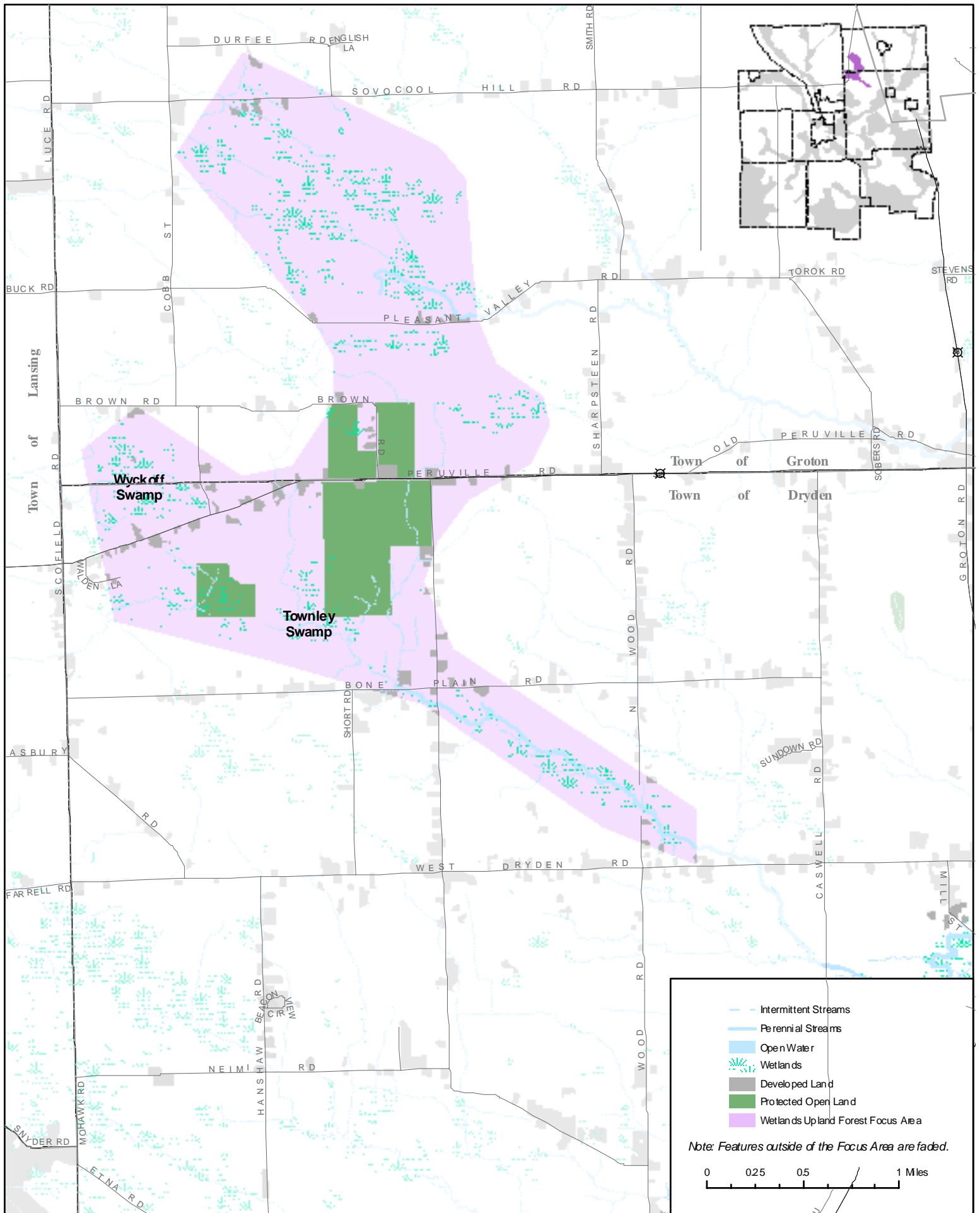


Wetlands Upland Forest





Description of Focus Area

The Wetlands Upland Forest Focus Area lies within the Towns of Dryden and Groton and the headwaters of four watersheds (Owasco Inlet, Salmon Creek, Fall Creek, and East Cayuga Lakeshore). This small Focus Area is comprised of two distinct landscapes – large pristine wetlands in the low-lying areas, and rich mesic forests in the adjacent upland areas.

Major Benefits

With key portions of the headwaters of four different watersheds, the Wetlands Upland Forest Focus Area affects water quality across a broad geographic area. Surface water originating here contributes to several public drinking water sources, and numerous wetlands found here provide flood retention and pollutant filtering benefits that extend well beyond the Focus Area boundaries. The wetlands and forests in this area provide a variety of habitats for many different plant and animal species to thrive. Other important benefits include education and research on the lands owned by Cornell University and scenic views throughout the Focus Area.

Water Quality

The Wetlands Upland Forest Focus Area includes portions of the headwaters for four different watersheds and thus has the potential to impact an incredibly wide area for its size. All these watersheds contain streams that are either themselves public drinking water supplies or have outfalls into Cayuga or Owasco Lake, which are public drinking water supplies. As a result, land management practices and water quality in this Focus Area have the potential to directly impact water quality throughout the northeastern portion of the County, and beyond. Wetlands play a particularly important role in protecting water quality in these key headwaters areas by filtering, absorbing, and gradually releasing water.



Wetlands play a particularly important role in protecting water quality in this key headwaters area, and provide important habitat.

Critical Habitat and Biodiversity

Townley Swamp and Wyckoff Swamp provide important habitat for unique plant and animal communities, including a diversity of birds. Both swamps are large and pristine, and, along with the myriad smaller wetlands and ponds scattered throughout the area, are important components of the biological corridor that runs through the Focus Area, connecting Fall Creek to Salmon Creek. Residential development in this area, along with the nutrients from associated septic systems, have the potential to negatively impact the ability of this area to support its current diversity of species.

Protection and Management Issues

Water Quality

- n Pollutants in the waters (such as sediment, pesticides and herbicides, fecal contamination and other inputs) can negatively impact human health and increase the costs of treating drinking water. Vegetated buffers along permanent and intermittently flowing watercourses, wetlands, and associated floodplains help filter pollutants from water, and are critical for sustaining water quality. Although specific buffer needs vary from site to site based on topography, vegetation, soils, and land uses, in general a 100-foot vegetated buffer is the minimum needed to provide nutrient and pollutant removal. A wider buffer width may be required for bank stabilization or additional water filtration, depending on local site characteristics.
- n Excavation of gravel from streams, and other in-stream management activities, can cause erosion and change the natural course of the stream.
- n When areas are developed, precipitation and runoff flowing across developed areas accumulate pollutants, such as sediment and oil and gas products.
- n As water runs off the landscape and into streams below, it accumulates pollutants (such as sediment, bacteria, pesticides, and herbicides) that can negatively impact water quality. Shallow soils in some portions of this Focus Area reduce the ability of the landscape to absorb rainwater, and therefore increase the potential for runoff. Land management practices designed to minimize the amount of pollutants entering runoff are particularly critical in these areas.
- n Water flowing through roadside ditches eventually enters a stream and/or a lake. Proper management of roads and roadside ditches is important in limiting the amount of pollution and sediment that enters streams and lakes and the spread of invasive species.

Critical Habitat and Biodiversity

- n Although specific habitat size requirements vary by habitat type and from species to species, contiguous open space of at least 135 acres is generally needed to support diversity and abundance in plant and

animal communities, and to enhance species survival by providing habitat for larger populations of animals and allowing for species movement and migration.

- n Wildlife corridors promote genetic diversity among species and help counter the negative effects of habitat fragmentation by connecting otherwise isolated patches of suitable habitat.
- n The introduction of non-native species, pesticides, herbicides, and fertilizer can inhibit growth of native plants critical to biodiversity.
- n Beavers physically alter habitats by cutting down trees, building dams, digging canals and building lodges. This activity affects the distribution of many other plant and animal species. In some situations beavers are desirable, whereas in other circumstances their presence may be detrimental to habitat management goals. As a result, areas inhabited by beaver may require active beaver management. The nature of the management depends on the particular conditions and resource priorities of the site.
- n Wetlands and ponds are sometimes filled or degraded, which has a negative impact on the ability of those systems to support wetland and pond species. Large wetlands (>5 acres) provide critical habitat, and smaller wetlands serve as “stepping stones” to provide habitat connections. Wetlands and pond areas that are isolated and small in size cannot support certain wetland and pond species of greatest conservation need. Many wetland bird communities depend on their local habitat, as well as the wetlands within a two-mile radius.
- n Species that live in and around wetlands and ponds require clean water to thrive. Poorly managed wetlands, ponds, and upland areas have a negative impact on water quality and reduce the viability of these habitat areas.
- n Illegal collection of seeds, plants, and animals can have a negative impact on plant and animal populations that are critical to biodiversity in this region.
- n Some pond species, such as snapping turtles, are vulnerable to high mortality on roads during the nesting season.

Priority Actions for Wetlands Upland Forest

The Natural Features Focus Area Project has identified 35 priority action items to be initiated over the next five years. The action items have been established to bolster and coordinate the region's many existing conservation efforts. They are not intended to replace or replicate those efforts. The action items reflect the broad range of unique uses in the identified Focus Areas. Below is a list of actions that are particularly relevant to the Wetlands Upland Forest Focus Area. For a complete list of actions and designation of principal agencies that will lead implementation efforts please see the *Implementation of Priority Actions* section of the complete county-wide plan.

Water Quality

- è Encourage semi-pervious paving, bioretention, and infiltration practices.
- è Provide education about and access to hydrologically sensitive area data through the Natural Resources Inventory (NRI) on-line interactive mapping tool.
- è Educate highway departments about the impacts of roadside ditching on water quality and water quantity as well as on the spread of invasive species, and provide highway departments with information about appropriate best management practices to address this issue.

Critical Habitat and Biodiversity

- è Work with municipalities to protect wetlands and vernal pools smaller than 12.4 acres in size and not regulated by the NYS Department of Environmental Conservation.
- è Map small wetlands and vernal pools using data on hydrologically sensitive areas.

Invasive Species and Native Plants

- è Inventory and identify high priority areas for the control of invasive species.
- è Establish a coordinated approach for distributing invasive species information to landowners throughout identified high priority areas.
- è Develop and distribute a list of popular landscaping plants and appropriate native species substitutions.
- è Conduct a comprehensive “natural lawns and gardens” campaign to limit the use of pesticides, herbicides, and fertilizer, and increase the use of native plants in landscaping.

- è Provide a wide selection of native plants as part of annual plant sale, and eliminate all invasive species from the sale.

Rural Landowner Outreach and Education

- è Enhance existing rural landowner education efforts with an emphasis on sustainable forestry practices, impacts of ATV use, invasive species, wetlands management, grassland habitat, and targeted outreach to new rural landowners.
- è Identify and coordinate the dissemination of information about grants available to private landowners for habitat management and enhancement.

Technical Assistance for Municipalities

- è Provide technical assistance to municipalities working on projects that implement the recommendations of the plan.
- è Provide training and information to municipalities on the full-range of conservation tools available, the Plan and the Natural Resources Inventory, flood plain management strategies, and vernal pool and small wetland habitat conservation.

Coordination

- è Convene a group of partners (Tompkins County Conservation Partners) involved in local conservation efforts twice a year. Meetings will facilitate regular information sharing as well as coordinated educational efforts such as periodic field trips for municipal officials to key sites in the Focus Areas.

Land Protection

- è Protect priority protection areas through partnerships with area agencies and municipalities by purchasing land and acquiring conservation easements.
- è Educate landowners about tax incentives available for conservation efforts through various formats including town/village newsletters with special emphasis on landowners within the open space system.
- è Develop or identify a model conservation zoning ordinance for use in key portions of the Focus Areas.
- è Engage key land protection stakeholders to assess the financial resources available for land conservation and work to establish additional funding as needed.