

A Vision for the Canandaigua Lake Watershed



Prepared by Betsy Landre and the Finger Lakes Land Trust September 2010

Executive Summary

This report is the culmination of a yearlong evaluation of the Canandaigua Lake watershed undertaken by the Finger Lakes Land Trust. It includes an assessment of the watershed's natural resources and their importance to local residents' quality of life. Threats to these resources from development are described as is local capacity for land use planning and natural resource protection. The report presents a vision for how communities in the Canandaigua Lake watershed can work together to guide growth while protecting valuable watershed resources.

Canandaigua Lake is indeed a jewel, and it is the number one reason residents name for living here. The lake provides drinking water to more than 60,000 residents along with exceptional recreational opportunities. The 174 square mile watershed is rich in natural resources. Over one-half of the watershed soils are highly suitable for agricultural production. About 120 watershed farms produce a variety of agricultural products, from dairy to vegetable crops, grapes, and horticultural and specialty products.

Significant forest resources provide timber, wildlife habitat, and recreational opportunities. Especially notable are the roughly 30 square miles of woodlands carpeting the hill country between Bare Hill and High Tor Wildlife Management Area. The extensive 1,500-acre High Tor wetland complex at the south end of the lake acts as a filter for storm water and provides excellent wildlife habitat. Scenery, including rural landscapes of farms and forests as well as dramatic lake views, is another heralded watershed resource.

Steady population growth during recent years has increased pressure on watershed resources. With the vast majority of available lakeshore developed, demand for residential development has shifted to hillsides commanding lake views. More than 900 new residential units within the watershed possessed preliminary development approvals in 2009. At the same time, the Canandaigua Lake Watershed Council documented an upward trend in total phosphorus (TP), the critical nutrient governing lake productivity and associated symptoms like algae blooms.



The Canandaigua Lake watershed has been the focus of water quality planning among grassroots organizations for more than twenty years. Watershed towns have taken steps to enact land use zoning and some have adopted ordinances for natural resource protection, such as steep slopes. The Towns of Canandaigua and Gorham have also created special funds for open space acquisition. Despite these laudable steps by local communities, an increasingly suburbanized landscape, unprecedented proposals for development of scenic hillsides, and the prospect of widespread natural gas development all call for more concerted action to guide the future of Canandaigua Lake and its watershed.

Based on the watershed assessment, the Finger Lakes Land Trust presents a vision for the Canandaigua Lake watershed that incorporates a high quality lake resource, vibrant community centers, rural landscapes of working farms and forests, and exceptional recreational opportunities, wildlife habitats and scenic resources. This vision can be achieved through cooperative action to:

- Strengthen natural resource planning and land use controls, with a focus on encouraging growth within cities, town centers and hamlets and the enactment of special protections for water courses, steep slopes, and scenic resources;
- 2) Protect high quality farmland through the purchase of development rights;
- 3) Develop more robust local sources of conservation funding to help communities acquire parkland and purchase development rights on sensitive watershed lands and prime farmland;
- 4) Create a "Canandaigua Highlands Heritage Area" to promote the protection, interpretation, and appropriate use of the southeastern portion of the Canandaigua Lake watershed. This 45-square mile area includes Bare Hill, South Hill, High Tor, and the West River Valley. It features extensive forests as well as scenic farmland, wetlands, lakeshore, rich cultural and historic resources, and two villages. The creation of a public/private partnership is needed to develop an interpretive center and associated plan to enhance recreational and educational use; create a Highlands Heritage Trail extending from Bare Hill to Naples; develop a community plan for Vine Valley that allows for change while maintaining the hamlet's unique character; protect key parcels through the use of conservation easements as well as select acquisitions; and support compatible economic development in the area.
- 5) Establish a scenic byway around Canandaigua Lake and use conservation easements to buffer scenic overlooks while implementing scenic overlay districts to maintain rural character along the byway.
- 6) Create the Canandaigua Lake Water Trail, a system of rest stops, natural areas, parks, and picnic areas strategically linked with existing boat launch sites and commercial establishments. This paddling trail would accommodate small boats and enhance the menu of recreational opportunities on the lake while providing water quality benefits through the maintenance of natural shoreline.
- 7) Educate and prepare landowners and local governments to deal with environmental impacts associated with Marcellus and Utica shale natural gas development;
- 8) Formalize the partnership between the Finger Lakes Land Trust and the Canandaigua Lake Watershed Council in the forthcoming comprehensive update of the Canandaigua Lake Watershed Management Plan, and more fully integrate use of conservation tools such as conservation easements and conservation financing as options for meeting watershed protection goals.

The key to realizing this bold vision are vibrant partnerships. No entity can meet the challenge alone. The Finger Lakes Land Trust invites all residents, communities, and stakeholders within the watershed to join us in making this vision our shared reality and a legacy for future generations.



VERVIEW AND PURPOSE Canandaigua Lake—The Chosen Spot

"Ga-na-ta'-queh" was the name the Seneca people gave their settlement at the north end of Canandaigua Lake. The English translation: The Chosen Spot. The modern name: Canandaigua.

The Chosen Spot characterization is affectionately espoused today by local business owners, community leaders and residents who share a sense of pride in a place all call home. The number one reason people choose to live here, according to surveys, is the beauty and quality of Canandaigua Lake.

The Canandaigua Lake area has experienced steady growth over a number of decades. The lake is a magnet, with the value of lakefront and lake view real estate topping \$1 billion. Paradoxically, growth and development put pressure on the resources which attract people to the area in the first place. Today, our land and water resources are increasingly threatened by poorly planned development.

Time is of the essence. Once land is developed, its role in the watershed is permanently altered. While there is no single land use decision that will seal the fate of Canandaigua Lake, the cumulative impact of incremental decisions over time will. If the changes in the watershed in the last ten years are any indication, we could be living in a substantially different place within a single generation. It is critical that we work together to shape the character of the watershed by finding the appropriate balance between growth and conservation.

This report presents an assessment of the Canandaigua Lake watershed and a vision for how we can work together to ensure the future of the Lake while securing other important watershed resources that contribute enormously to our quality of life: scenic vistas, recreational opportunities, productive farmland, forested hillsides and rich wildlife habitat.

"Canandaigua Lake and its watershed are one of the jewels of Western New York. We are so fortunate to live and work in the Finger Lakes Region, with its spectacular natural resources and recreational opportunities. But with the benefits of having such an incredible resource available to us comes a great responsibility to protect it for current and future generations."



A JATERSHED ASSESSMENT

The Natural Resources of the Canandaigua Lake

Watershed

The Lake

Canandaigua Lake is the third largest of the eleven Finger Lakes. It is 15.5 miles long, averages just over a mile wide, has a maximum depth of 276 feet and holds 429 billion gallons of water.

The Lake is prized for its high water quality. It receives New York State Department of Environmental Conservation's (DEC) highest AA rating as it supports a public drinking water supply for more than 60,000 people, naturally reproducing fisheries and excellent opportunities for swimming and boating.

Canandaigua Lake is also designated an "Important Bird Area" by New York Audubon. It is recognized as a significant wintering area for large congregations of waterfowl, particularly Redhead and Mallard ducks. Large flocks of American Coots winter on the lake, as well.

Watershed Dynamics and Change

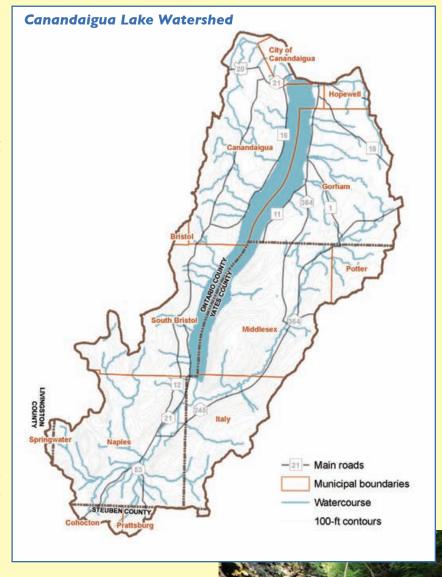
174 square miles of land drain to Canandaigua Lake. This is the Lake's watershed. All but a very small portion (2.1 percent) of the watershed lies in 13 municipalities of Ontario and Yates Counties.

Canandaigua Lake's water quality is influenced by its watershed and the water that drains

to it. Multiple tributaries and hundreds of small streams flow to the Lake via a hydrological network that transports an estimated 43 billion gallons of water annually from watershed lands.² Pollutants like nutrients, sediment and bacteria can reach the lake from remote sources in the watershed via this network.³

The largest of the tributaries is the West River. Originating in the fertile agricultural lands of Gorham, it winds its way slowly through the low-lying terrain of the Middlesex Valley and the wetlands of New York State's High Tor Wildlife Management Area before reaching Canandaigua Lake's southern terminus.

Dozens of streams flow with less volume but plenty of energy through steep gullies and gorges directly to the lake. Especially during storms and periods of rapid snow melt, these streams often flow with force. Waterfalls and cascades punctuate the steepest watercourses, revealing outcroppings of fragile shale bedrock, and creating unique gully environments, a hallmark of the Finger Lakes Region.





Fisheries

Canandaigua Lake supports both cold and warm water fisheries. Prized cold water fish include lake, brown, and rainbow trout. NYS DEC stocks lakers and browns, but the rainbow trout population is naturally reproducing, primarily in Naples Creek. Spring fishing along Naples Creek, and upstream tributary Grimes Creek, is a spectacular event, as hundreds of anglers converge on this celebrated resource known to yield ten to twelve pound fish.

The warmwater fishery boasts large and smallmouth bass, chain pickerel, brown bullheads, yellow perch and panfish. Smelt and alewife populations are also present. Anglers troll the deep water by boat, fish the shallows from docks, boats or shore or work the streams with fly rod. Ice fishing is popular, too. DEC estimates \$8 million in revenue is generated annually from Canandaigua Lake anglers.



Wetlands

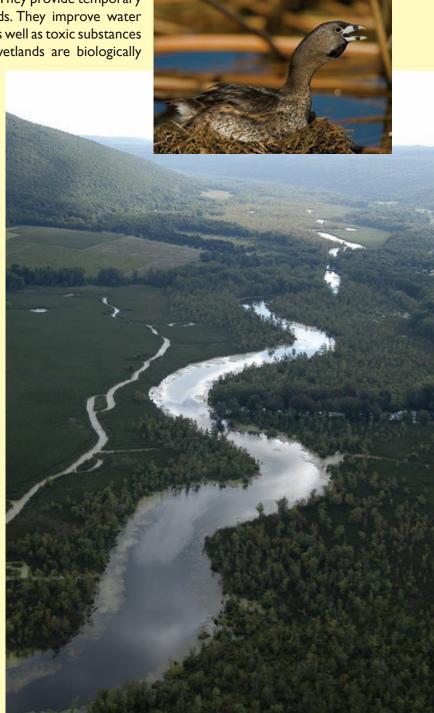
Wetlands serve important functions in a watershed. They provide temporary storage for storm water, reducing flooding hazards. They improve water quality by acting as filters. Cattails take up nutrients as well as toxic substances and trap sediments. Called "nature's nurseries," wetlands are biologically

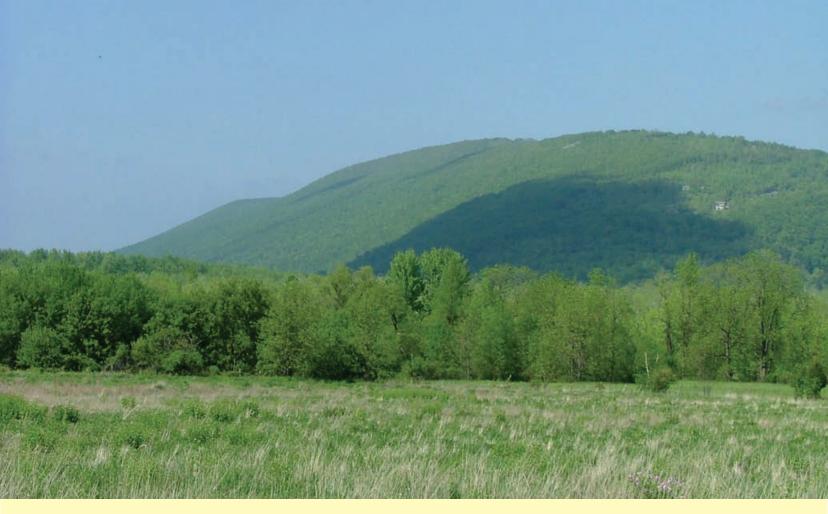
diverse and highly productive, providing important habitat to many birds, amphibians, reptiles, insects and mammals.

The I,500 acre High Tor marsh at the south end of Canandaigua Lake is truly a significant wetland ecosystem. Managed by DEC, High Tor is home to at-risk species such as the Pied-Billed Grebe, American Bittern, and Least Bittern. Like Canandaigua Lake, the High Tor marsh is also designated an Important Bird Area by New York Audubon.

A whopping 58,596 acres, or almost 53% of the total watershed area, drains to Canandaigua Lake through the High Tor wetlands, underscoring its importance for filtration and stormwater retention. Some of the most highly erodible soils in the watershed are located in the steep, southern headwater drainages of Grimes, Eelpot, Tannery and Reservoir Creeks. These tributaries flow to Naples Creek before meeting the West River in the wetland.

Small wetlands are scattered about the watershed, with a concentration in the northeastern portion (especially the Sucker Creek subwatershed) where agriculture and residential development are primary land uses. Other significant wetlands are located in the upper reaches of the West River and Grimes Creek subwatersheds.





The Forests

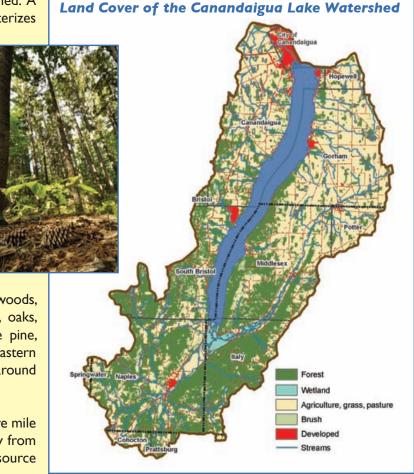
southern half of the watershed.

Forests cover over forty percent of the watershed. A patchwork of woodlots on private land characterizes the northern, agricultural part of the watershed. More extensive, contiguous forest tracts cover the steep slopes of the

For a century following the arrival of European settlers in the 1790s, forests around Canandaigua Lake were progressively cleared for cropland and pasture. By 1885, about 85% of the land in the watershed had been cleared. Regrowth of young forests has followed a pattern of farmland abandonment, especially since the 1930s.

Today's typical forest is composed of mixed hardwoods, featuring species like sugar maple, beech, hickory, oaks, poplar and black walnut. Conifers, including white pine, are more common at the higher elevations, and Eastern hemlock is predominant in the steep, shaded gullies around the Lake.

On the east side of the Lake, an impressive 30 square mile block of forestland carpets most of the hill country from Bare Hill to South Hill and High Tor. This forest resource



Special Forest Inhabitants

Home to the Vulnerable Cerulean Warbler

The forests around Canandaigua Lake are home to a breeding population of Cerulean Warblers. This striking blue songbird prefers tree tops for nesting and forage. Due to declining population across its range, the Cerulean Warbler is listed as "vulnerable" by the International Union for Conservation of Nature (IUCN), is included on National Audubon's Watchlist, and is under consideration for listing under the federal Endangered Species Act. Habitat degradation is the cause of its decline, primarily the removal and fragmentation of mature, hardwood forests.⁴



The Bald Eagle: A Comeback Story

In 1975, DEC wildlife biologists could document only one nesting pair of Bald Eagles in New York State. By 2005, thanks to the 1972 banning of the pesticide known as DDT and DEC's aggressive eagle restoration program, there were 92 successful breeding pairs in the State. In recent years, winter and summer sightings of Bald Eagles have increased around Canandaigua Lake, and DEC biologists confirmed an active nest in the Town of South Bristol a few years ago. Long term success of Bald Eagles at nest sites on Canandaigua Lake will hinge on the protection of their favored habitats, which are threatened by encroaching development.



is unparalleled in the watershed and is one of the largest remaining forest blocks in the Finger Lakes Region.

Over 5,100 acres of this area are managed as public open space. These include Bare Hill State Unique Area, the uplands of High Tor Wildlife Management Area, and the Finger Lakes Land Trust's Great Hill Preserve. Private holdings complete the forest assemblage, including a few large properties, like the 600+ acre Whaleback hunting preserve, as well as hundreds of smaller properties.

Forests play important roles in the watershed, including provision of wildlife habitat (see sidebar) and water quality protection. Trees anchor rocks and soil to help minimize erosion and sedimentation. The forest floor acts like a sponge and filters rain water, helping to maintain high water quality in streams. "It is critical for lake water quality to maintain forest buffers along the steep gullies around Canandaigua Lake," emphasizes Stephen Lewandowski, Program Consultant for the Canandaigua Lake Watershed Association.

Other benefits provided by forests are clean air and reduction of greenhouse gases, forest products and energy independence, recreational opportunities and scenic beauty. Many watershed residents know the restorative benefits a simple walk in the woods can provide to the human spirit.

The Farms

Highly productive soils, plentiful fresh water, and a favorable climate combine to create exemplary agricultural resources in the Canandaigua Lake watershed. Seventy-six percent of the soils in Ontario County have properties that qualify them as "important farmland soils" according to the United States Department of Agriculture (USDA). Only 15 percent of New York State and a meager eight percent of the United States bears this designation. In the Yates County portion of the watershed, prime agricultural soils are concentrated near Vine Valley, in the West River Valley and in the town of Potter. According the Jim Ochterski, agriculture specialist at Cornell Cooperative Extension of Ontario County, "We are sitting on a gem."

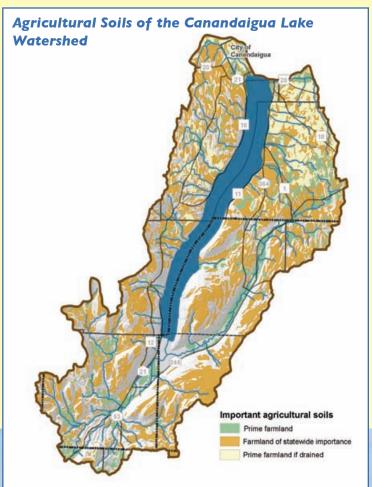
An estimated 120 farms cover about 30,000 acres (or one-third of the area) of the Canandaigua Lake watershed. ⁵ It is a diverse agricultural sector, producing milk and cheese, meat products, vegetables, fruits, grains, juices and wines.

In Gorham, Middlesex, and Potter, more than 60 Mennonite families maintain a growing agricultural land base, bringing idle land back into production as small dairy operations mixed with produce and horticultural products. Another trend is an increase in small-scale specialty operations. "People are getting into farming who would not have been able to afford the 100+ acre traditional farm. They are doing it with less acreage and high value products for retail markets," explains Peter Landre of Yates County Cooperative Extension.

Excellent soils, technological innovations, new markets and increasing public demand for local foods all work together to positively influence the outlook for local agriculture. Adaptable farmers can be profitable, according to local experts.









Tourism, Outdoor Recreation, and Scenery

In 2009, the Finger Lakes tourism industry generated \$2.45 billion in visitor spending and \$327 million in state and local taxes. To emphasize the tax impact per capita, the Finger Lakes Tourism Alliance calculates that, without the infusion of tourism dollars, each Ontario County resident would have to make up \$1001 more in local taxes.

A vibrant, natural landscape is the backbone of the regional tourism industry. Valerie Knoblauch, President of Finger Lakes Visitors Connection in Canandaigua explains it this way: "Imagine taking a vacation that has great parks, lakes for recreation, waterfalls and hiking paths, and vistas that make you want to pull out that camera to etch the scenery in your mind. That vacation is here, in the Finger Lakes, and it's these features that make over 15 million people visit our region each year."



Recreational Trails

Hikers enjoy extensive trails in the southern half of the watershed. The Bristol Hills Branch of the 900+ mile-long Finger Lakes Trail traverses the watershed. From its northern end in Ontario County's Gannett Hill Park, the trail crosses the Naples Valley, and rises up 1,100 vertical feet in High Tor Wildlife Management Area, for a 20+ mile long trip.

Additional public trails and walkways are found at: State land on Bare Hill and High Tor, the Land Trust's Great Hill Nature Preserve on South Hill, Grimes Glen in Naples, Kershaw and Lagoon Parks in the City of Canandaigua, the Robert E. Moody Trail in Gorham and Onanda Park in the Town of Canandaigua.



Scenic Vistas

Canandaigua Lake is renowned for breathtaking scenic vistas. No doubt each resident has their favorite. The best vantage points for scenic vistas tend to be along ridgeline roads encircling Canandaigua Lake. The view from County Road 12 in South Bristol is especially significant, with a panorama that takes in Canandaigua Lake, Bare Hill, Vine Valley, South Hill, and the High Tor marshes and uplands. Also impressive are views from State Route 21 on the west side of the lake and State Route 364 on the east side. Stunning vistas can also be observed from secondary roads in the vicinity of Vine Valley, the Naples Valley, and surrounding highlands.





WATERSHED STAKEHOLDERS AND COMMUNITY CONTEXT

Rural Landowner Attitudes and Goals

A variety of stakeholders determine land use practices and policies in the watershed and play an important role in shaping its future. Hundreds of rural landowners lease, farm, manage forests and recreate on private properties in the watershed. For a fifth generation farmer or an out-of-state investor, land is an important financial asset. The future of a significant portion of the land base in watershed is tied to rural landowners' attitudes about their land and goals for the future.

A recent survey of watershed landowners with 70 acres or more revealed a strong affinity for the land. Most respondents own "working lands" with two-thirds using the land for agriculture (either running an operation or leasing acreage to a farmer). The majority enjoy hunting or fishing on their properties. About one-third harvest timber while one-quarter lease mineral rights to a natural gas company. However, landowners commonly cite intrinsic values as those they most appreciate about their land, such as solitude, quiet, scenery and views and the presence of wildlife. More practical values, like soil fertility and income derived from land, were cited less frequently as aspects most appreciated about the land.

The majority of survey respondents reported that they plan to hold on to their land for at least the next ten years. Only I I percent plan to sell their land within the next decade, and another I I percent are unsure. For those who planned to sell, financial concerns were their primary motivation. Yet 87 percent of responding landowners reported that, if their financial goals were met, they would prefer their land remained in its current condition. Given the right mix of financial tools and incentives, landowners are inclined to choose conservation of their properties over development.

Municipal Planning and Zoning

The New York State Constitution places the power to make decisions about land use in the hands of local government, a doctrine known as Home Rule. Every town in the watershed has at least the rudiments of municipal land use planning: a comprehensive plan, zoning and site plan review. In addition, several towns have adopted special natural resource protection laws. For example, Bristol, Canandaigua, Gorham, Naples and Potter have ordinances regulating disturbances on steep slopes. Canandaigua, Gorham, Hopewell and Middlesex have adopted sediment and erosion control laws.

While every community in the watershed has made a public commitment to the protection of natural resources, uneven adoption of laws is a reflection of diversity among watershed communities, including their size and the unique challenges they face.

Local laws are generally strongest in the northern part of the watershed where the development pressures are greatest. Staff capacity is higher here, too, where larger tax bases support larger town budgets. For example, the Town of Canandaigua has a 15-member staff (with a seven-member development office) and five boards functioning in addition to the town board. The Town of Italy operates with a staff half that size and, beyond the town board, has one additional board for planning and zoning functions.

Recent years have seen unprecedented development proposals in the Towns of South Bristol and Middlesex, and both communities have moved quickly to pass ordinances in response. Both are now considering an ordinance to regulate building on steep slopes.

Proactive local planning and zoning are very important tools for guiding growth and maintaining community character, but they are not fail-safe. Costly lawsuits have taken up town resources and created angst in communities as developers test the resiliency of local laws and the boards that enforce them. Variances to code, meant to offer appropriate flexibility in individual situations, may be granted so freely that codes are, in effect, circumvented. Further, zoning can be changed by future boards.

If a community desires to truly safeguard its treasured resources and the features that define its character, it must complement zoning with other strategies to secure or protect them.

Municipal Financing for Open Space and Resource Conservation

Two watershed towns have already taken steps to create open space accounts to establish parks, trails, and leverage state grants for farmland protection. The Town of Canandaigua has an Open Space Reserve Fund that has accumulated a little over \$1 million over several years. Funds were used in 2009 to purchase almost 100 acres of parkland at two different sites.

The Town of Gorham created the Land Preservation Capitol and Reserve Fund and the Conservation Advisory Council to recommend projects for funding .The fund grew to \$629,000 before the town moved to purchase just over nine acres of lake view property near Ontario County's Deep Run Beach.The parcel was purchased from a developer who had a 14-unit subdivision planned for the site.



In both cases, allocations to these open space accounts are made by Town Boards. In tough years, no funds may be allocated, as was the case in 2009. While the establishment of open space accounts demonstrates a notable step forward, the number of compelling projects far exceeds available resources. Gorham Town Supervisor Dick Calabrese explains, "The biggest obstacle we have right now is funding. Unless you've got prime farmland, there really isn't much public financing available. Unless the municipality and landowner can agree to save land at their expense, it's going to be hard."

Profile in Conservation:

Preserving a Scenic Overlook: Carolabarb Park, Town of South Bristol

The views from County Road 12, often called the "high road" by locals, are spectacular. Bare Hill and South Hill provide a panoramic backdrop to Canandaigua Lake while the West River meanders in from the south. Odell Scott purchased land in this area in 1960 and enjoyed the exemplary views for decades. In 2004, he decided to donate 30 acres of his land so that the public would have the same opportunity to enjoy these views. His generous gift became the catalyst for a partnership between the Town of South Bristol, Mr. Scott, and the Finger Lakes Land Trust.

Mr. Scott wanted assurance that the land would not be developed at some point in the future, so the partners worked out a process which would best serve everyone's interests. Mr. Scott donated a conservation easement on the property to the Finger Lakes Land Trust and then donated the land to the Town for use as a park. The park concept was ideal, because the Town was already developing a scenic overlook with picnic tables adjacent to the Scott property. The Town now maintains the park, and the Land Trust is responsible for upholding the terms of the easement.

"The partnership has been tremendous," says Dan Marshall, Supervisor of the Town of South Bristol. "Through Odell Scott's generosity, one of South Bristol's premier vistas was protected for everyone to enjoy. His gift enhanced our scenic overlook, and the involvement of the Finger Lakes Land Trust ensures this natural environment forever."

Odell Scott named the new park Carolabarb Park for two very important women in his life: Carol Holcomb Scott, his wife of 55 years who passed away in 1992, and Barbara Hawkins Scott, his wife of 14 years. Odell passed away in 2007. Barbara says, "There's not a Sunday that I go to church when somebody doesn't come up to me to say they've been up to the overlook and how beautiful it was and how much they enjoyed it. Odell would be absolutely thrilled that so many people are enjoying what he enjoyed for so many years."



Watershed Organizations

The Canandaigua Lake watershed has been the focus of education, research, planning and restoration by local watershed organizations for over twenty years. These groups have spearheaded many programs to safeguard the lake and its water quality.

The Canandaigua Lake Watershed Council is an intermunicipal body comprised of publicly elected representatives from fourteen watershed and water purveying communities. The Council is responsible for the implementation of the Canandaigua Lake Watershed Management Plan, a comprehensive document outlining more than 90 specific actions local governments support to help reduce pollutants to the lake.

Funded by grants and budget allocations from each member municipality, the Council supports an annual water quality monitoring program. The Council also provides oversight and advice on development projects in the watershed, and has been instrumental in the development and sharing of model ordinances for local towns to consider for adoption to protect natural resources.

The Canandaigua Lake Watershed Association formed from a 2009 merger of long-standing lake groups, including two former property owner associations and an interagency/citizen action coalition called the Canandaigua Lake Watershed Task Force. Under a single umbrella, this membership organization combines planning, education, and advocacy including, at times, litigation aimed at the long-term health of Canandaigua Lake and its watershed.

These watershed organizations provide data and counsel to aid local decision making and resources to secure grants for projects to help protect water quality. Several partners also assist, including many local agencies, a watershed inspector, academic institutions, consultants, and nonprofit organizations.

Profile in Conservation:

Public-Private Partnership Protects Forested Hillside Overlooking Canandaigua Lake in the Town of Gorham

The Town of Gorham had just completed its "Farmland, Open Space and Resource Conservation Plan" and was in the process of forming its Open Space Advisory Council when town board member Allyson Adam-Anderson became aware of an interesting parcel of land on the market. She brought it to the attention of town officials as a potential conservation project. At about the same time, the Finger Lakes Land Trust learned of the property and asked the landowner's permission to take a small group of board members, staff and volunteers to investigate the site. The Land Trust representatives were impressed.

The 96-acres of forested hillside overlooking Canandaigua Lake served as recreational land and a source of timber for its owner. It happened to sit at the end of the sewer line on East Lake Road, contained a mixed deciduous hardwood forest supporting excellent wildlife habitat, bordered Fisher Gully, a tributary to Canandaigua Lake and included a mile and a half of road frontage.



Finger Lakes Land Trust Board Member, Jim Fralick, Town of Gorham Supervisor, Dick Calabrese and Town of Gorham Board Member, Allyson Adam-Anderson

What can happen when a Town Board and a Land Trust both see the value of conserving a piece of land? An excellent partnership.

The Town and Land Trust jointly contracted for an appraisal, negotiated a purchase option with the landowner, and together pursued state interest in the property. The property was evaluated by NYSDEC staff, and the partners learned late in 2006 that state funding had been approved. Those close to the process indicated the partnership with the municipality factored favorably into the state's decision.

New York State's land acquisition process takes time, and local partners need to be willing to find solutions to challenges along the way. When the purchase option was due to expire before state funds were available, the Land Trust moved to close on the property. Interim funding was provided by the Rochester Area Community Foundation and the Norcross Wildlife Foundation.

The property was transferred to the State in early 2007. It is now managed as part of Bare Hill Unique Area and is available for the public to enjoy.

PRESSURES ON THE WATERSHED

Population and Development Trends

The watershed has seen steady population growth for many years. Between 1960 and 2000 (the last year for which US Census Bureau statistics are available) the number of people living in Ontario County grew by 68% while Yates County grew by 32%. Within the watershed, the lakeside communities of Canandaigua, Gorham, and Middlesex witnessed the most significant growth.

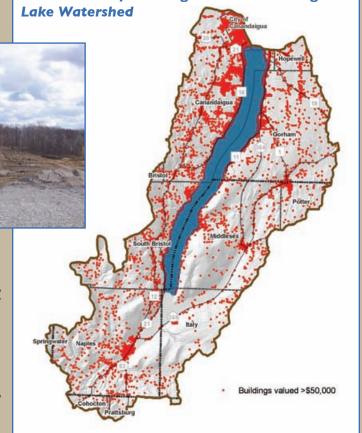
Even in portions of the watershed that are not experiencing population growth, sprawling development threatens both farmland and natural areas as it moves further from community

centers. Sprawl results in people having to drive greater distances to reach services. It also puts pressure on municipalities to extend costly infrastructure and services, like sewer and water lines, roads and school busing to new residential developments.

In 2009, 524 new residential units had at least preliminary planning board approvals in the Town of Canandaigua. The vast

majority of those units are in subdivisions. In Gorham, 371 units had preliminary approvals. Meanwhile, projections show, for the first time in history, the population of the Town of Canandaigua will exceed that of the City of Canandaigua in the next decade, a sure sign of sprawl.

Pressure to sell prime farmland for residential development is mounting across the northern part of the watershed, where the best farm soils are concentrated. One local farmer recently watched 550 acres on three neighboring farms sell in



Distribution of Buildings in the Canandaigua



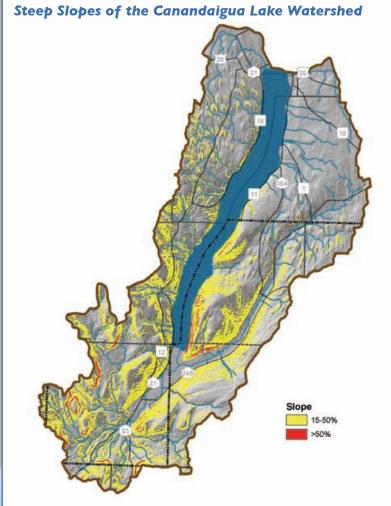


a suddenly brisk market. None of the buyers were actual farmers. The farmer commented, "I want to keep my farm green. It means a lot to me to watch crops grow. But if I wanted to sell, I could make a single phone call today and it would be done."

While development pressure is less intense in the southern part of the watershed, an increasing number of homes are being constructed on challenging sites that would have previously been considered unbuildable. The removal of vegetation, excavation of soils, and grading on these sites frequently results in erosion and sedimentation. On some of these sites, even the construction of a single home can have a significant adverse impact.

New rooftops punctuate ridgelines as residential development moves south along the lake. As hillside property is carved into smaller parcels with more impervious surfaces, the potential for runoff to the lake increases.

During 2009, construction was halted at one development site in the watershed when an intense rainstorm sent an estimated five tons of sediment off the property, collapsing a silt fence into a ditch and ultimately into Canandaigua Lake one-half mile away. According to the Canandaigua Lake Watershed Council's Kevin Olvany, significant erosion problems have occurred at several development sites in the watershed in recent years, each having an impact on water quality.





A Story of Change:

Canandaigua's Southern Corridor

Canandaigua's Southern Corridor is a desirable stretch of land on the west side of Canandaigua Lake between NYS Routes 5 and 20 and the town line with South Bristol. In 1960, it was a combination of farmland and rural residences, a few small subdivisions and a mix of summer cottages and year-round homes along the lakefront. In 1989, the Southern Corridor's first major subdivision called Fox Ridge received approval for 153 residences. The Landings followed in 1990, with plans for 13 luxury lake view homes. In the late 1990s, a survey of town residents revealed strong public support for

maintaining the rural character of this scenic area. Despite this sentiment, transformation toward a suburban landscape has hastened in the last decade with the construction of six additional residential subdivisions and the approval of hundreds of building lots. Another 69 lots proposed in 2008 at the West Lake Marine Club off West Lake Road are today the subject of a court battle.



Water Quality Warning Signs

The Canandaigua Lake Watershed Council monitors water quality in Canandaigua Lake annually and has 16 years of data. Of concern is total phosphorus (TP), which is trending slowly upwards. Total phosphorus is the critical nutrient governing lake productivity, and the element most responsible for algae blooms and low oxygen levels which, in turn, can adversely affect fish. Phosphorus can be carried to the Lake through sediment runoff. According to the Council, two million pounds of sediment are washed into the Lake during an average storm. Some comes from natural erosion processes in the watershed, but human activities frequently exacerbate soil loss to the Lake.

Hydrofracking for Natural Gas Extraction

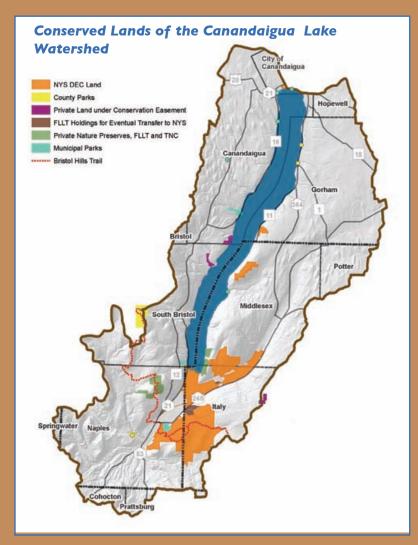
Less understood at this time but certainly a growing concern in the region are water quality and land use impacts from prospective widespread natural gas drilling. As energy companies seek to exploit natural gas reserves deep underground in the Marcellus and Utica shale formations that underlie much of central and western New York, many questions confront landowners and local governments as they weigh costs and benefits. A number of watershed landowners have already signed leases with gas companies.

"Hydrofracking" (or hydro-fracturing) is a process used to extract natural gas from bedrock whereby chemically treated water is pumped under pressure into the shale, fracturing the rock and releasing natural gas for capture. Wastewater from the process is collected and requires disposal. Hydrofracking has raised widespread concerns over the potential for contamination of ground and surface waters, as well as the impact of large scale water withdrawals associated with this process.

Land impacts from extensive gas drilling include fragmentation of farms and forests, building of new roads to service drilling facilities, truck traffic (water tankers coming and going to drill sites) on rural roads, noise and lights.

CONSERVATION TOOLS

Communities can use a variety of tools to protect natural resources in the watershed. These tools include land use planning and local ordinances as well as conservation easements—legal agreements that limit future development on land that typically remains in private ownership.



Conservation Easements

A conservation easement is a voluntary, legally binding agreement between a landowner and either a non-profit land trust or a government conservation agency. Conservation easements are recorded with the property deed and remain in effect as ownership changes.

Conservation easements protect natural resources by placing limits on subdivision, the number of structures that can be built, removal of vegetation and excavation of soil in sensitive areas. These agreements are flexible and can be tailored to the specifics of a particular property as well as the landowner's personal and financial goals.

Land under conservation easement typically remains available for agriculture or other traditional uses, such as managed timber harvest and recreation. They do not provide for public access, except in special circumstances.

Conservation easements can be either sold or donated. To date, the primary source of public funding available for the purchase of conservation easements is through New York State's Farmland Protection Program.

Farmland Protection in New York State: Purchase of Development Rights Program

New York State Department of Agriculture and Markets (NYSDAM) offers Farmland Protection Implementation Grants to communities which apply on behalf of a cooperating farm owner. Grants are used to help communities purchase agricultural conservation easements (also referred to as purchase of development rights) on productive farmland under development pressure. In order to participate in this program, communities must have documented farmland protection as a public goal. NYSDAM also offers planning grants for communities to complete farmland protection plans.

Farmland Protection Implementation Grants pay up to 75 percent of the value of the development rights, as established by an appraisal. The grants currently require a 25 percent local match, which can be donated by the landowner through a "bargain sale" of development rights, or provided through funding from other sources. Landowners who make a bargain sale of development rights are typically eligible for state and federal tax benefits.

This is a highly competitive program. Grant applications are evaluated based on productivity of soils on the farm, future farm viability, development pressure, and the degree to which the project buffers a significant resource. More information about this program is available at **www.agmkt.state.ny.us/AP/agservices/farmprotect.html**.

Donating Conservation Easements

Conservation minded landowners who are not eligible for the purchase of development rights program may also decide to protect their land by donating a conservation easement.

Provided that certain criteria are met, the value of a donated conservation easement can be claimed as a charitable deduction on state and federal income taxes. Also, New York State implemented a Conservation Easement Tax Credit in 2006 to provide property tax relief to qualifying landowners.

Landowners whose land is restricted by a donated conservation easement can receive an annual state income tax credit equal to 25 percent of the combined town, county and school taxes paid on the land during the previous tax year. The credit is capped at \$5,000 per year for each qualifying landowner. Finally, a conservation easement may reduce estate tax burdens thereby easing intergenerational land transfer costs.

PROFILE IN CONSERVATION Farmland Protection through Purchase of Development Rights: Hicks Family Farm, Town of Canandaigua

The Hicks Farm sits atop a hill with stunning views of Canandaigua Lake. It has been in the family for more than 200 years. A diverse operation, the farm supports cattle, vineyards, orchards, row crops and hay. The farm is especially suitable for vineyards due to its proximity to Canandaigua Lake with its moderating effect on temperature. Mary and Irwin Hicks reside on site in the farmhouse and their son, Jim, is chief operator of the farm. Jim and three siblings share ownership of the 87-acre farm, which is comprised of three independent parcels.

Its location near the lake makes the Hicks Farm ideal for grape production, but also attractive for real estate development. The Hicks family is resolute that they don't want to see the family farm converted to housing. The Town of Canandaigua agrees. Farmland protection is a priority of the Town, and the Hicks farm gets high marks in the Town's ranking of candidate farms for protection.

Partnering with the Hicks family, the Town of Canandaigua was awarded a Farmland Protection Implementation Grant in 2007 for the purchase of development rights on the



Hicks Farm. The Hicks family will receive payment for a portion of the appraised value of the development rights on their farm. They will also make a substantial charitable contribution of the remainder of the development rights. The Finger Lakes Land Trust will hold agricultural conservation easements for each parcel, ensuring the agricultural resources of the Hicks Farm are preserved for the future.

The grant process is lengthy and involves investment of time and money up front, but the Hicks family remains committed to their goal. Jim Hicks explains the legacy he and his siblings cherish, "We're doing this to keep the farm together. We feel like we owe it to our relatives. I'm the seventh generation to work the farm, and we'd like it be there for another seven generations. It is not about the finances." Referring to the complexity of having multiple siblings own the farm, he adds with a laugh, "In part, we're doing it to protect the farm from ourselves. You never know when someone might come up with some harebrain idea."

Land Acquisition

On some occasions, conservation is most effectively achieved through outright acquisition and subsequent management of the land as public open space. For example, in 2008, the Finger Lakes Land Trust partnered with Ontario County to acquire the heart of Grimes Glen. This property has been enjoyed by the public for generations and features steep slopes that are highly susceptible to erosion. The land is now being managed as a public park. New York State's Open Space Plan identifies lands adjacent to High Tor Wildlife Management Area as another area where public acquisition of land is being considered.

Financing Open Space Protection and Land Acquisition

During recent years, a growing number of communities across the country have raised revenue to cover the purchase and caretaking of parks and conservation lands. Many have also purchased conservation easements, primarily on productive farmland, which remains in private hands but is permanently restricted from development. These communities have taken action to maintain the character of their landscapes as well as their quality of life.

Land Conservation Bonding

In neighboring Monroe County, multiple towns have passed bonds to secure open space by purchasing development rights through conservation easements on farms. For example, a local planning process in the mid-1990s led the Town of Pittsford to the goal of preserving 2,000 acres of open space.

A town-wide inventory identified 1,200 acres on seven viable, priority farms in addition to several hundred acres of sensitive lands of ecological or scenic importance. The town authorized a \$9.9 million bond to purchase key parcels and development

PROFILE IN CONSERVATION A Conservation Easement Donation:

Morse Conservation Club, Town of South Bristol

When Marion Myers thought about the future of the 64-acre parcel of land in her father's estate, she wanted it kept the way she remembered it—a natural place, wooded with evergreen and deciduous trees, with a lovely view overlooking Canandaigua Lake. The land had been in the family since 1866.

Her wish came true when 20 childhood friends and neighbors formed the Richard M. Morse Conservation Club (named for her father who died in 1999) and purchased the land above Seneca Point on the west side of Canandaigua Lake in the Town of South Bristol. In late December 2005, they donated a conservation easement to the Finger Lakes Land Trust to ensure the future of the land.

The sloping land includes a pond and primitive cabin as well as the south rim of Seneca Point Gully. The 20 members of the club share in the enjoyment and management of the land. They use it for hunting, hiking and picnicking. The easement allows for the selective harvest of timber, and maintenance of the pond, trails, and cabin. It ensures the land will not be divided, and will stay in a natural condition.

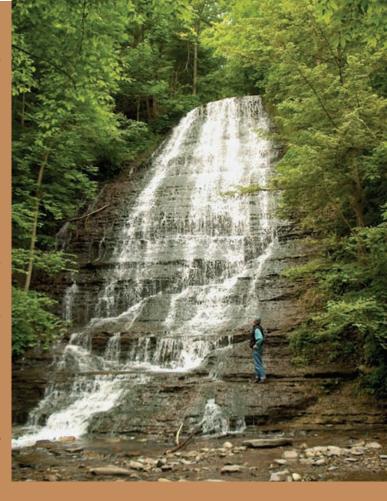
"From our own personal experience, we knew what could happen if we didn't act," said George Hamlin, president of the conservation club, referring to development pressures in the area. All too often, neighbors lament the loss of adjacent lands to development. In this case, the neighbors and friends banded together and protected a cherished landscape.



rights on farmland. The town secured state funding for a portion of identified farmland protection projects, and ultimately borrowed just \$6.7 million, to be paid back by taxpayers over 20 years. Development rights on all seven priority farms were purchased, and the Town's goal for farmland protection was fully met.

How did the town support borrowing millions to finance the purchase of development rights on farms? A study conducted by the Center for Governmental Research in Rochester estimated that, if the seven farms were to be developed, the cost of delivering services (sewer, water, school busing, roads, etc.) would be approximately \$250 in increased taxes per household, per year, forever. The study concluded by buying the development rights on the seven farms, the cost per household would be \$67 per year for a 20 year term. Bill Carpenter, Pittsford Town Supervisor, reflects, "People say we were able to do this because Pittsford is an affluent community. I tell them, don't wait until your assessments are as high as ours. You can do it for less, now."

Many other Monroe County towns have made financial commitments and leveraged additional resources for open space protection, including Brighton, Chili, Gates, Greece, Henrietta, Irondequoit, Mendon, Parma, Penfield, Perinton and Webster.



Open Space Incentive Grants

Communities in Monroe County have been helped by an incentive program in the last decade. The county legislature dedicated \$2 million in tobacco settlement funds to create the Greenspace Initiative in 2000. The program offers 50/50 cost-sharing to municipalities and land trusts for open space projects. Currently in its third round, 12 projects have been completed to date protecting 978 acres in multiple towns. These projects have leveraged additional public and private resources for a total cost of \$7.9 million. Paul Johnson of Monroe County Planning Department explains, "The program has generated municipal interest in communities that may not have felt they could afford to protect open space."

Community Preservation Act

The vanguard of local conservation financing in New York State is the Community Preservation Act (CPA). This enabling legislation allows local communities to enact a real estate transfer fee of up to two percent on the sale price of real property to fund local open space initiatives and create parks, trails, etc. The fee does not apply to any property below the median sale price in order to exempt low income housing. Long Island and Hudson River Valley communities have passed the CPA and seen results.

Five Long Island communities worked together with their state representatives to enact the Community Preservation Act in 1998. Since then they have collectively accrued over \$500 million in revenue and paid for the preservation of over 10,000 acres. Former East Hampton Town Supervisor Jay Schneiderman comments, "The thing that surprised us was the amount of money it started to generate." For the first time, communities were able to negotiate for properties on equal financial footing with developers.

State Assemblyman Fred Thiele, Jr., one of the architects of the CPA legislation says, "The CPA has surpassed our wildest dreams." While CPA revenues in these Long Island communities are buttressed by a high-end real estate market, the price of conserving land is proportionately high in these communities. The principles can apply to other regions and real estate markets at difference scales, including the Canandaigua Lake watershed.

The Community Preservation Act today only applies to a relatively small number of communities within New York State. To enact this tool within the Canandaigua Lake Watershed, municipalities would first need to secure state enabling legislation and would then need to pass a public referendum endorsing local implementation of the Act.

AVISIONFOR THE CANANDAIGUA LAKE WATERSHED

"These are not our hidden treasures – these treasures are to share, but also to preserve, so future generations can equally enjoy them."

—Valerie Knoblauch, Finger Lakes Visitors Connection

Residents of the Canandaigua Lake watershed today stand at a crossroads. We can continue on the path that we're on and face a future that includes diminished water quality and expanding suburban landscapes that resemble many other parts of our country. Or, we can work together to bring about an alternative vision—one that accommodates growth in a way that strengthens existing villages and hamlets and builds upon local traditions—a future that includes a clean lake and the scenic, rural landscapes that define our "Chosen Spot."

Concerted action is needed now. Following are eight recommendations that could help bring about this vision:





A spectrum of planning and zoning policies have been enacted within the watershed in response to development pressure, and some zoning laws are more effective than others. For example, there are alternatives to five or three-acre zoning, once the norm for maintaining low residential density in rural areas. Experience has shown that this type of zoning actually consumes open space more rapidly. With clustering, or conservation subdivision, residences are grouped together on a property and a significant portion is set aside as open space.

While admirable advances have been made in local planning and zoning, significant gaps still exist. Throughout the watershed, planning and zoning policies must be strengthened to provide for:

- a. better protection of steep slopes and watercourses through the adoption of model laws to expand buffers and setbacks;
- b. implementation of design standards and scenic overlay districts to minimize visual impacts associated with ridgeline and lakeshore development and to maintain scenic road corridors;
- c. expanded incentives for encouraging development within existing cities, villages, and hamlets;
- d.strong incentives for clustering development to minimize the consumption of open space and to provide for more efficient investments in public infrastructure.

2. Protect valuable farmland by purchasing development rights on priority farms

While over 100 farms exist throughout the watershed, efforts should focus on preserving the best agricultural soils on the most productive farms, as well as those farms that buffer other significant open space resources. These projects will be most competitive for state and federal funding. Competition for state farmland protection grants is expected to remain extremely keen until budget appropriations increase, so local communities should prepare to dedicate local funding to leverage additional resources, and to examine new ways to generate conservation financing (see #3 below). Local planning efforts should be undertaken to identify and prioritize appropriate farms for protection.

3. Develop sources of local conservation financing through passage of the Community Preservation Act, bonding, or other mechanisms to secure important open space lands, including both natural areas and farmland



With severe constraints on state and federal programs and budgets, communities should position themselves now to do more locally to finance priority conservation projects and protect natural resources their residents cherish. In conjunction with the development of public financing for open space, it is important to develop an inventory of critical resources and document community goals for open space. A clear plan or defined projects are most likely to engender support for local financing and ensure sound public investments.

Community investments in open space conservation will help maintain quality of life while contributing to the community's

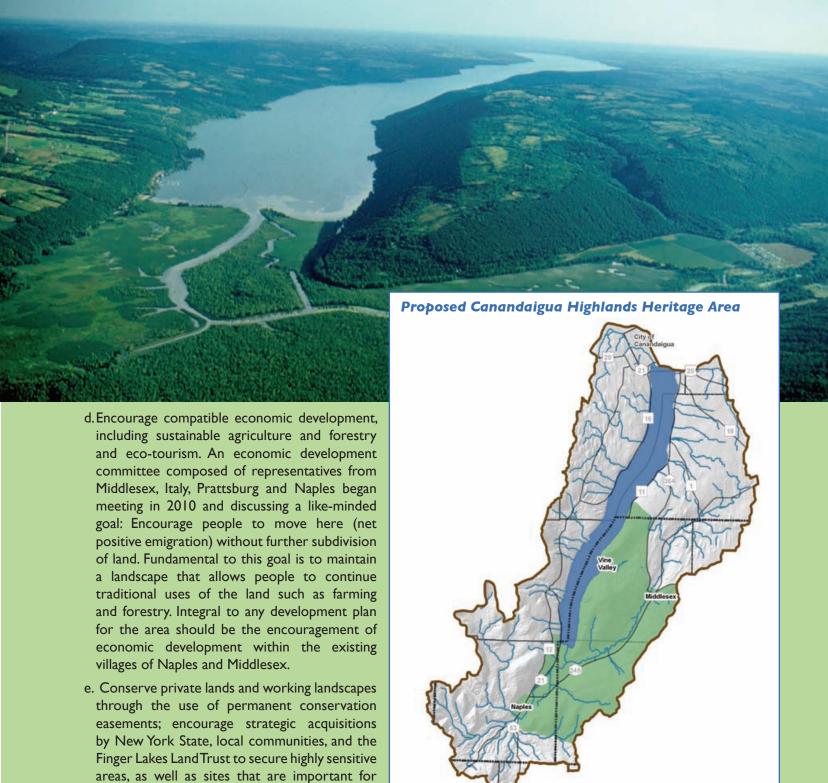
fiscal health. Watershed communities must act before the resource base dwindles and land becomes prohibitively expensive. Waiting until development pressure is more intense will lead to higher costs and reduced likelihood for success.

4. Create a Canandaigua Highlands Heritage Area to promote and protect the character of a special district boasting exceptional natural and cultural resources

The proposed Canandaigua Highlands Heritage Area includes Bare Hill, South Hill, High Tor, and the West River Valley. Spanning approximately 45 square miles, it encompasses almost 6,500 acres of public land, the largest intact forest in the watershed (and among the largest in the Finger Lakes region), many significant farms, the historic hamlet of Vine Valley, the legendary birthplace of the Seneca Nation, multiple gorges and waterfalls, the largest tributary to the Lake, extensive wetlands, and access to the Lake at Woodville. The wealth of natural, cultural, and historic resources to be found in this area make it of regional and statewide significance.

To ensure the future of this area while providing for enhanced public access, increased educational opportunities, and compatible economic development, it is proposed that a variety of public and private sector partners work together to develop an action plan that includes the following five components:

- a. Development and implementation of an interpretive plan that provides visitors with a network of natural and cultural resource areas that would also be utilized by educational groups. The creation of a staffed interpretive center within the heart of the Heritage Area would be the centerpiece of the plan. The center would provide both educational and tourism resources and would be linked to a network of interpretive kiosks to be developed throughout the area. Resources to be highlighted include those associated with Grimes Glen, Bare Hill, High Tor Wildlife Management Area, and the Great Hill Nature Preserve; historic and cultural sites relating to the Seneca Indian Nation as well as early European settlement of the area; and current and past agricultural practices within the area. Maps and kiosks on State lands should be improved to provide additional information on the myriad recreational opportunities available. Linkages to Ganondagan State Historic Site, Finger Lakes Community College, and the proposed Finger Lakes Natural History Museum could lead to the cross-promotion of programs and provide for networking of local educational institutions with special interest in this Area.
- b. An expanded network of multi-use recreational trails in the area, with one goal being the development of a "Highland Heritage" walking trail from Bare Hill to South Hill and beyond to the Village of Naples. This trail would link three existing tracts of public open space and would connect to the Finger Lakes Trail in the High Tor Wildlife Management Area. Development of the trail would provide a truly unique hiking experience for residents and visitors alike.
- c. Development of a community plan for Vine Valley that maintains the unique character of this scenic lakeshore hamlet, while allowing for change. The plan should lay out a consensus vision and identify measures and tools to guide growth to achieve this vision. Yates County and Town of Middlesex staff could work with Vine Valley residents and neighbors, and a consultant as needed, to develop this plan. An excellent reference document can be found in Roger Trancik's 1990 Yates County Looking Ahead: A Planning and Design Guide.



5. Establish a scenic byway around Canandaigua Lake through the New York State program of the Federal Highway Administration's National Scenic Byways Program. Use conservation easements to buffer scenic overlooks and implement scenic overlay districts to maintain rural character

The New York State Scenic Byway program is administered by NYS Department of Transportation. The program creates unique travel experiences by promoting, protecting, and interpreting scenic, historical, natural and recreational resources of an area. Grant funding is available for projects that enhance designated byways. Cayuga Lake is circled by an 86-mile Scenic Byway. Also in western New York, the Lake Erie region boasts the 55-mile Southtowns Scenic Byway.

public access



The Canandaigua Lake Scenic Byway could highlight rural working landscapes, including wine and local food products, geology, gorges and waterfalls, wetlands, cultural heritage, and scenic beauty. The byway could be anchored by existing highway pullouts on State Route 21 in Canandaigua and County Road 12 in South Bristol, as well as Grimes Glen, High Tor Wildlife Management Area, Bare Hill State Unique Area, Deep Run Beach, Kershaw Park, the New York State Wine and Culinary Center and local commercial establishments.



6. Create the Canandaigua Lake Water Trail—a system of rest stops, parks, and picnic areas strategically linked with existing boat launch sites and commercial establishments

Water trails, sometimes called blueways, are paddling trails designed to accommodate small boats. There are several designated water trails on waterways across New York State, including one that traverses Lake Champlain. In a recent assessment of water trail development potential, the Genesee/Finger Lakes Regional Planning Council rated Canandaigua Lake and its outlet as high priorities.⁸

On Canandaigua Lake, rare, remaining parcels of undeveloped shoreline could be acquired and networked with existing parks, commercial establishments, and launch sites. The Water Trail would enhance the menu of recreational opportunities on the lake while providing water quality benefits through maintenance of natural shoreline. Conflicts with motor boats could be minimized by routing the trail to minimize lake crossings. Yates and Ontario County Planning Departments could work together with local governments to facilitate the development of the Canandaigua Lake Water Trail.

7. Educate and prepare for Marcellus and Utica shale natural gas development impacts

Regulation of hydrofracking rests with State and Federal authorities. More research is needed to assess risks associated with this process. In addition, more stringent regulations are needed to ensure the protection of land and water resources from adverse impacts associated with natural gas development.

There are important steps landowners and communities should take to inform and prepare themselves for changes which will ensue from regional natural gas development. Landowners should band together and work with neutral experts to learn about gas leasing and the potential impacts associated with gas development. Landowners must have access to experienced legal counsel and landowner advocates in negotiating leases with gas companies. Lessons for landowners and local governments can be learned from our neighbors to the south in Pennsylvania, and other areas of the country, like Colorado, where natural gas development is extensive.

8. Integrate land conservation tools and measures described in this document in the forthcoming update of the Canandaigua Lake Watershed Management Plan.

The existing watershed management plan is formally adopted by watershed municipalities and provides an excellent framework for intermunicipal cooperation and action. Through the Canandaigua Lake Watershed Council, towns have made significant progress in implementation of recommendations to protect water quality. In recent years, the Council has partnered in multiple land protection projects to protect water courses or sensitive lands, including providing financial support for two gully acquisition projects spearheaded by the Finger Lakes Land Trust. The upcoming comprehensive update of the watershed plan is an opportune time to formalize the partnership between the Land Trust and the Council and to include the use of conservation easements and conservation financing to help meet water quality goals. Expanded use of these tools will be needed to secure additional sensitive lands within the watershed.

CONCLUSION

Canandaigua Lake is an extraordinary place at a very important juncture. If unchecked market forces have their way, the watershed's prized farmland, scenery, wildlife and recreational opportunities may be irreversibly degraded within less than a decade. To protect the natural resources that make Canandaigua Lake such a special place and define our quality of life, we must act now.



The key to success is partners working toward a shared vision. No entity can meet the challenge alone. Each project will call for people coming together in different combinations to make something positive happen. Landowners, municipalities, the Land Trust, watershed groups, other non-profit institutions, individual citizens, county, state and the federal government will all have a role.

The Finger Lakes Land Trust stands ready to work with partners to realize the bold vision set forth in this document; a vision that includes vibrant communities as well as working landscapes and prized natural resources that will be enjoyed by future generations. We invite all residents, communities, and partners in the Canandaigua Lake watershed to join us in making this vision our shared reality.

"Preservation of Canandaigua Lake and its watershed is critical to the environmental and economic future of Ontario County. Both the private and public sectors must work together if there is to be sustainable conservation of this unique resource. Neither sector, working by itself, can achieve success. But partnering—using the strengths of each—can give us all the opportunity to successfully meet our responsibilities of exemplary management of the watershed."

—Geoff Astles, Ontario County Administrator

END NOTES

- ¹Camerhoff, Frederick, 1750. Diary of the Journey of Bros. Cameroff and David Zeisberger to the Five Nations, August, 1750.
- ²Canandaigua Lake Watershed Council, Water Levels, www.canandaigualake.org/levels.htm
- ³Gilman, B. and K. Olvany, 2009. Long Term Water Quality Report: Health of Canandaigua Lake and its Tributary Streams. Prepared for Canandaigua Lake Watershed Council.
- ⁴Cornell Laboratory of Ornithology, 2009. All About Birds. Available at www.allaobutbirds.org/guide/cerulean _warbler
- ⁵The Watershed Steward, Canandaigua Lake Watershed Council, 2002 and Pers. Comm., J. Ochterski, CCE Ontario County, May 24, 2010.
- ⁶Oxfords Economic Impact of Tourism in the Finger Lakes, 2009.
- ⁷Gilman, B. and K. Olvany, 2009, Long Term Water Quality Report: Health of Canandaigua Lake and its Tributary Streams. Prepared for Canandaigua Lake Watershed Council.
- ⁸Genesee-Finger Lakes Regional Planning Council, 2010. Genesee-Finger Lakes Regional Blueway Trails Analysis: An Inventory and Description of Regional Blueway Opportunity Areas in the Genesee-Finger Lakes Region, Available at www.gflrpc.org/blueways/htm.

cknowledgements

The Land Trust gratefully acknowledges the generosity of two anonymous donors whose support made this project possible. Additional support was provided by a grant from the New York State Environmental Protection Fund through the New York State Conservation Partnership Program, a partnership of the New York State Department of Environmental Conservation and the Land Trust Alliance.

The Land Trust also would like to thank the many public officials, community leaders, and private landowners who offered valuable information and perspectives in support of this project. Special thanks are expressed to the following individuals who provided technical assistance and guidance to this project:

Jean Chrisman, Town of Canandaigua

Kris Hughes, Ontario County Planning Department

Stephen Lewandowski, Canandaigua Lake Watershed Association

Kevin Olvany, Canandaigua Lake Watershed Council

Colby Petersen, Yates County Soil and Water Conservation District

Kevin Schultz, Ontario County Planning Department

Robert Stryker, Ontario County Soil and Water Conservation District

David Zorn, Genesee/Finger Lakes Regional Planning Council



Photo Credits: Bill Banaszewski John Cancalosi **Bill Davis Emily Eisman** Lang Elliott **Chuck Feil** Finger Lakes Vistors Connection

Bob Growe Bill Hecht Nigel Kent

Betsy Landre Rvan Lov

Miss-N'Fishin' Charter

1im Ochterski **Kevin Olvany** Marie Read Fritz Sarkis Town of Gorham **Andrew Zepp**

Maps by Karen Edelstein Cover photo by Bill Banaszewski Design and layout by Christi Sobel

Data for GIS maps courtesy of: NYS GIS Clearinghouse, CUGIR, NRCS, USFWS, USGS

Additional assistance from Ontario and Yates Counties

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.filt.org** or call 607-275-9487.

