No site control (D.O.C owned) of the immediate property	Mid-Hudson Sustainability Plan supports Ag industries and can continue to.	Need ag-friendly zoning
Long-term farming heritage of the lands and property within the Colony Farm region.	D.O.C. has no plan; property could be split up	Dept of Corrections does not have a plan	Dept. of Corrections: may be unwilling to part with the land
Keeping it going would be a continuity of use		Planning	
		Prime property for cultivation	
		CFA grants may be available	
		Town policy supports Ag uses at Colony Farm	
<u>Suggestions and Items to Address</u>			
Initiate study of prison/farm properties in Hudson Valley	Importance of engaging NY State & other officials		
Related to: historical use of lands, potentials and support for agricultural basis	Importance of getting officials & agencies on your side		
Dairy focus v.s. diversified operation for Colony Farm	Maps show Colony Farm is the critical connecting feature of a regional corridor		
Identify what Rondout Valley needs to succeed	Ag\Biz with zoning along Rt. 209 corridor		
Responsive to changing conditions & markets	Towns bring visibility to prison farm land issues		
Ag\Tourism = foundation of local economy	DEC taking ownership of DOC lands could be supportive of many ecological options; though Ag uses might be limited		

Table 3. Ecology Working Group: SWOT Analysis & Suggestions

Ecology and Corridor Science Working Group

Group leader: Cara Lee - TNC			
STRENGTHS			
	WEAKNESSES	OPPORTUNITIES	THREATS
Lots of protected lands with the potential for linkages			
Large patches of unfragmented forest lands	Some of existing zoning might not encourage connectivity	Nature-based tourism can be a strong economic driver	Incompatible growth of Air B&B industry, limited use for natural or rural areas?
Abundant trail systems - can support connectivity for hikers, etc... Ecological goals largely compatible with agricultural goals	Challenge of balancing development and protection of linkages	Could provide strong local economic stimulus for: biking, hiking, restaurants	diminished connectivity
Floodplain protection & connectivity provides community resilience to flooding		Clustered/Priority growth areas, in Comp plans coincides with potential corridor development	Incompatible development along Rt. 209 corridor
Davis & Kelly Farms		Improve wildlife connectivity as bridges & culverts are replaced, oversize and improve to enhance aquatic connectivity as well as animal movements	Diminished water quality
		Repurposing or restoration of areas with idle business and abandoned structures could ease development in undeveloped areas	
		Protection of riparian zones can serve many purposes, as habitat, water recharge, water filtering, slowing flooding, hiking and recreation	
Suggestions and Items to Address			
"What can Wawarsing & Rochester *do**?"			
Name streams to include more protection	DEC\TNC Culvert study (2012) with camera traps showed animal activity through culverts, show that a corridor is needed	Hunting, fishing communities seen as supporting conservation; wild material foraging could go either way	
Buffer all streams, even if they may be intermittent	Public access points (Colony Farm, Lundy property) help connect important regional features		
Rt. 209 Corridor: find places to preserve connectivity	Promote forest management with private landowners		
Find places that are good for cluster\conservation development (sensitive\important)	Educational opportunities on connectivity and stewardship		
Identify development constraints (floodplains & stream corridors)	Citizen science: e.g. use iNaturalist to collect observations of wildlife use across corridors		
Park of municipally owned parcels	County owned lands (?)		

Table 4 Recreation Working Group: SWOT Analysis & Suggestions

Recreation Working Group			
<u>Group leader: Andy Garrison NYNJTC</u>			
<u>STRENGTHS</u>	<u>WEAKNESSES</u>	<u>OPPORTUNITIES</u>	<u>THREATS</u>
Lots of recreation density & diversity	Trailhead Parking	Lots of public lands	Private sale of Colony Farm\prison lands
Many existing connection between State and local recreation assets	Signage for locating recreation opportunities	Sharing town servicers to regionalize town park systems	Farm land for other than ag\rec.
Colony Farm makes good trail hub	Water access especially for Rondout Creek	Trails\Recreation opportunities for Ellenville, Bicycle opportunities	Tax cap restrictions in allocating local funds for recreation
Agritourism potential & farm stays	Recreation development fees; don't currently exist (?). How to implement	Tie proposals more closely to management plans (Sundown\Vernooy Kill State Forest)	
	Lacking in affordable\desirable local overnight accommodations	Develop signage plan	
<u>Suggestions and Items to Address</u>			
Extend stakeholder groups to include groups such as: mountain bike representatives, hunting, fishing, water sport groups			

Table 5 Economics Working Group: SWOT Analysis & suggestions

Economics & Agro-tourism Working Group

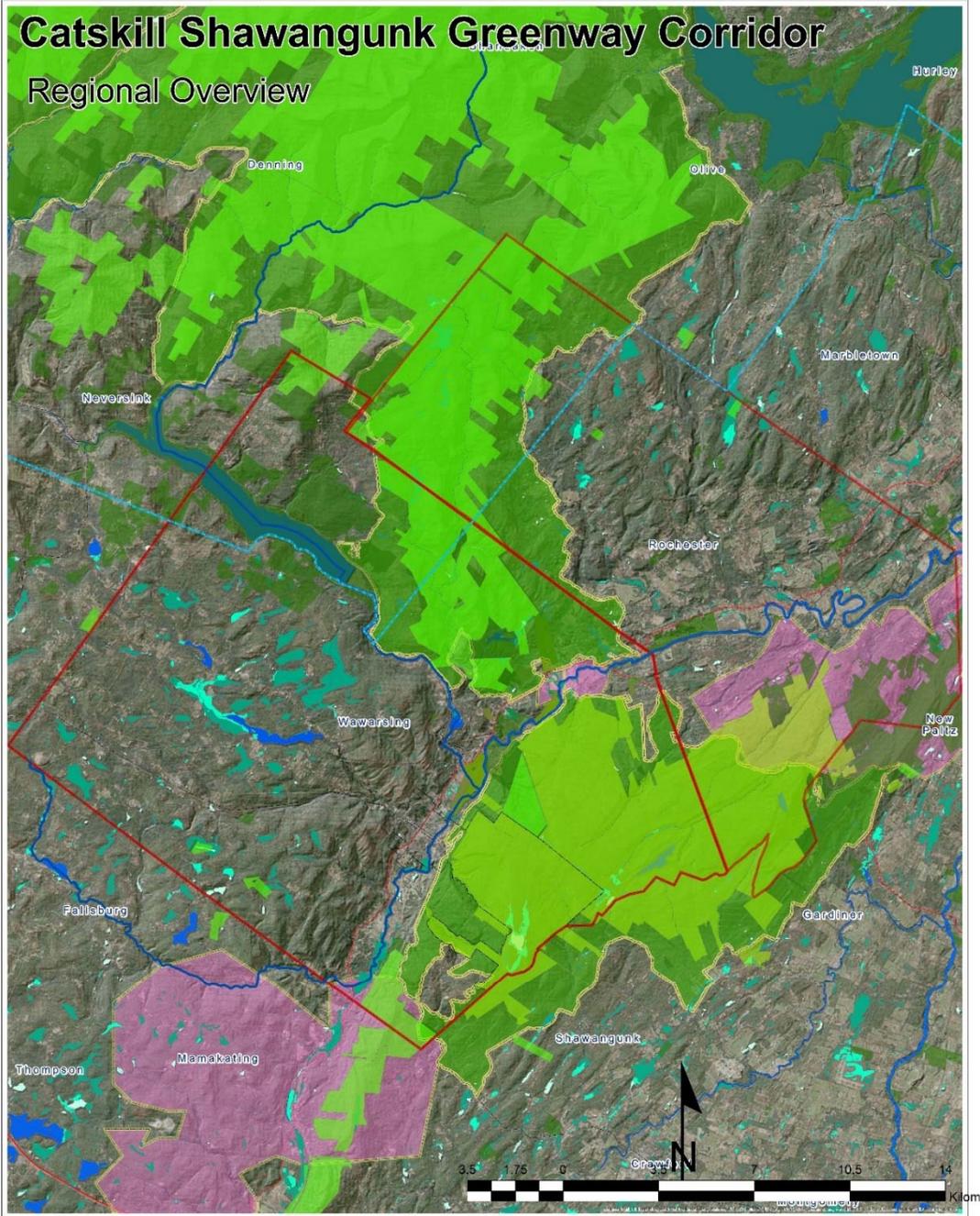
<u>Group leader: Richard Travers - Rondout Valley Business Association</u>			
<u>STRENGTHS</u>	<u>WEAKNESSES</u>	<u>OPPORTUNITIES</u>	<u>THREATS</u>
Cheese Farm (potential for) = great idea!	Rail Trail gaps & crossings	More agro-themed recreation & education	Waste disposal, cleanup for increased tourists
Great fishing in areas (and opportunity to expand) could be real draw	Rt. 209 splits the Long Path and ecological corridor	Strong emphasis on healthy, delicious agriculture	More parking
Rail Trail – Needs to be completed, Ellenville – Kerhonkson, will be important for region	Rt. 209 development now random and unattractive	Rondout Valley branding	Box\stores, strip malls, sprawl along 209
Town Park in 'Village of Kerhonkson – potential would be welcomed	Lack of funds	Draw hoards visiting near-by parks	
Wawarsing Zoning Update to preserve rural character along Rt. 209 is welcomed	Prison bureaucracy, Dept. of Corrections	Popularize routing to avoid New Paltz traffic\ establish Rt. 17 as major gateway	
Great local farms along Rt. 209 corridor & some upland	Wawarsing zoning	Foodies - food tourism	
UC Tourism (ulsteralive.com) very helpful and supportive		Expand bike trails and bike rentals	
		Put-ins, Take-outs access to Rondout Creek with boats, kayaks, canoes	
		Rental of E-Bikes	
		Zoning limitations ?	
<u>Suggestions and Items to Address</u>		Better regional transportation to get to Ellenville	
Envision and work on: overpass\underpass passages for animals to safely cross RT. 209		Better wayfinding throughout valley to point out strengths	
Restaurants – more and better		Bike lane\Mtn. bike trails along Rt. 209	



		Bed & Breakfasts along Shawangunk Side	
		Expansion of Bike & Canoe rentals	

Catskill Shawangunk Greenway Corridor

Regional Overview



Regional Perspective

Legend

- | | | |
|---------------------------------------|-------------------------------|---|
| NHD Areas
1:50,000 scale | NW Wetlands
1:50,000 scale | Matrix Forest Blocks
1:50,000 scale |
| Roadcut Creek
1:50,000 scale | Wetlands
1:50,000 scale | Linkage Zones
1:50,000 scale |
| NYS Park Lands
1:50,000 scale | Wetlands
1:50,000 scale | Forest Block Linkages
1:50,000 scale |
| DEC Lands
1:50,000 scale | Wetlands
1:50,000 scale | |
| All Protected Lands
1:50,000 scale | | |

Hydrology and Wetlands
Protected, Forest and Park Lands
Proposed Regional Corridor Footprint