

RIP RAP

U.S. Army Corps of Engineers
Albuquerque District

USACE SPA, 4101 Jefferson Plaza N.E., Albuquerque, NM 87109

Photo: Night descends on Albuquerque's Sandia Mountains.



**US Army Corps
of Engineers®**
Albuquerque District

Volume 23, Issue 3
March 2011

In this issue...

District Happenings

Pages 1-8

Focus on People

Page 9-11

News Briefs

Page 12

District Engineer,
Lt. Col. Jason Williams

RipRap is an unofficial publication authorized by AR 360-1. It is published by the Public Affairs Office, Albuquerque District, U.S. Army Corps of Engineers. The views and opinions expressed do not necessarily reflect those of the Department of Defense or the Department of the Army. Reader input is welcome. Photographs are official USACE photos unless otherwise indicated. For submission and writers' guidelines, contact the editor at 505-342-3171 or send email to: kristen.skopec@usace.army.mil

District Hosts Meeting to Discuss Rio Grande

By Michael Logue, Public Affairs

More than 80 Rio Grande stakeholders met at the District headquarters Feb. 18 to discuss urbanization issues and possible projects associated with the Rio Grande, referred to by some as the “spine of New Mexico.”

Representatives from federal, state, local and tribal entities across Texas, New Mexico and Colorado discussed technical, professional and public concerns during the one-day meeting, providing an overview of current activities and opening the door for new collaboration. The meeting was patterned after a gathering in 2006.

“The meeting five years ago produced many of the initiatives on the Rio Grande that we are working today,” said the District’s Deputy for Project Management Jorge Colberg.

Facilitated by Project Manager Ron Kneebone, the meeting included presentations on the river’s salinity levels, flood risk management issues, issues along the border with Mexico and ongoing data-collection and research projects.

The group was also able to speak remotely with project managers in the Rock Island District to consider past environmental initiatives on the Upper Mississippi River as possible models for efforts on the Rio Grande. A trio from the Corps, the U.S. Fish and Wildlife Service and the U.S. Geological Service answered questions and provided insight into the success of 24 years of partnership on the Upper Mississippi.

When the floor was opened for comments, the assembled group focused on productive “next steps,” such as developing an organization and future discussions to maintain the meeting’s momentum. Key considerations voiced involved: collecting data to show the value of



Photo by Michael Logue

During the conference, Seth Jones, planning lead, Galveston District, discusses Galveston’s projects that relate to the Rio Grande.

Rio Grande ecology and recreation; engaging stakeholders who might be impacted by future decisions and solutions; avoiding piecemeal approaches and moving toward watershed planning; using “passive adaptive” management to apply successful techniques used elsewhere on the Rio Grande and educating each other on funding mechanisms required or already in place.

In another five years, New Mexico and sister states could be enjoying the fruits of this meeting along the reaches of the river. Additionally, the participants were able to network and make connections that may shape the future of water resources planning, as it pertains to this important and legendary water source.

This meeting directly contributes to Action 5 (Develop collaborative approaches to address regional water resource challenges).

The students participated in a game called "Coyote Wheel," where they pretended to be predator and prey. They also learned to mimic the call of the coyote.



Corps Helps Educate about Watersheds

Hildreth "Coop" Cooper of the Durango Regulatory Office conducted a nature studies tour Feb. 8 for students from Ignacio Elementary to teach the students about the role of snow science in watershed management.

Cooper leads school groups through an outdoor classroom trail circuit in the San Juan National Forest. The groups conduct scientific

investigations using snow pits to evaluate snow crystals, layers, temperature, density and water content. The practical application of the investigations is to demonstrate the importance of understanding avalanche potential and predicting water availability for the watershed.

The students also learn about winter survival adaptations of local wildlife.



Safety Issue Addressed at Abiquiu

A maintenance crew placed station markers along the crest of the Abiquiu dam Feb. 14.

Workers Roger Apodaca and Joseph Lopez spaced 18 markers 100 linear feet apart.

Shortly, the team will get precise GPS coordinates of the markers, so their exact location can be transposed onto maps.

According to Abiquiu Lake Operations Manager Dave Dutton, the purpose of the markers is strictly observational.

"Now, we can report areas of concern, and people in operations and dam safety will have a quick point of reference," he said.

Joyous Sights, Sounds Abound for History Month

Sonia Murdock, Black History Month Special Emphasis Program Manager, and her daughter, Shania, helped set the tone for a rousing celebration on Feb. 23.



As part of the program highlighting numerous, significant contributions made by African-Americans, a special guest performer, Mr. Facinet Bangoura, from Guinea, West Africa, demonstrated the music that can be made by using an African instrument called the balafon.

Bangoura was born in the village of Forecavah in Guinea, and his family is descended from a long line of Diali, or keepers of the history and culture as it is expressed through musical traditions. He began formal training on the balafon at age 7.

The musician and his wife also demonstrated traditional rhythms produced by African drums.



Photos by Lisa Lockyear

March: Women's History Month

"In America, we must lead by example in protecting women's rights and supporting their empowerment. Despite our progress, too many women continue to be paid less than male workers, and women are significantly underrepresented in the science, technology, engineering and mathematics (STEM) fields. By tapping into the potential and talents of all our citizens, we can utilize an enormous source of economic growth and prosperity. The White House Council on Women and Girls has continued to remove obstacles to achievement by addressing the rate of violence against women, supporting female entrepreneurs, and prioritizing the economic security of women. American families depend largely on the financial stability of women, and my Administration continues to prioritize policies that promote workplace flexibility, access to affordable, quality health care and child care, support for family caregivers, and the enforcement of equal pay laws. I have also called on every agency in the Federal Government to be part of the solution to ending violence against women, and they have responded with unprecedented cooperation to protect victims of domestic and sexual violence and enable survivors to break the cycle of abuse." — *President Barack Obama*

District Promotes Safety Consciousness with Award

Public Affairs: Tell us about the award?

Richard Buttz, Safety: The awards are presented annually to any project office and resident office where the assigned team has gone the whole year without a lost time accident. The intent of the award is to enhance our Safety Program by not only creating a Safety Environment, but creating and maintaining a District-wide Safety Culture. Recipient offices for 2010 were: Abiquiu, Cochiti, Conchas, John Martin, Santa Rosa, Trinidad and the El Paso Resident Office.

Public Affairs: Is the program new?

Richard Buttz, Safety: The initial idea of awarding the plaques started in 1995. However, there were no awards given in 2009, because the District Commander decided to forego the program that year.

Public Affairs: Do you conduct safety training on a regular basis?

Richard Buttz, Safety: We recently added safety training to every employees' individual training plan. So far, we've conducted portable fire extinguisher training and fire evacuation training. We'd like to start teaching the OSHA 10-hour construction safety training, as well.



Team members from John Martin and Trinidad (top) project offices received the award on Feb. 23

(L-R) Walter Migdal, Glenn Roybal and Daniel Curado listen as Jeremy Brazell presents HydroTech Inc.'s capabilities during a District business outreach event held in the Albuquerque District main office Feb. 24. HydroTech Inc. is an 8(a) certified small disadvantaged and woman-owned small business in Arizona.



Photo by Lisa Lockyear

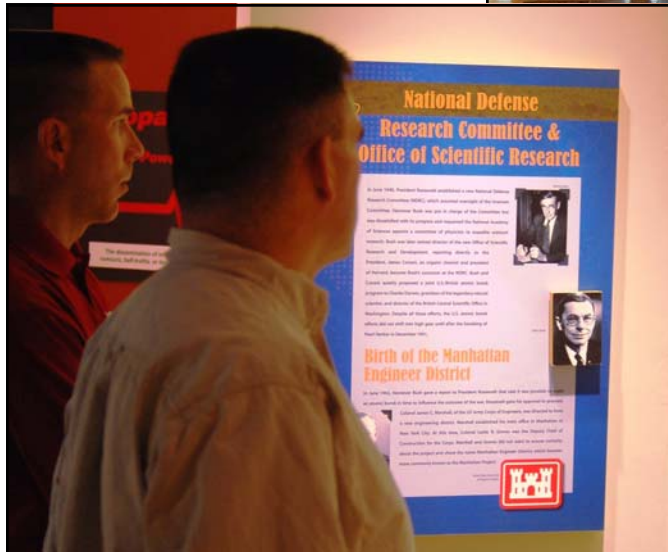
District's Military Members Visit Museum



As part of a leadership development program, the District's military members visited Albuquerque's National Museum of Nuclear Science and History March 5.

Elementary Atomics

The District's military cadre study the Periodic Table of Elements at the museum; they also learn about the development of atomic science and its military and civilian applications.



A Tremendous Responsibility

Lt. Col. Jason Williams (Left) and Maj. Rick Collins consider the challenges faced by Engineer Officer Maj. Gen. Leslie Groves to develop the atomic bomb. Groves directed the construction effort, acquired raw materials, directed the collection of military intelligence and helped select the target cities in Japan.

What Security Plan?

Chief of Security Master Sgt. Bernie Lujan studies an Army Plymouth used to transport a major component of the atomic bomb from Los Alamos to the Trinity Site near Las Cruces, N.M. Amazingly, the device made the long trip sitting on the car's seat.

National Museum of Nuclear Science and History
601 Eubank Boulevard S.E.
Albuquerque, NM 87123
(505) 245-2137



Photos by Michael Logue

District Happenings

River Compacts Ensure Recognition of Water Rights

By Michael Logue, Public Affairs

In the Old Southwest, a dam across a creek shared with a neighbor might produce a response with guns and dynamite.

Today, a tight collaboration among several agencies, driven by formal interstate compacts, has eliminated water wars and protects a historic way of life for all along the major rivers in the Albuquerque District.

The water compacts for the Rio Grande, Pecos, Canadian and Arkansas rivers were set up to “remove all causes of present and future controversy regarding the equitable distribution of waters” within those states.

Other benefits included encouraging interstate “pleasantry,” securing and protecting future development, facilitating water-related projects, ensuring the efficient use of water and coordinated flood control.

The compacts ensure that each state gets its agreed upon share of the water and provides for mathematical reimbursements when a partner doesn’t.

For Dennis Garcia and his Reservoir Control Branch team, the compacts play out in real life as the states look to their technical advisors to help them manage the water compact year by year and

month by month.

Each year, technical teams from various agencies meet to discuss snow pack and projected seasonal rains to determine the needs and wants throughout the watersheds, without conflict.

“At the end of the day, our success is based on close collaboration and the working relationships we have built with others over the years,” Garcia said. “Especially with our own project offices; we couldn’t do our job without the hardworking people in the field.”

The technical teams, which include the Interstate Stream Commission, Middle Rio Grande Conservancy District, Bureau of Reclamation, Pueblo interests and others, prepare reports to be presented to appropriate Compact Commissioners in the spring.

The Corps’ report is developed in close coordination with District personnel, and includes water operations and civil works activities conducted in our basins during the year.

Deviations from authorized water control plans are sometimes warranted, but require intense coordination and Division approval.

A successful deviation from authorized operating plans on

the Rio Grande last year, to benefit the silvery minnow and other downstream environmental resources, required months of planning. A change in release at Cochiti Dam was adjusted in a manner that helped the natural spring runoff provide ideal flows for the spawning and recruitment of the silvery minnow.

This deviation was particularly challenging because, although the Corps is a key player in the management of releases from our dams, the Corps does not own the water released and must operate in a manner that respects flood control and water compact obligations.

Another example of the collaboration process came during the recent winter cold spell, resulting in power shortages. Los Alamos County contacted the Corps to investigate generating hydro-power from Abiquiu dam. Garcia’s team sorted out the water requirements, resolved the issues and was prepared to okay the water flow to generate power and help struggling residents.

Fortunately, the crisis passed, but “the team was ready to push the button” on short notice, Garcia said.

Water Control Team Coordinators

Pecos Basin: Curtis McFadden

Arkansas Basin: Marc Sidlow

Rio Grande Basin: Don Gallegos

Canadian Basin: Roberta Ball

Corps Contributes to Investigatory Efforts at Base

By Walter Migdal, Environmental Project Manager

Kirtland Air Force Base has been a part of Albuquerque since the early 1940s, when it started out as a transient base for bomber pilots en route to the west coast during WWII and a training base for bomber crews. Today, Kirtland hosts multiple tenant units supporting a myriad of activities.

Throughout the years, many different types of aircraft have been flown from Kirtland, and they all required fuel to fly.

In 1999, as part of a site investigation, a groundwater well was installed near the bulk fuels facility on base, and workers discovered groundwater contamination. Since then, more than 29 wells have been installed to determine the extent of the contamination.

In June 2010, the Army was tasked to develop a performance work statement for the remediation of the site, to respond to regulatory requirements. The Corps was handed this difficult task but was able to award a \$22 million contract to Shaw Energy and Environment (Shaw) by the end of the fiscal year. Since that time, Air Force, USACE, Air Force Center for Engineering and the Environment and Shaw have worked at a feverish pace to get the project initiated and in the field to meet the deadlines imposed by the New Mexico Environment Department's (NMED) Hazardous Waste Bureau.

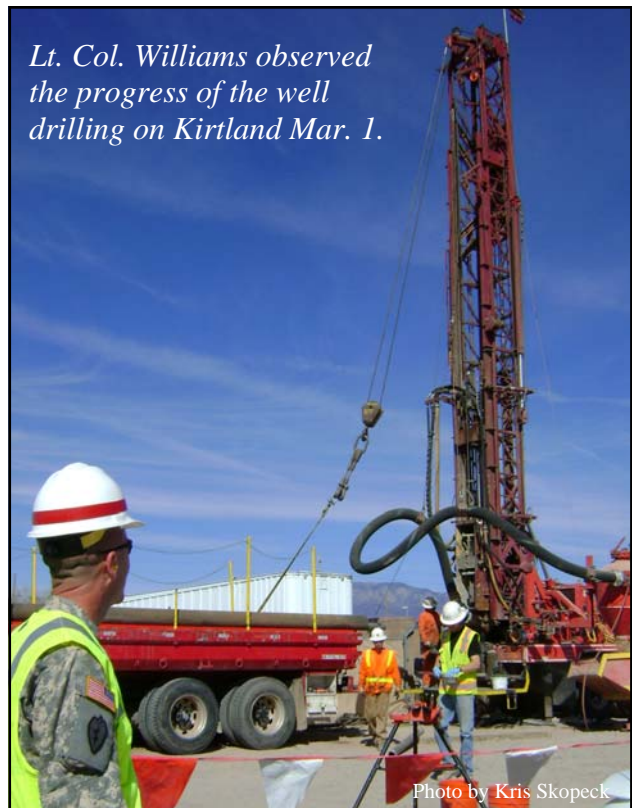
The field work started in early December, after NMED reviewed and partially approved the work plans. In January 2011, installation began on the first of 78 groundwater wells and 35 soil vapor monitoring wells, in addition to excavation of contaminated soils down to 20 feet. The wells are being installed using a drilling technique known as Air Rotary Casing Hammer to drill down to the 500-foot water table. To add to the complexity, a military construction project to remove and replace the aging bulk fuels facility continues nearby.

Shaw plans on having up to nine separate rigs going at one time, to meet project deadlines.

The biggest challenges lay ahead, as work will move off the base and into residential neighborhoods to install 55 groundwater wells. The planning for off-base work has involved close coordination with local citizens' advisory boards, neighborhood associations, the Veterans Administration hospital and the City of Albuquerque for permits and approvals.

The well drilling is estimated to take six months to complete, and it will take approximately two years to collect the data for the Risk Assessment, which will lead to the preparation of a Corrective Measure Evaluation. This report will detail the results of the investigation and a better understanding of the extent of contamination. The report will be used as a basis for the final plan of remediation.

Team members in the Kirtland Resident Office are involved with both projects.



Lt. Col. Williams observed the progress of the well drilling on Kirtland Mar. 1.

Photo by Kris Skopeck

This activity supports our Operations Plan: Action 7 (Execute the regional Military Program and capitalize on Interagency and international Services opportunities).

Rip Rap — March 2011 — Page 7

District Happenings

Design of District's First BIM Project Nearly Complete

By Kris Skopeck, Public Affairs

In early January 2010, the District stood up a Building Information Modeling (BIM) project team charged with mastering and implementing this state-of-the-art technology within the field of Computer Aided Design.

The team, comprised of architects, engineers and technicians from the architectural, structural, mechanical and electrical disciplines, was asked to focus its talent on bringing about significant improvements in the quality and efficiency of facility planning, design, construction and operations.

The group collaborated within a formal BIM training and coaching session and then turned their focus onto an Air Force flight simulator project to be designed within the 3D, model-based BIM environment.

Meeting weekly since its inception, the BIM team is about 95 percent complete with the project's design phase.

"The BIM technology is rapidly gaining

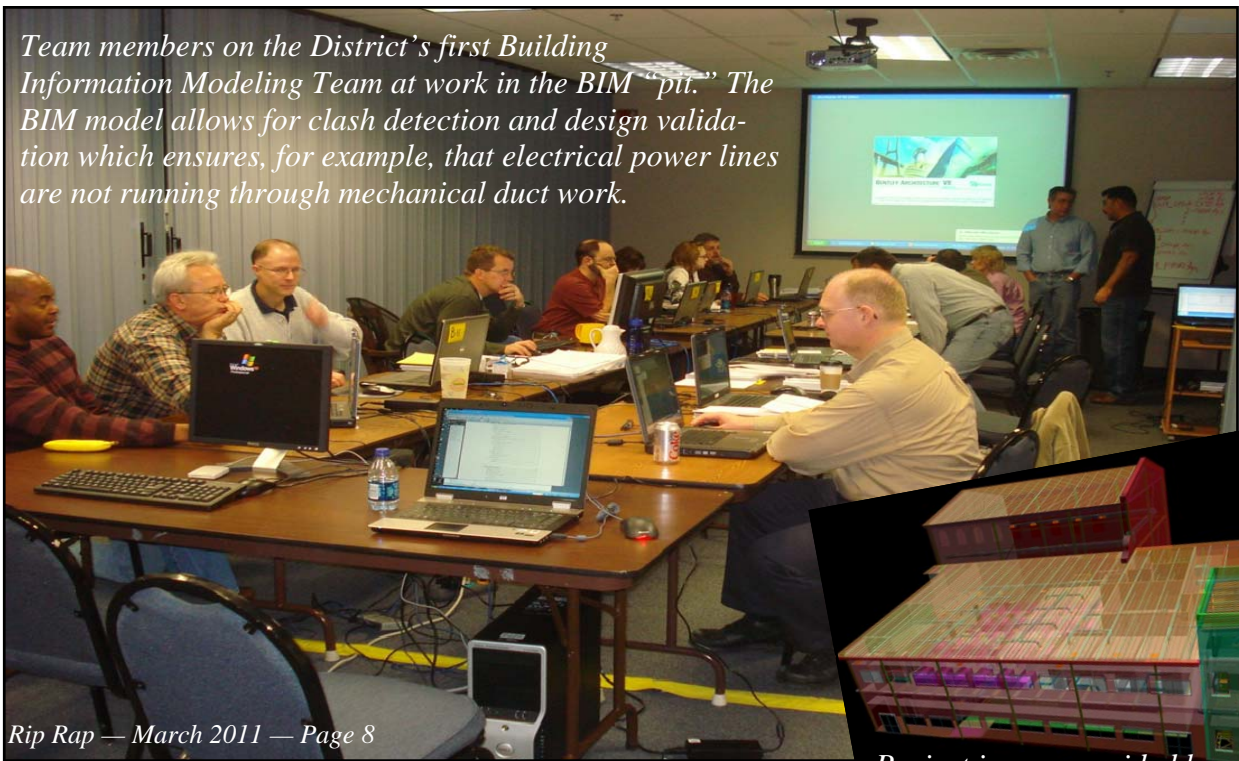
acceptance throughout the planning, architecture, engineering, construction, operations and maintenance industries," said BIM Manager Paul Rebarchik. "The Albuquerque District's challenge is to proactively use BIM to drive down costs and delivery time, while maintaining and improving quality at the same time."

According to Rebarchik, the future of BIM is promising for both military and civil works model-based digital design processes, to include the integration of other Corps software products and data that supports engineering analysis, bill-of-material generation, cost modeling, production planning, supply-chain integration and, eventually, computer-driven fabrication on the factory floor.

Other disciplines called upon to help with the flight simulator project include civil engineering, geotechnical engineering, cost engineering, specifications and contracting.

The project manager is April Fitzner, and the BIM lead architect is Jim Marshall.

Team members on the District's first Building Information Modeling Team at work in the BIM "pit." The BIM model allows for clash detection and design validation which ensures, for example, that electrical power lines are not running through mechanical duct work.



Rip Rap — March 2011 — Page 8

Project image provided by Jim Marshall.

Employee Competes in Race for 15th Time

Team finishes first in their age division

By Elizabeth Lockyear, Public Affairs

With 15 years of competition in the annual Mt. Taylor Quadrathlon under his belt, Mike Goodrich, chief of the District's Environmental Project Management section, has participated in more than half of the 28 years the event has been held in Grants, N.M.

This year, it took place Feb. 19, and Goodrich described the race as both "very challenging" and "great fun."

He said there were between 400 and 500 participants, and about 200 of them raced solo, with the rest grouped in teams of two to four people.

This year, Goodrich's team came in first in their age category and were the fourth fastest team overall. It was the fourth year cyclist Skip Wrightson, skier John Pietz, snowshoer John Ferriaoulo and runner Goodrich competed together.

The Quadrathlon is a 42-mile race from Grants to the summit of Mt. Taylor and back. It starts with a 13-mile bike ride, followed by a 5-mile run. The skiing section is the most technical: it's a steep 1,200 foot climb covering 2 miles.

The notorious "Heart Break Hill" is the mid-way point and involves a 1-mile climb on snowshoes to reach the summit.

The soloist or team then reverses course, going downhill

21 miles by snowshoeing, skiing, running and cycling back to the start/finish line.

Goodrich said he raced solo once and it was the "hardest physical thing I've ever done."

The other 14 years, Goodrich raced as part of a team, doing the running and cycling portions.

In high school, Goodrich ran track and cross country and has been running ever since. He took up cycling about ten years ago when his knee began giving him a little trouble. He said that most Saturday mornings he can be found on the trail that goes along the foothills of the Sandia Mountains.

At 11,301 feet in elevation, Mt. Taylor is the highest peak in northwest New Mexico. To the Navajo people, Mt. Taylor is one of four sacred mountains marking the cardinal directions and the boundaries of the *Dinetah*, the traditional Navajo homeland. The Acoma, Laguna and Zuni people also consider the mountain sacred.

Goodrich said that, with training, competing in the Quadrathlon is "do-able" and hopes to see some District employees on the course next year.

"Unless I'm injured, I'll do it again," he said.





***At Left:** Public Affairs Specialist Ronna Schelby visits the Pentagon as part of the activities leading up to her graduation Mar. 11 from a 10-week course at The Defense Information School at Fort Meade, Md.*

***Below:** The newest members of the District were sworn in March 14. From left to right, the new employees are: Andrea Gonzales (STEP real estate); John McBee, project manager; Timothy Eng, project manager; and Hemrie Clarke, admin clerk. Not shown: Glenn McMaken, Mechanical Engineer.*



Photo by Lisa Lockyear



Some Albuquerque District team members like flexing a little muscle in their choice of vehicles. These shiny, new cars belong to the following: Mark Yuska, John Kimball, Denise Gutierrez and Greg Allen.

Photo by Kris Skopeck

Division Leadership Program Offers Challenge

By Elizabeth Lockyear, Public Affairs

While participants describe the year-long Regional Leadership Development Program (RLDP) as demanding and intensive, it offers emerging leaders within the Corps the chance to develop and enhance their leadership skills.

Two of the 17 in this year's class are from the Albuquerque District, Josh Carpenter and Michael Porter. The other 15 are from South Pacific Division, located in San Francisco, or one of the other three districts: Los Angeles, Sacramento and San Francisco.

Getting accepted into the program is a rigorous process. Completion of the district-level version, LDP II, is a springboard for RLDP and highly recommended, but not technically required. According to the District's LDP Coordinator Craig Lykins, soon applicants will have to complete the Basic Civilian Education System course in order to apply for RLDP.

The number of students from a district varies by size and funding. One of the smaller districts in the Division, Albuquerque usually sends two students per year. The larger Los Angeles and Sacramento Districts may send five or six students.

Porter, a fishery biologist in the District's Environmental Studies Unit, said he applied to "further develop [his] people skills," polish leadership skills and find improvement areas.

Carpenter, senior project manager at the District's Southern Colorado Regulatory Office, describes the program as "an investment by the organization in people the organization sees as prospective leaders."

RLDP, also known as LDP tier III or LDP III, involves a significant time commitment. There are reading assignments from books such as *Good to Great* and *Congress for Dummies* and regular meetings with a mentor. Students also attend week-long meetings every quarter that coincide with the Division's Regional Management Board meetings.

There is also a "field trip" to Washington

D.C., where students attend a week-long class at George Washington University.

A key element of the program is the team project. RLDP has been in place approximately 10 years and, for the first time, this year's class divided to do two projects.

Porter said that the class used a variation of the Delphi method to narrow down project ideas. The Delphi method is a structured communication technique. The class debated several project topics suggested by leadership, narrowing down the topics until two were left. At this point, they decided their class should split and work on both topics.

Ten students are examining morale building in the Southwest, while the other seven are evaluating the Corps' Interagency and International Services program (IIS). Both team projects will be presented to leadership, most likely at the graduation in September.

Regardless of how the Division uses the teams' recommendations, Lykins said it's the team exercise that's important.



(LtoR) Front row: James Maes, Irene Lee, Jody Fischer, Crystal Huerta, Cindy Tejada; Middle: Kristy Riley, Kim Carsell, Kathleen Ungvarsky, Dina Aman, April Fontaine; Back: Mickey Porter, Charles Fenwick, Scott Moore, Laurie Suda, James Robb, and Josh Carpenter.

News Briefs—News Briefs—News Briefs—News Briefs

Open House at Abiquiu Dam

The U.S. Army Corps of Engineers at Abiquiu Lake will be hosting an Open House for the public. The open-forum style meeting is scheduled for Wednesday, **March 23rd, 2011, 6:00 pm** at the Abiquiu Lake Visitor Center located on Highway 96, 2 miles west of the Highway 84 junction.

Officials from the Corps of Engineers - Albuquerque District, Reservoir Control Branch will be there to discuss the 2011 spring runoff, river release forecast and associated water operations. Current and future natural resource and recreation projects will also be discussed by the Abiquiu Lake Staff.

For additional information, contact the Abiquiu Lake Project Office at 505-685-4371.

Public Asked to Comment on NWP

Nationally, the U.S. Army Corps of Engineers is accepting public comments on a proposed set of revised Nationwide Permits (NWP). These permits are for work in wetlands and other waters that the Corps regulates under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors

Act of 1899. The NWPs are revised every five years, the last time being in 2007.

Locally, the Albuquerque Corps of Engineers District is seeking public comments on proposed regional conditions for the states of New Mexico, Texas and Colorado.

Under federal guidelines, a Division Engineer may add regional conditions to NWPs that are specific to the needs and/or requirements of a particular region or state.

To comment on the proposed regional conditions either e-mail Allan.E.Steinle@usace.army.mil or mail to Albuquerque District, ATTN: RD, 4101 Jefferson Plaza NE, Albuquerque, NM, 87109 by **April 18, 2011**.

Anyone who wishes to comment on the proposed NWP revisions can send their comments to NWP2012@usace.army.mil or through the Federal eRulemaking portal at www.regulations.gov at docket number COE-2010-0035 by April 18, 2011.

Small Business Conf.

The 10th Annual Veterans and Small Business Training and Outreach Conference is to be held **April 12–14, 2011**, at the John Ascuaga's Nugget Hotel, Reno, Nevada. The U.S. Army Corps of Engineers,

South Pacific Division and the California DVBE Alliance are looking forward to networking with you!

There will be a wide variety of workshops and networking sessions that will keep you up-to-date regarding federal procurement. These featured workshops are designed to help small businesses find new government marketplace opportunities. For more information go to <http://www.implanners.com/veterans/>

Basic Media Training

Public Affairs has developed an online media training course that can help alleviate fear of the media. The training can be completed in about 30 minutes at this link: <http://www.spamediatrain.com/>

Holiday Extends Tax-Due Deadline

Taxpayers will have until Monday, **April 18** to file their 2010 tax returns and pay any tax due because Emancipation Day, a holiday observed in the District of Columbia, falls this year on Friday, April 15. By law, District of Columbia holidays impact tax deadlines in the same way that federal holidays do; therefore, all taxpayers will have three extra days to file this year.