

Network News



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Municipal Officials Respond to Water Resource Issues

By Sharon Anderson, Watershed Steward

What do streams, roads, onsite wastewater treatment systems, grass, and marinas all have in common? How our town, city and village governments handle each of these has a great impact on water quality.

Elected officials have many responsibilities and they need tools to help them make good decisions. A new tool, called LEAPE, recently designed and piloted by Cooperative Extension is being received with enthusiasm. The program uses Geographic Information System (GIS) data, paired with technical information on water resources management options to assist municipal officials in carrying out their roles to protect water quality. The management options cover streamside protection, road management, onsite wastewater treatment systems, turf management, and marina management. The acronym stands for "Locally-led Education and Action for Protecting the Environment." It is well chosen because the program facilitates the local community to explore water resources issues and tailor the management options to its needs.

The Cayuga Lake Watershed Network received a three-year grant from the Tompkins County Foundation to implement LEAPE in Tompkins County. Each of the 3 years the Network will work with 4 municipalities. The municipality will receive training, ongoing support, aerial photographs, topographic maps, and digitized mapping data.

Most of the data needed is available as public domain or has already been digitized by the County. The grant allows the data to be scaled down and customized to the municipal level. The data includes mapping information on land use, soils, topography, zoning, infrastructure, and hydrology.



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Cayuga Lake Watershed Network

8408 Main St., PO Box 303
Interlaken, NY 14847
<http://www.cayugalake.org>

Office 607-532-4104
Fax 607-432-4108

OFFICE HOURS:
M-W & F - 9AM to 1PM
Thursday - 1PM to 5PM

OFFICERS:

Janet Hawkes, Chair
607-255-8122
jeh34@cornell.edu

Antonio Ganzon, Vice Chair
315-549-2544
aganzon1@rochester.rr.com

David Morehouse, Vice Chair
315-364-8439
aquagrown@aol.com

Tad Palmer, Vice Chair
607-347-2707
tapalmer@nyseg.com

Jose Lozano, Secretary
607-273-8381
JLL13@cornell.edu

William Shaw, Treasurer
607-273-2900
wmrshaw@aol.com

DIRECTORS:

Peter Chappell
315-253-6732

Gene Hocutt
315-364-7159
refugekeeper@peer.org

Julie Patterson
315-255-2161
jjpatt@baldcom.net

Dennis Rhoads
607-756-8752
drhoads@groton.cnyric.org

Peter Shuster
315-568-9337
pcshuster@seneca24.net

Barney Unsworth
607-272-5827
mcu1@cornell.edu

STAFF:

Sharon Anderson,
Watershed Steward
steward@fltg.net

Debbie Wech, Office Manager
assist@fltg.net

Update on Groundwater Contamination in Towns of Aurelius, Springport, & Fleming


By Eileen A. O'Connor, Environmental Health Director, Cayuga County

As part of their investigation into the presence of low level volatile organic chemicals within the Village of Union Springs well water, the New York State Department of Environmental Conservation (NYSDEC) determined in December 2000 that there was a groundwater plume of volatile organic chemicals in the area between the City of Auburn and the Village of Union Springs. Following that determination, over 300 wells in the area were tested by the Cayuga County Health Department in conjunction with the New York State Department of Health. Trichloroethene and its degradation byproducts were detected in 77 wells.

As a result of this determination by NYSDEC, the United States Environmental Protection Agency (USEPA) arranged for the immediate delivery of bottled water and installation of individual household treatment systems to those homes that had levels of contaminants that exceeded EPA standards. In addition, the Cayuga County Health Department, with funds from New York State, was able to make available treatment units for those homes that did not exceed the EPA standards but did have lower levels of contamination present in their well water.


Concurrently, the Cayuga County Water and Sewer Authority sought funding for the installation of a public water line to serve those homeowners who had the highest levels of contamination. With a combination of grants and loans, the waterline was constructed during the fall and winter of 2001. In addition, efforts are underway by the Cayuga Lake Intercommunity Water Board, an intermunicipal organization comprised of the Towns of Springport, Aurelius, Fleming and the Village of Union Springs, to obtain funding to provide public water to other homeowners affected by this plume.

During 2000, the NYSDEC began an investigation into the cause of the pollution. This project has since been turned over to the USEPA. As part of their investigation, the USEPA will be installing approximately 8 monitoring wells that will be studied in an effort to determine the source of the pollution so that a cleanup effort can be initiated.

For more information contact the Cayuga County Department of Environmental Health at 315-253-1405 or cayean@yahoo.com 

Municipal Officials... *continued from page 1*

Once the program has been successfully implemented in Tompkins County, LEAPE can be more easily implemented in other counties within the watershed. LEAPE could help municipalities throughout the watershed make significant progress towards implementing the recommendations of the Restoration and Protection Plan, which was released last fall by the Cayuga Lake Watershed Intermunicipal Organization.

The Network is working collaboratively with the Tompkins County Planning Department, the Water Resources Council, Cornell's Center for the Environment and Cooperative Extension to carry out the project. This team will work closely with the municipalities to tailor the program to local needs. 

Hungry Cows Help Protect Water Quality

By Aaron Smith and Sharon Anderson

Last year Seneca County farmers began participating in “Graze NY”, an ambitious program that puts livestock to pasture and keeps pollutants in their place. Farmers establish permanent ground cover as livestock feed, which has the benefit of holding soil in place along with the non-point source pollutants that can travel with the soil. Areas with highly erodible soils can still be productive as pasture without being plowed for row crops. Fences are used to keep animals out of streams and ponds, again reducing erosion plus keeping pathogens and nutrients out of the water. If those water bodies were being used as drinking water for the animals, an alternative water source such as a tank, well, or spring development is provided.

Water quality benefits, and so do the farmers. Grazing animals tend to be healthier. By not being confined to the barn their contact with pathogens is reduced. Their foot and leg health improves because they are walking on grass instead of concrete. Other benefits of rotational grazing include providing large, contiguous blocks of open grassland habitat needed by wildlife and protection of nesting sites for grassland birds.

Graze NY was developed in 1995 with the assistance of Congressman James Walsh. The goals of Graze NY are:

To improve the water quality of the Seneca River and Cayuga and Seneca Lakes, and therefore the larger Great Lakes Basin, by reducing sediments, pathogens and nutrients through grazing.

To help farmers learn about the environmental and financial benefits related to rotational grazing.

To organize the agencies and organizations that are concerned



with controlling non-point source pollution through the practice of rotational grazing.


Rotational grazing moves livestock from pasture to pasture in a deliberate pattern called prescribed grazing. Prescribed grazing is the management of grazing or browsing animals to control the harvest of vegetation in order to achieve planned objectives. This means clearly identifying the management objectives for a particular plant, plant community or animal production enterprise. Once this has been done the frequency, intensity, timing and duration of grazing events can be prescribed along with the method of stocking and the kind, number, and class of animals required to meet the stated objectives. Grazing animals can include dairy cows, beef cattle, fallow deer, horses, sheep, goats, poultry, pigs, llamas and alpacas.

Farmers in Seneca County are now joining with Cayuga and Tompkins County farmers who have already been reaping the benefits of rotational grazing. More Seneca County grazing workshops will be offered this year. Participating farmers will receive free soil tests and forage sampling.

Grazing specialist Aaron Smith

says “There are encouraging signs that future funding may be made available to farmers within the Cayuga Lake Watershed during the upcoming year to use in projects aimed at protecting the watershed.” The Cayuga County Soil & Water Conservation District (SWCD) has played a major role in assisting the Seneca County SWCD establish their Graze NY program. They will continue to work together closely to help protect the Cayuga Lake Watershed.

Tompkins County SWCD recently submitted a grant to reduce a non-point source pollution. Their grazing specialists Jerry Verrigni stated, “These grants are only written every one to two years and the funding will not be available until 2003. It is a 75% cost share and interested farmers can contact us. The money is limited and is not available too often.”

For more information about Graze NY in Cayuga and Seneca Counties contact Aaron Smith or Doug Kierst, Cayuga County SWCD at 315-252-4171 or via email at aaron-smith@ny.nacdnet.org. In Tompkins County contact Jerry Verrigni with TCSWCD at 607-257-2340. 

Second Annual Essay Contest

"It Takes a Community to Protect Our Watershed" is the topic of the second annual essay contest sponsored by the Cayuga Lake Watershed Network. The contest, divided into three categories, is open to school children and adults throughout the six-county watershed, which includes portions of Cayuga, Seneca, Tompkins, Cortland, Schuyler, and Tioga counties.

The categories consist of the following: Grades 6-8, 500-word limit, \$75 first prize; Grades 9-12, 1000-word limit, \$150 first prize; and Adults, 2000-word limit, \$275 first prize. The cash prizes have been donated by ITT Industries/Goulds Pumps, which has pump manufacturing facilities in Seneca Falls and Auburn. The essays should deal with the question: what can one person – or an entire community – do to protect the Cayuga Lake Watershed.

All entries must contain the name of the author and page number marked at the top, right hand corner of each page. Entries must be postmarked no later than April 1, 2002 and sent to the Cayuga Lake Watershed Network, P O Box 303, Interlaken, NY 14847. Winners will be announced during National Water Week, which begins May 5, 2002. Winning essays will be published in the Network's quarterly newsletter. For more information contact staff member Sharon Anderson, 607-532-4104 or steward@fltg.net.



Essay Contest

"It Takes a Community to Protect Our Watershed"


Write and submit an essay by April 1, 2002 on what *one person*, or *the entire community* can do to protect the Cayuga Lake Watershed.

Prizes courtesy of Goulds Pumps Inc., Seneca Falls NY

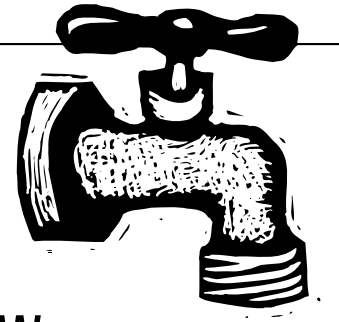
CATEGORIES:		
Grades 6-8	500 word limit	1st prize \$75
Grades 9-12	1000 word limit	1st prize \$150
Adult	2000 word limit	1st prize \$275

Send essays to: CLWN, Box 303, Interlaken, NY 14847

Winners announced Water Week - week of May 5, 2002

 Winning essays published in CLWN Network News 

Visit Cayuga Lake Watershed Network website @ <http://www.cayugalake.org>
For information concerning essay contest contact steward@fltg.net



How Well Is Your Water?

January 29, 7:00-9:00 p.m. attend an educational program at the Freeville Fire Hall and receive a discount on water tests for bacteria and nitrates. This program will cover well maintenance, the importance of regularly sampling a drinking water well, taking a water sample and reading the test results. The program is co-sponsored by the Fall Creek Watershed Committee. It is free and open to the public. Registration required.

Bottles for taking water samples will be given out that evening. The next day, January 30, the filled bottles will be collected in Freeville for processing at a certified lab. The test results will be mailed approximately 2 weeks later. All participants receive a 15% discount on testing for bacteria and nitrates. Thanks to special funding, Tompkins County wells will receive a 75% discount. To register or for more details contact Sharon Anderson, steward@fltg.net or 607-532-4104.

Lake Levels Raise and Fall with Reason

By Joe Castelli, member of the Finger Lakes Ecology Association

At the northern end of Cayuga Lake is a dam used to regulate the lake level by discharging water into the Seneca River. Operated by the Thruway Authority's Canal Corporation, the dam works well in maintaining seasonal water levels during normal weather conditions. During the average year those levels vary by 4.4' from spring's high to winter's low following long established regulation charts. The stability of the ecosystem and infrastructure that has developed along the lakeshore offers testimony to the consistency of those water levels.

On occasion, however, the lake floods. Sometimes in the spring, if the ground is still frozen, or water saturated, a few inches of rainfall can raise the lake by several feet. Coupled with a swollen Seneca River, which reduces the dam's ability to discharge water, there is a potential for flooding. The opposite can happen too, with dry springs and little or no winter runoff, the lake can stay too low to allow fish access into swamps and streams to spawn. Docks, boat hoists and launching ramps become unusable and low water depths hinder boating. Both of these conditions seldom occur and then only as the result of extremes in weather.

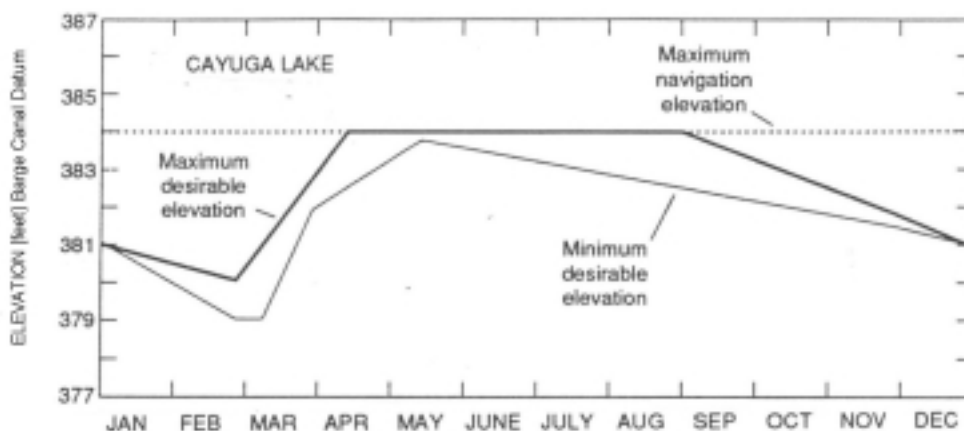
When we do find ourselves with too much or too little water there are always proponents of

Even during periods of relatively stable water levels there are proposals to change Cayuga Lake water levels in order to reduce the incidence of flooding on the Seneca River.

changing the water level management. Even during periods of relatively stable water levels there are proposals to change Cayuga Lake water levels in order to reduce the incidence of flooding on the Seneca River. By lowering the winter water levels of Cayuga Lake by an additional foot there would be a reduction in the frequency of the nuisance type lawn and dock flooding on the Seneca River. Unfortunately at this lower winter level history shows that there will not always be adequate water inflow to fill Cayuga Lake

to the desired spring and summer levels.

The current regulating chart works well and should be preserved. When the system fails it is the result of some extreme in weather. Our worst flood was the result of a hurricane, another the result of a major late March snowstorm. Long-range policy should not be based on unusual occurrences such as these, but by the results of decades of input. 🐦



Water levels in Cayuga Lake are raised and lowered seasonally to protect recreational uses, increase storage capacity, and minimize the potential of flooding. At the close of the navigation season in the fall, water levels are drawn down to provide storage for spring snowmelt and runoff. Water levels are at their annual minimum in the winter and are allowed to rise slowly in the spring in anticipation of summer recreation and navigational needs. Summer water levels are a balance between the competing needs in the system with water supply and navigation given highest priority.

Editors: An automated information line that gives the lake level can be reached at 315-438-2499. Additional information on managing lake levels can be found in the Network publication "Issues in the Cayuga Lake Watershed" and in the USGS publication "Managing the Water Resources of the Oswego River Basin in Central New York." Network members can contact the office to receive free copies of either. Available to others for the cost of postage.

Follow-Up on Gas Drilling

By Barney Unsworth, Director, Cayuga Lake Watershed Committee

NetworkNews readers will recall that our Fall issue carried an article that discussed the prospects for natural gas drilling in the Finger Lakes National Forest. James White, a Network member and retired Cornell professor, considered the Draft Environmental Impact Statement which had been filed for the project, and obviously was not persuaded by the alleged economic benefits which would result from the new wells. "When all of the above economic costs and benefits are factored in, it is quite likely that this proposal would be a money loser for the governments concerned, not a money maker", in Jim's words..." Congressional representatives should introduce legislation that will permanently eliminate as a use, leasing and drilling for gas either under or in the Finger Lakes National Forest."

The New York legislators in Washington seem to be attempting to do just that. First, Senators Clinton and Schumer introduced a bill that would ban gas drilling in the FLNF. This was attached as a rider to the Senate Energy and Water bill, and passed. But the legislation applies to 2002 only and the push



for a permanent ban on drilling has foundered in the House. Then the latest move in the negotiations there has been the introduction of a bill to ban – permanently – oil and gas drilling in the FLNF, sponsored by Republican James Walsh of Syracuse and Democrat Maurice Hinchey of Saugerties.

Finally, in late December, Paul Brewster, the Supervisor of the Green Mountain and Finger Lakes National Forest, announced a "No Action" decision. So there won't

be any gas drilling, for now. The Forest Service statement makes particular mention of the many hours spent in reviewing all the public comments received on the question. So apparently they were an important factor in the decision. We would speculate also that the rumblings from our federal legislators – Hinchey, Walsh, Schumer and Clinton – had an impact as well. 🐦

Reflections On 2001

By Sharon Anderson, Watershed Steward

February marks my one-year anniversary as Watershed Steward. It's been an exciting and dynamic year as I worked with the various committees of the Network and the organizations with whom we collaborate. While all our accomplishments are too numerous to mention, here are a few to remind you of the amazing work you support through your membership and volunteer involvement.

In March, concerned citizens were updated on the area's largest landfill

during our forum on Seneca Meadows. The Outreach Committee did a terrific job at bringing together diverse experts so that the attendees got a well-rounded understanding of the complex issues.

Last spring our sister organization, the Cayuga Lake Watershed Intermunicipal Organization (IO), drafted the Cayuga Lake Restoration and Protection Plan. Working with the IO's Education Committee, the Network hosted 3 public meetings to garner

public input on the Plan. Together we also produced and distributed an informational newsletter for the IO that highlighted the needs for and the benefits of the Restoration and Protection Plan. The Network remains an active partner with the IO as we move into implementing the Plan.

As the weather warmed, the Network's oversight of the Fall Creek Cleanup, run in partnership with Trout Unlimited and the Fall Creek Watershed Committee, netted 3000

Agricultural Economics in the Watershed

Excerpted from the Network publication "Issues in the Cayuga Lake Watershed"

Farms provide a "free good" to rural residents, and the tourism industry by maintaining open space and views. Agriculture products provide direct support to local economies. Within the watershed, dairy and animal products are the largest components of the farm economy. The largest dairy farms are concentrated in Cayuga County. As measured in sales, field crop production is concentrated in Cayuga and Seneca counties; fruit and berry production is concentrated in Seneca and Schuyler counties and vegetable production is mostly in Cayuga County. From the 1997 Agriculture Census, total product sales by county ranged from \$115.4 million in Cayuga to \$14 million in Schuyler. Cortland, Seneca and Tompkins were in the mid-range.

In Tompkins, Schuyler and Cortland counties more than half of the farms produce less than \$25,000 in sales annually. Many of these farms sell products for sale at roadside stands, u-pick operations and at the Ithaca Farmers' Market. Some of these operations are experimenting with organic farming to raise pesticide free products. Others are small nursery operations which may use larger amounts of pesticides and nutrients to enhance

appearance.

The agricultural economy has changed dramatically. Many farms are now highly mechanized and managed as small corporations. Large dairy farms are highly mechanized. Cows are milked three times a day and may never leave the barn in contrast to the free range pasture operations of smaller farms. These large dairy operations may have significant waste disposal problems. Fields growing crops can only absorb so much manure spreading, before upsetting the soil nutrient balance and increasing the amounts of phosphorus and nitrogen that can contaminate the ground and surface waters. Without adequate land base to spread manure, these farms will need to find alternatives such as composting and vermiculture to process their wastes. Aquatic vegetation is usually limited by available phosphorus. Should extra phosphorus reach surface waters, it stimulates algae blooms and rapid growth of rooted aquatic plants. Excess nitrates can leach into ground water and infiltrate to wells to cause health problems for infants. The health and environmental risk has caused the U. S. Environmental Protection Agency (EPA) to regulate large animal operations under a

program called CAFO (Concentrated Agricultural Feeding Operations).

Farmers have used large amounts of fertilizer and organic pesticides to enhance production and control impacts from insects. Typically, corn fields and vineyards have received the heaviest application of pesticides.

There are two programs designed to reduce the impacts of excess fertilizer and pesticide use. Many farms are now adopting conservation tillage and integrated crop management programs. The purpose of these programs is to reduce the need for fertilizer and also the amount of surface erosion and run off. Integrated pest management also uses a combination of management techniques to reduce the amount of pesticide use. These programs aim to not only reduce impacts to the watershed, but they may also save farmers money.

Agriculture is a major economic and land management partner in the watershed. While the number of farmers is small relative to the population, farmers' support for conservation measures will be major contributions to management and stewardship in the watershed. 🐦

pounds of trash thanks to the hard work of 70 volunteers.

Educational programs were given to school and college students plus we assisted with a teachers training organized by Board member Linda Tompkins. Still more youth were reached through activities for Earth Day and Water Week.

Through 2 drinking water education programs homeowners learned how to protect their private wells and as a bonus received a significant

discount on testing their drinking water for bacteria and nitrate contamination. Join us when the last of this workshop series will be offered (see "How Well Is Your Water").

Local funding sources have given us a vote of confidence through their generous contributions, which funded both specific projects and our general operation. We are grateful for contributions from Great Lakes Aquatic Habitat Network and Fund, Goulds Pumps, Evans Chemetics, the Intermu-

nicipal Organization, Tompkins County Foundation, Lowe's Home Improvement Warehouse, NYS Department of Environmental Conservation, the Fall Creek Watershed Committee, Cornell University, TC Department of Health, and Delavan Foundation.

2002 promises to be more exciting as we continue to grow. See "Members Make It Possible" to discover ways you can get more involved. 🐦

Members Make It Possible

By Sharon Anderson, Watershed Steward

Looking for a way to try out some new skills to build your resume? Want to meet new people? Need to feel you are doing things that make a difference? Any of these and many more are reasons that our members volunteer. We tailor the volunteer experience and commitment to your needs. Here are some ideas to get you started thinking about the perfect role for you!

✦ Serve on a committee. Committees include Public Relations (these folks oversee the newsletter and Web site), Membership (keeps our base of support strong and growing), Community Outreach (they put on educational and fun programs like the Essay Contest, Lakefest and programs on current issues), Finance and Development (explores grant possibilities and oversees our spending), Nominating (makes sure we have a dynamic Board of Directors) and Issues (keep us focused on what's most important).



Jose Lozano and Barney Unsworth prepare Issue in the Cayuga Lake Watershed for mailing.

- ✦ Distribute newsletters to public places in your area.
- ✦ Be on call to help with large mailings or other office work.
- ✦ Work on special projects such as taking photos for a slide show or upgrading our display.
- ✦ Become trained to teach hands-on lessons to school youth.
- ✦ Staff a display booth for the Network at public events in your area.
- ✦ Serve as a volunteer coordinator to help build and support our great pool of volunteers.
- ✦ A Cayuga County member is being sought for a seat on the Cayuga County Water Quality Management Agency that meets monthly.

Plus, let me hear your ideas of how you would like to get more involved! Contact me at 607-532-4104 or steward@fltg.net.



P.O. Box 303
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