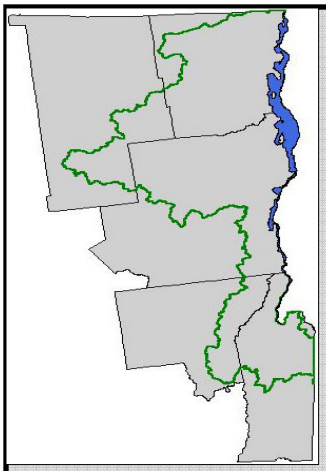


Champlain Watershed Improvement Coalition of New York, Inc (CWICNY)

Clinton, Essex, Franklin, Warren and Washington Counties

2008 Annual Report

"Adirondacks Mountains from Lake Champlain" Photo Courtesy of: Barbara Ganley, Weybridge, VT

While 2008 may not be remembered fondly by most, it was a very busy and successful year for the Champlain Watershed Improvement Coalition of New York (CWICNY). Thanks to funding provided by Senator Betty Little and Assemblywoman Teresa Sayward, more than $300,000 dollars of water quality improvement projects and programs were implemented across the New York side of the Lake Champlain Basin by CWICNY and its partners.

CWICNY's goal is to get cost-effective water quality improvement and protection projects on the ground. Working with local communities, farmers, highway departments and others, CWICNY brings together the strengths of numerous agencies and organizations to help protect Lake Champlain. As we look forward to 2009, we hope to continue and even grow our efforts on this behalf. Working together, we can do much for this important lake.

- Dave Wick, President

"Lake Champlain is one of our region's most important assets, a beautiful natural resource that millions of people enjoy every year. I applaud the coordinated efforts of the Champlain Watershed Improvement Coalition to protect this great body of water. Working across geographic and political boundaries, they have raised awareness, focused resources and implemented solutions to reduce pollutants entering the lake. I've been pleased to secure state funding on their behalf."

-NYS Senator Betty Little

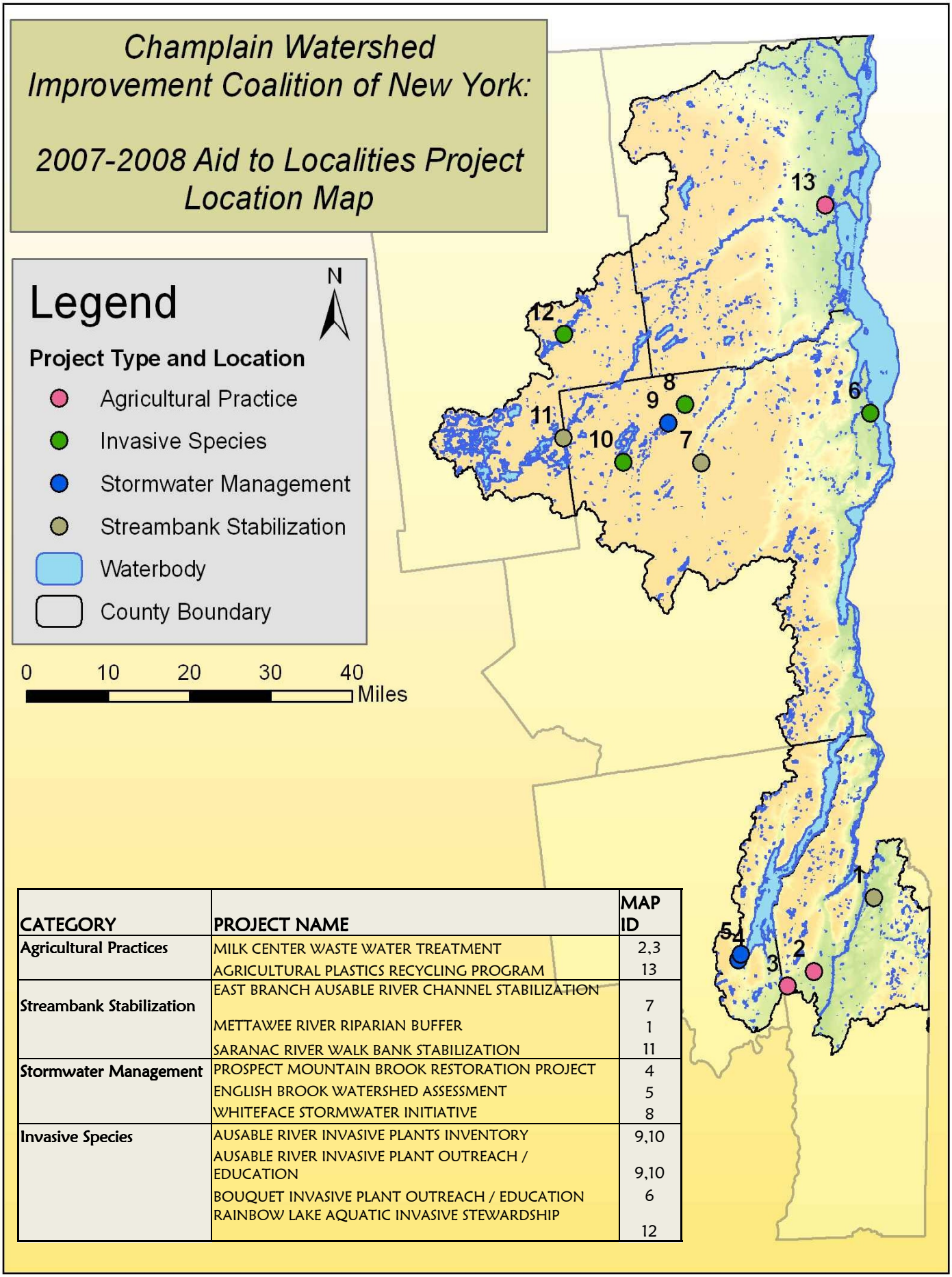
"Our small rural communities certainly value their unique North Country environment. They struggle to make sure they properly address the issues stormwater runoff, non-point source pollution, and clean drinking water. These communities can't afford to do these projects without the help of professionals. The assistance provided by CWICNY is essential in development and completion of these important projects."

-Assemblywoman Teresa Sayward

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

Champlain Watershed Improvement Coalition of New York:

2007-2008 Aid to Localities Project Location Map



CATEGORY	PROJECT NAME	MAP ID
Agricultural Practices	MILK CENTER WASTE WATER TREATMENT	2,3
	AGRICULTURAL PLASTICS RECYCLING PROGRAM	13
Streambank Stabilization	EAST BRANCH AUSABLE RIVER CHANNEL STABILIZATION	7
	METTAWEE RIVER RIPARIAN BUFFER	1
	SARANAC RIVER WALK BANK STABILIZATION	11
Stormwater Management	PROSPECT MOUNTAIN BROOK RESTORATION PROJECT	4
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Invasive Species	AUSABLE RIVER INVASIVE PLANTS INVENTORY	9,10
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Agricultural Practices

Agricultural Best Management Practices are essential for controlling significant phosphorus inputs from farming operations throughout the Lake Champlain Basin

MILK CENTER WASTE WATER TREATMENT

Installation of Milk Center Wastewater Collection (Washington County)

In cooperation with CWICNY, the Aid to Localities program and the Washington County Soil and Water Conservation District, two large farms, located in the Lake Champlain watershed of northern Washington County, have installed wastewater collection systems. The systems for each of the three participating farms are very similar, by design, to contain and treat rinse water discharged from milkhouse cleansings. Each system contains a 3,000 gallon concrete holding tank (shown in photos) which is regularly emptied into a spreader for cropland application. Through land application, phosphorus and other nutrients are filtered through soil absorption and crop uptake.

Milk Center Wastewater system installed (Washington County)

Each farm has developed a Comprehensive Nutrient Management Plan (**CNMP**), a major component of a more comprehensive whole farm plan, required by NYS-DEC and US-EPA for all dairy farms of 200 or more cows. In each case, the farm's CNMP prescribed that the wastewater generated by daily milking operations be collected in a tank and pumped to a manure spreader for daily spreading, or to an adequate ag waste storage facility.

These systems replace the existing conditions where milk center waste either ran onto the ground, through grassy areas, or into a nearby ditch which often leads to a stream or other surface waterbody. Nutrient overloading and oxygen depletion typically resulting in streams from the effluent will no longer occur. These systems were designed and certified by a NYS Licensed Professional Engineer, with much of the planning and construction oversight provided by the Washington County SWCD staff.

AGRICULTURAL PLASTICS RECYCLING PROGRAM

The recycling of agricultural plastics from Lake Champlain Valley farms is now a reality as a result of the 2007-2008 Aid to Localities funding. In fact, much of the North Country agricultural community has seen the ag plastics baler in operation and the results of its capabilities. A partnership with Cornell University's "Recycling Ag Plastics Project" (**RAPP**), CWICNY and the Clinton County Soil and Water Conservation District have increased awareness and efforts towards the environmentally-friendly removal of once burned/ landfilled plastic refuse. As a result of the success of this program, further efforts are underway to expand the number of plastic balers available to farmers in the western Adirondacks and throughout New York State.

Hand-feeding ag plastics into the Plastics Baler [Clinton County]

The "Big Foot 300" agricultural plastics baler (photo) is actually modeled after a tobacco baler from the southern US. It has been modified to compress mountains of agricultural plastics scattered throughout the countryside. The baler is mounted on a hydraulic trailer which can be lowered to the ground for operations and raised for easy transport from farm to farm. A small air-cooled engine operates the hy-

(Continued on page 4)

Agricultural Practices - contd

(Continued from page 3)

draulic system necessary to compress the loose plastic into marketable 40 inch cubes. The 1,200lb bales of plastic will be recycled and reused in a variety of products including plastic lumber. Marketing this type of "dirty plastic" is difficult, and changing economic conditions require constant vigilance. Through the statewide and nationwide contacts of RAPP, the challenge of marketing has an optimum chance of success. The Ag Plastics program has generated intense media interest and television news exposure as well as numerous written articles across New York State, and parts of the Northeast. A number of hands-on educational demonstrations have thus far occurred in a variety of settings.

Compressing the Plastic into Bales. [Essex County]

Beginning on the day of delivery, July 9, 2008, the Marshall Ducharme Farm in West Chazy hosted Clinton County's first look at the baler. From there the machine has traveled to Empire Farm Days in Seneca Falls, the Franklin County Fair, a demonstration at Hy-View Farms in Chateaugay, as well as two dairy farms in Essex County.

Streambank Stabilization

EAST BRANCH AUSABLE RIVER - CHANNEL STABILIZATION PROJECT

The restoration and stabilization of the East Branch of the Ausable River at the Rivermede Farm in Keene has been in the planning phase for the past 14 years. An original design and restoration plan was completed by USDA-NRCS and Army Corps of Engineers when work first began years ago.

The area targeted for construction is a very unstable section of river (accompanying image) that has seen a tremendous amount of bank erosion. The erosion and streambank shifting in this section of the East Branch of the Ausable River was so severe after the original design was completed, a second survey was required for new stabilization plans.

The 2007-2008 Aid to Localities funds afforded Trout Unlimited and a private engineering firm the financial capability to complete an updated survey and design required to obtain permitting from the Adirondack Park Agency and NYS DEC. A funding match of 65% federal funds and 35% local funds was critical to obtain the new design.

The final planning phase is now complete with implementation of the new design slated to begin in 2009. The stabilization project will now be coordinated by the Army Corps of Engineers. When completed, this project will restore habitat, protect, and stabilize a highly erodible section of streambank on the majestic and rapid east branch of the Ausable River.

Channel Stabilization Aerial View and Project Cross-Sections [Essex County]

Streambank Stabilization - contd

METTAWEE RIVER RIPARIAN BUFFER

The Mettawee River in Washington County was experiencing 350+ feet of severe bank erosion and loss of cropland on the Edward Foot Farm. As a result, a considerable amount of sediment was depositing into the river. Unending efforts by the Washington County Soil and Water Conservation District to locate funding to stabilize the bank finally came to fruition in 2007.

Newly established buffer and stabilization on Mettawee River. [Washington County]

Funding provided through the NYS Agricultural Nonpoint Source grant program allowed for installation of log revetments as well as a bankfull bench to stabilize the streambank at this site.
With funding through *Aid to Localities*, the project was expanded in 2008. The financial assistance through Aid to Localities allowed for an additional component of a riparian area (photo) to be completed at this site. The buffer area, 350 feet x45 feet, was planted with nearly 160 native tree and shrub seedlings providing additional streambank stabilization, surface water filtration, and habitat creation and restoration.

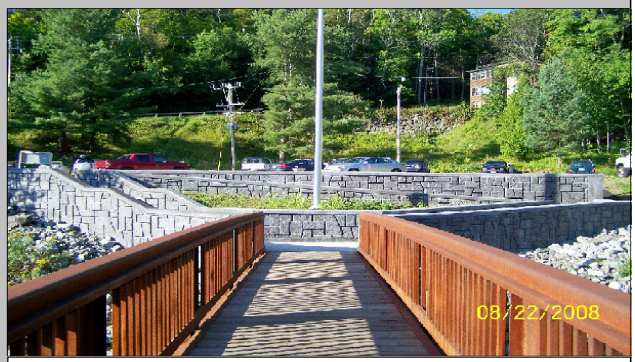
SARANAC RIVER WALK BANK STABILIZATION

The Village of Saranac Lake Office of Community Development, the Saranac River Corridor Commission and CWICNY collaborated efforts to complete the final phase of the Saranac River Walk and Bank Stabilization Project.

Located in the Village of Saranac Lake on the Saranac River, this project was able to be completed in 2008 through funding provided by the *Aid to Localities* program. The final phase of this project included installation of a new access ramp to the footbridge as well as riverbank armoring along approximately 100 feet of the Saranac River. The armoring of the river bank was a much needed stabilization practice at this location where bank erosion on the Saranac River had posed a water quality issue for years.

Sediments were continually being deposited into the river as a result of overland flow and bank instability. Angular stone was placed on the bank to prevent additional bank erosion and to filter out sediments transported during and after construction resulting in a massive reduction of sediment deposition into the Saranac River.

Post Construction Stabilization and Sediment Containment. River Walk, Saranac Lake.



New entrance to Saranac River Walk, Saranac Lake, with angular rock erosion protection along side walls.

Stormwater Management

As Lake George flows into Lake Champlain, improvements to Lake George and filtration of stormwater runoff ultimately help protect Lake Champlain itself

PROSPECT MOUNTAIN BROOK RESTORATION PROJECT

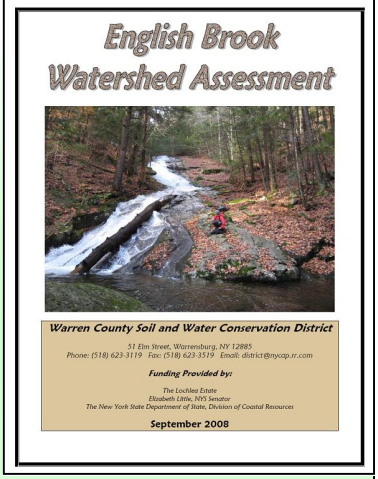
Prospect Mountain Brook winds its way through the heart of the Village of Lake George , flowing between streets, parking lots and residential backyards eventually to its confluence with Lake George. Along its course, stormwater runoff pipes enter this stream, conveying road sands, salts and other pollutants into the brook. In addition to the pollutant inputs, the stream itself has seen considerable bank erosion, leading to excessive sediment reaching Lake George. These sediments and pollutants have been a concern for a long time, and have caused issues at the outlet with delta creation and navigation problems. However, thanks to funding through CWICNY's Aid to Localities grant, the NYS DEC, and the Lake George Association, most of these issues on Prospect Mountain Brook have been eliminated.

Installation of Stormwater Filtration System in Prospect Mountain Brook Watershed, Lake

The Warren County Soil and Water Conservation District has worked with the Village of Lake George DPW over a two year period to design and install over 20 separate stormwater improvement systems and streambank protection projects for the brook. The stormwater improvements consist of reworking the Village's existing storm drainage network to include the capturing of pollutants and the infiltration of runoff back into the ground. The stream restoration components included over 500 feet of channel protection efforts, which protect the stream from upland inputs and streambank erosion. With the completion of these projects, the amount of pollutants entering the stream and Lake George is significantly reduced.

ENGLISH BROOK WATERSHED ASSESSMENT

English Brook is one of the largest streams draining to Lake George and also maintains one of the largest sediment deltas in the lake. This important stream has been heavily impacted over the past few decades by the construction of the Northway, development within the watershed, and highway de-icing practices. Although the impacts to this brook are well known, there was no plan of action to address the array of pollution sources entering the lake.



Thanks to funding through Aid To Localities and others, a comprehensive watershed-wide field study was conducted to identify these sources and develop recommendations for solutions. This project was undertaken by the Warren County Soil and Water Conservation District over the period of almost two years, culminating in a document titled the "English Brook Watershed Assessment". This document is not only a detailed review of pollutant inputs into the stream, but is also a plan of action to address these issues through cost-effective restoration initiatives. To gain an understanding of the watershed and its issues, more than 10 miles of stream was analyzed, ultimately resulting in watershed-wide maps of issues and recommendations for improvement. This Assessment, completed in September of 2008, now acts as the guidebook for watershed restoration activities. This project was also funded by the Lochlea Estate in Lake George and the NYS Department of State. Go to www.warrenswcd.org for the full report.

Stormwater Management - contd

WHITEFACE STORMWATER INITIATIVE

The Essex County Soil and Water Conservation District has been working to install sediment traps along roadways to collect and reduce sediments entering local waterbodies. These efforts have been targeted primarily in the Bouquet and Ausable River watersheds.

In 2008, a terrific opportunity emerged for CWICNY and the Essex County SWCD to participate in a sediment collection project at Whiteface Ski Area. As the Town of Wilmington was connecting municipal water to the resort, part of the project plans included the installation of a sediment collection system during construction of the water main.

Each year, during the winter months at the height of the ski season, many tons of sand and salt are applied to roadways and parking areas at Whiteface Mountain. Those sediments eventually find their way into the world-renown trout waters of the Ausable River with each spring thaw. The potential exists for this sediment to run off impervious surfaces directly into the river to settle, suffocate, and destroy fish spawning areas in the Ausable.

The Town of Wilmington was successful in securing a grant to install a *Vortex* unit to intercept stormwater and filter out sediments. However, the awarded funds would not cover the total project costs. The balance of required funding was provided through CWICNY's Aid to Localities resulting in the highly anticipated implementation of this critical project. The installation of the filtration units will dramatically reduce the high volume of sediments that run directly into the river from the upland areas and the parking lots.

The benefit of this project is twofold. On top of being a very environmentally viable project showcasing the benefits and effects of reducing stormwater runoff pollution, the local community will continue to thrive economically from tourist dollars produced by the Ausable's healthy sport fishery.

Looking at Whiteface Mountain across entrance bridge over the Ausable River (above)

Construction of Vortex Filtration Unit at Whiteface Mountain (above)

Vortex Unit Installed at Whiteface Mountain