



# 2012 Annual Report

*A brief summary of the many projects and programs undertaken by your local Conservation District in 2012.*

*2012 was an interesting time for the District as we had several changes to the staff. I am happy to say that we weathered the changes and have come out ahead of where I hoped that we would because of the workload that we carry. Sometimes getting thrown into the thick of things pays off for the future!*

*I anticipate that we will continue to expand on a number of conservation related programs in addition to our current projects. Our responsibility is to the people of Warren County and we strive to meet the issues that occur anywhere in the county. I hope that you take a moment to review our 2012 successes and contact us if you have any questions or comments.*

*The District looks forward to continue the tradition of working with landowners, municipalities, non profits and other organizations as we all have a role to play in conservation, including fishing, hunting, hiking, farming, sightseeing and many other activities. Thank you for your support and we look forward to a busy 2013.*

*- Jim Lieberum, District Manager*

## Fish Passage Culvert Improvement Project

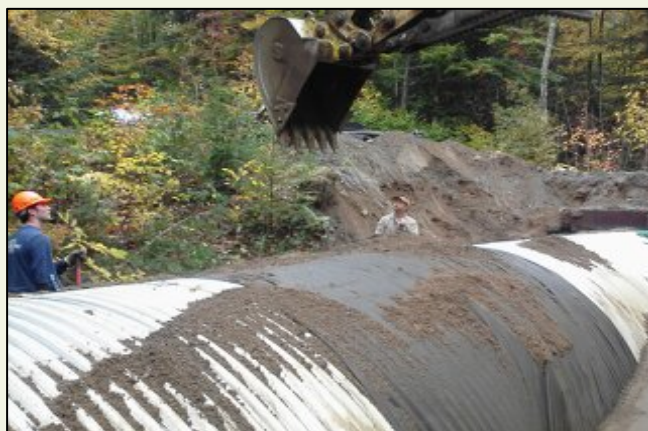
The Warren County Soil and Water Conservation District has worked with the town and county highway departments, within the Hudson River and Lake George-Lake Champlain Basins to provide local on-the-ground training for these new culvert installation techniques. In an effort to improve habitat in our local trout streams, this project reconnects sections of trout waters previously impassible due to poor culvert placement.

The goals of this initiative are to improve spawning and migration for all aquatic species, upgrade existing municipal infrastructure, and educate local highway departments on the sizing and installation of wildlife passable culverts.

In 2012 the project included the design and installation of five new stream culverts located in Stony Creek (Stony Creek), Mill Creek (Johnsburg), Big Brook (Warrensburg) as well as tributaries leading to Brant Lake (Horicon) and Lake George (Lake George). The Fish Passage Culvert Improvement Project is funded by the New York State Department of Environmental Conservation through the Water Quality Improvement Project grants program.

Over the past several years local highway departments have taken on the challenge of installing larger squash culverts or small bridges in response to this program or from recent storm events. These structures not only assist with improving fish and wildlife habitat, they help to improve the stream dynamics and allow the stream to regulate itself.

The District feels that this is an extremely beneficial program for the municipalities and we will continue to assist with stream crossings while keeping in mind; fish and wildlife, potential road hazards and public safety.



## Hague Bolton Stormwater Identification Projects

In 2012 the Towns of Hague and Bolton with the District began the task of identifying stormwater inputs to Lake George from road systems. This was funded by the Lake George Park Commission (LGPC) through a stormwater improvement grant program. In 2012 the District developed a specific stormwater assessment for the Town of Bolton, -The Stewart Brook Watershed, and for the Town of Hague. These reports identify stormwater outfalls into waterbodies with connectivity to Lake George.



In each community, numerous outfalls and erosion concerns were mapped and evaluated. The highest priority areas were assigned potential solutions.

The next step consists of working with the communities to determine if the site specific recommendations are feasible based on site conditions, specifically depth to groundwater and bedrock. Most of the soils in Warren County are able to act as treatment systems for stormwater, however test pits and other pre-design considerations need to be evaluated.

To close out the Town of Bolton's grant, the District is mapping the stormwater outfalls and concerns for the rest of the hamlet not including the Stewart Brook Watershed. A report similar to *Stewart Brook Watershed/Dula Pond Watershed Assessment* will be generated.

From this LGPC grant, the Town of Hague will use some of the remaining funds to install a rain garden and bioretention cells, replace a small failing culvert and clean out several sediment basins.



## Glen Lake Stormwater Improvement Project

The Town of Queensbury and the District have teamed together for the stormwater retrofit program with funding provided by the NYSDEC to reduce stormwater runoff from impacting Glen Lake or its tributaries

Stormwater runoff is the major contributor of sediment and non-point pollutants in many of our water ways. Runoff from the surrounding road network is being treated by improved ditching, drywells and infiltration systems installed inside the Glen Lake Watershed. Stormwater runoff that once flowed directly into Glen Lake from the roads will now recharge the lake as groundwater. By reducing sediment and the subsequent nutrient loading to the lake, the need for dredging and the proliferation of aquatic macrophytes will diminish.

In 2012 the Town of Queensbury's Highway Superintendent, Mike Travis and one of his crews led by foreman Mark Dutra installed a drywell infiltration system on Hall Hill Road and a pair of infiltration systems; one each on Barber and Glen Lake Roads.

A special thanks goes out to Dave and Denise Paddock the owners of the Glenmoore Lodge on Glen Lake Road for allowing us to utilize their parking area as a site for a four chamber infiltration system.

This year the District is anticipating additional stormwater improvements in cooperation with the Town Highway Department and the Glen Lake Protective Association.



*Infiltration chamber installation*



*Drywell installation*

## Schroon Lake Milfoil: Mapping and Management

The Towns of Chester, Horicon and Schroon have joined together with the East Shore Schroon Lake Association (ESSLA) and the District to help fight the spread of Eurasian Watermilfoil in Schroon Lake. In 2012 the District and the ESSLA contracted Aquatic Invasive Management, LLC (AIM) to hand harvest milfoil from the Meadow Cove in Essex County and the Warren County section of Schroon Lake. AIM picked 16 bags of milfoil weighing approximately 400 pounds, from Meadow Cove and the Warren County portion of Schroon Lake, in their 4 weeks of harvesting. After the July harvesting period it was agreed that AIM would assist the Schroon Lake Association (SLA) and Adirondack Ecologists, LLC (AE) with milfoil harvesting in the Essex County section of the lake. In the final two weeks of harvesting in 2012, AIM removed an additional 19 bag sof milfoil weighing 475 pounds. The total for the season was 35 bags of Eurasian Watermilfoil weighing nearly 900 pounds. In addition, AIM removed numerous Curly Leaf Pondweed plants, a lesser known invasive species found in Schroon Lake. They also sent samples of small clams found during plant harvesting, to the Darrin Fresh Water Institute and Steve Resler of Innerspace Diving in order to confirm that they were not the dreaded Asian Clam.



## Hazard Mitigation

Beginning in July of 2011, the District took on the role of the County Hazard Mitigation Coordinator. This position, required by the Federal government, is to work throughout the county to reduce identified and potential hazards and impacts including, but not limited to flooding, landslides, infestations (think beavers or emerald ash borer), earthquakes and many more.

The Coordinator has been working with communities on several grant applications, identifying potential threats to their infrastructure and assisting landowners and municipalities with the storms that we had in 2011. Many resource issues caused by major events are not identified for several years and many landowners are just now realizing the impacts.

There are many caveats that are to be dealt with when utilizing federal dollars and in many cases landowners are not eligible applicants. A municipality may apply on behalf of a landowner, but specific agreements need to be made prior to any application.

Through several of its grants, the District is working with highway departments to improve road culverts, stabilize ditches to reduce soil loss and reduce flooding impacts.

If you have any questions about Hazard Mitigation or are concerned with an issues, please feel free to contact the District.

## Warren County and Town of Queensbury MS4 Program

Warren County and the Town of Queensbury are regulated municipalities under the NYS Department of Environmental Conservation (DEC) Municipal Separate Storm Sewer System (MS4) Program. All municipalities regulated under the MS4 Program are required to implement Best Management Practices to control stormwater runoff. These regulations help protect and improve the quality of public waterbodies in more densely populated areas of the state. In addition, the regulations outline a large number of tasks which the municipality must undertake to be in compliance with these mandates. The six minimum measures (MM) which Warren County & the Town of Queensbury must undertake consist of the following:

**MM1:** Public education and outreach  
**MM2:** Public involvement and participation  
**MM3:** Illicit discharge detection and elimination

**MM4:** Construction site runoff control  
**MM5:** Post construction stormwater managmentgmt  
**MM6:** Pollution prevention and good housekeeping for municipal operations

### **Project Updates**

Currently the main focus for the Warren County & Queensbury MS4 Programs is storm sewer mapping and data collection within the MS4 boundaries. This includes stormwater conveyance from roads (drop inlets and ditching). All of the storm sewer data and GPS locations are mapped in ArcGIS software. We have finished data collection on all MS4 county roads and we are continuing to map MS4 Town of Queensbury roads. We are also working on public education and outreach through presentations for planning and zoning boards, and a stream cleanup day with a group from Queensbury Schools this spring.



## **Agricultural Environmental Management**

The benefits of being in the Agricultural Environmental Management (AEM) Program include professional assistance in farming with proper conservation practices which leads to increased production and decreased operating costs. Our AEM program offers free technical assistance to farmers and producers with the goal of promoting conservation for the land as well as improving production.

Agricultural operations that are eligible include: riding stables, green houses, hay fields, fruit, vegetable or tree farms, forestry, horses, dairy or other pastureland and vineyards. All farms, large or small, are encouraged to join our AEM program. Being part of the Warren County AEM Program qualifies you to receive assistance in developing a plan that is best for the farm and resources.

### **Program Updates**

Our most recent project includes assisting a small farm to start up and are currently working with the farmer every step of way. This includes a site visit to plan long and short term goals including fruit, nut and Christmas trees, goats and swine, spring development, fencing, and the development of a rotational grazing plan. We are also mapping each section of the farm using a Global Positioning System, plotting the data on for the farmer's reference for field use, acreage, soil type and overall management of the farm.

For more information visit- <http://www.warrenswcd.org/reports/2009-2012%20AEM%20Strategy.pdf>.



## **Sewell Street Stormwater Improvement Project**

The District assisted the Village of Lake George with Sewell Street, where stormwater has been an issue for many years. A significant amount of stormwater drains from State Route 9, west down Sewell Street to a low point in the road near Shoreline Boat Sales & Services.

The first part of the project was to intercept the stormwater running off Route 9 onto Sewell Street. By installing a catch basin and three drywells located 130' west of the intersection of Sewell Street and Route 9. The catch basin was installed on the north side of Sewell Street conveys stormwater to the three drywells located on the south side of Sewell Street. The catch basin and three drywells capture the stormwater from both sides of the crowned road and the roadside ditch drainage coming off Route 9.

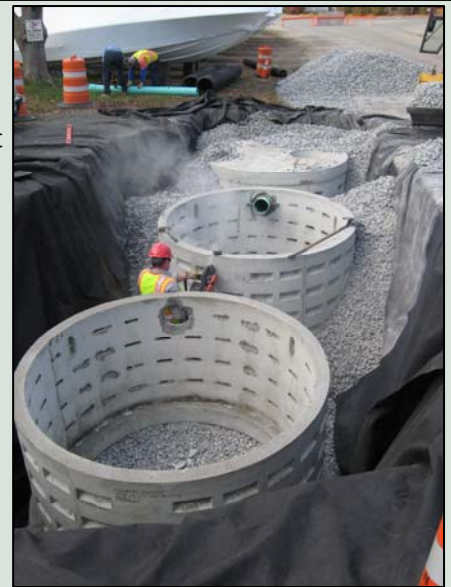
The second phase of the stormwater project was to deal with the standing water at the low point on Sewell Street. The cause of the flooding during a storm was the crushed pipe in the storm sewer system preventing any drainage adjacent to the parking lots along the road between Cortland Street and Dieskau Street.

The Sewell Street stormwater infiltration system was installed successfully, the flooding of Sewell Street nicknamed "Lake Sewell", is no longer an issue. The upgraded infrastructure is conveying stormwater as planned and is keeping the high traffic location safe for travel. The major benefits of the upgraded stormwater system include ease of maintenance to keep the system functioning properly and the stormwater clean. It is important to have stormwater treated before it outlets to the forested area, which then flows to a wetland and eventually West Brook. By settling and infiltrating stormwater, a significant amount of nonpoint source pollution is treated before it can impact Lake George.

This project was funded by the Lake George Park Commissions through a stormwater improvement grants program.



*Paved swale to convey stormwater*



*Three drywells for infiltration*

## A Few Other Conservation and Recreation Efforts...

**Contractors Erosion Training:** The District organized and conducted six Erosion and Sediment Control and Stormwater Management workshops for contractors in 2012, totaling over 200 contractors in attendance.

**Warrensburg Football Field & Bolton Soccer Field:** The Town of Warrensburg is nearly done with its junior football field and plans to have it completed up by springtime. The District assisted with the layout, design and erosion control.

The Town of Bolton will have a soccer field finished this year and with the help of mother nature and the rain, will be able to play on it this fall. The District has partnered with the Bolton Highway Department to undertake the layout and construction of the field, increasing the recreational opportunities of the town.

**Town of Stony Creek Nature Trail:** Significant progress has been made for the Town of Stony Creek's *Dean Farm Trail*. This past year the District assisted the Town of Stony Creek with planning and construction of the trail, along with other community volunteers. This trail is being funded through a state grant that the Warren County Planning Department received.

**Reservoir Cleanouts:** The District once again assisted the Towns of Hague and Bolton and the Lake George Association with their sediment basins' maintenance. The District coordinated delivery of the long reach excavator, the movement from basin to basin, oversaw the dredging and implemented the sediment controls. Nearly 1,200 yards of material was removed from seven sites.

**Warrensburg Outfall Mapping:** District staff drove or walked each of the town, county and state roads within the urbanized area of Warrensburg in order to document the stormwater infrastructure and drainage patterns. A GPS unit was utilized to record site specific information and locations. Photographs were taken to document any areas of concern and for future potential retrofits.

The data collected was mapped to display the information. A total of 262 points were collected: 169 drop inlets, 62 drywells and 31 direct outfalls to a waterbody. The Town of Warrensburg Stormwater Mapping Report lists priority stormwater locations with recommended retrofits and we look forward to assisting Warrensburg with future stormwater improvements.

## Schroon Lake Consolidated Funding Application—Approved!

On behalf of the Town of Chester, the District developed an application for funding through the NYS Consolidated Funding Application program for the Schroon Lake Watershed. In November, it was announced that this application had been approved for \$300,000 out of the requested \$330,000! This CFA award will work numerous projects, but most of the funds will be dedicated to stormwater remediation. Other aspects of the grant include invasive species management, watershed stewardship activities, watershed education and on-site waste water treatment systems.

This is a partner driven grant that includes: Warren County SWCD, Essex County SWCD, The Town of Chester, Horicon and Schroon, the East Shore Schroon Lake Association, the Schroon Lake Association and many other community organizations.

## New Office Staff

In 2012 the District had several staff vacancies and we were fortunate enough to hire two tremendous employees—Bob Bombard and Nick Rowell.

Bob is well known to many people in the conservation arena as he worked for the NYSDEC and for the Darrin Freshwater Institute. Bob is the Water Resources Specialist and has been working on Schroon Lake, stormwater, fish passage culverts and many other projects.

Nick has a background in environmental science and a CADD certificate degree. He has been spending a tremendous amount of time stormwater mapping for our MS4 programs, working on a number of stormwater reports and many field related projects.

Both of them are willing to do what needs to be done to get a project completed correctly and we are extremely pleased to have them here.



*Nick Rowell*



*Bob Bombard*

## **Halfway Brook Stormwater Improvement Project**

In 2011 a Terre Kleen Stormwater Improvement System was installed on Route 9 in the Town of Queensbury across the street from Price Chopper. The system installed was a part of the Warren County Soil and Water Conservation District's *Halfway Brook Stormwater Abatement Project*. The system captures 56 acres of stormwater drainage and pollutants from direct discharge to Halfway Brook.

The Terre Kleen System is a hydrodynamic separator that has been used in the drinking water industry for many years to remove suspended solids and floatables. The Town of Queensbury Highway Department has done an excellent job at maintaining and inspecting the system. In June of 2012, Warren County SWCD and the Town of Queensbury used a vacuum truck to perform the necessary maintenance extracting the suspended solids and collected sediment from the system. Approximately 10 to 12 cubic yards of sediments was removed from the system. While maintenance was being performed, all flowing water through the system was diverted to prevent turbid water from entering Halfway Brook during maintenance.



## **The 2012 Warren County Envirothon**

The Warren County Envirothon hit a milestone in 2012. It was the first time ALL Warren County high schools were able to attend this event. Over 100 students had competed in the event. The winning team from Johnsburg Central School went on to compete at the State Envirothon at Hobart and William Smith Colleges in Geneva, NY.

This program tests the student's knowledge in the areas of Soils, Forestry, Aquatics, Wildlife and a Current Issue. At the state level, students have to deliver an oral presentation to a panel of judges comprised of professionals from across the state. The new goal for 2013 Warren County Envirothon is to see each school bring three teams which would fill the program to capacity.



## **District Fish and Tree Programs**

The District's tree and shrub program was again a great success! Blueberries topped the charts followed by white cedar. Bluebird, bat and wood duck houses continue to sell well. The District also has fertilizers tablets, tree mats and stakes, wildflower mixes and bird houses available throughout the season. Thank you for your support.

2012 represented the first year the District began selling fish in the fall as well as the spring. This Bi-annual sale met with great success. The District offers Brook and Rainbow Trout, Largemouth bass and minnows. The fall sale allows new pond managers to really assess the productivity of their ponds after a spring stocking and adjust species or bait accordingly. Sometimes simple things can be overlooked that have a big impact on a pond. Things to look for include; presence of predators, cover, temperature fluctuations, water level/pond depth and or food sources. New in 2012, the District offered minnow shelters (brooders) to provide baitfish some protection from predation, while giving them a place to reproduce. For more information on this program or if you have pond question, please contact our office.



## **Hydroseeding for Erosion and Sediment Control**

The District worked in seven of its county municipalities, last season hydroseeding roadside ditches that had been established or recently cleaned out. Nearly 300,000 square feet of area was covered. Over this nearly two miles of ditch seeding, the District has been utilizing wood mulch with tackifier and 0% Phosphorus fertilizer to enhance the program's effectiveness. In years past, the paper cellulose mulch used with a tackifier, did not hold up to rain events as well as the wood mulch that is currently used. Small rain events after applications have little to no effect on our projects. Once established, grass reduces erosion rates up to 90%!



## Conservationists of the Year

**Bill Lupo** has been a longtime supporter of the District and has always been very proactive in his management of programs that the District is associated with. Bill takes a common sense approach to resource issues and looks to develop solutions, rather than get bogged down in the minutia of a perceived problem.

Due to his extensive knowledge of the programs, Bill is able to provide accurate information. With his support and guidance the District has been extremely successful in implementing many water quality improvement projects and his encouragement of the District staff has expanded their technical abilities leading to a better standing in the eyes of other agencies.

Bill's willingness to assist communities, agencies, partners and landowners is a great example of his respect for conservation. It is safe to say that this District would not be as successful if we did not have the support and confidence from Bill.

We extend our thanks and gratitude for his friendship to the District and his commitment to the conservation of resources for the people of Warren County.

The partnership that has developed between **Warren County** and the District is tremendous enabling us to assist the constituents and municipalities of Warren County in dealing with natural resource issues. This type of working relationship that exists between the County and District is not seen in many other counties. District staff interacts with various county departments and employees on a weekly basis. This may consist of a question about proper purchasing procedures, assisting the DPW with a question about stream information, the County IT department dealing with our computer issues or meeting with the mechanics at the County Garage about the needs of our vehicles.

The relationship is mutually beneficial to all involved and aids in addressing many resource issues in the county. We look forward to continuing to strengthen this relationship and to be able to assist the county in any way we can.



*Bill Lupo (r)  
Frank Thomas, SWCD Chairman (l)*



*Paul Dusek, Administrator (r)  
Frank Thomas, SWCD Chairman (l)*

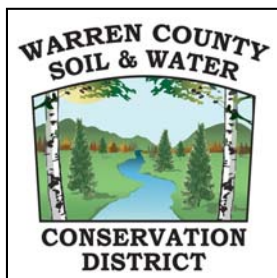
## Municipal and Landowner Assistance

In a nutshell, the Warren County SWCD offers conservation assistance to anyone in Warren County; including landowners, businesses, not for profits, municipalities and many others. We are able to offer assistance through the support and working relationships that we have with our partners. In a day we may be on a site with a landowner providing technical assistance regarding streambank stabilization and permitting, then move to a meeting on stormwater requirements for communities and then talking about wildlife habitat improvement to a garden club. We are happy to be able to reach out to various groups and provide information and assistance.

However the District is much more than just providing advice. When developing grant applications, we look to the communities to provide input as far as what their resource conservation issues may be and see if we can include them into an application for funding. We develop our own grant applications and when funded, actively work on them in the field with the partners. Examples of this can be seen in the Glen Lake Stormwater section and the Wildlife Passage section. We actively run machinery such as plate compactors, chainsaws, hydroseeders and power mulchers and even excavators on our projects. We are also good at using shovels and rakes!

The Warren County SWCD is non-regulatory and was created to provide technical assistance. We attempt to provide you with the most accurate conservation advice we can, and if we can be of assistance, we would encourage you to contact us. We provide periodic updates on projects and programs at our website [www.warrenswcd.org](http://www.warrenswcd.org) so check us out and see what we may be able to help you with.





394 Schroon River Road  
Warrensburg, NY 12885

## *By The Numbers...*

- The Warren County Soil and Water Conservation District has been in existence for 56 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 2012 operating expenses were \$405,123.
- Our 2012 funding allocation from Warren County was \$268,000. The remainder of the District budget comes from competitive grants and some reimbursement from NYS.
- The District has received over 62 grants in the past eleven years, totaling over \$4 million dollars. These dollars go directly to conservation projects and programs for Warren County.
- The District fielded over 1,500 calls related to conservation issues in 2012.
- SWCD staff conducted more than 300 landowner and municipal site visits in 2012 related to conservation issues.



### **2013 SWCD Board of Directors**

Frank Thomas - Chairman  
Ron Montesi - Vice Chairman  
Evelyn Wood  
Mark Brown  
Tim Costello  
Charlie Maine  
George Ryan

### **District Staff**

Jim Lieberum, District Manager  
Rhonda Jarvis, Office Manager  
Dean Moore, Sr. District Technician  
Bob Bombard, Water Resource Spec.  
Nick Rowell, Nat. Resource Spec.

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*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](http://www.warrenswcd.org) or "Like Us" on Facebook at [www.facebook.com/pages/Warren-County-Soil-and-Water-Conservation-District/300484853328896](https://www.facebook.com/pages/Warren-County-Soil-and-Water-Conservation-District/300484853328896)