



**US Army Corps  
of Engineers**®  
New England District

# Yankee Engineer

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*Congressman William Delahunt speaks to students of the Broad Meadows Middle School during the field trip.*

Photo by C.J. Allen

## Restoration project good for fish, wildlife, and the economy

**By Andrew Stamer  
Public Affairs Office**

Broad Meadows Marsh is getting a much-needed facelift decades after dredged material was used to fill approximately 110 acres of marsh and estuarine habitat.

Broad Meadows Middle School, which directly abuts the marshland, sits on top of some of the material that was dredged. Over the years, the current marsh has become a soupy mixture of dredged material, water and the common reed, *Phragmites australis*, creating a tangled mess and an area for the invasive reed to grow virtually uninhibited.

ited.

The site was used by the U.S. Army Corps of Engineers for dredged material disposal from the Town River in Quincy, Mass., as late as the 1950s. After half a century, and with the help of Massachusetts Congressman William Delahunt and cooperation from successive mayoral administrations in Quincy, a project to recreate the marsh has begun.

The city budgeted \$1 million for the cost sharing project, while Delahunt was able to secure an additional \$3.76 million in federal funding.

The project's restoration plan reads like a recipe: create 35 acres of high and low salt marsh (including chan-

nels), 20 acres of high marsh, and a dash (five acres) of bordering vegetative wetlands, said Catherine Rogers, an ecologist with New England District's Engineering and Planning Division. But it's as much a recipe for the restoration of a coastal area as an intricate puzzle being put back together.

"Salt marshes are known as nursery, nesting, shelter and feeding habitats for fish, birds, mammals, and shellfish," said Rogers.

This transformation from a severely degraded landscape to a healthy salt marsh will "increase the ecological value of the area, giving more variety in the number of species and animals overall

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# Yankee Voices

Ed O'Donnell, Navigation and  
Maurice Beaudoin, Construction/Operations



## Shop 'til you drop? Just be careful

You're probably shopping a lot more during the holiday season, so pay attention to your safety:

- **Pick the right time.** Shop during daylight hours, when the mall or store won't be too crowded. Bring a friend or family member with you for added security.

- **Don't overload yourself.** Carrying an armful of bags and packages limits your freedom of movement. Combine items in a single bag, and take packages to your car before you can't carry anymore. (and be sure to place them in your truck, out of sight).

- **Give yourself time.** Know how long you're going to spend on the shopping, and stop well before you need to get home (or wherever you're headed next). You'll be less likely to rush and more likely to be careful. (*First Draft*)

## Words worth repeating

A rising tide lifts all boats.  
- *American proverb*

## President Obama recognizes Coastal America Award recipient

*Editor's note: The following letter was presented to Barbara Blumeris as part of the Coastal America Award she received representing the New England District Team on the Sesuit Creek-Bridge Street Salt Marsh Restoration Project. See article on page 7.*

Congratulations on receiving the Coastal America 2008 Partnership Award for the Sesuit Creek-Bridge Street Salt Marsh Restoration Project. The award recognizes outstanding partnerships that make a significant contribution towards the restoration and protection for our nation's coastal environment. It is the only environmental award of its kind given by the White House.

Through a collaborative effort between federal, state, and local governments, nongovernmental organizations, and the private sector, an outstanding environmental victory was achieved for the Cape Cod coast with the proactive restoration of the largest salt marsh project thus far in Massachusetts. The Sesuit Creek-Bridge Street Team developed an innovative process which led to the restoration and preservation of nearly 65 acres of a vital coastal ecosystem. The project increased tidal exchange, improved habitat for fisheries and wildlife, and enhanced educational and recreational opportunities.

I applaud and support you in your efforts to bring together collective resources to meet common goals and better our coastal environment. Please accept my sincere congratulations, and best wishes for your continued success.

**Barack Obama**  
President, United States of America

## Congratulations

...to **Kathy (Miller) Malinowski**, Engineering/Planning, and her husband, **Rob**, on the birth of their first child, son **Robert Charles Malinowski**, on Sept. 25.

... to **Janet Lane**, Engineering/Planning Division, and her husband, **Michael Pollino**, on the birth of their first child, daughter **Lillian Rochelle Pollino**, Oct. 24.

...to **Jan Crawford**, Construction/Operations, on the birth of her first grandchild, **Isabella Bacigalupo**, Oct. 26.



# Restoration project good for fish, wildlife, and the economy

*Continued from page 1*

that can use a salt marsh versus the current, nearly monotypic marsh,” she said.

“This is the type of project the Corps loves to be involved in and loves to be a part of,” said Col. Philip T. Feir, commander, U.S. Army Corps of Engineers, New England District at the Oct. 19 project kick-off held at Broad Meadows Middle School, named for the marsh it abuts.

“Once we lower the floor of the marsh and get it back to where it was, it will provide the conditions for the salt marsh to redevelop,” said Robert Russo, project manager, New England District’s Engineering and Planning Division. The excavation will get rid of much of the reed; restoring the tidal flow will further diminish the ability of Phragmites to survive because the plant doesn’t grow well in salty waters.

Proposals for the site date back to the early 1960s, but the project to restore the marsh got its roots in 1997, said Hunt Durey, acting deputy director, Massachusetts Division of Ecological Restoration, which played a role in project permitting as well as getting congressional and community support for the project.

What makes Broad Meadows unique is that it “is the largest coastal restoration of its kind to date in Massachusetts because of the amount of fill that has to be removed to restore the wetland and upland areas,” Durey said, adding, “The restoration project will re-open this estuarine landscape to use by a wide range of fish, birds, and other biota that form the basis of a healthy coastal food web and that support commercial fisheries.”

Beyond creating a successful habitat, “The project will

generate significant economic benefits by injecting federal money into the local economy that supports jobs in the engineering and construction fields,” said Durey.

School officials have plans to integrate the restoration project into their science curriculum as well.

“You are going to school right now in the middle of a living laboratory,” said Delahunt at the event, where a class from the school got to tour the marsh before construction begins. Delahunt hopes this will increase each student’s awareness of what it means to be a good steward to the environment. It is also a chance to look at lessons learned from previous generations and to “take on the responsibility of restoring this marsh back to its original habitat,” which he said couldn’t be done without citizen activists pushing for such projects.

For Durey, Delahunt’s support for this project and his overall backing of environmental restoration efforts in general is critical. “The congressman, the Corps, and the city have been great partners to develop and see this project through to construction,” Durey said.

While 35 acres of salt marsh restoration may seem inconsequential, it “is significant considering how densely developed the area around the project site is. A restoration project of this size makes a difference because there isn’t a lot of healthy salt marsh left in the region,” said Durey.

While immediate benefits may not be seen, Rogers estimates that based on similar past projects that the area will become productive in three to five years. “Give Mother Nature a chance and she’ll do what she’s supposed to do,” Rogers said. “Sometimes all it takes is getting the right people involved.”



Photos by C.J. Allen

**Above:** The Broad Meadows Restoration Project. **Inset:** Cathy Rogers (left) and Robert Russo describe the project.



Rigging group arrange equipment during the "Rescue" at North Hartland Lake confined space training.

## District hosts 'Rescue' at North Hartland Lake

*A 911 call comes into the Hartford, Vermont Fire Department – there's trouble at North Hartland Lake. Two people welding in the bottom of the gatehouse are injured after an explosion. The stairwell leading down to the bottom of the gatehouse is destroyed and they can't get out.*

*Twenty six local responders from Hartford, Rutland, Montpelier and Springfield Fire Departments rush to one of New England District's most picturesque projects intent on rescuing the injured personnel trapped in the small, dark compartment below.*

*And then their training began...*

North Hartland Lake personnel sponsored the Hartford Fire Department's Confined Space Training Oct. 15, in an effort to fine tune the department's rescuing prowess.

"When I was approached by the local fire department to use the gatehouse, they wanted to make a scenario that was realistic," said Heather

Morse, Project Manager, North Hartland Lake. "I explained that we do go to the bottom of the gatehouse to do work, repairs, and check gauges and that's when they came up with the welding 'accident.'"

The Hartford Fire Department extended the training to other local departments when they received fund-

ing from the Vermont Homeland Security, increasing the number of responders to the "accident scene."

Once all the responders – 26 firefighters and five Confined Space trainers – arrived at the scene they broke into groups in charge of different pieces of the rescue mission. The first group went into the gatehouse to as-

sess the situation and monitor the air quality which was deemed to be “bad.”

“Because of the ‘explosion’ the air quality became unbreathable so the rescue group would need to have oxygen,” said Morse.

Once the first group reported the information they gathered, a rigging group quickly set up the tripod and ropes to lower firefighters down to the bottom of the gatehouse. Another group set up oxygen and radio lines for the rescue group. “Once everything was in place, the firefighters were lowered to the bottom to check on the people (for this exercise, two dummies were used) who needed to be rescued and then rescued them.”

The entire ‘rescue’ ran from 8:30 a.m. to 1:30 p.m. and was successfully completed. The “workers” lived to weld another day and the responders got some valuable, life-saving training.

“The firefighters were very thankful for allowing them access to the gatehouse,” said Morse. “They were grateful for the experience and the real world training they will use to save lives.”



*Emergency workers enter North Hartland Lake gatehouse for rescue training.*

Photos by Heather Morse



*Emergency responders arrive at North Hartland Lake after receiving a "911" call about an "accident" at the gatehouse.*



*Firefighters prepare to descend to the bottom of the gatehouse to "rescue" the trapped and injured "workers."*



*The Plymouth Harbor footbridge is in sound condition after the District's contractor made emergency repairs.*

Photo by Mike Walsh

## District team repairs bridge in record time

A New England District Project Management Team is credited with quick action to repair a footbridge that was a threat to public safety.

Project Manager Mike Walsh received a call from Plymouth Harbormaster Tim Routhier, saying that the deck boards on the Plymouth Harbor footbridge had rotted and were breaking. The New England District had built the footbridge when the agency created a breach in the breakwater to improve water circulation within Plymouth Harbor.

The Plymouth Harbor footbridge allows the public access to the top of the breakwater for recreational activities, such as fishing.

“Imagine walking on a timber deck and the board breaking under your weight,” said Walsh, describing the danger of the damaged footbridge. “You

probably wouldn’t fall through the resulting hole as it would only be about eight inches wide, but your foot would go through and your body would probably drop until you got stuck.”

Walsh quickly assembled his team – John Kedzierski (Structural Engineer), Norman Krause (Contracting), Maurice Beaudoin (Construction Resident Engineer), and Mike DeGrazia (Construction Representative/Inspector) – and went to work on the problem.

The team conducted site investigations of the timber footbridge, developed a simplified contract document to repair the bridge and awarded the contract.

The small business contractor Cousins Contracting of Watertown, Mass., was awarded the \$26,356 contract to perform the work.

However, shortly after the con-

tract was awarded, the situation turned even more dangerous. “Prior to the pre-construction conference, the Plymouth Harbormaster’s office informed us that several deck boards had broken through, creating a significant safety hazard to the public,” explained Walsh.

According to Walsh, in less than four hours the team had designed a repair and negotiated a price for the contractor to perform the necessary emergency repairs, which were completed the next day.

Due to the quick action and professional expertise of the Project Delivery Team, the footbridge was reopened to the public within less than 24 hours from initial notification after the deck boards had failed. In addition, the original contract for all of the repair work was completed significantly under budget.



Above: The culverts at Sesuit Creek in Dennis, Mass. (Inset) The Sesuit Creek-Bridge Street Saltmarsh Restoration Team.

## District team receives Coastal America Award

Barbara Blumeris, Engineering/Planning, traveled to Cape Cod to join federal, state (Massachusetts) and town of Dennis team members to receive one of the country's most prestigious environmental awards.

The Sesuit Creek-Bridge Street Saltmarsh Restoration Team received the Coastal America Award during the 2008 Partnership Award Ceremonies, Oct. 19 in Dennis, Mass. Over 20 partners who make up the team, were recognized for their efforts as a team for completing the largest proactive saltmarsh restoration in Massachusetts to date.

"I appreciate receiving the award for the Corps effort on the Planning Assistance to States (PAS) Cape Cod Study in 1995 -1996 and was very pleased that the Town Natural Resource Officer Retired George Macdonald noted in his address to the audience that the PAS Study provided the town with the scientific and engineering information needed to move forward with the restoration project," said Blumeris.

Corps team members on the PAS study included Heather Sullivan, Larry Oliver and Maureen Murray. The project conducted by the Partnership Team restored tidal flow to 65 acres of degraded saltmarsh by replacing the single deteriorated 24-inch diameter Bridge Street culvert with two 10 by 12 foot box culverts.

Bill Hubbard, Chief, Evaluation Branch, said that the project was a success. "The project restores 65 acres of degraded saltmarsh – directly addressing an action-oriented, results driven process aimed at restoring and preserving vital coastal ecosystems," he said.

According to Hubbard, in addition to the restoration of this saltmarsh, the replacement of the culvert completed the replacement of this and four other culverts that were previously barriers to a fish passage at Scargo Lake at the head waters of Sesuit Creek. "There is now completely unrestricted access for fish and other species dependent on this rich coastal resource," he said.

Established in 1997, Coastal America is a partnership of federal, state, local and private resources working to protect and restore the marine environment. The Corps of Engineers is a federal partner. Since its inception, New England District has received 11 Coastal America Awards.

In addition to receiving the Coastal America Award, Blumeris and the team also received a letter from President Barack Obama, praising them for their outstanding work.



Sesuit Creek.

Photos provided by Engineering/Planning

## District hosts first NAD Sustainable Energy Conference

The North Atlantic Division will have to do more than change to energy efficient light bulbs and turn off the copiers at night if they hope to reduce their energy consumption by 30 percent as mandated in an Oct. 5 Executive Order.

With that in mind, Farrell McMillan, Chief, Engineering/Planning; Bill Hubbard, Chief, Evaluation Branch; Patricia Donovan, NAD LEED Engineer and support staff organized the first ever NAD Sustainable Energy Conference, to have energy experts come in and give ideas on how to reduce the Division's energy output. The conference was also supported by key experts from Industry providing new technologies, panel discussion participation and agenda development.

The conference was held Oct. 7-8 at the New England District headquarters in Concord, Mass.

McMillan facilitated the conference attended by more than 80 people from all over the division, with a kick-off welcome by New England District Commander Col. Philip T. Feir; Deputy Division Commander Col. Christopher J. Larsen and NAD Chief Business Technical Division John P. Bianco.

Additionally, contractors and other federal agencies came to hear about 20 experts such as keynote speaker Col. (ret.) Dan Nolan of Sabot 6, Inc., talk about the strategic importance of energy independence and Rear Admiral Richard Gurman, Massachusetts Maritime Academy (MMA) talk about his successful Wind Turbine Project in Bourne, Mass.

Mr. Alan Hurt, Engineering and Environment, Inc., supported the strategic planning of the agenda.

"A key to the success of the conference was the combination of both Industry and Corps of Engineers personnel both collaborating on the latest technologies in alternative

energies and green building innovations," he said.

The conference also consisted of energy related break out sessions, panel discussions, and training in the U.S. Army's Leadership in Energy and Environmental Design (LEED), a tool the U.S. Army and the Corps of Engineers is using to become more energy independent.

Hubbard explained that the conference began with the idea of a brown bag seminar on energy efficiency and then developed into the two-day conference.

"Farrell McMillan knew people from his deployment,

such as Alan Hurt, a national figure in sustainable energy, who brought in presenters such as retired Army Officer Col. Nolan," he said. "This networking generated an incredible group of high powered speakers."

The New England District will look at its facilities and the various energy-saving methods to determine how to best become energy efficient. Windmills such as the one at MMA are

a good source of clean energy. They are also expensive and may not be the best fit for all – or any – of New England District's facilities. "Energy savings could come in the form of a simple new furnace purchase or added insulation," said Hubbard.

According to McMillan, the first step in the process of determining the best way to become more energy efficient is to conduct an energy audit.

Someone familiar with the new technologies and trained in LEED would focus on a facility and examine all of the energy bills generated there. "All of them – electricity, hot water, gas for the cars, etc.," he said. "And then in each of these categories we need the appropriate alternative to be



*Rear Admiral Richard Gurman discusses the success of the Wind Turbine Project at the Massachusetts Maritime Academy in Bourne, Mass.*

Photo by Brian Murphy

more energy efficient."

According to the U.S. Army website, LEED provides a complete framework for assessing building performance and meeting sustainability goals. "Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality," it says.

Patricia Donahue is the North Atlantic Division's LEED Engineer. Bogden Fiegel is the New England District point of contact for this effort. Donahue spoke about the Army Implementation of LEED in one of the Energy Conference break-out sessions and performed LEED training in the afternoons.

In addition to looking at its own facilities, New England District will assist its customers to become energy efficient with current buildings as well as new facilities constructed and designed by the District to be LEED compliant.

This first NAD Energy Conference was highly successful, according to McMillan.

"Everyone commented that in the two days they were here, they were able to absorb a lot of information," he said. "There were plenary speakers but there were also break out small group sessions plus LEED training every afternoon. Besides wind and solar power there was also geothermal presentations by Don Brown of Energy and Environment, Inc., and both solar tracking skylights and solar energy technologies for lighting efficiencies. Some of the people at the conference actually helped write the executive order. That's the level of expertise we had there."

## Franklin Falls Dam represents at County Public Safety Day

by Park Ranger  
Natalie McCormack

On Oct. 10, the Meadowbrook U.S. Cellular Pavilion in Gilford, N.H. hosted the second annual Belknap County Public Safety Day. This event is organized by the Belknap County Sheriff's Relief Association, and is designed to allow residents to meet their public safety organizations on a nonemergency level. This event was free and attracted nearly 500 visitors from the area.

Looking to expand on last year's event, organizers sought agencies outside of Belknap County. This included the U.S. Army Corps of Engineers out of the Franklin Falls Dam and the Franklin Fire Department, which both come from the adjacent Merrimack County.

Along with the other presentations, our own Corps of Engineers Water Safety Trailer was open for visitors to come and learn about swimming and boating safety, as well as meet with Seamoor the Water Safety Dragon.

Park Ranger Natalie McCormack was also able to talk with visitors about the Franklin Falls and Blackwater Dams and the purposes they serve for the Corps and the community.

Other organizations that were present at the event included: Eight police departments, five fire departments, the Belknap County Sheriff's Department, Regional Special Operations Unit, Regional Accident Investigation Team, New Hampshire Marine Patrol, Lakes Region Community Emergency Response Team, New Hampshire Liquor Commission, State Police, and the U.S. Department of Homeland Security. Each group offered guests safety demonstrations, or safety related information pertaining to fire emergencies, motor vehicle safety, water

safety, and more. Children were allowed to tour fire trucks, police cruisers, the State Police helicopter and other emergency apparatus.

Other highlights of Public Safety Day included: a State Police K9 Unit exhibition, where the dogs and handlers showed their ability to sniff out drugs and take down the bad guys. Another State Police demonstration came from the Bombs Squad. They showed how their robots are used to handle potential explosive devices while keeping members of the State Police out of harms way.

The Tilton-Northfield Fire Department brought a Fire Safety Trailer which simulates how smoke rises and circulates in a building that's on fire. Kids were shown how to crawl below the smoke to escape the fire, and smoke inhalation.

In another part of the trailer there was a sprinkler system set up to show the effectiveness of sprinklers in putting out fires. The trailer also has smoke detectors and exit signs so children can familiarize themselves with alarm systems and safety procedures.

The New Hampshire Police Standards and Training Counsel showed off their roll-over model which demonstrated to spectators how seat belts can prevent ejection during a crash. It also showed the effects of not wearing a seat belt in a roll-over accident.

A martial arts group called Lakes Region Vale Tudo presented some self defense moves for an awed crowd. This group offers training for local law enforcement officers as well as lessons for the general public on self defense and mixed martial arts.

And, every half-hour two team members from the Belknap County Regional Special Operations Unit presented rappelling demonstrations off of the roof of the Meadowbrook U.S. Cellular Pavilion.

## Volunteers turn out at District sites for National Public Lands Day

New Englanders love the outdoors and their national public lands. More than 500 of them turned out to four of the New England District's recreational facilities to express that love by working thousands of hours on improvement projects during National Public Lands Day, Sept. 26.

East Brimfield and Westville Lakes, Barre Falls Dam, Buffumville Lake and Hodges Village Dam, and West Hill Dam all held events to celebrate public lands and volunteerism, while saving the federal government thousands of dollars in labor.

At East Brimfield and Westville Lake, 42 volunteers performed tasks to include trail tread repairs and improvements; stone wall repairs; debris removal; sign board installation and sign post staining; and trimming low tree limbs for equestrian use. Volunteers donated 126 hours of their time, totaling over \$2,500. Event partners included the town of Southbridge Trail Committee, Grand Trunk Trailblazers, the Girls Scouts, and the town of Brimfield Trail Committee.

Barre Falls Dam had 71 volunteers roll up their sleeves to perform jobs such as planting, weeding and trimming shrubs and bushes; raking; staining fences, benches and picnic tables; disc golf improvements and litter pick up.



Photo by Tom Chamberland

*A volunteer at Westville Lake operates heavy machinery during National Public Lands Day.*

The volunteers worked 213 hours, totaling \$4,155 in savings to the government. Although there were no formal partnerships, Barre Falls personnel worked closely with several local Girl Scout troops and the New England Disc Golf Association to get the work done.

Buffumville Lake and Hodges Village Dam have the distinction of having the longest running Public Lands Volunteer event in the District with 18 annual celebrations, to include the 16 National Public Lands Day events to their credit. An incredible 224 volunteers arrived ready to work. The 21

completed projects ranged from trailblazing and trash clean up to painting gates, Disc Golf upkeep, and bluebird box construction and installation. The volunteers racked up 868 hours of labor saving the government \$17,500.

West Hill Dam's event was so large, they held it over two weekends. About 150 volunteers arrived on Sept. 19 and an additional 40 volunteers arrived Sept. 26 to clean bluebird and wood duck boxes and perform work such as trail cleaning, litter patrol and restoring a World War II Memorial bench. Participants in West Hill Dam event were Toyota, Shaw's Supermarket, Jumbo Donuts, Wal-Mart, Blackstone River Watershed Association, Blackstone Heritage State Park, and Home Depot.

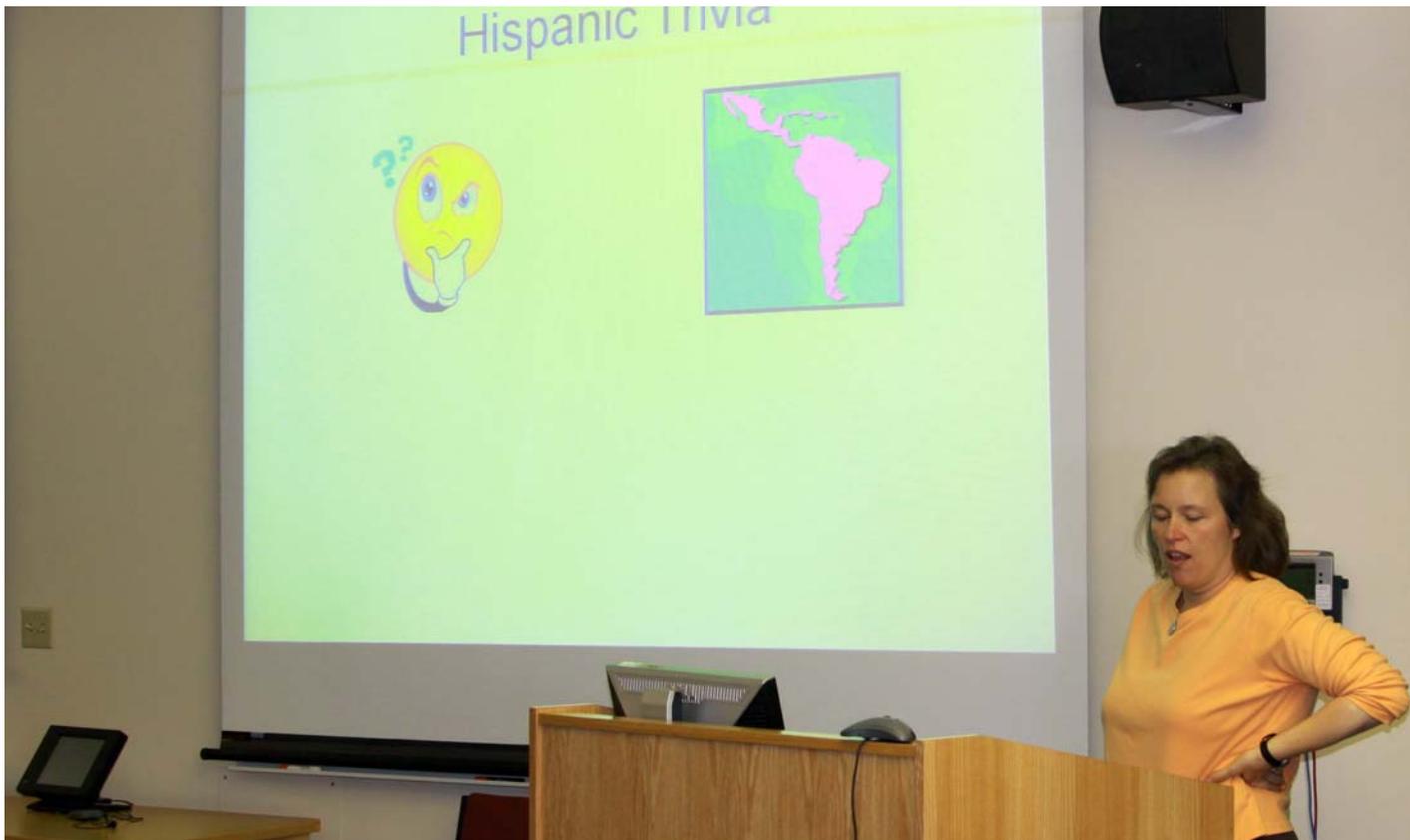
Volunteers who worked hard improving the project sites were rewarded with a lunch donated by various NPLD sponsors. Girl and Boy Scouts at all of the event sites worked to earn their "Get with the Land" patch.

According to Publiclandsday.org, National Public Lands Day is the nation's largest hands-on volunteer effort to improve and enhance the public lands that Americans enjoy. Last year, about 120,000 volunteers performed improvement work nationwide.



Photo provided by Barre Falls Dam.

*Basin Manager Joe Faloretti assists volunteers plant shrubs during Barre Falls' National Public Lands Day celebration.*



Ruthann Brien, Hispanic Employment Program Manager, runs the Hispanic trivia game in the theatre.

Photos by Brian Murphy

## Hispanic Heritage Fiesta a hit at New England District

The Hispanic Heritage Program and the EEO Office teamed up for an interactive event that had toes tapping, taste buds singing and brains working.

The 2009 Hispanic Heritage Month Fiesta took place in the cafeteria and theatre on Oct. 15. This year's theme was "Embracing the Fierce Urgency of Now."

Dozens of people arrived at the celebration to find 17 homemade Hispanic dishes waiting for them to taste. As attendees sampled the cuisine, salsa, and chips, they listened to Latin Music from various Hispanic countries.

After the meal, participants tested their knowledge of Hispanic culture by answering questions prepared by Ruthann Brien, Hispanic Heritage Program Manager. Over a dozen people helped out on the popular event by cooking dishes, buying salsa and chips, decorating and setting up.



(Above) District employees enjoy Hispanic cuisine and each other's company during the fiesta. (Right) Lt. Col. Steven Howell dishes out some Hispanic food during the event.



# Dredging up the past . . .



*From left: New England District Commander Col. Brian Osterndorf; Virginia Tippie, Coastal America director; Robert Durand, Secretary of the Massachusetts Executive Office of Environmental Affairs; Dr. Joseph Westphal, Assistant Secretary of the Army for Civil Works and Bill Hubbard, Chief Evaluation Branch display the award Secretary Durand presented to the New England District for their work with Coastal America and supporting the Commonwealth of Massachusetts Executive Office of Environmental Affairs Wetlands Restoration Program in this Nov. 30, 2000 photo.*

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