

# Activity Report for our Conservation Partners

January - February 2009

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### Message From Pooh Vongkhamdy, State Conservationist



Greetings from the Rhode Island Natural Resources Conservation Service State Office. I am pleased to have been selected as the Rhode1 Island State Conservationist and am very excited about coming to Rhode Island. I look forward to working with NRCS' staff and conservation partners to further the agency's work in conservation where I am confident that my experience in various roles at NRCS will further enhance future conservation efforts and partnerships in Rhode Island.

Allow me to provide you with some detailed insight on my background. My career with NRCS began as a Soil Conservationist Trainee in college where I graduated with a Bachelor's Degree in Soil Science from the University of Wisconsin-Stevens Point. Upon graduation, I was promoted to a Soil Conservationist and then District Conservationist where I worked at several field and county offices in Minnesota. I also served as the Minnesota State Outreach Coordinator assisting field office staff to work with underserved and socially disadvantaged customers including Tribal governments. I was promoted to Assistant State Conservationist of Field Operations in Oklahoma to oversee 19 county field offices. I proudly received the Secretary of Agriculture's Annual Honor Award for Supporting the President's Management Agenda and Civil Rights due to my efforts providing outstanding outreach in conservation to traditionally underserved and limited resource customers including Native Americans and Asians.

I was born and raised on a family farm in Laos where I farmed rice, tobacco, silk worms, sugar cane, and vegetables. In the 1980s, I escaped from the Laotian communist regime and lived in a refugee camp in Thailand before immigrating to St. Cloud, Minnesota where I was sponsored by the Catholic Church and lived with a foster family. Growing up on a family farm, my cultural values are based on "living off the land".

As State Conservationist for Rhode Island, it is a great honor to work with land owners who see the importance and value of taking care of our natural resources.

Contact Us

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PHOUKHAM "POOH" VONGKHAMDY State Conservationist

Stillhouse Cove Cranston, RI

### **Upper Narragansett Bay**

Article by John Richard, Soil Conservationist

#### Project History - Phase I:

Stillhouse Cove, located in the City of Cranston in the Upper Narragansett Bay, is a salt marsh that was impacted by runoff from surrounding high density development and historic filling. Storm water runoff discharged into the marsh resulting in sediment accumulation on the marsh surface and the colonization of the sediment by the invasive plant, *Phragmites australis*.

In 2004, a major restoration project was conducted in the cove which included improving storm water management, shoreline protection, and salt marsh restoration. The salt marsh restoration included restoring 1.5 acres of valuable marsh habitat by removing approximately 1,400 cubic yards of material from the marsh and excavating new creeks into the salt marsh. Due to budget constraints, the material that was removed from the salt marsh was disposed of in the upper marsh area. This area is now being recolonized with *Phragmites australis*.

The Edgewood Waterfront Preservation Association (local spearhead) in coordination with the City of Cranston, the Natural Resources Conservation Service, DEM Mosquito Abatement Program, and Save The Bay is proposing a second phase of the salt marsh restoration and the implementation of an adaptive management plan for Stillhouse Cove. This Phase II of restoration includes relocating fill material in the disposal area and sections of the upper marsh to regain salt marsh as well as to excavate channels to facilitate further marsh restoration.

#### Current Project Scope - Phase II:

The project partners have developed an initial plan to be implemented with funding from the Natural Resources Conservation Service's Wildlife Habitat Incentive Program as well as in-kind services from the DEM Mosquito Abatement Program and the City of Cranston. Phase II of the Stillhouse Cove salt marsh restoration consists of excavating tidal channels for connectivity of salt water to the marsh, facilitating freshwater drainage from the marsh, and relocating a portion of fill that was placed on the marsh surface to regain salt marsh. Excavation of a tidal channel is proposed at the eastern side of Stillhouse Cove. Since Phase I of this project, the mouth has accreted a sand plume that interferes with tidal flushing of the marsh. To address this accretion, excavation is also proposed at the mouth of an existing channel at the south side of the cove. During Phase I, excavated material from the creeks was disposed of at the northwest corner of the cove. Phase II proposes to excavate the lower half of the material and stack it on top of itself, resulting in net gain of marsh area. Phase II is currently in the permitting process.

#### Lower Narragansett Bay by Justin Tuthill, Soil Conservationist

#### 2008 RI EQIP Oyster Restoration Complete

The inaugural year of the EQIP Oyster Restoration Program proved to be both challenging and rewarding. In May 2008, six oyster farmers began the restoration effort by obtaining shell fragments called "cultch" from a shellfish shucking house. By early June the cultch had been loosely packed in mesh bags and cleaned several times before it was delivered to a shellfish hatchery in Danvers, MA and placed into a large tank for the oyster setting process. Over the next week, oyster larvae were added to the tank and allowed to set (attach) on the shell. A week later the shellfish farmers picked up the newly set oysters on cultch and brought them back to Rhode Island where they were put into their individual oyster grow-out systems. Throughout July, August, and September, the oysters were periodically observed to monitor growth and check the success of the set.

Beginning in October 2008, site visits were conducted at each grow-out location to calculate and measure the number of live, healthy oysters and determine the total volume of oysters on cultch produced. These numbers were recorded for each shellfish farmer and cost-share payments were made in accordance with pre-determined size and volume guidelines. On average, restoration oysters are required to be 1" or larger and set on at least 2" shell before they can be transplanted to the final restoration site.

Subsequent to the oyster grow-out inspection, the shellfish farmers prepared their individual restoration sites by spreading clean cultch (comprised mostly of surf clam and oyster shell) as needed to stabilize soft substrates. These restoration sites are located in several water bodies including Bissell Cove, Smelt Brook Cove, Jenny's Creek and Ninigret Pond after approval for restoration by the appropriate landowners and State agencies. Once the restoration sites were prepped, the oysters were transplanted and placed in roughly 10ft. diameter piles, approximately 3 to 6 inches thick. Piles were placed at least 10 feet away from each other to create a dynamic reef-like habitat. The transplanting effort spanned from October 2008 to February 2009 with water temperatures ranging from 47°F to just above freezing. One transplant even required breaking through 4 inches of ice. The creation of these initial piles marks the end of the 2008 restoration effort. This spring, scientific monitoring will be completed by the shellfish farmers to measure over-winter mortality at their restoration sites. This data will be analyzed for growth trends and long-term sustainability of these newly created reefs. Additional monitoring will be completed in the Fall of 2009 to measure summer growth.



Six shellfish farmers raised and transplanted oysters in 2008.

Four restoration sites were identified and approved – Bissell Cove, Smelt Brook Cove, Jenny's Creek, and Ninigret Pond.

Approximately 31 cubic yards of oysters on cultch were produced.

Approximately 2,752,013 live oysters were produced with an average size of at least 1" per oyster.



Oyster larvae set on cultch



Cultch bags at shellfish hatchery



Transplanting oysters at restoration site

#### What to look for in 2009

Two additional shellfish farmers funded in 2008 will begin the oyster restoration project this spring. NRCS has received 10 applications for oyster restoration projects under the 2009 EQIP program. If these applications are approved, an additional 7,000,000 oysters will be transplanted each year for the next three years.

### **Economics - Happenings**

by Reena Shaw, Economist

Recent changes in national policy will allow NRCS to provide payments to clients for forgone income when agricultural production is adversely affected from implementing a conservation practice. We are currently working toward incorporating forgone income into the data sheets and payments for establishing pollinator habitat through such practices as Conservation Cover, Crop Rotation, Field Border, Hedgerow Planting, and Filter Strip. Additionally, we are adding forgone income to Pasture and Hayland Planting for deferred grazing; Transition to Organic Production for production losses during the transition period; and Residue and Tillage Management. The deadline to add forgone income to practices for the FY 2009 Practice Payment Schedule is March 6, 2009. We will be assessing other conservation practices for the potential to add forgone income as part of the payment to clients in FY 2010.

These changes will be presented at the next State Technical Committee meeting. We are always seeking new data sources for our practices and encourage our partners to view the data sheets for the Practice Payment Schedule (PPS) and the PPS spreadsheet. Contact Reena Shaw, State Economist, with any cost data for the practices listed.

The FY 2008 PPS can be viewed at:

http://efotg.nrcs.usda.gov/treemenuFS.aspx, Section 1, Item C2 Cost data, and 2 Conservation Practice Cost List, 2008 Practice Payment Schedule and Item D. Cost Data Sheets FY2008. The FY 2009 PPS will be posted to efotg shortly after the March 6, 2009 deadline.

#### Programs - Update

by Michael Moorman, Assistant State Conservationist - Programs

After receiving record breaking response for EQIP and WHIP, the field staff is working through over 160 EQIP and 40 WHIP applications.

The ranking deadline was extended on two different occasions to allow for the final program rules to be published in the Federal Register. The latest deadline for applications was March 13, 2009.

The Food, Conservation, and Energy Act of 2008 (New Farm Bill) has several new requirements for additional targeted funding groups. These have been identified as Historically Underserved (HU). This designation is represented by groups previously identified as Limited Resource, Beginning Farmer/Rancher, or Socially Disadvantaged. Ten percent of the total program funds allocated to each State must be set aside for the HU group at least through the first ranking. Once demand for funds from the represented group is assessed, a determination will be made to either provide additional funds to the targeted group or use targeted funds in the general sign up.

New initiatives that expand NRCS' scope of conservation responsibilities were also included in the Farm Bill. Language in the bill emphasizes



forestry and forest management practices, bringing forestry to the same level of importance as other facets of agriculture. Additional specific measures include: organic production and the transition to organic production from traditional agriculture; air quality as it pertains to reductions of emissions such as particulate matter, nitrogen oxides, volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment; and increased energy efficiency in production agriculture. All these changes require the agency to prepare technically sound standards and practices that can be used by applicants to achieve the conservation goals in a realistic, sound manner.

Another change allows the use of funds normally reserved for installation of cost-shared practices to be used for developing resource plans that will lead to actual conservation practices to be installed on the land. These plans, referred to as activity plans, can be acquired by applicants from certified planners in the private sector. NRCS will then provide reimbursement to the landowner for the cost of having the plan developed. Examples are forest management, nutrient management, and organic system plans.

Much work has been completed at the national and local levels to incorporate these new mandates in time for implementation in the latest round of conservation funding. The work is ongoing in many areas with the target of having these practices available for this year's applicants.

# Earth Team Volunteer Program (ETVP) - Update by Michelle Moore, Acting State Volunteer Program Coordinator

I have received multiple inquiries from people wishing to become volunteers with NRCS through the Volunteer Center of Rhode Island (VCRI) Web site. At this time, NRCS has decided to not accept new volunteers due to the current work load and the cost of a background check for each volunteer. I am hoping that there will be a future need for volunteers in field positions. I have included the VCRI Web site below for your convenience.

#### http://www.vcri.org/matriarch/default.asp

I am looking forward to sitting down with the district heads, RC&D, and our new State Conservationist Phoukham Vongkhamdy to further develop the volunteer program in these three area offices. There is much work to be done and many volunteers to add and assist in our mission.

# Outreach and Communications-Happenings by Walter Marshall, State Public Affairs Specialist

Three workshops were held for prospective customers highlighting program eligibility and changes resulting from the implementation of the 2008 Farm Bill. There was also an overview of the application process.

In addition, NRCS RI sponsored a booth at the Local Food Forum at Brown University where NRCS programs were marketed to local farmers, restaurants, and agricultural entities which promote commerce of locally grown food. A booth was also sponsored at the Tufts University Science and Technology Career Fair where three staff members discussed NRCS career opportunities in engineering, biology, and soil conservation with several students.

A presentation was conducted for the Rhode Island Coastal Resources





Management Council to brief members on the status of current joint partnership activities and potential conservation partnership opportunities in the future based on the changes resulting from the implementation of the 2008 Farm Bill.

A second presentation was held at the Harvest New England Agricultural Marketing Conference where the theme was to expand regional agricultural tourism business within the New England States. NRCS program information was disseminated to the attendees encouraging them to apply for program assistance.

NRCS staff worked with the Northeast Organic Farming Association (NOFA) where meetings were held to create an NRCS organic farming fact sheet to be marketed to farmers encouraging them to transition to organic farming practices.

Regarding press releases, four were published including FY 2009 National Conservation Innovation Grants, FY 2009 Farm Bill Funding (WHIP and EQIP), Gooseneck Cove Restoration Project (WRP), and Pooh Vongkhamdy's Welcome as Rhode Island State Conservationist. The releases were disseminated to the news media and conservation partners with noted coverage for each release in the Providence Journal. Conservation partners also included news release information on their Web sites and in their newsletters.

Outreach Event	Date	People Reached
NRCS Workshop (Chepachet Grange)	January 21	30
NRCS Workshop (The Nature Conservancy)	January 27	27
RI Coastal Resources Management Council Presentation	January 27	27
NRCS Workshop (Eastern District Office)	January 29	18
Local Food Forum	February 4	225
Tufts University Science and Technology Career Fair	February 11	300
Harvest New England Agricultural Marketing Conference	February 24	100
Total		727

### Personnel - Update

by Brenda Venable, Accounting Technician

#### **Personnel Actions:**

1. Phoukham "Pooh" Vongkhamdy was promoted to Rhode Island State Conservationist effective February 15, 2009.

Performance Update by Jackie Pashnik, Management Analyst

Statewide Performance Goals (as of March 2, 2009)

Performance Measures 2008	Program	Goal	Progress	Percent
Conservation plans written, acres	СТА			
Watershed or area-wide conservation plans developed, number	СТА			
	RC&D	6		
Soil surveys mapped or updated, acres	SOILS	1,400		
Cropland with conservation applied to improve soil quality, acres	СТА	250		
	EQIP	930	62	7%
Land with conservation applied to improve water quality, acres	СТА	5.054		
	EQIP	1,409	112	8%
CNMP written, number	СТА			
GIVINI WITHER, Hamber	EQIP			
CNMP applied number	СТА	2	1	50%
CNMP applied, number	EQIP	2		
Land with conservation applied to improve irrigation efficiency, acres	СТА	114		
	EQIP			
Grazing and forest land with conservation applied to protect and improve the resource base, acres	СТА	900		
	EQIP	1,600	118	7%
Non-federal land with conservation applied to improve fish and wildlife habitat quality, acres	СТА	482		
	EQIP	204	75	37%
	WHIP	935		
Wetlands created, restored or enhanced, acres	СТА	4,150		-
Farmland, forestland, and grazing lands protected by conservation easements, acres	FRPP	132		
Prime, unique, or important farmland protected by conservation easements, acres	FRPP			
Land and water resources benefited by RC&D projects, acres	RC&D	2,100		
Local businesses created in rural communities, number	RC&D	32		

<sup>--</sup> denotes not available.



Fig. 1 Fletcher Avenue near Plainfield Pike, Cranston, RI



Fig. 2 Fletcher Avenue adjacent to cemetery, Cranston, RI



Fig. 3 River Avenue, Johnston, RI

# Engineering - Update by Jade Nield, Civil Engineer

The final draft of the Pocasset River Watershed Plan was completed by engineering consultant GZA GeoEnvironmental, Inc. On February 20<sup>th</sup>, legislative representative Steve Keenan from Senator Jack Reed's Washington, DC office visited NRCS for a briefing update on the progress of the draft plan as well as a projected progress schedule of required action steps that will ultimately lead to congressional funding and implementation of the recommended practices to alleviate flooding within the watershed. Figures 1 through 3 illustrate the recent flooding in Cranston and Johnston which occurred on December 12, 2008.

The fish ladder structure at Atlantic Mills in Providence is complete. The contractor, New England Infrastructure, has some additional site work to be completed in the spring.

RI NRCS will host and sponsor a 40-hour Contracting Officer's Technical Representative (COTR) training the week of March 23-27. This training will provide key staff from RI, MA, and CT with the certification requirements to be a COTR.

Jade Nield, Assistant State Conservation Engineer, Meghan Walter, Hydraulic Engineer, and John Richard, Soil Conservationist attended a Science and Technology Career Fair at Tufts University on February 11<sup>th</sup> to recruit potential candidates for internships and vacancies as well as to promote NRCS nationwide. Meghan Walter, Hydraulic Engineer, continues to attend training in water resource engineering at Tufts University.

## Resource Conservation & Development (RC&D) by Chris Modisette, RC&D Coordinator

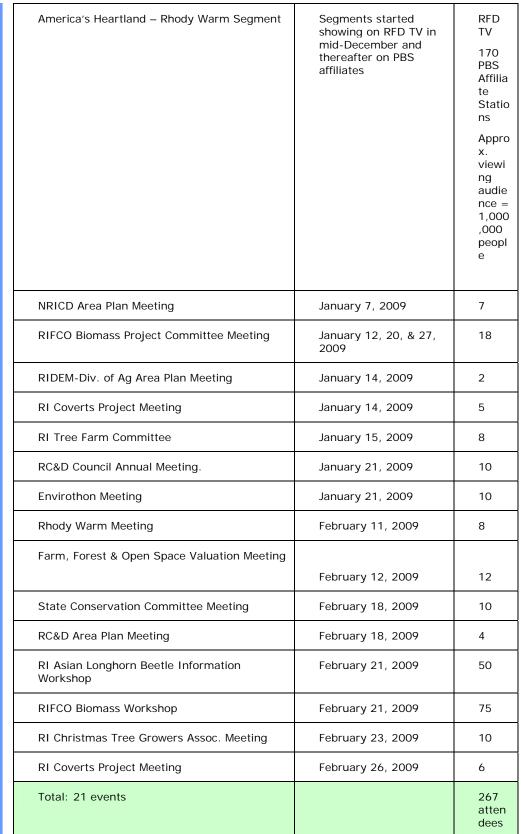
#### **RC&D Highlights**

Attendance/participation at 15 events with 6,007 attendees. (List below):



Event	Date	Atten dance
USFS Review of RIDEM's Urban & Community Forestry Program	December 3, 2008	6
RI Coverts Project Meeting	December 4, 2008	3
Eco-Assets Forest Investment Meeting	December 9, 2008	15
Rhody Warm Meeting	December 15, 2008	7
RI Foundation	December 16, 2008	1









#### **RC&D Council Capacity**

Area Plan Update:

The RI RC&D Area Council's existing Area Plan was approved in May 2004 for the period from June 2004 – June 2009. As such the RI RC&D Council completed the following activities in furtherance of this plan:

Held one-on-one meetings with Council Sponsors to get their input into the plan.

Developed and distributed a printed and on-line survey.

Scheduled four public workshops to solicit public input into the plan.

Held two Area Plan meetings with the Council.

Nancy Hess was approved as the new representative for the RI DOA Division of Planning on the RC&D Council with Paul Gonsalves continuing as her alternate.

#### **Rhode Island Woody Biomass Workshop**

Seventy-five people attended the Rhode Island Woody Biomass Workshop held on Saturday, February 21, 2009, at the Ponaganset Middle School in Glocester, RI. Generation of heat and electricity utilizing woody biomass and the issues surrounding the use of wood for energy was the subject of the workshop.

Eight workshops were completed where attendees viewed the new woodchip burning heating system recently installed at the new middle school serving the towns of Foster and Glocester.

Featured speakers included RI State Forester Catherine Sparks, NRCS State Staff Forester and RC&D Coordinator Chris Modisette and regional experts on air quality and market trends, as well as local residents involved in the inclusion of the biomass heating system in the construction of the Ponaganset schools. There were two tracks of half-hour presentations with one for the general public and a more technical presentation for wood industry professionals.

The workshop was sponsored by RIFCO, RIDEM, Tree Farm, and RI RC&D.



The RI Coverts Project is looking for woodland owners and other interested individuals who want to learn more about their forests and the wildlife that live in them in exchange for a commitment to share that knowledge with others in their community. RI RC&D President Harriet Powell announced that the 2<sup>nd</sup> annual RI Coverts Cooperator Class will be held at URI's W. Alton Jones Whispering Pine Conference Center, April 17-19, 2009.

This year, up to 20 woodland owners will be chosen to participate in the two and one-half day workshop that focuses on forest ecology and stewardship, wildlife management, and land conservation. The training consists of both indoor and field sessions, as well as informal time to



learn from fellow participants. In addition, each participant is given materials to take home. All costs of the seminar including meals, lodging, and reference materials are covered with the exception of the registration fee which is only \$100.00. In exchange, we will ask participants to return to their communities and share what they've learned with others and to become part of a state-wide coverts cooperator network. Participants will be supplied with reference materials that allow them to either answer questions on forest and wildlife management or direct the questioner to the proper professionals.

RI RC&D sees this as an opportunity to reach out to woodland owners and teach them how good forest stewardship can earn the woodland owner a long-term financial return and improve the health and productivity of both the forest and the wildlife that live in it. Ultimately, we hope that more woodland owners will participate in the project and serve to promote the sustainability of Rhode Island forests.

Anyone interested in participating in the program or who would like more information should contact Paul Boisvert, RI Coverts Project Coordinator, at: 401-568-1610 or e-mail sneforest@sneforest.necoxmail.com.

The RI Coverts Project is sponsored by the Rhode Island Resource Conservation & Development Area (RIRC&D), the University of Rhode Island - Department of Natural Resources Science (URI), the RI Chapter of the Ruffed Grouse Society (RGS), the RI Department of Environmental Management Division's of Fish and Wildlife (DFW) and Forest Environment (DFE), USDA-NRCS, and the RI Forest Conservators Organization (RIFCO).

### Capacity Building for the RI Christmas Tree Growers Association (RICTGA)

Faced with aging and declining membership, the RICTGA was concerned about the future viability of its organization. It questioned the ability of the group to continue. To address this concern, RICTGA requested assistance from the RC&D Council to reassess its mission and goals and improve its capacity to offer programs to members. In that capacity, we have helped to facilitate three meeting that focus on such issues as:

Rechecking its direction, vision, and mission.

Developing a strategic plan.

Setting long- and short-term goals and establishing priorities.

Coordinating planning and implementation activities.

Carrying out an effective information and education program.

Approximately half of its membership participated in one of the three workshops organized for input on the group's future. Additionally, a survey was developed and mailed to all members to solicit additional input from the group.

The process reenergized the group resulting in the following: Confirmation of its vision and mission Re-affirmation of the value of the organization and what it offers its members and the general public

Agreement to move forward with a newer, more focused and streamlined organization

New slate of officers to carry the organization forward

Prioritization of short-term goals will include:

Recruit nominees for election to the executive committee at its annual meeting

Maintenance and improvement to its high-quality Web site

Continue to provide national *Christmas Tree Magazine* to members as a benefit of membership

Annually hold one technical field meeting and one general meeting

Continue newsletter and investigate additional low cost marketing and outreach tools

Investigate methods of providing technical assistance to members

Revise and update by-laws

#### **RI Urban & Community Forestry Coordinator**

RIRC&D is working with the Rhode Island Division of Forest Environment (RIDFE) to coordinate the implementation of the Rhode Island Urban and Community Forestry Program. RC&D applied for and received a USDA Forest Service grant to hire an Urban & Community Forester to work with the State to implement its Urban & Community Forestry Plan.

Accomplishments include:

Processed America the Beautiful Grants (including over 150 mailers to promote the 2009 Grant)

Processed 2009 Arborist License Applications (including mailers to all Arborists who renewed for 2009)

Attended Asian Longhorn Beetle Workshops

Conducted field visits to review the trees planted for the America the Beautiful Grants and processed mailers for the Tree City USA Program and RI Tree Warden Appointments

Participated in US Forest Service RI Urban Forestry review meeting, attended the RI Arborist License review meeting with Cathy Sparks and Paul Dolan

Presented at the Rhode Island Asian Longhorn Beetle Informational Workshop at URI on February 21, 2009 at which there were approximately 50 attendees

#### RI River and Stream Continuity Project

The Draft Watershed Area Plans for the Beaver and Clear River watershed have been completed and are available for review and comments. To obtain a copy, please contact Kathryn Zuromski at Kathryn.Zuromski@ri.usda/gov or by calling 401-822-8877.

Inventory work with the Northern RI Chapter of Trout Unlimited continues in the Clear and Millers Rivers watersheds. To date, approximately 150 of these sites have been inventoried.

Inventory work is underway in the balance of the Pawcatuck watershed by the Narragansett Chapter of TU.

A list of 51 potential projects in the Upper & Lower Wood River, Queens, and Beaver River watersheds was provided to NRCS for discussions with Senator Jack Reed's staff who met with NRCS officials on February 20, 2009.

#### "Rhody Warm" - Surplus Wool Project

America's Heartland continues to run a half-hour segment on the Rhody Warm project. America's Heartland is a weekly magazine-style, half-hour public television series produced by PBS affiliate KVIE in Sacramento, CA that celebrates and profiles the people, places, and processes of our Nation's agriculture. The Rhody Warm piece will be broadcast by RFD TV or and 170 PBS affiliate stations which reaches an audience of approximately 1 million people. This has resulted in the sale of Rhody Warm blankets across the country.

#### **Pawcatuck Optimization Project**

Comments on the draft fact sheet were submitted in February. A revised timetable for future outreach, presentation reports, and fact sheets for Congressional leaders, conservation stakeholders (TAC), user groups, State and town officials, and the general public was developed and provided to NRCS.

### **Workshop Opportunity - Carbon Trading: Market Opportunities** for Agriculture

Carbon trading is a method to reduce global greenhouse gas emissions by allowing market mechanisms to find the most cost effective way to reduce emissions from a variety of sources. There are opportunities for farm, forest, and land management to participate in greenhouse gas mitigation.

Central New York Resource Conservation and Development, Inc. (CNY RC&D) with funding from Northeast Sustainable Agriculture Research and Education (NESARE) hosted a workshop called **Carbon Trading: Market Opportunities for Agriculture** on May 20, 2008. The objective of the workshop was to give agricultural educators a basic understanding of the complexities of carbon trading while providing them with a set of tools to educate farmers and landowners about carbon trading.

CNY RC&D is working with RI RC&D so that RI RC&D can offer a carbon trading workshop in Rhode Island. Our goal is to provide an overview of the knowledge and tools available to educate farmers, foresters, and landowners about this important topic.

Soil mapping at Bowdish Pond

Soil landscape for Quononchontaug and Ninigret Ponds

### Soils Program - Happenings

by Jim Turenne, Assistant State Soil Scientist

#### Soil Activity Report Jan-Feb 2009

#### **Ground-Penetrating Radar Investigation:**

Jim Doolittle, Research Soil Scientist/Ground-Penetrating Radar Specialist with the National Soil Survey Center in Lincoln, Nebraska assisted the soil staff with collecting soil data using GPR techniques. Some of the resource areas investigated included: conduct a fresh water pond survey to map the soils in Bowdish Pond in Glocester, collect transect data on loess thickness for Scio and Bridgehampton soils, and work in the Coastal Zone collecting data on marshes and barrier dunes. Information on GPR can be found at: http://nesoil.com/gpr/index.htm

#### **Subaqueous Soil Mapping:**

The MapCoast crew worked on describing and sampling the soil cores collected during the summer/fall field season. Ten soil cores were cut, described, and sampled for analysis at URI Pedology Lab. The NRCS soils staff worked on developing soil series and entering data into the NASIS data base.

Google Earth Demo: Maggie Payne developed an example of the MapCoast subaqueous soil data for Google Earth. The data was posted on the Google Earth Bulletin Board two days before Google announced the new Google Ocean program which provides data for ocean and seas. The data posted include a bathymetric image and soil landscape map for Quononchontaug and Ninigret Ponds, all soil description locations, and links to data for all areas in RI. To date the post has been viewed/downloaded by over 500 people. To view the file visit: http://bbs.keyhole.com/ubb/ubbthreads.php?ubb=showthreaded&Numb er=1196193#Post1196193

#### New RIGIS Soil Data Released:

A new release of the 1996 RIGIS soils data was released for download on the RIGIS Web site. The updated soils data include added/corrected interpretations, hyperlinks to soil map unit descriptions, layer (legend) files for creating thematic maps of the attribute, complete meta-data, and the ad-hoc spot symbols. To download the new soils visit: http://www.edc.uri.edu/rigis/

#### RI Completes First Subaqueous Soil Survey for a Fresh-Water Pond:

Bowdish Reservoir is a 250 acre shallow pond located in Glocester, RI in the George Washington State Park. Taking advantage of ice conditions, the RI soil staff used ground penetrating radar (GPR) to profile the subsurface of the pond and map the soils in the pond. Results of the GPR data showed that most of the pond consists of very deep (>45 feet in some areas) organic deposits (Histosols). Using the newly developed

taxonomic classification, the pond will be mapped as Frasiwassists and Terric Frasiwassists. A complete bathymetric survey is planned for this spring.

#### **Onsite Assistance and Outreach:**

Two on-site soil investigations were conducted to assist the planning and engineering staff. A soil talk on the RI MapCoast Partnership was provided at the Soil and Water Conservation Society meeting in Hadley MA and a talk to teachers about RI soils was also provided in late February.