

# **Indian Creek Gorge & Lake Slopes Unique Natural Area\***

**Its Significant Natural Features  
And Need for Protection**

**Prepared by  
The Town of Ithaca Planning Department**



*\*Report generated to support the creation of a Conservation Zone that was adopted by the Town of Ithaca Town Board on April 10, 2006 (via resolution No. 2006-079)*

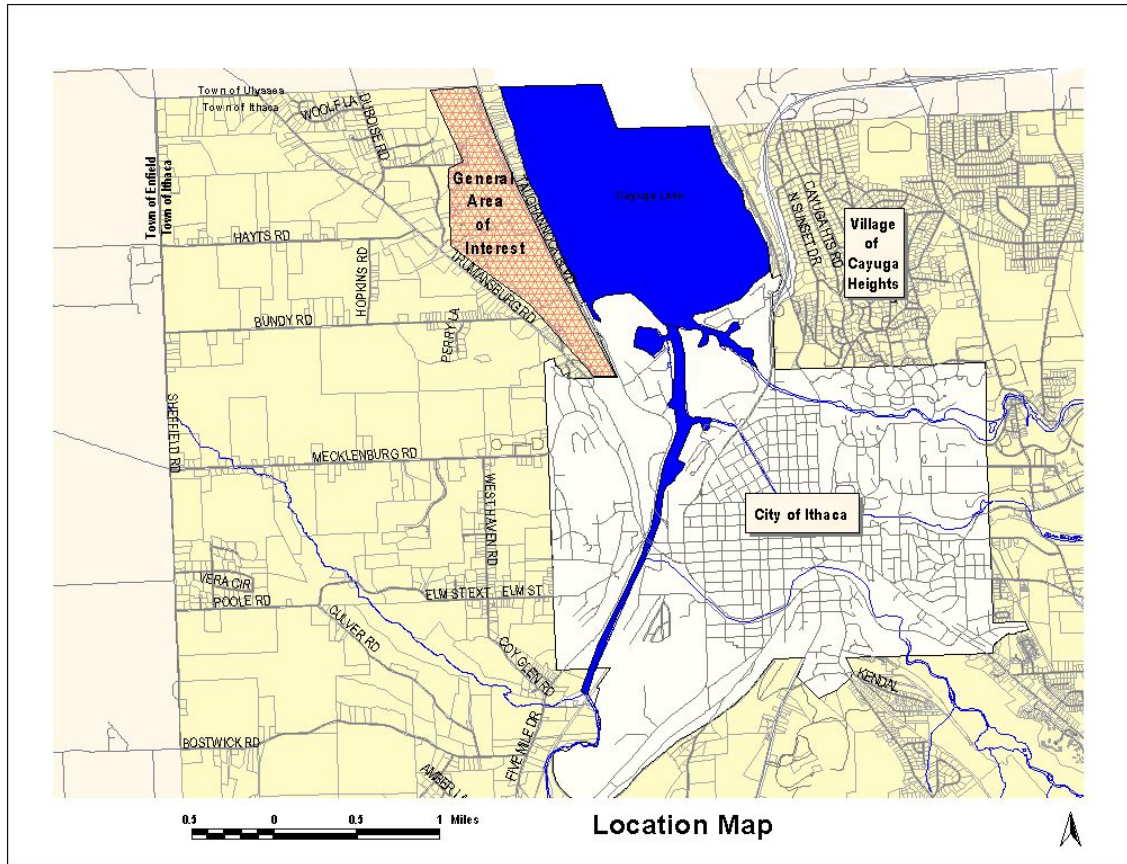


Figure 1

**Introduction**

The Indian Creek Gorge and Lake Slopes Unique Natural Area (UNA) is one of twenty-seven UNA’s in the Town of Ithaca. The UNA is a countywide designation that identifies land areas that contain outstanding environmental qualities deserving special attention for preservation and protection. This inventory, developed by the Tompkins County Environmental Management Council, serves as an important tool for the land use planning efforts in the Town of Ithaca. Both, *the Town of Ithaca’s Comprehensive Plan (1993)* and the *Park, Recreation and Open Space Plan (1997)*, have clearly stated the Town’s commitment to ensuring protection of its open space and sensitive environmental resources, and both have identified specific targeted areas, including the Indian Creek Gorge and Lake Slopes. The Town has made great strides in implementing many of the Plans recommendations, but further efforts must continue in order to insure that conservation opportunities are not lost.

The purpose of this report is to describe what is known about the Indian Creek Gorge and Lake Slopes area and to present a proposal for establishing a Conservation Zone in this area. The area of consideration includes only the undeveloped portions of the UNA along the west side of Taughannock Blvd./ Route 89. The proposal does not affect the immediate lakeshore properties east of Cayuga Lake, which have already been developed and contain relatively small lot sizes, unlikely to ever be further subdivided.

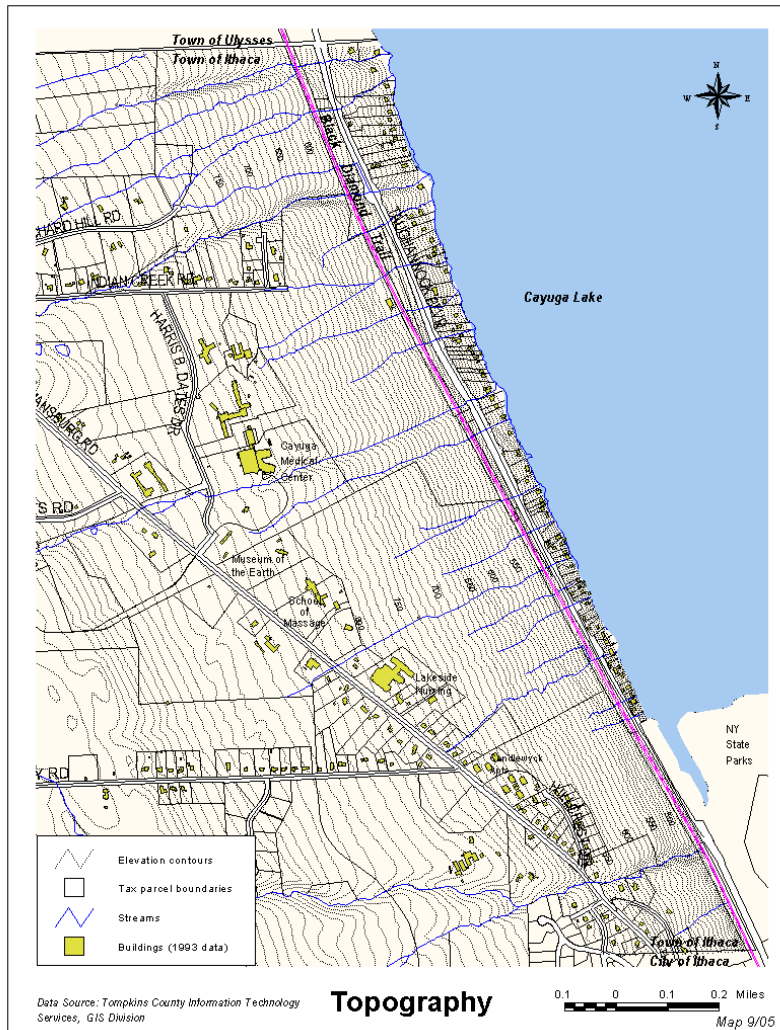


Figure 2

### **General Description**

As shown in Figure 1, the Indian Creek Gorge and Lake Slopes area traverses an area between Taughannock Blvd and Trumansburg Road, along the west-facing slope of the Cayuga Lake valley. This area is known for its steep slopes, mature woods, and numerous small stream gorges. As shown in Figure 2, the elevation contour lines are closely concentrated in this area, indicating a very steep grade. Slopes within this region range from 12% to 15% immediately behind (east of) the developed area along Trumansburg Road (i.e. the Cayuga Medical Center, Museum of the Earth) and exceed 20%, and sometimes 25%, in portions nearing Taughannock Blvd.

The Indian Creek Gorge and Lake Slopes Area is distinguished by its wide continuous corridor of largely undeveloped forested lands that extends from the City of Ithaca municipal boundary throughout the Town of Ithaca for almost two miles (Figure 3). This forested landscape provides an important scenic resource, especially as seen from Cayuga Lake and points east and south of the lake. Scenic and aesthetic values were also cited in the UNA inventory as one of several reasons for the UNA designation. This wide swath of forest, up to 2000 feet wide at the northern municipal boundary, extends into the Town of Ulysses for another half mile, becoming a mix of forest and agricultural land with sparse interspersed development that extends to the north for many miles. Several larger forested tracts, including the Cayuga Nature Center property and Taughannock Falls State Park exist along this corridor.

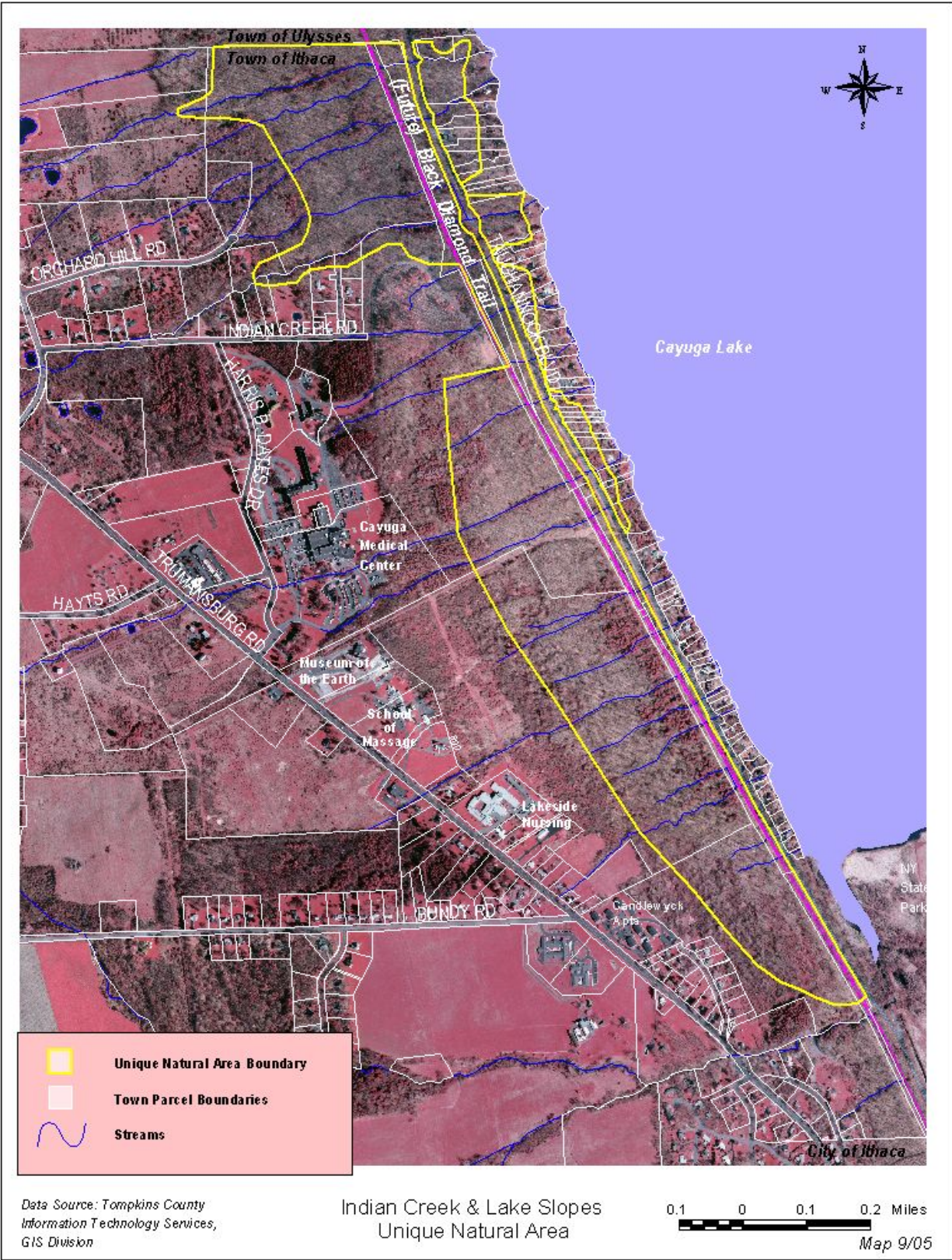


Figure 3

As seen from the east side of Cayuga Lake, the forested hillside of the west slope is a prominent view that extends for miles from the City of Ithaca up beyond Taughannock Falls State Park. This is the type of scenic quality that has led to the NYS designation of the Cayuga Lake Scenic Byway that extends for 86 miles around the lake.

According to the UNA survey form, the Indian Creek Gorge and Lake Slopes UNA (UNA-97), contains a mix of mature forests and old-field forests. The mature forests generally occur in the steepest areas, where the difficult terrain served to make logging less frequent and more selective. These areas are dominated by white and red oak, along with pignut and shagbark hickories. Also present are sugar maple, tulip poplar, and sassafras. The UNA survey reports some of the best forests as occurring in the stream gorges associated with Indian Creek, where it appears to have been 60 – 100 years since the last timber harvest. One particular stand of mature forest is reported as containing trees over 150 years old. Sugar maple, white oak, basswood, white ash, and hemlock are reportedly present in these areas. On the abandoned farm fields, shrub thickets and young forests are found to be present, with the old-field forests dominated by red maple, white ash, and white pine.

This area also serves as important habitat for plants and wildlife, with the long forested corridor providing for unimpeded movement of species. The NY Natural Heritage Program has determined that the site “may contain rare plants, animals, and/or significant ecological communities,” with the UNA inventory documenting the occurrence of a couple of locally rare plant species, specifically palmate violet and purple bush clover.

Another distinguishing feature of this UNA is the numerous streams that traverse down the steep slopes and into Cayuga Lake. In many cases these fast moving streams have created small gorges with steep sided walls and shale rock beds. The streams can be observed along Taughannock Blvd., where the drop off from the old abandoned railroad grade has resulted in the creation of numerous waterfalls that are particularly noticeable during spring snowmelt or after a large rain event. The size of these streams, in terms of contributing drainage areas, varies, with the two largest streams being Indian Creek, which has a drainage area originating near Sheffield Road, and Williams Glen.

The UNA is also dominated by highly erodible soils. As shown on Figure 4, erodible soils are prevalent throughout the UNA and contiguous areas. These soils include Hudson-Cayuga silt loam (HuC3 and HuD), Hudson-silty clay loam (HsD3), Hudson and Dunkirk (HzE), and Howard gravelly loam (HdD). The classifications are provided from the Soil Survey for Tompkins County (USDA, 1961), which describes the relative natural erodibility of the soils as being a function of soil texture, including coarse fragments and degree of slope.

The future Black Diamond Trail traverses the UNA from north to south. This 15 mile multi-use trail to be constructed and maintained by the NYS Office of Parks, Recreation, and Historic Preservation will utilize the abandoned Lehigh Valley Railroad bed that runs parallel to Taughannock Blvd. (Figures 2-4). This long awaited trail provides important recreational and transportation opportunities for the community, and will link four state parks with the City’s waterfront trail and the Town’s multi-use trail network.

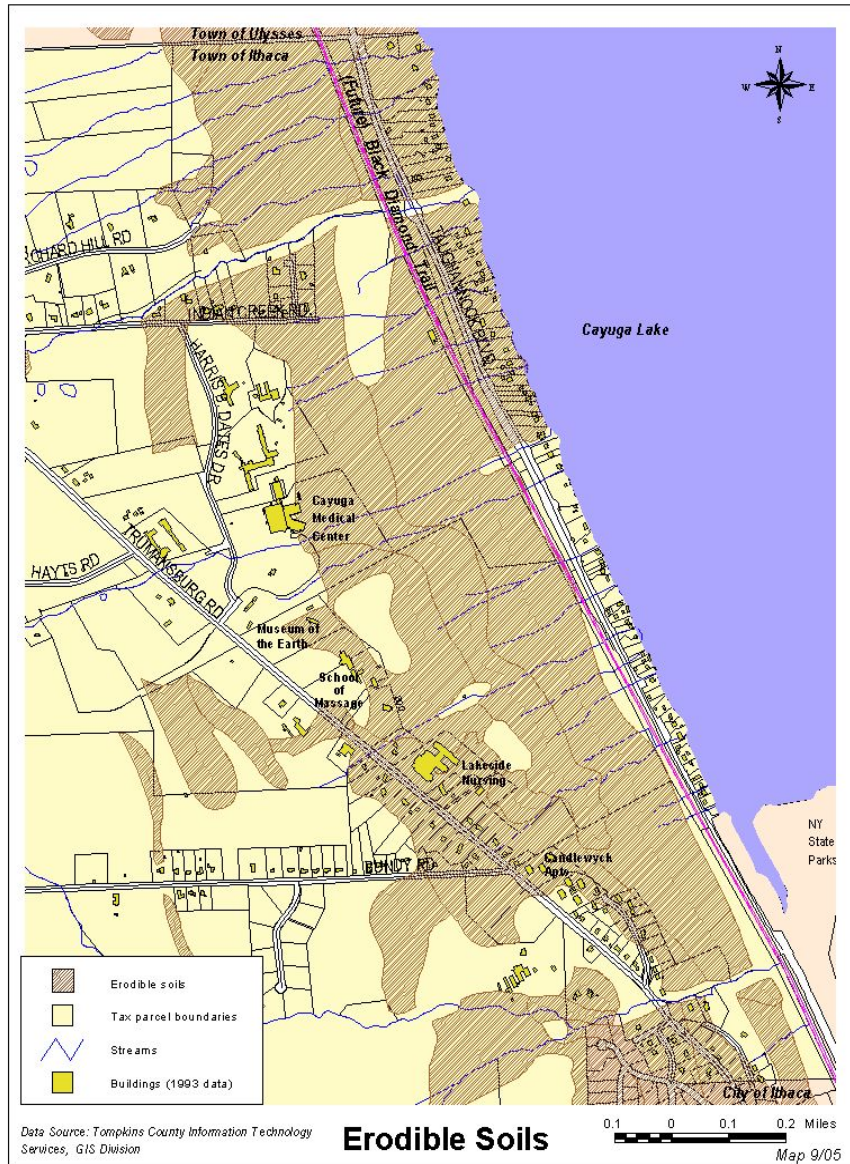


Figure 4

**Additional Recognition of the Indian Creek & Lake Slopes Area**

In addition to its UNA designation, the Indian Creek Gorge and Lake Slopes area has also been identified by the Tompkins County Greenway Coalition as an important biological corridor in need of protection. The 1995 report, *Building Greenways for Tompkins County: An Action Plan* prepared by the Tompkins County Greenway Coalition, identified thirty biological corridors in Tompkins County. The Indian Creek and Lake Slopes area is part of the greater West Banks of Cayuga Lake corridor. The study included sites with rare species and habitats, and high quality examples of common natural habitats, along with land areas where connections or “land bridges” between the large open areas and scarce habitats and landforms could be made. The study described how increasing development fragments natural habitats into increasingly smaller and more isolated patches, creating barriers for dispersal or wildlife movements, ultimately changing the plant and animal communities in them. In order to provide for the needs of both plants and animals this study recommends protection of these important habitats and corridors.

The recently completed *Tompkins County Comprehensive Plan* (December 2004) also recognizes this area. The Plan identifies 14 distinct and significant “Natural Features Focus Areas” in Tompkins County and recommends that conservation efforts be applied to insure protection. One of these areas is the “Lake Shore” area, which includes the Indian Creek Gorge and Lake Slopes UNA. According to the Plan, this area is described as surrounding “the most significant focal point of Tompkins County”, and includes such resources as “a large biological corridor, an Important Bird Area, numerous stream corridors, ...and trail corridors.” The Plan recognizes that increasing rates of land development threatens to fragment the landscapes and degrade the habitats that support the quality of life.

### **Proposal for Protection**

The environmental assets, so characteristic of the Indian Creek Gorge and Lake Slopes UNA, are in large part a consequence of the site’s steep terrain, its many small stream gorges, and the presence of highly erodible soils, which have all contributed to its limited development. These development constraints have allowed this valuable open space to flourish with rich ecological and scenic resources. Unconstrained development would mean a loss of these amenities, but equally important, development on the steep slopes could pose lasting impacts due to uncontrolled erosion and sedimentation, degraded water quality, increased stormwater runoff, and concerns for slope stability. The environmental sensitivity of this site warrants establishing constraints to guard against unwise development, and to protect those resources that give the town and surrounding area its special character.

To that end, the Town of Ithaca Conservation Board and Codes and Ordinances Committee have proposed a Conservation Zone for the Indian Creek and Lake Slopes area. Figure 5 shows the Conservation Zone boundary that was developed by the Board and Committee. This area encompasses approximately 276 acres, and largely follows and expands on the UNA boundary. The proposed conservation zone boundary includes areas outside the UNA boundary where steep slopes, mature forests, or stream gorges exist, as well as portions where continuity of the biological corridor can be achieved. This includes incorporating the disturbed area associated with the gravel drive and site of the former heating plant on Cayuga Medical Center property behind the “Biggs Buildings,” and the southernmost area near the City/Town municipal boundary. Where feasible, the proposal follows existing property lines.

The recommendation for protecting the Indian Creek Gorge and Lake Slopes area is consistent with the *Town of Ithaca Comprehensive Plan (1993)* and the *Town of Ithaca Park, Recreation and Open Space Plan (1997)*. The anticipated Land Use Pattern Map from the Comprehensive Plan and the Potential Zoning for Open Space and Purchase of Development Rights Target Areas from the Park, Recreation and Open Space Plan is included in the Appendix. Both Plans recommend the implementation of conservation measures in this sensitive environmental area. The purpose of establishing the conservation zone would be to limit land use in such a way that development would not pose significant environmental impacts to the area. The zone minimizes development to one house per seven acres, includes requirements for cluster development, and includes additional protective measures as outlined in Article V of *The Town of Ithaca Code*.

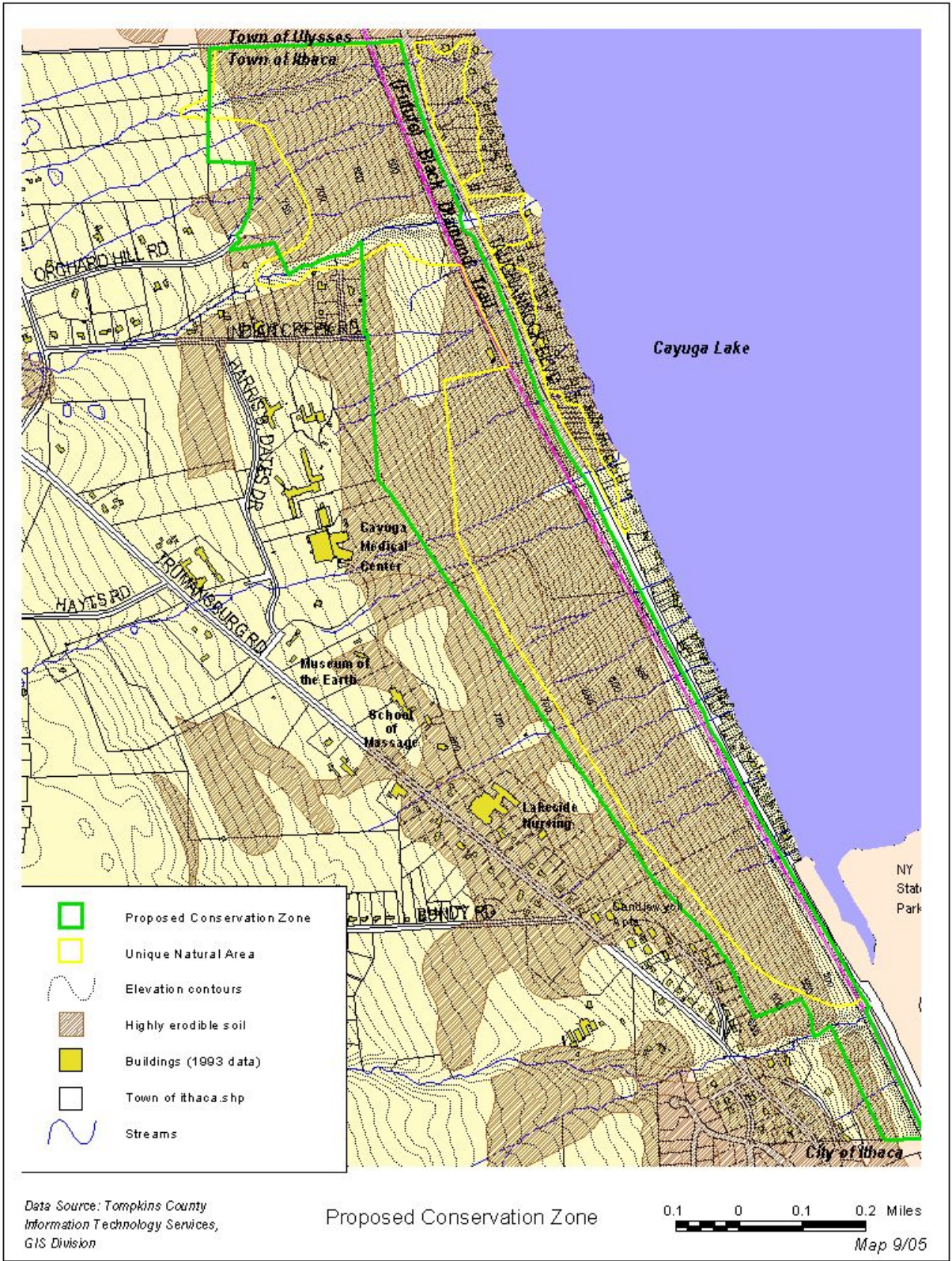


Figure 5



**Land Ownership in the Indian Creek Gorge and Lake Slopes Area**

The majority of the land in the Indian Creek Gorge and Lake Slopes proposed Conservation Zone is owned by four major landowners, each owning more than 48 acres of land. An additional eleven property owners also own land in the proposed new conservation zone, with each of these owning parcels that contain three acres in size or less (see Table 1). Of these eleven property owners, seven

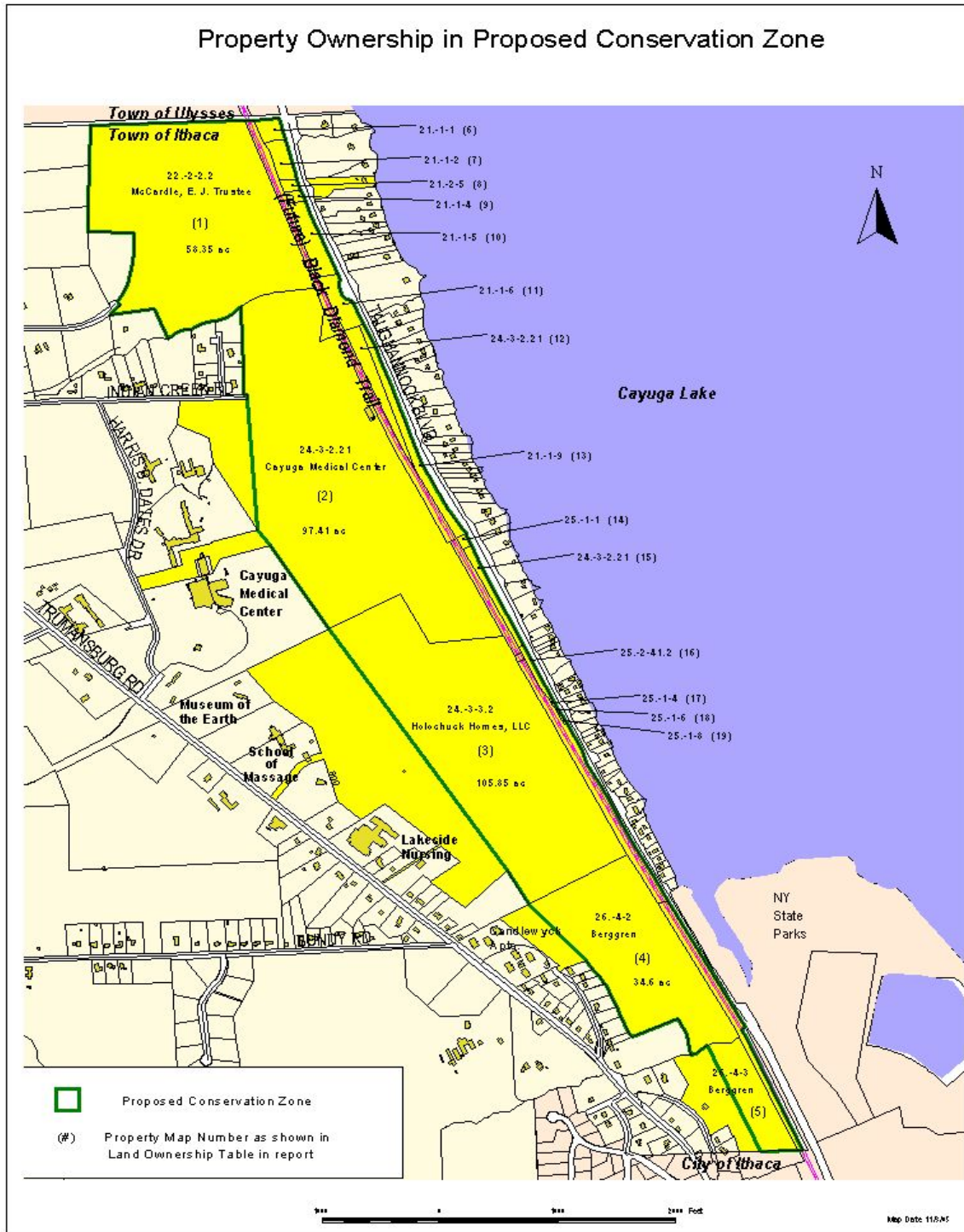


Figure 6

Table 1

Property Map Number	Tax Parcel Number	Acreage of Property	Property Owner	Comments
11	21.-1-6	1.8	Barr, David	Also owns lakefront property
8	21.-2-5	2.0	Baxter, Anthony & Caitlin	Also owns lakefront property
5	26.-4-3	13.6	Berggren, Richard & Betty	
4	26.-4-2	34.6	Berggren, Richard & Betty	
19	25.-1-8	<.0.1	Berggren, Richard & Betty	
13	21.-1-9	3.3	Bettucci, Frank	
7	21.-1-2	1.3	Burns, Judith & Joseph	Also owns lakefront property
2, 12, 15	24.-3-2.21	97.4	Cayuga Medical Center	
14	25.-1-1	0.2	Egan, Francis	
16	25.-2-41.2	0.5	Holochuck Homes LLC	
3	24.-3-3.2	105.2	Holochuck Homes LLC	
1	22.-2-2.2	58.4	McCardle Edward J. Trustee	
9	21.-1-4	0.3	Mulcahy V. & C. Livermore	Also owns lakefront property
17	25.-1-4	0.1	Pinnisi, Michael	Also owns lakefront property
10	21.-1-5	2.5	Reizes, Margaret	
18	25.-1-6	<.0.1	Schaye, A.R.& C.Greenwald	Also owns lakefront property
6	21.-1-1	0.9	Yale, Barbara	Also owns lakefront property

also own parcels directly across Taughannock Blvd., on the lakeshore side. It is likely that these parcels separated by Taughannock Blvd. were at one time contiguous and were separated when the state road was built. For these seven, the two separate parcels have continued to be associated and sold together when the lakefront parcels have changed ownership.

It is anticipated that the Town would complete a development potential analysis, comparing theoretical development under current zoning, versus estimated development potential under the proposed conservation zone, as part of the New York State Environmental Quality Review for the rezoning request.

**Summary**

In summary, the Indian Creek Gorge and Lake Slopes area have been identified as an area of valuable and sensitive natural resources that deserve protection from unconstrained development. Increasing development pressures along our steep forest-clad hillsides poses a threat to our community’s rich ecological and scenic amenities, as well as risks for long-term problems associated with stormwater runoff, erosion, and water quality. The Conservation Board and Codes and Ordinances Committee have put forth a proposal to limit development in the Indian Creek Gorge and Lake Slopes area that will benefit the entire community now and for future generations. It is hoped that this report will serve to illustrate that protection measures are warranted and that expedited action is needed.

**REGULAR MEETING OF THE ITHACA TOWN BOARD  
MONDAY, APRIL 10, 2006**

**TB RESOLUTION NO. 2006-079 : Resolution Adopting “A LOCAL LAW AMENDING CHAPTER 270 OF THE TOWN OF ITHACA CODE, TITLED “ZONING”, AND THE OFFICIAL ZONING MAP TO REZONE CERTAIN LANDS ALONG AND WEST OF TAUGHANNOCK BOULEVARD FROM LOW DENSITY RESIDENTIAL ZONE TO CONSERVATION ZONE”**

WHEREAS, the Town of Ithaca Comprehensive Plan (1993) recommends protection for environmentally sensitive and unique natural areas in the Town, and has indicated on a map entitled “Anticipated Land Use Patterns” that a portion of land along and west of Taughannock Boulevard from the City of Ithaca municipal boundary to the Town of Ulysses municipal boundary should be considered for Conservation/Open Space; and

WHEREAS, the Town of Ithaca Park, Recreation & Open Space Plan (1997), recommends Conservation Zoning as a means to protect lands with steep slopes, gorges and ravines, key stream corridors, and other significant natural areas, and the Plan includes a map entitled "Potential Zoning for Open Space and Purchase of Development Rights Target Areas," that identifies an area along and west of Taughannock Boulevard from the City of Ithaca municipal boundary to the Town of Ulysses municipal boundary, as ""recommended for conservation zoning"; and

WHEREAS, the Unique Natural Areas Inventory of Tompkins County (revised January 2000) conducted by the Tompkins County's Environmental Management Council, identifies the "Indian Creek Gorge and Lake Slopes" area (Site Code UNA-97), located along and west of Taughannock Boulevard, as a Unique Natural Area, and describes the area as a steep lake valley slope cut by stream gorges, having scenic and aesthetic value, containing areas with rare and scarce plants and a mature trees stand with trees over 150 years old, as having been identified by the Tompkins County Greenway Coalition as serving as a biological corridor, and states that "the main threat to the site is from development"; and

WHEREAS, the Tompkins County Comprehensive Plan (December 2004) identifies the area to be rezoned as part of the “Lake Shore” area, which is one of the “Natural Features Focus Areas” that the Comprehensive Plan recommends be considered for conservation efforts to insure protection; and

WHEREAS, the Town of Ithaca Conservation Board and Codes and Ordinances Committee have examined the area in and adjacent to the Indian Creek Gorge and Lake Slopes area, have examined the Planning Department report entitled “Indian Creek Gorge & Lake Slopes Unique Natural Area – Its Significant Natural Features and Need for Protection” (12/2/05), and based on that documentation, have recommended a delineated area to be re-zoned to a Conservation Zone based on the need to protect the area’s rich ecological and scenic resources, and to minimize long-term impacts posed by development on the steep slopes (and erodible soils), including uncontrolled erosion and sedimentation, degraded water quality, increased stormwater runoff, and concerns for slope stability; and

WHEREAS, the Town Board of the Town of Ithaca in Resolution No. 2006-050 referred a draft local law to rezone the above-described property to the Planning Board for a recommendation; and

WHEREAS, the Town of Ithaca Planning Board held a public hearing on February 21, 2006, to consider comments from the public regarding this rezoning request; and

WHEREAS, pursuant to Section 270-236(H) of the Town of Ithaca Code, the Town of Ithaca Planning Board in Resolution No. 2006-026 found:

1. There is a need for a Conservation Zone in the proposed area to protect valuable natural resources and environmentally sensitive lands, and
2. The existing and probable future character of the neighborhood will not be adversely affected by the proposed rezoning, and
3. The proposed rezoning is in accordance with a Comprehensive Plan of development of the Town; and

WHEREAS, the Town of Ithaca Planning Board in Resolution No. 2006-026 recommended that the Town Board adopt the proposed local law to rezone the above-described property from Low Density Residential Zone to Conservation Zone; and

WHEREAS, the Tompkins County Planning Department, by letter dated March 10, 2006, indicated it has reviewed the proposed rezoning pursuant to General Municipal Law Sections 239-l and m and has determined that the proposed rezoning will have no negative inter-community or county-wide impacts; and

WHEREAS, a resolution was duly adopted by the Town Board of the Town of Ithaca for a public hearing to be held by said Town on April 10, 2006 at 7:00 p.m. to hear all interested parties on a proposed local law entitled **“A LOCAL LAW AMENDING CHAPTER 270 OF THE TOWN OF ITHACA CODE, TITLED “ZONING”, AND THE OFFICIAL ZONING MAP TO REZONE CERTAIN LANDS ALONG AND WEST OF TAUGHANNOCK BOULEVARD FROM LOW DENSITY RESIDENTIAL ZONE TO CONSERVATION ZONE”**; and

WHEREAS, notice of said public hearing was duly advertised in the Ithaca Journal; and

WHEREAS, said public hearing was duly held on said date and time at the Town Hall of the Town of Ithaca and all parties in attendance were permitted an opportunity to speak on behalf of or in opposition to said proposed local law, or any part thereof; and

WHEREAS, pursuant to the New York State Environmental Quality Review Act (“SEQRA”) and its implementing regulations at 6 NYCRR Part 617, adoption of said local

law is a Type I action for which the Town Board of the Town of Ithaca, acting as lead agency in an environmental review with respect to rezoning, has on April 10, 2006 made a negative determination of environmental significance, after having reviewed and accepted as adequate a Long Environmental Assessment Form Parts I and II prepared by the Town's Planning staff;

NOW, THEREFORE, be it

RESOLVED, that the Town Board of the Town of Ithaca hereby finds the proposed rezoning: will protect the area's rich natural resources and environmentally sensitive lands; will minimize long-term impacts posed by development on the steep slopes and erodible soils, including uncontrolled erosion and sedimentation, degraded water quality, increased stormwater runoff, and slope instability; will not adversely affect the existing and probable future character of the neighborhood affected by the rezoning; and is in accordance with a Comprehensive Plan of development of the Town; and it is further

RESOLVED, that the Town Board of the Town of Ithaca hereby adopts said local law entitled "**A LOCAL LAW AMENDING CHAPTER 270 OF THE TOWN OF ITHACA CODE, TITLED "ZONING", AND THE OFFICIAL ZONING MAP TO REZONE CERTAIN LANDS ALONG AND WEST OF TAUGHANNOCK BOULEVARD FROM LOW DENSITY RESIDENTIAL ZONE TO CONSERVATION ZONE**", a copy of which is attached hereto and made a part of this resolution; and it is further

RESOLVED, that the Town Clerk is hereby authorized and directed to publish and file said local law with the Secretary of State as required by law.

MOVED: Councilman Stein

SECONDED: Councilman Engman

Roll Call Vote: Supervisor Valentino       Aye  
Councilman Burbank       Aye  
Councilman Cowie       Aye  
Councilman Engman       Aye  
Councilwoman Gittelman   Absent  
Councilwoman Leary       Aye  
Councilman Stein       Aye