

North Jersey Resource Conservation & Development



North Jersey RC&D

2008-2009 Annual Report

North Jersey RC&D serves and is sponsored by the Freeholders and Soil Conservation Districts of Hunterdon, Morris, Somerset, Sussex, Union, and Warren Counties. Through partnerships with municipal, state, and federal agencies, as well as many private entities, the North Jersey RC&D Council develops and manages programs and projects that promote the improvement and wise use of the region's human and natural resources.

Our Mission:

To facilitate the transition to sustainable use and protection of the region's human and natural resources through partnerships, education and innovation.

Our Vision:

North Jersey RC&D will be a universally recognized and respected leader in advancing natural resource conservation and building partnerships throughout the region.

Current Area Plan Goals:

- Goal 1:** Improve water quality through use of appropriate agricultural best management practices
- Goal 2:** Improve water quality and quantity in the region
- Goal 3:** Protect and improve riparian corridors through the implementation of stream restoration techniques
- Goal 4:** Sustain the agricultural industry by implementing programs which enhance farming operations and economic viability
- Goal 5:** Promote the proper use and maintenance of onsite wastewater treatment systems, including alternative designs and use of new technologies
- Goal 6:** Promote natural resource management on publicly owned land
- Goal 7:** Improve the region's ability to maximize the use of its human and economic resources

History:

North Jersey RC&D formed in 1972 as the Sussex – Warren RC&D. In 1988 the area expanded to include the counties of Morris, Hunterdon, Somerset and Union. At this time the Council also received recognition as a U.S. Internal Revenue Service 501 (c)(3) charitable organization not-for-profit corporation. The USDA Natural Resources Conservation Service provides assistance to North Jersey RC&D in the form of a USDA RC&D coordinator to the council. The Coordinator works closely with Council to develop and implement their area plans.

North Jersey RC&D has accomplished many valuable projects during the past thirty-seven years for the citizens within the six county area and looks forward to continuing to serve the region.

Agricultural Sustainability

Continued to manage the **River-Friendly Farm** program that provides technical assistance, recognition, and marketing options to farmers. Through the program 14 farms have been certified as River-Friendly and additional farms are working toward meeting the River-Friendly criteria. Through the implementation of the Variable Source Area (VSA) model, hydrologically sensitive areas have been identified and targeted for outreach to implement best management practices.



Bruce and Beverly Oliver, owners and operators of a River-Friendly Farm

With funding from an NRCS Cooperative Conservation Partnership Initiative grant and matching funds from the New Jersey Water Supply Authority, RC&D has worked with project partners and is nearing completion of a **Riparian Buffers on Agricultural Land in the Raritan Basin**

plan. Over the last year we developed a GIS model to determine priority areas for buffer placement. The model uses soil erodibility, runoff potential, wildlife habitat, and impervious surface to assess the priority for buffers. A questionnaire for agricultural producers and landowners was developed and is being utilized to understand concerns and barriers to buffer implementation. Based on the results from the questionnaire, project partners started to research and evaluate potential funding sources that could be utilized in the project area. The final project report will be completed in the next fiscal year. The riparian health analysis model was submitted and chosen for presentation at the 2009 Watershed Science & Technology Conference in September 2009.

Water Resource Protection



Continuing to work on a **stream restoration projects** through a Wildlife Habitat Incentive Program Contribution Agreement by installing riparian forest habitat along waterways in the Upper Delaware and Wallkill River Watersheds. Steps necessary to complete four buffer projects this year included designing the buffer, securing plant material and coordinating volunteers to plant the trees and shrubs. A buffer project was completed along the Musconetcong River in Mansfield Township Warren County. The project involved planting 45 trees and 155 shrubs, with the help of volunteers. Another buffer project was completed on the Clove Acres Lake in Sussex Borough Sussex County. The project involved planting 8 trees and 65 shrubs, with the help of community volunteers. An additional 100 shrubs were planted along the Wallkill River in Station Park to complete work in Phase 1 of the buffer restoration. A small buffer was planting at the Musconetcong Watershed Association River Resource Center, new watershed association headquarters in Asbury Hunterdon County along the Musconetcong River. At this buffer 9 trees and 42 shrubs were planted with the help of watershed association members.

RC&D buffer planting along Musconetcong River in Morris County after recently removing the Grundyke Dam, September 2008. Beth Barry, Executive Director for the Musconetcong Watershed Association, and her young volunteer help to plant trees and shrubs.

Two Watershed Management initiatives continue:

The first is in the **Musconetcong Watershed** where RC&D staff is continuing to work on developing a Watershed Restoration and Protection Plan. Additional water quality monitoring data was collected in summer 2008 and May 2009 targeting coliform bacteria contamination. This sampling event included additional samples along the tributaries with the highest fecal coliform results in the two subwatersheds of concern. The additional water quality monitoring coupled with the a higher level analysis using Microbial Source Tracking (MST) at all 18 sites helped to further bracket the sources of coliform contamination. From these water quality results seven more additional sampling sites were located for analysis in August 2008 and six more sampling locations were further identified for sampling in May 2009. All thirteen new sites became areas of concern when the MST results clearly indicated coliform contamination from human and bovine sources. Thus far 24 different sampling locations have been identified since the onset of this project all with the



Musconetcong Watershed Project: Locating and documenting water quality sampling location along Turkey Hill Brook, Bethlehem Township Hunterdon County, Summer 2008

purpose of narrowing in on the potential sources of fecal coliform contamination to the watershed. Other project tasks accomplished this year included meeting with and sharing the water quality data results with the five municipalities' in the project area. Additionally progress was made on an agricultural implementation project in the project area that would include constructing a stabilized cattle crossing, planting a riparian buffer and fencing along the Brook.



Rutgers Cooperative Extension Water Resources Program Associate collecting water quality sample sfor fecal coliform bacteria analysis along a tributary to Musconetcong River in Warren County



Trout Unlimited volunteers planting trees and shrubs along tributary to Musconetcong River at one of the North Jersey RC&D buffer sites. May 2009

The second project is focusing on a 30 square mile portion of the **Neshanic Watershed**. For this project, RC&D staff are using remote sensing and working with local farmers to document crop rotations and best

management practices currently in use within the watershed. This information was incorporated into the Soil and Water Assessment Tool (SWAT) model, and presented at stakeholder meetings. The model will be used to project water quality improvements as well as cost savings if alternative practices are used. Discussions with local farmers have identified a need for manure management options for small farms that must transport their manure off-site. As a result, planning is underway to determine the feasibility of a regional manure composting facility in central New Jersey, and education and outreach is ongoing to augment current manure composting activities.

Agricultural property within the Musconetcong Watershed project study area. The Project Team is working with the landowner/operator to implement best management practices on farm to help improve tributary water quality.





Grace Messinger—North Jersey RC&D, Dave Derrick—US Army Corps of Engineers, and Linda Peterson—NJ Natural Resources Conservation Service

The Walnut Brook Streambank Stabilization Working Workshop held June 22 to 26th in Raritan Township Hunterdon County. At this working workshop 40 volunteers had an opportunity to assist with installing various innovative bio-engineering and bank stabilization practices along 720 feet of eroding banks of the Walnut Brook. On site instructors included engineers from the U.S. Army Corps of Engineers and the Natural Resources Conservation Service. This project included installing longitudinal peaked stone toe protection, rock vanes, locked limbs and locked logs, keyways, grade control, live willow and sycamore cuttings into the banks, single stone bendway weirs, smooshed rip rap and over 100 native trees and shrubs along the newly stabilized streambanks. About 980 tons of rock were placed in and along the stream; 1,500 live willow and sycamore cuttings were planted; and 536 hours of volunteer assistance was donated to help stabilize the severely eroding banks of the Walnut Brook.

Continued to plan and to work on the **Walnut Brook Riparian Restoration** project. The project received permitting approval from the New Jersey Department of Environmental Protection Land Use Regulation Department in July 2008. Potential contractors bid on the stream and wetland construction projects. Through the bidding process it was recognized that additional funds would be needed to continue with the project. RC&D secured an additional \$369,000 to construct the streambank stabilization practices, create 3 acres of a wooded wetland and plant an eight acre riparian forest buffer. Additionally, project partners continued to provide donated services and materials to off-set the project's \$700,000 price tag. About 30 corporate volunteers and 15 community volunteers assisted with installing 660 shrubs along the brook this spring. The streambank stabilization construction occurred in June and the wetland construction will occur at the end of August 2009.



Meander #1 in November 2004 Looking Upstream

Walnut Brook Streambank Stabilization Project



Meander #1 installing LPSTP stone. June 2009



Meander #1 looking downstream after storm . August 13 2009



Morris Canal project, December 9, 2008

Continued work on our first fee-for service agreement to provide technical and administrative assistance to Warren County Planning Department as they explore project feasibility options for improvements to the **Morris Canal and the Lopatcong Creek** in Lopatcong Township. RC&D staff has had discussions with the Morris Canal Committee, National RC&D Councils (via the listserve), private environmental consultants, State Historical Preservation Office, and NJ Department of Environmental Protection (NJDEP) Land Use, with regards to feasibility and funding opportunities. Although there are regulatory hurdles to overcome, a sense of optimism among all involved parties has led to further evaluation of the NJDEP Flood Hazard Rules. The unique amalgamation of cultural and environmental

Continued to work on the project, **Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources** in the Rockaway Creek watershed. Steps were made to share the Variable Source Area (VSA) hydrology mapping results with the municipalities in the project area. Based on municipal meeting results, adjustments to the maps were made. One adjustment being that if we want the municipality to implement land use policy changes that the model has to be analyzed for the entire municipality and not just the portion that follows the Rockaway Creek Watershed line. Several presentations about the overall concept of the VSA were made this year.



Project Team members in the Rockaway Creek Watershed collect field data (soil moisture) to verify modeling results . May 2009

Community Development

Over thirty sites have been evaluated throughout Warren County for improved rural fire protection through **dry hydrant** installation. Twelve of those sites have been approved and are currently in the design process. North Jersey RC&D installed the first dry hydrant on Mountain Lake in Liberty Township which will help serve over 4,000 residents. Additionally, four municipalities from Sussex County have expressed interest in dry hydrant installations. Our lofty goal for 2009 is to install a total of fifteen dry hydrants. Through this project, thirteen municipalities within two counties will have improved fire protection. Tens of thousands of New Jersey residents will benefit through the installation of these dry hydrants.



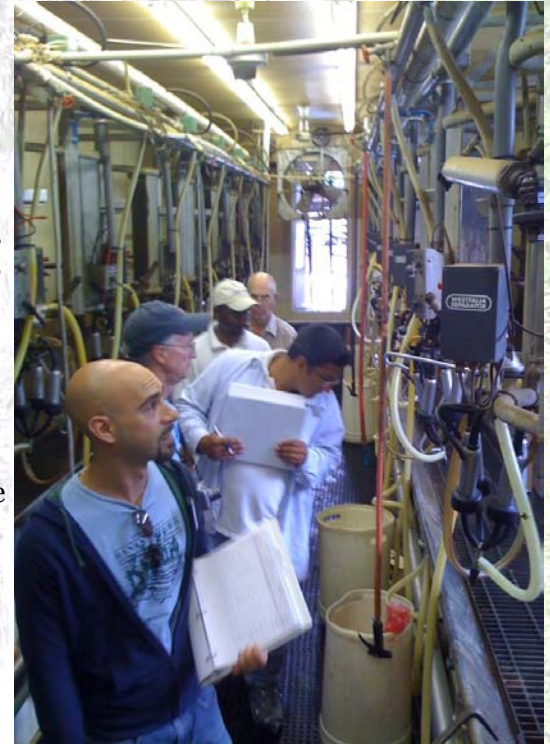
Mountain Lake Dry Hydrant Installation in Liberty Township, Warren County. March 2009

The North and South Jersey RC&D Councils teamed up to put on an event filled, interesting, and educational four day **Mid-Atlantic RC&D Conference**. This conference, held in Clinton, NJ from September 21 to 24, drew 112 people from the six Mid-Atlantic States. The Conference featured the world renowned speaker, Andy Lipkis of TreePeople; project highlights from 10 different Councils, information on renewable energy, soil quality, project funding, and how to better manage your council; a field tour, plus a locally produced, farm fresh dinner at the historic Red Mill in Clinton. At the award ceremony, New Jersey's own Frank Pinto received the award for "Outstanding 2008 Council Member" for the Mid-Atlantic region.

Community Development

In June, the North and South Jersey RC&D Councils trained five individuals to collect data for **Farm Energy Audits**. The training was performed by EnSave, Inc, who will process the data collected and create the final audit report for participating farms. This report will show farmers where and how they can reduce their energy use. The three day training focused on dairy and greenhouse operations, as these operations have the greatest potential for energy savings as a result of an audit. However, farm audits can be conducted on any type of farm.

Nearly 60 people attended the North Jersey RC&D's **Marketing Carbon Credits: Opportunities for Ag and Forestry** workshop held at the Pequest Trout Hatchery and Natural Resource Education Center in April 2009. The workshop targeted forest and farm landowners, agricultural producers, private consultants and agency staff. Topics that were covered included an introduction to carbon trading, an overview of the sources of greenhouse gases from agriculture, natural resource opportunities for carbon trading, and examples of individual experiences with carbon trading.



EnSave On-Farm Energy Audit training . June 2009



EnSave President, Steve Faust, collects information about this dairy farm from the Fulper family during the training session.

Continued hosting an **AmeriCorps Watershed Ambassador** at the RC&D office. For the past nine years the North Jersey RC&D has hosted one of the state's twenty Watershed Ambassadors. This past year the Watershed Ambassador assisted with implementing and maintaining our riparian restoration projects, conducting stream visual assessments, and conducted numerous educational programs using the Enviroscope watershed model.

Council Members	Sponsoring Organization	Staff	Title
Barbara Rosko	Sussex County Soil Conservation District	Grace Messinger	North Jersey RC&D Watershed Specialist
David Dech	Warren County Board of Chosen Freeholders	Jen House	North Jersey RC&D Watershed Specialist
Louise Davis	Morris County Soil Conservation District	Abigail Jones (resigned end of June)	North Jersey RC&D Ag Outreach Specialist
Eric Snyder	Sussex County Board of Chosen Freeholders	Michelle Rollman	North Jersey RC&D Administrative Assistant
Kenneth Bogen	Hunterdon County Board of Chosen Freeholders	Marykathryn Kopec	2008-2009 AmeriCorps Watershed Ambassador
William Engisch	Hunterdon County Soil Conservation District	Christine Hall	NRCS/North Jersey RC&D Coordinator
Frank T. Pinto Jr.	Morris County Board of Chosen Freeholders		
Tara Kenyon	Somerset County Board of Chosen Freeholders		
Ernest Thurlow	Somerset-Union Soil Conservation District		
Sandra Myers	Warren County Soil Conservation District		
James Lynch	Union County Board of Chosen Freeholders		

Statement of Financial Income and Expense

July 2008 through June 2009

Unaudited

Revenues and Other Support

Unrestricted	Contributions	54.31
	Workshop Income	21,254.86
	Interest income	840.95
	Membership dues	4,950.00
	Service income	1,837.50
	Miscellaneous Income	940.73
	Total Unrestricted	29,878.35
Restricted	Contributions	4,790.00
	Grant income	396,639.77
	Total Restricted	401,429.77
Total Support and Revenue		431,308.12

Expenses

General and administrative	Bank service charges	80.00
	Board & Council meetings	521.60
	Computer Supplies	1,348.26
	Dues and subscriptions	1,498.15
	Insurance	1,597.62
	Internet service	166.80
	Meetings and conferences	3,923.56
	Travel	102.43
	Miscellaneous	261.20
	Office supplies	41.97
	Postage and delivery	33.66
	Printing and reproduction	802.32
	Professional fees	7,789.67
	Personnel cost	1,942.65
	Services	468.00
	Supplies	466.48
	Total General and administrative	21,044.37
Council Project Expenses	Advertisements	519.30
	Contract labor	140,692.14
	Contract Supplies	52,326.61
	Insurance	1,275.85
	Meetings and conferences	2,422.28
	Other program cost	436.00
	Postage and delivery	574.58
	Printing and reproduction	1,525.00
	Professional fees	110.00
	Repairs and maintenance	104.90
	Personnel cost	179,722.74
	Supplies	16,789.55
	Travel	4,125.81
	Total Council Projects	400,624.76
Total Expense		421,669.13

Net Assets

9,638.99

Have A Project In Mind ?

Let Us Know !

Type of Assistance Provided:

- ◆ Technical
- ◆ Planning
- ◆ Grant Search &/or Writing
- ◆ Locating Project Partners
- ◆ Project Coordination
- ◆ Obtaining In-kind donations for project
- ◆ Project Facilitation



To Apply for Project Assistance or Learn More About North Jersey RC&D

Visit Our Newly Redesigned Website!

www.northjerseyrcd.org



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North Jersey RC&D is making a difference in the communities we serve by:

- ◆ Developing services and programs that meet local needs
- ◆ Providing assistance to small scale and beginning farm operations
- ◆ Addressing new and emerging issues in the communities we serve
- ◆ Facilitating partnerships and information sharing
- ◆ Linking research, education and conservation

YES! I want to support North Jersey RC&D and invest in my community.

Please accept my tax deductible gift of:

\$250+ _____ \$150 _____ \$100 _____ \$75 _____ \$50 _____ \$25 _____ \$ _____

Name: _____

Mailing Address: _____

City, State, Zip Code: _____

Telephone (optional): _____

Email (optional): _____

I am also interested in volunteer opportunities with North Jersey RC&D. Please send me more information

Checks can be made payable to North Jersey RC&D and mailed to the address above or you can make your donation by Credit Card by completing the following information:

Credit Card Number: _____ Expiration Date: ____/____

Billing Zip Code: _____ Signature: _____

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