



Warren County Soil and Water Conservation District

2009 Annual Report

While 2009 may not be remembered fondly by many due to the economy and financial crisis, it was a significant year for the Warren County SWCD. Thanks to a lot of hard work, determination and cooperation of many organizations and individuals, we moved into our new modular office building on Schroon River Road in Warrensburg (see article page 5). This was a tremendously cost-effective project (one of only two modular government buildings in NYS), due to the assistance and partnering of our many municipal friends and organizations.



New SWCD Office

On the conservation front, it was an exceptional year for getting projects planned, designed, and constructed across the county. We continue to draw in hundreds of thousands of grant dollars every year, which fund on-the-ground projects and also help keep our county operating costs down. In fact, due to our success in obtaining outside funding, we have been able to support almost 40% of our operating costs from grants and contracts. These successes are due to the SWCD's outstanding staff and the leadership of our Board of Directors led by Town of Stony Creek Supervisor Frank Thomas.

Looking forward, 2010 will be an even busier year for getting important conservation projects on the ground. Please take a look at this brief summary of the activities your local Conservation District undertook this past year, and thanks to all of you who work to keep Warren County the most beautiful area to live in and visit in all of New York State.

-Dave Wick, District Manager

Village of Lake George Stormwater Remediation

Since the creation of Lake George Village over 100 years ago, each time it rained the road runoff would enter the lake, taking with it pollutants such as sand, silt, road salt, lawn fertilizers, bacteria and more. Over time, these pollutants have contributed to a decline in the long-term water clarity in the lake. However, over the past few years, the Warren County SWCD and Village have teamed together to address these issues.

Thanks to funding from an EPA grant through the Champlain Watershed Coalition of New York, thirteen new stormwater infiltration systems have been installed in Village streets (see



"The cooperation of the Warren County Soil and Water Conservation District in solving our stormwater and flooding problems in the Village has been remarkable. Our taxpayers and the lake are truly grateful."

-Bob Blais, Mayor, Village of Lake George

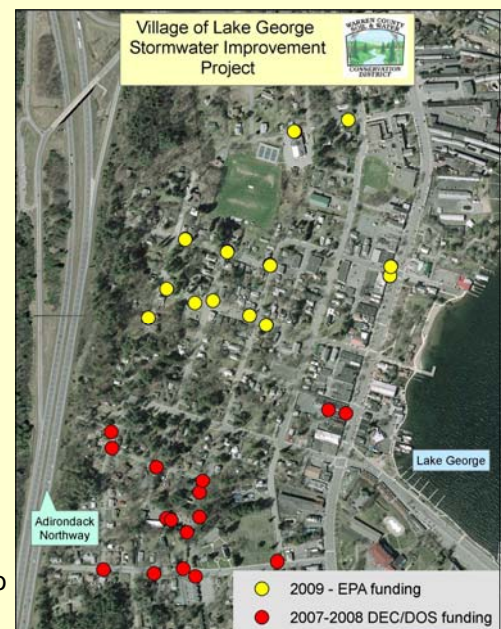
map). Large concrete structures with holes on the sides (drywells) were installed in the ground to replace the existing small catch basin.

Essentially, if you look at the storm grates on the roads, they are now large

chambers which act to infiltrate the rainwater into the ground. The soil in the ground filters out all pollutants, and returns clean water to the water table. The goal is to keep this runoff from reaching Lake George, and while doing so, help increase the groundwater which feeds the streams in the Village during dry times. A win-win solution.

These structures are simple in design and operation, and low in cost (approximately \$3,000 per site). The District contracted with Morrissey Excavation for an excavator and operator, and the Village DPW provided trucking, loaders, and labor. The Warren County SWCD designs the systems and assists with installation and administers the overall project.

To date, we have "retrofitted" over half of the Village of Lake George. Our goal is to retrofit the entire Village so that stormwater runoff no longer impacts the lake, protecting it long into the future.



Projects and Programs

Planning for Removal - Hague and Finkle Brook Deltas

This past year, the Warren County SWCD was very active in developing plans for the removal of two very large sediment deltas in Lake George. The focus has been on the Finkle Brook delta in the Town of Bolton (8,000 cubic yards planned for removal), and Hague Brook in the Town of Hague (27,000 cubic yards planned for removal). These deltas have grown tremendously over the past few decades due to upland erosion, highway road sanding, and other practices.

Thanks to a \$14,000 grant from the Lake George Association, the District has been able to undertake the collection and analyses of delta sediment samples, develop logistical plans, and create maps and figures necessary to submit permit applications to numerous regulatory agencies.

The benefits of removing these deltas include increasing fish migration and spawning opportunities upstream, restoring near-shore water depths and dock spaces, reducing potential boating accidents and improving navigation, and simply restoring the areas to pre-disturbed states. These efforts would remove any existing Eurasian Watermilfoil, and make way for reestablishment of native aquatic plants which would be of benefit to the aquatic community. These projects are expected to be "shovel ready" by summer of 2010. Although funding has not yet been secured for these initiatives, having them ready to go moves them up the ladder in terms of funding eligibility. The sediment in both deltas has been tested for metals, pesticides and other parameters and are approved by NYS DEC for unrestricted reuse. This project represents years of interagency local cooperation that will tremendously benefit both the local communities and the lake itself.



SWCD Manager Dave Wick drives a core sampler into the Finkle Brook Delta with Jim Swart of DEC.

New Soil and Water Conservation District Office

394 Schroon River Road, Warrensburg, NY

Perseverance does pay off. Five years of planning, design, site location, financing, permitting, and contracting came together on February 9th, 2009 when the Terex crane gently set all four boxes of our new modular office building on the recently completed foundation. In two days' time the building was erected (it was built in a factory offsite), and within two months we received our Certificate of Occupancy and were up and running at our new location. Our old office building was demolished by the Town of Warrensburg less than a week after we moved out.

Our new facility is approximately 2,300 square feet including five offices, a reception area and a small conference/break room. We designed the facility with an unfinished attic/second floor which we are currently constructing into a usable office space of another 1,600 square feet (simply for the cost of attic trusses, insulation, sheetrock, and carpet). SWCD staff are constructing this as time allows, and work should be completed this March.

This building is one of only two modular government office buildings in all of New York State. It was completed for a total cost of less than \$400,000, or approximately \$100 per square foot of finished space (most government facilities average \$200-\$300 per square foot). This building stands as a model of how low-cost office space can be done at the government level if you're creative and persistent. SWCD staff have over 2,000 hours into this project, with everything from bulldozing and landscaping to painting and construction.

Thanks to the Warren County Board of Supervisors who unanimously voted to fund this new facility, and to our many municipal friends who gave their time, manpower and equipment to help keep costs down (Town of Bolton Highway, Town of Warrensburg Water Department, Warren County DPW and Parks and Recreation, Warren County Information Technology, Village of Lake George DPW). Please stop in!!!



Projects and Programs

Glen Lake EPA Septic Program

Glen Lake has the most densely developed shoreline of any lake in Warren County. As there are no public sewer lines in the area, each of those residences has a private septic system. Most of these septic systems are close to the shoreline, which makes maintenance of these systems tremendously important for water quality protection and public health.

In 2009, the Warren County SWCD began a voluntary "septic pumpout and education" program for near-shore residents on Glen Lake. This effort is funded through an EPA Targeted Watersheds grant that the Champlain Watershed Coalition of NY received in 2008.

Letters were sent out to homeowners within 300 feet of the shoreline asking if they were interested in participating in this initiative. Each landowner who participated received a half-price septic tank pumpout, a water conservation kit including a low-flow shower head, two faucet aerators, and an educational folder. District staff was at every pumpout and met with the landowner to answer questions. The septic hauler inspected each tank to see if it was in good working condition. Seventy-five septic systems were pumped out from June through November, which was an excellent response.

This has been a successful program in raising the awareness of properly maintaining septic systems and the potential impacts that can happen when failures occur. The District will resume this program at Glen Lake beginning in the spring and continuing through fall of 2010.



Schroon Lake Management Plan

Schroon Lake is a beautiful waterbody which lies within northern Warren and southern Essex Counties. At over 9 miles long and covering more than 4,000 acres, it is the second largest lake in Warren County (second only to Lake George).

To understand the current condition of Schroon Lake and to help protect it for the future, there is currently a lake and watershed planning effort underway. Led by the Schroon Lake Association and the East Shore Schroon Lake Association, this effort is designed to determine the "State of the Lake" and to identify upland issues that might be affecting the lake's water quality. This effort has been ongoing since 2007, and will be completed this coming summer (2010). Numerous partners are involved, including the three municipalities, the two county Soil and Water Conservation Districts, the DEC, local citizens, Adirondack Ecologists LLC, and others.

To assist this effort, the Warren County SWCD secured a grant of \$57,600 through the NYS Department of State in 2009, managed through the Town of Chester.

This grant provides funding for an in-depth look at Schroon Lake and its surrounding watershed, with the ultimate goal of providing concrete recommendations and solutions for the issues facing this important lake. When completed, a concerted effort will begin to obtain grants for reducing pollutants reaching the lake, and to successfully manage the nuisance plant Eurasian Milfoil.

The beauty of our lakes in Warren County is unmatched, and it is up to all of us to work together to ensure that our lakes are well taken care of. At the Warren County Soil and Water Conservation District, we continue to work hard to ensure that our lakes maintain their high quality long into the future.



Warren County SWCD Technician Dean Moore using GPS to log roadside ditch erosion around Schroon Lake

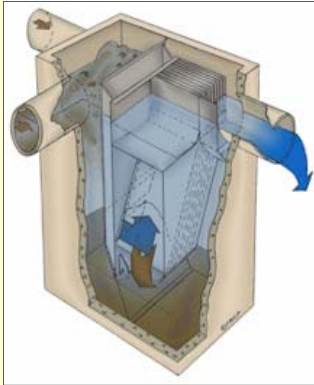


Storms and Streams

Halfway Brook Stormwater Remediation Project

Across from Price Chopper in Queensbury is one of the largest stormwater drainage pipes in Warren County. This pipe channels huge amounts of urban stormwater runoff to Halfway Brook. In 2007, the District received notice of a \$184,000 grant award to help clean up this stormwater, with the Town of Queensbury generously matching the grant dollars. Late in 2009, the District finally was in receipt of the signed contract from NYS DEC (we've learned that patience is a not only a virtue, but a must). Throughout this time however the project has not been static, but rather has been progressing quite well.

This past summer, the District coordinated a site visit to the proposed project location with numerous stormwater technology vendors. After reviewing many proposals, a *Terre Keen* hydrodynamic unit was selected (pictured at left, it is essentially a large and complex underground chamber).



The District is moving forward to have final designs completed soon by Jarrett Engineers, LLP. Bids will be sought for construction in the fall of 2010. When completed, this project will significantly reduce sediment, greases and oils, and trash (soda bottles, plastic bags, cigarette butts, etc.) from reaching Halfway Brook, which is a classified trout stream. This installation will significantly improve the brook's water quality and aquatic habitat, and the District looks forward to making it a reality very soon.



A new underground stormwater treatment structure will capture runoff from Route 9 and the surrounding developed area. The structure will be installed in the lawn area above, on Enterprise Rent-a-Car property.

Lake George Culvert Fish Passage Initiative

In October of 2008, the Warren County SWCD completed a comprehensive study of over 200 stream culverts in the Lake George Basin regarding fish passage and structural issues (available online at www.warrenswcd.org). The District found that more than 35% of the stream culverts in the Lake George Basin are not capable of allowing brook trout migration upstream. In all, more than 70 culverts in the Lake George Basin have been shown to be impassable to fish, on streams ranging from small headwaters to major tributaries.

Thanks to a \$60,000 grant from the US Fish and Wildlife Service in 2009, we are taking the first steps to fix some of these problems. Through this grant and working with local highway



departments, the District will design and install six new stream culverts in the Lake George watershed in 2010. These culverts will replace existing culverts which are both structurally unsound and also act as barriers to fish passage and migration in the Lake George Basin. The goals of this initiative are to improve spawning fish migration, reduce long-term culvert scouring, and promote better culvert installation techniques for highway departments.

For the long-term, these new culvert design and installation techniques will bring back much stronger brook trout, smelt, and landlocked salmon fisheries in Lake George. The District is also promoting these concepts county-wide, and most highway departments are getting on board.



Additional 2009 Initiatives...

Reservoir Cleanout Program: Organized and managed the cleanout of six reservoirs and in-stream sediment ponds throughout the Lake George Basin. With funding provided by the LGWC and LGA, over 1000 cubic yards of sediment was kept from adding to the deltas in Lake George.

Stony Creek Park: Worked with the Town and Highway Department to restore town beach and fish habitat Stony Creek at the Town's Park. Excavated over 200 cubic yards of sediment to restore swimming area.

Stormwater Tradeshow and Conference: Worked with Champlain Watershed Improvement Coalition of NY to organize and host the 5th Annual North Country Stormwater Tradeshow, drawing 160 attendees from around the region. This was the largest stormwater conference in New York State in 2009.

French Mountain Restoration: Completed site restoration oversight of Macchio Property access road erosion issues at the request of the Town of Queensbury.

Glen Lake Dry Hydrant Crib Dock: Assisted the town with plans for an enclosed crib dock system which improves recreational access and protects the inlet of a new "dry fire hydrant" system installed at that location.

Contractors Erosion Training: SWCD staff organized and conducted 10 Erosion and Sediment Control workshops for contractors in 2009. The Warren County SWCD is one of only a handful of Districts in NYS with three technical staff who are "Certified Professionals in Erosion and Sediment Control".

New Funding Proposals: Developed and submitted 13 funding proposals for water quality and other conservation projects throughout Warren County in 2009.

Town Mineland Plans: SWCD staff conducted surveys and design work for mineland plans for the Town of Horicon and the Town of Stony Creek. These plans allow the municipalities to obtain sand and gravel for their highway operations.

Stormdrain Stenciling: Developed a program with Warrensburg High School environmental program to have students conduct "stormdrain stenciling", which paints "don't dump, drains to river" on the roadway by storm grates. Promotes public awareness and is a good environmental program for students.

English Brook Sediment Basin: Surveyed and designed a new basin to capture sediment before it reaches the delta in Lake George. Installation anticipated in 2010.

Hubble Reservoir Repair and Cleanout: Contracted with Galusha Excavating to fix outlet structure and dewatering pipe for this reservoir, and also removed over 700 cubic yards of sediment. Funding provided by Lake George Association.

West Brook Conservation Initiative: The District remains actively engaged in the technical development of this groundbreaking multi-million dollar conservation project in the Town/Village of Lake George.



Natural Resources Specialist Lori Kerrigan arranged and managed six reservoir cleanouts in 2009



Ongoing Programs

Rotational Grazing in Warren County

Many farms utilize methods of rotational grazing to increase pasture and supplement the high cost of buying feed for their animals. This is not only good for the animals and the farmer's pocket book, but it is good for the land.

A rotational grazing system is developed based on the amount of land productivity in a particular soil type needed to feed a given number of animals. By rotating the animals amongst several pastures, each pasture gets a chance to "rest" and rejuvenate the vegetation. By not overgrazing a pasture, recovery time is minimized increasing the amount of feed available for the animals. Because the fields are not overgrazed or trampled as much it also minimizes erosion which benefits the animals, the landowner and the soil.

The Warren County SWCD has been working with the USDA NRCS and farmers to help develop rotational grazing plans for horses, chickens, goats and pigs. For more information on this free service call the office for an appointment to help assess your farm's needs.



Hydroseeding for Erosion and Sediment Control

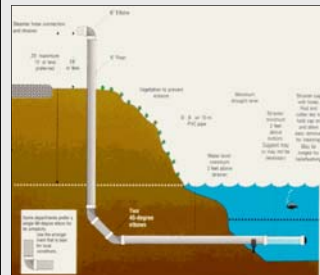
In 2009, more than 21 lane miles of ditches and roadsides were hydroseeded by Warren County SWCD to reduce erosion and sedimentation to our waterbodies. The District uses a phosphate free fertilizer in the mix, to prevent any additional phosphorus from reaching our lakes and streams.

This program remains highly successful thanks to the support of our local and county highway departments and the state department of transportation. Hydroseeding has the ability to eliminate erosion by more than 90%, making it one of the most cost effective erosion control practices out there. This program is available to any Warren County municipality, and if you have any questions, please contact the District.



District Dry Hydrant Program

A dry hydrant consists of a pipe with one end in the water and the other end extending to dry land and available for connection to a pumper. The District has designed and helped install 55 hydrants across the county since the inception of this program in the late 1990's.



In 2009, the District embarked on an assessment and repair effort for this program. We excavated sediment clogging an existing hydrant in Queensbury, conducted restorative work on the Glen Lake hydrant and fixed a broken hydrant in Thurman. The Warren County SWCD conducted evaluations of about one-half of the hydrants we've installed in the county, and the remainder will be done in 2010. Our dry hydrant program has become an extremely important program for rural firefighting in Warren County.



The 2009 Warren County Envirothon

The "Envirothon" is a hands-on conservation competition for Warren County high school students that the District hosts every year. In 2009 a team from North Warren Central School beat out 15 other teams from across the county at our local event, and went on to place 26th out of 54 at the NYS Envirothon held at Keuka College in May.

Since this program began in 1993, it has continued to encourage students to participate in subjects that they may not be familiar with (surveying, wildlife biology, forestry, game laws, etc.) and encourages the participants to look at potential careers in the field of conservation. Over 2,000 kids have participated over the years, many of which have gone on to college focused on conservation related topics. The District is pleased to help shape the next generation of Warren County conservationists!



Municipal and Landowner Assistance

Conservationist of the Year - 2009

The District is pleased to announce that the Warren County Conservationist of the Year Award goes to Marc Migliore of the NYSDEC. Marc is the assistant regional deputy permit administrator for NYSDEC Region 5.

Marc developed and put into action a DEC General Permit that Districts can issue to municipalities or private landowners for projects which temporarily disturb streams and lakes. This permit can be issued within 24 hours of notice, provided all of the permit stipulations are met and accepted. This is a milestone change, and one which makes sense for everyone involved. In 2009, it saved and estimated 100 hours of needless permit paperwork processing. More importantly, projects are no longer held up for weeks or months pending permitting.

Marc tirelessly supports our office to all levels of government, and readily encourages individuals and towns to contact the SWCD for assistance. Well done Marc!



Marc Migliore (left) receiving award from SWCD Chairman Frank Thomas

Municipal Assistance

As everyone knows, this past year has been difficult financially for all of our municipalities. The District constantly looks at innovative ways to assist them on a diverse array of issues. This past year the District has developed mineland plans for two municipalities, conducted dozens of site evaluations for flooding issues, developed permits for culvert replacements, hydroseeded municipal projects and assisted with many other local initiatives.

Warren County SWCD staff regularly attend various county and town meetings to provide information. This past year, all of the District staff joined the *Warren County Association of Town Highway Superintendents*, to broaden this outreach even further. While at the meetings, superintendents have discussed numerous projects in their Towns with the District.

If any Warren County municipality has a resource issue and believe that the District may be of assistance, give us a call at 623-3119.



Landowner Technical Assistance

Each year District staff assist landowners who have diverse resource questions. The questions may vary from: *I have flooding issues, can you help me? How should I stop my riverbank erosion? to Is my property suitable for farming?*

Warren County SWCD staff are very diverse in their conservation knowledge and have excellent technical skills. If you have a mapping question or historic aerial photo request (wetland, stream, etc) we can assist you over the phone. However if you have a larger issue, then District staff will set up an appointment to meet with the landowner onsite, generally within 48 hours of receiving the call. Following the visit, the staff member will draft a letter from the visit with detailed recommendations for solutions.

There is no fee to Warren County landowners for this service. If you have a natural resource question or concern please contact us. We are happy to answer your questions and help direct you to additional sources of information.



Water Resources Specialist Jim Lieberum (right) assisting small farm owner Ben Thomas of Warrensburg

Fish and Tree Programs

Every year, District organizes and sponsors a tree and shrub seedling program and a fish stocking program for landowners. In 2009, we sold 4,600 low-cost tree and shrub seedlings, 1,500 trout and bass, and 3,800 forage minnows.

Over the past few years, we have reviewed and updated our order forms to meet your requests. We always look for species of trees and shrubs that provide benefits to wildlife and the environment and would welcome any suggestions you may have. The Tree and Shrub Program is available in the spring of the year, the Fish Program is held in the fall. Visit www.warrenswcd.org for order forms and information.

You don't need to be a Warren County resident to purchase products from the District and if you have any questions, please feel free to contact us. All District staff are knowledgeable about the programs and will assist you with selecting the correct species for your purpose.



SWCD Office Manager Rhonda Jarvis (left) at the District's Annual Tree and Shrub Seedling Program



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By The Numbers...

- The Warren County Soil and Water Conservation District has been in existence for 54 years, and was created by the Warren County Board of Supervisors in 1956 under NYS Soil and Water District Law.
- The District is a county-based organization overseen locally by a seven member board of Directors.
- The District's total 2009 operating expenses were \$394,080.
- Our 2009 funding allocation from Warren County was \$232,000.
- The remainder of the District budget comes from competitive grants and some reimbursement from NYS.
- The District has received over 50 grants in the past ten years, totaling over \$3.5 million dollars. These dollars go directly to conservation projects and programs for Warren County.
- The District fielded over 1,400 calls related to conservation issues in 2009.
- SWCD staff conducted more than 400 landowner and municipal site visits in 2009 related to conservation issues. All requests for service were responded to.



Board of Directors

Frank Thomas - Chairman
Ron Montesi - Vice Chairman
Dan Belden
Mark Brown
Tim Costello
Charlie Maine
George Ryan

District Staff

Dave Wick, District Manager
Rhonda Jarvis, Office Manager
Lori Kerrigan, Nat. Resource Spec.
Jim Lieberum, Water Resource Spec.
Dean Moore, Sr. District Technician

The District's mission is to protect and improve the lakes, rivers, streams, soils and other natural resources of Warren County through locally-led conservation projects and programs.

Visit us online at our website: www.warrenswcd.org