CAYUGA LAKE WATERSHED NETWORK

summer 2002

Network News

INSIDE . . .

Honoring David Morehouse

By Gene Hocutt, Network Board Member

Central New York, the entire Finger Lakes Community, and Cayuga Lake lost a pioneering leader on the 29th of June, 2002 when David G. Morehouse, 65, of Aurora lost a long and valiant battle with cancer. For over 40 years, David was a strong and clear voice for maintaining and enhancing the integrity of Cayuga and the other Finger Lakes.

At the time of his death, David was the Vice Chair for Cayuga County with the Cayuga Lake Watershed Network. The group serves to educate and communicate the fundamental premise that water quality in Cayuga Lake can only be maintained by improving the 785 square-mile watershed around the lake. He also was instrumental in founding the six county, forty-four municipality Cayuga Lake Watershed Intermunicipal Organization. His involvement extended to the Finger Lakes Ecology Association, a group dedicated to the scientific management of water levels in Cayuga and Seneca Lakes.

The words "pioneer" and "visionary" should be applied to David because he became actively involved in these Finger Lakes long before doing so became popular. In the early 1960's, he helped to found the Cayuga Lake Conservation Association — one of the first organizations in central and western New York State

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5th Annual Lakefest

August 25 • Noon - 4 pm

Taughannock, Falls State Park, North Point Shelter

Noon – 1:30 pm	Picnic provided by Wells College and Music
2 pm - 2:45 pm	Puppeteer Tom Knight
2:45 pm - 3 pm	Big Apple and Brown Cow Punch
3 pm - 4 pm	Annual Meeting
12:30 pm - 3 pm	Information tables from local environmental groups.

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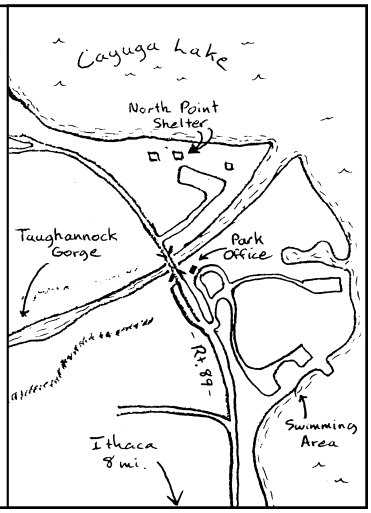

New Watershed Educator Comes On Board

Bill Foster began work this month in the newly created position of Watershed Educator for the Network. Bill is returning to Ithaca with his wife, Patty, and 14-month old son, Noel, after a 15-year absence, but claims he never "really" left. His formative years spent around Ithaca's lakes, streams and waterfalls established in him an abiding love of all things water. Bill graduated with a BS from Cornell's School of Civil & Environmental Engineering in 1987 and spent the next 12 years working with the Environmental Protection Agency's Office of Water in Philadelphia, PA. Through his work with EPA, he gained experience in public water supply and wellhead protection, contaminated aquifer remediation, and watershed management. Bill assisted in the development and implementation of non-point source management and related programs under the Federal Clean Water Act for several Mid-Atlantic States.

"...truly meaningful community involvement is critical to the success of any resource management effort."

Bill's experience at EPA, and subsequently as the manager of a riparian buffer program for the Watershed Agricultural Council – a Catskill-based non-profit organization – has lead him to believe that truly meaningful community involvement is critical to the success of any resource management effort. That involvement is dependent, in turn, on well-conceived educational efforts that are sensitive to the needs and priorities of local communities. Bill feels that working with the Network will provide him with an excellent opportunity to focus on education and outreach techniques that will round out his "Jack-of-all trades" approach to water resources, and anticipates making a valuable contribution in his role as Watershed Educator. Bill noted, "This is an all-too-rare opportunity to work professionally for the benefit of a resource and community that I value personally".

Honoring David Morehouse *continued from page 1*

to dedicate itself to wise use, protection and education about watersheds and lakes.

David's education and early life almost dictated the directions of his later work and value system. He held a B.S. in fisheries management (1959) from Cornell University and a M.S. (1967) from the University of Arizona. He served with the US Army during the Korean War. For several years he managed the Hibiscus Harbor Marina on Cayuga Lake. He also worked with his father Dick and his Uncle Bob in their business, Morehouse Boats, at the northern end of Cayuga Lake. Morehouse Boats were legendary in this area and are now highly collectable. Just prior to his death, and with the strong support of his family, David was actively working to establish a Morehouse Boat Museum.

David took over management of the Morehouse Bait Farm in Seneca County after his father's death. He expanded the original spring-fed ponds many times over and became one of the largest producers and distributors of minnows and crabs for fishermen in upstate New York. He applied an excellent education and plain hard work to make a complex business succeed. Again, even his business world revolved around a healthy lake ecosystem.

For all of the reasons that made David who he was, he asked that memorials be made to the David G. Morehouse Scholarship Fund in care of SUNY Agricultural and Technical College at Cobleskill, Cobleskill, NY 12043-9986.

All of us who care deeply for this legacy of lakes, their watersheds, their habitats and their critters will miss and remember David Morehouse. He was a big man with a big intellect and big personality. Plus, he was kind, compassionate, and gentle – a rare, rare mix. No one ever attended a meeting and found it necessary to ask if David Morehouse was there! You knew.

In our organization, we can best remember David (and his wonderful supportive wife Claire and their sons Randy and Nathaniel) by being active in causes in which David believed. He was a wise steward because he felt obligated to be one. You will best honor David's memory by your personal involvement. Please support wise use, clean lakes and improved watersheds.

CAYUGA LAKE WATERSHED NETWORK

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Mark Your Calendar for Lakefest

Taughannock Falls State Park, North Point

The Cayuga Lake Watershed Network will hold its annual Lakefest at Taughannock Falls State Park in Trumansburg on Sunday, Aug. 25, noon - 4 pm. Please join us for:

1. A free picnic generously provided by Wells College;
2. Watershed information from local environmental groups and;
3. Entertainment for the whole family.
4. There is also a swimming beach at the park.

The Network's annual meeting, during which new members of the board of directors are elected, will take place during the event.

The Park charges a $6 admission fee per car, so consider carpooling! We're pleased to be able to support our State Parks and preservation of natural areas such as Taughannock Falls.

Taughannock Falls State Park is on NYS Rt. 89, about 10 miles north of Ithaca. Lakefest will be held in the the North Point shelter – take the park entrance (right) on the north side of the creek and continue to your left. Look for signs on and around the pavilion.

We hope you will invite your friends to join with you for a great afternoon in beautiful Taughannock Falls State Park. We thank NYSEG for their financial support and Wells College for providing the picnic. If you would like to volunteer to help, to perform, or to participate in any way, please contact Sharon Anderson, Watershed Steward at steward@fltg.net or (607) 532-4104.

Water Week Event Draws Hundreds

This year's Water Week event was held on Friday and Saturday, May 10th and 11th on the Ithaca Commons and at the Ithaca Farmer's market in celebration of National Drinking Water Week. It was co-hosted by the Tompkins County Health Department and the Cayuga Lake Watershed Network. Participants included nonprofit organizations, citizen groups, and local government agencies, and information on water related issues were made available to the public through discussions, displays, demonstrations and pamphlets. The Ithaca Area Waste Water Treatment Facility also provided free boat rides into the Cayuga inlet to demonstrate lake water sampling techniques. Along with the displays, the 9th Annual Tompkins Drinking Water Taste Test was held. Seven municipal water systems in Tompkins County participated in the contest this year, and 279 people took the test. Trumansburg won the contest, followed by the City of Ithaca, Village of Dryden, Bolton Point (last year's winner), Cornell, Newfield, and Groton respectively.

All in all, the celebration was a great success, with this year having the highest turn out so far!

NEWSLETTER RECEIVES AWARD OF EXCELLENCE

The spring 2002 issue of the Network News received accolades from the New York State Federation of Lake Associations. Each year lake and watershed organizations throughout the state are invited to enter a newsletter contest. This year the Network is proud to be the recipient of the first place Award of Excellence. Judges evaluate the newsletters for their content, appearance and appeal to both members and nonmembers.

Kudos and thanks to the authors and to the volunteers on the Public Relations Committee, Jose Lozano, Tad Palmer, and Barney Unsworth, for their dedication and oversight of the newsletter.

ESSAY CONTEST WINNERS

"It Takes a Community to Protect Our Watershed" is the theme of the 2002 annual essay contest. We are pleased to print the first place essays in each of the three categories, adult, high school and middle school. The theme is published in the winter issue of Network News with entries due in the spring.

Case studies and how you can help"

By Marci Meixler, First Place, Adult Catagory

Petey Brucker's story begins simply enough. He lives in a tiny town of about 250 people in the Salmon River watershed of Northern California, one of the country's most remote and biologically intact watersheds. In the old days, salmon were plentiful. People said that one could walk on the backs of the fish during the spawning runs. But by the 1980s and 1990s, these fish populations were fluctuating dramatically...as high as 1,500 fish and as dangerously low as 160 fish were counted in annual surveys.

Petey Brucker noticed the difference and identified the problem. Everyone in his town was part of the problem…they all fished. He also realized they could all be part of the solution if organized properly. He and others in the area organized their first community-focused fisheries restoration project called "Salmon Education." Education, rather than law enforcement, was the theme for the community workshops and school activities which followed. The presentations, made by various local groups and community members, were enjoyed by presenters and audiences alike.

In the following months it became evident that a change in attitude was growing in the river community. No longer did people brag about how many fish they had caught. Instead, people seemed proud to help the fish make it back to the spawning ground. As Petey observed, "peer pressure…detoured many who usually went after the spring salmon. The hole blasters were chased out by the same folks who used to hammer the fish."

In response to the community's overwhelming interest, the Salmon River Restoration Council (SRRC) was created to take the lead in developing insight and cooperation in the community. Community members regularly count fish for the US Fish and Wildlife Service. They remain involved, interested and helpful in creating change for a better environment. They are a community, made up of individuals, creating change and working for a better environment.

The protection of a watershed is a community effort. The Cayuga Lake watershed covers 785 square miles in which over 120,000 people live and work. This area is too large for a single group to oversee, improve and protect. The Environmental Protection Agency (EPA) states that some of the most important lessons learned in effective watershed protection include involvement of and partnerships within the community. Public support drives protection of the environment but public support depends upon public awareness, involvement, and education. The greater the role of the community, the more successful watershed improvement campaigns will be.

Involvement of the community can be accomplished in various ways. One of the most effective is through education. Anne Rheams, Education Coordinator of the Lake Pontchartrain Basin Foundation in Louisiana, realized that getting kids from the community out in the field is "the key component of watershed education." She helped start programs to bring inner city kids on field trips to local watersheds and aid the funding of a local Children's Museum for an exhibit on the impact of urban runoff on local lakes.

Similarly, the Anacostia Watershed Society is working to raise awareness in their community by running a "Day on the River" learning program for Washington, D.C. metropolitan area youth. The students go on a five-mile canoe trip down the Anacostia's Kingfisher Canoe Trail where they identify flora and fauna and monitor water quality. They discuss their observations with the group and consider the effects various land use practices have on the river. The exercise is designed to introduce students to the principles of ecology and watershed protection and to emphasize their connection to the natural world – how lifestyle choices affect the environment, and how the environment, in turn, affects their neighborhood and quality of life. Education accomplished in this way can have a long-lasting impact and can increase understanding of the issues involved in watershed protection.

Educational programs which involve students can have a direct beneficial impact on the watershed, as in the Rouge River watershed in Detroit, Michigan. A group of motivated students at North Farmington High School got involved in the Global Rivers Environmental Education Network (GREEN) monitoring program. The GREEN program provides "opportunities for young people to understand, improve and sustain watersheds in their community." They teach young people how to assess watershed health with the proper tools and then undertake projects to improve

environmental quality based on their findings. The students at North Farmington High School analyzed data that they and students from other schools had collected and discovered bacterial contamination down river from a city sewage pumping station. They presented their findings to the city engineer, who then took action by repairing a malfunctioning pump. The students not only learned valuable skills in problem-solving and science but initiated action which contributed to the health of the community. Through experiences such as this, watershed practitioners have learned that the person who delivers the information is an important consideration. In general, peer to peer communication or communication by a neutral source is preferred. Community members, such as students, are often better received than a government official.

Education of community members other than students is equally important but often difficult to accomplish. The folks at the Tiburon Golf Course in Omaha, Nebraska, found an effective way to reach these groups. They developed the "Water Quality Opens" where entrants enjoy 18 holes of golf for a modest fee while they learn about measures the golf course is taking to protect water quality in a nearby lake. Golfers are engaged in active learning exercises as they make their way around the course. Golfers are also provided with a list of "10 Things Golfers Can Do To Help" and asked to complete exercises about non-point-source pollution and prevention. A unique educational feature of the tournament is that people from all walks of life are brought together in a casual environment conducive to learning about watershed issues. The participants are scrambled into teams, thereby facilitating interaction among the broad spectrum of professionals who participate: clergy, attorneys, elected officials, farmers, developers, engineers, and government employees. The tournaments have also helped to stimulate discussions between the golfers and the golf-course superintendent about management practices. As an example, golfers were asked how to solve the "perceived" cattail overpopulation. They overwhelmingly expressed a desire to leave the cattails in place, thus recognizing the water quality benefits of the cattails, and demonstrating the effectiveness of the educational program.

Another component of community involvement in watershed protection is the development of partnerships. Community partnerships are an essential ingredient since no one entity can solve all issues in any given watershed. As Joy Huber of *River Voices* states, "Far different from the adversarial emphasis of traditional environmentalism, the focus of the watershed approach is to work cooperatively to build healthy watershed communities".

According to the EPA, essential ingredients for effective partnerships include: focusing on common interests, respecting each participant's view point, thanking each other, being willing to learn about others' needs and positions, and building trust. The presence of these factors in partnerships can be critical to success as seen in the Cheat River improvement effort in West Virginia. When a major acid mine blowout turned the Cheat River orange, concerned stakeholders in the watershed mobilized to form *Friends of the Cheat (FOC)*. FOC brought together over 20 groups to restore the Cheat watershed through collaboration, sharing of information, and building on each other's ideas. The various interest groups developed and signed a proclamation called "River of Promise: A Shared Commitment for the Restoration of the Cheat River, West Virginia." Signatories included federal and state agencies, environmental groups, local government, and a coal company. The River of Promise Task Force meets quarterly to monitor progress and coordinate future projects. In 1996, reclamation projects were funded at a total of more than $6 million. "We've got a long way to go," says Dave Bassage, FOC Executive Director, "but water quality has already started to improve. By focusing on partnerships and including a broad range of interests, we have eliminated hurdles and opened doors. We'd rather shake hands than raise our fists, and that strategy has really paid off." He feels that the key to effective partnerships is to get all potential interests in a room together and work towards consensus, rather than try to coordinate from a distance. He notes that the spirit of cooperation is now so strong that it is often difficult to tell which groups the individuals represent.

As in this example, community partnerships should include representatives of key interests in the watershed so that the partnership can tap into their strengths, increase group credibility, reduce duplication of effort, and make optimal use of limited funds. The effectiveness of community partnerships is well illustrated in the work being done at the Fish Creek Watershed, which drains 110 square miles of agricultural land in northeast Indiana and northwest Ohio. The creek is

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ESSAY CONTEST: **"It Takes a Community to...**

Protect Our Watershed"

By Nicole Loerzel, First Place, High School Category

A watershed is a region or area from which water-soluble substances ultimately drain to a particular water course or body of water. The watershed of each lake consists of all drainage from adjacent uplands, shorelines, and wetlands. Most people think that if they are a mile or so away from a body of water they are out of the watershed, but they are not. Every piece of land is the watershed for a specific body of water. All bodies of water are connected in one way or another. So, no water and no watershed is safe from pollutants, unless the land surrounding the entire planet is properly cared for.

When toxins and other pollutants enter a lake, they ruin it. They kill what grows naturally and promote the growth of bacteria. If they do not kill the wildlife of the water they pollute, they poison it. Then, when the things that feed off of that wildlife eat, they too become poisoned. Humans also rely on lakes for their drinking water and their water for everything. If you have a lake polluted with toxins and harmful chemicals, then much filtration and purification has to be done before you can consume that water. The plants and animals in the environment though, do not have the ability to alter the water back to usable standards. Therefore they use it as is and become sick and in some cases die.

The Cayuga Lake Watershed is larger than most people would think. Due to the fact that the general public does not know much about their lakes' watershed, toxins are released into the watershed without a second thought. People do not realize that when you dump toxins, they do not just go "away". They get into the ground and storm drains, then into streams and rivers and are led down to the lake. Once in the lake their concentrations just build up and pollute. They can take over the lake, and kill everything in it to which they are harmful. This only occurs in the most dramatic circumstances.

In order to prevent further abuse to the watershed and lake, each individual has to learn how to treat the watershed properly, and then do so. If everyone of a community will respect their watershed, then the community has come together to put forth just efforts. When looking at the big picture though, one community is still a small matter. If you look around a lake as large as Cayuga Lake, you will find private homes, public businesses, private businesses, and many diverse communities. It is difficult to get everyone from one community to understand and do the right thing. It is nearly impossible to get everyone surrounding an entire lake to conform to healthier habits. Attempts to get proper treatment of the watershed must be made. The attempts of just one person, though they may seem small, can help in a big way. If everyone is of the mentality that, "If no one else is wasting their time doing it, why should I?", you will get no results. On the other hand, if everyone is of the mentality that "Everyone else is doing their share, so I better do mine.", the results will be excellent and the community can only benefit from them.

As one person you can do your share for the watershed in many ways. You can protect it starting with your family and yourself. This would be done by making sure that you and your family do not dump harmful materials into your yard or any other piece of land where the materials will end up in a watershed. You would make sure that no toxins were dumped directly into a body of water. Make sure your toxic materials are properly cared for by learning the correct ways to dispose of them, or by taking them to a hazardous waste collection site. You could also help your watershed by cleaning toxins and waste out of visible parts of it. This means cleaning out rivers, inlets, outlets, and streams that are part of your watershed. When you clean them out you would collect the materials and make it your job to dispose of them properly. The most important and influential way to keep your watershed clean, is to educate. If you educate your family, friends, and neighbors, it is a beginning. When you educate the public about what their watershed is, and how to properly take care of it, they usually will follow your teachings. Even the people who normally do not care, may feel pressured to do the right thing because now they know what they are doing and what the consequences are. They know that they are ruining the water that they need to live.

You can educate them in a few ways. You would tell them exactly what a watershed is and how the watershed effects a lake. Then you would show what substances should not be let into the watershed. This would be all pollutants and chemicals that are harmful in one way or another. Examples would be bleach and oil and chemicals that are supposed to kill one thing and benefit another, such as lawn care products and pesticides. Adding unnecessary pollutants to the water that may carry diseases is also harmful. Such pathogens

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Protect Our Cayuga Lake Watershed"

By Thomas Updike, First Place, Middle School Category

Have you ever wanted to jump into some ice-cold refreshing water to cool off on a hot summer day? However, when you arrived at the water's edge and looked into the depths, the water was green, murky and foul smelling? This is a possible scenario if the population of our Cayuga Lake Watershed keeps polluting the water. One person cannot maintain the health of the Watershed; it takes a community. There are three important factors you should know about our Watershed: what it contributes to the community, pollution risks, and how to help protect and preserve the ecosystem.

Most importantly, the Cayuga Lake Watershed is a setting for recreation, a location for vineyards, communities of people, and a wildlife habitat. Our Watershed attracts visitors and tourists who enjoy concerts, museums, wine tasting at vineyards, and historic sites. These attractions also provide local employment, which helps keep the economy at a higher level of prosperity. If you are looking for entertainment, then the Watershed provides various activities such as fishing, boating, sailing, kayaking, hiking, swimming, diving, windsurfing, bird watching, or you can kick back and enjoy the view. If pollution carries on at the rate it is going, then eventually all these attractions would vanish from the community.

Sadly attractions and activities are not sufficient to stop people from contaminating our Watershed. Most people inadvertently pollute the watershed without realizing what they are causing to happen. A quantity of the pollution comes from oil leaks in boat motors, and run-off sewage from ill repaired septic systems. The oil and sewage spurs a process called eutrophication to occur. Eutrophication transpires when there is an elevated level of phosphorus (caused by oil, sewage, and fertilizer) in the water. The phosphorus then creates a rapid growth of algae. As the algae die, decomposers become more active. The decomposers use up much of the dissolved oxygen, which results in the deaths of many aquatic animals. The algae are the reason why the water becomes murky, foul, and ultimately unappealing. Other pollutants include heavy metal concentrations (such as chromium and lead), and coliform bacteria (mostly derived from sewage from sewage systems).

Here are several ways you can help. If you own a boat, then regularly check the engine and keep it in good repair to prevent oil leaks. If you have the need to dispose of chemicals or sewage, restrain yourself from dumping the contents into a drain or into the soil. Most drains deposit the water in a part of the Watershed. The chemicals can also become runoff into the water from the soil. To prevent sediment plumes (soil deposits which cause the water to become murky), refrain from cutting down trees or vegetation from the stream banks. The roots of trees and undergrowth help to hold the soil together. The regularly checking and repairing of septic systems is an essential element to helping preserve our Watershed. Paying your taxes is also of assistance for the reason that the government helps manage the land surrounding our Watershed. Everyone has to take part in helping to prevent pollution.

In conclusion, our Watershed only contributes positive effects to our society. How does society show its appreciation? We are abusing and destroying the health of our Watershed. Therefore we should immediately desist from polluting and commence in preserving Cayuga Lake's ecosystem. Not just one person can preserve the ecosystem; it will take a community of people to protect and preserve our Watershed.

It Takes a Community to Protect Our Watershed *continued from page 6*

are fertilizer and the materials left by the animals when taken straight from a barn or pen.

When making an entire community understand the importance of their watershed, you protect it in a very big way. Once citizens know what it is that they are doing wrong, they will change their ways. When they see what they were doing correct, they will be proud and have a sense of comfort in knowing they have been doing good. Watershed protection is a necessity from everyone. If everyone does their part, quality of living could increase from pure surroundings, rather than making quality seem to increase by loading the environment with chemicals.

Is Cayuga Lake an "Impaired Waterbody"?

By Bill Foster, Watershed Educator

Is Cayuga Lake polluted? Should it be on the State's 303(d) list? What is a TMDL, anyway?

As debate over the state of the lake continues in local papers and between concerned organizations and individuals, it's easy to become overwhelmed with unfamiliar terms and figures. In this article and others to follow, the Network will attempt to keep its readership up to speed on the issue in language that won't require a PhD to understand. Please let us know if we're accomplishing that goal!

To begin, the Federal Clean Water Act requires states to periodically report on the quality of their waters. Section 303(d) of that Act also requires states to identify waters that appear to be "impaired", because they cannot be used for appropriate activities, or "designated uses". These waters are then included in a biennial 303(d) listing, and if it is appropriate, the state must characterize pollution sources and calculate the level of reductions necessary to mitigate specific impairments. This process results in the calculation of a Total Maximum Daily Load, or TMDL.

Why Is Cayuga Lake Considered to be Impaired?

The "designated uses" for Cayuga Lake include bathing, recreation, and drinking water supply.

NYS Department of Environmental Conservation (DEC) believes that the continuing closure of the bathing beach that once existed at Stewart Park, coupled with aesthetic complaints and a growing water quality database, provides adequate evidence that the southern portion of the Lake is not supporting its designated uses.

Because of this impairment, DEC identified southern Cayuga Lake as a candidate for TMDL development on its 2002 New York State Section 303(d) List of Impaired Waters, recently submitted to EPA.

Water clarity is complicated within the southern portion of the lake due to a combination of factors. Tributaries carry sediment to the lake and lake bottom sediment is stirred up and resuspended as a result of high winds and waves. Both types of sediment may carry phosphorus particles. Phosphorus is a limiting nutrient meaning the growth of aquatic plants, including algae, increases when more phosphorus is available. Algal growth can have a significant effect on water clarity and perceived water quality.

What Happens Now?

The lake's impairments are characterized largely as the result of turbidity and sediment. DEC notes in its findings, however, the need to better understand these closely related water quality concerns. To that end, it is likely that DEC will seek a comprehensive study of contributing factors- particularly sediment and phosphorus sources—over the next few years. While there is a common assumption that TMDLs will be required for phosphorus and sediments, it is important to understand that

What Is A TMDL?

Simply put, the Total Maximum Daily Loads that may be created for Cayuga Lake will calculate how much phosphorus or sediment can be input into the lake and its tributaries before adverse effects begin to occur. However, in order to make these calculations meaningful, the State must assess all contaminant sources, and evaluate the relative impact of each source. For example, phosphorus entering the system from farm activities along Fall Creek would likely have a much different impact than phosphorus entering the lake directly from a wastewater treatment plant. Once pollution sources and processes are modeled, calculations can be made to determine how much each source must be reduced in order to mitigate impairments in the Lake. The results of this process would then be used to develop a TMDL implementation plan in collaboration with stakeholders.

DEC is required by federal law to move forward with TMDL preparations for phosphorus and sediment. However, final development of TMDLs for the southern end of Cayuga Lake is a ways down the road. According to Cliff Callinan, a DEC engineer who has been studying Cayuga Lake during the past several years, "The use impairment issues within the southern portion of Cayuga Lake are complex, and the potential resolution of these issues will require substantial additional study of the south lake and tributary system. While plans are not yet final, the effort will likely entail several additional years of water quality monitoring and model development. These activities are necessary to further define pollutant sources and system dynamics that will form the basis for TMDL development.

Where Does DEC Stand?

alternative solutions may arise as more information emerges. Further, EPA has established criteria intended to ensure that any steps eventually prescribed to reduce pollution levels targeted by a TMDL will be the result of a collaborative planning process between DEC and watershed stakeholders. In the case of Cayuga Lake, the extensive effort invested in the creation of the Cayuga Lake Watershed Restoration and Protection Plan should provide an excellent starting point.

Given the complexity and potential impact of the TMDL process, it is important that watershed communities interact effectively with DEC to ensure that conclusions reached are accurate, and that eventual pollution reduction goals are realistic. DEC maintains that public input is valued, and has already responded to nearly 30 comments submitted regarding Cayuga Lake's 303(d) status. Readers may view responses and additional information on DEC's website, at www.dec.state.ny.us/website/dow or may contact the Network for information.

It Takes a Community to Protect Our Watershed: Case studies and how you can help *continued from page 5*

noted for having the most diverse assemblage of freshwater mussels in the Great Lakes Basin; 31 species of which three are endangered. Soil erosion and loss of wetlands and forest land threaten the system. Together, partners from a multitude of public and private organizations have succeeded in reforesting land along the creek, fencing livestock, restoring wetlands, and creating a nature reserve. Larry Clemens of the Nature Conservancy, attributes the success of the project to the fact that each partner is able to look beyond his or her organization's "traditional" interests and focus on the needs of the watershed. The benefits of community partnerships are clear as they can lead to wider acceptance and quicker implementation of projects.

Our own Cayuga Lake watershed has a wealth of natural resources including rich forests, wildlife, fisheries and wetlands. The lake is the source of water for many people. It provides recreational opportunities such as boating and fishing, and it is a prominent spot for migrating waterfowl and songbirds. However, the watershed is threatened by problems such as phosphorous pollution from upstream agricultural runoff and animal waste, streambank erosion and sedimentation from the scouring effect of moving water, and heavy metal deposition of lead and chromium.

So, how can we help? We can draw from the above examples for ideas on how to improve and protect our rich resources. In terms of education, we can help students and members of the community learn the meaning and practice of watershed protection by starting a local GREEN program or working with the existing Water Monitoring Group to identify potential problems. We can help teachers to bring the subject alive in the classroom through teacher education programs focused on environmental issues like those offered by the Institute on Science and the Environment for Teachers. We can encourage attendance of the many ecologically-focused field trips led by talented local experts or organize field trips of our own focused on particular issues. We can work with the Science Center on exhibits to promote responsible living. We can make small lifestyle changes to help the environment which, if seen and copied by others, may eventually become the "cool" thing to do by all.

In terms of partnerships, we can work with the already effective Cayuga Lake Watershed Intermunicipal Organization which has developed a restoration and protection plan aimed at addressing potential watershed threats. We can stay informed about local developments and think about how proposed plans may impact the watershed. We can participate in discussions which may lead to management plans and decisions regarding the Cayuga Lake Watershed. We can talk to local representatives about issues involving watershed protection and restoration.

Most of all, we can work as a community for the protection and improvement of the Cayuga Lake watershed. Our efforts now will have long lasting benefits. It is up to us as a community to preserve our natural environment and maintain the rich resources for the years ahead. We can all be a positive part of that process.

Economic Development and the Cayuga Lake Watershed: A Perspective From Tompkins County Area Development

By Martha Armstrong, Vice President of TCAD

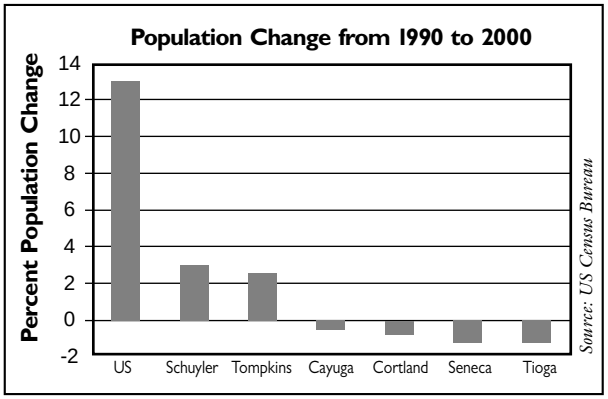
PROTECTING THE NATURAL ENVIRONMENT IS IMPORTANT TO THE QUALITY OF LIFE IN THE CAYUGA LAKE WATERSHED. QUALITY OF LIFE IS A KEY SELLING POINT FOR ATTRACTING AND EXPANDING BUSINESSES. ECONOMIC OPPORTUNITY ATTRACTS MORE PEOPLE THEREBY INCREASING LOCAL POPULATION. RESPONDING TO INCREASING DEMAND FOR WATER RESOURCES, WHILE PROTECTING THEM AT THE SAME TIME, IS IMPORTANT FOR THE CONTINUED ECONOMIC VITALITY.

Economic development in Tompkins County

Economic development usually focuses on business sectors that sell their goods and services outside the county, thereby bringing sales income back into the county. That income, in turn, supports local sectors like retail, car repair and other services where money is exchanged between local people and local businesses. The sectors that bring the most income into Tompkins County are education (i.e. Cornell and Ithaca College), manufacturing, and high-tech. Agriculture, tourism, utilities, and mining also bring income into the county.

How does the watershed affect the economy?

During the 1990's, the "New Economy" – information driven, highly flexible, and highly competitive – took off. Much of upstate New York has lagged behind the nation in developing modern high-tech businesses and in attracting people who possess specialized skills and experience for the new business environment. Tompkins County has done better than many upstate communities largely because it is a college community with a major research university. High-tech businesses, modern manufacturing plants, and academic institutions, however, all need to attract specialized workers required by the new economy. This is a challenge in a region that is perceived as being older and in decline. A key ingredient to attracting these workers is to emphasize quality of life. People who are looking for a good place to raise a family or who value access to nature are attracted to the Finger Lakes. The gorges and Cayuga Lake are strong selling points.



How does the economy affect the watershed?

There are only two businesses in Tompkins County who use water for industrial purposes requiring pre-treatment before entering the sewage system. The main way the economy affects the watershed is by increasing its population. Population growth and decline tend to follow employment trends; people move toward economic opportunity. Most counties in upstate New York lost population during the 1990's as their economies entered cycles of decline. As a growing employment center, Tompkins County saw modest *growth* during the 1990's.

There are approximately 120,000 people living in the watershed, and Tompkins County accounts for about 75% of that population. Seneca and Cayuga counties have the next largest populations living in the watershed. Tioga, Schuyler, and Cortland counties all have fairly few residents in the Cayuga watershed. Tompkins County grew by nearly 2,500 people in the 1990's. At the same time, Cayuga and Seneca counties experienced small declines of about 350 people each. In addition, 1990 saw over 11,000 people commute into Tompkins County for work. (2000 figures are not yet available but they are expected to show an increase in commuter traffic.)

Modest population growth is expected to continue for the foreseeable future. This will place an increased demand on water resources for domestic and recreational uses. Responding to this demand while protecting these valuable resources is important for the continued economic vitality of Tompkins County.

Tompkins County Area Development (TCAD) is a not-for-profit membership organization that provides economic development services for Tompkins County. This article does not discuss the Tourism and Agriculture sectors of the economy. These are addressed in other watershed publications.

Community-wide Stream Cleanup a Huge Success!

By Tom Dumas, Fall Creek Trout Unlimited Member

A dedicated crew of 83 volunteers removed 3300 pounds of trash from seven stretches of Fall Creek extending from Lake Como in Cayuga County to the south end of Cayuga Lake. On Saturday, May 4th youth and adult volunteers from Cayuga, Tompkins and Cortland County came together to clean up Fall Creek. This event was sponsored by the Fall Creek Watershed Committee, the Fall Creek Chapter of Trout Unlimited and Cayuga Lake Watershed Network but was made possible with the help of the many individuals and organizations that volunteered their time and provided supplies.

This event has also served to make people aware of the amount of trash that is improperly disposed of in our lakes and streams. Hopefully, this awareness will keep the trash out of Fall Creek. In order to continue to keep Fall Creek as trash-free and beautiful as possible, there are plans to make this cleanup an annual event.

Families of NYSEG staff joined in the Fall Creek Cleanup.

Network Launches Member-Get-a-Member Campaign

Members are the heart of the Cayuga Lake Watershed Network and to expand our membership the Network has launched an ambitious Member-Get-a-Member Campaign.

We are pleased to report that many members have already renewed their commitment for the 2002-03 membership year and are hopeful that a reminder will prompt others to renew soon. Only with the support of loyal members – and new members to further strengthen our ranks – can the Network continue and expand programs and projects vital to preserve, enrich, and protect our treasured Cayuga Lake Watershed.

We can reach our goal to increase active membership by 25% this year, IF each member joins our Member-Get-a-Member campaign and gets just one new member. It's easy. Simply share your copy of Network News and your enthusiasm about the importance of Cayuga Lake Watershed Network with a friend, co-worker, or area business, ask them to complete the NEW MEMBER FORM below and return it to the Network office (P.O. Box 303, Interlaken, NY 14847 with their membership dues.

We're counting on each and every member to renew – and to help us reach our new member goal. We will keep you informed of progress along the way.

NEW MEMBER CONTRIBUTION FORM

☐ I want to do my part
to preserve, enrich and protect the water resources and environment of Cayuga Lake and its watershed – so I'm joining the Cayuga Lake Watershed Network with my enclosed contribution of:

☐ $25 ☐ $35 ☐ $50 ☐ $100 ☐ $250 ☐ Other $_____

Please see below for minimum dues. Gifts above minimum dues are needed and encouraged, so please be as generous as you possibly can. Your contributions to the Network are tax deductible. Thank you!

NAME

ADDRESS COUNTY

CITY STATE ZIP

PHONE ( ) E-MAIL

SPONSORING MEMBER

Thank you.

CAYUGA LAKE WATERSHED NETWORK – Minimum Dues

$500	Watershed Benefactor	$50	Organization/Agency
$250	Lake Sponsor	$35	Family
$100	Headwaters Donor	$25	Individual
$50	Farm or Small Business	$10	Student/Senior

With your dues contribution of these amounts or more, you will receive Network News for a full year – and you have the choice of receiving our award-winning newsletter by mail and/or by email. Please indicate your preference below.

☐ Please mail my Network News to the above address.
☐ Please save postage and paper and email Network News to my email address above.
☐ I'd like to receive my newsletter by mail and email.

Please make your tax-deductible check payable to Cayuga Lake Watershed Network and return it with this New Member Contribution Form in the envelope provided. The Network's membership year is from July 1 to June 30.

☐ I want to help even more!
Please contact me about volunteering to serve on a Network committee or help out on special projects.

Water Quality Study of the Finger Lakes

An excellent and comprehensive report of the water quality of the Finger Lakes, written by Cliff Callinan, NYS DEC, has been released. This study compares and evaluates the water quality conditions of the Finger Lakes. The report can be downloaded from www.dec.state.ny.us or from the Cayuga Lake Watershed Network website www.cayugalake.org. The files are all in Adobe© Acrobat Portable Document Format (PDF). A PDF reader is available at no cost from Adobe at the following web site: http://www.adobe.com. If you have any questions regarding this study, please contact Clifford W. Callinan, P.E. at cwcallin@gw.dec.state.ny.us

Small But Mighty Willows

Shrub willows only reach 12 feet in height, but their roots work wonders, holding soil in place against the force of fast moving creeks. Each year, in cooperation with local Soil and Water Conservation Districts and Cooperative Extension, the Network oversees the securing, distribution and planting of 1000 shrub willows. The Restoration and Protection Plan for the Cayuga Lake Watershed identified sedimentation as a major threat to Cayuga Lake. Not only is the eroded soil a concern, but also it serves as a vector to carry pesticides, nutrients and heavy metals from uplands to the lake. The majority of willows were planted on Six Mile Creek supporting larger erosion control projects. The remaining willows were planted along Treman Creek. Both youth and adults who contribute their time to plant the willows received a brief educational program on the harm caused by soil erosion, and simple techniques in prevention and restoration. The willows are generously supplied by NYS Department of Environmental Conservation to protect streams with public fishing access.

Youth from the Community Fly Fisher brave cold, rainy weather to plant willows that help fight erosion.

Cayuga Lake Watershed Network

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