

Whippany River Watershed Action Committee



Visions for the Whippany Watershed

2011/2012 Annual Report

Let's Build a Rain Barrel

Veteran's Memorial Park in Parsippany was the sight of WRWAC's first rain barrel workshop on May 7, 2011, a bright Saturday Spring morning. Pat Rector, Environment and Resource Management Agent for Rutgers Cooperative Extension of Morris County, supplied the barrels for just \$60 each and provided step by step instructions. Attendees planned to use the rain water on their home vegetable and flower gardens. The rain barrels hold about 50 gallons of water, which is collected from rooftops by connecting to downspouts. According to Rutgers' Water Resource Program, an 800 square foot roof can provide 500 gallons of water during a one inch rainfall. Collecting rain water can help prevent non point source pollution by capturing run off before it hits the streets and waterways. WRWAC and Rutgers will hold another workshop in the Spring of 2012.



Photo by A. DiBartolo

Annual Spring Whippany River Clean Up

Boy Scout Troop #155 of Whippany, NJ was up early on a cold April Saturday morning ready to drag out winter's trash from the river by Hanover Township's Central Park on Eden Lane. Assisting were several WRWAC members, and many large bags of debris were removed from the area, as well as balls of all sizes, from a ping pong ball to a bowling ball. The troop is sponsored by American Legion Post #155, also of Whippany. Jim Baranski, chairman of WRWAC's Outreach and Education Committee, arranged the event. WRWAC continues its tradition of community clean ups with local groups.



Boy Scout Troop #155

Photo by A. DiBartolo



Dispose of oil and other petroleum products in approved facilities

The vision of the members of the Whippany River Watershed Action Committee is to continue to be a vibrant organization, known for getting things accomplished. With support from its members-town leaders, the Morris County Freeholders, and other stakeholders including individuals, businesses, and conservation groups the committee is committed to being a leader in watershed management and ensuring that the Whippany River is a valued, viable and well-managed natural resource for everyone.

Visions for the Whippany Watershed

Support and Funding in 2011

In addition to its member municipalities and the Morris County Freeholders, WRWAC receives partner support and/or funding from the following organizations:

New Jersey Department of Environmental Protection

Rutgers Cooperative Extension of Morris County

Rutgers Water Resources Program

County of Morris

New England Interstate Water Pollution Control Commission

Hacklebarney Chapter Trout Unlimited

The Watershed Institute Grant Program

Tiffany & Co.

Brookside Diner, Route 10, Whippany NJ

Boy Scout Troup #155



Whippany River Watershed

Action Committee

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The Board of Trustees are the member municipalities and are represented by their appointees.

2011 Board of Trustees:

Township of East Hanover

Borough of Florham Park

Township of Hanover

Borough of Madison

Borough of Morris Plains

Township of Morris

Town of Morristown

Borough of Mountain Lakes

Township of Parsippany Troy Hills

Morris County Board of Chosen Freeholders

Arthur Vespignani, Facilitator

Contact 973-886-7969

Mary O'Keefe, Administrator

Contact 973-428-6279

Education and Outreach Committee: Program Committee:

Jim Baranski, chairman, Hanover

George Van Orden, chairman, Madison

Rich Taubald, Hanover

Sal Iannaccone, Hanover

Amy DiBartolo, East Hanover

Brian Marshall, Mountain Lakes

Douglas Vorolieff, Morristown

Ralph Rhodes, Mendham Township

Len Cipkins, Parsippany Troy-Hills

Hank Sawoski, Morris Plains

Pat Rector, Rutgers Cooperative Extension

Executive Committee

Saverio Iannaccone, Chairman

James Baranski, Vice Chairman

Brian Marshall, Secretary

Amy DiBartolo, Treasurer

Margaret Adams, At Large

Richard Taubald, At Large

Whippany River Watershed

Management Group

The Whippany River Watershed Management Group is recognized by NJDEP as the entity representing the various interests within the Whippany Watershed whose purpose is to improve the condition or prevent further degradation of the watershed.

The Whippany River Watershed Action Committee is a 501(c)(3) non-profit grass roots organization whose members represent twelve municipalities and the Board of Chosen Freeholders. Established in 1999 as a result of the NJ Department of Environmental Protection's first watershed management program, the committee is responsible for implementing the Whippany River Watershed Management Plan.

Troy Brook Regional Stormwater Management Plan

This project assesses water quality, quantity and groundwater recharge issues related to stormwater in the Troy Brook watershed, a subwatershed of the Whippany River Watershed. This regional plan identifies problems and develops solutions in three municipalities, Mountain Lakes, Parsippany and Hanover Township. The management plan process started in 2002. Rutgers Cooperative Extension Water Resource Pro-

gram, with the Whippany River Watershed Management Group as a partner, performed the many steps to compile the plan and is now implementing stormwater management strategies throughout this watershed. Federal Clean Water Act funding through NJDEP made this project possible. For more information, check out <http://water.rutgers.edu/Projects/Troy/Troy.htm>

Troy Brook Subwatershed Mini Bus Tour

This was one event for which we didn't want clear skies, and luckily it rained for the participants who toured the Troy Brook Subwatershed on June 11th to learn about techniques to capture and treat stormwater run off. The tour was arranged and narrated by Pat Rector, Rutgers Cooperative Extension Environmental Agent.

The bus tour started at Parsippany-Troy Hills Municipal Building's Rain Garden that was installed two years ago, then proceeded to NJ's first Residential Cluster Rain Garden Project in the nearby Hills of Troy neighborhood. Tivoli Garden Apartment Complex was next, and Dr. Chris Obropta from Rutgers Water Resources Program explained the plans for slope stabilization and multiple rain gardens at sites throughout the area. Participants also toured the Normandy Parking Lot on Cherry Hill Road, Parsippany DPW yard, (described to the right) and the Parsippany Police Department project described on page 6.



These garbage trucks are parked in the Parsippany DPW parking lot, close to the Troy Brook.

Minibus on left.



With the new cascading rain gardens project, run off from the parking lot is filtered slowly through a planted swale and rip rap, filtering the stormwater before it flows into the brook.



Five rain gardens in the Hills of Troy neighborhood form a cluster for more impact. Filtering and filtrating stormwater helps the Troy Brook become cleaner.



Plantings include switchgrass grass that filters pollutants and hydro carbons from the soil.

Dr. Obropta of Rutgers explains the great amount of labor that went into this task, supplied from Parsippany DPW as well as volunteers.



Dr. Chris Obropta led the tour to Tivoli Gardens, explaining the job to the travelers preconstruction. Excited about the future outcome, interest for another tour next year was raised.



Turfstone pavers replace the dirt emergency driveway at the rear of the DPW building, slowing the stormwater runoff into the Troy Brook

Hackensack Eco Cruise From Laurel Hill County Park to Staten Island and Back

Participants on this cruise wished they brought sweaters even though it was one of the hottest days in July 2011. The difference in the temperature made the air feel 20 degrees cooler on the water as the two pontoon boats traveled down the Hackensack River into the Newark Bay, reaching as far south as Staten Island. WRWAC sponsored this trip once again learn about river restoration and non-point source pollution.



Chrissie & Meghan by Laurel Hill and Turnpike

photo by Amanda DiBartolo



Mallards in the Whippany River

Photo by John Deep

More highlights of 2011/ 2012

- Hank Sawoski and Rich Taubald continue to make presentations to community groups such as All Seasons Garden Club of Morris Plains and Bethel AME Church of Morristown
- Douglas Vorolieff, Jonathan Darwell, Buffy O'Brien, Marla Weetall, and Donna Bangiola continue geese deterrent and site aversion methods for goose control
- Brian Marshall is regularly updating Watershed Jeopardy for Earth Day in Lewis Morris Park and our June action committee meetings
- Brian Jacobus invited Art Vespignani to host the October 2011 Morris County Green Table forum "**Bioretention Basins – Cost Effective Stormwater Management The Native Way**". Speakers were Pat Rector of Rutgers Cooperative Extension and Stephen Souza, Ph.D. of Princeton Hydro, LLC.
- Art Catalusci from the County of Morris continues to inform and educate members about non-point source pollution prevention
- WRWAC had a info booth at Lake Parsippany Day in June 2011
- Watershed Ambassador Stephanie Queirolo has helped out by doing river assessments in the Whippany Watershed
- Len Cipkins introduced WRWAC to Facebook and Wikipedia; check us out!
- Andre Jensen continues to count geese at the various open spaces throughout the watershed, and also helps set up the tables with Mary O'Keefe before meetings
- Chairman Sal Iannaccone from Hanover has served since the beginning of WRWAC in 1999, along with George Van Orden of Madison and Hanover Health Dept., Amy DiBartolo of East Hanover, Ralph Rhodes of Mendham Township, Ted Largman of Morris Township and Art Vespignani, now the facilitator.

Support the Whippany River Watershed

Please join today with a tax deductible donation, receive a window decal and information on upcoming events.

() \$500 Gold Sponsor (name on sign) () \$100 () \$50 () \$25 () \$5 () Other _____

Send your check to: WRWAC, Inc. PO Box 223 Morristown, NJ 07963-0223

Name _____ email address _____

Address _____

The Whippany River Watershed Action Committee is a 501(c) 3 non-profit corporation and is registered with the

State of New Jersey Division of Consumer Affairs as a charitable organization.

We are organized for the purpose of preserving, protecting, and maintaining the land and water resources of the Whippany River Watershed.

Whippany River Trends Analysis Completed

In 2010, the Morris County Board of Chosen Freeholders funded the WRWAC Program Committee's Trend Analysis Sampling and Data Collection of the Whippany River. George Van Orden and the sampling team, including Ralph Rhodes of Mendham Township, Gary Annibal of Harding Township Health Department, Lee Piscitelli and Joanna Adamiak of Hanover Township Health Department and Peter Summers of Morris County Office of Health Management were able to complete the three rounds of dry weather sampling by the fall of 2011.

Three rounds of water quality data were collected at selected locations along the Whippany River for comparison to historical data collected under the same seasonal and weather conditions. The selected sampling locations included Lake Valley Road in Morris Township (13.3 miles upstream of the Whippany River confluence with the Rockaway River), Speedwell Avenue in Morristown (12.4 miles upstream of the confluence), South Jefferson Road in Hanover Township (7.9 miles upstream of the confluence), Melanie Lane in East Hanover Township (4.1 miles upstream of the confluence) and Edwards Road in Parsippany (0.3 miles upstream of the confluence). Samples were also collected upstream and downstream of Speedwell Lake in an effort to determine the rate of sedimentation (loss of suspended solids) to the lake. Trend analysis samples were collected on 8/11/10, 6/9/11 and 10/11/11. Samples were collected under dry

weather conditions. Water quality parameters analyzed include temperature, dissolved oxygen (DO), pH and conductivity which were determined in the field and carbonaceous 5 day biochemical oxygen demand (CBOD-5), total Kjeldahl nitrogen(TKN), ammonia nitrogen (NH₃-N), nitrite nitrogen(NO₂-N), nitrate nitrogen(NO₃-N), orthophosphorus (ortho-P), total phosphorus (Total-P), total suspended solids (TSS), total dissolved solids (TDS), total alkalinity, chlorophyll A, fecal coliform and enterococcus.

Dry weather conditions generally reflect the river's water quality impacts from point source pollution. These conditions also reflect the effects that both point and non-point pollution have on river sediments. Pollutants (i.e. suspended solids, phosphorus, organic nitrogen) which settle and accumulate in the sediments may be released (or their effects may be seen) over long periods of time in the water column under both wet and dry weather conditions.

The purpose of this study is to evaluate water quality over time to determine if improvements (as observed during our earlier trend analysis study – March 2003) are continuing. Water quality improvements observed over time during dry weather conditions most likely reflect upgrades made in wastewater treatment (publicly owned treatment works) and an active watershed management program within the Whippany River Watershed.

Morris County Freeholders Support WRWAC Program

In 2011, \$9000 was received by the county freeholders to support WRWAC's program. These funds are committed to project development within the Whippany Watershed. WRWAC Executive Committee seeks to leverage these funds in order to attract grant funding, using it as seed money to get projects started to the point where funding applications can be completed and submitted.

One such successful application is the Riverbank Stabilization Study at the Bethel AME Church in Morristown. Using the county funding, WRWAC was able to obtain a Watershed Institute Grant of over \$17,000. The study will create an action plan to eliminate the erosion caused by the Whippany River. After the study is done, WRWAC will seek fur-

ther funding from outside sources to get the job done.

WRWAC will use Morris County funding to host various workshops throughout the watershed, such as the Rain Barrel Workshop scheduled in May 2012, partnering with Rutgers Cooperative Extension Agent Pat Rector.

The committee is researching additional projects, and continues to encourage member municipalities to forward problem watershed areas to our attention so that we can work together to reverse any degradation of our valuable resource.

The committee is grateful to the county for continued support from the county staff as well, and look forward to many future successful joint projects.

Who owns a river?

Tree Boxes installed at Parsippany Police Department Parking Lot

Three Filterra units were installed into the existing storm water collection system in the fall of 2011 and will filter runoff from the one acre parking lot that flows into the Troy Brook. This is a green infrastructure storm water management technique designed to better manage and improve runoff. This demonstration project is funded by New England Interstate Water Pollution and Control Commission (NEIWPCC) and includes design, engineering and monitoring of improvements to storm water runoff at the Parsippany-Troy Hills Township Police Station and Municipal Court complex. WRWAC received a \$185,000 for this project in 2010. Additionally, installation of a fueling pad and an oil separator will be incorporated into the project. The entire work will be completed in June 2012.

The process is being filmed and documented by Rutgers and will be used as a green infrastructure demonstration project. Large impervious areas are commonplace throughout the highly developed portions of the Whippany River watershed and it is hoped that this project will be replicated.



Photos by Len Cipkins

Work on Pollution Control and BMP Grant Continues

Making full use of existing data and decades of past work, the Action Committee's 2008 NJDEP 319(h) grant's goal of properly identifying and prioritizing the sources of fecal coliform contamination responsible for some of the rivers' most significant impairments and the installation of Best Management Practices is almost complete. Sites at the Morris County Public Safety Training Academy and at the Morris View Nursing Home were selected for retrofitting existing retention basins and their conversion into bioretention basins. These improvements not only discourage geese from congregating on site, thereby reducing the amount of fecal coliform and coli transported to the river but plantings, regrading and soil enhancements also provide for increased recharge into the aquifer while eliminating the basins as mosquito breeding grounds. Subsequent to completion of the bidding process, a contract was awarded to Robert Wogisch Landscaping. The work was performed in the summer and fall of 2011. The project came in significantly under estimate. The WRWAC has been working with the NJDEP to apply the remaining funds to other projects within the watershed.



Photo by Virginia Michelin

Watershed Signage Program continues

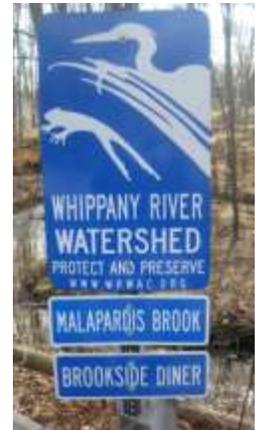
Rich Taubald of the Outreach and Education Committee is quickly becoming the expert of naming the tributaries of the Whippany River. Labeling them one by one he uses USGS quad maps to ensure accuracy before posting under watershed signs. Rich has already identified Malapardis, Pinch Brook, Watnong, Troy and Black Brooks, as well as Humphrey's, Eastman and the North Branch of the Whippany River. These tributaries and the Whippany flow into the Rockaway River in East Hanover, and then flow to the Passaic, a major source of industrial power in the 19th century. Today it is a major source of drinking water for numerous communities in northern New Jersey.

This sign represents the wildlife found in

the river, on its surface and along its banks. It is meant to make people aware of the river's meandering ways as it flows through almost 70 square miles of Morris County. Its motto "Protect and Preserve" is a reminder that preserving this valuable resourceful is a responsibility of all the people who drive or walk along (and over) this river on a daily basis.

Businesses are invited to sponsor any sign. For more information, contact info@wrwac.org.

Tiffany & Co. and Brookside Diner have contributed this year to our sign sponsorship program. The funds go to continue our work in the Whippany River Watershed.



Brookside Diner, located on Route 10 West in Whippany, sponsors this sign by the Malapardis Brook.

Photo by Rich Taubald



Speedwell Lake and Martin Luther King Blvd, Morristown after Tropical Storm Irene August 28th 2011 Photos courtesy of Donna Bangiola

Guest Speakers in 2011

March: Art Catalusci, County of Morris, Engineering Division "Illegal Connections and Discharges—Pollution Prevention Awareness"

April: Pat Rector, Rutgers Cooperative Extension of Morris "New England Interstate Water Pollution Control Commission Grant" regarding the Parsippany Troy-Hills Police headquarters parking lot retrofit with Filterra units

May: Jim Baranski, Urban Watershed Forestry

September: Art Vespignani, In Depth Review of 2011 Projects in the Whippany Watershed

October: Barry Levitt, Levitt's LLC, Parsippany "Trends in the Lawn Care Industry"

The Action Committee holds nine public meetings a year at the Morris County Library on the first Wednesday of the month at 5:45 PM. Meetings are not held January, July and August.

