

Natural Features

PRINCIPLE

Natural Features that define the community should be preserved and enhanced.

The Need for Preservation

Tompkins County is known for its resplendent landscapes and natural havens. Both local residents and visitors enjoy and appreciate Cayuga Lake; the many gorges, streams, and waterfalls; our rolling farmland, fields, and wooded hillsides. In fact, we are living in a landscape that became more diverse during the twentieth century with the return of forests in the southern parts of the county and the preservation of significant tracts of our most valued natural areas as parks, state forests, and preserves. In contrast, in the latter part of the twentieth century sprawling development started to adversely impact these natural features.

Increasing rates of land development threaten to fragment the landscapes we cherish, calling into question the

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consequences of land use policies that do not include a long-term goal of sustainability. For example: Will our existing natural areas be degraded by encroaching development? Will the return of native wildlife such as river otters, wild turkeys, beavers, and bald eagles continue? Will the scenic views we take for granted as part of our quality of life be marred by inappropriate development?

If we wish to continue to enjoy these features of our community, we need to take action to protect them. Conservation efforts should be determined through public education, development of protection plans, and public/private partnerships. Sustaining profitable and functioning landscapes will be key to protecting these areas over the long-term.

Our Natural Bounty

A recent study of tourism in Tompkins County, conducted for the Convention and Visitor's Bureau, found that visitors ranked beautiful scenery and waterfalls, and outdoor activities among the features of Tompkins County they liked the most. In addition to a vast number of streams, gorges, waterfalls, lakes, forests, and wetlands, the county also has four State Parks, nearly 39,000 acres of protected natural areas, and miles of hiking and multi-use trails.

Central to Tompkins County's beauty and character is Cayuga Lake. The Cayuga Lake valley's spectacular topography, with steep slopes to the east and west and a relatively

flat drainage basin to the north, was carved by periods of glacial advance and recession. With a length of greater than 38 miles, an average width of almost two miles, and over 95 miles of shoreline, Cayuga Lake dominates the county. It is

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the longest and widest of the Finger Lakes, and among the deepest, with a maximum depth of 435 feet. Water flows into the lake from a network of more than 140 streams and takes more than ten years to slowly make its way northward, where Cayuga Lake drains into the Oswego River Basin.

Although Cayuga Lake provides a variety of recreational opportunities for Tompkins County residents and visitors, lake access is somewhat limited. Boating facilities at the southern end of the lake are available at Allen H. Treman State Marina and Taughannock Falls State Park on the west side, and at Noah's Marina and Myers Point Municipal Park on the east side. Swimming is limited to Taughannock Falls State Park and Myers Point, although prior to the 1960s there was also a swimming beach at Stewart Park in the City of Ithaca. Hiking and biking amenities along the lake have improved dramatically in recent years, in particular with the development of the Waterfront Trail in the City of Ithaca.

Wetlands provide flood protection and abatement, erosion and sedimentation control, water quality maintenance, groundwater recharging, surface flows maintenance, fish and wildlife habitats, nutrient production and cycling, recreation, open space, education and scientific research, and biological diversity. There are nearly 20,000 acres of wetlands in Tompkins County identified in the National Wetlands Inventory. The New York State Department of Environmental Conservation has regulatory authority for more than 5,000 of these acres.

Tompkins County is crisscrossed with creeks and streams, from major waterways to seasonal rivulets whose music fills our woods. Major creeks include Salmon Creek, Cayuga Inlet, Six Mile Creek, Cascadilla Creek, Fall Creek, Owasco Inlet, Owego Creek, Catatonk Creek, Cayuta Creek, and Taughannock Creek. There are also more than 40 additional named perennial streams, as well as numerous intermittent streams. These stream corridors provide important habitat benefits, promote biodiversity, and connect pockets of open space. Stream corridors also provide important water quality functions, such as filtration and erosion control.

The Unique Natural Areas (UNAs) of Tompkins County are sites with outstanding environmental qualities deserving of special attention for preservation and protection. The 192 designated Unique Natural Areas are found in gorges, woods, swamps, fens, cliffs, and along streams. They are located throughout the county and range in size from less than an acre to more than 4,000 acres.

Greenways provide connecting links between large tracts of existing protected open space. They are intended to meet the needs of wildlife (both plants and animals) for habitat dispersal, breeding, and migration. The 90 square miles of greenways, identified by the Tompkins County Greenway Coalition in 1995, form the basic components of a biological corridor system.

The National Audubon Society, with the support of the American Bird Conservancy, initiated the New York Important Bird Areas (IBAs) program in the Spring of 1996. They identified areas based on the concentration of birds, the presence of endangered, threatened or special concern bird species, the type of habitat, and the use of the site for avian research. Four of the 127 identified Important Bird Areas in New York State are located in Tompkins County.

Tompkins County has nearly 200 miles of hiking and multi-use trails. This includes the Finger Lakes Trail, park trails, trails in state forests, Cornell trails, and trails on nature preserves. In addition, the 1995 Greenways Plan identifies a number of corridors in Tompkins County with potential for future trail development. The future trail corridors were identified based on the location of abandoned railroad beds, the location of population centers, and the potential for connecting existing trails and natural areas.

Existing Protected Open Space

Protected open space includes natural areas such as state lands, Finger Lakes Land Trust preserves and conservation easements, Nature Conservancy preserves, and county reforestry lands, as well as other types of open space such as municipal parks, county airport clear zones, and cemeteries.

Lands already protected by ownership provide an important framework for future protection efforts.

Many natural resources – such as wetlands, greenways, birds areas, and areas of unique plant and animal species – are located in these protected areas. In addition, many of these

are open to the public and provide important recreation opportunities.

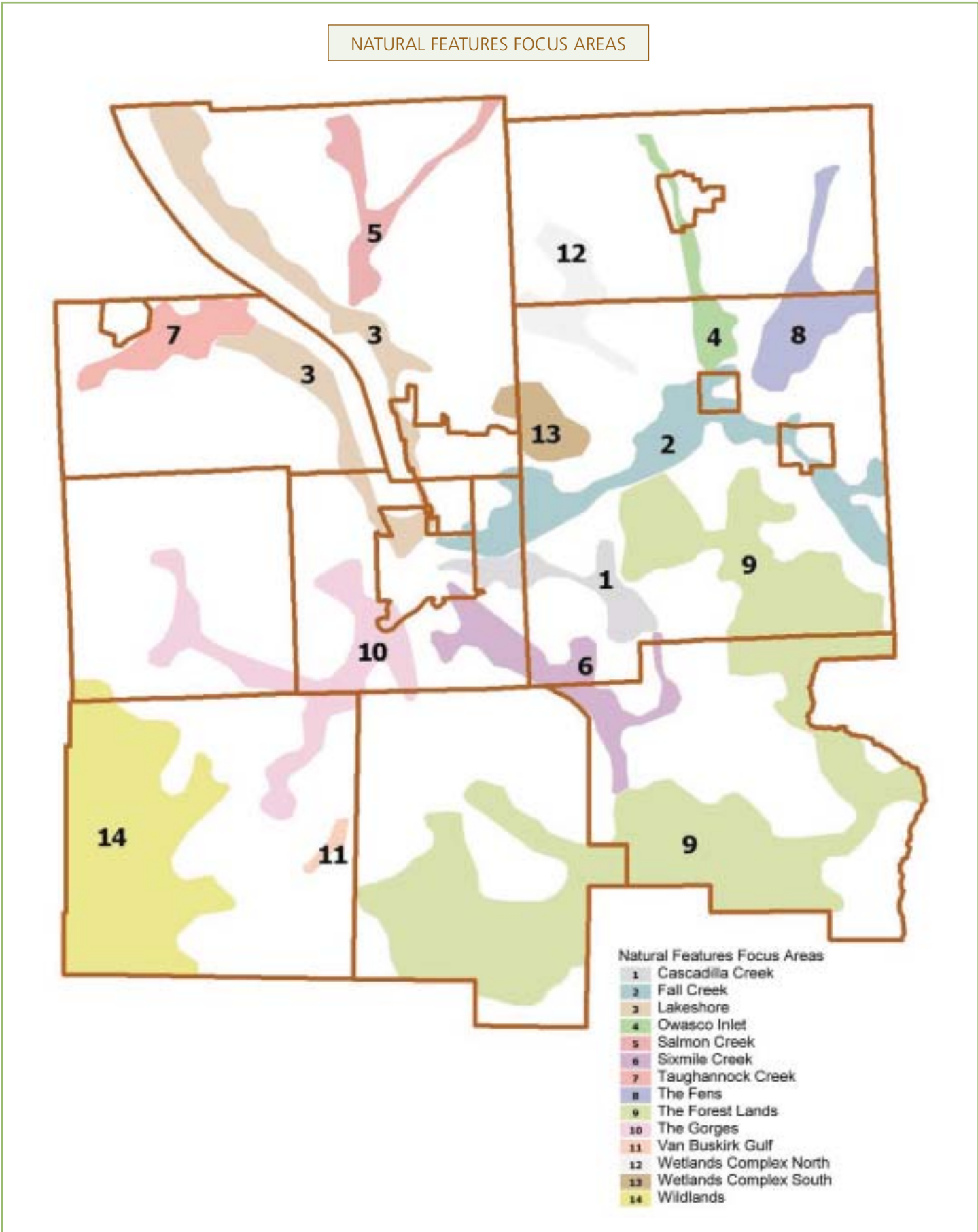
Lands already protected by ownership provide an important framework for future protection efforts. Building on these areas will help create a “critical mass” of interconnected open space that will promote habitat connections, sustain agriculture, protect water quality, and ensure the health of wildlife populations for generations to come.

PROTECTED NATURAL AREAS	
Owner	Acres
New York State	27,808
Cornell University	6,820
Finger Lakes Land Trust	2,609
City of Ithaca	1,160
Tompkins County	654
The Nature Conservancy	393
Private/other	75
Other local municipalities	30
TOTAL	39,548

Natural Features Focus Areas

Good land stewardship, and the strong connection between landowners and their lands, provides a foundation for long-term preservation of the natural resources we value. Individual efforts, however, cannot fully address the need for community-wide open space preservation. Successfully preserving open space and its various functions requires a coordinated effort that spans across property lines and municipal boundaries. Identifying areas in the county to focus our efforts will help achieve this goal.

Tompkins County has been proactive in identifying and mapping many of the natural resources in the county. Based on the location and concentration of those resources, such as Unique Natural Areas, wetlands, stream corridors, public drinking water resources, important bird areas, and hiking and multi-use trails and trail corridors, the County Planning Department has identified 14 distinct and significant natural features “Focus Areas,” ranging in size from 400 to 40,000 acres.



Sources: Tompkins County Planning Department

NATURAL FEATURES FOCUS AREAS

Taughannock Creek	3,000 acres	About 25 percent is located in Taughannock Falls State Park. Resources include Taughannock Creek, a biological corridor, small wetlands, UNAs*, a portion of an IBA**, a portion of the Black Diamond Trail, and waterfront access.
Lakeshore	9,000 acres	This area surrounds the most significant natural focal point of Tompkins County. Resources include a large biological corridor, an IBA, numerous stream corridors, and important wetland clusters, waterfront access, and trail corridors.
The Gorges	8,000 acres	Three spectacular gorges include hanging cliffs with substantial waterfalls. Thirty percent of the area is protected by ownership, largely by inclusion in Buttermilk Falls State Park and Treman State Park. Resources include UNAs, wetlands, a biological corridor, a municipal well, a portion of the Finger Lakes Trail, and trails in the state parks.
The Wildlands	6,000 acres	There is very little development in this area, particularly outside the Route 13 corridor. The area is predominantly forested, with agricultural lands in the valley. Almost 60 percent is already protected as open space. Resources include a biological corridor, an IBA, UNAs, wetlands, perennial streams, significant sections of the Finger Lakes Trail, and two potential trail corridors. The area is home to a growing population of black bears.
Van Buskirk Gulf	400 acres	This area is small but significant for the natural features it possesses. Resources include a high-ranking UNA which accounts for more than half the focus area, Chaffee Creek, and a potential trail corridor.
The Forest Lands	40,000 acres	This crescent-shaped area includes four state forests. More than half the area is protected by ownership. Resources include UNAs, portions of several biological corridors, multiple creeks, wetlands, and an extensive trail network.
Six Mile Creek	5,000 acres	This area is defined by Six Mile Creek and its perennial tributaries. Almost 30 percent is protected by ownership, primarily as part of the City of Ithaca Six Mile Creek Natural Area and watershed protection area. Resources include an extensive biological corridor, UNAs, wetlands, and existing and potential trail corridors.
Cascadilla Creek	3,000 acres	Forty percent of this area is protected open space, although only half of these lands are protected to preserve the natural features. Resources include a biological corridor, wetlands, UNAs, East Hill Recreation Way, Ellis Hollow Nature Preserve trails, and the Cornell Plantations Cascadilla Creek trail. These trails provide recreation as well as transportation connections between downtown Ithaca, Cornell, and outlying population areas.
Fall Creek	9,000 acres	Almost 30 percent of this area is protected by ownership. Resources include an IBA, wetlands, UNAs, a biological corridor, potential trail corridors, and an existing trail network that includes Cornell Plantations trails, Dryden Trail, Freeville Trail, and the Dryden Lake Park Trail.
The Fens	4,000 acres	This area includes numerous and extensive fens, which are designated as a National Natural Landmark. The fens, many of which are part of UNAs, are scattered along the stream corridors. Additional resources include a biological corridor and the proposed Lime Hollow Trail.
Owasco Inlet	2,000 acres	This is the only focus area with no land currently protected by ownership. Resources include a biological corridor, wetlands, and a UNA. A potential trail extends along an abandoned railroad grade from the Village of Freeville past the Village of Groton.
Wetlands Complex South	2,000 acres	More than a third of this focus area is protected by ownership by inclusion in the Cornell University Natural Areas. Resources include a number of large wetlands and UNAs.
Wetlands Complex North	3,000 acres	Less than 15 percent is protected by ownership. Protected lands include a cluster of properties with Finger Lakes Land Trust conservation easements. Resources include a biological corridor along Mill Creek, and scattered wetlands and UNAs.
Salmon Creek	3,000 acres	Only 30 acres of this area are currently protected by ownership, as a Finger Lakes Land Trust Nature Preserve. Resources include an IBA, a biological corridor, wetlands and a UNA.

Benefits of Preserving Open Space

Open space provides a variety of important quality of life functions including the health benefits of outdoor recreation and general enjoyment of the natural beauty and scenic views. These amenities can contribute to the local economy by increasing property values and tax revenues, attracting tourists, and ensuring the continuance of agriculture and other unique working landscapes. A case study of town-houses in Tompkins County found that views of “ecological greenspace,” defined as some type of protected natural area, increased the property value. This was also true for properties near Cayuga Lake, major creeks, and State Parks.

Open space also supports valuable environmental processes such as protecting significant types of habitat and enhancing critical environmental processes such as water filtration, recharge of groundwater resources, and climate control.

Policies

Tompkins County has been proactive in identifying many of the natural features we value, through the Unique Natural Areas Inventory, Building Greenways for Tompkins County, and the Tompkins County Agricultural Lands and Natural Areas Feasibility Study. The identified Natural Features Focus Areas indicate where conservation efforts should be applied through public education, the development of protection plans and public/private partnerships.

It is the policy of Tompkins County to:

- Preserve the natural features, ecosystems, and forest lands within the Natural Resources Focus Areas identified in the Comprehensive Plan.
- Preserve and protect scenic views, areas of natural beauty, and the rural character of Tompkins County.
- Protect the ecological, economic, and recreational functions and beauty of Cayuga Lake.
- Preserve and enhance existing parks, hiking trails, active and passive recreation facilities, and historic resources, and foster the creation of new recreational amenities.

Action Items

Action items are activities that Tompkins County government or community partners can undertake to implement policies.

- TO DO** → Establish an open-space program to protect or preserve natural resources and recreational amenities in the focus areas identified in the Comprehensive Plan using tools appropriate to the functions of those resources.
- TO DO** → Define stream corridor buffers for the major tributaries to Cayuga Lake and encourage use of appropriate measures to preserve the designated stream corridors.
- TO DO** → Compare the results of the New York State Gap Analysis Program and the results of the New York Natural Heritage Program’s Significant Natural Communities with the natural features focus areas identified in the Comprehensive Plan.

- TO DO** → Develop and disseminate educational information tailored to each natural features focus area and each agricultural resources focus area.
- TO DO** → Conduct a Scenic Resources Inventory and prepare a Scenic Resources Preservation Plan.
- TO DO** → Provide support to Tompkins County’s municipalities that would like to identify and codify appropriate portions of natural features focus areas as Critical Environmental Areas.
- TO DO** → Develop or identify model performance standards to preserve natural resources.
- TO DO** → Develop or obtain a system to track land use changes and preservation efforts.
- TO DO** → Complete the Cayuga Waterfront Trail and the Black Diamond Trail.