Town of Wawarsing
Open Space Plan (2018)
Created under the Rochester and Wawarsing Intermunicipal
Open Space/Natural Heritage Planning Project

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TOWN OF WAWARSING NY
OPEN SPACE PLAN  2018

INTRODUCTION

Executive Summary

The Town of Wawarsing, in partnership with the Town of Rochester, has completed an intermunicipal Open Space/Natural Heritage Planning project. This Plan is presented as an amendment and supplement to the previously adopted 2006 Comprehensive Plan as updated 2015. 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 or advisors, and our peers in the neighboring Town of Rochester, to complete this Plan. This work builds on the 2014 Open Space Inventory of the Town. Included in this Plan 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 the elements of the adopted Town Comprehensive Plan.

Project Team and Acknowledgements

This Plan 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.

To enact the joint Plans, a central Project Team was appointed by the Town Boards of Wawarsing and Rochester to direct work, in partnership with the two hired consultants. Members, three from each town, included:

- **Wawarsing**
  - Terry Houck – Wawarsing Town Board member (Supervisor – 2018)
  - Jack Grifo, Town Environmental Conservation Commission & Rezoning Committee member
  - Jorge Gomes, Wawarsing – Wawarsing Parks & Recreation Committee
Rochester:
  o Carl Chipman, Town Supervisor (Mike Baden – Supervisor 2018)
  o Laura Finestone, Town Environmental Conservation Commission, Chair
  o Rick Jones, Town Environmental Conservation Commission & Planning Board member

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

  • Wawarsing
    o Hank Alicandri – Town of Wawarsing Environmental Conservation Commission member
    o John Adams, Town of Wawarsing Environmental Conservation Commission co-chair and Colony Farm project coordinator
    o Sarah Underhill, Town of Wawarsing Environmental Conservation Commission secretary
    o Hank Bartosik, Town of Wawarsing Environmental Conservation Commission member
    o Jamie Deppen - Town of Wawarsing Environmental Conservation Commission member
  
  • Rochester
    o Judith Karpova - Town of Rochester Environmental Conservation Commission member (who also served as alternate to the Project Team)
    o Larry Dewitt – Town of Rochester Planning Board member
    o Angela Doris – Town of Rochester 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 is deeply indebted to a number of people and agencies who contributed their time to the effort and shared their thoughts, ideas and hopes for the region. These included:

  • The Town of Wawarsing Town Board
  • Supervisor Terry Houck
  • Laura Heady, Hudson River Estuary Program, who has supported and championed a collective vision of a healthy and vibrant region for so long and in so many ways.
Background

The Town of Wawarsing, in partnership with the Town of Rochester, has completed an Open Space Plan. This Plan is presented as an amendment and supplement to the previously adopted 2006 Comprehensive Plan as updated 2015. With grant support from the Hudson River Estuary Program of the New York State Department of Environmental Conservation (NYSDEC) the town helped convene a broad, two-town coalition, led by a team of consultants to complete this Plan. This work builds on the 2014 open space inventory (OSI) of the town (Taconic Site Design). This detailed OSI project outlined and identified the major town-wide open space, cultural, historical, recreational and natural heritage systems, resources and places for the town. The reference and resulting geographic map products still holds great value for readers wishing to understand the baseline components of the town, and we refer readers to it for specific thematic and spatial details. To support this open space planning process, the majority of the 2014 open space inventory baseline and component data layers were converted into KML format, by the consultants. This will enable anyone with the Google Earth software to load, query, visualize and better understand the overlapping spatial dimensions of the data, at scales ranging from neighborhoods to watersheds. An extended version of the Project Team was also provided with training in the use of Google Earth, to leverage and facilitate the integration of the KML data into this plan and any future applied conservation efforts.

Included in this Plan is an audit of existing town and State polices and codes relevant to local open space and natural resources as well as an analysis of the related Ulster County open space plan. A comprehensive supporting reference array is included in the form of map graphics; collectively known as the Conservation Open Area Maps, all part of the final Open Space Index). Lastly, a set of detailed recommended actions the town should consider jointly with Rochester and/or alone are presented, which if adopted will serve to protect and enhance the important open spaces 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. Using the best available science-based information, data, public input, and stakeholder-based collaborations, this Plan provides the background and recommendations for Wawarsing to pursue consensus building across municipal lines. Such a regional approach promises to more broadly and effectively protect the important natural and open spaces resources of each town, at a scale and dimension not available to either, singularly. Additionally, when considering important resources such as landscape linkages, corridors, habitats and aquatic resources, and watersheds inter-municipal approaches are needed when resources cross borders. In addition, plans and programs to preserve important cultural and historical features such as robust agricultural systems, recreational rail\bike\ski trails, and hydrological and flood control measures, all benefit greatly from a broad, regional approach.

The purpose of this Plan is to define the special and unique natural, cultural, historical, land and water characteristics that exist within the Town of Wawarsing, and to consider, identify and outline the actions best suited for protecting and enhancing these components, now and for future generations. Like all settings, the Town of Wawarsing is unique and it is ever changing – so open
space must be defined by the current town settings, as illustrated and presented through the 2014 open space inventory material and 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 would include both the generalized and region-wide natural, cultural and physical systems, networks, built and green-infrastructure as well as the detailed places, features, landmarks, and site-specific resources of a given locale. Through this process, we sought to understand any background, history or context that a topic or cause might have previously undergone within the public discourse and to examine its successes and failures. From a vision and strategic perspective, the Town of Wawarsing adopted the conventional and commonly understood term “Open Space Plan” for the focus of this planning project.

Also acknowledged in the process of developing this plan is the fact that nearly 33% of the area of Wawarsing is already in permanently protected status– notably through New York State Park and Forest designations and NYC DEP watershed lands, with significant private conservation lands as well. Additionally, conditions and priorities related to natural heritage and open space protection can and will shift through time. The roles and needs of Town residents remain a priority in defining and confirming what open space actually is and how best to protect or address these resources.

One of the key concepts built into the project, was the primacy and importance of the roles that the Environmental Conservation Commissions (ECCs) play in considering, understanding and weighing the eventual tradeoffs of any proposed conservation or development plan being brought before a town. A mature, educated, dedicated and engaged ECC can bring energy, perspectives, information and applied analytical resources to bear that can be indispensable when considering any proposed development or protection project. In the same way that Town Planning and Zoning Board members can help shape the future trajectory of a Town’s growth pattern, by investing in the body either as an ECC or a Conservation Board, delicate and sometimes complex perspectives can be better understood and effectively reconciled by the Towns. These planning projects were undertaken with the assumption that elevating the respective ECC’s to Conservation Boards would, over time, provide insight, oversight and invaluable information and perspectives that can support the Towns commitments to establish a resilient and sustainable future.
Review of Plans, Policies and Codes – Summary of the Town Audit

This Town Open Space Plan is written to directly support and amplify two key documents. They are the 2006/2015 Town of Wawarsing Comprehensive Plan and the 2007 Ulster County Open Space Plan.

The Town of Wawarsing Comprehensive Plan

The Town of Wawarsing 2006/2015 Comprehensive Plan has a set of essential, consensus-based goals that directly relate to the purpose of this Open Space Plan. Indeed, page 14 and 26 of the Comprehensive Plan recommends creation of an Open Space Plan consistent with the Ulster County Open Space Plan. Pages 19 and 23 also recommend Intermunicipal Action on a range of land-use planning actions, as demonstrated with this new Open Space Plan.

First, the Comprehensive Plan has six (6) lead goals which this new Plan shall be consistent with:

- Preserve the Town’s Character and Appearance – resources specifically referenced include agriculture and wooded areas, natural waterways, scenic areas, a system of open spaces and park and recreation facilities, and historic sites.
- Preserve the Town’s Residential Character – including providing adequate green spaces and recreation areas.
- Preserve Transportation and Circulation.
- Improve the Town’s Economic Base – including preservation and enhancement of the natural beauty and man-made environment.
- Maintain and Improve Important Public Infrastructure – including water supply, groundwater sources of drinking water, and the “Rail Trail”.
- Promote and Seek Intermunicipal Actions to Solve Important Regional Problems and Pursue Important Regional Opportunities – including in the Shawangunk Mountains Scenic Byway

This Open Space Plan also addresses many objectives and policy recommendations stated in the Town Comprehensive Plan under the 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.
This Plan shall be consistent with the “Plan Concept” as depicted in Figure II-1 page 4 of the Comprehensive Plan.

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 and 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 Wawarsing, 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

Policy/Code Audit: General Findings

As preliminary support for this Plan, an independent audit of codes and policies in both the Towns of Wawarsing and Rochester was conducted. The consultants 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, which is retained on file in the Wawarsing Town Hall. This summary emphasizes findings deserving attention in this Plan and shared by both Wawarsing and Rochester.

- Water Quality & Visual / Scenic Resources are 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 an extended 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 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 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 seldom been used. Feedback suggests overall lack of development since the 2008 housing market crash may play a role.
- Active Land Conservation – The County’s senior staff and others have expressed the need and opportunity for the Towns along 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 ECCs in project application reviews. Implement best options for each Town to incorporate smart comments from respective ECCs when considering planning and zoning permit reviews.

Shared Two-town 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 Greenway 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 and groups. These include
- A Catskill Shawangunk Greenway Corridor (CSGC)- helping to maintain ecological connectivity between the important Catskill and Shawangunk ecological regions.
- The extended Colony Farm region; which is important both as a vital, historical agricultural area as well as falling within the critical connection area for the CSGC
- Rondout Creek corridor and shared feeder-stream systems spanning both towns
- Regional O&W rail trail and D&H canal path recreational project
- Lundy property, now protected as NY DEC lands

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 Wawarsing and surrounding regions. A focus has been to seek ways that can include complementary and parallel efforts in the neighboring Town of Rochester, in order to enhance conservation effectiveness through collaborative efforts.

The expanded Project Team met on a monthly basis to direct, forward and advise this work and all meetings were open to the public. Additionally, public information meetings were held in Accord and in Ellenville (October 2016), to both provide updates on the project as well as solicit input, preferences and 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 forty (40) regional stakeholders, professionals, and citizens joined State, County and municipal officials and staff to collectively review and offer input on the Catskill Shawangunk Greenway Corridor and Colony Farm project. This regionally important feature both 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 more important biodiversity regions of the mid-Hudson region. *(See Appendix B for Symposium Summary)*

An extended Project Team group, which included members of both Town’s Planning, Zoning and Town Board members (in addition to the ECC members) were provided several half-day, hands-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 enhance, expand and help establish critical place-based capacity building and analytical skills within both the Project Team and the respective
Environmental Conservation Commission members, respectively. While static map compositions, such as the Conservation Open Area Maps, are an important and integral part of any such inventory and planning process, 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 3D and multi-date image backgrounds to virtually unlimited combinations of any of the hundreds of geospatial layers made available for the project. It also provides opportunities for much quicker and more effective updates, as new layers can be easily added and old ones modified, thereby enhancing the Towns’ effective data holdings.

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 Mountains 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 Mountains 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. The remaining intact
Catskill forested lands (Vernooy Kill State Forest) stretching close to a northern section of the Shawangunks (Minnewaska State Park Preserve), combined 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 by multiple resource agencies as critical to the success of the Catskill-Shawangunk Greenway Corridor as well as for their current and historical agricultural value.

Ranked Components & Outline

Establishing ranked or ordered priorities; or considering which components might be protected, one above another, clarified things greatly and began with a logical and measured approach. For example: as several Team members agreed: the abundant forest lands and green spaces bringing so many to the town, providing residents with such a high quality of life would be critically important to include. Other members suggested that without adequate amounts of clean, available water, life in the Town of Wawarsing would become challenging for humans and nature alike. So, water and places that water is found seemed like 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 would change and shift some, and while all were considered important, the resulting rank order array would hold throughout the rest of the planning process.

This final sorted 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, though individual features, facilities and place-based resources:

1. 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 forest 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

2. 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)

3. 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

4. RECREATIONAL RESOURCES, includes:
   a. Parks
      i. State, county, local (also part of Ecological Resource category)
      ii. Picnic areas, day use areas
         iii. Ice caves as part of A), e,i (above)
   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…
5. 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

6. HISTORIC & CULTURAL 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
            b. Lack of Strip-mall, high-visual impact developments.

7. 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 feature, place, or landmark 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 Kelders Farm, the Nevele, Witches Hole State Forest – 5 votes

• **Rondout Creek and watershed** – 4 votes

• **Iconic wetlands and significant wetland complexes** in each town, including: Cedar Swamp (Wawarsing) and Pacama Vly (Rochester) - 4 votes

• NYS DEC, OPRHP and private **Parks and forest lands** and preserves including: Minnewaska State Park Preserve, Sam’s Point Park 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:
  - Verynooy 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 has 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!!!**
Project perspectives took a few steps back in considering that shared “footprints” (geographic position or landscape niche) might be a simple and 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. In considering similar overlapping patterns with water and aquatic systems we ended up adopting this “place-based” perspective for much of the rest of the project. It helped simplify many details in being able to look at summary and converging spatial patterns and map sets, and, since we were tracking all of the individual layers making up the groups at the same time, we felt comfortable that we’d be able to understand and reconstruct the details making up each grouping as well.

Town-specific Resources – Wawarsing
FOCUS ON WAWARSING RESOURCES - Forests

Of the region-wide systems that contribute immensely to local economies as well as quality of life, none are more important to Wawarsing than the matrix forests and woodlands. From a 2011 satellite-based landcover perspective, forests appeared to cover some 80% of the Town of Wawarsing and the figure is closer to 85% if Forested Wetlands are included.

Figure 2. Satellite land cover break out of Wawarsing (2011 National Land Cover Database)
However, from a realistic, functional perspective, where “core area” is considered, the spatial footprint estimate of functional forest lands is closer to 50% of the Town. Core Area is a commonly used metric of forest productivity and is measured by the distance to the edge of the particular patch. The metric is sensitive to the size, shape, distribution and other aspects of the respective patches and multiple research works have shown that the smaller the patch size, the less able the forests are to deliver services that larger ones 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 habitat 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 ranked. The “top” combined ranking is “Outstanding” followed by: “Very High”, “High”, Medium and “General”. Wawarsing enjoys a clear majority of it’s forest blocks falling in the “Outstanding” combined rank, though the remaining classes possess fairly low amounts of forest cover.

![Figure 4. Town of Wawarsing: Distribution of forest blocks within Wawarsing, according to their assigned ranking by the 2013 “Cores” assessment (Ulster County). 36% of the remaining core area blocks were considered “OUTSTANDING”, another 26% as VERY HIGH. Ranking based on several factors, including: size, biological diversity, water quality and others.](image)

<table>
<thead>
<tr>
<th>Wawarsing Forest % differences based on study type and method</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Forested – Natl. Land Cover Data (NLCD2011) = <strong>79.4 %</strong> (satellite-based image estimate)</td>
</tr>
<tr>
<td>% Forested – CORES (GIC 2013) Ulster County = <strong>49.5 %</strong> (modeled GIS-based estimate)</td>
</tr>
</tbody>
</table>

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 the 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 of systems we’re still working to understand.

Figure 5. Graphic depicting remaining "core" forest blocks within Wawarsing and their Core Ranking. (Note how, according to the model: roads, built areas and developments lead to fragmentation and lessened value and capacity.)
FOCUS ON WAWARSING RESOURCES – Water & Aquatic Habitats

Water, both surface and ground, for both human and habitat uses, also plays an important role in the life of Wawarsing. While the majority (53%) of small, local stream systems in the town are classified by the NYS DEC as “B” (indicates a best usage for swimming and other recreation, and fishing), some 30% are classified as either “AA” (19%) or “A” (11%). These waters are both listed as “best usage for a source of drinking water, swimming and other recreation, and fishing”. While some 17% of streams are listed as “C” (best usage for fishing) there are no “D” quality streams within the Town. The central Rondout Creek receives sufficient levels of pollutants (likely sediment) at some point resulting in its’ waters being classified as “C”, including from the source at the NYCDEP Rondout Reservoir.

According to the NYS DEC: “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.”

- 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 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 excepting intermittent streams)

Maintaining adequate monitoring, field surveying and remediation programs across the Town will go a long way to helping Wawarsing maintain the integrity of this most precious resource. Taking a second look at the 2001 “Watershed Master Plan” for the Rondout system and considering refreshing and potentially enacting some of the protective measures contained within could also provide benefits to the Town. Following up with the NY Rural Water Association to hold an active place in their evaluation program queue could also help provide enormously detailed and useful information for the future integrity of local water quality.
Figure 6. Of the ~185 miles of Wawarsing major streams, NYS DEC classifies: 19% as “AA”, 11% as “A”, 53% as “B” and 17% as “C”
Of the many wetlands, streams, floodplains and surface water systems, across the Town, none are more important than the regions drinking water systems (Figure 7). Maintaining adequate and healthy riparian buffer zones along the wetlands and stream systems will help significantly to maintain both water quality, by filtering sediment and pollutants, as well as water quantity.
Downstream flooding can be greatly alleviated keeping water “on site” allowing it to recharge local aquifers and groundwater systems. One of the issues that that both Wawarsing and Rochester will need to face within coming years, is the co-occurrence of the region’s main groundwater aquifers, that underlie the same area that the Rt. 209 transportation and commercial corridor is found. With known areas of karst (limestone) geological formation, which can form large, connected underground systems, one or two sizable pollutant spills can quickly and lastingly impact extensive groundwater supplies.

Figure 8. Major stream systems of Wawarsing (named and unnamed)
Adopting the convention of providing a 100’ riparian buffer protection zone to named streams (as per the most current USGS National Hydrographic Dataset for New York State) and a 50’ buffer zone for unnamed streams, would provide highly valuable protection for both water quality as well as flood protection patterns. Maintaining adequate monitoring, field surveying and riparian restoration programs by the town can also achieve a lot in ensuring long-term water integrity. The Wawarsing ECC has collaborated with neighboring towns and regional support agencies like Riverkeeper for several years and continuing to do so can both engage active citizen scientists as well as provide valuable support and funding.

FOCUS ON WAWARSING RESOURCES – Agriculture

Agriculture and farming have long formed a foundation of cultural life in and around Wawarsing. The rich soils within the Rondout floodplain as well as many further upslope areas would benefit from protection, should our national economy shift and local food become more and more important. Many of the Prime and Soils of Statewide Importance do currently fall within the County Agricultural Districts, but if sudden development surges erupt, some of the more valuable food-producing areas of the town could be permanently lost or degraded.

Figure 9. Town of Wawarsing - major agricultural resources
FOCUS ON WAWARSING RESOURCES – Terrain, Recreational and Scenic Resources

Recreational resources of the town and region include everything from small, private fishing locations to State parks and forest preserves thousands of acres across. The iconic scenic resources, formed by the dramatic terrain and topography of the area create both a high quality of life for residents as well as a major draw for tourism and recreational visitors. Hundreds of miles of high-quality hiking, skiing and rail-trails abound and there are numerous private recreational facilities, retreats and golf courses. The scenic and historical resources of Wawarsing may be too easy for the town to take for granted. Detailed assessments of each would help to quantify and clarify the precise spatial dimensions and aid establishing specific programs to help ensure that their value is extended well into coming ages.

Figure 10. Recreational and Scenic resources contribute immeasurably to the local economy, character and quality of life in Wawarsing.
FINAL WAWARSING OPEN SPACE COMPONENTS & RECOMMENDED ACTIONS

This chapter presents the final set of open space “components” that the Project Team selected for protection within this current plan initiative as well as the matched and related actions recommended, to effectively and comprehensively protect or conserve them. Recommended actions are based on the background audit research relating and tied to the specific “components” and open space resources selected for action.

Both the Components and matching/paired Recommended Actions were developed with the aid of paired “matrices” (one for each Town) during the course of the Plan. These tools evolved as the plan work did, to help identify and eventually finalize the resources, systems and places that would be included in each Town’s Plan. We include a copy of the final Matrix (below) to serve as a virtual diagram of the layout and summary of what each Town created for their respective policy documents. Copies of the Wawarsing and Rochester matrices will be available within the respective Town Halls, along with copies of the Plans and associated Conservation Open Area maps and Open Space Indices.

The recommended actions are presented with strong consensus and agreement that the Town should act promptly when ready to do so. To facilitate the process, sets of draft codes, resolutions, and/or program language were provided, for ready use by the appropriate Town agencies.

FINAL WAWARSING COMPONENTS

1. Help promote ecological and recreational connectivity, reduce habitat fragmentation and support high-quality biodiversity areas through the creation of a Catskill-Shawangunk Greenway Corridor (Appendix B, Image 2), By-

   • Leveraging the history, content, function and strategic position of the extended Colony Farm region
     o As critical connection point, linking the forest blocks of the Catskills to the north with those of the Shawangunk region to the south
     o Helping to maintain rural character and open space
     o Reduce impacts of development
     o Enhancing as recreational and educational resources
     o Establish as an active farm and agro-tourism resource, in collaboration with current Town of Wawarsing feasibility study
     o Showcasing sustainable and organic farming practices
   • Maintaining and protecting remaining intact natural areas and forest blocks within and adjacent to the proposed Greenway Corridor
     o To maintain ecological connectivity and movement of plants, animals and genes
o Reduce the impacts of development and climate change
o Help maintain rural character and dark skies (minimize light pollution)

2. Maintain and enhance surface and ground water quality and quantity in partnership with Town of Rochester, including:
   - Groundwater aquifers
     o Ensure a safe and ample water supply for future generations
     o Encourage sustainable water use
   - FEMA regulated floodplains
     o Reduce frequency and extent of flood damages
   - Riparian buffer zones on streams
     o Maintain riparian zone size and integrity to enhance and protect ground water (recharge) quantity and quality
     o Maintain healthy ecosystems and aquatic habitats within the areas
     o Reduce the impacts of development
     o Reduce habitat fragmentation by roads, hanging culverts and bottlenecks
   - Sandburg and Rondout Creeks
     o Enhance sustainable tourism, recreational and educational opportunities in and around the systems
     o Maintain and enhance surface and ground water quality and quantity
     o Maintain healthy ecosystems within and adjacent to the systems
     o Reduce impacts of development
   - Lakes and Ponds
     o Maintain healthy ecosystems
     o Reduce impacts of development
   - Wetlands (including CEA candidates – Cedar Swamp)
     o Maintain and enhance surface and ground water quality and quantity
     o Maintain healthy ecosystems
     o Reduce habitat fragmentation by roads, hanging culverts, and bottlenecks
     o Reduce impacts of development
     o Covering the Rondout Creek Reservoir and basins
     o Suggest following through with implementing the plan, as historically commissioned and designed.
3. Promote the Health of the Cedar Swamp
   - Reduce the impacts of development within the contributing watershed of such materials as: road salt, agricultural run-off, logging erosion and septic issues
   - Maintain healthy ecosystems
   - Preserve flood control function, the integrity of forested buffers and the forested matrix between wetlands

4. Protected Agricultural Resources (Colony Farm region, Kelly Farm, NYS Department of Corrections lands, etc…)
   - Maintain use as working agricultural lands
   - Promote prime soils, farmland contiguity/integrity, farm infrastructure
   - Maintain ecological connectivity within, and to ecosystems outside of farm boundaries and reduce habitat fragmentation within farms
   - Maintain rural character and open space
   - Reduce impacts of development
   - Used as an agritourism resource
   - Sustainable and organic farming practices used

5. Maintain Scenic Resources and Ridges (in partnership with Town of Rochester)
   - Ridge Protection
     - Reduce impacts of development
     - Maintain rural character and scenic vistas
     - Enhance sustainable tourism, recreational and educational opportunities
   - Catskill Park Viewshed
     - Identify gateway areas for both Towns (through additional study/fund)
   - Other Scenic Resources
     - Identify Other Scenic Resource areas for both Towns (through additional study/fund)

6. Preserve Lands Adjacent to existing protected lands such as: Sam’s Point, Minnewaska State Park Preserve, Bear Hill Preserve, Lippman Town Park, other NYS DEC lands.
   - Reduce habitat fragmentation
   - Enhance ecological connectivity and contiguity
   - Reduce impacts of development
   - Maintain rural character
   - Enhance sustainable tourism, recreational and educational opportunities
   - Establish ecological buffers to promote more biodiversity
   - Key tasks:
     - Identify and prioritize key contiguous parcels over 25 acres as part of Open Space Index exercise (part of Open Space Plan)
7. Enhance Sustainable Recreational Opportunities
   - Along the O&W Rail-trail\D&H Canal Corridor and the Kerhonkson Town Park in collaboration with the Town of Rochester
   - Promote the Long Path
     - Conduct study to investigate land ownership patterns along Rt. 52 corridor
     - Include within Scenic Resources and Viewshed Analysis study
     - Enhance Port Ben Road to accommodate pedestrian and bike access and traffic
   - Enhance sustainable tourism, recreational and educational opportunities
   - Increase transportation opportunities
   - Identify publicly owned parcels along rail trail corridor that may provide future access\parking\trailheads

8. Create Kelly Farm Ecological Corridor
   - Promote ecological and recreational connectivity and reduce habitat fragmentation across the region
   - Prioritize and identify key parcels over 10 acres in corridor within Open Space Index

9. Maintain and promote regional dark skies programs to lessen light pollution at night
   - Reduce light pollution
   - Minimize impacts of night light on regional ecological processes
   - Maintain rural character
   - Enhance appreciation of value of brightness of stars and view of night sky
   - Identify major light sources (urban\commercial)

10. Maintain and Enhance Biodiversity and habitat integrity of rare\threatened species through the establishment of Critical Environmental Areas (CEA)
    - Develop proposal to obtain grant funding to have detailed, site-base natural resources and biodiversity study conducted

11. Promote Culvert Remediation to Re-establish Hydrological Connectivity Across the Region
• Apply to NYSDEC Hudson River Estuary Program for study\implementation grant funding

Proposed definition for “rural character”: “Rural Character” includes a predominant visual landscape of open spaces, mountains, forests, and farms and the activities which preserve such features. It balances environmental, forest, and farm protection with rural development and recreational opportunities.
RECOMMENDED ACTIONS - SUMMARY

Priority Recommended Actions are presented below specific to the Town of Wawarsing. 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 Rochester, note is made wherever an action recommended for Wawarsing has also been recommended to Rochester. 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.

A. Adopt Open Space Plan as an Amendment to the Town’s Comprehensive Plan.

As a complement and supplement to the 2015 Town Comprehensive Plan, 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 (page 10) under the Plan Goal: Preserve the Town’s Character, Appearance and Natural Resources. This action is also recommended for the Town of Rochester.

B. 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 Rochester.

C. Accept and Approve the Conservation Open Area Map & Inventory as 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 46. This action is also recommended for the Town of Rochester.

D. 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 opt 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, but also to 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 Rochester.

E. Support the 2017 recommendations of the Town Zoning Update Committee (ZUC) specific to ridge protection, viewshed protection, conservation subdivisions, zoning standards on dark skies / steep slopes / wetlands and streams, and on a new agricultural development zoning district.

Prior to and simultaneous to this preparation of this Plan, the Town ZUC had been designated by the Town Board and has prepared and recommended as series of zoning updates, several of which directly support and complement this Open Space Plan.

F. Designation of the Catskill-Shawangunk Greenway Corridor as a Critical Environmental Area (CEA) See Appendix B, Image 2.

The Town shares with the Town of Rochester 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 supported in the Town Comprehensive Plan (see page 15 and Figure III-7). This is also recommended for the Town of Rochester.

G. Designation of the Cedar Swamp as a Critical Environmental Area (CEA). See Figure Appendix B, Image 9.

This mapped unique habitat and wetlands complex includes the Cedar Swamp, Beer Kill and Cape Pond basins and is part of the Great Rondout Wetlands 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 including potentially 400 year-old tree specimens. A Resolution, with supporting justification and map, for Designation of the Cedar Swamp as a Critical Environmental Area (CEA) as per 6 CRR-NY 617.14(g) (also known as SEQRA).
H. Designation of the Kelly Farm Ecological Corridor as a Critical Environmental Area (CEA). See Appendix B, Image 11
This mapped area provides unique opportunities as a scenic gateway to the Town from the south, as a sustainable farming area, and as an ecological corridor and connection between the significant protected lands of the Shawangunk Ridge to the east and the mix of undeveloped agricultural lands and forests to the west. The Nature Conservancy’s Resilient Land Mapping tool identifies this area as having high value connectedness. A Resolution, with supporting justification and map, for Designation of the Kelly Farm Corridor as a Critical Environmental Area (CEA) as per 6 CRR-NY 617.14(g) (also known as SEQRA).

I. 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 adoption 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 dedication 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, pages 12-14, 16. The establishment of a dedicated parkland or payment in lieu of process can also support recreation component of the infrastructure and facilities planning recommended on page 22. This action is also recommended for the Town of Rochester.

J. 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 advisory Committee 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 8 where guidelines and standards are recommended for landscaping and lighting, and page 11 where establishment of riparian buffers is recommended. This action is also recommended for the Town of Rochester.

K. 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.

This action is supported in the Comprehensive Plan, page 26 relevant to the establishment of riparian buffers and related site plan review standards. This action is also recommended for the Town of Rochester.

L. 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 Goals for Preserving the Town’s Character, Appearance and Natural Resources (pages 10-16) and to Promote and Seek Intermunicipal Actions (page 23). This action is also recommended for the Town of Rochester.

M. Adopt a Town Right to Farm Law.

Article 25AA of New York State Agriculture and Markets Law includes establishment of right to farm rights in New York State and also authorizes Towns to do the same. Right to farm laws set as policy the encouragement and promotion of farmland and farm business in agricultural production and protect such uses from nuisance complaints. They also can define a local process for resolving any disputes that might arise about farm practices and farm operations and adjoining or nearby land uses.

This action is supported in the Comprehensive Plan under Plan Goals for Preserving the Town’s Character, Appearance and Natural Resources relevant to agriculture (Pages 10-16, 14) and Improving the Town’s Economic Base (page 6). This action is also recommended for the Town of Rochester.

N. 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 leaders gain regular advice as needed on agricultural issues including appointment of an agricultural member on the Town Planning Board to
establish an Agricultural Advisory Committee. The Town can also look to collaborate with the established Rondout Growers Association. A proposed Resolution has been provided designating for the appointment of a Town Agricultural Advisory representative to be assigned to the Town Board.

This action is supported in the Comprehensive Plan under Plan Goals for Preserving the Town’s Character, Appearance and Natural Resources relevant to agriculture (Pages 10-16, 14) and Improving the Town’s Economic Base (page 6). This action is also recommended for the Town of Rochester.

O. Expand the Town efforts regarding source water and groundwater aquifer protection for drinking water, including application for outside Technical Assistance as well as zoning provisions for such protection.

With the existence of the approved Comprehensive Plan along with this Open Space Plan, the Town is well positioned to take advantage of technical assistance opportunities to support priority recommended actions. In particular, a lead recommendation is to apply to the New York Rural Water Association for a technical assistance grant for a source water protection plan. A sample aquifer protection overlay zoning code is provided for reference as an action the Town could take.

Additionally, the Town can implement the recommendations of the 2001 Watershed Master Plan related to the portions of the New York City drinking watershed which overlap into the Town.

P. Expand the Town efforts for outside Grant Assistance Applications – including in support of Agriculture.

With the existence of the approved Comprehensive Plan along with this Open Space Plan, the Town is well positioned to take advantage of grant opportunities to support priority recommended actions.

It is recommended to advance applications to New York State, with willing property owners and in partnership with Ulster County, for the purchase of development rights (PDR) as specifically recommended in the 2015 Town Comprehensive Plan (see Page 10). Also, application to the NYS Department of Agriculture and Markets for 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 importance but lack of use of TDR now enabled in Town code, and the prospect of a competitive application to New York State. This action would best be presented as an inter-municipal effort with the Town of Rochester.

Q. Fully Evaluate Town Scenic and Biodiversity Resources.

Scenic and biodiversity resources remain important to many Town constituents and
leaders, but 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.

R. Reorganize or invigorate a Rondout Creek Watershed Association or Council.

The Rondout Creek and Valley is a prominent, shared resource of the highest value. There have been prior efforts to organize attention to this resource that is shared across several municipal boundaries. Recommended is to review options and to revisit or refresh collaboration on shared Rondout Creek Watershed priorities with both municipal, County, and non-governmental agency partners.

This action is supported in the Town Comprehensive Plan, Plan Goals to Promote and Seek Intermunicipal Actions … (Page 23) and to Preserve the Town’s Character, Appearance and Natural Resources, notably related to natural waterways including the Rondout Creek and tributaries (pages 10 & 14) and public access to these same features (page 15).
The first several months of our project were 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. They are presented here with links to those protection tools (as Tabs) and the range of Conservation Open Area (COAM) sets (named, 100', unnamed 50') as historically commissioned and designed. The Action called for in Comprehensive Plan and access points are noted on the maps for the key areas to promote ecological and recreational connectivity and reduce habitat fragmentation with TOW and the region to promote ecological and recreational connectivity and reduce habitat fragmentation with TOW and the region.

### Actionable Aspects

- **Riparian buffers on streams**
- **Lakes and Ponds**
- **Rondout and Sandburg Creek**
- **FEMA Floodplains**
- **Aquifer**

### Regional Goals

- **Model after TOR**

### Recommended Actions

- **Designate Cedar Swamp**
- **Promote proposed Agriculture Feasibility Grants for Local Right to Farm Law (TOW_RA1)**
- **Reduce habitat fragmentation by roads, hanging culverts, and bottlenecks**
- **Maintain healthy ecosystems**
- **Maintain and enhance surface and ground water quality and quantity**
- **Enhance sustainable tourism, recreational and educational opportunities**
- **Reduce flood damage**
- **Ensure a safe water supply for future generations**

This matrix portrays the breakout and details of the various system-wide natural heritage and open space components. They are presented here with links to those protection tools (as Tabs) as well as the range of Conservation Open Area (COAM) sets (named, 100', unnamed 50') as historically commissioned and designed Action called for in Comprehensive Plan and access points are noted on the maps for the key areas to promote ecological and recreational connectivity and reduce habitat fragmentation with TOW and the region.
**PLAN GOAL: Protect Agricultural resources (Colony Farm, Kelly Farm, DOCC, etc)**

- Maintain use as working agricultural
- Promote prime soils, farmland contiguity/integrity, farm infrastructure
- Maintain ecological connectivity within, and to ecosystems outside of farm boundary
- Maintain rural character and open space

**ACTIONABLE ASPECTS:**
- Reduce impacts of development
- Used as an agritourism resource
- Sustainable and organic farming practices used

**TOW COAM_AgResources**

**PLAN GOAL: Maintain Scenic Resources / Ridges with TOR**

- Actionable Aspect: Ridge Protection
- Reduce impacts of development
- Maintain rural character/vistas
- Enhance sustainable tourism, recreational and educational opportunities

**TOW_COAM_TerrainScenicRec**

**PLAN GOAL: Preserve land adjacent to Sams Point, MSP, DEC lands, Bear Hill, Lippman Park**

- Reduce habitat fragmentation
- Enhance ecological connectivity and contiguity
- Reduce impacts of development
- Maintain rural character
- Enhance sustainable tourism, recreational and educational opportunities
- Establish ecological buffers to promote more biodiversity

**TOW_OSI_MATRIX**

**Key Tasks**

- Identify gateway areas for both towns, and locate on Official Map/COAM Partnership
- Add guidelines for Planning/Zoning Boards to utilize and refer to COAM

**PLAN GOAL: Enhance sustainable recreational opportunities along the O&W Rail-trail / D&H Canal Corridor/Kerhonkson Town Park with TOR**

- Enhance sustainable tourism, recreational and educational opportunities
- Increase transportation opportunities

**TOW_COAM_ECOHABITAT**

**Key Tasks**

- Conduct study
- Conduct study
- Conduct study

**Proposed definitions for "rural character":**

- **Rural Character** includes a predominant visual landscape of open spaces, forests, rivers, creeks, and farms and the activities which preserve such features. In balance, environmental, historic, and farm promotion with rural development and recreational opportunities.
Model Right to Farm Law
For Town of Wawarsing

Be it enacted by the Town Board of the Town of Wawarsing as follows:

Section 1. Legislative Intent and Purpose

The Town Board recognizes farming is an essential enterprise and an important industry which enhances the economic base, natural environment and quality of life in the Town of Wawarsing. The Town Board further declares that it shall be the policy of this Town to encourage agriculture and foster understanding by all residents of the necessary day to day operations involved in farming so as to encourage cooperation with those practices.

It is the general purpose and intent of this law to maintain and preserve the rural traditions and character of the Town, to permit the continuation of agricultural practices, to protect the existence and operation of farms, to encourage the initiation and expansion of farms and agri-businesses, and to promote new ways to resolve disputes concerning agricultural practices and farm operations. In order to maintain a viable farming economy in the Town of Wawarsing, it is necessary to limit the circumstances under which farming may be deemed to be nuisance and to allow agricultural practices inherent to and necessary for the business of farming to proceed and be undertaken free of unreasonable and unwarranted interference or restriction.

Section 2. Definitions

1. "Farmland" shall mean land used in agricultural production, as defined in subdivision four of section 301 of Article 25AA of the State Agriculture and Markets Law.

2. "Farmer" shall mean any person, organization, entity, association, partnership, limited liability company, or corporation engaged in the business of agriculture, whether for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock.

3. "Agricultural products" shall mean those products as defined in section 301(2) of Article 25AA of the State Agriculture and Markets Law, including but not limited to:

   a. Field crops, including corn, wheat, rye, barley, hay, potatoes and dry beans.
   b. Fruits, including apples, peaches, grapes, cherries and berries.
   c. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
   d. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.
   e. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, llamas, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, milk and milk products, eggs, furs, and poultry products.
   f. Maple sap and sugar products.
g. Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.

h. Aquaculture products, including fish, fish products, water plants and shellfish.

i. Short rotation woody crops raised for bioenergy.

j. Production and sale of woodland products, including but not limited to logs, lumber, posts and firewood.

4. "Agricultural practices" shall mean those practices necessary for the on-farm production, preparation and marketing of agricultural commodities. Examples of such practices include, but are not limited to, operation of farm equipment, proper use of agricultural chemicals and other crop production methods, and construction and use of farm structures.

5. "Farm operation" shall be defined in section 301 (11) in the State Agriculture and Markets Law.

Section 3. Right-to-Farm Declaration

Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in agricultural practices within this Town at all times and all such locations as are reasonably necessary to conduct the business of agriculture. For any agricultural practice, in determining the reasonableness of the time, place, and methodology of such practice, due weight and consideration shall be given to both traditional customs and procedures in the farming industry as well as to advances resulting from increased knowledge, research and improved technologies.

Agricultural practices conducted on farmland shall not be found to be a public or private nuisance if such agricultural practices are:

1. Reasonable and necessary to the particular farm or farm operation,
2. Conducted in a manner which is not negligent or reckless,
3. Conducted in conformity with generally accepted and sound agricultural practices,
4. Conducted in conformity with all local state, and federal laws and regulations,
5. Conducted in a manner which does not constitute a threat to public health and safety or cause injury to health or safety of any person, and
6. Conducted in a manner which does not reasonably obstruct the free passage or use of navigable waters or public roadways.

Nothing in this local law shall be construed to prohibit an aggrieved party from recovering from damages for bodily injury or wrongful death due to a failure to follow sound agricultural practice, as outlined in this section.

Additionally, the Town excludes from this Right to Farm Declaration practices associated with certain land uses on lands not within an Agricultural District as created and administered consistent with New York State Agriculture and Markets Law 25AA, Agricultural Districts. These certain land uses include concentrated animal feeding operations (CAFOs), slaughterhouses, and agricultural businesses when they do not have a significant connection to products growth or produced on the same lands as the business is located.

Section 4. Notification of Real Estate Buyers
In order to promote harmony between farmers and their neighbors, the Town requires land holders and/or their agents and assigns to comply with Section 310 of Article 25-AA of the State Agriculture and Markets Law and provide notice to prospective purchasers and occupants as follows: "It is the policy of this state and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors." This notice shall be provided to prospective purchase of property within an agricultural district or on property with boundaries within 500 feet of a farm operation located in an agricultural district.

A copy of this notice shall be included by the seller or seller's agent as an addendum to the purchase and sale contract at the time an offer to purchase is made.

Section 5. Resolution of Disputes

1. Should any controversy arise regarding any inconveniences or discomfort occasioned by agricultural operations which cannot be settled by direct negotiation between the parties involved, either party may submit the controversy to a dispute resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action and prior to a request for a determination by the Commission or Agriculture and Markets about whether the practice in question is sound pursuant to Section 308 of Article 25AA of the State Agriculture and Markets Law.

2. Any controversy between the parties shall be submitted to the committee within thirty (30) days of the last date of occurrence of the particular activity giving rise to the controversy or the date the party became aware of the occurrence.

3. The committee shall be composed of three (3) members from the Town selected by the Town Board, as the need arises, including one representative from the farm community, one person from Town government and one person mutually agreed upon by both parties involved in the dispute.

4. The effectiveness of the committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.

5. The controversy shall be presented to the committee by written request of one of the parties within the time limits specified. Therefore after, the committee may investigate the facts of the controversy but must, within twenty-five (25) days, hold a meeting at a mutually agreed place and time to consider the merits of the matter and within five (5) days of the meeting render a written decision to the parties. At the time of the meeting, both parties shall have an opportunity to present what each consider to be pertinent facts. No party bringing a complaint to the committee for settlement or resolution may be represented by counsel unless the opposing party is also represented by counsel. The time limits provided in this subsection for action by the committee may be extended upon the written stipulation of all parties in the dispute.

6. Any reasonable costs associated with the function of the committee process shall be borne by the participants.

Section 6. Severability Clause

If any part of this local law is for any reason held to be unconstitutional or invalid, such decision shall not affect the remainder of this Local Law. The Town hereby declares that it would have passed this local law and each section and subsection thereof, irrespective of the fact that any one or more of these sections, subsections, sentences, clauses or phrases may be declared unconstitutional or invalid.
Section 7. Precedence

This Local Law and its provisions are in addition to all other applicable laws, rules and regulations.

Section 8. Effective Date

This Local Law shall be effective immediately upon filing with the New York State Secretary of State.

TOW_RA2_Critical Environmental Area (CEA) Catskill Shawangunk Greenway Corridor

Town of Wawarsing with Town of Rochester, Ulster County, New York
Draft Critical Environmental Area
Catskill–Shawangunk Greenway Corridor

Purpose
In order to assist in the protection of important intermunicipal community resources, the Towns of Wawarsing and Rochester have designated the Catskill – Shawangunk Greenway Corridor 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 Corridor including Colony Farm 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 as a ecological corridor and connection between the significant protected lands of the Shawangunk Ridge to the east and the Catskill Park and Forest Preserve to the west. Indeed, 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 corridor 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 heart of the CEA and critical connection region includes the full and unique Agricultural Development Area depicted and defined within the Town of Wawarsing’s adopted 2015 Comprehensive Plan. This area is also anchored by historic Colony Farm, a former NYS Department of Corrections working farm that offers significant potential for continued agriculture, recreational-tourism, and agri-tourism uses. Such potential has been formally recognized by the Town, and through supportive financing from both NYS and USDA-NRCS. Agriculture has long been an important enterprise in Wawarsing. 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 northern 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 Corridor 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 tail. 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 corridor. 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 Corridor 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 the shared value importance of the setting of this CEA and to support further initiative to protect the potential for an unfragmented ecological connection to the east and west while supporting and enhancing complementary recreational and agricultural activities.

The Nature Conservancy’s Resilient Land Mapping tool identifies the region of the Greenway Corridor as having above average and far above average connectedness. It also identifies the region as having above average and far above average capacity to maintain species diversity and ecological function as the climate changes.

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

This Greenway Corridor offers a unique and substantial ecological and biodiversity connection between the Catskill Park and Forest Preserve and the Shawangunk Ridge and Mountain complex – both of which offer large, contiguous, unfragmented forest habitat. The Corridor CEA will serve as an important connection for our region’s native species, as well as species migrating due to the effects of climate change. The CEA covers a spectrum of altitudes so that the corridor will remain viable to different species with different temperature range and habitat requirements as the climate changes. The area is sensitive to poorly planned development that blocks wildlife movement and fragments and degrades habitat.
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 Corridor. In the context of inevitable road corridor development, there remains the important need to address the sensitivity between these trends and needs.
OPEN SPACE INDEX

RESOLUTION # ______________

TO ADOPT THE TOWN OF WAWARSING OPEN SPACE CONSERVATION OPEN AREAS MAP SERIES (COAM) TOGETHER WITH THE OPEN SPACE INVENTORY, AS AN OPEN SPACE INDEX (OSI), TO SERVE AS AN AMENDMENT TO THE TOWN COMPREHENSIVE PLAN

Motion by: ______________

Seconded by: ______________

WHEREAS the Town of Wawarsing special open space committee appointed by the Town Board along with the Town Environmental Conservation Commission has prepared and presented to the Town Board a series of Conservation Area Maps (Map) together with a prioritized inventory of open space lands

WHEREAS 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 were developed as part of the officially sponsored intermunicipal project, completed in 2017, therefore be it,

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

RESOLVED that the Open Space Plan is adopted as an amendment to the Town Comprehensive Plan, and

ADOPTED: VOTE – AYES: ____ NAYS: _____

Source: NYS Adirondack Park Agency, Sample Town/Village Resolution To Adopt Mandatory Training For Planning Board And Zoning Board Of Appeal Members. This document may be modified as needed. It was compiled from documents provided from several NYS Towns and incorporates Adirondack Park Agency references for local governments in the Park. A MS Word format document is available by request (518-891-4050) or available on the APA website: www.apa.state.ny.us
TOW_RA4_Aquifer Protection Overlay (APO)

Town of Wawarsing, NY

Proposed: Aquifer Protection Overlay (APO)

Section XX.

(1) Purpose. The Town of ___________________ finds that protection of groundwater is essential to promoting the health, safety and welfare of the Town. The purpose of the APO overlay district is to protect, preserve, and maintain the quality and quantity of groundwater resources which the Town depends upon for its present and future public, community and private water supply serving current and future wells. As used herein, the “present and future” means any wells or springs currently in use for water supply purposed, any potential wellhead areas that have been studied or could be planned for future use.

(2) District Boundaries. The APO district consists of aquifers and aquifer recharge as shown on the map dated xxxxx 2017. This map is an approximate delineation of the boundaries of such aquifers and aquifer recharge areas. Any landowner may challenge the inclusion of land in the APO district by presenting expert evidence provided by a qualified professional based upon on-site investigation. Where such evidence shows, to the Planning Board’s satisfaction, that the subject property need not be included to meet the purpose stated above, the regulations of this district shall not apply. The Planning Board shall also make a recommendation to the Town Board to adjust the relevant boundaries of the district map.

(3) Aquifer protection standards. No approval of an application for a special use permit, site plan, subdivision, rezoning or variance shall be granted for land lying within the APO district unless the applicable board reviewing such application finds, based upon available information, analysis, and evidence, that the action proposed in the application will not:

a. Reduce the availability of groundwater to private and/or existing or potential public water supply wells;

b. Degrade the quality of groundwater through the introduction of sewage wastes, stormwater runoff, liquid chemicals, petroleum products, dissolved metals, or other regulated substances;

c. Increase the long-term risk of groundwater contamination through the siting, establishment, or expansion of uses which store, transport, or use significant quantities of material which is potentially harmful to groundwater quality;

d. Increase the long-term risk of groundwater contamination through the introduction of relatively small quantities of hazardous or other regulated substances which, over a period of time, may accumulate in groundwater;

e. Increase the rise of groundwater contamination through the removal of soil, sand, stone, or gravel which provides a protective mantle or cover for groundwater or which is part of the geologic deposits making up the aquifer;

f. Reduce to less than five (5) feet the separation between the surface of the ground and the seasonal high water table; and,
g. Result in more than 35% impervious surface coverage of any single parcel of land. This subsection g shall not apply to parcel of land that already have 35% or greater impervious surface coverage, provided that no increase in impervious surface coverage shall be permitted on such parcels. The Town encourages owners of such parcels to reduce impervious surface coverage where practical.

(4) Use Restrictions. The following use restriction and requirements shall apply to all land in the APO district. These use restrictions are not intended to supersede the New York State Agriculture and Markets Law or the New York State Environmental Conservation Law governing acceptable agricultural practices.

a. Disposal Wells. The installation or use of disposal wells is prohibited.

b. Infiltration Basins. The installation or use of stormwater runoff infiltration basins is prohibited.

c. Snow Disposal. The stockpiling or dumping of snow which has been transported to the property in the district is prohibited.

d. Animal Wastes. Any storage combination in excess of 10 cubic year total is prohibited. Manure piles shall not be permitted unless provision has been made to prevent seepage into groundwater. Suitable storage facilities is recommended when it is not possible to spread or dispense wastes on a daily or recurring and frequent basis.

e. Industrial Sludge and Toxic Chemicals. No toxic or hazardous substances, defied as such by the United State Environmental Protection Agency or the New York State Department of Environmental Conservation, shall be sored except under permit from one of those agencies.

f. Wastewater Lagoons and Pits. Use of wastewater lagoons and pits for temporary storage of wastewater is prohibited.

g. Fertilizer, Pesticide and Herbicide Storage. All bulk storage of fertilizer, pesticide or herbicide for agricultural or commercial use must be within a completely enclosed building or structure which will prevent any seepage or runoff.

h. Storage Tanks and Pipelines. This subsection is intended to be consistent with the requirements of the New York State Petroleum Bulk Storage regulations found in 6 NYCRR 612, 613, and 614. The installation, construction, placement, or replacement of new or existing underground storage tanks or containers of eleven hundred (1,100) gallons or less for petroleum projects including their pipelines, or underground storage tanks, pipelines, or containers for any other toxic chemical is prohibited in connection with all use including home fuel storage tanks for residential purposes. All above ground storage tanks of eleven hundred (1,100) gallons or less for petroleum, pipelines, and transfer areas shall to the maximum extent feasible be designed to minimize the risk of groundwater contamination by incorporating backup containment, impervious surfaces, catchment, and other design features.

i. Salt and Coal Stockpiles. The storage of salt or coal is prohibited except in a completely enclosed building or structure which will prevent any seepage or runoff.
TOWN_RA5_Streams and Wetlands

**Town of Wawarsing**

**Proposed new stream and wetland setback regulations**

**Consistent with Town Rezoning Committee Proposal previously submitted**

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 and the fauna that depend on the water for sustenance. As such, 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 or storage of machinery, 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 and the impacts of erosion and sedimentation will not be compromised.

E. In order to maintain the functional value of the buffer areas stated in Section D, existing vegetation and trees may be removed or disturbed, subject to approval by the local government, only to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, filtering non-point source pollution from runoff, and providing adequate shade for aquatic life.

F. 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.
Town of Wawarsing

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 ________________.” [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

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.

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 stormwater 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.

APPENDIX A: 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.


[2] The term perennial stream could be replaced by the term “named” stream as per the 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: \( R \times K \times LS / T < 8 \), 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
TOW_RA6_Critical Environmental Area (CEA) Cedar Swamp

Town of Wawarsing, Ulster County, New York
Draft Critical Environmental Area
Cedar Swamp

Purpose
In order to assist in the protection of important community resources, the Town of Wawarsing has designated the Cedar Swamp 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 Cedar Swamp 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.  
The Cedar Swamp 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 Cedar Swamp 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 Cedar Swamp is a forested wetland area totaling over 800 acres. Including the watershed lands feeding the wetlands, Ulster Heights Lake, and Cape Pond and inlets to this Pond including the upper reach of the Beer Kill, this CEA is generally located south of the Rondout Reservoir and covers lands both north and south of Ulster Heights Road. Considered the largest wetland of its kind in the Catskill region, the area contains trees over 400 years old as well as numerous, documented unique and rare communities and species. The NYS Natural Heritage Program has recognized this as a state unique and important conservation area.

(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 and rare 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; and, 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.
Town of Wawarsing

Proposed Amendment to Zoning

Appointment of agricultural member to Planning Board

Pursuant to New York State Town Law § 271.11, the Town finds that it is beneficial to provide for the option of appointing a agricultural member to the Planning Board. As such, Chapter 112: Zoning, Article VIII, Administration and Enforcement, § 112-64 Planning Board is amended to include a new subsection H as follows:

H. Appointment of agricultural member. Notwithstanding any provision of this chapter or of any general, special or local law or ordinance, the Town Board may, if an agricultural district created pursuant to section three hundred three of article twenty-five-AA of the agriculture and markets law exists wholly or partly within the boundaries of such town, include on the planning board one or more members each of whom derives ten thousand dollars or more annual gross income from agricultural pursuits in said town. As used in this subdivision, the term “agricultural pursuits” means the production of crops, livestock and livestock products, aquacultural products, and woodland products as defined in section three hundred one of the agriculture and markets law.
TOW_RA8_Scenic Design Standards

Town of Wawarsing
Proposed Amendment to Zoning
Adoption of Non-binding Design Standards
for Shawangunk Mountains Scenic Byway

§ xxx Shawangunk Mountains Scenic Byway Design Guidelines. By reference Scenic Resources in the Shawangunk Mountain Region, A Guide for Planning Boards (Shawangunk Mountains Regional Partnership) should be used by the Planning Board and by any applicant to the Planning Board as non-binding guidelines. These guidelines are particularly relevant to use of lands or property along, contiguous to, or within view of New York State Routes 209, 52 (Town of Wawarsing only) and 44/55 which together are road corridor elements of the designated Shawangunk Mountains Scenic Byway. Such Guidelines are available in Town Hall, or at http://mtnscenicbyway.org/pdf-guides.

http://mtnscenicbyway.org/pdf-guides
TOW_RA9_Conervation Board

Town of Wawarsing
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 man is 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 Chairman 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. SECTION 4. OFFICERS, MEETINGS AND COMMUNITIES: A. Officers 1. Chairman: The Town Board shall appoint the Chairman. 2. Vice-Chairman: the Chairman 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: The Chairman shall preside at all meetings of the Board. He shall be ex-officio member of any committee of the Board. He is responsible for the review of all reports and studies coming from the work of the committees. He 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 must approve any news releases sent to the news media. The Chairman will approve all authorized expenditures of the Board within the appropriations set in the Board budget approved by the Town Board. The Chairman will make out budget and financial statements on a quarterly basis to all members of the Board. The Chairman 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 Chairman will be ex-officio chairman 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 Chairman or, in his absence, the 1st Vice-Chairman; or in the absence of the 1st Vice-Chairman, the 2nd Vice-Chairman; or the majority of the Board might designate. The secretary may assist the Chairman 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 Chairman, the Vice-Chairman, or a majority of the members deem necessary. Special meetings of the Board may be called at any time at the pleasure of the Chairman 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 Chairman 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 Chairman, or in the absence of the Chairman, the 1st Vice-Chairman, or in the absence of the Chairman and the 1st Vice-Chairman, the 2nd Vice-Chairman.

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.
Town of Wawarsing

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.
In order to assist in the protection of important community resources, the Town of Wawarsing has designated the Kelly Farm Ecological Corridor 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 Kelly Farm Ecological Corridor 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 as an ecological corridor and connection between the significant protected lands of the Shawangunk Ridge to the east and a mix of undeveloped agricultural lands and forest lands to the west. On a larger scale, it also provides unique opportunities as part of a major Catskill ecological corridor running south along the west side of Route 209 from the Catskill-Shawangunk Greenway Corridor / Colony Farm to Port Jervis into the Upper Delaware River Scenic and Recreational Area, the Delaware River riparian corridor, and the Pocono Mountains.

The Nature Conservancy’s Resilient Land Mapping tool identifies the region of the Kelly Farm Ecological corridor as having slightly above average and above average connectedness. It also identifies the region as having above average and far above average capacity to maintain species diversity and ecological function as the climate changes.
The Kelly Farm portion of Route 209 can also be considered as the southern gateway into the Town of Wawarsing and Ulster County making the rural and scenic character of this area important to conserve. There are spectacular views of this area from scenic overlooks on Route 52 which the state has recently upgraded to improve aesthetics and traffic safety.

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

The CEA area includes the historic Kelly Farm agricultural lands. Agriculture has long been an important enterprise in Wawarsing and this area includes some of the significant prime and statewide significant agricultural soils found in the Town. In order to keep agriculture stable and promote regional food security, a critical mass in production and ancillary enterprises must be maintained.

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

The Kelly Farm CEA area will serve as an important corridor for our region’s native species, as well as species migrating due to the effects of climate change. The CEA covers a spectrum of altitudes so that the corridor will remain viable to different species with different temperature range and habitat requirements as the climate changes. The area is sensitive to poorly planned development that blocks wildlife movement and fragments and degrades habitat.
Town of 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 B: Conservation Open Area and Critical Environmental Area Map Set

Image 1. Conservation Open Area Map - Agricultural Resources
Image 2. Conservation Open Area Map Set: Critical Environmental Area (CEA) - Catskill-Shawangunk Greenway Corridor
Image 3. Conservation Open Area Map Set: Water Resources – Regional Groundwater Aquifers
Figure 6. Conservation Open Area Map Set: Water Resources - Regional Water Quality Classification (streams)
Image 7. Conservation Open Area Map Set: Water Resources - Regional Water Quality Classification (streams) with known trout streams
Image 9. Conservation Open Area Map Set: Critical Environmental Area (CEA) Cedar Swamp
Image 10. Conservation Open Area Map Set: Terrain, Scenic & Recreational Resources
Image 11. Conservation Open Area Map Set: Critical Environmental Area (CEA) – Kelly Farm Ecological Corridor
Image 12. Conservation Open Area Map Set: Ecological Resources & Terrestrial Habitat
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 Vernooy 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

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>FNAME</th>
<th>LNAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager - CSGC</td>
<td>John</td>
<td>Adams</td>
</tr>
<tr>
<td>OSI</td>
<td>Bob</td>
<td>Anderberg</td>
</tr>
<tr>
<td>TOR Planning Chair</td>
<td>Mike</td>
<td>Baden</td>
</tr>
<tr>
<td>Benjamin Center at SUNY New Paltz</td>
<td>Gerald</td>
<td>Benjamin</td>
</tr>
<tr>
<td>TOR Supervisor</td>
<td>Carl</td>
<td>Chipman</td>
</tr>
<tr>
<td>NH&amp;OSP Consultant</td>
<td>David</td>
<td>Church</td>
</tr>
<tr>
<td>RVA</td>
<td>Deborah</td>
<td>Dewan</td>
</tr>
<tr>
<td>TOR Planning Bd. Member</td>
<td>Larry</td>
<td>Dewitt</td>
</tr>
<tr>
<td>UC Planning Director</td>
<td>Dennis</td>
<td>Doyle</td>
</tr>
<tr>
<td>Hudson Valley Agribusiness Development Corp.</td>
<td>Todd</td>
<td>Erling</td>
</tr>
<tr>
<td>Center for Bioregional Living</td>
<td>Andrew</td>
<td>Faust</td>
</tr>
<tr>
<td>TOR ECC Chair</td>
<td>Laura</td>
<td>Finestone</td>
</tr>
<tr>
<td>NYNJTC</td>
<td>Andy</td>
<td>Garrison</td>
</tr>
<tr>
<td>TOW ECC Member</td>
<td>Jorge</td>
<td>Gomes</td>
</tr>
<tr>
<td>TOW ECC Member</td>
<td>Jack</td>
<td>Grifo</td>
</tr>
<tr>
<td>NYS DEC HREP</td>
<td>Laura</td>
<td>Heady</td>
</tr>
<tr>
<td>TOR ECC Member</td>
<td>Rick</td>
<td>Jones</td>
</tr>
<tr>
<td>TOR ECC Member</td>
<td>Judith</td>
<td>Karpova</td>
</tr>
<tr>
<td>TNC</td>
<td>Cara</td>
<td>Lee</td>
</tr>
<tr>
<td>NYNJTC</td>
<td>Sonya</td>
<td>Mason</td>
</tr>
<tr>
<td>Organization</td>
<td>First Name</td>
<td>Last Name</td>
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<td>-----------------------------------------</td>
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<tr>
<td>NYS DEC</td>
<td>Evan</td>
<td>Master</td>
</tr>
<tr>
<td>Town of Wawarsing</td>
<td>Paul</td>
<td>McAndrews</td>
</tr>
<tr>
<td>NH&amp;OSP Consultant</td>
<td>John</td>
<td>Mickelson</td>
</tr>
<tr>
<td>Rondout-Esopus Land Conservancy</td>
<td>Gloria</td>
<td>Mirsky</td>
</tr>
<tr>
<td>RVA\Local farm-to-table advocate</td>
<td>John N.</td>
<td>Novi</td>
</tr>
<tr>
<td>Graphic artist</td>
<td>Maria</td>
<td>Reidelbach</td>
</tr>
<tr>
<td>NYS DEC</td>
<td>Jeff</td>
<td>Ryder</td>
</tr>
<tr>
<td>Catskill Center\CRISP</td>
<td>John</td>
<td>Thompson</td>
</tr>
<tr>
<td>RVBA</td>
<td>Richard</td>
<td>Travers</td>
</tr>
<tr>
<td>TOW ECC Member</td>
<td>Sarah</td>
<td>Underhill</td>
</tr>
</tbody>
</table>
### Agriculture & Agro-tourism Working Group

**Group leader:** John Adams - Port Ben Farm

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>17,000 acres of farmland in Ag Districts with an increase in farmland across the Rondout Valley</td>
<td>No site control (D.O.C owned) of the immediate property</td>
<td>Mid-Hudson Sustainability Plan supports Ag industries and can continue to.</td>
<td>Need ag-friendly zoning</td>
</tr>
<tr>
<td>Long-term farming heritage of the lands and property within the Colony Farm region.</td>
<td>D.O.C. has no plan; property could be split up</td>
<td>Dept of Corrections does not have a plan</td>
<td>Dept. of Corrections: may be unwilling to part with the land</td>
</tr>
<tr>
<td>Keeping it going would be a continuity of use</td>
<td></td>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prime property for cultivation</td>
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<tr>
<td></td>
<td></td>
<td>CFA grants may be available</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Town policy supports Ag uses at Colony Farm</td>
<td></td>
</tr>
</tbody>
</table>

**Suggestions and Items to Address**

- 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>
<thead>
<tr>
<th><strong>Ecology and Corridor Science Working Group</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group leader:</strong> Cara Lee - TNC</td>
<td></td>
</tr>
<tr>
<td><strong>STRENGTHS</strong></td>
<td><strong>WEAKNESSES</strong></td>
</tr>
<tr>
<td>Lots of protected lands with the potential for linkages</td>
<td>Some of existing zoning might not encourage connectivity</td>
</tr>
<tr>
<td>Large patches of unfragmented forest lands</td>
<td></td>
</tr>
<tr>
<td>Abundant trail systems - can support connectivity for hikers, etc…</td>
<td>Challenge of balancing development and protection of linkages</td>
</tr>
<tr>
<td>Ecological goals largely compatible with agricultural goals</td>
<td></td>
</tr>
<tr>
<td>Floodplain protection &amp; connectivity provides community resilience to flooding</td>
<td></td>
</tr>
<tr>
<td>Davis &amp; Kelly Farms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestions and Items to Address</strong></td>
<td></td>
</tr>
<tr>
<td>“What can Wawarsing &amp; Rochester <em>do</em>**?</td>
<td></td>
</tr>
<tr>
<td>Name streams to include more protection</td>
<td>DEC\TNC Culvert study (2012) with camera traps showed animal activity through culverts, show that a corridor is needed</td>
</tr>
<tr>
<td>Buffer all streams, even if they may be intermittent</td>
<td>Public access points (Colony Farm, Lundy property) help connect important regional features</td>
</tr>
<tr>
<td>Rt. 209 Corridor: find places to preserve connectivity</td>
<td>Promote forest management with private landowners</td>
</tr>
<tr>
<td>Find places that are good for cluster\conservation development (sensitive/important)</td>
<td>Educational opportunities on connectivity and stewardship</td>
</tr>
<tr>
<td>Identify development constraints (floodplains &amp; stream corridors)</td>
<td>Citizen science: e.g. use iNaturalist to collect observations of wildlife use across corridors</td>
</tr>
<tr>
<td>Park of municipally owned parcels</td>
<td>County owned lands (?)</td>
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</table>
## Table 4 Recreation Working Group: SWOT Analysis & Suggestions

<table>
<thead>
<tr>
<th>Recreation Working Group</th>
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<tbody>
<tr>
<td><strong>Group leader:</strong> Andy Garrison NNYJTC</td>
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</table>

### STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Lots of recreation density &amp; diversity</td>
<td>Trailhead Parking</td>
<td>Lots of public lands</td>
<td>Private sale of Colony Farm/prison lands</td>
</tr>
<tr>
<td>Many existing connection between State and local recreation assets</td>
<td>Signage for locating recreation opportunities</td>
<td>Sharing town servicers to regionalize town park systems</td>
<td>Farm land for other than ag/rec.</td>
</tr>
<tr>
<td>Colony Farm makes good trail hub</td>
<td>Water access especially for Rondout Creek</td>
<td>Trails/Recreation opportunities for Ellenville, Bicycle opportunities</td>
<td>Tax cap restrictions in allocating local funds for recreation</td>
</tr>
<tr>
<td>Agritourism potential &amp; farm stays</td>
<td>Recreation development fees; don't currently exist (?). How to implement</td>
<td>Tie proposals more closely to management plans (Sundown\Vernooy Kill State Forest)</td>
<td></td>
</tr>
<tr>
<td>Lacking in affordable/desirable local overnight accommodations</td>
<td>Develop signage plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Suggestions and Items to Address

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

<table>
<thead>
<tr>
<th>Group leader: Richard Travers - Rondout Valley Business Association</th>
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<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese Farm (potential for) = great idea!</td>
<td>Rail Trail gaps &amp; crossings</td>
<td>More agro-themed recreation &amp; education</td>
<td>Waste disposal, cleanup for increased tourists</td>
</tr>
<tr>
<td>Great fishing in areas (and opportunity to expand) could be real draw</td>
<td>Rt. 209 splits the Long Path and ecological corridor</td>
<td>Strong emphasis on healthy, delicious agriculture</td>
<td>More parking</td>
</tr>
<tr>
<td>Rail Trail – Needs to be completed, Ellenville – Kerhonkson, will be important for region</td>
<td>Rt. 209 development now random and unattractive</td>
<td>Rondout Valley branding</td>
<td>Box\stores, strip malls, sprawl along 209</td>
</tr>
<tr>
<td>Town Park in 'Village of Kerhonkson – potential would be welcomed</td>
<td>Lack of funds</td>
<td>Draw hoards visiting near-by parks</td>
<td></td>
</tr>
<tr>
<td>Wawarsing Zoning Update to preserve rural character along Rt. 209 is welcomed</td>
<td>Prison bureaucracy, Dept. of Corrections</td>
<td>Popularize routing to avoid New Paltz traffic\establish Rt. 17 as major gateway</td>
<td></td>
</tr>
<tr>
<td>Great local farms along Rt. 209 corridor &amp; some upland</td>
<td>Wawarsing zoning</td>
<td>Foodies - food tourism</td>
<td></td>
</tr>
<tr>
<td>UC Tourism (ulsteralive.com) very helpful and supportive</td>
<td></td>
<td>Expand bike trails and bike rentals</td>
<td></td>
</tr>
</tbody>
</table>

### Suggestions and Items to Address

- Envision and work on: overpass\underpass passages for animals to safely cross RT. 209
- Restaurants – **more and better**
- Better regional transportation to get to Ellenville
- Better wayfinding throughout valley to point out strengths
- Bike lane\Mtn. bike trails along Rt. 209
<table>
<thead>
<tr>
<th></th>
<th>Bed &amp; Breakfasts along Shawangunk Side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expansion of Bike &amp; Canoe rentals</td>
</tr>
</tbody>
</table>