Improving Your Gateways To Nature

Access and Trail Upgrades Made to Many CWC Preserves

Cummins’ Jamestown Engine Plant is heavily involved in the community, providing funding and volunteers to a wide variety of local organizations. In early 2017, CWC was approached by Cummins regarding these opportunities, and the “Gateways to Nature” program was developed. The GTN program has three key components. One is providing monies for the purchase and installation of main preserve signs. The next component deals with obtaining tools and other materials necessary for proper trail maintenance and preserve stewardship. The third and final component involves developing a novel educational initiative that would involve local school districts.

The money provided by Cummins has assisted CWC in commissioning more than a dozen main preserve signs, which will be installed this fall. It also provided funding for power trimmers and other tools needed to efficiently maintain hiking trails found at some of our properties, as well as funding to build kiosks and bridges and make other preserve improvement projects that are typically difficult for smaller non-profits to fund. This enhanced ability to fund work that helps make for a more pleasing hiking experience is very exciting, and over the past two seasons, we have accomplished quite a bit! Thanks to the generosity of Cummins, we have plenty of financial ability to do even more in the coming months and have several small and large projects planned.

For a list of our GTN program accomplishments to date, turn to page 4.

CWC Supports Request For A More Thorough Herbicide Impact Study

In mid-August, CWC issued a statement of support for the petition filed by Chautauqua Institution demanding a more thorough impact study on the application of herbicides in Chautauqua Lake before more herbicides are applied to the lake in the future. As we stated during the herbicide permitting process, the CWC believes that the Supplemental Environmental Impact Statement submitted by the Town of Ellery in support of an herbicide application is flawed and that the application of herbicide without further study could harm the ecology of the lake. This season’s herbicide application conflicts with the Chautauqua Lake Macrophyte (rooted aquatic plant) Management Plan, which has been endorsed by the CWC and others. The CWC’s full statement can be read on the CWC website.

CWC believes that herbicides are an appropriate tool for the control of invasive, non-native terrestrial and aquatic plants under certain circumstances. CWC supports the aquatic plant management approach contained in the Chautauqua Lake Macrophyte Management Strategy which determines the circumstances for which herbicides are appropriate.
As I write this, we are enjoying beautiful, sunny weather and un-seasonably warm temperatures as the days start to grow shorter. I walked out onto our community dock this morning and was delighted to see to the bottom of the lake where the weed beds parted way. We are fortunate to live in an area blessed with an abundance of water and a green landscape dotted with the colors of flowers.

CWC’s new preserve guide map arrived in my mailbox today, and I was pleased to see how easy we are making it for all to enjoy the 1,000+ acres of preserves across Chautauqua County that our members enabled us to conserve. These properties and those of residents who have adopted our buffer plantings and rain gardens assist in arresting further flows of sediments into Chautauqua Lake that would foster the growth of more plants and algae.

Readers of our local Post Journal newspaper know that controversy and finger-pointing continue as a result of the application of herbicides to portions of Chautauqua Lake this past June and last year. CWC supports science-based approaches to plant management and community efforts to work with others to protect our natural resources. CWC was instrumental in the creation of the Chautauqua Lake Watershed Management Plan and the Macrophyte Management Strategy. We are proud to be a member of the Chautauqua Lake and Watershed Management Alliance, New York State Federation of Lake Associations, North American Lake Management Society, Land Trust Alliance and Chautauqua County Chamber of Commerce. We believe that continuing education and an open dialogue with all community members will foster a better understanding of the challenges we face in ensuring Chautauqua Lake can meet the needs of all residents and visitors. We continue to meet with all of the lake organizations to foster a better understanding of how we can work together. We support the centralization of all data derived from the lake and transparent sharing of results from lake efforts. The good news is that a lot of people – local residents and visitors – are interested in a healthy future for Chautauqua Lake. We look forward to continuing our work together and doing our part to support the health of our lakes and watershed!
Meet Our Conservation Committee!

Nonprofit organizations don’t make decisions in a vacuum, and CWC is no exception. In addition to a board of directors that oversees operations, we have several committees that focus on a particular area or issue of the agency, such as finances or board development. Because our agency focuses on land conservation, we have a conservation committee to help guide our conservation work at all levels. This committee is comprised of a number of passionate, talented and respected biologists, naturalists and conservation enthusiasts, all of whom are volunteers.

The committee is tasked with:

- recommending land conservation strategies to the board
- managing CWC conservation lands
- developing and implementing management plans (including conducting biological inventories on all properties, managing or eradicating invasive species and guiding preserve improvement projects to balance public access with ecological protections)
- marking properties and monitoring lands
- seeking partner organizations to undertake/share in stewardship
- identifying, training and assisting volunteer preserve stewards for each property
- reviewing all land conservation proposals
- evaluating, prioritizing and recommending properties to be conserved
- conducting landowner outreach
- coordinating tours of preserves and potential conservation sites
- developing and implementing pollution and erosion prevention priorities, programs and actions

As you can see, this is an enormous amount of work! Because we ask so much, and are given so much more, CWC would like to recognize and applaud our special conservation committee. While our other committees are critically important to the successful operation of our organization, we wouldn’t be doing such excellent conservation work without the professionals and enthusiasts that make up this committee. Below is our current conservation committee roster. A special, heartfelt thank you goes out to each of these dedicated individuals, as well as those who have served on the committee in the past. We are proud to say that we have some of the best talent and intellect around helping to ensure that we are on track with our conservation efforts!

Dave Anderson – retired teacher, former CWC conservationist
John Antonevich – retired physicist, former CWC treasurer and board director, current CWC preserve steward
Jan Bowman – Professor of Biology at SUNY-JCC, member of the Chautauqua County Water Quality Task Force, former CWC board director
Jane Conroe – retired teacher, member of the Chautauqua Lake & Watershed Management Alliance’s Scientific Review and Advisory Committee, longtime Citizen Statewide Lake Assessment Program volunteer, former CWC vice president and board director, former CWC conservationist
Bob Lannon – retired manager of plant engineering, former CWC treasurer and board director, current CWC preserve steward
Mary Laumer – retired professional environmental consultant, former CWC vice president, current CWC board director
Dr. Twan Leenders – President of the Roger Tory Peterson Institute, conservation biologist, member of the Chautauqua Lake & Watershed Management Alliance’s Scientific Review and Advisory Committee
Dr. Terry Mosher – retired SUNY-Fredonia professor, avian expert
Becky Nystrom – Professor of Biology at SUNY-JCC, CWC co-founder, former CWC president and board director, member of the Chautauqua Lake & Watershed Management Alliance’s Scientific Review and Advisory Committee
Jennifer Russo – Adjunct Professor of Biology at SUNY-Fredonia, research technician at Cornell Lake Erie Research and Extension Laboratory, research and development engineer at TimberFish Technologies
Craig Seger – retired teacher, current CWC board director and preserve foreman
Dr. Jonathan Titus – Associate Professor of Biology at SUNY-Fredonia, native and non-native plant field ecologist
THANK YOU TO OUR  
2017-2018 BUSINESS MEMBERS!  
Please support the businesses that support the CWC!

| Andriaccio's Family Restaurant | Heath's Inn of Chautauqua | Pine Hill Cottages & Motel |
| Linda Barber, Arbitrations &  | Hope's Windows            | Quality Mechanical       |
| Business Consulting            | Hotel Lenhart             | Quick Solutions          |
| Barkstrom Accupuncture        | Indulge Salon Spa         | R&R Landscaping/Property Services |
| Belap Management LTD Co.      | James Lakefront Camping   | Real Estate Advantage    |
| The Cambridge                 | Jamestown Macadam         | Rhoe B. Henderson Insurance Agency |
| Calamunci Management LLC      | Keystone Electric Inspectors | Rodgers Land Surveying |
| Camp Chautauqua               | Klinginsmith Plumbing & Heating | Rushhill Vineyards & Nursery |
| Catapult Fundraising Inc.     | Kurtis Woodland Services  | Saxton, Kocur & Associates |
| Chautauqua Belle              | Labella Associates        | Schutts Saw & Mowers Service |
| Chautauqua Institution        | Lake Erie College of Osteopathic Medicine | Seibt Custom Photo Props |
| Chautauqua Reel Outdoor Guide & Tackle | Lake Shore Development Co. | Shults Auto Group |
| Clint Williams Rental         | Lakewood Apothecary       | Snug Harbor Marina       |
| Colwell Company               | & Natural Health Center   | Southern Tier Brewing Company |
| Cummins Engine                | Lakewood-Busti Storage    | Sparks Street Partners   |
| EcoStrategies Civil Engineering | Larson Orthodontics     | Steel-Art Incorporated   |
| Erickson, Webb, Scolton & Hajdu | Lenhart Enterprises     | Synergetics              |
| Evans Discount Wines & Liquors | Lind Funeral Home        | David Todd, DMD, MD      |
| Everydays True Value          | Marantha House            | Tri-James Sevices        |
| Fessenden, Laumer & DeAngelo | Matric                   | Truck-Lite Co.           |
| Emily S. Gausman, DMD         | Mayshark Builders         | United Refining Company  |
| G. L. Olson, Inc.             | MB Engdahl & Co.          | Webb’s Captain’s Table Restaurant |
| Glatz Agency                  | MW Graphics Printing      | Weber Bay Properties     |
| Great Lakes Tree Service      | Native Roots              | Wegmans                  |
| Guppy's Tavern                | Pepsi-Cola Bottling Group | WGE Group                |
|                             |                         | WNY Urology Associates   |

Gateways To Nature Program Accomplishments To Date (continued from front page)

- Constructed a 12ft x 12ft nature immersion/viewing platform with two benches, replaced parking barriers and demolished a bridge at the Goose Creek Valley Greenway Preserve
- At the Browns Creek Tributary Forest Preserve, constructed a 26ft bridge over Browns Creek and constructed 32 feet of bog bridge to span wet areas, reducing erosion and helping to keep visitor’s feet dry
- Installed hundreds of feet (more than 500!) of bog bridge at the Bentley Nature Preserve and Dobbins Woods Preserve
- Laid out three truckloads of wood chips on the trails at the Bentley Nature Preserve to enhance the walking experience there, reduce safety issues and control erosion/damage to tree roots
- In coordination with Eagle Scout projects, constructed 2 picnic tables and 8 benches and installed 2 bat houses capable of housing 250 bats each
- Purchased 14 main preserve signs and several smaller informational/interpretive signs for installation, with 3 main preserve signs installed to date
- Began boundary postings at the Salomon Family Nature Preserve, Fletcher Family Preserve, Bentley Nature Preserve and Galucki Wetlands Preserve at Chautauqua Lake’s Big Inlet
- Broadcast 50+ pounds of native wildflower/grass seed at the David and Margaret Naetzker Preserve as part of an ongoing ecological restoration project there
- Held meetings with representatives of 2 school districts as well as a SUNY-Fredonia curriculum and development expert to begin developing educational programming
With Our Appreciation For Gifts In Memory Of . . .

Robert G. Allison
Robert Van Every & Judith Claire

Thomas H. Cable
Thomas G. Cable

Sherwood Cadwell
10 O’Clock Coffee Club
Susan Abdella
David & Marie Anderson
Martha Anderson & Family
Children of R. Quintus Anderson
John Bauer
Sally Black
Mary Blair
Bruce Boehm & Nancy Luberoff
Thomas & Sandra Calalesina
Craig & Rebecca Colburn
Peter Dawson
Russell & June Diethrick
James & Mary Dobek
Dennis & Jane Eshbaugh
William Evans
Karen & Mark Falahhee
The Gaden Family
William Johnston
Elizabeth & Adam Lasser
John Lawrence & Jeanine Delay
Greg Osman
Reynolds & Patricia Perlee
Phillips Lytle LLP
Jack & Lynne Reading
Charles & Carol Robbins
Craig & Mary Seger
John & Carole Sellstrom
David & Elizabeth Shepherd
Allen & Elaine Short
Frank Stefanelli
Lois Strickler
Peter & Holly Sullivan
Jack & Priscilla Wall
Barclay & Diane Wellman

Jim Dorr
Elaine Morris

William Price Churchill
Hans & Kari Auer
William Bargar
James & Betty Berdine
Chase & Megan Churchill
Matthew & Katie Churchill
Stephen Dana
John & Linda Galati
Mark & Josephine Graves
Daniel & Carolyn Haglund
Hope’s Windows
Jamestown Garden Club
Allan Johnson
Eugene & Linda Johnson
Elizabeth Kidder & James Sherry
Roland & Jane Kidder
Keith & Patricia Kulju
John & Rhonda Lamancuso
Doug & Andrea Larson
Michael & Barbara Lyons
Randy & Susan Manitta
MBA Roundtable
Rudolph & Diane Mueller
The Peppy Dental Team
Mr. & Mrs. Max Pickard
Craig & Mary Seger
Edmond & Susan Shultz
Tim & Betsy Shultz
Eric & Sandra Snabl
Vicary Insurance Agency
David & Carolyn Wesp

Edward “Red” Garfield
Larry & Betty Roush

Charles Gibson
Walter & Daniel Barker
Brenda Caruso
Leslie Hallock
Betsy Homan
Sandi Olson
Marlene Piazzi
Joselle Syracuse
Patty Volpe

Robert Karbacka
Suzanne Abbey
Mary Ann Bollman
Loretta Bush
Chaut. Regional Youth Symphony
Rick Davis
Lynda J. Harris & John Antonevich
Martin & Patty Idzik
John & Carol Jablonski
Martha Jordan
Skip & Louanne Lind
Mark & Barbara Mincarelli
John & Kathryn O’Hagan
Louise Pillitteri
Lori Price
Michael & Karen Roberts
Lisa Russo
Larry & Missy Russo
Gayle Schulte
Jack & Roberta Thompson
David & Juanita Walter
Lynn Warner

Tilda Klaus
Elaine Morris

Susan Maloney
Ronald Kelly

Robert Perletz
Marvin & Zelda Feldman

Ned Steckel
Brian & Alicia Berg

Amy Weaver
Patricia King

Pam Westrom
Lois Strickler

With Our Appreciation For Gifts In Honor Of . . .

Cynthia Bracken’s Birthday
& Mother’s Day
Ben & Sarah Bracken

Donna Charest’s Birthday
Dorothy Conroe

John Jablonski III
Peter D. Weaver

Jay Kuntz
Jessica Kuntz

Stephen & Patricia Telkings
Peter & Susan Weaver
William & Janet Weaver

Jonathan Townsend
Mary Anne Harp

John & Yvonne McCredie


The ‘Shed Sheet - Page 5 - Fall 2018

[Signature]
[Thank you]
Be A Watershed Steward In Your Yard This Fall

The beautiful and vivid colors of autumn’s leaves can be spectacular and awe-inspiring! However, once they fall onto our properties, they can also be a nuisance. But before you grab that rake and start piling up the leaves on the curb, remember that fall is a great time for you to practice watershed friendly yard care. After all, the choices you make on your property can directly impact the health of nearby lakes and streams, whether or not you live near one.

Leaves are a valuable resource!

- Pulverize your leaves with a mulching lawnmower and leave them on the lawn. This will provide nutrients to feed your lawn and reduce the need for fertilizer. It will also reduce the fossil fuels used by your city, town or village to pick up leaves, saving energy and tax dollars!
- Rake your leaves into a pile and use your lawn mower to shred/pulverize them – then just let the pile sit until spring. This pile will become high-quality compost without any additional effort! Mo muss – no fuss! Use the rich, black compost from the bottom of the pile for gardening in the spring.

Don’t waste the leaves by disposing of them into storm drains, ditches, streets, stream banks or waterways. If you do, the leaves will eventually end up in our streams and lakes. This will result in a build-up of organic matter, which will then feed lake plants and algae and interfere with boating, fishing and swimming fun next summer.

Fall is also great time for planting!

Autumn is an ideal time to seed your lawn because temperatures are mild, moisture is adequate and weeds are less competitive than in spring and summer. Seeding exposed soil is a good way to reduce rainwater runoff and erosion from your yard. Planting trees and shrubs is also better in the fall than spring. In the fall, there is more moisture in the soil, and the ground retains warmth from the past summer season. These conditions are very favorable for planting trees such as maple, elm, sycamore and pine as well as planting deciduous shrubs.

Trees and shrubs provide many benefits to the watershed, including:
- Absorbing runoff and locking in pollutants,
- Stabilizing stream banks and lakeshores, which helps prevent erosion, and
- Providing shade to keep the water cool.

In short, plan to mulch and compost your leaves and plant native trees and shrubs this fall! Not sure which species are native to our area? You can find several lists of native trees, shrubs and plants on our website at chautauquawatershed.org!

Have a lasting impact on protecting land and water resources in the Chautauqua region watershed by naming the Chautauqua Watershed Conservancy as a beneficiary in your will, living trust, bank account, 401(k) or life insurance policy.

Consult your financial advisor or the CWC for more information. What will your legacy be?

Leave A Legacy

The ‘Shed Sheet - Page 6 - Fall 2018
Starve The Algae: Reduce Phosphorus From Septic Systems!

Discharges from septic systems (also called “onsite wastewater treatment systems”) contribute nutrients, including phosphorus, to Chautauqua Lake. A Total Maximum Daily Load report for Chautauqua Lake estimates that septic system discharges account for about 1,700 pounds of phosphorus entering the lake every year, or approximately 5% of the annual external phosphorus load to the lake.

Septic systems “short-circuit” when there is not enough distance between the system and the groundwater table, and septic systems within 250 feet of a lakeshore are at a high risk for short-circuiting. One way to reduce phosphorus discharges from septic systems is to eliminate the system by connecting with a municipal sewer system (if available). Once completed, the current expansion of sewer service around Chautauqua Lake will help with this reduction. However, not all properties will have municipal sewer available, so in order to reduce phosphorus discharges from septic systems, as well as to protect public health and drinking water supplies, the Chautauqua County Department of Health and Human Services (CCDHHS) has instituted a Mandatory Inspection Program (MIP) to identify failing and inadequate systems. Through this program, the CCDHHS is required to inspect private septic systems within 250 feet of Chautauqua Lake (as well as Bear, Cassadaga, Erie and Findley Lakes) that meet one of the following criteria: 1) there is no record of a Chautauqua County permitted system at the property, or 2) the septic system was permitted and installed more than 30 years ago.

CCDHHS began contacting property owners to initiate this program in 2016. In the Chautauqua Lake watershed, CCDHHS has focused on areas in the Towns of Ellery and Chautauqua in which sewer expansion is not planned at this time. According to information provided by CCDHHS Public Health Sanitarian Jessica Wuerstle, the CCDHHS has contacted 34 property owners as of May 2018 because their septic systems potentially meet the inspection criteria. Of these, no further inspection was required on 19 of the systems, conditions of use were imposed on 4 of the systems and corrective actions were taken on 2 of the systems. Inspections are planned or pending for the remaining properties. Going forward, additional septic system inspections will be required as systems become more than 30 years old.

In addition to the MIP statistics above, CCDHHS also inspects septic systems whenever there is a property transfer. Therefore, if a property meets the requirements for the MIP but CCDHHS has not yet notified the property owner of a required inspection, the inspection will be required if/when the property is transferred or sold. Property transfer inspections are tracked separately from the MIP statistics above. This system of septic system inspections and upgrades is important in helping to further reduce nutrient inputs to Chautauqua Lake.

YES! I want to help conserve the lakes, streams, wetlands and watersheds of the Chautauqua region!

Name/s: ___________________________________________ Phone: ___________________________

Address: _______________________________________________________________________________

Seasonal Address (if applicable): ___________________________________________ Dates: ___________________

Seasonal Phone: ___________________________ Email: ___________________________

☐ Leader $2,500+    ☐ Partner $1,000 - $2,499     ☐ Supporter $500 - $999

☐ Contributor $200 - $499     ☐ Steward $50 - $199     ☐ Other $______

☐ My check is enclosed (made out to CWC)  ☐ Please charge $__________ to my Visa/MC/American Express/Discover:

___________________________________ / _____________________________________________

Credit Card Number          Expiration       Sec. Code                 Signature

Please remit with your contribution to the Chautauqua Watershed Conservancy, 413 North Main Street, Jamestown, NY, 14701 or donate online via PayPal at www.chautauquawatershed.org.

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SAVE RESOURCES!
Get The ‘Shed Sheet electronically - email us at info@chautauquawatershed.org.

JOIN US!
Wednesday, November 7th - 6:30 to 8:00 PM
James Prendergast Library, Murray L. Bob Lecture:
Harmful Algae Blooms In Lakes - What Are The Causes?
Featuring Dr. Gregory L. Boyer, Faculty of Chemistry, SUNY-Environmental Science and Forestry, Great Lakes Research Consortium Director

Stay Connected!
Follow us on Facebook, Twitter, YouTube, Pinterest, and Instagram, and sign up to receive our e-news at www.chautauquawatershed.org!
Chautauqua Stream Restoration Projects Near Completion

Seven sites on five creeks in the Chautauqua Lake watershed have been restored and/or stabilized to reduce erosion, stemming the flow of the sediment and nutrients to Chautauqua Lake that fuel plant growth and toxic algae blooms.

A total of $1.4 million has been invested in this group of Water Quality Improvement Projects (WQIPs). These projects were a joint venture among the County of Chautauqua, the Chautauqua Lake and Watershed Management Alliance, the Chautauqua Watershed Conservancy and the Chautauqua County Soil and Water Conservation District. They were funded by grants from the NYS Department of Environmental Conservation, utilizing state Environmental Protection Funds. The grants were made possible with a local match from the County of Chautauqua.

Banks along Ball, Bemus, Goose, Prendergast and Dutch Hollow Creeks were rehabilitated as part of these projects, which began in 2016.

WQIP’s Impact on Chautauqua’s Waterways

The seven improvement projects focused on stream banks within the Chautauqua Lake watershed that showed significant erosion.

In addition to degrading the health of the creek itself, eroding and failing streambanks carry sediment, and the nutrients it holds, downstream into Chautauqua Lake. The sediment itself fills in the lake, reducing its depth over time. The nutrients carried by the sediment deposited into the lake feed the invasive plants and algae blooms that have a negative impact on the health of the lake and that reduce enjoyment of the lake. In addition to the negative immediate impact of erosion and sedimentation on the lake, the nutrient-enriched sediment deposited into the lake continues to leach the nutrients that feed algae, increasing the lake’s overall internal nutrient load.

While erosion is a natural process that occurs on all streambanks when the force of the water exceeds the strength of the banks, manmade conditions along waterways may accelerate the erosion process. When erosion is severe enough, it can have a negative impact on the waterway and the overall watershed. The seven sections of streambanks targeted through these projects were identified as having a concerning level of erosion through the 2010 Chautauqua Lake Watershed Management Plan.

This aerial view of Chautauqua Lake near the mouth of Goose Creek shows severe sediment loading to the lake. WQIPs will decrease sedimentation to the lake.
The Scope of the WQIP
Improving our Streams

Through this round of stream improvements, there are three primary methods of restoring and stabilizing streambanks to reduce erosion. Those methods include:

- **Regrading streambanks and building rock toe and bank protection.** Along the project corridors, where streambanks were badly eroded, the banks were regraded and bioengineered to improve their stability. To protect the banks from the force of the water in the future, large limestone blocks were stacked into rock walls to armor the banks.

- **Constructing limestone riffles and grade control.** Across the streams, grade control structures, including engineered limestone riffles and ramps, were installed to reinforce the strength of the stream channels and to slow the flow of water. Riffles also aerate the water as it flows over the rocks, which improves the health of the stream and the habitat for aquatic species.

- **Planting natural streambank protection.** Along the sides of the banks, willows and dogwoods were planted. As these plants grow, their root systems reinforce the strength of the banks, and they help to shade and cool the water.

WQIP Sites

**Prendergast Creek**
Town of Chautauqua

Prendergast Creek was the first project to break ground, and improvements were completed in the fall 2016. Several of the stream’s seriously degraded banks were addressed. Failing banks were regraded, and 790 tons of limestone were installed as riffles, rip-rap walls and a downstream ramp. Grade control structures were installed to hold sediment structure downstream, and 1,910 tree stakes were planted. In all, the Prendergast Creek improvements protected 650 feet of streambank.

**Ball Creek**
Town of North Harmony

On Ball Creek, 250 feet of streambank was protected in the Town of North Harmony on CWC’s Ball Creek Preserve at the intersection of Interstate 86 and State Route 394. The project used 760 tons of stone to create rip-rap toe protection and create an engineered riffle. 500 stakes of willow and dogwood were planted along the streambank.

The Ball Creek project was completed in the fall of 2017. In conjunction with these improvements, CWC is addressing invasive plant species that had overrun the preserve. Invasive plants were removed, and native species will be planted next year as a buffer to filter and slow surface and near-surface runoff to the creek.
as it passes. The plants’ roots also filter pollutants from surface and near-surface runoff as it passes through the soil and root system before entering the waterway.

At all of the sites, natural debris was removed from the streams, as needed, and any disruption caused by the construction was restored.

**Bemus Creek**
*Town of Ellery*

Two sites on Bemus Creek were addressed through WQIPs. On the upstream site on Bemus Creek, the failing bank was sloped, and bioengineering was used to stabilize the site. A large limestone wall was built to protect the toe of the bank, and grade control was put into place to slow sedimentation. Limestone riffles and a downstream rock ramp were constructed. In all, 1,113 tons of stone were placed, and 1,100 tree stakes were planted to protect 500 feet of the streambank.

On the downstream site of Bemus Creek, in the Village of Bemus Point, the streambank was graded and bioengineered for stability, and 1,293 tons of limestone were used to create rip-rap toe and bank protection, a large engineered riffle and a downstream rock ramp. Grade control structures were installed to control sedimentation downstream.

An upstream portion of this site was regraded and planted with willows, without the use of additional rock structures. The entire project included the planting of 1,500 willows. The lower Bemus Creek project protected 610 feet of streambank. Both Bemus Creek projects were completed in Fall 2017.
Goose Creek
Town of Busti

The Goose Creek improvement project restored 225 feet of streambank at Route 394 in Busti, just upstream from CWC’s Goose Creek Preserve. The bank was sloped and bioengineered to increase stability, and 550 tons of stones were used to create a large rip-rap wall to protect the toe of the streambank. The project, which was completed this summer, included the planting of 700 tree stakes to further stabilize and protect the bank.

Dutch Hollow Creek
Town of Ellery

Two improvement projects were completed in September on Dutch Hollow Creek, off Dutch Hollow Road in the Town of Ellery. At the upstream site, the confinement of the channel is being reduced, and the creek is being reconnected to a viable floodplain through regrading and reconstruction. Rock cross veins will be placed at critical intervals to control the grade. The work will protect a planned 850 feet of streambanks.

At the downstream site on Dutch Hollow Creek, where erosion of the streambank was a serious problem, the project included the restoration and bioengineering of the natural channel. Grade stabilization structures, riffles and bank protection were constructed using limestone. A planned 1,100 feet of streambank will be protected along the lower bank of Dutch Hollow Creek. The work on both Dutch Hollow Creek sites was completed in September 2018.

Future WQIPs

Extreme sedimentation and nutrient loading are major problems that impact the quality of Chautauqua Lake. WQIPs help address these problems by restoring the integrity of failing streambanks to reduce erosion and sediment flow.

To continue to address these serious problems, four additional projects are being undertaken to restore and stabilize failing banks on Cheney Creek (2018), tributaries to Burtis Bay (2018), Goose Creek (2019) and Dewittville Creek (2019).

Partnering Organizations