

The Finger Lakes Trail In the Emerald Necklace: A Plan for Corridor Protection and Enhancement



Prepared by:
Mark Whitmore and Rick Manning
Finger Lakes Land Trust
Ithaca, NY

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Members of the Cayuga Trails Club pose on bridge built by volunteers. Photo provided by Cayuga Trails Club.

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Executive Summary

The Finger Lakes Trail (FLT) is a 900 mile system of hiking trails that includes a 563-mile-long main trail stretching from Allegany State Park to the Catskill Mountains. The trail is widely recognized as a recreational resource. It traverses a diverse mix of public and private lands, including extensive forests, open farmland, rugged gorges, and rural hamlets. The Finger Lakes Trail was created exclusively by volunteers of the Finger Lakes Trail Conference and several local hiking clubs, including the Cayuga Trails Club.

This planning effort was initiated to help protect and enhance a 78-mile section of the trail that passes through the “Emerald Necklace”, a crescent of forest lands that stretch in an arc around the City of Ithaca through Schuyler, Seneca, Tompkins, and Tioga Counties from the Finger Lakes National Forest in the west to Hammond Hill State Forest in the east.

The Emerald Necklace is a network of open spaces that is composed of protected lands within six State Forests, two State Parks, a State Wildlife Management Area, a National Forest, eight Finger Lakes Land Trust Nature Preserves, and six Cornell Plantations Natural Areas totaling more than 50,000 acres. These protected lands comprise approximately 40 percent of the FLT corridor; the remaining 60 percent is hosted by 53 private landowners on 80 parcels. Agreements to host the FLT with these landowners are made almost entirely on a handshake basis, which is revocable at any time.

Today, nearly 12 miles (15 percent) of the Trail are located along the side of public roads, instead of in farm fields or through woodland, as was envisioned by trail volunteer planners. Since 1971 the amount of trail that has been routed onto roads has increased by approximately 2.5 miles, or about 25 percent. The slow, but steady shift from field and woodland to the roadside is a result of many factors, including property sales and subdivisions, landowners’ decisions to discontinue hosting the trail, and land development pressures. The result is a greatly diminished scenic and natural hiking experience on the Finger Lakes Trail.

This combination of threats to the Finger Lakes Trail, as well as both threats and opportunities relating to other significant open space resources within the Emerald Necklace, led the Finger Lakes Land Trust and the Tompkins County Planning Department to apply for a Department of State Quality Communities Grant to prepare this plan. The Plan’s goals are to document natural resources along the trail, identify threats to the trail’s long-term viability, and to develop strategies for trail corridor protection and enhancement.

The vision that has emerged from this study is that of a Finger Lakes Trail located within a permanently-protected corridor, in a scenic, off-road setting. The future Finger Lakes Trail will have easy, visible access via four gateways on or near major state highways, improved trailhead-parking areas, and clearly interpreted routes and unique natural areas. The public forests and preserves that form the backbone of the Emerald Necklace will be enhanced by the strategic acquisition of key parcels or through the acquisition of conservation easements on properties with high natural resource and scenic values.

To protect and enhance the trail, the institutional capacity of stakeholder organizations must be strengthened, including the Finger Lakes Trail Conference, the Cayuga Trails Club, the Finger Lakes Land Trust, county planning agencies and other municipal, state and federal agencies. Creating a planner position with the primary responsibility for advancing this and other recreational trail projects will be critical to the successful implementation of much of this corridor protection and enhancement plan. In addition, a full-time land protection specialist will be needed to work with landowners and local communities to achieve the conservation objectives identified through this project

Key recommendations of the plan are summarized below:

- **Secure permanent protection of the entire Finger Lakes Trail** within the Emerald Necklace, with the goal of protecting a corridor width of at least 300 feet. A systematic program to secure voluntary or purchased conservation and access easements is needed and, in some cases, outright purchase of key tracts should be pursued. This effort should be based upon the strong tradition of partnership between private landowners and the Finger Lakes Trail Conference. Acquisition of easements and land should be undertaken solely with willing landowners.
- **Develop four Finger Lakes Trail gateways** proximate to major state highways to provide enhanced public access to the trail and offer interpretation of nearby natural and cultural resources. Proposed gateways to be located:
 - In the Town of Hector, Schuyler County, on State Route 79 just east of the Hamlet of Bennettsburg near Texas Hollow Road (in the vicinity of Finger Lakes National Forest);
 - In the Town of Ithaca, Tompkins County, on state land located on the east side of State Route 13, across from Robert Treman State Park;
 - In the Town of Danby, Tompkins County, within Jennings Pond Park on Bald Hill Road, located a short distance from State Route 96B; and
 - In the Town of Richford, Tioga County, on State Route 79 near the Tompkins/Tioga County line (in the vicinity of Robinson Hollow State Forest).
- **Launch a systematic effort to work cooperatively with private landowners to secure the permanent protection of significant open space lands within ten identified focus areas.** Protection efforts should emphasize the use of conservation easements and any acquisitions of land should be from willing sellers only.
- Encourage municipalities along the trail to recognize the value of the trail as a recreational resource for their residents and to develop or **strengthen land-use planning tools that can be used to protect the Finger Lakes Trail and buffer it from nearby development.**
- **Provide the staff resources needed in the areas of land protection and land use planning to achieve these objectives.**



Hiking on the Finger Lakes Trail. Photo by Rick Lightbody.

Introduction, Goals, and Methodology

The Finger Lakes Trail and Emerald Necklace Corridor

The Finger Lakes Trail (FLT) is a 900 mile system of hiking trails that includes a 563-mile main trail extending from Allegany State Park to the Catskill Mountains through the Finger Lakes and Southern Tier regions of Upstate New York. This study focuses on a 78-mile section of the FLT that runs through a corridor of forested and hilly landscapes south of Cayuga Lake in Schuyler, Tompkins, and Tioga counties that is known as the Emerald Necklace.

The Finger Lakes Trail Conference (FLTC) was formed by volunteers in 1962 and is the coordinating group for the Finger Lakes Trail System. Since its creation, most of the Finger Lakes Trail in the study area has been stewarded by the Ithaca-based Cayuga Trails Club. The Trails Club maintains and constructs not only the trail but also associated bridges, lean-tos, and trailhead signage. The Club is also responsible for maintaining relations with private landowners who host the trail. The FLTC provides coordination, training, trail standards, limited funding, and overall promotion of the trail. These two groups interact with both public and private stakeholders, as approximately 40 percent of the FLT within the Emerald Necklace corridor is on publicly-owned land and the remaining 60 percent is hosted by 58 private landowners.

The Emerald Necklace corridor harbors the divide between the Susquehanna River and Lake Ontario watersheds and was predominantly forested with northern hardwoods at the beginning of the 19th century when it began to be cleared for agriculture. After 100 years of intensive agriculture only 30 percent of the land south of Cayuga Lake remained forested. However, a great deal of the marginal farmland was abandoned early in the 20th century and purchased by State and Federal agencies to be managed as public open space; much of this land eventually reverted to forest. Today, roughly 75 percent of the land within the Emerald Necklace corridor is forested, 20 percent is in agricultural use, and 5 percent is in residential or mixed use.

The Emerald Necklace encompasses more than 50,000 acres of public open space and features a diversity of wildlife habitats and landscape features, including two Audubon New York-designated Important Bird Areas, multiple New York Natural Heritage Program (NYNHP) Significant Natural Communities, and forested lands that serve as the headwaters to streams feeding Cayuga Lake, the Susquehanna River, and ultimately the Chesapeake Bay. The Finger Lakes Trail passes over and along seventeen protected streams and through six state and federally classified wetlands. In recognition of the significance of the Emerald Necklace, as well as the need to take action to secure its future, New York has listed it as a Priority Conservation Project within the State's Open Space Conservation Plan.

Today, the Finger Lakes Trail and the open space resources of the Emerald Necklace stand at a crossroads. In recent years, development pressures and other factors have led to displacement of the trail from private lands and its subsequent routing along public roads in some areas -- not the hiking experience originally envisioned by trail planners. At the same time, trail infrastructure needs include improved signage, trailhead parking, and several bridges. In the broader context of the Emerald Necklace, significant open space resources are increasingly threatened by sprawl and will not retain their integrity unless proactive action is taken.

Study Goals

This study was undertaken with the objectives of documenting the natural and recreational resources associated with the Finger Lakes Trail Corridor and the Emerald Necklace, identifying threats to their long-term viability, and developing strategies for trail corridor protection and enhancement.

Methodology

This planning effort was conducted in four phases:

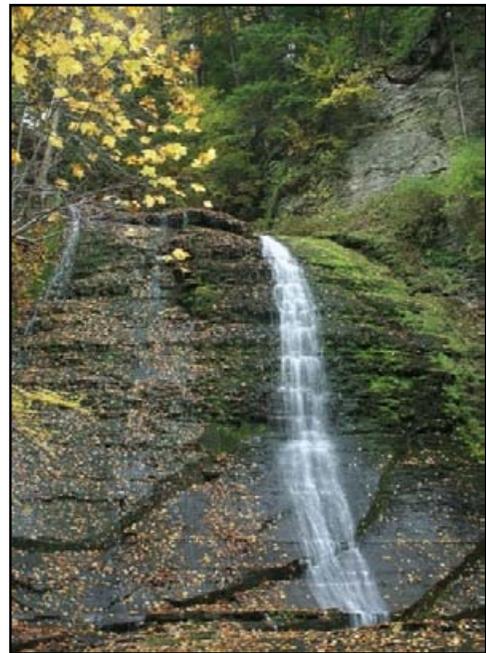
- Trail corridor inventory and assessment of associated open space;
- Trail corridor analysis of issues, threats, and opportunities;
- Assessment of institutional context and stakeholder attitudes; and
- Development of corridor protection and trail enhancement recommendations.

Trail Corridor Inventory and Assessment of Associated Open Space

During the first phase of the study, existing conditions along the Finger Lakes Trail were documented and mapped. The Trail Inventory & Assessment identified key resources worthy of protection within the trail corridor and recommended appropriate protection strategies. A Steering committee comprised of members of the trail organizations as well as representatives from local, state, and federal conservation agencies was convened to provide project guidance.

Open space resources associated with the trail were evaluated based on an assessment of existing data, as well as through limited field surveys. Four “at risk” areas were identified in this phase of the study where problems with the trail route exist. In most cases, the at-risk areas were trail sections that have been relocated from woodlands or fields to rural roads and even busy state highways. The four “at-risk” areas identified are:

- 1) Southern border of Finger Lakes National Forest (FLNF) to the northern border of Texas Hollow State Forest in the Town of Hector, Schuyler County.
- 2) Northeastern border of Connecticut Hill State Wildlife Management Area to the western border of Robert H. Treman State Park in the Town of Enfield, Tompkins County.
- 3) Finger Lakes Land Trust’s Sweedler Preserve at Lick Brook to the northern border of Danby State Forest in the Towns of Ithaca and Danby, Tompkins County.
- 4) Fire Tower Road in Caroline, Tompkins County to the southern border of Robinson Hollow State Forest in the Town of Richford, Tioga County.



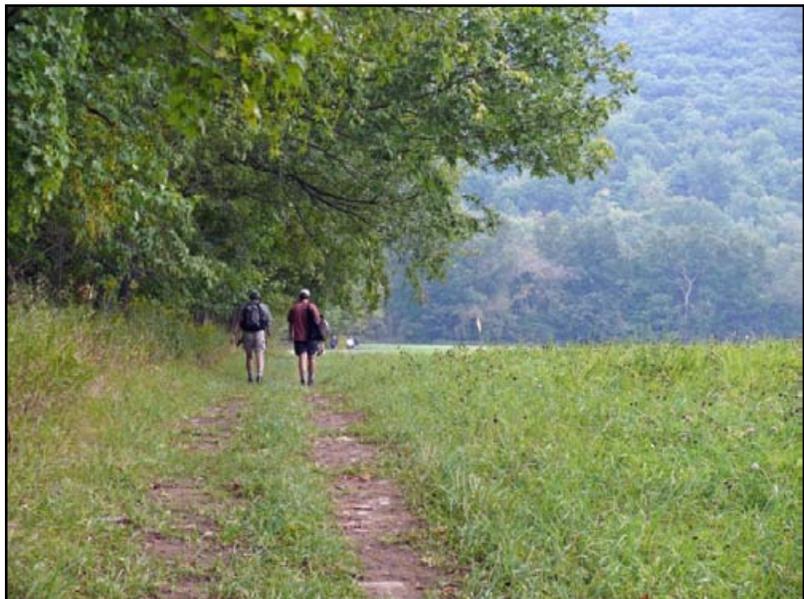
Trailside waterfall along Lick Brook, Town of Ithaca. Photo by Richard Ruswick

Trail Corridor Analysis

The Trail Corridor Analysis focused on identifying issues and opportunities within the four “at-risk” trail areas and also looked at opportunities to secure the entire trail corridor within the Emerald Necklace. Potential re-routes to relocate the trail off of roads were identified within the “at-risk” areas and preliminary field assessments were conducted.

Assessment of Institutional Context and Stakeholder Attitudes

In order to better understand the threats and opportunities associated with the Trail and associated open space resources, the project also involved an assessment of stakeholder attitudes along with an evaluation of institutions that are either currently affecting these resources or ones that might play a role in the future. The assessment of stakeholder attitudes included the distribution of a written survey to every landowner who hosts the trail; 14 follow-up interviews with landowners; numerous interviews with trail volunteers, representatives of public conservation agencies, local municipalities and other stakeholders; and a series of four public workshops/listening sessions.



Along the Finger Lakes Trail. Photo by Rick Lightbody.

An evaluation of the institutional capacity of stakeholder agencies and organizations associated with the project involved a comparative analysis of trail organizations undertaking similar projects, as well as numerous interviews with representatives of public and private sector entities. This process also served to identify best practices for trail conservation projects.

Development of Corridor Protection and Trail Enhancement Recommendations

Project consultants worked with staff from the Finger Lakes Land Trust and the Tompkins County Planning Department, as well as project steering committee members, and other stakeholders, to develop a series of recommendations for the long-term protection and enhancement of the trail corridor and associated open space resources over a period of several months. The recommendations are based upon the characteristics of the trail and the corridor, as well as the capacity of existing institutions, and a comparative analysis of similar trail projects.

Trail Corridor Inventory and Assessment of Associated Open Space

General Overview

While the majority of the Emerald Necklace is characterized by maturing forests that are typical of the Finger Lakes Region, this diverse landscape also harbors unique natural areas, rugged gorges, rich farmland, pristine wetlands, sparkling streams, and expansive scenic vistas. Open space resources include some of the largest blocks of unfragmented native forest remaining in the region as well as headwater streams that remain largely undisturbed.

The Finger Lakes Trail passes through these lands and connects 50,000 acres of public open space while also passing through 80 privately-owned properties and travelling along 12 miles of public roadways. The trail links portions of nine towns within three counties. From west to east, the trail passes through the Towns of Hector and Catharine in Schuyler County; then through the Towns of Newfield, Enfield, Ithaca, Danby, and Caroline in Tompkins County; then briefly through the Town of Richford in Tioga County. It then exits the Emerald Necklace into the Town of Dryden in Tompkins County.

Finger Lakes Trail and Associated Trail Resources

The Finger Lakes Trail is regarded by many as one of the region's premiere recreational resources. The trail provides access to scenic vistas, unique natural areas, rugged gorges, and is part of the North Country National Scenic Trail, a much larger trail system that stretches half way across the continent. The natural and cultural resources present in the Emerald Necklace are of such stature that the entire area has been identified as a Priority Project within New York State's Open Space Plan.

The trail is typically characterized by a narrow footpath marked by white paint blazes. Roadside access points are frequently obscure and improvements are minimal. Formal parking at trailheads is typically lacking and interpretive signage is basically non-existent. Within the Emerald Necklace, several lean-tos are provided for overnight accommodation and camping is possible within both state parks and state forest lands. While the trail is much loved by its users, it remains little known by many members of the communities through which it passes.

Recreational highlights along the Finger Lakes Trail include popular loop trails and linkages with other more localized trail systems located within associated public open space lands. The most popular loop trail is the eight-mile long Abbot Loop located in the Michigan Hollow area of Danby State Forest. Other popular loops are the three mile long Bob Cameron Loop, and six mile long Van Lone Loop in Connecticut Hill



Hikers relaxing at the Shindagin Hollow Shelter. Photo by Rick Lightbody.

Wildlife Management Area and the mile long Texas Hollow Loop Trail in Texas Hollow State Forest. Trail systems connected to the Finger Lakes Trail include over 30 miles of trails within the Finger Lakes National Forest, five miles of trails in Robert Treman State Park, 10 miles of mountain bike trails in Shindagin Hollow State Forest, and 15 miles of multi-use trails in Hammond Hill State Forest.

Scenic vistas from the hilltops, ridges, and gorges along the trail are spectacular. Most notable are the gorges found in Treman State Park in the Town of Enfield, along Lick Brook in the Town of Ithaca, and the Gulf on the Cayuta Lake Outlet in the Town of Catharine; the vistas from the top of Rogers Hill in the Town of Catharine, from Town Line Road in the Towns of Ithaca and Newfield, and the views associated with Upper Wilseyville Valley and Eastman Hill in the Town of Caroline.

The Emerald Necklace hosts many botanically unusual and rich habitats. Texas Hollow Bog has been recognized as a fine example of a locally rare acidic bog and the New York State Natural Heritage Program (NYNHP) recognizes it as a Significant Ecological Community. Cayuta Lake's extensive marsh and swamp forests have also been recognized for their floral diversity, as have the wetlands of Michigan Hollow and the dry hillsides of Thatcher's Pinnacles, Eastman Hill, and the Caroline Pinnacles (all located within the towns of Danby and Caroline in Tompkins County). In addition to these sites, several dozen others have been recognized for locally uncommon flora or the presence of particularly rich habitats.

The importance of the Emerald Necklace to birds has been recognized by Audubon New York through the designation of two sites as Important Bird Areas (IBA): Connecticut Hill and the Finger Lakes National Forest. The Finger Lakes National Forest IBA was cited because it provides important habitat for grassland birds and for four species at risk. In addition, the forest provides quality-nesting habitat for a number of more common bird species that have a significant portion of their nesting range in New York State. Connecticut Hill was recognized as an IBA due to the Wildlife Management Area's extensive



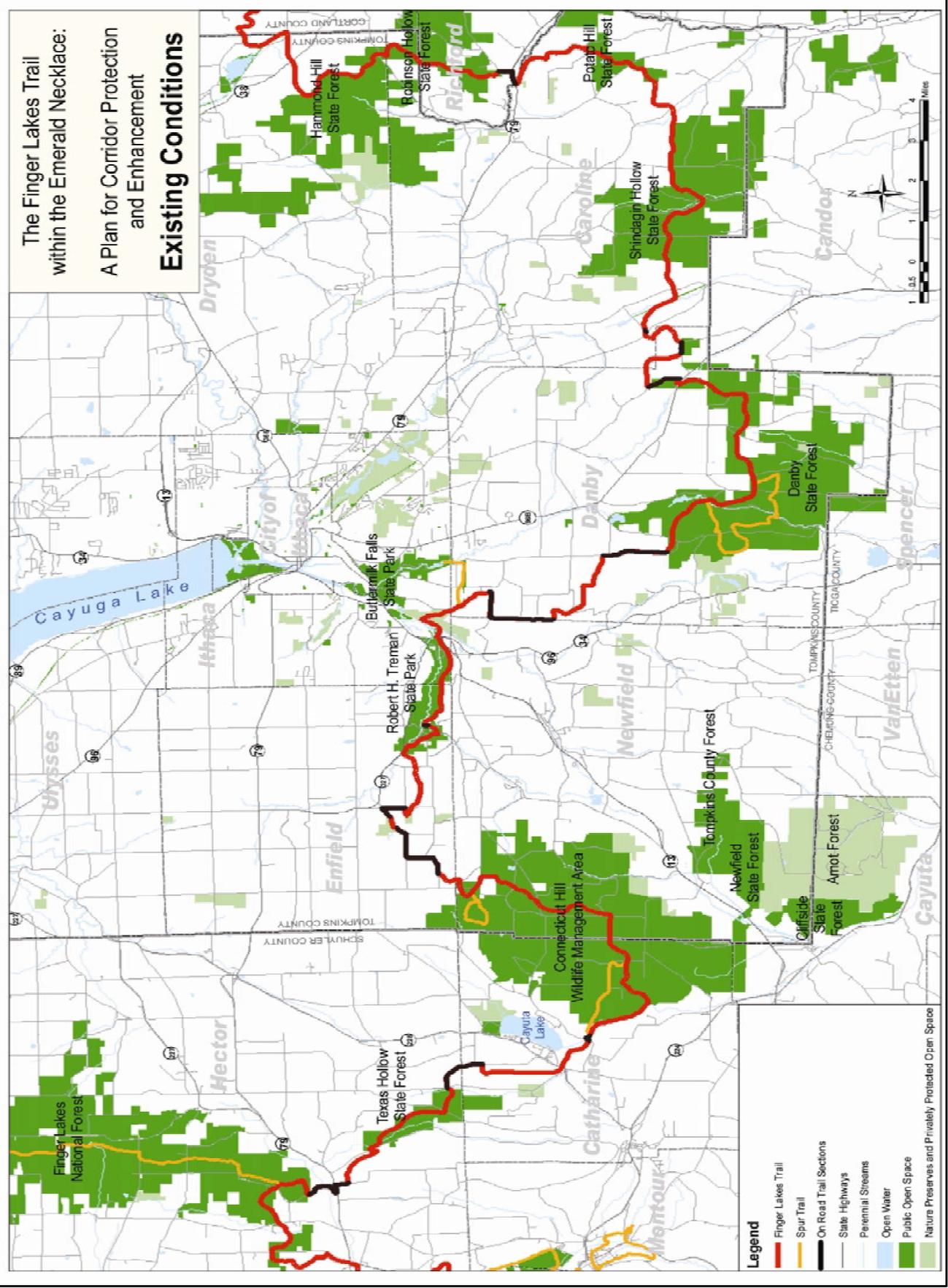
Finger Lakes Trail in woodland. Photo by Rick Lightbody.

forest cover, which provides a home for the Northern Goshawk (a species at risk), as well as a number of other bird species.

Within Tompkins County, the County's Environmental Management Council has identified 35 Unique Natural Areas (UNAs) within the Emerald Necklace. Ten of these UNAs are actually traversed by the Finger Lakes Trail. The UNAs were identified on the basis of a systematic

survey of the county, and each represents significant open space resources that are worthy of conservation. While Schuyler and Tioga Counties have not conducted similar evaluations of natural areas, it is believed that several sites identified through this project in adjacent counties would meet the criteria used in Tompkins County.

**The Finger Lakes Trail
within the Emerald Necklace:
A Plan for Corridor Protection
and Enhancement
Existing Conditions**



- Legend**
- Finger Lakes Trail
 - Spur Trail
 - On Road Trail Sections
 - State Highways
 - Perennial Streams
 - Open Water
 - Public Open Space
 - Nature Preserves and Privately Protected Open Space

Pressing Issues and Threats

The single biggest problem facing the Finger Lakes Trail at this time is the loss of access across private lands, which serve as critical links between public lands. These links were created through relationships that were forged with landowners willing to host the trail. Most agreements with private landowners are made on a handshake basis and are revocable at any time. Currently, only three landowners within the Emerald Necklace have granted permanent trail easements on about two miles of trail in total.

Over time, many of the original landowners hosting the trail have moved on and properties have changed hands. In some cases, the properties have been subdivided, increasing the number of landowners along the trail. This increases the landowner relations work load for the trails clubs and increases the possibility that a new owner may not want the trail on his or her land. These changes have resulted in the re-routing of the trail on to public roads, sometimes for considerable distances. Since 1971 the percentage of the trail that is located on roads has increased by 25 percent, or almost 2.5 miles, totaling nearly 12 road miles today

Extended on-road trail segments are the primary concern in the four “at-risk” segments of the trail in the study area. Besides the diminished aesthetic experience associated with roadside trails, hiker safety is a serious concern. Some sections of the FLT have been forced to relocate onto major highways. Two such examples exist on State Route 79 in the western and easternmost parts of the Emerald Necklace. Walking along these highways can be hazardous, but it is



Approximately 12 miles of the Finger Lakes Trail is along roadsides, like this section on State Route 79. Photo by Rick Lightbody

particularly dangerous when the road narrows to pass over a bridge. This situation is especially bad in the eastern portion of State Route 79 near the Tompkins/Tioga County line where the trail crosses over two bridges. One bridge has a very narrow shoulder over the West Branch of Owego Creek and the other crosses a small creek and has no shoulder at all.

Finger Lakes Trail Corridor Analysis

The Trail Corridor Analysis involved an in-depth review of four identified “at-risk” trail segments, all of which included significant sections of trail located on roadways. Possible alternative routes were developed and subsequent field surveys were conducted to determine their viability. Considerations for potential alternative routes included topography, number of landowners, drainage, area sensitivity, and aesthetic value. Several private landowners were contacted through this process to gauge their receptivity to hosting the trail.

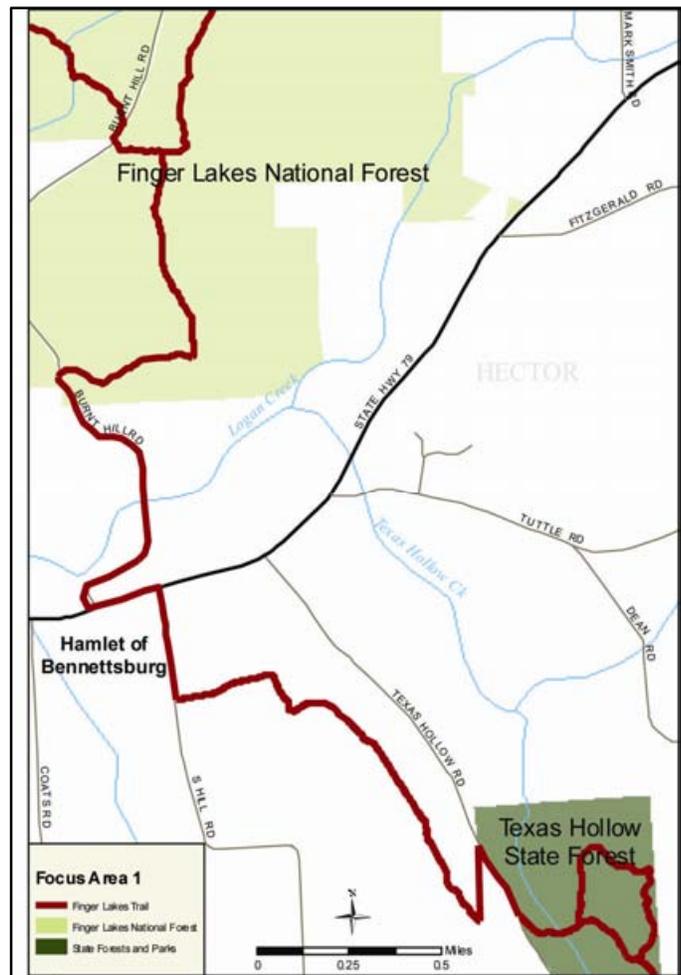
At Risk Area 1: Southern border of Finger Lakes National Forest (FLNF) to the northern border of Texas Hollow State Forest.

This at risk area is located within the valley of Hector Falls/Logan Creek, between Ithaca and Watkins Glen, in the vicinity of State Route 79 and the Hamlet of Bennettsburg. This portion of the trail is # miles long and includes both a 1.4 mile road walk and a steep descent into Texas Hollow. The FLT is routed through the Hector Falls Creek Valley via Burnt Hill Road, Route 79, and South Hill Road.

Four alternative trail routes were considered, each of which run east of the current alignment. Two of these routes would take the trail from Texas Hollow State Forest to Tuttle Road in the Town of Hector while the other two would continue the trail from Tuttle Road to Finger Lakes National Forest.

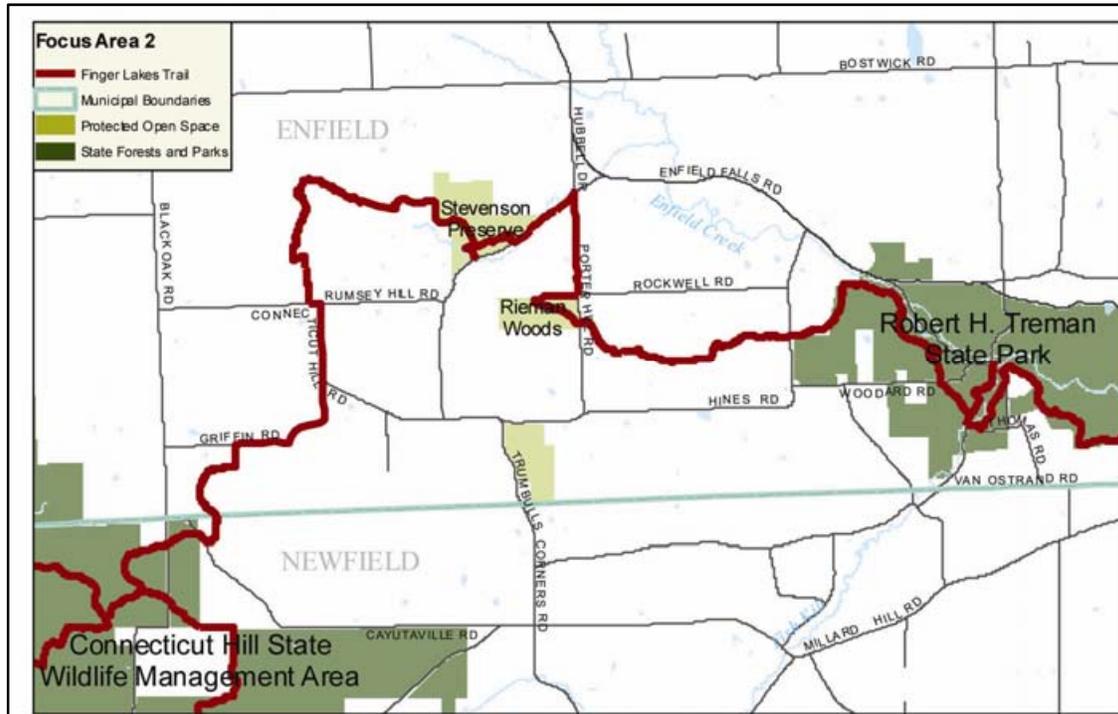
While either combination of these routes would be more desirable than the current route, the preferred route would be a new trail to be developed that follows the east side of Texas Hollow Creek to Tuttle Road; traverses land owned by the Town of Hector before crossing State Route 79; then crosses private land and crosses Hector Falls Creek before entering the Finger Lakes National Forest.

Construction of this route would first require obtaining the permission of several private landowners as well as the Town of Hector. A bridge would needed to cross Hector Falls Creek and some boardwalk construction might be required to cross wet areas associated with the creek.



At Risk Area 2: Northeastern border of Connecticut Hill State Wildlife Management Area to the western border of Robert H. Treman State Park.

At risk area 2 has a significant portion of trail that is routed onto roads (2.6 miles). Increasing subdivision and residential development in this area make the continued maintenance of landowner hosting agreements a particular challenge. Where this segment of the FLT approaches the City of Ithaca urban area, intervention is absolutely necessary, or this section of the trail may be lost.



Four alternative alignments were considered to replace the extensive roadside trail segments on Griffin Road, Rumsey Hill Road, and Porter Hill Road. An analysis of these alternatives revealed two routes that are worthy of further investigation:

Alternative Route #1:

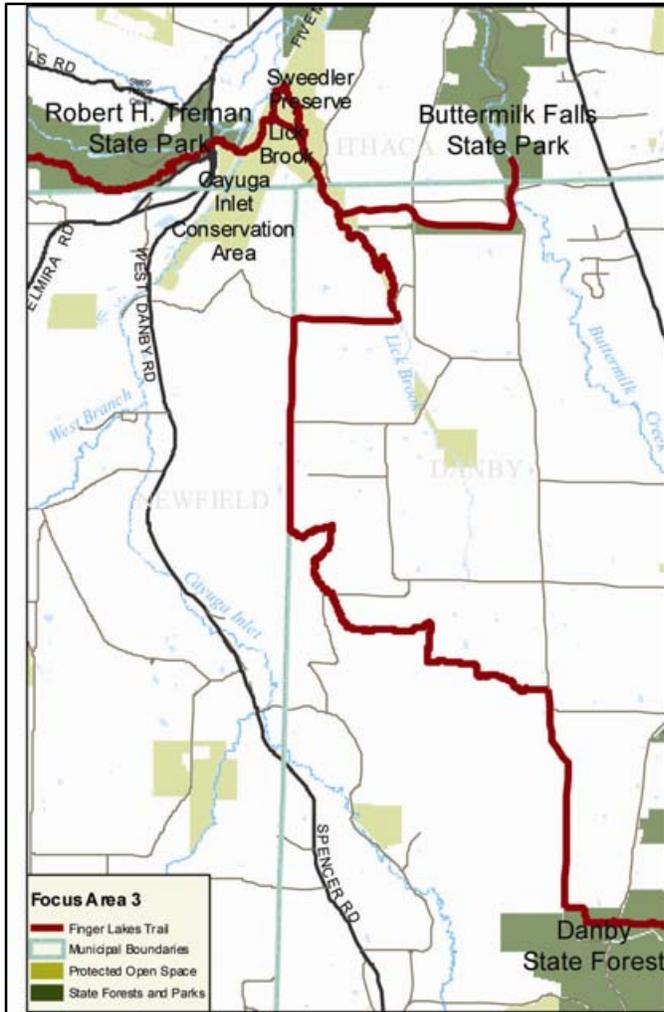
- Restoration of an off-road trail linkage between the Finger Lakes Land Trust's Stevenson Preserve and the Cayuga Trails Club's Rieman Woods should be pursued. While the current trail corridor includes both of these natural areas, the previously existing trail access between the two conservation areas was revoked. Currently, they are linked by a lengthy on-road trail segment. Attributes of the Stevenson Preserve include mature streamside forests and popularity as a destination for hikers, while Rieman Woods provides nearby camping opportunities for trail hikers.

Alternative Route #2

- It is recommended that an alternative alignment from Connecticut Hill to Rieman Woods be explored, given the degree of land fragmentation between this area and Connecticut Hill Wildlife Management Area. The most promising route seems to be an alignment that would depart Connecticut Hill east of its current route, and then head northeasterly, crossing Hines Road, before linking with the current trail at Reiman Woods. Development of this proposed alternative would result in the Stevenson Preserve-Rieman Woods trail becoming a spur to the primary FLT

At Risk Area 3: Finger Lakes Land Trust’s Sweedler Preserve at Lick Brook to the northern border of Danby State Forest.

In at risk area 3, the FLT departs the Land Trust’s Preserve, crosses several privately-owned parcels, intersects with West Jersey Hill Road and then continues along the roadside for about 1.4 miles. Before entering Danby State Forest, an additional 1.4 miles of trail are located on Comfort Road. Three alternative routes were identified and analyzed, two of which would eliminate the West Jersey Hill Road segment and one which would eliminate the Comfort Road segment.



Alternative Route for West Jersey Hill Road

To avoid the road walk on West Jersey Hill Road, the restoration of the Lick Brook trail corridor is desirable, provided that neighboring landowner permissions can be obtained. The Lick Brook corridor affords a very scenic route and it is one of the most heavily used sections of the FLT. The trail historically followed the brook upstream farther than in the current alignment, but access was lost. The Finger Lakes Land Trust recently acquired 50 acres within this historic trail corridor, with more than 6,000 feet of frontage on the brook. If a trail extension to link this new acquisition with the current trail is not possible, a spur to the main trail should still be considered as it is a popular destination for local residents.

Alternative Route for Comfort Road Segment

A second alternative route within this segment would begin where the FLT crosses the Cayuga Inlet then continue south from the vicinity of the Sweedler Preserve, gradually climbing the wooded hillside located on the east side of the Cayuga Inlet. This alignment would traverse a lightly developed area extending southward to Danby State Forest.

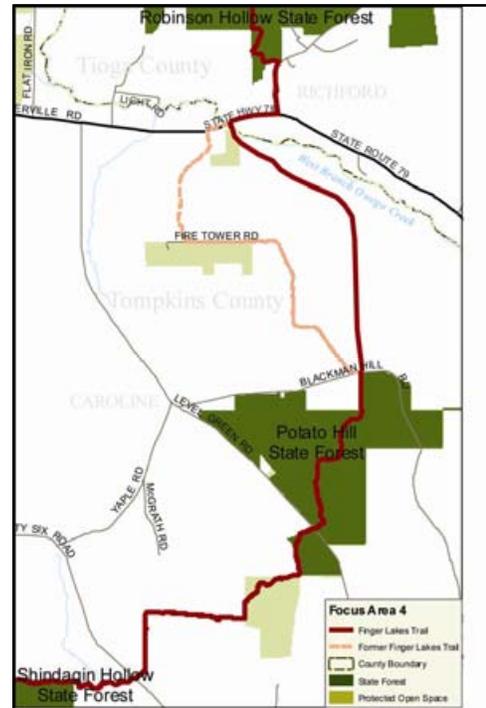
Steep slopes in this area make it less vulnerable to development pressures than the current Comfort Road trail alignment. No other strong alternatives to the Comfort Road alignment were identified due to the high degree of land fragmentation in this area.

At Risk Area 4: Fire Tower Road in Caroline to the Southern Border of Robinson Hollow State Forest.

During the course of this study, FLT access was revoked on a parcel that provided access from Fire Tower Road down the steep valley wall to State Route 79. This forced major rerouting in order to avoid a long road walk on the state highway in at risk area 4. Landowners in the area were contacted and the trail was successfully rerouted from Blackman Hill Road to Route 79, not only replacing the lost section of trail but also eliminating an additional 1.5 road walk on Fire Tower Road. This recent success demonstrates the potential to improve the existing FLT through concerted, systematic outreach to landowners and other trail stakeholders.

While the recent reroute eliminated a significant road walk, additional work is needed in this focus area. The current alignment contains a dangerous stretch on State Route 79, including two bridge crossings – one of which has virtually no road shoulder. An additional road walk on Robinson Hollow Road immediately follows this segment of the trail.

If landowner permission is obtained, a more direct route would cross Route 79, then continue north into Robinson Hollow State Forest along the east side of the West Branch of Owego Creek. This alignment would eliminate the road walks on Route 79 and Robinson Hollow Road. Due to the presence of the Creek and its associated wetlands, no other alternative alignments were considered for this area.



One of the most dangerous on-road sections of the trail is found on Route 79 near the Tioga-Tompkins County line. Photo by Mark Whitmore.

Assessment of Stakeholder Attitudes and Institutional Capacity

The future of the Finger Lakes Trail and the open space lands of the Emerald Necklace will be determined by the decisions and actions of a number of individual and institutional stakeholders. These stakeholders include the public conservation agencies and non-profit groups charged with caring for these resources, private landowners, local municipalities, recreational users, and members of the general public.

To determine how best to secure the FLT and protect associated open space lands, this project considered the interests of each of these groups and carefully assessed the capacity of conservation agencies involved in stewardship of the trail or associated priority conservation areas.

Landowner Survey Results

Landowners and land managers are perhaps the most important constituency considered among the various stakeholders; without their support, the FLT would not exist. To better understand their interests, a written survey was distributed to each of the 53 private landowners who host a portion of the FLT within the Emerald Necklace. Thirty-eight landowners (78 percent) responded to the survey and more than a dozen one-on-one interviews were conducted to further illuminate landowner interests.

In general, the survey revealed that most landowners enjoyed hosting the trail and many cited a civic commitment to allow others to enjoy the recreational opportunities provided by the FLT. While the survey provided overwhelmingly positive feedback, several landowners noted the need for greater focus on communications between landowners and trail stewards. Other issues of concern included uncontrolled dogs on the trail and users straying from the trail onto adjacent private properties.

While the positive nature of survey responses demonstrates the strong commitment of landowners hosting the trail, separate conversations with landowners and the revocation of access to two properties during the course of this study highlights the fragile nature of trail access. In one of these cases, generational succession and a desire for privacy resulted in a decision to discontinue trail hosting while the other case involved concerns about landowner liability for trail hosts.

In general, continued trail access is threatened by generational succession and changing attitudes about accommodating the public on private land. These trends are exacerbated by the challenge of maintaining contact with landowners that, in some cases, involve extended families or individuals who do not live in the area.



Goetchius Wetland Preserve, Town of Caroline. Photo by Mark Whitmore

Institutional Capacity

Finger Lakes Trail Conference and Cayuga Trails Club

Both the Finger Lakes Trail Conference and the Cayuga Trails Club are grassroots organizations that accomplish much of their work through the deployment of volunteers. Their strength is demonstrated in the existence of the trails as well as the various bridges, lean-tos, and other trail-associated improvements found along the way.

The long-term cultivation of current and future landowners has proven to be a challenging activity for volunteers, as landowners do not always reside on the property or in other instances, lands are controlled by multiple family members. Discussions relating to the future of the trail frequently touch on sensitive issues of family finance and interpersonal relationships. The nature of these conversations often calls for a sustained and nuanced effort that is frequently beyond the scope of volunteers' commitment to the FLT.



Since its inception, the Finger Lakes Trail has been created and managed by volunteers. Organized in 1962, the mission of the Finger Lakes Trail Conference (FLTC) is “to build, protect, and enhance a continuous footpath across New York State, Forever!” The Cayuga Trails Club was also formed in 1962 and has been responsible for constructing and maintaining the FLT throughout much of the Emerald Necklace.

INSTITUTIONAL CAPACITY: The FLTC has 3 part-time staff members, including an Executive Director, Office Manager, and an Accounting/Database Assistant. It has more than 1,200 members who pay annual membership fees of at least \$25 per individual or \$30 per couple. FLTC acts as an umbrella group to coordinate the activities of the various local groups working on the FLT. There are currently 20 trail organizations and 38 individuals and families engaged in maintaining the trail system. Each year volunteers log in approximately 15,000 hours of trail maintenance work.

The Cayuga Trails Club has no paid staff and relies entirely upon volunteer resources to accomplish its mission. The Club's financial resources are limited.

PROTECTION: Trail protection has received increased emphasis since 2007. Recently a Vice-President for Trail Protection was designated and a Trail Stewardship Fund was created that has a current balance of approximately \$100,000. The organization's trail protection efforts focus on securing voluntary trail easements that are generally 50' in width, although this is negotiable. The trail stewardship fund is used to pay for legal and surveying fees associated with donated easements. Currently, volunteers representing the Finger Lakes Trail Conference and the Cayuga Trails Club negotiate one of three types of voluntary trail access agreements with landowners: 1) A verbal, handshake agreement; 2) A trail use agreement, written and signed by FLTC and the landowner, essentially a license revocable at any time by owner; and 3) A permanent trail easement. The vast majority of existing FLT agreements are verbal, handshake agreements.

Comparable Trail Organizations

To assess options for securing the future of the FLT and to identify best practices for trail corridor protection, three similar trail protection projects along with their corresponding trail organizations were assessed: the Ice Age Trail (WI), Catamount Trail (VT), and the Long Trail (VT).

Ice Age Trail

The Ice Age National Scenic Trail is one of only eight national scenic trails. Located in the State of Wisconsin, the Ice Age Trail is a 1,100 mile long hiking path, 467 miles of which are off-road, 103 miles on multi-use trails, and 530 miles are ‘connecting trails’ found on roads and sidewalks. 21 local volunteer Ice Age Trail chapters handle landowner communications, protection agreement negotiations, and trail maintenance and enhancements.

INSTITUTIONAL CAPACITY: The Ice Age Park and Trail Foundation (IAPTF) has a professional staff of nine, including an Executive Director, a Trailway Director, a Director of Development, and a Land and Stewardship Manager. IAPTF staff work closely with the National Park Service’s Ice Age National Scenic Trail (www.nps.gov/iatr) planning staff, which has a field office in Madison. NPS staff prepare corridor planning studies to identify trail routes and conduct needed environmental review, and then develop trail corridor protection strategies that identify specific parcels that warrant protection, allowing state and federal funds to be made available for acquisition.

PROTECTION: The Ice Age Trail has 140 miles of unprotected off-road trail where only handshake agreements are in place with landowners. When negotiating a permanent agreement, the optimum width is 200’, however 100’, 50’ and as narrow as 15’ widths have been accepted. IATPTF has developed Landowner Contact Guidelines for trail volunteers who negotiate access and conservation easements with landowners. Improving landowner communications is a key strategy for moving towards written, permanent protection of the trail.

Catamount Trail

The Catamount Trail is a 300-mile cross-country ski trail spanning the state of Vermont. This trail development effort began in 1984 and was fully linked together in 2008. The trail traverses 135 miles of public land, including the Green Mountain National Forest and numerous state and town-owned parcels. The remaining 165 miles cross private land owned by nearly 200 landowners. Development pressure and changing landowners constantly place the trail in jeopardy of closure. Since 1998, the number of landowners hosting the trail has more than doubled as land has been subdivided and sold.

INSTITUTIONAL CAPACITY: The trail is managed by the Catamount Trail Association (CTA), a non-profit membership organization. CTA has three staff members, an Executive Director and a Trail Management and Protection Director (both full time) and a part-time Office Manager. The Catamount Trail is divided into 31 sections, each managed by a volunteer trail chief responsible for its maintenance. CTA partners with the State of Vermont and the many land conservation groups in the state on projects that include the Catamount Trail within parcel boundaries. CTA partners have included the Stowe Land Trust, the Vermont Land Trust, and The Nature Conservancy.

PROTECTION: The Catamount Trail Association (CTA) initiated a strategic Trail Protection Program in 1998 to work with willing landowners who wish to donate permanent trail easements across their property. As of spring 2008, more than 75 miles of the Trail have been permanently conserved with easements held by CTA or a conservation partner. On many of these parcels the trail is protected through a conservation easement rather than a trail easement. CTA has developed a Trail Protection Plan, which outlines the protocol of their efforts to protect all 300 miles of the Trail in perpetuity. Recently, CTA has also compiled an Easement Stewardship Plan. This document includes important policies and procedures for upholding CTA’s obligations to ensure sound easement drafting and an exemplary stewardship program.

Long Trail

Built by the Green Mountain Club (GMC) between 1910 and 1930, the Long Trail is the oldest long-distance hiking trail in the United States. The Long Trail follows the main ridge of the Green Mountains from the Massachusetts-Vermont line to the Canadian border as it crosses Vermont's highest peaks. The Long Trail is divided into fourteen sections that are each maintained by geographically located chapters of the GMC.

INSTITUTIONAL CAPACITY: The Green Mountain Club has an eleven person staff, including an Executive Director, and Directors of Development, Conservation, Stewardship and Membership. The GMC works in partnership with the State of Vermont and the Vermont Housing and Conservation Board. Financial support for the organization and its trail protection program has come from 9,500 GMC members, foundations, the Vermont legislature, the Governor's Office, the Nature Conservancy, and other partner organizations.

PROTECTION: In 1986, the GMC launched the Long Trail Protection Program in an ambitious effort to permanently protect the Long Trail. At that time, thirty miles of the Long Trail atop seven mountain summits and a number of shelters were for sale. An additional thirty miles of trail had no legal guarantee of public access and use. During the same year, landowners closed the trail in two locations, creating a 2½-mile road walk. Since then, the GMC has conserved over 25,000 acres of Long Trail lands through 80 land acquisition and conservation easement projects.

Over the 270-mile length of the Long Trail, 61 miles of main trail, more than 17 miles of side trails and 19 shelters have been permanently conserved. In addition to the Long Trail, many GMC-protected properties contain other recreational trails and habitat for rare, threatened and endangered species. Habitat for black bear, songbirds, moose, bobcat, deer and other wildlife are provided by Long Trail conservation lands.

Land conserved by the GMC is typically added to state forests with the GMC retaining conservation restrictions on the land to protect a trail corridor. The conservation of Long Trail lands and adjacent lands conserved by other organizations and public agencies has created a significant conservation corridor along the spine of the northern Green Mountains. Despite these successes, nearly 10 miles of the Long Trail System still lacks legal protection and is at risk of being closed to public access at the discretion of landowners at any time.



Upper Willseyville Valley and Eastman Hill. Photo by Bill Hecht.

Comparison of the Finger Lakes Trail Conference/Cayuga Trails Club and Other Trail Organizations

	Finger Lakes Trail (Finger Lakes Trail Conference, www.fltc.org)	Ice Age Trail (Ice Age Trail and Park Foundation, www.iceagetrail.org)	Catamount Trail (Catamount Trail Association, www.catamounttrail.org)	Long Trail (Green Mountain Club, www.greenmountainclub.org)
Trail Length (miles)	900 miles with 563 mile main trail (Study Area portion is 78 miles)	1,100 miles	300 miles	272 miles
Ownership and Protection Status	<both study area and entire trail approximately 50% permanently protected Trail on land owned by 53 private landowners within study area and 688 across entire length (31 easements) and 136 public parcels	55% permanently protected 467 miles of trail is off road, of which 140 miles is unprotected; 530 miles on roads and sidewalks	70% permanently protected 135 miles on public land; 165 miles on private land (200 landowners)	98% permanently protected 61 miles of main trail and 17 miles of spur trail are protected. 25,000 acres are protected through 80 conservation easement and acquisition projects.
Typical Agreement(s)	Verbal, handshake agreement, publicly owned land	Trail and conservation easements, publicly-owned land	Trail easements, publicly-owned land	Trail and conservation easements, publicly-owned land
# Staff Members	3 part-time staff members	9 full and part-time staff members	2 full time and 1 part-time staff members	11 staff members
# Trail Club Local Chapters	20 local chapters	21 local chapters	31 trail sections each with volunteer trail chief	14 sections each with a GMC Chapter responsible
Trail Corridor Width Goal	Current policy - 50 ft, study recommendation – 300 ft.	200 ft.	50 ft.	1,000 ft.
Membership & Funding Sources	1,200 members, Trail map sales, Grants.	3,000 members, Trail map sales, Grants.	1,800 members	9,500 members
Operating Budget	\$ 109,000	\$ 850,000	\$ 225,000	\$ 1,530,000

North Country National Scenic Trail and North Country Trail Association

Both the Finger Lakes Trail and the Ice Age Trail are associated with the North Country National Scenic Trail. Federal legislation passed in March 1980 authorized the establishment of this Trail – one of only eight authorized by Congress as National Scenic Trails. National Scenic Trails are long-distance, non-motorized trails. As envisioned, the North Country National Scenic Trail will ultimately extend across the entire northern tier of the U.S.

INSTITUTIONAL CAPACITY: The North Country Trail Association (NCTA) is the primary citizen’s organization formed to support efforts to develop and promote the North Country NST. The NCTA is a private, nonprofit corporation composed of individual members and affiliated organizations. Its purpose is to help acquire, build, maintain, promote, and protect the trail. It does this primarily by organizing and coordinating private sector involvement in such efforts as fundraising and recruiting, organizing, and training of volunteers to build and maintain the trail.

PROTECTION: The National Park Service (NPS) is responsible for overall administration of the North Country Trail and has primary responsibility for planning the trail and interpreting the landscape through which it passes. NPS has a staff of planners that assist in corridor planning, route selection and long-term protection efforts. With the recent passage of the federal Omnibus Public Lands Bill, the NPS can now accept land titles or easements from the purchase or donation of lands for the use of the trail. This means that the NPS can now apply for funds from the federal Land and Water Conservation Fund and other sources to support the trail.

The NCTA offers funds to local trail organizations for trail construction, maintenance, and the acquisition of trail easements through two programs: the Challenge Cost Share program which is funded directly by the NPS; and the Field Grants Program which is funded by NCTA membership dollars. In addition, the NCTA funds Regional Trail Coordinators in many states, but has yet to do so in New York. The Regional Trail Coordinators offer professional design assistance for all aspects of trail work as well as coordination with other NCTA activities.

The NCTA and the National Park Service currently only play a limited role in supporting the Finger Lakes Trail. Given the potential to learn from other trail projects, and to gain additional private and public resources, partnership opportunities with both NCTA and the NPS should be more fully explored.



View of Connecticut Hill and Cayuta Lake from Carley Road, Town of Catharine. Photo by Mark Whitmore

Additional Institutional Stakeholders

Other key institutions associated with the FLT and the Emerald Necklace include the Finger Lakes Land Trust, local municipal and county governments, and state and federal conservation agencies. The Finger Lakes Land Trust is one of the primary sponsors of this project and has made an ongoing commitment to the protection of key land parcels in this area. The organization is currently working on the acquisition of additional lands, conservation easements, and cooperative acquisitions with the U.S. Forest Service and the New York State Department of Environmental Conservation (NYSDEC).

Local governments are playing an increasing role in open space conservation and recreational trail development within the Finger Lakes Region. The Towns of Ithaca, Dryden, and Danby are three examples of local governments taking a proactive stance in trail protection. The Town of Ithaca has allocated money for the protection of open space and is also developing a network of recreational trails throughout its neighborhoods. The Town contributed funds, as did Tompkins County, to support the Finger Lakes Land Trust's recent acquisition of a 117-acre parcel hosting a portion of the FLT along the Cayuga Inlet.

Dryden is another town that is expanding its role relative to conservation and recreation. The Town is partnering with the Land Trust to acquire two conservation areas and is also actively conserving farmland through the purchase of conservation easements. While the Town of Danby has less institutional capacity, it is also advancing the creation of recreational trails that would link to the FLT. Other towns within the Emerald Necklace are more rural in character and have not yet been particularly active in trail development and open space conservation.

Of the three counties located within the project area, Tompkins has the greatest institutional capacity and has been most active in conservation and open space/trail planning. Its Planning Department has six full-time professional planners, and the county government has directly supported land conservation projects in the past. Schuyler and Tioga are more rural in character and their planning departments have significantly less capacity at the time of this study.

State and Federal conservation agencies play a key role in managing thousands of acres of conservation lands within the project area. The U.S. Forest Service manages the state's sole national forest, which hosts a portion of the FLT along with associated trail systems. The Forest Service also selectively acquires key privately-owned parcels (in holdings) that are located within the Finger Lakes National Forest.

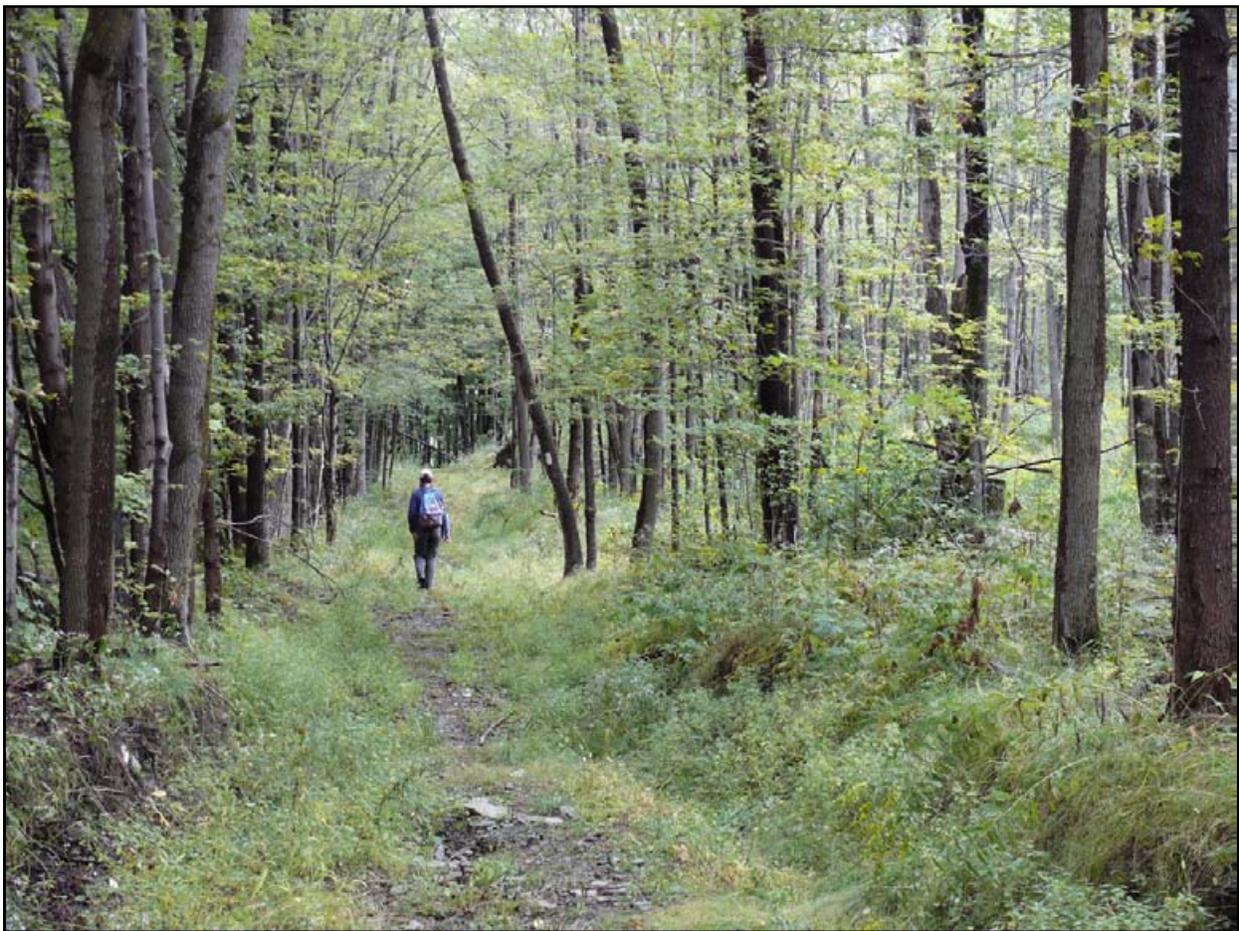
New York State owns and manages tens of thousands of acres within the Emerald Necklace. The FLT is hosted on lands under the jurisdiction of the New York State Department of Parks, Recreation, and Historic Preservation; Department of Environmental Conservation (NYSDEC) Division of Lands and Forests; and the Department of Environmental Conservation Wildlife Bureau. The state has recently acquired lands to extend protection of the FLT adjacent to Robert Treman State Park. NYSDEC has also recently acquired two privately-owned parcels that were surrounded by Hammond Hill State Forest. Land management capacity is limited for both state agencies, but particularly so for NYSDEC, which has suffered significant staff cutbacks in recent years.

Protection and Enhancement Recommendations

Vision

The vision that has emerged from this study is that of a Finger Lakes Trail permanently located in a scenic, off-road setting within a protected corridor of sufficient size to provide a quality recreational experience as well as habitat for a diversity of plants and animals. The trail will have improved and visible access via four gateways located on or near major state highways, as well as enhanced trailhead parking areas, and interpretive signage.

The public forests and preserves that form the backbone of the Emerald Necklace will be strengthened through the strategic purchase or acquisition of conservation easements on parcels with high natural resource and scenic values and that provide a buffer to such lands already in public ownership. The institutional capacity of trail groups, public conservation agencies, the Finger Lakes Land Trust, and local planning efforts will be expanded to further protect the trail. In particular, a new full time land protection specialist at the Finger Lakes Land Trust and a planner position within the Tompkins County Planning Department will both work with project partners toward the implementation of the recommendations within this study.



Finger Lakes Trail passes through a managed forest on a woodland road. Photo by Rick Lightbody.

Corridor Protection and Enhancement Recommendations

To achieve the vision put forth, the following are key recommendations of the Finger Lakes Trail Corridor Protection and Enhancement Plan:

1. **Permanently protect a continuous corridor of at least 300 feet throughout the Emerald Necklace to host the Finger Lakes Trail;**
2. **Enhance Finger Lakes Trail access and infrastructure through the development of four trail “gateways” along with improved trailheads and other associated infrastructure;**
3. **Implement a systematic effort to secure the permanent protection of ten significant open space resource areas within the Emerald Necklace;**
4. **Strengthen municipal land-use planning tools to buffer the Finger Lakes Trail corridor; and**
5. **Significantly expand the institutional capacity of key stakeholder organizations.**

1. Permanently protect the Finger Lakes Trail Corridor

In order to ensure a quality hiking experience and to secure habitat that can serve as a wildlife corridor, it is recommended that a **corridor of 300 feet in width** be permanently protected through the use of voluntary easements as well as select acquisitions from willing sellers. It is vital that this effort be undertaken in a way that recognizes the interests of private landowners and is built upon the strong tradition of trail stewardship that already exists.

Thirty-three miles of the trail within the Emerald Necklace are unsecured at present, including 12 miles of trail that is located on public roads. It is estimated that the creation of the above mentioned corridor will require the protection of approximately 1,800 acres of land. While it is expected that charitable donations by landowners will secure a portion of this amount, it is anticipated that a combination of public and private funds will be needed to secure the bulk of this acreage.

The proposed 300 foot corridor is based on a review of comparable trail protection efforts across the country as well as current thinking on stream corridor buffers and wildlife corridors, and an assessment of feasibility. The 300 foot corridor is proposed as a goal that may not be achieved in all areas. It is understood that those involved in trail corridor protection must be flexible and must accommodate the desires of landowners associated with the trail.

Given the scope of trail corridor protection needs, protection efforts will need to be prioritized to match staff and funding capabilities. The following are suggested criteria for prioritizing trail protection projects:

- Protect trail segments that are replacing on-road trail sections as a top priority.
- Protect the trail sections that link existing publicly-owned lands, in particular where public lands are in close proximity, as a high priority.
- Prioritize other trail protection projects based on natural resource values and anticipated threat to the corridor and its associated natural resources.

2. Enhance Finger Lakes Trail Access and Infrastructure

While the Finger Lakes Trail is recognized as a valuable recreational resource, access to the trail is frequently obscure, and infrastructure and interpretive signs are minimal. To make it easier for the public to access and enjoy the trail, it is recommended that four “gateways” be developed along with additional improvements to trailheads and trail signage, the construction of several new bridges, and other site specific improvements. The following are the specific recommendations:

Gateways

In order to enhance public access to the trail, the development of four trail gateways is recommended. Each gateway will serve as a visible trail access point proximate to a state highway. The proposed gateways will provide parking for up to 20 cars and will also host bicycle racks, trail information, picnic tables, and benches. Professionally-designed, four-sided information kiosks should be constructed at each of the four gateways. The Catharine Valley Trail’s Genesee Street Trailhead in Montour Falls, NY is an excellent model for the type of facility envisioned for the Finger Lakes Trail gateway.



New York State Park’s Catharine Valley Trail four-sided kiosk is a good model for the kiosks envisioned at the four proposed Emerald Necklace Gateways Photo by Rick Manning.

Proposed gateways should be located at:

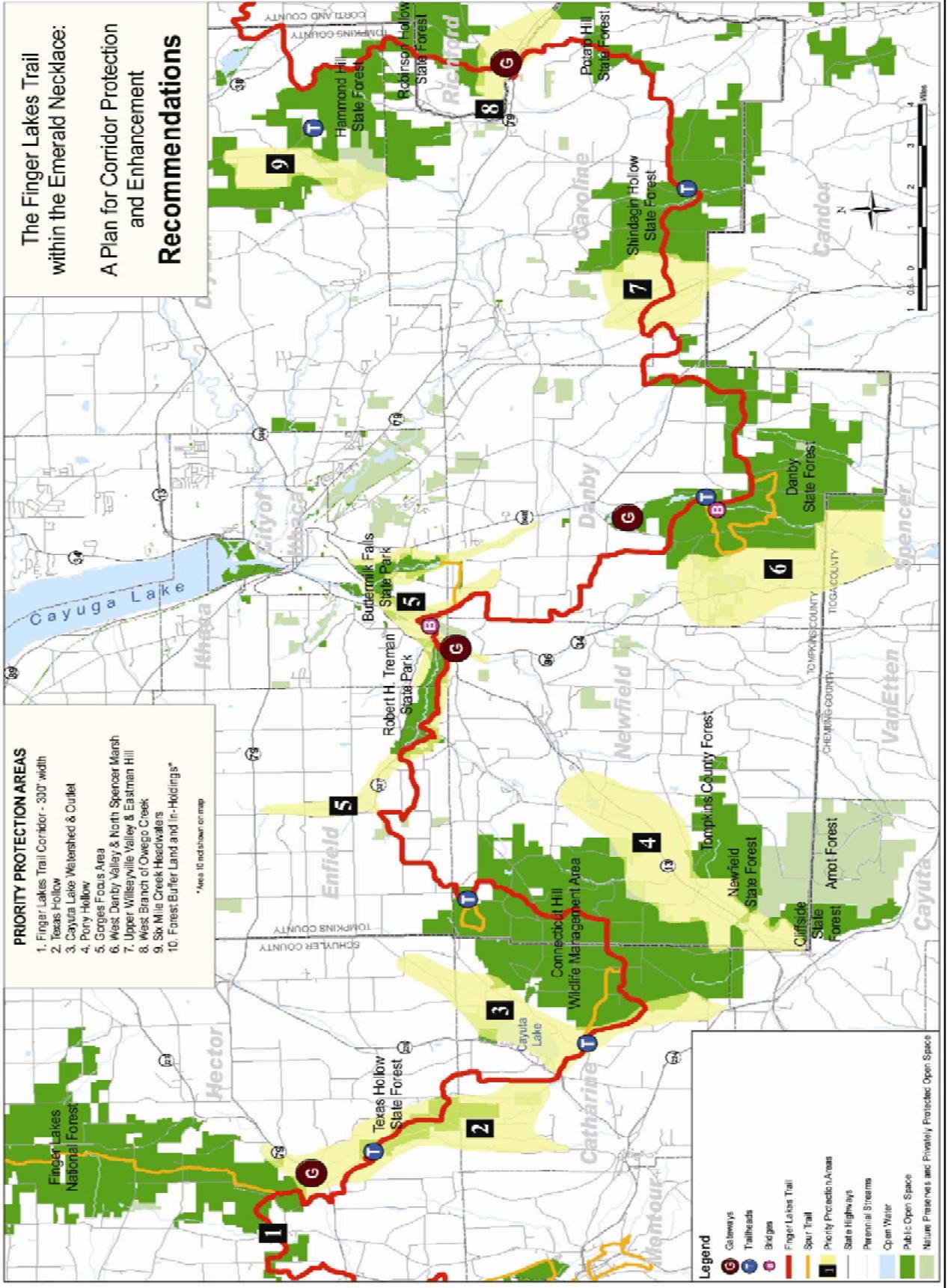
- **Route 79 West** – This gateway would be on State Route 79 in the Town of Hector, Schuyler County between Finger Lakes National Forest and Texas Hollow State Forest (on the east side of the hamlet of Bennettsburg). It is anticipated that the gateway would be developed in conjunction with a reroute of the current trail, which is currently located on public roads for more than one mile in this area. An interpretive kiosk at this site would provide information about the natural and recreational resources associated with the nearby public forests as well as information about the history of the area.
- **Robert Treman State Park** – Robert Treman State Park currently hosts the Finger Lakes Trail within the Towns of Ithaca and Enfield in Tompkins County. The park is located on State Route 13 and is widely recognized as a destination for outdoor recreation. Ample parking is already provided at this site. The construction of an interpretive kiosk in the vicinity of the parking areas near Route 13 could provide information about the Finger Lakes Trail and other associated trails in the area, as well as the area’s natural resources and history.
- **Jennings Pond Park** – This site in the Town of Danby, Tompkins County features an attractive pond, mature woodlands, and a loop trail. While this site is not currently linked to the FLT, the trail is nearby and the park provides an attractive location for trail interpretation that is located just off State Route 96B. The development of a spur trail to the FLT is recommended along with the installation of an interpretive kiosk providing information about the trail and nearby Danby State Forest. Auto wayfinding signs should also be provided from State Route 96B.
- **Route 79 East** – This gateway should be in either the Town of Richford, Tioga County, or the Town of Caroline, Tompkins County, in the vicinity of the Tioga/Tompkins County line on Route 79, a major travel corridor utilized by visitors to Ithaca and other Finger Lakes destinations. This gateway is located in an area where a reroute of the existing trail is proposed. An interpretive kiosk would provide trail information, as well as information about nearby State Forests (Robinson Hollow, Potato Hill, and Hammond Hill) and the West Branch of Owego Creek – a nearby stream that is within the Chesapeake Bay Watershed.



This access to New York State Park’s Catharine Valley Trail parking is about the size needed at the four proposed Emerald Necklace Gateways Photo by Rick Manning.

The Finger Lakes Trail within the Emerald Necklace: A Plan for Corridor Protection and Enhancement Recommendations

- PRIORITY PROTECTION AREAS**
1. Finger Lakes Trail Corridor - 330' width
 2. Texas Hollow
 3. Cayuga Lake Watershed & Outlet
 4. Pony Hollow
 5. Gorges Focus Area
 6. West Danby Valley & North Spencer Marsh
 7. Upper Willseyville Valley & Eastman Hill
 8. West Branch of Owego Creek
 9. Six Mile Creek Headwaters
 10. Forest Euler Land and In-Holdings*
- *Area 10 not shown on map



Trailheads

Trailheads on existing public lands should be further developed to enhance the hiking experience and accommodate increasing use. In keeping with the rustic nature of the trail, proposed improvements are relatively modest. For parking areas, a gravel parking lot for 5 -10 cars would be appropriate. Trailheads should also include a one or two-sided kiosk with a local/regional trail map, interpretive panel about natural and cultural sites of interest within walking distance, trail rules and regulations, and accessibility information. Trailheads should be developed and/or improved at the following locations:

- **Texas Hollow State Forest** (Town of Hector, Schuyler County) – Parking for at least six cars should be clearly delineated at the trail access point that is located immediately south of the school bus turnaround at Texas Hollow Road. Rustic post and rail fencing should be installed on three sides of the parking area to distinguish it from the existing bus turnaround. An interpretive kiosk should be installed with information about the FLT and the State Forest. The nearby bog and associated loop trail should be a particular focus of interpretation at this site.
- **Cayuta Lake Outlet, The Gulf, and the Van Lone Loop Trail (Town of Catharine, Schuyler County)** – The existing small parking area on Gulf Road, off of County Route 6, at the head of The Gulf provides access for the Van Lone loop trail and The Cayuta Outlet Gulf. This area should be reconfigured to provide a more efficient, perpendicular parking layout. The expansion of parking in this area must be done in a way that does not encroach upon adjacent wetlands. Rustic post and rail fencing should be installed on three sides to clearly delineate and contain a 5-6 car parking area. A trailhead kiosk would describe the FLT trail route and Van Lone Loop, along with the unique geology of the Gulf. The installation of an auto way finding sign on nearby County Route 6 is also recommended.
- **Bob Cameron Loop at Connecticut Hill Wildlife Management Area** (Town of Enfield, Tompkins County) – To accommodate increasing use, a new parking lot and kiosk should be constructed at this access point for the loop trail which is located within the Connecticut Hill Wildlife Management Area and adjacent state park land. A southern point where the trail crosses Tower Road would be the best location; the slope is gentle and a 6-car lot could be created on either side of the road. The kiosk should describe the trail route and Cameron Loop Trail as well as information about Connecticut Hill Wildlife Management Area and its designation as one of New York State’s Important Bird Areas.
- **Abbott Loop at Danby State Forest** (Town of Danby, Tompkins County) – To accommodate increasing use of this popular eight mile loop trail, a formal parking lot with the capacity for 6 to 12 cars should be constructed at the existing trailhead on Michigan Hollow Road. An interpretive kiosk should also be installed, providing visitors with information about the loop trail and resources associated with the state forest.
- **Shindagin Hollow State Forest** (Town of Caroline, Tompkins County)– The existing parking area at the junction of Shindagin Hollow Road and Gulf Creek Road should be enlarged to accommodate increasing use of this area and a kiosk with a trail network map and interpretive signage should be installed.
- **Hammond Hill State Forest** (Town of Dryden, Tompkins County) – The existing kiosk at this popular venue for cross country skiing should be enhanced to provide additional information about the Finger Lakes Trail, other recreational opportunities in this area, and natural resources associated with this forest.

Trail Bridges

Numerous bridges have been constructed within the study area to cross small streams. Most of these efforts have been undertaken by volunteers associated with the Cayuga Trails Club.



Finger Lakes Trail bridge in Connecticut Hill Wildlife Management Area was built and installed by volunteers. Photo by Mark Whitmore.

Two sites were identified where either a new bridge or an improved structure are required. The most urgent need is for the construction of a pedestrian bridge across the Cayuga Inlet in the Town of Ithaca, immediately adjacent to the existing railroad bridge. This bridge would replace a crossing of the Inlet which can be dangerous at times of high flow. Due to the breadth of the Inlet in this area, the bridge should be professionally designed and constructed. The most appropriate site for the bridge would be on land owned and managed by New York State Parks.

A new, more durable, bridge is also needed over Michigan Hollow Creek in the Danby State Forest. The current bridge is functional but is deteriorating due to hiking traffic associated with the Abbot Loop Trail. This project should be coordinated with other trailhead improvements proposed in this report.

Future trail reroutes may also require the construction of bridges and creek crossings. For example, a bridge over Hector Falls Creek may be required to allow for possible trail rerouting between the Finger Lakes National Forest and Texas Hollow State Forest.

Trail Signs

The installation of additional signage is recommended throughout the study area to provide greater visibility to trail access points; more detailed information about the trail, natural, and historic resources; and to remind users that much of the trail is sited on private land.

The following specific improvements are recommended:

Kiosks:

Trail accessibility information should be provided at the gateways and other major trailheads. Information provided should be based on the Universal Trail Assessment Process (UTAP), which documents the actual conditions in natural environments. Trail characteristics are noted that would allow hikers of all abilities to decide whether to undertake a particular trail and make necessary safety or equipment preparations beforehand. These characteristics include trail grade, cross slope, width, surface firmness, and the presence of obstacles. See www.beneficialdesigns.com for more information on this process.



Trailhead and gateways kiosks present interpretive information about adjacent areas along the trail, along with information about wayfinding, trail conditions, and trail rules and regulations. Photo provided by the Finger Lakes Land Trust.

Interpretation Signs:

There are many significant natural areas and historic sites along the Finger Lakes Trail that warrant interpretation to enhance the trail experience for hikers. Interpretive panels will be included on gateway or trailhead kiosks. Additionally, low-profile wayside signs should also be placed at significant sites or viewpoints along the trail. An interpretive plan for the Emerald Necklace should be developed to coordinate sign themes, design and placement. The assessment section of this report describes some of the areas of natural interest that should be considered when developing an interpretive signage plan.

Four other signage priorities stand out when considering improvements needed to enhance the Finger Lakes Trail:

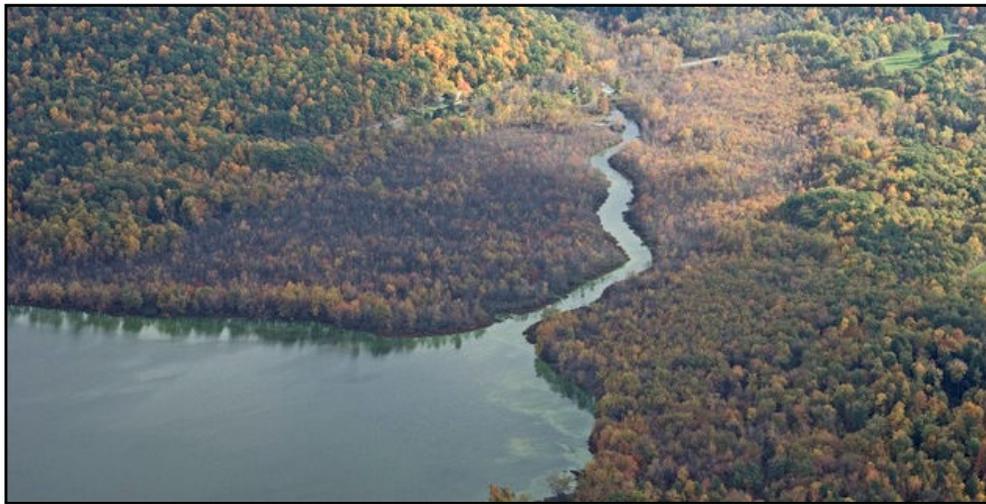
- Auto wayfinding signs - Signs along roadways that help motorists find gateways, trailheads and other trail access points are needed.
- Pedestrian crossing signs - Where the trail crosses roadways, pedestrian crossing signs should be installed to enhance the safety of crossings.
- Entering Private Land Signs: The landowner survey indicated a need for additional signage where the trail is crossing onto private property to advise trail users to stay on the trail, keep dogs on leash, and to respect the rights of landowners.
- Adopter Signs: Adopter signs should be incorporated into trail gateways and trailheads to provide contact information for the volunteer trail steward organization/individual responsible for trail maintenance. This would afford trail users contact information in case there is a need to notify the trail steward about safety hazards or management issues on the trail.



Auto Wayfinding Signs should be placed along state highways and other major roadways to direct motorists to gateways, trailheads and other trail parking and access points. Photo by Rick Manning.

3. Implement a Systematic Effort to Secure the Protection of Ten Significant Open Space Resource Areas within the Emerald Necklace

The Finger Lakes Trail passes through many of the Emerald Necklace’s most scenic landscapes. Accelerating the protection of significant open space resources within the Emerald Necklace will help preserve the Finger Lakes Trail hiking experience and secure parcels that play a key role in maintaining the quality of our natural resources, providing habitat for fish and wildlife, and maintaining the scenic character of our region.



Cayuta Lake Outlet. Photo by Bill Hecht.

Building upon a track record of success:

Protecting Lick Brook Gorge



Photo by R. Blakely

Upon retirement, Marjory “Ree” Thayer of Ithaca purchased the parcel she lives on for its natural beauty and to be near family. Ree and her late husband, Bill, donated a conservation easement on their property to the Finger Lakes Land Trust in the late 1980’s because they “didn’t want the natural beauty to disappear.” She mentioned that they had seen so many natural places nearby change and become developed that they wanted to be sure their property would remain intact forever, and that their decision to host the Finger Lakes Trail was also part of that commitment to the community.

Ree hosts about 2,400 feet of the Finger Lakes Trail, which already passed through their property when they purchased it. Ree likes having the trail on her property because she likes to walk and she feels that there are many people looking after the land: “Having many people around keeps it safe and they watch out...” something she could not do on her own. She says the trail has always been maintained well and that the vast majority of trail users are respectful. She feels it is important to help provide such an important community resource that is free for everyone to enjoy: “...it was no small job creating it; just to get all the connections made is remarkable. It’s been a good experience to have the trail available for people to use.”

Protection Priorities

In tandem with this project, the Finger Lakes Land Trust undertook a systematic review of public and private sector open space lands within the Emerald Necklace that are considered the highest priority for protection. Ten focus areas were identified, including the trail corridor itself, as well as private lands that are located within large blocks of public forest or provide critical buffer to these areas. More detailed descriptions of these resource areas are provided in Appendix D. The ten areas are as follows:

- 1) **Finger Lakes Trail Corridor** (Schuyler, Tompkins & Tioga Counties): Protection of a 300 foot wide corridor for the trail will ensure continued public access while maintaining the quality of the hiking experience and securing associated wildlife habitats.
- 2) **Texas Hollow** (Towns of Catherine and Hector, Schuyler County): Located between Ithaca and Watkins Glen, Texas Hollow features a bog, pristine stream segments, and a popular section of the Finger Lakes Trail. Numerous vernal pools provide excellent habitat for amphibians in this area. Expansion of protected lands in this area will link this site with nearby Finger Lakes National Forest and also ensure overall habitat integrity.
- 3) **Cayuta Lake Watershed and Outlet** (Town of Catherine, Schuyler County): Cayuta Lake is bordered by extensive wetlands that host uncommon plant communities and a diversity of wildlife. In addition, mature forests on the east side of the lake adjoin Connecticut Hill Wildlife Management Area and are worthy of protection. The Cayuta Outlet Gulf is also recognized for its geological significance and hosts a popular segment of the FLT.
- 4) **Pony Hollow** (Town of Newfield, Tompkins County): A scenic valley located just south of Ithaca, Pony Hollow features some of the region's most productive farmland, dynamic wetlands, and scenic vistas from State Route 13. Pony Hollow also serves as a corridor for wildlife movement between Connecticut Hill Wildlife Management Area and the extensive forest lands located to the east. Conservation easements should be used to ensure the integrity of this scenic valley.
- 5) **Gorges Focus Area** (Town of Danby, Ithaca, and Newfield, Tompkins County): The network of gorges found on the southern end of the Town of Ithaca features two state parks and 2,000 acres of existing protected open space. The protection of additional lands is needed to provide buffer to existing protected lands, ensure water quality within Buttermilk Creek, Lick Brook, and Enfield Creek, and to provide adequate habitat and recreational linkages.

Building upon a track record of success:

Providing a Permanent Home for the Trail

Charlie Elrod of Newfield bought the rural parcel that he lives on 11 years ago with a trail easement already in place.



photo by M. Whitmore

According to Charlie he "...thought it was great. It made the land more desirable at the time of purchase." Charlie hosts about 1,200 feet of the Finger Lakes Trail just west of Robert Treman State Park. Charlie is an enthusiastic supporter of the trail, uses it regularly, and has become actively involved in its maintenance.

The trail passes far from his home, at the back of his property, so Charlie has little interaction with trail users other than when he is hiking himself. He states that he has had no adverse experiences with hikers on his property. Charlie enjoys being connected to the Finger Lakes Trail and being able to walk to the trail network at Treman State Park from his property. Indeed, he stated that one of the most important aspects of the Finger Lakes Trail is that it is a part of the North Country Trail and that if he wanted to, he could walk halfway across the United States just by walking out his back door.

6) **West Danby Valley and North Spencer Marsh:** (Town of Danby, Tompkins County & Spencer, Tioga County) The West Danby Valley features kettlehole ponds and wetlands as well as steeply sloping hillsides – a legacy of glaciers. The diversity of its glacial landscape features also provides outstanding habitat diversity. This area hosts several Tompkins County-designated Unique Natural Areas and the Finger Lakes Land Trust’s Lindsay-Parsons Biodiversity Preserve. Just to the south, North Spencer Marsh is a 100-acre wetland that features outstanding habitat for migratory birds.

7) **Upper Willseyville Valley and Eastman Hill:** (Town of Caroline, Tompkins County and Town of Candor, Tioga County): This scenic valley hosts extensive wetlands (including Ridgeway Swamp) as well as a popular segment of the Finger Lakes Trail. Eastman Hill is an adjacent Tompkins County-designated Unique Natural Area with uncommon flora and mature forest communities. The protection of lands in this area will create an unbroken corridor between Danby and Shindagin Hollow State Forests.

8) **Six Mile Creek Headwaters** (Towns of Dryden and Caroline, Tompkins County): The valley between Yellow Barn State Forest and Hammond Hill State Forest features pristine stretches of Six Mile Creek that support native brook trout. Extensive wetlands and a great blue heron rookery are associated with the creek in this area. A mix of field and forest adds to this site’s habitat diversity.

9) **West Branch of Owego Creek** (Town of Caroline, Tompkins County and Town of Richford, Tioga County): Emerging from wetlands located just north of the Hamlet of Caroline, the West Branch of Owego Creek flows in an easterly and southerly direction through a narrow valley characterized by streamside wetlands and steeply sloping, forested hills. The Creek and its associated wetlands provide excellent wildlife habitat. Also, this area is bisected by a key segment of the Finger Lakes Trail.

10) **In holdings and key buffer parcels associated with public forestlands** (Schuyler, Tompkins, and Tioga Counties): The acquisition of key forest parcels located within or adjacent to existing public lands will ensure the ecological integrity of these areas while also ensuring that future development does not diminish recreational opportunities. Parcels surrounded by public land, as well as those that extend public ownership to the nearest road, should be given the highest priority for protection.

Building upon a track record of success:

Creating the Cayuga Inlet Conservation Area



When long-time landowner John Babcock offered his hillside woodlands to the Land Trust for sale, the organization jumped at the chance to secure a key parcel within the Finger Lakes Trail Corridor. Located between Robert Treman State Park and the Land Trust’s Sweedler Preserve at Lick Brook, the Babcock land spans more than 100 acres, hosts a popular segment of the FLT, borders a Cornell Plantations Natural Area, and includes more than a mile of frontage on the Cayuga Inlet.

The Land Trust worked with a variety of partners to complete a \$200,000 fundraising campaign for the project. Contributors included Cornell University, Tompkins County, and the Town of Ithaca. “It was truly a collaborative effort,” says Land Trust executive director Andrew Zepp. “We simply couldn’t have completed this project without our partners’ contributions.”

It is proposed that the acquisition of easements through both purchase and donation be utilized as a primary strategy to achieve the protection goals identified through this study. For trail corridor protection, the acquisition of perpetual conservation easements should be combined with the acquisition of trail access easements. Typically, these conservation easements should be designed to maintain the general character of the trail while providing for traditional uses such as farming and forestry.

The recent expansion of federal and state tax benefits provides new incentives for landowners who are willing to consider the donation of a conservation easement. To ensure a continuous trail corridor, however, it is anticipated that the purchase of easements will also be required. Depending on landowner wishes and the character of the land, it may also be more appropriate to purchase land, outright, in order to permanently protect open space resources. In some cases, a landowner may simply want to sell the property. The consolidation of public ownership in some areas might actually reduce management costs. The implementation of this ambitious plan will ensure that future visitors and residents will enjoy outstanding open space resources that provide clean water, scenic vistas, productive farmland, and a variety of recreational opportunities.

A sustained commitment of public and private funds will be required both to purchase land and easements, and to support the staff time associated with development of site-specific conservation plans and the sometimes lengthy negotiation process.



Pond at Texas Hollow State Forest, Town of Hector. Photo by Mark Whitmore

4. Strengthen Municipal Land-Use Planning Tools

As communities within the Emerald Necklace continue to grow, local municipalities will need to take action in order to ensure the integrity of the trail corridor. Communities should work with their County Planning Departments to improve land use planning tools that can help protect the Finger Lakes Trail. The 78-mile long Emerald Necklace section of the Finger Lakes Trail passes through three counties and eight towns. Local land use planning decisions by town planning boards and staff can have a significant impact on the future of the trail. Town staff and board members should receive periodic trail updates from project partners to ensure they are aware of the conservation activities along the trail and the tools that they can employ to preserve the trail corridor.

Towns should consider including criteria into their site plan/subdivision review process when subdivisions or land use changes trigger review for lands that are adjacent to the trail. In addition, town comprehensive plans or plan updates should recognize the trail corridor and explore linkages to the trail from local, municipal destinations, providing economic development potential through tourism.

County planning staff should identify or develop model site plan/ subdivision review language for municipal consideration and work with town staff and board members to modify procedures to suit their capacity and interest. In addition, a model trail buffer ordinance should be identified and shared with all local communities hosting the trail. Such an ordinance would ensure that nearby development does not greatly alter the overall trail experience. County planning staff should provide appropriate prototypes to town boards.

5. Significantly Expand the Institutional Capacity of Key Stakeholder Organizations

The majority of the recommendations advanced through this study can only be implemented in a timely manner by expanding staffing levels and capabilities of existing stakeholder organizations, including the creation of a planner position to help coordinate project implementation while also working with local governments to ensure the future of the Finger Lakes Trail. In addition, a full-time land protection specialist is needed to conduct outreach to private landowners in the Emerald Necklace, as well as to negotiate protection agreements. It is further recognized that the Finger Lakes Trail Conference is in need of expanded staff capacity to support outreach to landowners and overall trail coordination. New York State also requires additional staff resources to adequately manage the open space resources under its care within the Emerald Necklace, and elsewhere, particularly in the Department of Environmental Conservation.

While the proposed expansion of staff capacity will call for a significant investment of private and public resources, it will also result in the creation of public benefits that will yield tangible environmental and economic results. In recognition of the budgetary constraints associated with the current fiscal cycle, it is understood that staffing increases may not occur immediately. In advance of new staffing resources, stakeholder agencies and organizations are encouraged to work together to identify, prioritize, and implement near term projects and activities.

- **Land Protection Specialist Position:** In order to advance the ambitious land conservation agenda associated with this project, a full-time land protection specialist is needed at the Finger Lakes Land Trust. This newly-created position will provide the Land Trust with the capacity to work with individual landowners to craft conservation plans, and negotiate easements or purchase agreements. This position will also serve as a liaison between the Land Trust and the Cayuga Trails Club, Finger Lakes Trail Conference, and other project partners.
- **Planner Position:** To provide overall coordination of implementation measures associated with this project and to work with local communities on land use planning measures associated with the trail corridor, it is recommended that 1/3 of a planner position be devoted to this effort. This position will take the lead role in working with municipalities to design and implement development and conservation strategies that complement trail corridor protection.
- **Emerald Necklace Coordinating Committee:** Given the scope of this project, it is recommended that a coordinating committee be established to facilitate communication and project implementation. Municipal staff and volunteer board members should be invited to participate as well as representatives of public conservation agencies. The proposed planner position would serve as staff support for this body.

- **Add Capacity to the Finger Lakes Trail Conference and NY State Conservation Agencies:** For long-term trail stewardship of the Finger Lakes Trail, additional staff capacity is needed within both the Finger Lakes Trail Conference and state land management agencies. Additional FLTC staff capacity is needed to strengthen communications between landowners and volunteers, and to provide for long-term stewardship of the trail. Both NYSDEC and NYS Parks, Recreation, and Historic Preservation are understaffed relative to their land management obligations. Additional staffing will be needed to ensure that public lands are not degraded by increased use in the future.
- **Strengthen Trail Partnerships and Tap Available Resources:** Trail partners should engage the National Park Service’s North Country National Scenic Trail professional staff and the North County Trail Association (NCTA) to seek more active support of conservation efforts associated with the Finger Lakes Trail. The National Park Service (NPS) is responsible for overall administration of the North Country Trail and has primary responsibility for planning the trail and interpreting the landscape through which it passes. The NCTA offers funds to local trail organizations for trail construction, maintenance, and the acquisition of trail easements through two programs: the Challenge Cost Share program which is funded directly by the NPS; and the Field Grants Program which is funded by NCTA membership dollars.

Implementation of Trail Enhancements

The following are implementation strategies for near term trail enhancements:

Finger Lakes Trail Gateways

To make highly visible improvements to the Finger Lakes Trail, it is important to begin developing four Finger Lakes Trail gateways in cooperation with state agencies and other stakeholder organizations. Implementation steps include site selection, site planning, detailed design, cost estimating, fundraising, and bidding/construction coordination. Opportunities for in kind contributions by local municipalities, county governments, and state agencies should be explored as project construction is planned. The location of the four gateways is as follows:

1. The western gateway for the Emerald Necklace is proposed to be located along NY State Route 79 in the vicinity of the Finger Lakes National Forest and Texas Hollow State Forest. Finding a suitable site should be undertaken in conjunction with the NYS Department of Transportation, Schuyler County, the Town of Hector, and local residents.
2. The Jennings Pond gateway will be located at Jennings Pond Park and will be developed in conjunction with the New York State Office of Parks, Recreation, and Historic Preservation and the Town of Danby. Wayfinding signs should be placed along NY State Route 96B to direct visitors to this gateway.
3. The trail gateway to be located on the east side of NY State Route 13 across from Robert H. Treman State Park should be developed by working with New York State Office of Parks, Recreation, and Historic Preservation and the NYS Department of Transportation.
4. The eastern gateway for the Emerald Necklace is proposed to be located along NY State Route 79 in the vicinity of the Tompkins-Tioga County line. Site selection should be conducted in cooperation with the NYS Department of Transportation, Tompkins County Planning, Tioga County Planning, the Towns of Richford and Caroline, and local residents.

ANTICIPATED COST: The average total cost per gateway is approximately \$75,000. Costs will vary depending on the existing site infrastructure. Development of kiosks will require sign panel design, fabrication, and construction and is estimated to cost \$25,000. Furnishings including benches, additional signage, and fencing will range from \$5,000 to \$10,000. Site preparation work might cost up to \$50,000 if clearing, filling, pavement and drainage is required. In addition, design fees can cost up to 20% of total construction cost.

Existing Trailhead and Access Improvements

It will be necessary to work with landowning agencies that host the FLT, including municipal, county, state and federal agencies as well as other volunteer trail organizations to enhance trail access by improving existing trailheads and developing new facilities where needed. Implementation steps are similar to those listed for gateways, but it is anticipated that trailheads will be handled primarily by volunteer and in-kind contributions of labor.

Proposed trailhead sites are all located on NYSDEC lands and include:

- Texas Hollow State Forest
- Cayuta Lake Outlet, Cayuta Lake Gulf, and the Van Lone Loop Trail
- Bob Cameron Loop at Connecticut Hill Wildlife Management Area
- Danby State Forest at the Abbott Loop Trailhead
- Shindagin Hollow State Forest at the junction of Shindagin Hollow Road and Gulf Creek Road.

ANTICIPATED COST: The cost for trailhead improvements will, again, vary greatly from site to site. The average cost per trailhead is estimated to be in the \$25,000 to \$35,000 range and would include the trailhead kiosk; materials and labor for creating, expanding or improving parking surface; drainage; fencing to delineate the parking area; benches; and signage.

Finger Lakes Trail Sign Improvement Plan

Funding should be sought to plan for the phased implementation of the signage improvements outlined on pages 31-32 of this report. Priority should be placed on installing pedestrian crossing signs where the trail crosses the road and signs that inform trail users that they are crossing from public to privately-owned land. The next priority is to develop an interpretive plan that will identify themes for kiosk signage and funding sources for panel design and fabrication.

Cayuga Inlet Trail Bridge

In consultation with the Cayuga Trails Club, NYS Parks should design and construct a foot bridge to cross the Cayuga Inlet to be located on state parkland on the east side of Route 13 in the Town of Ithaca. The bridge span is estimated at 65 feet with an anticipated cost of approximately \$150,000.

Michigan Hollow Creek Bridge

The NYSDEC should partner with the Cayuga Trails Club to replace the existing bridge over Michigan Hollow Creek at the Abbott Loop Trailhead. With a length of about 20 feet, the anticipated cost for a professionally designed and constructed bridge would be about \$30,000.

Appendix A. Detailed List of Protection Priorities

The top ten conservation priorities in the Emerald Necklace for the Finger Lakes Land Trust and its partners over the next decade are listed and described below. Please note general locations on the map presented as Appendix 3. The order does not suggest priority. Rather, the sites are arranged in geographic order, from west to east. The Land Trust and its partners will undertake work within any or all of these priority sites when and where opportunity exists and funding can be secured.

Texas Hollow

Texas Hollow lies in the Towns of Hector and Catharine in northern Schuyler County. A ridge and valley feature, Texas Hollow spans the region between Finger Lakes National Forest and Connecticut Hill. Texas Hollow State Forest anchors this area with 937 acres of upland and wetland forest at the very head of the Great Lakes drainage. Cranberry Creek, whose name points to past use of the resource for cranberry production, supports a wild brook trout population. The north end of the State Forest includes the only floating bog in Schuyler County. The Finger Lakes Trail also traverses this forest, including a short loop trail around the bog.

Most of the state forest land in the Emerald Necklace comprises ridge top and hill forests; but Texas Hollow is significant in the Emerald Necklace for its concentration of forested wetland habitat. It includes an abundance of natural kettle ponds and ephemeral woodland wetlands (vernal pools) that are considered rare in the area. These features, too small to be protected as regulated wetlands, are important habitat for many reptile and amphibian species. The NYS Amphibian & Reptile Atlas includes records for spotted turtle, as well as Jefferson salamander (both are NYS Species of Special Concern) from this area. A DEC Biologist has noted encountering an abundance of vernal pools and an unusual abundance of newts and red efts in this area.

Protection priorities for Texas Hollow include:

1. Riparian habitat north of the State Forest on Texas Hollow Creek and Hector Falls Creek (aka Logan Creek), which would provide a connective corridor to the Finger Lakes National Forest.
2. Forested and Riparian habitat south of the State Forest extending along Cranberry Creek and Mill Creek;
3. Key parcels on the east side of the State Forest to provide improved public access to state land along Steam Mill Road and State Route 79. A gateway kiosk and trail head parking on State Route 79 are proposed in this area to improve access to the Finger Lakes Trail.

Greater Cayuta Lake Watershed and Outlet

Cayuta Lake, a 588 acre water body at the headwaters of the Upper Susquehanna River watershed, lies to the west of Connecticut Hill State Wildlife Management Area in the Town of Catharine, northern Schuyler County. The lake features a warm water fishery, intact inlet and outlet wetlands and significant undeveloped shoreline habitat. The inlet wetlands are primarily shrub swamps, which provide significant habitat for breeding birds and amphibians. The NYS Breeding Bird Atlas recorded Pied-bill Grebe, Northern Harrier, and Red-Shouldered hawk from the block that includes the inlet wetlands. According to DEC biologists, the lake and wetlands also provide habitat for breeding waterfowl and other marsh birds, as well as American Woodcock and Ruffed Grouse. A rare freshwater sponge is known to exist in this area. A report on the Unique Natural Areas of Schuyler County notes that the sponge is known only from here and Siberia and hosts a rare fly as well.

Cayuta Lake outlet, which is called Cayuta Creek, flows through swamp wetlands and then through a narrow gorge with steep forested sides. The Cayuta Lake outlet gulf features a population of coal skink, an uncommon reptile tracked by the New York Natural Heritage Program, and provides excellent habitat for other reptiles and amphibians. The NYS Amphibian and Reptile Atlas reports red salamander, ribbon snake, smooth green snake and wood turtle from the area. A historical record for a rare native mussel, green floater, is also noted from Cayuta Creek downstream from the gulf.

Connecticut Hill State Wildlife Management Area includes the east wall of the gulf, where the Finger Lakes Trail passes. This greater Connecticut Hill area is designated as an important Bird Area for Northern Goshawk and other forest breeding birds, as well as Prairie Warblers and Golden-winged Warbler. Deep forest birds include Acadian Flycatcher, Winter Wren, Hermit Thrush and Blue-headed Vireo from the Outlet Gulf.

Protection priorities for the Greater Cayuta Lake Watershed and Outlet include:

- Key wetland tracts upstream of the inlet, to ensure water quality in the wetland as well as the lake. Parts of the inlet wetlands on the north side of the lake are protected by NYSDEC and Cornell Plantations. The state tract also provides fishing access.
- Upland habitat on the east side of Cayuta Lake to secure the connection between the lake and Connecticut Hill Wildlife Management Area. This would expand the contiguous block of habitat for forest breeding bird habitat in the IBA.
- Forested habitat on the west side of the Outlet Gulf to help maintain good water quality for fish, amphibians and native mussels in Cayuta Creek.

Pony Hollow

State Route 13 runs northeast by southwest through the Pony Hollow valley in the Town of Newfield to connect Ithaca with Elmira. Pony Hollow Creek flows south into the Upper Susquehanna River drainage, while headwater creeks to the Cayuga Inlet and the Great Lakes drainage flows north from Pony Hollow. The valley also features some of the most productive farmland in Tompkins County, as well as large undisturbed wetlands.

The valley runs between Connecticut Hill to the northwest and Cornell Arnot Forest and Newfield and Cliffside State Forests to the southeast. The area includes Pony Hollow Creek Marshes and Swamps (Tompkins County UNA 192) and is flanked by three other Unique Natural Areas: Connecticut Hill (UNA 164), Carter Creek, owned and managed in part as a Cornell natural area (UNA 165), and Key Hill Swamp Preserve and Seven Springs Swamp (UNA 166). Riparian habitat in this drainage divide area also provides protected corridors for dispersal of aquatic mammals such as river otter.

Key Hill/Seven Springs supports rat snake, an unusual reptile for this area. Habitat for declining grassland and early successional shrubland birds is also available here. Linking forested habitats in adjacent Connecticut Hill WMA and Newfield State Forest/Arnot Forest/Cliffside State Forest is a Tompkins County priority. Farmland and hedgerow habitat in the area provides suitable buffer habitat for forest breeding birds targeted in the Connecticut Hill IBA.

Protection priorities in Pony Hollow should focus on development of farmland protection easements to secure agricultural lands in the area while protecting water quality and providing riparian habitat. Easements and purchase of key forested tracts in this area would also provide a connection between the Connecticut Hill WMA to the west and the complex of Cornell Arnot Forest, Newfield and Cliffside State Forests and Tompkins County Reforestry Lands to the east. Securing lands between the disjunct parts of Cornell Carter Creek Preserve would protect water quality in Carter Creek and broaden the connective corridor to Pony Hollow.

Gorges Focus Area

The Gorges Focus Area is designated as one of Tompkins County's Natural Features Focus Areas. The upper watersheds of the Gorges Focus Area lie in the Towns of Ithaca, Enfield and Danby. New York State holds two state parks in this dramatic landscape of steep forested ravines, pools and waterfalls: Robert Treman and Buttermilk Falls State Parks. Just upstream of Cayuga Inlet and the City of Ithaca, these parks attract thousands of visitors throughout the year.

No fewer than 14 Tompkins County Unique Natural Areas can be found here, including these five in the upper watershed: Enfield Creek Swamp (UNA 141), the Land Trust Stevenson Forest Preserve (UNA 143), Enfield Glen (UNA 144), Lick Brook and Inlet Valley Slopes (149), and Buttermilk Falls Gorge and Inlet Valley Slopes (UNA150). The continued maintenance of a premier recreation resource with good water quality here is a major priority for Tompkins County and the New York State Parks, Recreation and Historical Preservation.

In recent years, swimming areas in both state parks have been temporarily closed due to water quality concerns. Water quality in Enfield and Buttermilk Creeks as well as Lick Brook would be ensured for the swimming public by protection of key parcels in the upper watershed of these creeks. Priorities include:

- Streamside buffers - in some areas Robert Treman State Park holdings includes the gorge, but insufficient upland buffer out to the nearest road;
- Key tracts to provide buffer upstream of the State Parks on Enfield and Buttermilk Creeks;
- Key tracts to expand the protection of the Finger Lakes Trail corridor in this area – one of the most popular stretches of the trail;
- Additional protection of lowland areas along the Cayuga Inlet, which provide high quality fish and wildlife habitat, and would serve to connect Treman and Buttermilk State Parks and Land Trust holdings at Lick Brook;
- In addition, the Land Trust should continue its ongoing efforts to protect lands along Lick Brook.

West Danby Valley and North Spencer Marsh

Anchored on the north by the Lindsay-Parsons Biodiversity Preserve and on the south by North Spencer Marsh, the West Danby Valley includes a chain of high value wetlands which provide habitat for a diverse array of wetland birds, amphibians, and rare plants. This area encompasses four Tompkins County UNAs: Thatcher's Pinnacles (UNA 186), Headwaters Swamp (UNA 187), West Danby Morainal Valley (UNA 188), and West Danby Creek, South Branch Wetlands (UNA 189). The site is valued for its geological features and expansive natural forests – wetland forests in the valley, rich mesophytic forests at the base of the pinnacles and oak-hickory types on the steep slopes and hill tops. It is a migratory corridor for hawks and songbirds.

West Danby Morainal Valley is situated at the headwaters of the Great Lakes drainage. Danby State Forest, which flanks the valley on the east, includes Michigan Hollow, which flows both north and south. These two valleys converge in the vicinity of North Spencer Marsh, which drains to south flowing Michigan Creek. River otters are common in the Upper Susquehanna drainage, and these drainage divide wetlands provide dispersal opportunities for the otters into the Cayuga Lake watershed.

The West Danby Morainal Valley has a very complex topography. State Route 34/96 passes though the valley, which is flanked both east and west by glacially oversteepened hills, for a very dramatic landscape. A valley head moraine, the valley lies in an area where the glacier left morainal ridges, as well as kettle holes and kame deposits in the valley and on the lower parts of the hillsides. The resulting

vegetation is most diverse, ranging from old growth rich mesophytic forest at the base of the pinnacles, to forested wetlands, shrub swamp, wet meadows, marshes and old fields.

North Spencer Marsh, which comprises 90 acres of freshwater pond and emergent marsh surrounded by another 39 acres of wooded wetland, lies in the Town of Spencer, Tioga County. The Breeding Bird Atlas reports nesting Pied-billed Grebe, Green Heron, Wood Duck, Common Merganser, and Osprey from the site. Nesting Red Breasted Mergansers have also been reported along with Virginia Rail and Sora, and possibly American Bittern.

Protection of priority wetland parcels and buffer in the West Danby Valley and North Spencer Marsh will secure the quality of these wetlands and the flora and fauna they support. Specifically, Finger Lands Land Trust and partners should:

- Work cooperatively with private landowners to secure significant wetland areas and contiguous forest within the West Danby Morainal Valley south of the Lindsay-Parsons Biodiversity Preserve. This is the highest priority project identified by the 20 interviewed individuals;
- Protect additional tracts bordering the Lindsay-Parsons Biodiversity Preserve and Danby State Forest. This is a Priority Protection Area under the Tompkins County Conservation Plan, and it would protect and connect two Tompkins County Unique Natural Areas.
- Secure remaining unprotected portions of Thatcher's Pinnacles, which is also a Tompkins County Unique Natural Area. The Pinnacles lie mostly within Danby State Forest, but include a portion of Lindsay-Parsons Biodiversity Preserve as well as private holdings.
- Secure North Spencer Marsh and adjacent uplands that serve to ensure its water quality. Wetland restoration projects should also be considered in the vicinity of the marsh to improve wildlife habitat while reducing downstream flooding.

Upper Willseyville Valley & Eastman Hill

Upper Willseyville Valley and the hills that flank it in the Town of Caroline in Tompkins County, and the Town Candor in Tioga County, provide an expansive drainage divide wetland complex between Danby and Shindagin Hollow State Forests. To the north, the complex drains to Six Mile Creek, a drinking water source for the City of Ithaca. To the south, it drains to Willseyville Creek. The wetland complex includes Ridgeway Swamp, which features large shrub swamps, open marshes, fens, and forested wetlands as well as beaver meadows.

Upper Willseyville Valley and Eastman Hill includes eight Tompkins County UNAs: Caroline Depot Woods (UNA 174), Willseyville Beaver Ponds (UNA 176), Belle School Road Fen (UNA 177), Eastman Hill (UNA 178), White Church-Willseyville Swamp (UNA 179), Caroline Pinnacles (UNA 180), Bald Hill Woods (UNA 181), and Bald Hill Laurel Woods (UNA 182). The complex sustains populations of rare plants, such as lyre-leaved rockcress, cow-wheat and hairgrass high on the hilltops and orchids like fragrant white bog orchid and hooded ladies' tresses in the wetlands. The diversity of wetland habitats also supports breeding and migrating birds as different as Black Duck and Whip-poor-will, as well as amphibians such as spotted salamander. The wetlands support warm water fish, while Six Mile Creek downstream is valued as a trout stream.

Shindagin Hollow State Forest flanks this site on the east, with large blocks of forest and Shindagin Hollow, itself, a steep gorge flanking a tributary to the Susquehanna River. Protected land within this area includes Cornell University natural areas at Bald Hill and the Caroline Pinnacles. The Finger Lakes Trail comes down into the valley from Danby State Forest onto the historic Ithaca and Owego railbed trail that runs along the west side of the valley.

Conservation priorities include the protection of:

- Key wetland and buffer tracts, to ensure habitat integrity, protect wetland hydrology, and contribute to the purity of Six Mile Creek drinking water for the City of Ithaca;
- The Ithaca and Owego railbed, which provides excellent recreational opportunities;
- Key tracts on Eastman Hill, which flanks the valley on the west, ensuring a link to Danby State Forest, securing a mature oak hickory forest, a section of the Finger Lakes Trail corridor, and protecting the steep headwater streams that flow to the wetland complex.

West Branch of Owego Creek

At the headwaters of the Upper Susquehanna River watershed, the West Branch of Owego Creek flows through forest and farmland in the vicinity of the county line, in the Towns of Caroline/Tompkins County and Richford/Tioga County. Along the headwaters, 250 acre Caroline Swamp (Tompkins County UNA 158) is partially protected by The Land Trust's Goetchius Wetland Preserve, which contributes to water quality protection in this trout stream. This area also provides a connection between State Forest lands at Potato Hill to the south and Hammond Hill/Robinson Hollow to the north. Whitmore and Manning have proposed a gateway kiosk and parking lot for improved access to the Finger Lakes Trail for the State Route 79 roadside along the creek.

Protection priorities for the West Branch of Owego Creek include:

- Expansion and restoration of the Goetchius Wetland Preserve;
- Conservation easements or acquisition of key parcels along the creek and hillsides to improve trout habitat, provide a site for the FLT gateway kiosk and parking access, and provide riparian habitat for a variety of mammals, including river otter and bobcat;
- Protection of key tracts that serve to connect Hammond Hill and Potato Hill State Forests.

Six Mile Creek Headwaters

Six Mile Creek is valued as a pure drinking water source for the City of Ithaca. While the main stem of the creek and its major tributaries are in the Town and City of Ithaca and the Town of Caroline, part of the headwaters are situated in the Town of Dryden, in the vicinity of Hammond Hill and Yellow Barn State Forests. The Headwaters site includes three Tompkins County Unique Natural Areas: Star Stanton Hill (UNA 116), part of which is included in Hammond Hill State Forest, Cornell Plantations' Slaterville Wildflower Preserve (aka Old 600, UNA 117), and Dryden-Slaterville Fir Tree Swamp (UNA 118). The headwaters creek also passes through the Land Trust's Roy H. Park Preserve.

Conservation priorities include protection of lands adjacent to Roy H. Park Preserve and acquisition or conservation easements on key buffer tracts along the creek corridor to help maintain water quality, fish habitat, and safe travel corridors for wide-ranging mammals like bobcat, and river otter, as well as connecting Hammond Hill and Yellow Barn State Forests.

Finger Lakes Trail Corridor

The Finger Lakes Trail winds through 78 miles within the Emerald Necklace, traversing protected stretches of corridor and lengths of less secure trail easements. The Trail uses public lands for 40% of its length. The remaining 60% passes over private property or roadways. The Trail must use existing roadways for a total of 12 miles in the Emerald Necklace, which provides a less than satisfactory and

sometimes dangerous hiking experience. Passage over private land is hosted by the landowner, mostly by handshake or written agreement. These informal agreements are subject to revocation at any time, and several sections of trail have had to be rerouted for this reason.

Formal conservation easements for passage of the Trail would provide permanent protection. Securement of key parcels throughout the Trail corridor would greatly improve this asset to local people and visitors attracted by the recreational opportunity the Trail provides. Establishment of a 300' trail corridor would ensure the wild character of the trail, while improving protected travel corridors for a wide variety of birds, mammals and amphibians. This long-term goal should be approached using permanent conservation and access easements, and in select cases, purchase of property. Specific Trail protection priorities, including provision for sites to be developed as trailhead gateways, can be found throughout the conservation priorities presented above.

Forest Buffer Lands and In-holdings

Acquisition of public forestlands in the Emerald Necklace began during the depression years of the 1930s as farms failed and landowners abandoned the land. Tracts were acquired from willing landowners, which generally resulted in a patchwork pattern of public land. Additional tracts have been acquired up to the present time, for a total of over 50,000 acres today. NYSDEC designated their holdings here as nine State Forests (Texas Hollow, Newfield, Cliffside, Danby, Shindagin Hollow, Potato Hill, Robinson Hollow, Hammond Hill, and Yellow Barn, over 23,000 acres combined) and the 11,000 acre Connecticut Hill Wildlife Management Area. The US Forest Service established the 16,000 acre Finger Lakes national Forest. Tompkins County also holds Reforestation Lands in the Town of Newfield.

Consolidation of state lands by acquisition or conservation easements on inholdings would prevent fragmentation and an increase in edge habitat. Where the edge can be minimized, forest dwelling birds are safer from predators, which are often generalists favored by an abundance of hedgerows and open habitat. Wide ranging mammals such as bobcat, black bear and river otter, which are advancing into the Emerald Necklace, are attracted to developed areas by the greater abundance of small mammal prey, bird feeders, and pets. Use of these areas by wide ranging mammals exposes them to greater risk of roadkill and other conflicts with civilization. Acquisition from willing sellers or development of conservation easements on key tracts would improve habitat for many species, especially forest nesting birds and wide ranging mammals. Consolidation would also secure recreational access, and enhance of other values such as water quality and scenic overlooks.

Appendix B. Results of the Landowner Survey

Introduction:

In late April 2008, a short written survey and cover letter were mailed to all 53 private landowners who host the Finger Lakes Trail (FLT) within the study area. A second mailing was sent in early June 2008 to those landowners who had either replied anonymously or did not return the first survey. Six landowners were subsequently interviewed personally while conducting other aspects of this study. Altogether 38 surveys were completed, representing 78% of the landowners who host the FLT, excluding undeliverable addresses.

The Survey Results:

Question 1: Perhaps we've made an error; does the trail pass through or adjacent to your property? All 38 responded positively to this question.

Question 2: How many years have you owned this property? 35 responded to this question and the average length of time they had owned their property was 31 years, with a high of 60 years and a low of 5 years.

Question 3: How many years have you hosted the Finger Lakes Trail? Although only 25 answered this question the difference was that 10 long term landowners didn't remember how long they had been trail hosts. This is likely the reason that the average length of time was only 26 years (maximum 45 and minimum 5 years), the actual figure is likely much higher.

Question 4: How would you rate your satisfaction with communications between you and the Cayuga Trails Club and/or the Finger Lakes Trail Conference? There were 35 who responded to this question and only 5 rated indicated their experience was unsatisfactory or highly unsatisfactory. Most of the respondents who commented mentioned they liked to get the newsletter, felt it was informative, and that they like getting updates. Two comments indicated possible avenues for improvement. One was that they would like regularly updated contact information with the people who work on their land; the other was that they felt it would be good to get something from the trail clubs that is tailored more to the hosting landowners. There were four who mentioned that they had had no communications with the trail organizations.

Question 5: How would you characterize the maintenance of the trail? Of the 37 responses to this question, only three were negative. Several respondents mentioned that they would like to know when maintenance activities are planned for their section of the trail so that they might be able to participate and so they would know when there will be chainsaws active on their land. One landowner mentioned that horse traffic made mowing difficult. There were five landowners who commented in personal interviews that they would like to see trail signs maintained that clearly stated the rules of the trail and communicate the respect the landowners deserve.

Question 6: How respectfully has your property been treated by trail users? Most respondents were very positive, commenting on how delighted they were to meet hikers. However, there were five negative responses that registered only comments, no numerical response, and seemed to be related to a few isolated incidents. The most common negative comments registered by respondents (5) were about dogs being off-leash on their property. One landowner stated that off leash dogs being walked on the trail had killed one of their sheep. There were also a few comments about hikers being rude to landowners because they were riding horses or ATV's on the FLT while on their own property.

Question 7: How do you view the overall experience of having the Finger Lakes Trail pass through your property? The responses to this question were almost entirely positive and only three did not

answer it. There were only few comments with this question and most were positive, expressing how they like people to use the trail and like to share their land with the community. Three respondents mentioned that they have had problems during hunting season.

Question 8: What do you like most and least about hosting the trail?

Nearly half of the respondents (17) did not answer this question. Most of the comments were positive and examples follow:

“I like people to enjoy nature.”

“I like to contribute to the availability for all who want to enjoy the outdoors.”

“I like to see people use the FLT and share the beauty.”

“I use the trail a lot, it connects with other trails on my property.”

“I like meeting interesting people.”

“I like visiting with hikers that stop by for water or just meeting them on the trail.”

“It’s great to have the ability to share the land with others who respect and enjoy it.”

“You act as a watchdog for me.”

Most landowners claimed there were no problems with the trail use on their property and many said they rarely even saw hikers on the trail. One large landowner leases most of their land to hunters and is very sensitive to trail use that would adversely impact these hunters use of their land. Indeed, they mentioned one incident where hikers had disturbed hunters during turkey season. They were dissatisfied with the Club’s response to their concern.

Another complaint expressed by a few respondents was that hikers were not following the rules of the trail and were disrespecting the landowners’ personal use of their land. Indeed, one landowner who used to host the trail mentioned in an interview that they revoked the rights of the trail on their land because hikers had given them a hard time for riding horses on their own property. These problems might be addressed by installing more signage that clearly states the rules of the trail and to respect the landowners.

One respondent mentioned that he was worried about the possibility of adverse possession and that he would appreciate a document that would clearly state he could revoke the right of public passage at any time. There were other landowners that stated they would feel more comfortable with some kind of written document, or memo of understanding concerning the passage of the FLT on their property and indicating key contacts within the trail organizations.

Question 9: What are your plans for the future of this property?

a) **No change.** The great majority (19) selected this option.

b) **Plan to sell the property sometime in the next 10 years.** 4 indicated this option.

c) **Plan to transfer the property to another family member.** 7 indicated this option.

d) **Not sure.** 5 indicated this option.

e) **I prefer not to disclose my plans for this property.** 3 indicated this option.

Question 10: As it exists today, the Finger Lakes Trail Corridor on private lands is for the most part maintained by simple handshake agreements. Would you consider assuring the future existence of the Finger Lakes Trail by making permanent your willingness to host the Trail through a permanent trail easement? There were five respondents who indicated they were interested in a permanent trail easement. Six said “maybe”, the majority (19) said “no”, and 5 did not answer this question. Two of the 5 landowners who indicated interest in an easement were interviewed at length about this after they had been contacted by members of the Cayuga Trails Club. There were a few issues that they mentioned that may be able to be incorporated into any future discussions of trail easements. The first landowner interviewed said they would consider an easement but not one with a defined route, they might want to reroute it depending on future land management decisions. The other important issue voiced by both landowners was the width of the trail easement corridor. They were not comfortable with the proposed width of 50 feet. The second landowners interviewed also mentioned that they had not considered the long term implications of an easement and that they needed more time.

Question 11: Would you like to become more involved in the organizations working on the Finger Lakes Trail? Four answered that they would like to become more involved with the FLT organizations, 3 said “maybe”, the majority (21) said “no”, and 7 did not answer.

Conclusion:

The civic commitment of the landowners who host the FLT was apparent in this survey. Problem areas need to be addressed and a more formal agreement with landowners would help to reassure them that their generosity is respected. The majority of respondents were happy hosting the FLT and cited community interest and involvement as motivating factors. However, 22% of trail-hosting landowners did not respond to the survey; it is unknown whether they are satisfied or dissatisfied with the trail. Some of the landowners that did not respond to the survey were contacted, and one stated that he would like to have a formal understanding with the trail organizations about his rights and the responsibilities of the Finger Lakes Trail Conference (FLTC). Such an agreement may be an important tool for engaging landowners in the active management of the trail system. In addition, it would give the landowners a sense of formal commitment on the part of the FLTC.

The most common concerns with trail use cited by landowners were based on a lack of respect for the rights of the private landowners hosting the trail. It seems clear that efforts to educate trail users need to be increased and increased trail signage would be a good place to begin.

The greatest threat today to the Finger Lakes Trail is land sale and transfer of ownership, as there are few trail easements in place. During the course of the study at least one inter-generational transfer of land ownership resulted in the loss of a significant portion of trail. To have a greater chance of attaining easements, they must be carefully crafted to be flexible to the landowner’s needs and desires.

The Finger Lakes Land Trust is a membership supported not for profit land conservation organization protecting those lands that define the character of the Finger Lakes region. Founded in 1989, the Land Trust works to conserve the beautiful, wild, and working landscapes of the 12 county region by establishing nature preserves and conservation areas which are open to the public, holding voluntary conservation easements on private lands, educating for responsible stewardship, and providing technical assistance to local governments and landowners.

Please consider becoming a member of the Finger Lakes Land Trust and supporting the Land Trust's efforts. If you are interested in learning more about the Land Trust or becoming a member visit www.flt.org or call 607-275-9487.