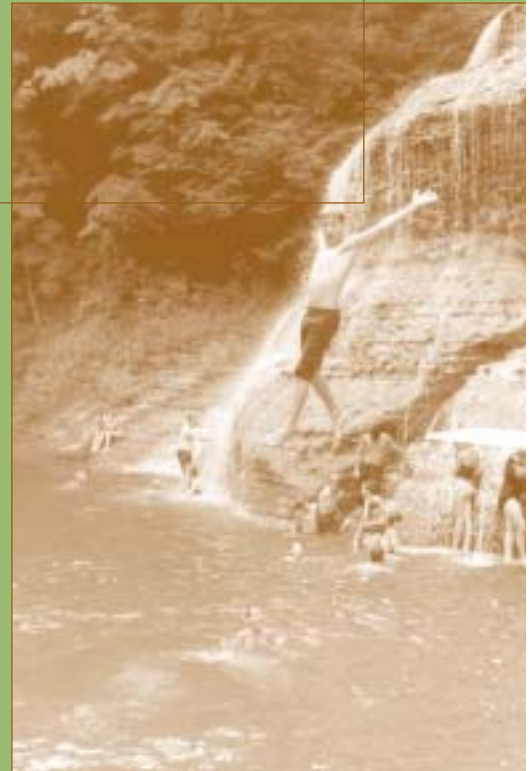


Interlocking Pieces: The Environment



O u r F i n i t e R e s o u r c e s

PRINCIPLE

Finite resources that provide needed community goods, services, recreational opportunities or environmental benefits should be protected and used appropriately.

Preserving the Irreplaceable

Finite resources such as drinking water, prime agricultural soils, and waterfront lands, as well as some elements of our built environment, contribute to our local economy and the unique character of Tompkins County. These resources serve multiple uses and functions that cannot be replaced if they are destroyed. While many natural systems exhibit a remarkable resilience to disruption, others are vulnerable to small incremental changes which can undermine, or delay indefinitely, their benefits to our community.

Water Resources

Foremost among our finite resources is drinking water. Not long ago water seemed like an inexhaustible resource, but sufficient water of a quality and quantity to serve human needs is becoming an increasingly scarce commodity worldwide.

Tompkins County is blessed with diverse water resources that provide for the domestic, commercial, and recreational needs of the community, and are necessary for the survival

Water resources do not function as separate systems but are part of an interconnected whole.

of many plants and animals. Water is a regional resource. Tompkins County is a major contributor to the Cayuga Lake watershed, with about 80 percent of Tompkins County's water draining north into the Finger Lakes and eventually into Lake Ontario, and 20 percent draining south to the Susquehanna River and eventually into the Chesapeake Bay.

The three major categories of water resources are surface water, groundwater, and wetlands. Surface water consists of streams, creeks, lakes and ponds. Groundwater is water that is stored in the underground spaces between deposits of sand, gravel, and silt, and in the cracks in bedrock. Groundwater deposits that can be expected to yield significant quantities to wells are called aquifers. Areas where surface water infiltrates into these aquifers are called recharge areas and are particularly important to the protection of groundwater quantity and quality. Wetlands include land areas that are inundated with water year-round, as well as areas that are dry for part of the year but collect water seasonally. Wetlands and riparian areas (lands associated with streams and rivers) are important because they provide flood protection, control erosion and sediment, supply surface

water flow and recharge groundwater supplies, and provide habitat for fish and wildlife. Tompkins County contains about 19,800 acres of identified wetlands.

These three major classifications of water resources are distinct parts of a larger interconnected water resources system and should be considered and managed as a system. The United States Geological Survey has recently determined that approximately 60 percent of the flow in surface water streams in central New York originates from groundwater resources. Wetlands along rivers and streams can help temporarily store floodwaters and filter pollutants from surface waters. Similarly, groundwater contributes to stream flow during low water periods.

Drinking Water Supplies

Surface water provides drinking water for approximately 55 percent of Tompkins County residents. Three water treatment facilities in the county rely on surface water. Bolton Point, operated by the Southern Cayuga Lake Intermunicipal Water Commission, draws its water from Cayuga Lake; the Cornell Water Filtration Plant draws from Fall Creek; and the City of Ithaca Water Treatment Plant uses water from Six Mile Creek.

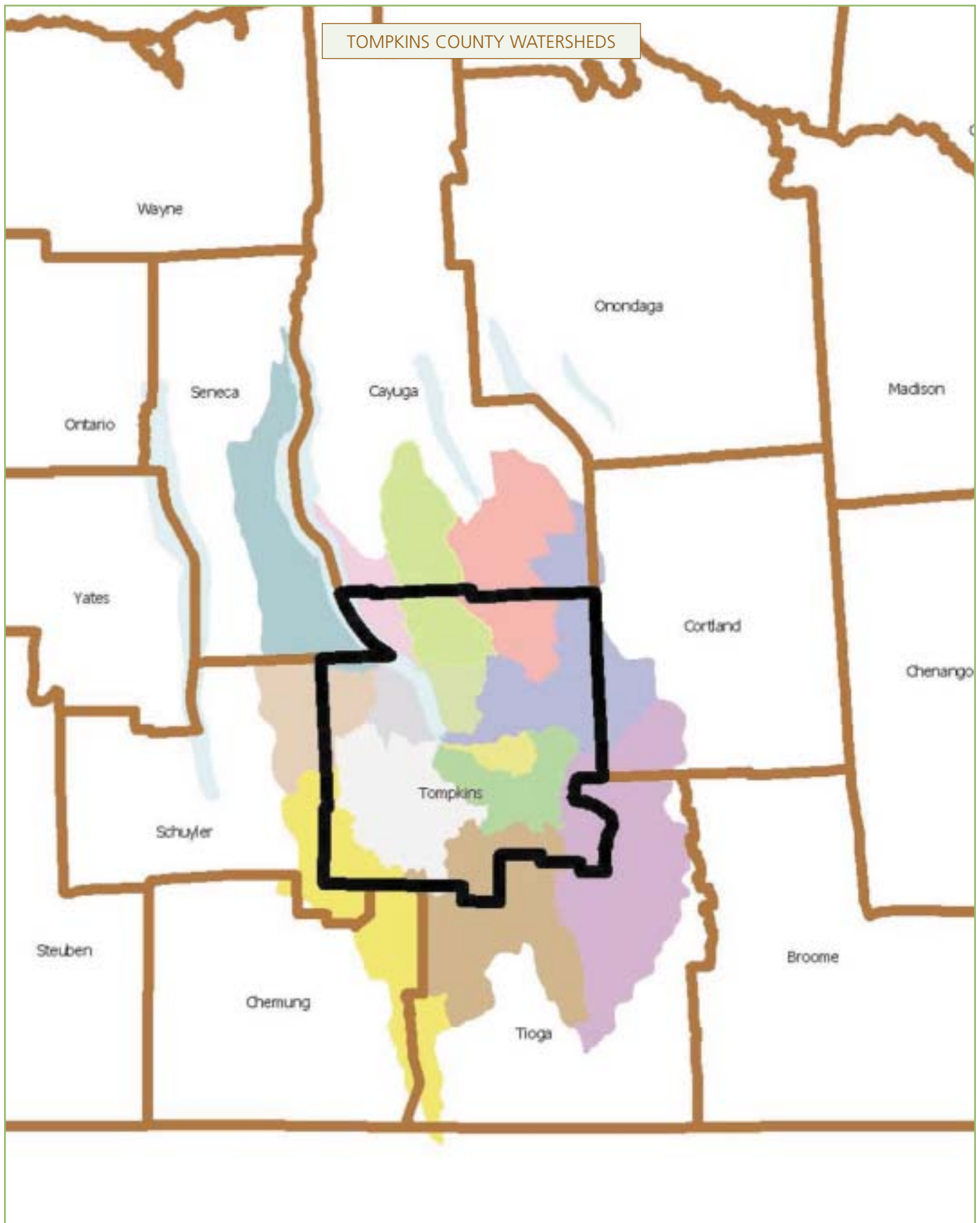
Groundwater is the source of drinking water for approximately 45 percent of county residents, including those with individual wells or on one of the two municipal drinking water systems, and over 170 small private systems.

The amount of available drinking water is primarily an issue in rural areas of the county that obtain drinking water from groundwater. As more homes and businesses are built in these areas, they are supported by new wells withdrawing more water from the aquifers. In some parts of the county

Studies to determine the extent of our aquifers and define their recharge areas are critical to the protection of these resources.

new wells can noticeably decrease the supply of water from wells in nearby areas.

Drinking water quality, however, is an issue countywide. Some of our public water supplies are threatened by the potential contamination of an entire aquifer or water body that can result from a single accidental chemical spill or leaking fuel storage tank. Land uses that pose the greatest threat should be located away from areas that contribute to drinking water supplies.



Studies to determine the extent of our aquifers and define their recharge areas are critical to the protection of these resources and should be continued.

Threats to Water Quality and Quantity

Many of the threats to water quality in Tompkins County come from more dispersed, “non-point” sources. Since 1969, low-density development in the county has increased by 10,000 acres and the amount of impervious surfaces has increased by nearly 1000 acres. These changes, accompanied by intensification of land use, have led to increased erosion and sedimentation, loss of wetlands and riparian areas, greater amounts of stormwater runoff and pollutants carried by the runoff, as well as an increase in flooding. Other impacts of increased rates of stormwater runoff include accelerated channel erosion and alteration of streambed composition, which can dramatically degrade aquatic habitats. A New York State Department of Environmental Conservation water quality study highlights these changes and found that from 1992 to 2002, water quality throughout New York State declined, attributable in large part to changes in land use and the intensity of land use.

In Tompkins County, the impacts of land use change on water resources culminate in Cayuga Lake, where it takes

From 1992 to 2002, water quality throughout New York State declined.

approximately 10 years for one drop of water to travel the length of the lake from south to north. The shallow southern end of Cayuga Lake is inherently more vulnerable to pollution than other, deeper portions and suffers from a number of water quality problems including elevated sediment and phosphorous levels, algae blooms, odors, and elevated levels of coliform bacteria. Low levels of agricultural chemicals have also been detected in the lake.

The loss of wetlands that once acted as sediment traps, as well as streambed and streambank erosion, contribute to sedimentation in the southern end of Cayuga Lake. Though sedimentation is often related to changes in land use, construction, and land management practices, it can also result from natural geological processes. A watershed assessment of the Six Mile Creek watershed, revealed that much erosion and sedimentation in that watershed could be directly attributed to natural processes.

Stormwater Runoff and Flooding

Increased stormwater runoff has a significant impact on floodplain management. As land area is converted to more urbanized uses, the amount of impervious surface associated with that land use generally increases, causing a reduction in groundwater replenishment and increased non-point source pollution and flooding. This increases both the frequency and magnitude of flood events. Flooding and stormwater runoff concerns are exacerbated in many parts of Tompkins County because of the steep slopes and glacially-dominated soils that do a poor job of absorbing runoff during heavy rains or snowmelt. Major storm events occur relatively frequently, and the capacity of our many streams can be quickly overwhelmed.

Population centers that are clustered in valleys and along the shores of creeks are particularly vulnerable to repetitive flooding. Many of Tompkins County’s manufactured homes are located in designated floodplains, increasing the vulnerability of these residents to flood events.

Prime Agricultural Soils

The United States Department of Agriculture Natural Resources Conservation Service classifies soils according to their suitability for agricultural use. According to this classification, Prime agricultural soils are limited in Tompkins County.

Higher quality soils with greater potential to support agricultural activity and productivity in the county are concentrated in Ulysses, northwestern Enfield, and northern Lansing. Smaller pockets are located throughout the County. The county’s best agricultural soils account for less than 25 percent of the land area in the county, highlighting the need to develop measures that effectively protect important agricultural resources and local farms.

The best agricultural soils account for less than 25 percent of the county’s land area.

The Loss of Farmland

Although most of the prime agricultural soils in Tompkins County are used for agriculture, these soils are also well suited for rural residential and commercial development, and the land area devoted to farming has been shrinking. Since 1982, Tompkins County has lost 21 percent of its farmland base. Farmland and other open space in the county are

Since 1982, Tompkins County has lost 21 percent of its farmland.

being consumed by residential, commercial, and sometimes industrial development. Randomly scattered development is common in most areas of the county, primarily in the form of single-family homes along rural roads or as commercial strip development along highways. Between 1969 and 1995 approximately 1,500 acres of open land was converted to commercial and industrial uses, and 14,000 acres for residential uses.

These trends of decentralization and suburbanization threaten the economic viability of farming by fragmenting the land base and intensifying conflicts between farmers and non-farm neighbors.

Waterfront

We are fortunate in Tompkins County to have approximately 26 miles of shoreline along Cayuga Lake, a magnificent environmental, recreational, social and economic resource. The shoreline of the lake is dominated by recreational and residential land uses. Several prominent parks are located along Cayuga’s shores: Taughannock Falls State Park, Lansing Town Park at Myers Point, Stewart Park, and Cass Park. Much of

Waterfront lands should be reserved for water-dependent uses and complementary water-enhanced uses.

the remainder of the shoreline outside the City of Ithaca is characterized by residential development.

In addition, the waterfront is home to businesses and utilities that depend upon or are related to the lake. Facilities such as marinas, boat rental services, boathouses, and the like, are absolutely dependent on a waterfront location. Many utilities are also dependent upon a location on or near a water body. Examples in Tompkins County include waste-

water treatment facilities in the City of Ithaca and the Village of Cayuga Heights, Bolton Point Water Treatment Plant, AES Cayuga power plant, and the Cornell Lake Source Cooling heat exchange facility.

Some businesses, while not dependent on a waterfront location, are strongly linked to and benefit greatly from a location on the waterfront. Restaurants, hotels, and water-related attractions can help draw tourists to the waterfront.

The City of Ithaca’s waterfront, along Cayuga Inlet, offers a tremendous opportunity to develop an urban waterfront experience for both residents and tourists alike. Recent and ongoing efforts to enhance this waterfront include the Inlet Island Promenade; the Cayuga Waterfront Trail – which will eventually connect the Visitors Center to Cass Park – and relocation of the New York State Department of Transportation’s Maintenance Facility.

Policies

Development can impact our finite resources in a variety of ways. The loss of these resources to commercial, residential, or other land uses, is often permanent, highlighting the need to develop measures that can effectively protect these important resources.

It is the policy of Tompkins County to:

- Promote appropriate development of waterfront lands for water-dependent or water-enhanced uses, including enhancing public access to Cayuga Lake.
- Protect water quality and quantity in the County’s streams, lakes, and groundwater.
- Protect drinking water supplies from contamination.
- Protect stream corridors, wetlands, and land areas that are seasonally inundated by water.
- Protect prime agricultural land for agricultural use.

Action Items

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

- TO DO** → Complete watershed assessments for the Fall Creek and Six Mile Creek drinking water sources.
- TO DO** → Continue to conduct aquifer studies.
- TO DO** → Initiate an inspection and maintenance program for individual on-site wastewater treatment systems.
- TO DO** → Update the county flood hazard mitigation program to incorporate watershed-based approaches to reducing the risk of flood damages.
- TO DO** → Update floodplain maps.
- TO DO** → Review municipal ordinances and management practices related to water resources management to ensure consistency within watersheds and among municipalities.
- TO DO** → Develop or identify model stream buffer ordinances and stormwater ordinances.
- TO DO** → Develop a system to ensure regular maintenance of existing drainage systems and use of appropriate road ditching techniques on County maintained roads, and encourage the use of such techniques on other roads in the County.
- TO DO** → Provide education and training programs for public works professionals on techniques for reduction of sedimentation and erosion, and for re-vegetating disturbed areas, when constructing and maintaining bridges and culverts, performing roadside ditching, etc.
- TO DO** → Develop boat docking, boat service areas, and waterfront commercial district on, and in the vicinity of, Inlet Island in the City of Ithaca.
- TO DO** → Redevelop the NYSDOT Maintenance Facility site with water-dependent and/or water-enhanced projects to provide economic benefits to the City and the County and provide public access to the water's edge.
- TO DO** → Dredge Cayuga Inlet and find an appropriate method for disposal of dredge spoil material, for example, using dredged material to create new, functioning wetlands at the south end of Cayuga Lake.

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

Increasing rates of land development threaten to fragment the landscapes we cherish.

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

Central to Tompkins County's beauty and character is Cayuga Lake.

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.

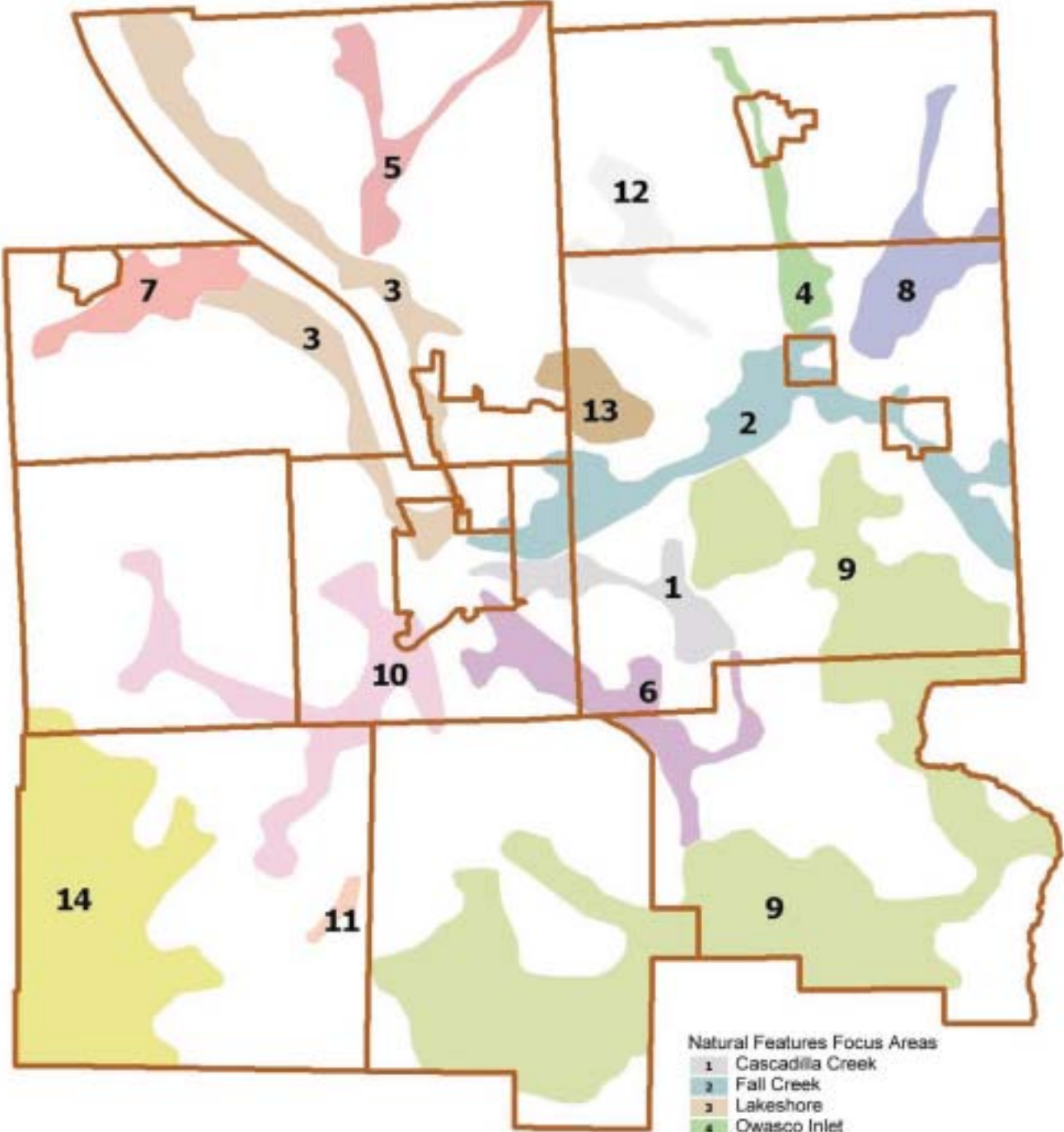
PROTECTED NATURAL AREAS	
Owner	Acres
New York State	27,808
Cornell University	6,820
Finger Lakes Land Trust	2,609
City of Ithaca	1,160
Tompkins County	654
The Nature Conservancy	393
Private/other	75
Other local municipalities	30
TOTAL	39,548

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.

NATURAL FEATURES FOCUS AREAS



- Natural Features Focus Areas
- 1 Cascadilla Creek
 - 2 Fall Creek
 - 3 Lakeshore
 - 4 Owasco Inlet
 - 5 Salmon Creek
 - 6 Sixmile Creek
 - 7 Taughannock Creek
 - 8 The Fens
 - 9 The Forest Lands
 - 10 The Gorges
 - 11 Van Buskirk Gulf
 - 12 Wetlands Complex North
 - 13 Wetlands Complex South
 - 14 Wildlands

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.