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St. Paul District
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Crosscurrents

Vol. 32, No. 5
November-December 2009

District progresses with St. Bernard Parish projects

Photo by Bill Csajko

From left: Grant Riddick, Alex Nelson, Kenton Spading and Bob Dempsey, all engineering and construction division, stand on Lake Pontchartrain and Vicinity levee reach 148 in New Orleans. They are observing clearing and grubbing work to create a pathway for water to flow out of LPV reach 149 through a gravity drain culvert.

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Crosscurrents is an unofficial publication, authorized under the provisions of AR 360-1. It is published monthly for the St. Paul District, U.S. Army Corps of Engineers.

Editorial views and opinions are not necessarily those of the Corps of Engineers, nor of the Department of the Army.

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Command Corner
By Col. Jon Christensen
St. Paul District Commander

Together we accomplished much this year

Team,

After an uncharacteristically warm and sunny November, winter has finally arrived. December looks more "normal," even though I haven't had a chance to go cross country skiing yet. Nor have I had much of a chance to test out my new snow blower, but there is still a lot of winter to come. As for now, snow is now on the ground, and the holiday season is upon us. Teresa and I wish all of you a most happy and safe holiday season and hope you all take advantage of the break to recharge for what will undoubtedly be a challenging new year.

The Holiday Awards Ceremony took place in December and it was a huge success. Teri Alberico, emergency management, and Kevin Bluhm, project management, did an outstanding job planning and organizing the event. Jon Lyman, ACE-IT, and Shannon Bauer, public affairs, outdid themselves once again with a powerful slideshow highlighting the district's outstanding performance in 2009. Of course, Santa Jeff [Pfannes], Mississippi Valley Division safety office and rehired annuitant, made his usual rounds and passed out a number of donated gifts. To cap it all off, Bobber the Water Safety Dog made an unexpected visit and was a huge hit with the crowd. And, of course, Tom Sully, executive assistant, was at his best in the role of emcee, ensuring the events stayed relatively on schedule while providing some appreciated levity to the event.

The Corps-aoke was a huge hit as well. With the exception of the executive office, the groups were well rehearsed and performed wonderfully. The competition was close, but operations division was the crowd favorite with a district move-themed rendition sung to the tune of Aquarius. Even Bobber showed his appreciation with a hearty tail wag as he danced to the tune. A great effort by all – it was a lot of fun.

As we close out this record-setting year, I want to thank everyone once again for your professionalism, determination and outstanding performance. Together we accomplished much – progress in St. Bernard Parish, execution of the American Recovery and Reinvestment Act, fighting floods in the Red River Valley, enhancing navigation on the Mississippi, saving wetlands, meeting the public's recreation needs, supporting Overseas Contingency Operations, Lock and Dam 3, Devils Lake, the Fargo-Moorhead Metro Study – the list goes on and on. I couldn't be more proud of your efforts.

Thanks for all you do.

Inside

Future Crosscurrents:
- Mississippi Valley Division reorganizes projects and programs to integrate work across districts.
- St. Paul District prepares to move next door, late April-early May.

District makes progress on St. Bernard Parish projects

by Mark Davidson

St. Paul District personnel have been working in St. Bernard Parish, or SBP, in Louisiana, since September 2005, right after Hurricane Katrina hit Louisiana and Mississippi on Aug. 29, 2005.

Now, district personnel are leading about 100 Corps personnel from eight districts and the Hurricane Protection Office, or HPO, plus hundreds of contractors in designing the six reaches for the SBP portion of the Hurricane and Storm Damage Risk Reduction System.

Bill Csajko, project management, has been the SBP technical manager for this project since 2007. He said more than 40 district employees worked on the SBP project in fiscal year 2009.

"Two of the three largest reaches have been awarded early contractor involvement contracts, with a total value of $637 million," said Csajko. "All the remaining construction contracts in SBP should be awarded in 2010."

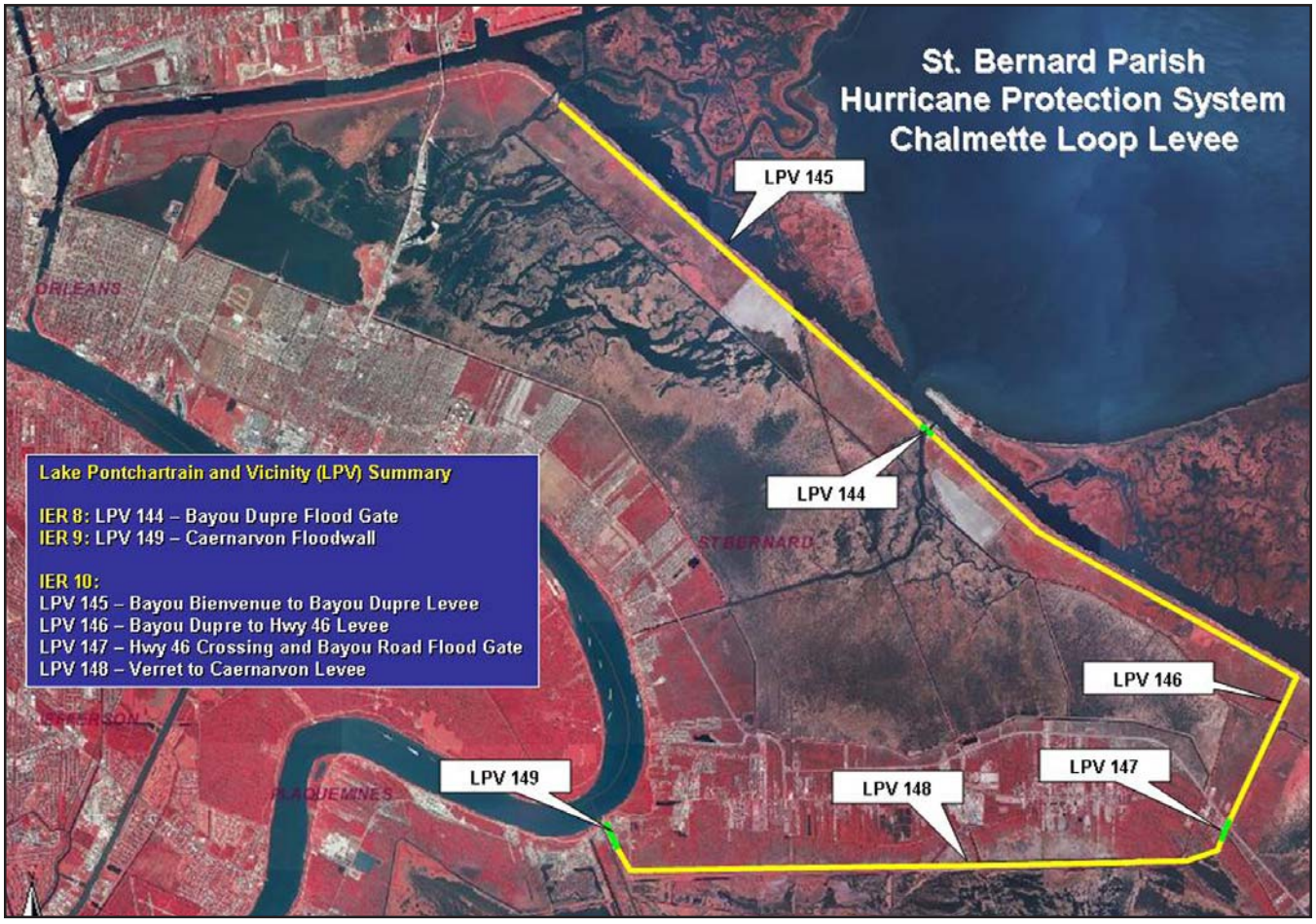
Location

SBP is located in southeastern Louisiana, east of and adjacent to the city of New Orleans. Approximately two-thirds of the parish is surrounded by water and consists primarily of marshlands formed by the Mississippi River Delta.

The area of the parish along the western portion on the northern shore (east bank) of the Mississippi River has the highest elevation and largest population. Eastern portions of SBP consist of a combination of fresh, brackish and saline marshes.

Remnants of natural topographic ridges can be found along the existing or abandoned courses of river distributaries, or bayous. Other ridges, or cheniers, are found along abandoned coastlines in isolated areas of the marshes. Barrier islands and beaches, in

***Parish**, continued Page 5*



St. Paul District GIS

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particular the Chandelier and Breton Islands, can be found at the edge of the Old St. Bernard Delta.

SBP project activity

The SBP HSDRRS has been broken into several smaller reaches and are referred to as Lake Pontchartrain and Vicinity, or LPV 144 to LPV 149. The reaches are as follows:

- LPV 144 – Bayou Dupre Floodgate Replacement
- LPV 145 – Bayou Bienvenue to Bayou Dupre Floodwalls
- LPV 146 – Bayou Dupre to Highway 46 Floodwalls
- LPV 147 – Highway 46 and Bayou Road Floodgates
- LPV 148.02 – Verret to Caernarvon Floodwalls
- LPV 149 – Caernarvon Floodwalls and Sector Gate

St. Paul District work on the LPV reaches include:

LPV 144

Jim Sentz, engineering and construction, is the technical lead for LPV 144. His team has eight primary members – five from St. Paul and three from Rock Island – and they rely on many others to provide assistance as needed.

"I took over the technical lead role in March 2009, when the previous technical lead retired from the Corps," said Sentz. "The project was at about the 60 percent completed design level at that time."

The LPV 144 reach consists of building a new sector gate twice as tall as and to the flood side of the existing sector gate, and then tying back into the levee/T-wall alignment of the adjacent projects, LPV-145 and LPV-146. The sector gate is to be built across the Bayou Dupre Channel just to the west of the existing Mississippi River Gulf Outlet channel.

St. Paul District photo

From left: Jane Flewellen and Kenton Spading, both engineering and construction; Sivaramakrishnan (Siva) Sangameswaran, Arcadis; and Alexander Nelson, engineering and construction.

The actual project, said Sentz, is LPV 144.02. The original LPV 144 consisted of Bayou Bienvenue and Bayou Dupre Sector Gates. Bayou Bienvenue is 144.01 and Bayou Dupre is 144.02.

The project is currently advertised for a construction bid with an opening date in mid-January 2010. Currently, Sentz and his team are coordinating responses to requests for information from prospective bidders and coordination modifications/changes if they are required. This involves working closely with the architect-engineer and the Hurricane Protection Office contracting and design teams.

LPVs 145 and 146

Tom Novak, project management, is the technical lead for two reaches, LPVs 145 and 146.

LPV 145 is located adjacent to the Mississippi River Gulf Outlet, fronting on Lake Borgne. It ties into the Inner Harbor Navigation Canal-Lake Borgne Barrier. A good portion of LPV 146 is located adjacent to the Mississippi River Gulf Outlet fronting on Lake Borgne.

Novak is leading approximately 20-24 people on each team. They are from St. Paul, New Orleans and HPO technical support plus dozens of people from an architect-engineering firm, the Lake Borgne Basin Levee District and several construction firms.

"I started in May 2008 on LPV 147 and moved into LPV 145, 156 and 148.02 in October 2008," said Novak.

He's leading two separate design teams that will design/construct a 10-12 foot high concrete flood wall on top of an existing 20-foot high levee. The walls for LPV 145 and 146 will be 5.68 miles and 7.57 miles long respectively.

These two reaches are part of the early contractor involvement.

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***Parish**, continued from Page 5*

The LPV 145 and LPV 146 design work will be done in January 2010.

LPV 147

Tommy Tucker, Vicksburg District, is the technical lead for LPV 147. He started on this project in December 2008 and leads about 40 people from Vicksburg, St. Paul and New Orleans districts.

LPV 147 is approximately in the center of the parish and near the town of Verret, La.

"I am the technical manager of the architect-engineer, which is designing and preparing the construction plans and specifications for a portion of the St. Bernard Parish line of protection," said Tucker. "It has been a very challenging project," he said.

The project consists of steel H-pile founded reinforced concrete flood walls and closure gates across Louisiana State Highway 46 and Bayou Road. The LPV 147 team is also responsible for performing the quality assurance of all work being performed by the architect-engineer and coordinating reviews through other districts, local sponsors, and stakeholders.

The design work was completed on Dec. 1. The design team is wrapping up the comments from the reviews.

LPV 148

Grant Riddick, engineering and construction, is the technical manager for the early contractor involvement contract for LPV 148.02. Riddick, who has been working on and off in Louisiana since 2005, has been the technical manager for LPV 148.02 since October 2009.

LPV 148 is located in the southern part of St. Bernard Parish (south and east of New Orleans proper) between Louisiana Highway 46 at Verret and Caernarvon, La. The reach is approximately eight miles in length.

"I am coordinating a team of about a dozen professionals from the government and private sector, as we design and prepare contract documents for an H-pile supported concrete T-wall placed on top of an earthen embankment," said Riddick.

Riddick said they all assist one another. He said this reach is being co-managed by himself, Novak, Csajko and Chris Gilmore, New Orleans District senior project manager.

The design team is composed of six people from the architect-engineer firm which is a joint venture composed of three companies. There are about six members from the AE firm in the disciplines of geotechnical, structures, costs, specifications, civil engineering and management.

The early contractor involvement part of this is the potential construction contractor and that entity is not yet known. The St. Paul District team members are Chris Behling and Greg Wachman from geo-technical; Kent Hokens, structures; and Aaron Mikonowicz, civil section.

The design work is scheduled to be done in March 2010.

LPV 149

Tim Paulus, engineering and construction, is the technical lead for LPV 149. He started working on this project in September 2008.

LPV 149 is located off Louisiana State Highway 39 and is on the St. Bernard Parish and Plaquemines Parish line. The project also provides the tie-in to the Mississippi River levee. The project has several significant businesses located within it including Elevating Boats Industries and Delacroix Corporation.

"If you include the architect-engineer team, there are around 40 people on the team," said Paulus. "We have an architect-engineer on board to design the sector gate, highway gate and railroad gate. We are designing the floodwall [concrete T-wall] in house."

The architect-engineer team is scattered throughout the country and is a joint venture among three companies. The government review team is from multiple Corps districts including Jacksonville, St. Louis, Huntington and New England.

Paulus's main job is to coordinate the overall design effort. This includes coordinating and setting up all the required technical reviews. He also has to negotiate the primary contract with an AE firm and all the modifications to the AE contract.

His team also has had to coordinate with the Norfolk Southern railroad to install a closure structure across their tracks. They also have had to coordinate with the Louisiana Department of Transportation for the closure structure across State Highway 39.

"Overall, the project has been very challenging," said Paulus. "This is probably the most challenging project in St. Bernard. We have a lot of project features in a very short reach. It takes an extensive amount of coordination."

The design for LPV 149 should be completed in February 2010.

Corps' national levee program "Building Strong"

By Peter Verstegen

Terry Zien , project management, and Michael Bart, chief of Engineering and Construction, are doing their "levee best" to build a strong national levee safety policy.

Zien is the project manager for the National Committee on Levee Safety. Bart leads the Levee Safety Policy and Procedures Team for Headquarters.

Zien cited three program talking points:

• Public safety is the number one priority of the Corps' Levee Safety Program;

• The program provides continuous feedback to the public about levee system condition and reliability through rigorous inspections and assessments; and

• Periodic inspection is the next level of rigor in the Corps' levee safety program and includes a more detailed and consistent evaluation of the condition of the levee system and will be conducted every five years.

Photos by Peter Verstegen

The reverse side of the Corps' Headquarters coin received by Terry Zien, project management, highlights "Building Strong" and recognized his contributions on the Corps' National Committee on Levee Safety.

In 2006, the Corps created its Levee Safety Program with the mission to assess the integrity and viability of levees and recommend courses of action to make sure that levee systems do not present unacceptable risks to the public, property and environment with the emphasis on the public.

The Corps subsequently launched a major effort to create a levee safety organization while developing the methods to manage its portfolio of levee systems. This includes systems operated and maintained by the Corps, systems built by the Corps and turned over to a local sponsor for operations and maintenance and systems built by a non-federal agency but in the Corps' Rehabilitation and Inspection Program.

The National Levee Safety Program Act of 2007 became law as part of the Water Resources Development Act on Nov. 8, 2007. It authorized the development of a national levee safety program, in addition to the inventory and inspection of levees. The program created a "committee on levee safety" to recommend a levee safety program. The committee consists of federal, state, local and private-sector members charged by Congress to make the recommendations and a strategic implementation plan on the National Levee Safety Program. "The committee has 16 voting members and eight non-voting members," said Zien. "The mission is to develop a national levee policy."

Corps Headquarters recognized Terry Zien's work as project manager with the Commander's Award for Civilian Service.

The committee has three over-arching concepts, said Zien:

• Establish a National Levee Safety Commission;

• Design and delegate a program to the states for levee safety; and

• Align existing federal programs.

The NCLS provided a draft report to Congress, "Recommendations for a National Levee Safety Program," to the Committee on Transportation and Infrastructure of the House of Representatives and to the Committee on Environment and Public Works of the United States Senate on Jan. 15, 2009. As a result, the American Reinvestment and Recovery Act of 2009 provided $90 million to accelerate levee inspections to augment the national levee database. The act cut the time for levee inspections from five years to 18 months, provided employment for contractors and increased the knowledge about the state of the nation's critical infrastructure as part of a broader national flood risk management strategy. The work of the NCLS will continue for three more years.

Data assets project team scans map files

Plans call for district data consolidation

By Kevin Bokay

This year has seen a breakthrough for a district team that's been working on a project since 2006. And it's a project that will eventually reduce the number of paper documents and make them easier to find in a digital format.

The St. Paul District Oracle Data Assets, or MODA, project delivery team initiative began in 2006 as a knowledge management discussion and ended up with an ambitious charter for the data acquisition and archive project delivery team. "The PDT set out to solve the challenge of dispersed data, drawings, technical reports and similar documents being maintained on hard drives, personal files, section file cabinets and other places," said Kenton Spading, engineering and construction and the MODA PDT manager.

The PDT decided on a large, digital library project that would index projects by geographic names and maintain all pertinent data and reports on a secure Intranet site. The team has members from all over the district: project management, geographic information systems, engineering and construction, design branch, information management, real estate, regulatory, the library and others.

The goals of the MODA PDT are to solve the problem of locating project information of many types and making this information available to all who need it. The team also wants to integrate applications such as GIS, CADD, REMIS, etc., and their associated processes across functional areas to improve the efficiency and the quality of work.

A major part of the MODA project started in September when the first task order was issued for the mapfiles scanning project. The project involves scanning about 100,000 engineering drawings from the mapfiles located in the district library.

"The mapfiles scanning work started as an independent effort within design branch with the triple goal of reducing the physical footprint of the mapfiles area within the district office, transitioning documents to a digital format for user friendly searching and retrieval and to move valuable documents off-site to a secure and environmentally controlled facility," said Marsha Mose, design branch chief. "It turned out that our thinking dovetailed very nicely with what was developing on a parallel track with MODA, so we were able to get more bang for our collective buck."

The project also explores a pathway for future projects related to the overall MODA project. This project has many lessons being learned regarding the logistics of inventorying, indexing, moving and

***MODA**, continued Page 9*

Photo by Jon Lyman

Brett Palmberg, engineering and construction branch, worked in mapfiles to transition documents into an accessible digital format.

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scanning these large documents, said Spading.

The project's mapfiles scanning contract was awarded after many months of brainstorming meetings that produced a scope of work and finally a contract with deliverables, task orders, a performance plan, and all the other components of a contract.

After months of researching the technical aspects of archival standards regarding digitization, microfilm and the different scanning and film practices and technologies, the contract was awarded to Iron Cross, Inc., of Chester, Va., which is using the subcontractor Data Abstract Solutions, or DAS, from Vancouver, Wash., to complete the work.

DAS rented space in the Sibley Square Building on the third floor and has set up a workshop there to do the scanning and filming. The deliverables call for digital images in tagged image file format, or .tiff, and portable document format, or .pdf, and photographic/microfilm images on 35 mm silver-halide film to be produced. The film format is an archival standard with a 500-year shelf-life.

Currently the drawings and maps are taken through several steps before finally being scanned and photographed. The drawing's metadata is loaded into MODA and indexed, then the drawings and maps are physically inventoried and secured, the inventory is verified and then verified again when consigned to the contractor.

DAS then takes the drawer downstairs where each drawing is photographed on microfilm and then carefully sheathed in optically-clear Mylar® and scanned to a digital image. Finally, the items are verified again upon return and put back into the collection. The process is continually being tweaked and made more efficient.

Photo by Jon Lyman

Hlee Moua, a student in design branch, accessed the mapfiles as part of the MODA project. The first task order for the mapfiles scanning project came in September.

Currently, the MODA tool is helping accomplish these goals. There are approximately 3,000 electronic documents related to district projects loaded in MODA, including design memorandums, operations and maintenance manuals, water control manuals, photographs, etc. Check out the website/database by clicking on "MODA (MVP ORACLE DATA ASSETS)" located in the "Corps Applications" portion of the MVP Intranet page.

Delivering data to the desktops of Corps employees is the guiding principle and the Oracle platform was chosen because it can manage many applications delivering the data to project managers and others who need it, said Spading.

The MODA PDT members point out that the documents found in MODA are not the official record copy of any document. The official copy is still the original hard copy and managing these documents still falls under the purview of Records Management.

District wins partnering award

"The St. Paul District has won the Dan Renfro Partnering Award for the third time," said Jim Peak, chief of construction branch. The district and its contractor, L.W. Mattson, Burlington, Iowa, partnered on the Pool 8 Phase III Stage 2 Habitat Rehabilitation and Enhancement project in Pool 8 of the Mississippi River near Brownsville, Minn. Mississippi Valley Division notified the district on Dec. 18. The award will be presented to the district and its contractor at an annual partnering conference on Feb. 5.

News and Notes

Newcomers:

Thomas Alich, security
Charles Boyd, engineering and construction
Lisa Buchli, engineering and construction
Jason Foss, engineering and construction
Matthew Groshek, student, regulatory
Jonathan Gustafson, engineering and construction
Patrick Mally, contracting
Loren Nishek, engineering and construction
Michael O'Keefe, regulatory
Brett Palmberg, engineering and construction
Wendy Pelletier, Lock and Dam 9
Andrew Sander, engineering and construction
Diane Scrafford, engineering and construction
Brian Siljenberg, engineering and construction
Nathan Wallerstedt, project management

Retirements:

Luanne Bearbower, Lower Area locks and dams administrator, with more than 23 years federal service
Merrill Cotter, logistics, with more than 38 years federal service
Donald Fehrenbacher, natural resources, with more than 35 years federal service
William Hurley, contracting, with more than 10 years federal service
Christine Kroll, operations, with more than 35 years federal service

Taps:

Charles Church, Lock and Dam 2, passed away Sept. 29.
Chris D. Granum, retired Lower St. Anthony Lock and Dam, passed away Nov. 18.
Jim Hurley, retired Lock and Dam 1, passed away Nov. 12.
Robert Penniman, retired project management, passed away Sept. 11.
Joan Quitter, retired civilian personnel, passed away Nov. 29.
Janice Wallace, retired civilian personnel, passed away Oct. 12.
Rob Zeches, Dredge Goetz, passed away Sept. 16.

Births:

Stephanie Dupey, real estate, celebrated the birth of a grandson, **Adam Richard Dupey**, Oct. 1. Adam arrived weighing 8 pounds, 3 ounces and 20-1/4 inches long.

Announcements:

Kyra Knoff, daughter of **Mike Knoff** in engineering, received a Federal Employee Education and Assistance, or FEEA, Fund Scholarship this past fall. FEEA sponsors the only merit-based scholarship competition program open exclusively to federal employees, their spouses and their children, rewarding hard workers through a merit-based program. FEEA is also a member of the Combined Federal Campaign. For more information, see: http://www.feea.org

Please send your announcements to include marriages, births, and graduations to: cemvp-pa@usace.army.mil.

Districts raises $24,000 for charity

The results of the **St. Paul District's 2009 Combined Federal Campaign** are in.

There were 49 pledges submitted, totaling $23,879.70 in contributions. The loose change contest brought in an additional $155.79, with the district's support offices taking first place in this competition. The bake sale also resulted in collecting $149.74.

Further, employees donated 67 pounds of food to the Emergency Foodshelf Network. With a total of $24,185.23 in donations, according to Eric Dore, district equal opportunity officer and CFC coordinator, the district came in third across the Twin Cities for the amount collected.

Photo by Peter Verstegen

Eric Dore, district equal employment opportunity officer, and Winifred "Wink" Newcomb, Combined Federal Campaign manager, supported the CFC kick-off, Oct. 7.

Photos by Shannon Bauer

"Introduce A Girl to Engineering Day," attracted 16 students to the district office in St. Paul, Minn., Oct. 29.

Jane Flewellen, engineering and construction, described her education and experience during her presentation.

Corps introduces girls to engineering

By Shannon Bauer

The Special Emphasis Program Gender Subcommittee hosted 16 girls at the district office Oct. 29 in celebration of Introduce a Girl to Engineering Day.

The National Society of Professional Engineers created Introduce a Girl to Engineering Day in 2001 as a way to increase interest in engineering among girls and young women. In the United States, only 10 percent of all engineers are women. By planting the seeds of interest early, NSPE hopes girls will be motivated to do well in math and science and be well prepared to enter engineering programs in college.

This is the fifth year the district has participated in this event.

The day's activities included presentations on the Corps of Engineers in general, civil engineering as a career, hydraulics, Geographic Information Systems, natural resources management, lock and dam operation, engineering design, wetlands science and obtaining student positions.

As to the success of the day, Liz Nelsen, hydraulics engineer and SEPC gender subcommittee member, said, "Even though the students were quiet this year, they all said at the end how much they learned and that they enjoyed the day."

Rojean Heyer-LaSeure (right), Lock and Dam 7, LaCrescent, Minn., described her work as the head operator on a Mississippi River lock and dam.

Mike Walker, geographic information systems, talked about the significance of GIS in engineering, wetlands and emergency response.