Ghost Lobster traps Page 10

Fran Donovan retires Page 8

Yankee Voices....2
Commander's Column....3
Point Judith Dredging....6
Chili Fest....7
Westville Lake Trail....11

US Army Corps of Engineers
New England District

Yankee Engineer

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District assesses federally-constructed levees in New England, part of nationwide program

By Tim Dugan
Public Affairs Office

The U.S. Army Corps of Engineers, New England District is continuing its ongoing inspection program of federally-constructed flood protection projects in New England. As part of the Corps' nationwide Levee Safety Program, the assessments from these inspections and any noted deficiencies, are reported to the project owner/sponsor and the Federal Emergency Management Agency (FEMA).

Many of these flood protection projects were built between 40 and 70 years ago and methodologies for assessment have changed as a result of lessons learned in the aftermath of Hurricane Katrina. "The Levee Safety Program's goal is to reduce risks to public safety," said Col. Curtis Thalken, the Corps' New England District Commander. "Congress authorized and appropriated funding in fiscal year 2006 for the Corps to initiate specific levee safety activities to include an inventory of all levees, development of a risk assessment methodology and to begin initial risk assessments."

The devastation caused by Hurricanes Katrina and Rita brought the issue of levee safety to the forefront of public debate, and the findings of subsequent Corps investigations into the performance of the flood damage reduction system clearly point to a need for a periodic, comprehensive and risk-informed approach to levee safety.

Together with the Federal Emergency Management Agency, the Corps has been making progress in addressing important issues related to flood damage reduction. The Corps' initial levee inventory provides data about a levee's level of protection. Corps engineers evaluate whether the owner/sponsor is performing adequate operation and maintenance.

Lowell, Massachusetts

The initial survey of levees in the Corps federal program, which consists of both levees that the Corps designed and constructed as well as many constructed by non-federal entities but incorporated into the federal program,

Continued on Page 4

Yankee Voices

New England District Distinguished Civilian Gallery members, Jim Leonard and Joe Ignazio.

Army Civilian Corps Creed

- I am an Army Civilian – a member of the Army Team.
- I am dedicated to our Army, our Soldiers and Civilians.
- I will always support the mission.
- I provide stability and continuity during war and peace.
- I support and defend the Constitution of the United States and consider it an honor to serve our Nation and our Army.
- I live the Army values of Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage.
- I am an Army Civilian.

Far East Environmental Chief sends appreciation from Korea to Concord Park

(Recently) the Far East District requested on site support from Dr. Ian Osgerby for the Fuel Recovery Project following a USFK (US Forces Korea) customer request that Dr. Osgerby participate in an IPR (In-Progress Review) meeting and that he provide support for a three-star general's site visit of the systems. Additionally, we needed Dr. Osgerby to provide technical support to Dr. Chon, UnYong who has provided the primary field oversight for these Never-Before-In-Korea systems.

Specifically, I wanted Dr. Osgerby to conduct site visits with Dr. Chon to each of the five closure camps to ensure the systems were being operated, monitored, and maintained in a technically sound manner and to have Dr. Osgerby provide his expert recommendations to Dr. Chon on outstanding issues. Dr. Osgerby has provided remote technical support to us throughout the life of the project, but there were several matters for which on site support was needed. Additionally, I wanted Dr. Osgerby to provide us his recommendations concerning the last two months of operations. I probably don't need to point out that this was a demanding request and an ambitious schedule for someone that would be in country only seven work days!

Although he arrived late on a Wednesday night after traveling more than 24 hours, Dr. Osgerby hit the ground running. Our IPR meeting with USFK was a success and included the statement from USFK that we should be proud of what we have accomplished with this project. For our customer, the Corps execution of this project has been seamless. USFK views Dr. Osgerby as a valuable project team member, often inquiring about his views and recommendations. Our DV site visit by Lt.Gen. Wood, the Deputy Commander of both the United Nations Command and USFK, was also a success. In fact, Lt.Gen. Wood remarked that he would like to invite his Korean counterpart to the site to see the system and the remarkable job that we've done.

As requested, while here Dr. Osgerby conducted the labor intensive site visits with Dr. Chon to the various camps. Together they identified several pages of issues for which Dr. Chon will provide follow-on visits and actions this week to resolve the underlying, systemic difficulties. Issues identified in their site visits included non-operational units due to a missing transfer pump, improper manual operation to address low sensor failure, and data interpretation – I am still working my way through their consolidated list of recommendations! Dr. Osgerby also made his recommen-

Continued on Page 3

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Commander's Corner:

We communicate as one in answer to public concerns

by Col. Curtis L. Thalken
District Engineer

USACE Headquarters recently released a list of levees from around the nation that have potential maintenance problems associated with them. Included on that list are 10 levees here in New England. Since then, many of you have told me you have been questioned about the condition and strategy to repair the listed levees.

This just reinforces a point that I have raised in several forums in the past. We all have responsibilities associated with our role as advocates for the Corps of Engineers in our day-to-day interactions with the public.

First, be aware of what is going on in other offices around the district. Public interest in our activities can span several different projects and programs at anytime. For example, our regulatory program often entails controversial aspects. Many decisions will disappoint either the applicant or other groups in opposition to the applicant.

Likewise, decisions involving the regulation of water releases from our dams have the potential to put groups in conflict for releasing either too much or too little water.

Additionally, projects for our stakeholders in the civil works, MILCON and even International and Interagency support can generate questions on the Corps role and interest.

Since questions can span all areas of the district having an awareness of what we are all working on provides context to frame responses to specific questions.

Second, know the Corps' position on critical issues. Our actions are driven by Corps' regulations and processes that are developed to achieve national policy objectives. While no one can memorize the Corps entire catalog of implementing instructions, having a general understanding of their intent and the linkage of regulations to policy objectives makes it easier to understand and explain why we choose to act as we do.

Third, know where to learn more. Maintaining situational awareness is a never ending task. Luckily, we have several sources that can help with our awareness. The Yankee Engineer is one; the Corps' Engineer Update is another. Likewise the district, division, and USACE websites hold a tremendous amount of data. Our state Update Reports (also included on our website) are great sources as well. An often overlooked way to stay informed is to just ask your co-workers what's hot in their area.

Finally, when in doubt, the PAO shop is always ready to help and I encourage everyone to take advantage of their expertise. If you're uncertain on a position, refer inquiries to the pros and if you're uncertain of the correctness of a response you've provided check with them as well. It's their job to know the right response or where to find it.

As always, thank you for everything you do everyday. Without your hard work, dedication and expertise the Corps' mission would be at risk.

Be proud of your accomplishments—and spread the word of our successes.

Essayons!

Far East District thanks New England, praises Ian Osgerby

From Page 2

dations for the final two months of system operations and assisted Dr. Chon with drafting an outline of the final project report. In short: he met our demanding requests and more!

As always, we were very pleased with the support we received from Dr. Osgerby. A certificate of appreciation from the District, and signed by the commander, was awarded to Dr. Osgerby for the key role he played in the success of this project.

On behalf of the Far East District, I thank you for the support you have provided us on this project. It is sincerely appreciated.

Lisa Fiedler
Chief, Environmental Section, Far East District

US Forces Korea Fuel Recovery Project Delivery Team.

Lincoln, New Hampshire.

Corps flood protection project inspections reveal concerns

From Page 1

included approximately 2,000 levees nationwide. The Corps has identified 122 levees nationwide that appear to be in fair, poor or unacceptable categories. This number may change as more data is gathered. Data from the levee inventory will be available to support certification of levees as part of FEMA's National Flood Insurance Program.

These Corps inspections and assessments are limited in scope and detail. There may be other deficiencies that affect the project operability. To develop a program remediation plan the city or sponsor, which operates and maintains the project, must conduct a comprehensive inspection of their project.

The data gathered from this and future inventories will help identify risks to public safety associated with levee systems across the nation. The Corps will ensure that Corps federal program levees are appropriately operated and maintained by project owners/sponsors to perform as designed and constructed. The Corps is using criteria from its Engineer Regulation ER 1130-2-530 and ER 500-1-1 that define the various categories of maintenance ratings.

"Flood damage reduction and public safety behind the levees is a collaborative effort," Thalken said. "Understanding the risk associated with living or working behind a levee is a critical factor in flood damage reduction."

A levee is a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding. Levees were first built in the United States more than 150 years ago. Farmers, traditionally drawn to the rich soils of floodplain, put many of the earliest levees in place to protect agricultural areas from frequent flooding.

The Corps' Levee Safety Program emphasizes the role of levees in flood and storm damage reduction to reduce the risks to public safety. The Corps of Engineers first became involved in flood damage reduction through the 1917 Flood Control Act, which authorized the Corps to have a significant role in flood activities nationwide. The Corps has long been active and concerned with the protection of life and property behind levees.

Most of these local protection projects in New England were built at the request of a local sponsor, either a city or state. Once construction was completed the projects were turned over to the city or state for operation and maintenance. The Corps provides periodic inspections.

Because of the cost to maintain these structures and the competing interests for money locally through the years, many lacked regular repairs or maintenance resulting in projects that today may no longer provide the expected level of protection against flooding that the projects were designed and constructed for.

Canton, Massachusetts.

with 10 levee systems in New England

Once assessments were completed, Corps officials notified the levee project owners/sponsors and the appropriate local, state and federal agencies of a project with a fair, poor or unacceptable inspection rating.

The Corps notification informed the project owner/sponsor and FEMA of the levee condition and any noted deficiencies. If the project receives a fair, poor or unsatisfactory rating this could result in the project being changed to an inactive status in the Corps Rehabilitation and Inspection Program and therefore no longer eligible for federal rehabilitation funding under PL 84-99 (i.e. not eligible for federal funding as a result of flood damage). Also, FEMA may decertify the levee and remove it from the Flood Insurance Rate Maps.

To afford the owner/sponsor a reasonable amount of time to correct any noted deficiencies and establish a required maintenance project, the Corps established a one time only "maintenance deficiency correction period" (MDCP) of one year.

Failure to correct project maintenance deficiencies within a one-year period will result in the project being placed in an inactive status and no longer eligible for federal funding if the levee should sustain damage during a flood event.

The Corps has been working together with FEMA to notify project owners/sponsors of the conditions of their levees, their responsibilities to correct unsatisfactory project conditions, and of the resulting consequences if the project conditions are not corrected. Informal discussions were held with project owners/sponsors in November 2006. Formal written notifications to project owners/sponsors, with a specific list of noted deficiencies, were made Jan. 31.

In New England and on a national and regional level, the Corps is coordinating these findings with FEMA for their use in making decisions in the National Flood Insurance Program.

The Corps and FEMA are working together to ensure that flood hazard maps clearly reflect the flood protection capabilities of the levees, and that the maps accurately represent the flood risks posed to those protected areas.

For more information on FEMA's National Flood Insurance Program and its availability go to FEMA's website: www.fema.gov.

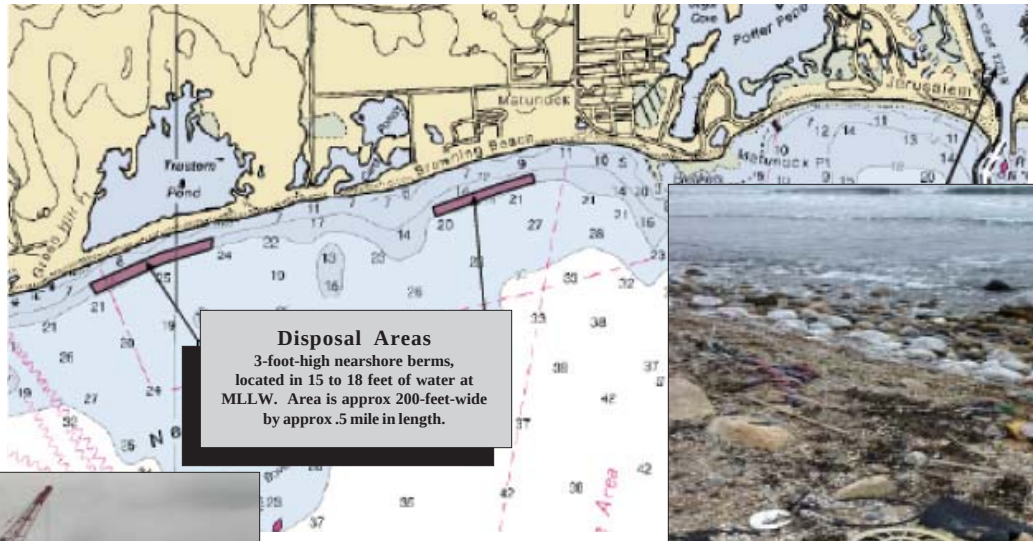
The next phase of the Corps Levee Safety Program includes development and fielding of a geospatial database model for levee inventory and development of a methodology for performing risk assessment of levees.

"It is important to note that no levee provides full protection from flooding," Thalken added. "Even the best flood damage reduction system or structure cannot completely eliminate risk of flooding."

Levees are designed to provide a specific level of protection, and larger flood events can cause them to be overtopped. Levees also decay and deteriorate over time. Regular maintenance and periodic upgrades are needed to ensure that they retain their level of protection and continue to perform to their original design. Maintenance can become a serious challenge as a levee system gets older.

"Understanding risk allows communities to make informed decisions about protecting their lives and property," Thalken said. "Individuals, businesses, and local governments should understand that knowing the condition of their levee and the risk associated with living or working behind a levee is a critical factor in flood damage reduction."

There are 10 local flood protection projects with levees of concern in New England. Those in Massachusetts include projects at Lowell, Canton, Springfield, West Springfield and Chicopee. Those in Connecticut include projects in East Hartford, Torrington and Waterbury/Watertown. New Hampshire has one project in Lincoln. Rhode Island has one project in Woonsocket.



Dredging the harbor of refuge at Point Judith. Above, some of the debris that has washed ashore.

Dredging project digs up more than sediments

By Tim Dugan
Public Affairs Office

The Point Judith Harbor of Refuge Federal Navigation Project in Point Judith, Rhode Island, has been stirring up more than sediments since dredging began Dec. 20, 2006. An unusual amount of debris has been pulled up along with the dredged material.

"Although we did anticipate some debris/trash in the harbor, I don't think any of us anticipated the magnitude of the trash dumped in Point Judith Harbor over the years," said Project Manager Michael Walsh, of the Programs and Project Management Division.

The harbor was last dredged by the Corps in 1977.

Debris includes such things as cans, rope, tires, cables, hoses, lobster pots and various other things people discard.

Walsh believes the debris comes from commercial and recreational boat operators who throw trash and debris over the side into the water. The flotsam settles to the bottom and gets buried in the sediments. Dredging then removes the trash with the dredged sediment and carries it all to the dredged material disposal location.

The fact that this sandy dredge material is being used for beneficial use and beach nourishment, depositing material at nearshore locations off of the Matunuck shoreline, complicates the process. Debris mixed in with the sand gets dumped in the nearshore of the Matunuck beaches.

The contractor, Newborn Construction Inc., of Center Moriches, N.Y., is required to remove visible and floating debris from the dredging operation and dispose of, separately, but some is not seen and ends up washing ashore with the sand.

"Our contractor is working to clean the beaches of trash as it washes up," Walsh said. Local groups have pitched in to help clean up the beaches as well.

The contractor will continue to clean up the debris as needed, Walsh said, adding that not all of the debris comes from the dredging operation.

There is always debris in the water and it's common for some of it to wash up onshore, he said.

The $ 1.5 million project calls for maintenance dredging of 90,000 cubic yards of material from 25 acres of the Federal Navigation Project.

The towns of South Kingstown and Narragansett are the local sponsors for the work.

"Natural shoaling processes have reduced available depths, making navigation hazardous at lower stages of the tide," Walsh said.

The federal project serves the commercial navigation industry and recreational boaters in the vicinity of Point Judith.

Disposal of the estimated 90,000 cubic yards of dredged material is being used as a beneficial use in the nearshore off of Matunuck Beaches in South Kingstown.

Officials point out that recent measurements indicate that the sand is already nourishing the beaches.

Dredging is anticipated to continue through March 15, 2007.

Fiery competition puts chili champs to the test

By Bob Meader
Engineering & Planning

With winter weather being warmer than usual the thought of a chili fest seemed out of place. The sign-up sheet reflected the pessimism with only three names just two days before the WE Committee's annual event.

However, the threat of the season's coldest temperatures brought out the best of the District's chefs. Eight crock pots of chili greeted chili lovers at 11 on Jan. 25. Bob Meader, Zina Cassulo, Norm Farris, Tim Beauchemin, Terry Negron, Sue MacDonald, Lt. Col Andrew Nelson and Lydia Brown had answered the call.

While their crock pots warmed up back at their cubes, Sue MacDonald and Bob Meader assembled tables and extension cords in the cafe. "Set up was easy since nearly everyone brought their own pots and utensils," said MacDonald. "The WE Committee provided cups and spoons, Greg Penta and I printed ballots, and more than 60 District employees paid their dollar to taste and vote on their favorite."

"Last year I left half of what I had made on the kitchen counter and saw that I could have used it all," said last year's winner Tim Beauchemin. This year he brought plenty and likely picked up some votes from late-comers who had fewer choices as the crock pots emptied.

Some chefs named their creations. Terry Negron's "Middle Child Chili (It is crying for your attention)" and Bob Meader's "Sweet Home Alabama" provided insight into what that first mouth watering taste would be like.

When asked about her secret to a winning recipe, Cassulo responded with, "I learned everything I needed to know from my brother Chris. He is a chef. And of course, sprinkling grated cheese on the top certainly added to the visual appeal.

Lt. Col Nelson, was a late entry but surely demonstrated the leadership buy-in that was necessary on the homefront. He had brought the ingredients home the night before, dumped them on the kitchen counter and hurried off to Boy Scouts with his son. Upon returning his wife had without direction nearly completed the task of converting the raw elements into a finished product.

Of course there is always something that doesn't go right. A day or two after the activity Norm Farris asked about his wife's favorite laddle which had not been returned with his empty crock pot. After a quick search it was learned that it had ended up in Terry Negron's crock pot. She had taken it home, washed it, brought it back, and had sent out an email inquiring to its owner.

"Just as with the pie fest, I am learning that the best way to get participation is to confront people with the question; 'How would you like to bring in some chilli,'" Meader observed.

Just ask Lydia Brown. She was cornered in the hall the day before the event and after saying, "no way" initially, she came through with a delicious sample of her cooking skills. So next year be prepared when you see me in the hallways.

Photo by Brian Murphy

Zina Cassulo serves up this year's winning chili to Maj. Steve Lefebvre and Dot Tinkham. In the overalls, Tim Beauchemin, last year's winner, was edged out slightly by Bob Meader, who took second place followed by the other feisty competitors.

Clockwise: Fran Donovan provides his unique insight; Fran, Rhonda, and Kristen (daughter); Col. Thalken (presenting Fran his retirement certificate), Bruce Zawacki, Captain Nash. Photos by CJ Allen.

Fran Donovan sailing off to land

By Sally Rigione
Public Affairs Office

Fran Donovan retired from Federal service with 38 years of service on Jan. 5. A retirement party was held at the Beachmoor Inn in Buzzards Bay where Donovan's wife Rhonda, daughter Kristen and his brother Joe attended the celebration with approximately 200 family and friends gathered to wish him well.

Larry Davis served as the Master of Ceremonies. Speakers who got up during the afternoon were: Captain Nash from the U.S. Coast Guard; retirees Bill Haskell, Vincent Vallesio and Joe Ignazio; John Morrow and John Hickey from the Gallo Arena; Mike "Rocko" Defilippo; Peter Clauson from ESCO Terminal; from the Canal field office Roger Mathurin, Luke Lomeland and Bill Norman; seasonal ranger Kevin Burke and representatives from Concord Park were Steve Dunbar and Jeff Preston.

The party brought all sorts of laughter and recollections among the attendees.

Photo By Kevin Burke.

Photo By Kevin Burke.

Clockwise: Larry Davis, Col. Thalken (presenting Fran with the Commander's Award for Superior Service), Dick Carlson, Fran, Kirsten and Rhonda, the official retirement ceremony and, nearly 200 friends and family attended the event.

# of leisure suits and three-putts

While Donovan requested that no gifts be brought to send him off into retirement, he received a GPS unit, an engraved Chelsea Clock and Barometer Set, jackets, t-shirt, a Marine Operations Plaque, several pictures, an Honorary Plaque, and many gag gifts. All of which are not gifts.

Donovan also received a Meritorious Civilian Service Award from the District and a Meritorious Civilian Service Award from U.S. Coast Guard. At the close of the afternoon, Col. Curtis Thalken and Richard Carlson presented Donovan with his retirement certificate.

Retirees who attended the celebration included: Andy Andreliunas, Bob Batt, Bill Berka, Bill Bradford, Carl Boutilier, Jack Caffrey, Rick Casano, Frank Ciccone, Bill Colman, Leon Cremonini, Joe Collucci, Fred Danhauser, Ray Francisco, Dave Gove, Bill Haskell, Peter Huie, Joe Ignazio, Bill Kavanaugh Sr., Andy Lamborghini, James Leonard, Buz McDonald, Fred Moehle, Bob Orman, Dave Paquin, Paul Pronovost, Fred Ravens, Dick Reardon, Bob Rousseau, Vinnie Vallesio, Mike Varney, Frank Vilkas, Arthur Wills and Bruce Zawacki.

Massachusetts Division of Marine Fisheries divers locate, identify and remove the ghost lobster traps from the canal.

Lobster Ghost Traps haunt Cape Cod Canal Shoreline

By Matthew McClintock
Cape Cod Canal

Lobstering from the Cape Cod Canal shoreline is a time honored tradition. During daylight hours at low tide lobster permit holders carefully walk down the slippery rip rap, locate their lines hidden under the seaweed and pull in their traps hoping to walk away with a couple legal sized lobsters.

Over the years, some lobster traps are forgotten about, lost or just abandoned where they lay on the canal bottom. These traps, known as ghost traps, that brought lobsters to one's dinner table, continue to catch lobsters and other sea creatures. Without being tended, they pose a serious risk to the creatures that crawl into them. Unable to get out of the trap, lobsters resort to cannibalism. Over time one unattended lobster trap can kill many lobsters.

Recently, Environmental Police Officer Kevin Clayton approached the Cape Cod Canal and asked if we could assist his agency and the Division of Marine Fisheries conduct an operation to identify and remove ghost lobster traps from the canal.

The operation would also identify traps not in compliance with state regulations concerning the size of escape vents, materials used to secure escape vents and the attachment of lobster permit numbers to each trap.

During each operation, divers entered Canal waters and checked each trap they identified. If a ghost trap was located it was removed or, if silted in, they would cut the tops off and release any trapped lobsters. If the trap was not in compliance, it was removed from the water and the Environmental Police would record each violation.

Canal Park Rangers assisted with taking the traps from the divers and dragging them up the canal bank for processing. To ensure the safety of the divers the Cape Cod Canal Marine Operations staff had patrol boats on station to alert approaching vessels that a dive operation was being conducted and to stay out of the dive area.

A total of 11 dives were completed. Two hundred and thirty three traps were surveyed, 127 ghosts traps were surveyed (an additional 106 traps were identified). Of these, 65 ghost traps were removed and recycled and 62 ghost traps were disabled because they were not retrievable, and 67 violations were noted by the Environmental Police. It is important to note that only about 10-percent of the canal was surveyed. The operation also gained the attention of countless inquisitive visitors who were educated on the detrimental effects unattended lobster traps had on the marine resources.

Operation Ghost Trap was carried out safely and efficiently by three agencies dedicated to providing the marine environment a helping hand and hopefully providing a viable and renewable resource for lobster permit holders for years to come.

Westville Lake Universal Trail Assessment completed

By Thomas Chamberland
Westville Lake

Park rangers, staff and volunteers at Westville Lake Recreation Area recently completed a Universal Trail Assessment Process (UTAP) on the community trail surrounding the Westville Lake Flood Reduction Project. UTAP is a process to assess outdoor paths, access routes, and trails by collecting access, mapping and maintenance information. This trail survey data is posted at the informational kiosks around the park.

"It has always been the goal to build the Grand Trunk Trail, and the Westville Lake Community Trail to comply with the standards and rules of the Americans with Disability Act Accessibility Guidelines (ADAAG), and be of Universal design," said Keith Beecher, Park Manager of Westville Lake. "People tend to select hiking trails based on their personal interests and abilities. This UTAP program provides the trail user information that they can use to determine if the trail meets their needs. This assessment not only indicated in detail where we are currently not in compliance with the ADAAG rules, but provided a detailed inventory of the maintenance needs and built environment of the trail."

Park Ranger Thomas Chamberland attended the 2006 National Trails Symposium sponsored by American Trails, completing the training process to use UTAP. This past December, over a period of three days, Corps rangers and engineering staff along with several members of the Sturbridge and Southbridge Trail Committees and volunteers, under the direction of Chamberland, completed a UTAP survey of the 1.8 mile Westville Lake Community Trail and of the several side trails through the park at Westville Lake.

Neal Beliveau,Glenna Vitello, Dave Rose, Pat McGarrah, Town of Sturbridge trail Committee member, Pat Tetreault, and Paul Janaghi Massachusetts Department of Conservation and Recreation State Trails Coordinator. Above, Rose,Vitello, Neal Beliveau, Tom Chamberland and Tetreault.

"Completing the UTAP on the Westville Trail gives us a much better picture of how we are doing in constructing an assessable trail. We will now be able to focus our future trail work projects and volunteer days improving those sections of the trail," said Chamberland. "And we will be able to better inform the trail user of their experience on the trail by having information on grades, slopes, surfaces and obstacles available at the trail heads."

Pat McGarrah, Town of Sturbridge trail committee member, Park Ranger Tom Chamberland, Corps Volunteer Dave Rose.

UTAP was developed by Beneficial Designs Inc. of Minden, NV with cooperation and assistance from American Trails, Federal Department of Interior, Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, National Center on Accessibility, U. S. Army Corps of Engineers, USDA Forest Service and Wilderness Inquiry.

Further development of training materials, guide and certification process were funded through the Small Business Administration and grants from the National Center for Medical Rehabilitation Research in the National Institute of Child Health and Human Development at the National Institutes of Health.

Dredging up the past . . .

In this 1994 photograph, a shot from the bow of the U.S. Army Corps of Engineers Dredge Currituck while removing sand from shoaled material from areas near and around Chatham, Massachusetts.

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