



CHAMPLAIN WATERSHED
IMPROVEMENT COALITION OF NEW YORK
CLINTON | ESSEX | FRANKLIN | WARREN | WASHINGTON | COUNTIES

2010 Annual Report



CWICNY MISSION: *To provide a coordinated effort to improve water quality and other natural resources within the New York Lake Champlain Counties through project implementation.*

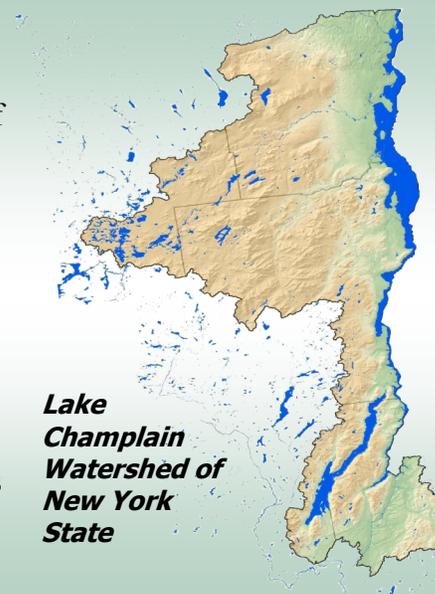
Photo: Lake Champlain, looking west over Willsboro Point, NY

Since its formation in 2001, the Champlain Watershed Improvement Coalition, Inc. has become a regional leader in developing and coordinating successful conservation projects on the New York side of the Lake Champlain Basin.

Its membership includes representatives from the region's five Soil and Water Conservation Districts, county Water Quality Committees, regional, county and local planning boards, and many other partner organizations.

By working together in a coordinated, watershed approach, CWICNY has managed to secure over \$2 million in grants in recent years. Every dollar acquired goes towards the protection of the water quality of Lake Champlain.

This Annual Report provides a brief summary of projects, programs and initiatives undertaken by CWICNY and its members throughout the watershed in 2010.



Agricultural Projects

Land - Use Comparison for NY Lake Champlain Watershed*

Land Use	Urban	Agriculture	Brush	Forest	Water	Wetland	Barren	Urban-Open
Area (Hectares)	36,643	66,236	23,647	565,725	30,194	14,049	493	11,137

**Source: LCBP Technical Report No. 54
"Updating the Lake Champlain Basin Land
Use Data to Improve Prediction of Phosphorus
Loading"*



Before

Outdated earthen waste storage area and transfer system, Washington County.



After

Newly constructed steel "Slurry" storage unit, Washington County.

Agricultural waste runoff from precipitation and snowmelt is a large contributor to non-point source phosphorus pollution in Lake Champlain and its tributaries.

However, local farmers, with the help of CWICNY, are doing their part to reduce agricultural waste runoff from their lands by incorporating waste management plans and systems into their operations.

In 2010, farms within Clinton and Washington counties utilized CWICNY's EPA Targeted Watershed grant funding to construct waste containment units and barnyard runoff management systems.

Washington County's priority implementation project was a new slurry waste storage unit in southern Lake Champlain, Mettawee River sub-watershed.

This large, round, above ground 62-foot by 68-foot unit is constructed out of prefabricated steel and replaced an earthen pit which the farm had previously constructed and utilized for many years (Before & After photos).

Cost-share funding for the project included closure (filling in) of the old earthen storage pit and the purchase and construction of the steel Slurrystore unit. Construction of an additional 80-foot by 16-foot concrete reception pit and the installation of a manure pump to transfer the waste from the reception pit to the main storage was also included.

The new waste management system will allow for safe, long term storage of manure and milk center wastewater until soil and weather conditions are suitable for field application in accordance with the farm's Comprehensive Nutrient Management Plan (CNMP).

Clinton County utilized CWICNY's Targeted Watershed funding to cost-share two barnyard projects in northern Clinton County. The barnyard projects were implemented on a dairy and beef farm which were allowing animals to congregate in open, outdoor areas for the benefit of herd health and exercise.

These areas are typically exposed to the natural elements and especially susceptible to deep muddy conditions or nutrient runoff after precipitation. With this funding, both farms have completed projects coving these areas.

The animals are now protected and barnyard runoff is eliminated throughout the year. Containing the manure will enable the farmers to collect and recycle it onto their fields for use as soil fertilization at the appropriate time.



Uncovered Barnyard

EM River Stream Simulator



Thanks to an Education and Outreach grant provided by the Lake Champlain Basin Program, CWICNY has purchased a small scale river simulation model known as the “**EM River Model.**”

The EM River Model is a visually-stimulating, hands-on tool that is used to demonstrate the natural characteristics and dynamics of stream channels and their response to human disturbance. The ‘fun-sized’ model incorporates mini culverts, stream protection, bridges, equipment, and animals to create various disturbance scenarios and simulate the natural effects that occur upstream and downstream of the disturbance.

The EM River Model can be used for audiences of all ages and educational levels. Throughout 2010, CWICNY members showcased the model at local Envirothons and the Adirondack Waterfest, as well as in several area schools. It is available to municipalities, schools and associations throughout the Champlain Watershed for public and private events and trainings at no cost.

Please contact your local Soil and Water Conservation District or CWICNY for availability and additional information about the model.



EM RIVER utilized at 2010 Adirondack Waterfest



EM River at the Warren County Envirothon

2010 Stormwater Tradeshow and Conference



The 2010 North Country Stormwater Tradeshow and Conference continued CWICNY’s tradition of providing high quality educational presentations and stormwater product displays to local professionals and municipal employees.

The one day conference was held October 14 at the Roaring Brook Resort and Ranch in Lake George. Presenters at the 2010 event included some of industries most elite and knowledgeable professionals:

- Tom Ballestero - University of New Hampshire Stormwater Center
- Don Lake - NY State’s elite Erosion and Sediment Control specialist
- Daniel Hershberg - Albany-area porous pavement design engineer.

Over 120 people attended the training, including local engineers, planning officials, code enforcement officers, and contractors. Topics covered included Cold Climate Best Management Practices and Performance, Climate Change, and Pervious Asphalt Applications. Opening remarks for the conference were provided by Bill Wellman of the Champlain Chapter of Trout Unlimited.



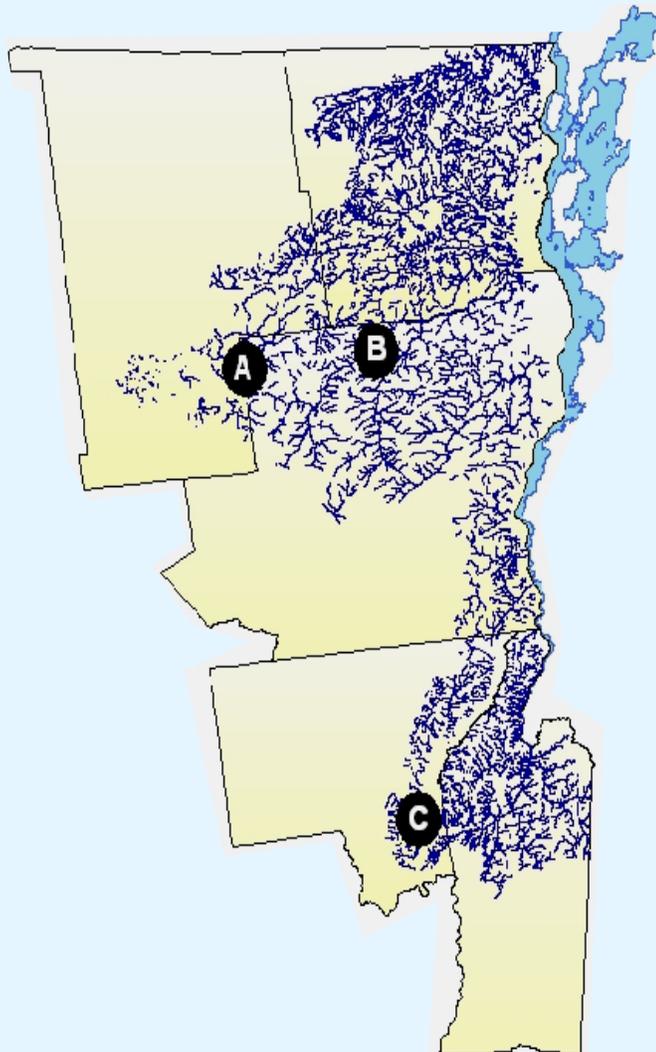
Stormwater Remediation

Stormwater runoff from both rural and urban areas is a large “puzzle piece” in the contribution of phosphorus into Lake Champlain. Luckily, public awareness on non-point source pollution is increasing.

Although state and national stormwater regulations and mandates typically do not apply to small communities and hamlets throughout the watershed, stormwater issues are not exclusive to large urbanized areas. Degradation of water quality can be perpetuated by stormwater runoff in communities of any population.

While funding and resources may be limited for stormwater remediation for communities each year, many continue to invest in stormwater management at some level to protect local water resources for future use and enjoyment.

Throughout 2010 CWICNY continued their efforts in assist communities with stormwater planning, projects, and funding and education about infrastructure improvements.



The towns of Saranac Lake, Wilmington and Lake George are a few examples of municipalities continuously working with CWICNY and the EPA's Targeted Watershed funding to address stormwater issues and phosphorus reduction in 2010.

All three watershed communities continue to plan for and implement new stormwater filtration solutions and technologies that will significantly reduce the amount of sediments, chemicals and trash entering their local waterbodies.

Map Location A: Village Saranac Lake

The Village of Saranac Lake continued planning efforts in 2010 to address stormwater runoff.

Preliminary assessments and site identification were completed with the assistance of CWICNY partners, Paul Smith's College, the Village DPW and Community Development.

Low-cost, low maintenance retrofit technologies, including the same dry well systems commonly utilized throughout Lake George, were recommended for the sites.

The dry well systems will allow for stormwater collection and infiltration from street runoff. Implementation of the new dry well systems is expected to be completed in 2011.

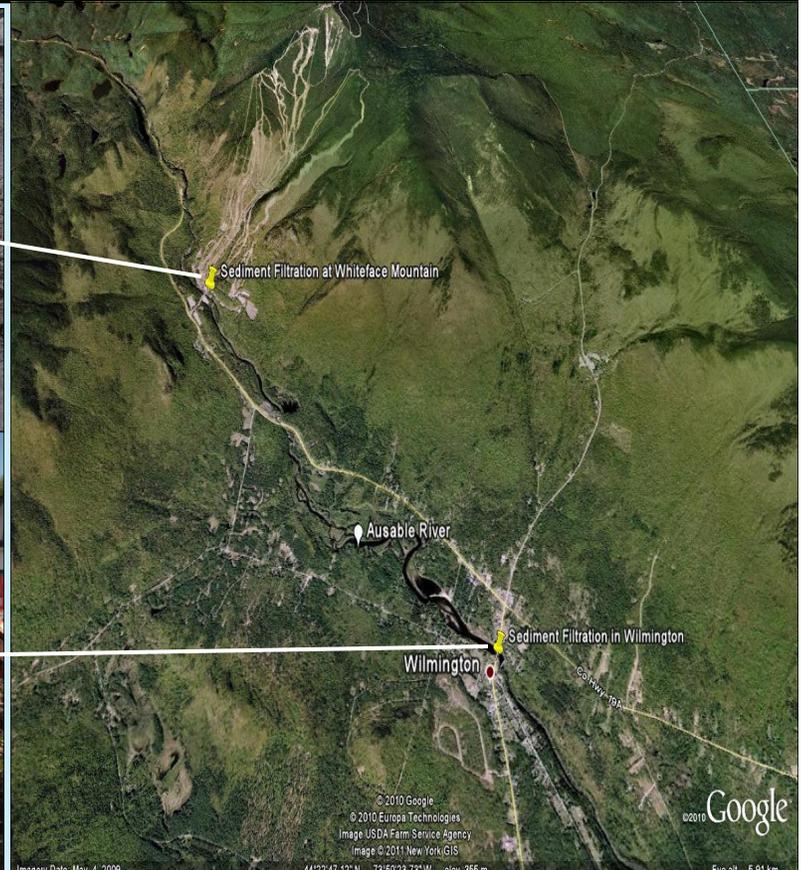
Stormwater Remediation - cont'd



Photo 1



Photo 2



Map Location B: Town of Wilmington

Utilizing CWICNY's Targeted Watershed funding, the community of Wilmington has completed the implementation of two stormwater retrofit technologies to combat sedimentation and protect its world-renown resource, the Ausable River.

Vortech filtration units (or sediment containment vessels) now pre-treat runoff from a parking lot on Whiteface Mountain (**photo 1**) as well as runoff from State Route 86 at the bridge before it reaches the Ausable River (**photo 2**).



Subsurface filtration technologies being constructed at the Lake George Municipal DPW.

Map Location C: Town of Lake George

The Town of Lake George was provided funds through CWICNY's Aid to Localities II grant for the construction of stormwater infiltration chambers at their Department of Public Works (DPW) garage.

The subsurface stormwater system will intercept maintenance yard runoff and collect it below ground, allowing for slow infiltration through the soils.

The project will significantly reduce direct over-land sediment and salt laden flows from the yard into the nearby West Brook tributary of Lake George.

CWICNY is hoping to develop a watershed-wide DPW maintenance yard assessment program, modeling the successful assessment and implementation project completed in Lake George.

Erosion and Sediment Control Program Initiation

Roadside erosion is a highly recognized source of sedimentation throughout the Lake Champlain watershed. It is created by the continuous process of disturbance and precipitation, which mobilizes soils and deposits them in nearby waterbodies. This process chokes local streams and rivers with tons of sediments and contributes to both water quality impairments and roadway deterioration.

With precipitation forecasted to increase in coming years, the importance of stabilizing the steep roadside areas and ditches is critical.

To address this issue, CWICNY applied for and received a planning grant through the American Reinvestment and Recovery Act (ARRA). The objective of this grant is to identify the roadside areas throughout the watershed experiencing chronic instability and erosion.

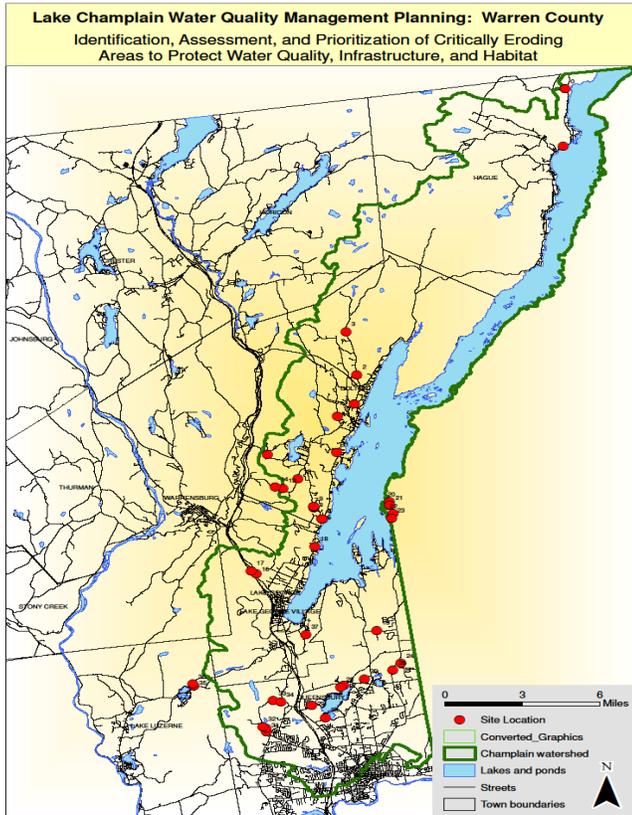
In 2010 alone, over 1,500 miles of roadways in Warren, Washington, Clinton and Essex Counties were inventoried.



Critical Area Identification and Data Collection in Essex County



Example of a gravel road ditch erosion control sock check dams implemented in Essex County



Roadside erosion site mapping around Lake George

The goals of this planning and assessment project are to prioritize areas that have experienced large amounts of erosion and determine the best management practices (BMPs) suitable to remediate each site.

These efforts are ongoing and will continue throughout 2011. Upon completion of collection and site assessments, CWICNY will actively seek project funding needed to purchase BMP's to stabilize the high priority sites.

Erosion and Sediment Control Program Initiation – Cont'd

Erosion Control Fleet - We're "Growing!"

In preparation for a watershed-wide, road-side erosion remediation program, each of the five CWICNY Soil and Water Conservation Districts are now equipped with hydroseeding equipment including a limited supply of erosion and sediment control materials.

"Seed funding" for the purchase of equipment and materials has been provided through EPA's Targeted Watershed grant and Senator Betty Little's NYS 2007-2009 Aid to Localities programs.



Road-Side Hydroseeding in Warren County



New Hydroseeder in Essex County



New Hydroseeder in Clinton County



New Truck for Hydroseeding in Franklin County

A Look Ahead...

From the City of Glens Falls to the Village of Saranac Lake to Rouses Point on Canadian border, the Lake Champlain Watershed Coalition of NY and its partner organizations continue to work tirelessly towards improving water quality and protecting the natural resources of the region.

Planning, Implementation and Education are key ingredients in achieving water quality improvement results and moving forward with projects and programs from north to south. These terms are commonly used with CWICNY as they relate to our 'on the ground' efforts throughout the watershed each year.

The constant, cumulative, evolving threats of climate change, invasive insects and plants, and individual actions continue to challenge our creativity and our progression towards the protection of Lake Champlain.

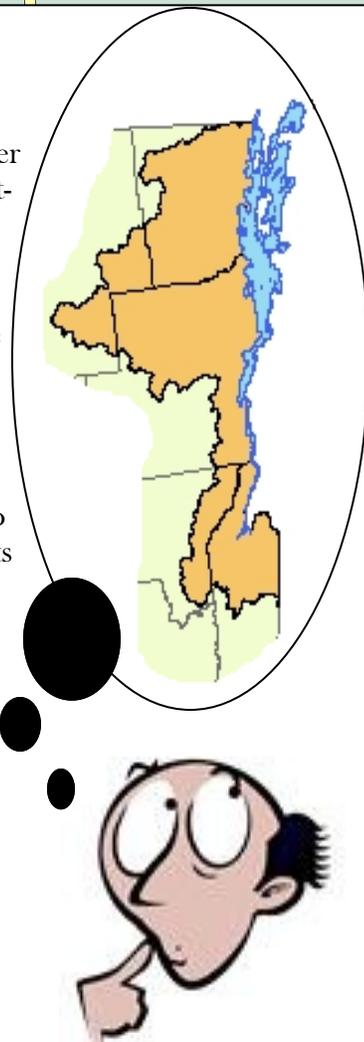
As state and federal funding for water quality protection projects continues to diminish, CWICNY hopes to remain steadfast and continue to move forward with its watershed partners to accomplish future goals.

The quality of the water resources throughout the region is profoundly recognized as a significant economic driver throughout the Lake Champlain region. This truly underscores the vitality and importance of protection efforts ongoing and long term.

CWICNY would like to thank all the individuals, municipalities and associations that have helped us achieve our 2010 goals, and we look forward to continuing our efforts throughout 2011.

-Drew

*Andrew 'Drew' Snell
CWICNY Coordinator*



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Upcoming 2011 CWICNY-Sponsored Educational Workshops and Conferences

- *On-Site Wastewater Design I — March 30 & 31 — Fort William Henry, Lake George*
- *On-Site Wastewater Design II — May 4 & 5 — Crowne Plaza Resort, Lake Placid*
- *Roadway Erosion and Sediment Control — Date/Location TBA*
- *North Country Stormwater Conference & Tradeshow — October 2011 — Specific Date/Location TBA*

More info at WWW.CWICNY.ORG

Regional, State and Federal Partners

Lake Champlain Basin Program

NYS Ag and Markets

Adirondack Park Agency (APA)

Ausable River Association (ARA)

Adirondack Park Invasive Plant Program (APIPP)

NY Senator Betty Little

NY Assemblywoman Janet Duprey

Greater Adirondack RC&D

USDA-NRCS

NYS DEC

Bouquet River Association (BRASS)

NY Citizens Advisory Committee (NY CAC)

Environmental Protection Agency (EPA)

NY Assemblywoman Teresa Sayward

Local Municipalities/Planning Boards

Cornell Cooperative Extension (CCE)