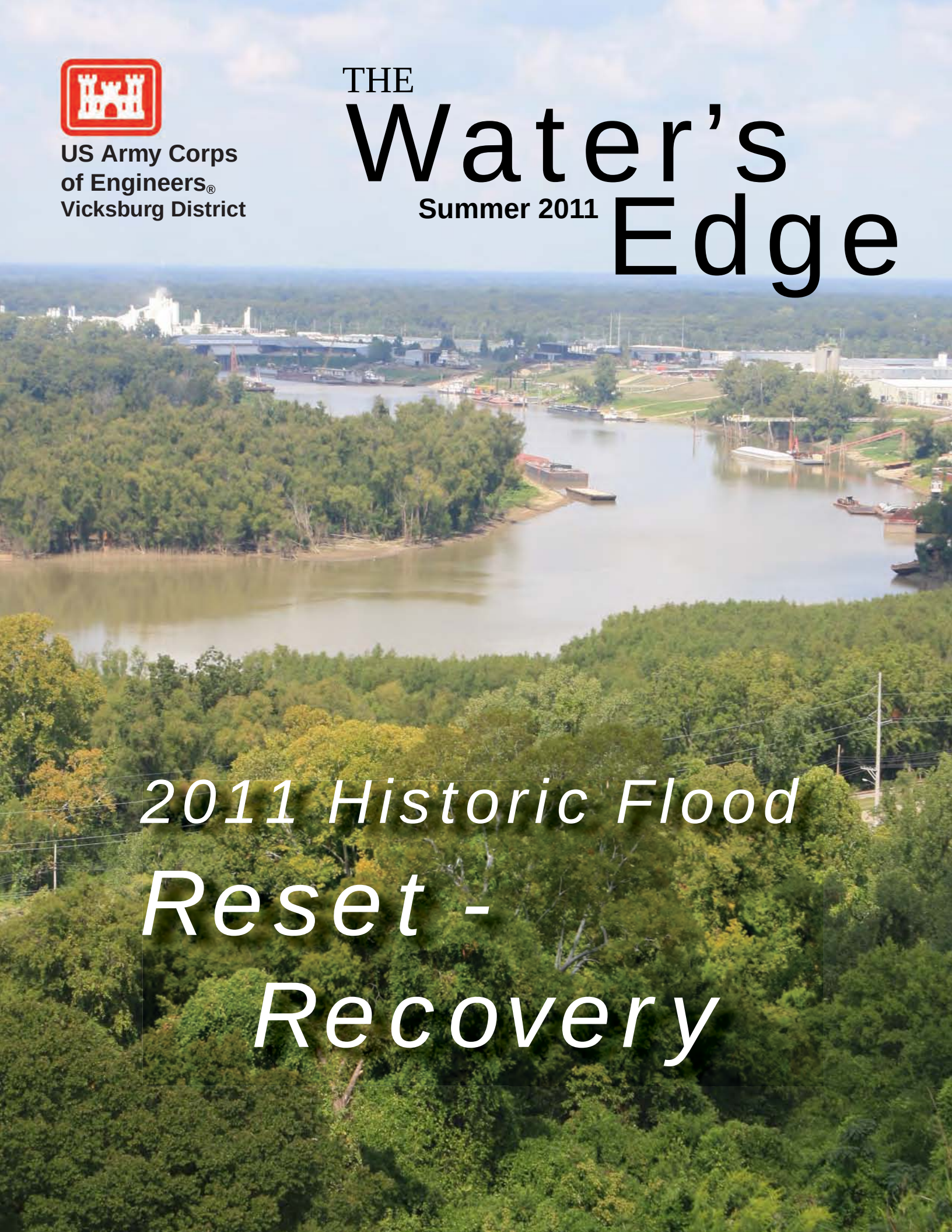
US Army Corps
of Engineers®
Vicksburg District

THE Water's Edge

Summer 2011



2011 Historic Flood

Reset - Recovery

The Water's Edge

CONTENTS

Summer 2011

US Army Corps of Engineers®

News magazine of the Vicksburg District
U.S. Army Corps of Engineers

Commander and District Engineer
COL Jeffrey R. Eckstein

Public Affairs and Communications Team

Kavanaugh Breazeale

Shirley J. Smith

Bucky Wall

Alice Bufkin

Bettie Flagg

Magazine Layout by
Colleen Cummins

• Authorization: The Water's Edge is an authorized magazine of the Vicksburg District. The Water's Edge is published quarterly in accordance with provisions of Army Regulation 360-1, is designed on a desktop publisher and is printed by offset.

• Circulation: 2000 copies per issue.

• Submission: News, features, photographs, and art are welcome.

Contact:
Kavanaugh.Breazeale@usace.army.mil
or Phone (601) 631-5052
Shirley.J.Smith@usace.army.mil
or Phone (601) 631-5223
Fax (601) 631-5551

Need to Know

PEOPLE
Ron Goldman and Ben Caldwell

PROCESS
Great Flood of 2011 & SMART Program Student working at District

PROJECTS
Sardis Lake Drawdown Structure

On the Cover

View of the Vicksburg Port which is home to the Mat Sinking Unit and dredge unit.
Photo by Kavanaugh Breazeale

Commander's Corner

with Colonel Jeffrey R. Eckstein

Greetings to all,

Congratulations to everyone! You were part of the success of the Mississippi River and Tributaries Project during the Great Flood of 2011. We had historic and unprecedented amounts of water in the river with over 250 folks on the ground actively fighting the flood. Part of the success of the MR&T project is attributed to our annual funding and the annual construction and maintenance that get accomplished. This requires the entire district working as a team - and I appreciate your constant efforts. I think you will remember what you did for the Corps during the flood. We also had our debris team out twice with numerous volunteers assisting in Minot, North Dakota; Joplin, Missouri, and western Alabama. We had nearly 80 volunteers out at the height of our support. The hired labor crew is still working on the Bird's Point-New Madrid Floodway rebuilding the levee. We should all be proud of our accomplishments and the support we provide to the Nation.

As we wrap up the end of the fiscal year, I want to review how we faired in executing the Operations Plan. The chart below gives the color coding for results. We did very well with our Civil Works survey results, inputting Quality Management System processes, and updating our corporate policies. We also significantly improved our Overseas Contingency Operations support, but need to continue. Our numbers are dropping off and we need new folks to volunteer. We will relook some of the metrics and validate the ones we did not get to green. We can do better with our participation in professional organizations and getting our work and our people some recognition in the various forms of media. Our baton holders and champions did a wonderful job tracking our tasks and keeping us on target. I appreciate the VLDP members' participation in the process.

All are aware of the reduced funding we have and the uncertain future. I am confident the Corps of Engineers will have a role in the infrastructure of our country in the future. The reduced funding for projects reduces our funding for labor; this is a significant impact. I remain committed to retaining our current government employees through the fiscal year. We have some mitigation measures in place already. Our rehired annuitants were released. We are not backfilling every vacant position. Normal attrition will dictate where the vacancies will occur. The district leadership will take the next six months to develop three possible end states for a future district structure. After we have one or more viable end states, we can develop the road map that will get us there.

The goal of the new structure is to reduce redundancies, gain efficiencies, retain the existing regional frameworks, and strengthen our resilience to future expansion and contraction of funding. Our balanced approach remains our method to accomplish our missions given the reduced funding. We will not continue to operate the way we have in the past and we just can't eliminate a function. The answer lies somewhere in between no change and zero. This will require us to do things differently. I ask all of you to be open to different possibilities and options for the future. With all of this change, we have opportunities. As a team we will become an agile and adaptive organization that can thrive in an uncertain future. I am confident and excited about the possibilities.

Thank you all again for your tremendous service to the Nation.

2011 Vicksburg District Operations Plan Scorecard

TASK DETAILS (parenthesis captures MVD IPLAN metric that aligns with task)	METRIC CATEGORIES	METRICS (listing is only a sampling; not exhaustive)
1. Contingency Operations at Home or Abroad (1a.1, 1c.1)		
Task Champion: Jonathan Pennington Baton Holder: Cynthia Lewis	Overseas Contingency Operations Emergency Operations	3% of MVK Employees qualified and prepared to deploy at all times in FY11 (quarterly) Ensure all RFO/EFO team positions are filled and ready (quarterly).
2. Regional Interdepence and Collaboration (2a.1, 2a.2)		
Task Champion: MAJ McRae Baton Holders: Toni Lowe-Fisher, Adam Staples	Deliver Real Estate Regional Workload Regional Training Hydropower	Improve in-house usage of appraisals to 80% in FY 11 Support RPEDs Regional Planning Workload Management - 25% for FY 11 Meet Regional Engineering requirements in FY 11 - 25% Meet regional Ops workload requirements in FY 11 – 20% (with 5% being external regional Hired Labor) Train the trainer – offer 4 courses (in-house) in FY 11 Switch remote operation of Cannon Dam from Truman to Blakely
3. Increase External Collaboration (2b.1, 2c.1)		
Task Champion: Jacob Brister Baton Holders: Tony Lobred, Amanda Hanks	CW Customer Surveys Stakeholder Engagement Regulatory Customer Survey Congressional Responses Contractor Safety	Improve any Civil Works survey response below 4.0 received on the '10 surveys to 4.0 or above in 2011. Maintain an average of 4.5 on all Civil Works survey responses PMs, OPMs, REs, and others engage 100% of the Stakeholders quarterly (include pre-survey checks) Achieve feedback response rate of 35% monthly Achieve a monthly customer satisfaction rating of 3.9 or greater All Congressional Responses will have a response within 10 days of receipt 100% of contractors have been briefed on the MVK Safety Policies/SOPs annually
4. Build, Strengthen, and Sustain the Bench (4a.1, 4d.1)		
Task Champion: Tim Shows Baton Holders: Sandy Gerbitz, Jessica Strider	Certifications Training Professional Org. Participation Retention Employee Safety	Baseline employee certifications and establish appropriate targets (by NOV 2010). Reach target % of certification in each career program among eligible employees (by Sep 2011) Refine (by FEB 2011) and implement (by JUN 2011) new employee orientation process 98% supervisor participation in at least one professional organization by Sep 2011 (May 2011) 50% non-supervisor participation in at least one professional organization by Sep 2011 (May 2011) Develop and/or update IDPs for 90% of workforce(95% of updated IDPs fully executed). Increase participation in mentor program by 100 (by Sep 2011). 100% of injured employees are fully aware of employee medical options on the same day of injury.
5. Strategic Communications (4b.1, 4b.2)		
Task Champion: Kavanaugh Breazeale Baton Holders: Lee Grant, Pam Samuels	Publication Customer Safety Project/Actvity Updates	Publish 15 media releases from existing articles in FY 11 Perform 8 courtesy Watercraft/boats inspections at MVK Lakes in FY 11. Increase number of press/media releases in FY 11 (10 per wk)
6. Disciplined Action in Utilization of Tools (4c.1, 4c.2)		
Task Champions: Barbara Petersen Baton Holders: Stacy Thurman, Andrew Strickland	QMS P2 Corporate Policy and Regulations	Input a minimum of 3 internal processes into QMS by each Division. Workload over/under resource report (+/- 5% by 30 Sept 2011) Identify and Revise top 3 regulations/policies (those requiring DE signature) in each DIV

District archaeologist discusses archaeological findings in Rolling Fork

Wall trenches of several houses

Site excavation

By Ben Robinson
Photos by Banks Leonard, Pan American Archeology

Christopher Koeppel, District archaeologist and chief of the environmental section, gave a presentation of the archaeology of the Rolling Fork Mounds site as part of Rolling Fork's "Lower Delta Talks" program. The archaeology on the property was conducted in advance of planned museum construction.

Koeppel described the large Native American village, dating to the 1300s, that once stood at the site. The presentation discussed the ceremonial mounds and plaza, several domestic houses, pit features, and the artifacts and floral and faunal remains that make up the pieces of a larger puzzle of everyday life in prehistoric Mississippi. ◄

Punctuated and incised pottery

Red painted pottery

Corps surveys damage to ports after historic flood

By Ben Robinson and photo by Kavanaugh Breazeale

As the Mississippi River swelled during the recent historic flood of 2011, it brought with it tons of sediment which was deposited in the seven commercial ports and harbors within the District. These ports and harbors are essential to maritime shipping along our nation's "inner coast" and serve a vital role in the economic prosperity of our country. Businesses depend on this navigational system as a cheap, reliable, and less polluting way to transport their materials domestically and globally.

The waters have now receded and the Corps has been surveying the damage left behind from the flood. This information will be included in damage assessment reports currently being assembled by all the districts throughout the Mississippi Valley. These reports will be used to evaluate damage done to the Mississippi River and Tributaries system during the great flood of 2011, and prioritize items of work ◄ .

Devils Lake project is joint effort for St. Paul and Vicksburg districts

By Lamar Rutland
Photos by Johnathan Silas

Devils Lake, North Dakota, has a population of approximately 8,000 people and is located on the northern shore of the lake commonly referred to as Devils Lake. The water level in Devils Lake has risen uncontrollably over the past 20 years. Several embankments around portions of the lake have been built and raised to protect the town; the current raise is scheduled to be the last.

The Corps is currently raising the embankments around the town to an elevation of either 1467.2' or 1469.2' which will allow the lake, currently at elevation 1454', to rise; when it reaches an elevation of 1458' it will outfall into the Sheyenne River. Currently, there is no outfall to allow the lake to flow into the Sheyenne River.

Construction on an outflow structure, designed by the Corps, is scheduled to begin in October or November. The current construction has been separated into three phases with three major contracts, causing the area office to expand its work force from two engineers to more than 20 employees managing the contracts. The construction contracts consist of raising 14 miles of embankment which will be approximately 3 million cubic yards of clay, 1 million cubic yards of sand, and 1 million cubic yards of riprap bedding.

There are also three pump stations included in the contracts that are capable of pumping more than 400,000 gallons per minute. Slurry trench cut-off walls are also being constructed in the embankment to prevent seepage. All embankments have a sand layer allowing all water to flow through the embankment when it reaches a certain level.

There are also several roads at the lake that have to be raised which requires coordination between the Corps and the North Dakota Department of Transportation. The Corps' work on Devils Lake has saved the town from major flooding; it has been stated that if the embankments were not built the local Wal-Mart would be 25 feet under water. ◄

Slurry trench construction at Devils Lake.

Worker adds bentonite to slurry pond with water pump.

Corps' project benefits the economy and the environment

By Ben Robinson

Phase III of the Big Sunflower, Steele Bayou Sediment Reduction Structures was recently completed. This Corps project keeps sediment and agricultural fertilizers and pesticides out of the Delta's streams. The project was completed using stimulus funding and the work was accomplished by using a local Mississippi contractor, DCD Construction, Inc., from Ocean Springs.

The environmental benefits of this project are multi-faceted. The sediment reduction structures reduce sediment loads that would naturally be deposited in the streams. This benefits tax payers by reducing dredging costs while accomplishing one of the Corps major missions - flood risk reduction. Keeping the sediment out of the streams improves channel flow capacity during times of flooding.

Secondary benefits of these structures help the environment by keeping agricultural fertilizers and pesticides out of the streams, thereby contributing to another one of the Corps' major missions of ecosystem restoration. ◄

The Great Flood of 2011

By Shirley J. Smith

Contributing to this article were Ashley Ebersole, Tim Shows, Drew Smith, and John Stouffer

Photos by Alfred Dulaney, Ashley Ebersole, and Kavanaugh Breazeale

The Mighty Mississippi is widely known as the second longest river in the world, and just as known for the disastrous flood of 1927. Now, the Big Muddy has another for the record books, the Great Flood of 2011 that surpassed the 1927 river level of 56.2 ft. by 0.9 ft.

The river crested at 57.1 feet in Vicksburg on May 19, 14.1 feet above flood stage, causing an epic flood, or better known here as the Great Flood of 2011. This epic flood tested all well designed engineering aspects meticulously built into the Mississippi River and Tributaries Act (MR&T) of 1928.

The Corps' number one priority during any disaster is protecting lives, and that is what the flood fight was all about, saving people's lives. In order to execute the mission, difficult decisions had to be made, while still retaining vigilance.

According to the National Weather Service, 6 to 10 times above-average rainfall over a 200,000-square-mile-area, added to a 1.5 to 3 times greater-than-average snow melt from Minnesota, combined to create the Great Flood of 2011.

During the 1927 flood, more than 26,000 square miles of land, 16 million acres in seven states, were inundated. At the high point of the flood, the river stretched from Vicksburg to Monroe, Louisiana, a radius of 80 miles wide. Throughout the devastating flood of 1927, up to 500 people lost their lives, another 600,000 were displaced, and more than 41,000 buildings were destroyed.

Due to the comprehensive MR&T project in place during the Great Flood of 2011, more than 4 million people were protected, and the project performed as designed. While projects and people were being tested as never before, every flood control tool and MR&T resource were utilized to help protect threatened communities. These tools included the use of levees, flood walls, floodways, designed overtopping of backwater areas and intensive flood control reservoir-lake management.

To ensure that the MR&T project functioned as designed, the efforts required a tremendous amount of team work among the Corps, local, state, and federal partners, all working to protect the lives and property along the Mississippi Valley.

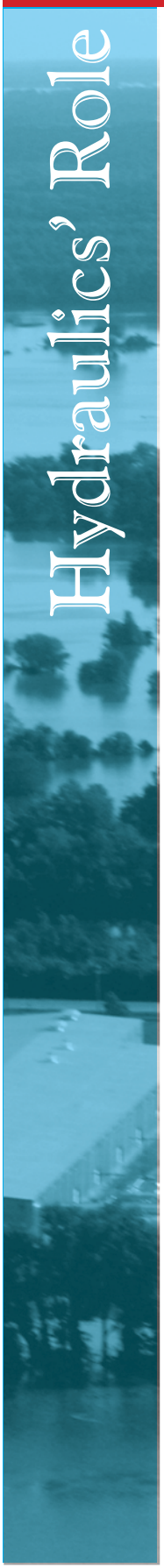
Col. George T. Shepard, Jr., Deputy Commander of the Mississippi Valley Division, stated, "This was the epic flood. The system took a beating, but it performed as designed."

The most pressing needs in the Corps' Vicksburg District involved building sand berms and relief wells, or both, at the 11 most vulnerable locations on the mainline and backwater levee systems. Three nearest to Vicksburg were at Buck Chute, just west of Eagle Lake, Lake Albermarle and the Yazoo Backwater Levee.

The Corps rushed to complete a 2-acre berm at Buck Chute in early May. A more permanent fix involved a shorter berm but with multiple relief wells to avoid raising lake levels and threatening homes within feet of the water's edge in the resort community. A similar plan was worked at Albermarle, where a slide and several boils broke out days before the river's crest in Vicksburg. Low spots were filled on the 28-mile backwater levee. Four miles of polyvinyl mat was laid to protect from erosion in case of overtopping of the structure.

When disasters occur, it is not just a local Corps district or office that responds, personnel and other resources are mobilized across the Corps' 45 districts and nine divisions throughout the country to carry out our response missions. Thus far in 2011, more than 1,000 Corps employees have responded to one or more major disasters as a result of floods and severe storms. All of the planning, equipment and programs are vital, but it is the competent, disciplined and resilient people who successfully accomplish the Corps' disaster response missions as outlined in the following sections.

Albermarle levee slide



Crest Predictions

From mid to late April a rain pattern developed over the Mississippi and Ohio River Valleys that, if continued, would invariably produce large magnitude flooding for watersheds and, more specifically the Lower Mississippi River Valley. Corps districts, St. Louis, Memphis, Vicksburg, and New Orleans, along with Corps Divisions Mississippi Valley, Great Lakes and Ohio River, and Southwestern, the National Weather Service (NWS), and the Hydrologic Prediction Centers (HPC) discussed the deteriorating conditions on the Lower Ohio and Upper Mississippi rivers through daily conference calls. A call was held each morning with all of the Corps parties involved to discuss flood control project operations and future predictions. Each afternoon these parties, along with NWS and HPC, held a conference call to discuss model predictions on the main stem of the Mississippi and Ohio rivers and future precipitation and its effects on the entire watershed. The NWS issued several forecasts on the Mississippi River at Vicksburg, throughout the flood event:

• On April 25, 2011, NWS predicted a crest of 52.5'.

• On April 26, 2011, NWS issued an updated crest of 53.5'.

• The rain pattern continued throughout the weekend of April 30 and May 1 and on May 2, 2011 NWS issued a predicted crest of 57.5' on May 18, 1.3' above the highest stage of record at Vicksburg.

A maximum stage at Vicksburg was reached on May 19th at 57.1'. Although the forecast would prove to be 0.4' higher than the actual stage, the accuracy of that forecast, produced almost three weeks earlier, was a commendable accomplishment for the NWS and USACE agencies involved in the forecast discussions.

The District's water management section developed a rough timeline of river stages and corresponding events as the river rose and fell. The timeline developed based on the current forecast at Vicksburg was issued and updated as the forecasted crest changed. This timeline alerted the public agencies on structure operations, road closures, and all other entities affected by the river.

Structure Operations

On April 25th the structure at Steele Bayou was closed to prevent the rising Mississippi River from inundating the Mississippi Delta; the structure remained closed until June 18th.

On April 27th, the water management section received approval from Mississippi Valley Division (MVD) through a major deviation request to deviate from the authorized operating plan of Muddy Bayou Structure and raise the elevation of Eagle Lake. The lake was filled with water from Steele Bayou and raised to EL 90' to minimize the head difference on the main line Mississippi River Levee at the Buck Chute location. As a result, Eagle Lake was 13.1' above its normal summer Pool of 76.9'. The Buck Chute location was identified early in the event as a possible problem spot in the levee and needed to be addressed rapidly. This operation was coordinated with members of the geotechnical branch. Eagle Lake remained at EL 90' until June 20th when Muddy Bayou Control Structure was operated to begin the drawdown of the lake back to normal pool of 76.9'.

Between April 25th and April 28th, 15 to 20 inches of rain fell over north Mississippi. This rainfall produced an extremely large inflow into Arkabutla Lake and resulted in the dam closure from April 26th to May 23rd. This event produced significant flooding downstream of the dam as well as in Marks, Birdie, and Sarah, areas on the Coldwater River. Water management personnel waited for downstream conditions to improve and then began releasing water out of the dam to start lowering the lake pool. At this point, a subsequent rain event caused the lake to fill into the surcharge pool and begin overflowing into the emergency spillway. Water management section continually monitored releases from the project to prevent as much downstream flooding as possible.

Public Meetings

The hydraulics branch had representatives at numerous public meetings during the historic 2011 Flood. Hydraulics branch representatives attended meetings in the following locations:

• Louisiana: Alexandria, Marksville, Lake Providence, Monroe, Columbia, and Vidalia

(Continued on page 8)

(Continued from page 7, The Great Flood of 2011)

• Mississippi: Yazoo City, Rolling Fork, Wolf Lake, and Vicksburg (City Auditorium)

• As events unfolded at Eagle Lake, public meetings were also held there to keep the public informed of operations at Muddy Bayou.

News Interviews

Several hydraulics branch employees conducted interviews with news agencies to provide flood information to the public regarding the Great Flood of 2011. The *Vicksburg Post* was updated daily on changing conditions as the flood progressed. Robert Simrall, Freddie Pinkard, and Drew Smith, all with the hydraulics branch, conducted TV interviews on various flood topics including levee saturation, expected fall of the river, levee embankment protection, and the flood crest, shown on the Vicksburg staff gage below the Interstate 20 Bridge.

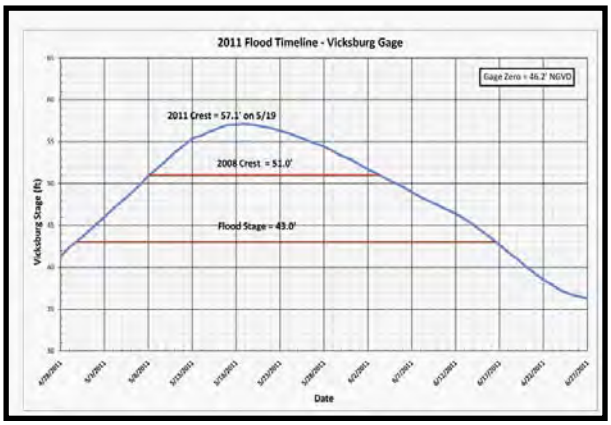
Robert Simrall speaks to the media with Mayor Paul Winfield and Kent Parrish.

Flood Extent Modeling

During the Great Flood of 2011, hydraulic engineers used digital elevation model (DEM) data, gage readings, and flood event simulation model (FESM), a hydraulic computer modeling software, to produce daily stage inundation maps and a forecasted crest inundation map of the Vicksburg District. The forecasted crest maps were updated regularly during the flood and provided to local, state, and federal agencies such as the National Guard, Mississippi Emergency Management Agency (MEMA), Federal Emergency Management Agency (FEMA), Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), Red Cross, United States Department of Agriculture (USDA), National Weather Service, Department of Wildlife, Fisheries and Parks, Mississippi Department of Transportation (MDOT), Mississippi State Department of Environmental Quality (USDEQ), Louisiana Department of Environmental Quality (LADEQ), NOAA, MDPS, Mississippi Department of Health, and the Department of Homeland Security.

Crest maps and shape files were also provided to utility and communication companies such as Entergy, AT&T, CenturyTel, Bellsouth, and Cellular South so that they could incorporate safety measures and protect switchyards, power stations, and power lines. A flood depth modeling grid, showing forecasted flood depths, was developed for the National Guard to assist with evacuation and rescue planning.

HEC-RAS and Flow2D, hydraulic computer modeling software, and ArcMap, Geographic Information Systems (GIS) software, were used by hydraulic engineers to produce flood inundation maps from several potential failure and overtopping scenarios. These scenarios included potential



Flood timeline gage

breaches in the east and west banks of the Mississippi River mainline levees and the overtopping of the Yazoo Backwater Levee. HEC-RAS was also used to model Muddy Bayou Control Structure operation to assist hydraulic engineers in determining the operation plans and filling times of Eagle Lake. In order to minimize seepage pressures in the Buck Chute area of the Mississippi River

mainline levee, these operations were put into effect when raising the water level in Eagle Lake.

The quick modeling capabilities of the FESM software proved to be very valuable during the flood. In addition to supporting the flood fight within its own district boundaries, the hydraulics branch also developed daily inundation maps using the FESM software for the Memphis District. This led to the deployment of Vicksburg hydraulic engineers to the Kansas City District to train and assist with the FESM software in support of the Missouri River flooding of 2011. Flo-2D and FESM modeling capabilities were utilized in the Kansas City and Memphis districts to analyze potential levee breach scenarios.

WLBT 3 news anchor Bert Case, right, discusses flooding with Warren County Sheriff Martin Pace, left, and Kent Parrish.

Levee Protection and Flood Fight

Hydraulics branch provided support to the 24-hour levee monitoring as engineers inspected for sand boils, levee slides, and any other potential failure modes. Hydraulic engineers worked in close coordination with engineers from water control to forecast water levels at the Yazoo Backwater Levee and determine potential overtopping areas. A protective liner was placed on the levee to prevent erosion in the case of overtopping, and engineers oversaw the application of HESCO baskets on the Yazoo Backwater levee near the Mississippi River mainline levee. These defense barriers are linked wire-mesh and fabric-lined baskets that can be removed in a manner of minutes. They are filled with sand to form a robust defense wall and have been used around the world to fight floods and provide blast protection. In this case, they were placed on the Yazoo Backwater Levee to divert potential overtopping waters away from the toe of the Mississippi River mainline levee. These baskets were also used to flood flight in the Green Meadows area of Vicksburg, and low areas of the Mississippi River levee in Greenville. Hydraulic engineers also supported the flood fight efforts in Marks.

State/City/County Coordination

MDOT provided the hydraulics branch with road profiles of highways 61 North and South. The GIS and modeling capabilities allowed engineers to determine areas that would be overtopped as well as timelines of when the overtopping would occur. MDOT, city and county officials used this data to determine road closures and identify flood fight areas.

Hydraulic engineers provided supervision and guidance, while working with the public and county officials, during the construction of a levee for the Green Meadows area. Inundation timelines and maps created by the hydraulics branch were used at public briefings, daily meetings with Louisiana Governor Bobby Jindal, and conference calls with Mississippi Governor Haley Barbour. Representatives from the hydraulics branch also served as hydraulics liaisons in the Emergency Operation Call Center.

James Ross (OD), left, discusses flooding situation with Louisiana Governor Bobby Jindal, center, and Col Eckstein, right.

(Continued on page 16)

District selects Goldman as director of Modeling, Mapping, and Consequences Production Center

By Shirley J. Smith

Ron Goldman

Ron Goldman, civil engineer, was recently selected as director of the National Modeling, Mapping, and Consequences Production Center (MMC) located at the Vicksburg District. Goldman has been acting director of the MMC Production Center since its inception in 2009.

As director, he is responsible for managing a virtual staff of more than a hundred professionals in the fields of hydraulic engineering, economics, and geographic information systems located in Vicksburg and more than 20 Corps districts (USACE) located throughout the United States. The MMC is charged with supporting the U.S. Army Corps of Engineers (USACE) in the production of hydrologic and hydraulics models, economic consequences models, and flood inundation mapping. These models and maps support a risk-based assessment, prioritization, and management framework for the USACE Critical Infrastructure Protection and Resilience, Dam Safety, and Levee Safety programs.

The MMC Production Center also provides critical feedback necessary to refine and update USACE guidance and policy for dam and levee safety. As a virtual team, staffed by USACE employees across the United States, the MMC Production Center also plays an important role in developing and maintaining USACE technical competency in hydraulic engineering, economists, and geographic information systems Communities of Practice.

Prior to this assignment Goldman served as chief of Engineering and Construction Division's hydraulics branch since 2002. He began his career with the Vicksburg District in 1977.

A native of Philadelphia, Mississippi, he earned his Bachelor of Science Degree in civil engineering from Mississippi State University, and is a member of the Society of American Military Engineers, the USACE Dam Safety Steering Committee, and is a registered professional engineer in the State of Mississippi. He is also a member of Bowmar Baptist Church where he has served as an elder, and serves as chairman of deacons.

He and his wife, the former Rita Dickinson of Carthage, are the parents of two daughters, Heather Hood of Southaven, and Holly Porter of Vicksburg.

District selects Caldwell as chief of Levee and Drainage Section

By Alice Bufkin

Ben S. Caldwell

Ben S. Caldwell was recently selected as chief of the levee and drainage section, Engineering and Construction Division.

Caldwell will be responsible for the overall management of design, documentation development, and preparation of plans and specifications involving levee work. He will also oversee tributary drainage improvements on the Mississippi, Red, and Arkansas Rivers.

In his previous assignment, he served as technical manager for the New Orleans to Venice Hurricane Protection Project.

Caldwell earned a Bachelor of Science Degree in civil engineering from Mississippi State University. He is a registered Professional Engineer in the State of Mississippi, and a member of the Society of American Military Engineers.

A native of Jackson, he is married to the former Jill McCullen of Jackson, and they have two children. He is the son of Mrs. Sara Caldwell and the late Henry Caldwell of Charleston.

District celebrates Founder's Day

By Shirley J. Smith • Photos by Alfred Dulaney

The annual Founder's Day Ceremony was recently held at the District with the inclusion of the annual awards ceremony. Some team members were recognized for receiving Honorary, Equal Employment, and the Public Affairs Award, as well as awards for those who have played lasting roles in making this District the premier organization it is today - the Length of Service Awards.

In honor of the Corps' birthday, a cake cutting ceremony was held immediately following the awards ceremony. The cake cutting was led by Col Jeffrey R. Eckstein, and the least and most tenured employees, Whitney Ladzick and Wanda Stevens, respectively; a tailgate party ended the day's celebration.

Team members receiving awards were:

Vicksburg District Team Award – Algiers Canal Levees Team

Wage Grade Team Award – Crew of the Dredge Jadwin

Wage Grade Leadership Award – David Butler (not pictured)

Engineer Award – Joey Windham

Scientist Award – Christopher Koeppel

Professional Award – Louise Acuff

Administrative Award – Amanda Hanks

Park Ranger of the Year Award – Robbie Hancock

Students of the Year – Anita Griffin, Will McRae, and Seth Sturdivant

Outstanding Achievement in EEO – Jacob Brister

Public Service Award – Regulatory Earth Day Team

Volunteer Leadership Award – Charles McKinnie

Paddle Wheel Award – Dereck Redwine

Employee of the Year Award – Patricia Hemphill.

The Length of Service Awards were presented to the team members with 20, 25, 30, 35, and 40 years of service. The Human Resources Office was the overall winner of the Tailgate Party.

Algiers Canal Levee Team

Crew of the Dredge Jadwin

Joey Windham

Christopher Koeppel

Louise Acuff

Amanda Hanks

Robbie Hancock

Anita Griffin

Will McRae

Seth Sturdivant

Jacob Brister

Regulatory Earth Day Team

Charles McKinnie

Dereck Redwine

Pat Hemphill

Great Flood of 2011

Photos by
Kavanaugh Breazeale

Albermarle levee slide stabilization

Flood water at portion of Highway 61 North

Metts being interviewed by television station on flood situation at Mat Casting Field.

Flood water at Vicksburg depicting river's crest on May 19

Andy Metts inspects damaged mats.

Worker installs pin to secure liner inside trench.

City of Vicksburg and Ergon installed Hesco Bastions on north Washington Street.

Tracey Clever, LTC Raimondo, and Kent Parrish discussing the historic water levels on SuperTalk Mississippi.

Great Flood of 2011

Photos by Kavanaugh Breazeale

Pictured from left to right are Peter Nimrod of the Mississippi Levee Board, Danny Barrett of the Vicksburg Post and Col Eckstein

Flood water at city front, Vicksburg, covers all previous flood mark levels.

GAO sand boil

Ring levee being built at Grand Lake berm.

Tom Shaw, left, and Lamar Jenkins, right, at the Yazoo backwater levee media event with MG Walsh, MVD commander.

Vicksburg Mayor Paul Winfield speaks to Corps, city, and county officials at city front on the Great Flood.

Hired laborers preparing for flood at Natchez Under the Hill.

WLBT reporter Bert Case interviews Robert Simrall, PPMD, regarding flooding at Eagle Lake.

Flood water covers Highway 465 at intersection with Highway 61.

THE SOCIETY OF AMERICAN MILITARY ENGINEERS
VICKSBURG POST

POST NEWSLETTER

June 2011

2011 SAME/ARMY Engineering and Construction Camp

by Mike Turner, Camp Director

With the support of a host of dedicated volunteers and few minor challenges the ninth annual Engineering and Construction Camp was successfully conducted 19 – 25 Jun 2011 in Vicksburg, Mississippi. As in the previous eight years, the one week program sponsored by the SAME and supervised by professional engineers from the local SAME Post and other volunteers from engineering organizations in the lower Mississippi valley was well received and greatly enjoyed by the 40 participating campers. This year's camp included 14 girls and 26 boys, all rising high school juniors or seniors from Mississippi, Arkansas, Louisiana, Alabama, Georgia, Florida, Texas, North Carolina, Virginia, Missouri, Illinois, Minnesota, Ohio, Pennsylvania, Colorado, California, Washington, and an American school in Korea.

The SAME/ARMY Engineering & Construction Camp is designed to provide high school students with an opportunity to gain hands-on experience in engineering and construction skills in Vicksburg's wide-ranging engineering community. The campers are exposed to various activities that provide insight into career choices in the fields of engineering and construction. Topics covered in this year's curriculum were surveying, civil engineering, environmental engineering, electrical engineering, mechanical engineering, industrial engineering, geotechnical engineering, river engineering, military engineering, CADD, GIS, and information technology.

The camp kicked off on Sunday afternoon with the campers arriving at their temporary home for the week at the U. S. Army Reserve 412th Engineer Command HQ Building. After check-in and introduction to the facilities and their sleeping area the campers were divided into four teams and introduced to their counselors. Each team has a male and a female counselor who themselves are young engineers. The counselors, known as pilots and first mates, spend the entire week with the campers both day and night. This year's pilots and first mates came from the Vicksburg District, St. Louis District, Engineer Research and Development Center, LA Department of Transportation and sustaining member firms GEC, Neel-Schaffer and ABMB.

Team activities started Sunday afternoon with an orienteering exercise and an icebreaker. Monday started off with a leadership and teambuilding exercise at the Vicksburg National Military Park, followed by a concrete mix design exercise at ERDC and a survivor type military challenge exercise at the 168th National Guard Engineer Group. The highlight of the day for campers and staff alike was a landing and visit by two AH-64 Apache helicopters complete with mock armament. Tuesday activities included computer modeling and a catapult demonstration at the Center for Advanced Vehicular Systems (CAVS) extension office in Canton, a guided tour of the Nissan Plant in Canton and a surveying, GIS and AutoCAD competition at Neel-Schaffer headquarters in downtown Jackson. Tuesday evening was capped off with a night of college themed bowling and pizza. Wednesday's schedule included several activities at the ERDC-ITL that morning followed by a visit to the Entergy Training Center in Clinton

SMART Program student working at District

By Holly Porter
Photo courtesy of Whitney Ladzick

The Science, Mathematics and Research for Transformation (SMART) Scholarship for Service Program has been established by the Department of Defense (DoD) to support undergraduate and graduate students pursuing degrees in Science, Technology, Engineering and Mathematics (STEM) disciplines. The program aims to increase the number of civilian scientists and engineers working at DoD laboratories and agencies.

The SMART program is an opportunity for students to receive a full scholarship and be gainfully employed upon degree completion. Typically more than 1000 applications are received for this program from the top engineering schools in the country and then narrowed down to approximately the top 100 in each engineering field.

Whitney Ladzick

Holly Porter, Planning, Programs and Project Management Division, served as the Mississippi Valley Division's (MVD) recruiter for the SMART program selection process that took place at Corps Headquarters. Porter selected five students for MVD from the 2010 SMART class. The Vicksburg District's 2010 selection was Whitney Ladzick. Whitney came onboard with the Vicksburg District in June 2011 working in the Engineering and Construction Division, Hydraulics Branch.

Ladzick graduated from Carnegie Mellon University in Pittsburgh, Pennsylvania, in May 2011, with a Bachelor of Science Degree in civil engineering. Ladzick is a native of Sherwood, Oregon, where her parents and younger brother still reside.

Ladzick knew she wanted to be an engineer since her childhood. "When I was 12, I had to give a report about myself. While all of the other students aspired to be pro-athletes and presidents, I already knew I wanted to be an engineer," Ladzick stated. Ladzick's father left for Iraq when she was 13 years old. While fighting to protect our freedom, he missed a year and a half of Whitney's growing up and maturing. But during that time he taught Whitney one of the most important lessons she could have ever learned…she learned to be proud of her country.

Whitney states, "Now, I am old enough to do my part, old enough to continue the traditions which I take so much pride in. I'm healthy; I'm strong, but my skills and efforts may not be best on the battlefield. I may in fact be able to support my country the most from an office desk somewhere within our country's borders. I am an engineer and I want to serve my country!" Whitney's goal is to take common infrastructure practices and make them more sustainable.

The Vicksburg District proudly welcomes Whitney Ladzick to our Corps family! ◄

Emergency Operations' Role

(Continued from page 9, The Great Flood of 2011)

The role of an Emergency Operations Center (EOC) during a disaster event is not widely understood. After all, the EOC is only activated after an event has occurred, or is impending. During a non-event, the EOC is staffed by a minimal number of full-time employees who prepare for such events; however, once activated the EOC can grow tremendously with additional support personnel brought in to maintain consistent and successful emergency operations.

During the Great Flood of 2011, the readiness branch was activated into a fully operational EOC and went from a staff of 5 to a staff of 35 within a few days. Understanding what our extended EOC support staff accomplished during our District's flood will give you a better insight into the role of an EOC during a disaster event and how we contributed to the historic Mississippi River Flood of 2011.

Two of the most important roles played by an EOC are to facilitate communication and to coordinate resources. For communication, the EOC acts as a central hub of information distributed through situation reports, database systems, liaison support, and Crisis Management Team briefings. The coordination involves the identification, tracking, and deployment of resources to support the event (monetary, personnel, and equipment resources). It is the responsibility of the EOC to feed the pipeline of requests for this communication and coordination from the field and reversibly from the management and command structure at the district. As an EOC, we act as a two-way streamlined funnel of information to support the district's decision-makers and essentially the success of the mission.

Communication/Information

The EOC fielded information and reports from all areas affected by the flood within the entire Mississippi Valley Division. We monitored data entry into the new FreeBoard system, collected and organized reports and photos. We briefed command staff and the crisis management team on issues, needs, and progress, and disseminated that information to area offices, and to emergency response partners in affected localities, state levee boards, Mississippi Emergency Management Agency (MEMA) and the Federal Emergency Management Agency (FEMA).

The following quotes are from Vicksburg District employees who joined us and made the EOC their home base during the flood. They represent just a small fraction of the productivity that came from our EOC. If you have the opportunity to speak to anyone who served in the EOC during the historic event, I encourage you to hear about their experiences. The efforts they contributed are commendable and every one of them added to the success of our office.

With such a vast area to cover during the flood, there was a lot of data to manage in regards to what was happening and where. Kirk Ross (OD) came to the EOC and gave us a bigger picture of the information coming from the field. "I assisted the mapping & geospatial database team by tracking inspection point features. This information is critical in the FreeBoard database that our team used. The FreeBoard database assisted us in making critical planning decisions imperative to our overall mission. Also, the web-based CorpsMap interface page displayed the inspection point data which assisted management and planning decisions throughout the mission," Ross stated.

Andrew Tomlinson (OD) led the effort of recording and reporting all information on the flood, stated, "ENGLink is the official reporting mechanism for the Corps' chain of command. During an event of this type, there is a lot of incorrect information that gets spread around. My job was to publish the most accurate, up-to-date data so that our decision makers could be aware of the important happenings during this event." The EOC published 54 ENGLink Reports between April 26th and June 20th. Researching, collecting, and organizing that information as it changed daily was a key component of the success and record of the event.

Most of our briefings were to the command staff and the Crisis Management Team, but we also had daily meetings with other partnering response agencies such as the state emergency management agencies, FEMA, and our local levee boards. Our district emergency manager, Jonathan Pennington, led most briefings which consisted of status updates, issues, and key information that

directed management decisions. "Briefing the commander and his staff with the significant information and doing so quickly was a challenge. It was necessary to have them so the commander could direct operations and give guidance as necessary, but the last thing we wanted to do was keep the area commanders and other staff stuck in a meeting all day." From these briefings, the EOC was responsible for disseminating any information relevant to other organizations and to our people on the ground fighting the flood.

Cindy Lyons (PPMD) served as an action officer for the Vidalia Area Office. Any information or requests to and from a specific area office, like Vidalia, Greenwood, or Southeast Arkansas, were streamlined and handled expeditiously by one person stationed at the EOC. "I just reacted, responded, and mediated actions. What I actually felt like was a customer service rep and found that I kind of liked it. It felt good being on the front line serving others," Lyons stated. As an action officer, she reported hot spots, personnel and equipment needs, and kept a constant flow of information between the area office and the EOC.

Coordination of Resources

The EOC also acts as a center of coordination during a disaster event. For this event, the district EOC was responsible for locating, resourcing, and accounting for people, equipment, and money, among other things. The email, telephone, and deployee traffic coming in and out of the EOC was enormous. It took a staff of very capable and knowledgeable extended EOC personnel to manage that flow and to make it as efficient as it was.

Donna Wright (OD-Sardis Lake) served as our lead ENGLink team member in personnel, getting employees on taskers, giving them the supplies they needed, and tracking their deployment. "I was part of the team responsible for getting employees to the locations where they were needed. These folks who stepped up to volunteer are an essential part of any emergency mission - and getting them there quickly and efficiently is a must, " Wright stated.

With the help of some notable leaders in the district, EOC staff managed the flow of more than 150 volunteers from the district to the locations they were needed most. This meant coordinating surges of employees as well as reaching out internally and externally when none were available. It was important to keep the staffing levels appropriate with the amount of work around the district and along the river to successfully respond to such a widespread event. Barry Moore assisted the EOC with planning these changes, and stated, "During the 2011 flood fight, I functioned as the planning officer. This included helping to organize staffing needs, including plans for ramping up staffing, as well as exit plans, on conclusion of the flood fight. This was an essential function, to ensure that efficiency of our personnel resources was maximized."

John Stouffer (E&C) assisted the EOC in many ways, but one of his main accomplishments was managing the resources that kept the flood from progressing or causing damages within our district. "I tracked and coordinated flood fight supplies and equipment at the district level. What I did was important because providing flood fight supplies is a major effort in any flood fight, in order to assist state and local agencies to better prepare for the flood," he stated. Throughout the event, we controlled the direction of nearly 1.5 million sandbags and 11,110 linear feet of Hesco-barrier walls, as well as poly rolls and pumps to our flood fight teams and to state and local officials.

With the number of people and equipment required to fight the Great Flood of 2011, the next obvious resource that needed attention was money. Philip Hite was one of the experts that came into the EOC to assist with tracking funding and making sure money was available to support the mission. "Along with monitoring flood fight funds on a daily basis, I set up Military Interdepartmental Purchase Requests (MIPRs) to other Corps agencies for their deployed personnel assisting our district."

These people represent just a fraction of the talented workforce that joined us in the EOC during this event. In addition to these, we had administrative and management assistance, flight coordination, and others who manned the EOC 24 hours a day. It what was a pleasure working together during the difficulties and successes of responding to such a historic flood.

(Continued on page 18)

(Continued from page 17, The Great Flood of 2011)

As the waters rose in the spring and summer of 2011, construction branch shifted to its EOC support function and implemented its flood fight organizations. In some cases, construction contractors continued to work on unaffected construction sites requiring continued contract administration and quality assurance activities. However, the primary and most apparent functions of the field offices in Greenwood and Vidalia shifted to 24 hours per day flood patrols and response missions. Additionally, personnel from all offices in construction branch joined in the operations, including 24-hour patrols running from the Northern Projects Office in Vicksburg (reporting to Vidalia), personnel from the Red River Office deploying to the Southeast Arkansas and Vidalia offices, and personnel from construction services branch in Vicksburg providing assistance in numerous areas. Many additional personnel from throughout the Vicksburg District and other Corps offices also deployed and served in support of patrols managed by the Greenwood and Vidalia offices.

Managing 24-hour flood patrols is a significant logistical challenge. Area Commanders and their deputies must assure that each sector has experienced personnel, familiar with the area, involved on every shift. They must assure that all necessary equipment is available. They must evaluate the resources provided and develop patrol teams that are matched up to assure both mission and safety concerns are satisfied. Additionally, patrol schedules must be established to assure most efficient use of resources, maximizing time in the field, minimizing unproductive drive times, assuring effective communication and transfer of information between patrol teams at change of shifts, and assuring that all daily reporting requirements are completed on time. Constantly changing needs for additional or replacement personnel must be evaluated and coordinated, in particular as the flood fight ramps up and down with personnel rotating in and out. Additionally, personnel time keeping rules and regulations must be considered to minimize complications in timekeeping, assure fairness to employees, and to implement event guidance regarding tours of duty and required or needed days off for rest. Activities of local stakeholders, levee boards, and other responders such as the National Guard must be considered when planning daily activities for the patrol teams, while also adapting plans for response to special "hot spot" needs and activities.

Gordon Watkins, OD, points to the Albermarle slide.

The patrolling of levees involves much more than one might imagine at first thought. This is not simply a windshield tour of the levee. The patrols are expected to look for and investigate potential problems on foot, often wading through knee deep water and mud, fighting brush and undergrowth, while avoiding snakes and other hazards. This requires an understanding of likely problem areas and common signs to look for, as well as the ability to recognize when to call in for immediate support. Once these "hot spots" are identified, the patrols along with additional personnel from the area offices, technical support from Engineering Division, and the levee boards work together to identify courses of action to assure the integrity of the levee is maintained.

Night time patrols add another level of difficulty to these efforts. In this Great Flood of 2011, Phase II (24 hour) patrols were performed for more than a month in all locations, with shifts running seven days per week, from 10 to 12 hours per shift. Additional Phase I (day time only) patrols were run for several more weeks transitioning in and out of Phase II. These boots on the ground are critical in our assuring prompt identification of potential problems and continued monitoring throughout the event.

During flood events, the Greenwood Area Office is responsible for all portions of the State of

Mississippi within the district boundaries. During the 2011 flood, Greenwood ran flood patrols on the Mississippi River and Tributary sectors known as Rosedale, Greenville, Myersville, Yazoo Backwater, and Yazoo City. There was also a high water response event in the Marks Sector on the Coldwater River. Including both normal Greenwood employees and those assigned travel to Greenwood, at least 45 personnel were utilized by the Greenwood Area Office during this event. These patrols performed identification, documentation, monitoring and assisted in appropriate response actions at 61 sand boils, 36 seepage areas, and 1 levee slide. Additionally, the Greenwood Area Office participated in numerous public affairs activities, press interviews, local communication with the general public, interface with local authorities and stakeholders, and other actions necessary to assure accurate information was available to the general public. Sandbags, pumps, and other emergency supplies were staged at the Greenwood Area Office readily available for distribution.

During flood events, the Vidalia Area Office, including Northern Projects Office in Vicksburg, is responsible for all portions of the state of Louisiana within the district boundaries. During the 2011 flood, Vidalia ran flood patrols on the Mississippi River sectors known as Tallulah, St. Joseph, and Vidalia/Natchez. Including both normal Vidalia employees and those assigned travel to Vidalia, at least 30 personnel were utilized by the Vidalia Area Office during this event. These patrols performed identification, documentation, monitoring and assisted in appropriate response actions at 166 sand boils, 23 seepage areas, and four levee slide concerns. And, just like Greenwood, the Vidalia Area Office participated in numerous public affairs activities, press interviews, local communication with general public, interface with local authorities and stakeholders, and other actions necessary to assure accurate information was available to the general public. Sandbags, pumps, HESCO baskets, and other emergency supplies were staged at the Vidalia Area Office readily available for distribution.

In addition to the flood patrol activities, construction branch directly assisted with multiple emergency response activities aimed at temporarily increasing the level of protection. This included assisting with scopes of work, identification of resources, issuance of contract modifications, and inspection of construction work to install a total of more than 16,000 LF of potato ridges on six different MRL levee items, and installation and removal of 5100 LF of HESCO Bastions on MRL Item 357-R. These emergency raises, some performed with 24-hours per day construction, assured the minimum level of freeboard was in place ahead of rising waters.

Other emergency work included support on efforts to transport approximately 25,000 cubic yards of sand from the Mat Casting Field at Delta to the Buck Chute site. This sand had been stockpiled by Fordice Construction for use in the current mat casting contract. Mat casting work had suspended due to the approaching flood waters. Since this sand was readily available, the government took possession of this sand and used it to meet the immediate need for sand at Buck Chute. With an emergency services contract, this sand was transported in just a few days to meet the critical needs at the buck chute site where work was being performed by the hired labor crew.

At Buck Chute (from left to right) are Chuck Mendrop, Tom Shaw, Kent Parrish, and Col Eckstein.

Construction required inspectors to monitor the loading and hauling operation running 24 hours per day.

One of the most interesting emergency projects involved the installation of temporary erosion

(Continued on page 20)

(Concluded from page 19, The Great Flood of 2011)

control on the protected side of approximately four miles of the Yazoo Backwater Levee near the Steel Bayou Structure. With a potential for overtopping forecast for 15 May, personnel in Engineering Division developed the scope of work on Thursday, May 5, and the morning of Friday, May 6. Later, engineering, construction, and contracting personnel met with Fordice Construction on site near the Steel Bayou Structure, and with cell phones in hand, three separate contracts were awarded on site that same day.

Contracts were awarded for the sheeting, installation of the sheeting, sandbagging, and for furnishing special equipment and trained technicians. Work began immediately to mobilize equipment, assembling of the contractor workforce, and ship materials. Fabric was delivered over a three-day period and staged at the Harbor in Vicksburg for transport from there to the site by Fordice Construction. Fabric installation began on Saturday, 7 May, as the first material arrived in Vicksburg in the early morning hours that day. Fabric was installed and seamed during daylight hours and materials were staged along the levee at night for placement the next day.

Access along the levee was very congested during the fabric installation. Fortunately there was no rain while this work was being performed. With over 100 workers on the ground at times, all fabric was essentially installed by May 11, and all work was completed Friday, May 13 - ahead of the forecasted overtopping. In addition to assisting with early planning, scoping, and acquisition, construction personnel performed inspections during installation, and assisted contracting in final negotiations on cost. While the crest stopped just a few inches short of overtopping, the team effort had assured that protection was in place if needed.

There are too many individuals to name who assisted and played key roles in this flood event. This was truly a team effort with everyone doing their part. The Vicksburg District never hesitated in the face of this record event, but rose to the challenge and assured this critical levee system performed as designed. Additionally, the experience, lessons learned and data gathered will be invaluable in future flood fight events.

Aerial view of Buck Chute

During the 2011 flood event, flood flows in the lower Mississippi River were roughly equal to or greater than those experienced during the catastrophic 1927 flood. Although there was widespread flood damage in unprotected areas, preliminary analysis indicates that the MR&T system functioned as designed and protected almost 10 million acres, thousands of homes, more than four million people and 200 billion dollars of infrastructure from inundation. However, the system was weakened by the event. The full extent of damage to the MR&T system is not yet known. Ongoing damage assessments will further define the nature and extent of the damage and identify system components and areas that need repairs.

Col. Jeffrey R. Eckstein, Commander of the Vicksburg District, stated, "Enough funding is in place to award a contract to address Buck Chute by late September or early October." ◄

Work being done on the Louisiana levee side.

Great Flood of 2011

Photos by Kavanaugh Breazeale

Work at Buck Chute.

Levee protects Redwood Elementary School from flood water.

Senator Roger Wicker, Senator Thad Cochran, Mayor Winfield, and Col Eckstein at press conference.

Flood waters surround the Comfort Suites Hotel at Lake Village, Arkansas.

Water surrounds U.S. Coast Guard building at Natchez.

Sandbags being placed at Natchez Under the Hill

District dedicates road in memory of former employee

By Shirley J. Smith
Photos by Alfred Dulaney

The Grenada Lake Field Office recently hosted a road dedication ceremony in remembrance of a former chief of the environmental and economic analysis branch of Planning, Programs, and Project Management Division. The Stoney Burke Road was named in honor of the late Robert "Stoney" L. Burke.

Burke's career spanned more than 27 years with the District. In 2005, he was recognized for his leadership and knowledge and received the Vicksburg District's Boss of the Year Award. The next year this award was changed to the "Robert L. Burke Boss of the Year Award." In 2010, Burke's name was added to the District's Gallery of Distinguished Civilian Employees.

Naming a road in memory of Burke is just another way to honor a man who was admired by many, and the road is not just another road. The Stony Burke Road is located on the east side of Grenada Lake, the route which Stoney traveled each weekend to his family's property in Calhoun County.

Karen Burke, Stoney's widow, was among the speakers at the ceremony. During her speech she often referred to him as "Lynn", as did other family members. To us here at the District he will be remembered as "Stoney," - a great guy.

Road sign bearing Burke's name.

Concluding the ceremony was the presentation of a plaque from Col Eckstein to Stoney's widow. ◄

Col Eckstein presents plaque to Karen Burke

Sardis Lake gets new field office

By Jonathan Boone
Photo by Chris Gurner

Whether you are a local Mississippian or a world traveler, you need to make a trip to north Mississippi to visit Sardis Lake. In addition to hiking, hunting, fishing, boating, or camping, Sardis Lake is also home to a new field office, which enhances service to the public.

New Sardis Lake Field Office

The District recently completed construction of the 7000-square-foot office building located high on the hill overlooking the lake near the emergency spillway. The prime contractor was Mississippi based S&M and Associates from Pascagoula, which is a certified small business. The construction funding was provided by the American Recovery and Reinvestment Act.

If you go to Sardis Lake to enjoy the great outdoors, stop by the field office to discover a wide selection of activities available during your trip, including a 98,000-acre recreational area. The building is full of information, and lake personnel there are sure to bring excitement to visitors. ◄

Construction is complete at Sardis Lower Lake Drawdown Structure

By Adam Staples and Jonathan Boone
Photos by Tony Wilson

The drawdown structure for the Sardis Lower Lake was recently completed. The structure will provide lake personnel control of water levels with the flip of a switch. Lowering the lake is essential for periodic inspection of Sardis Lake's outlet structure as well as for maintenance of the lower lake beach areas.

The increased efficiency gained in controlling lake levels could also prove invaluable in emergency situations related to public safety or dam inspection. Before installation of the structure, Sardis Lake personnel was spending two to three weeks excavating an earth plug to lower the lake with an additional two weeks needed for the lake to drop to the desired level. "The reduction in manpower and equipment is significant. In the past we had a dozer, a track-hoe and three or four guys working for two or three weeks to get the level down", said Alton Pollan, park manager of Sardis Lake. The total lead time needed to get the lake to the desired level could be as much as six weeks. The new drawdown structure will shorten the required lead time to approximately 14 days. In addition to the time taken to lower the lake, it took two to three weeks to reconstruct the plug at the end of the operation. "Including reconstruction of the plug, we'll be saving more than a month of labor and equipment each time we lower the lake", said Pollan.

In addition to increased control of water levels in the lake, the structure also provides a permanent access road to a boat ramp adjacent to the structure. "The only access in and out of the boat ramp was the plug that we were removing during our lowering operations", said Pollan. "It would close public access to the ramp for over a month."

The structure consists of two concrete pressure pipes 72 inches in diameter with sluice gates controlled by electric operators. Construction of the project required more than 250 days and was funded by less than $1.2 million in American Recovery and Reinvestment Act (ARRA) funds. The construction project was managed by the construction services branch, Greenwood Area Office. No lost time accidents occurred during the approximate 11,000 man-hours that were needed to complete the project. This project is a prime example of the District meeting its goal of putting safety first while completing quality projects that are beneficial to the public. ◄

Standing on the east bank of the Little Tallahatchie River looking toward the Sardis Lower Lake.

Standing on the west bank of the inlet channel looking toward the Sardis Lower Lake

Standing on the Lower Lake Walkway Bridge looking downstream toward the emergency spillway channel

District Field Offices & Services

U.S. Army Corps of Engineers,
Vicksburg District
4155 E. Clay Street
Vicksburg, MS 39183
www.mvk.usace.army.mil
email: cemvk-pa@army.us.mil

Lake Ouachita	(501) 767-2101
Lake Greeson	(870) 285-2151
DeGray Lake	(870) 246-5501
Sardis Lake	(662) 563-4531
Arkabutla Lake	(662) 562-6261
Enid Lake	(662) 563-4571
Grenada Lake	(662) 226-6391
Bayou Bodcau	(318) 322-6391
JBJ Waterway	(318) 322-6391
Ouachita-Black Rivers	(318) 322-6391

Aerial Photography	(601) 631-5709
Corps Wetland Permits	(601) 631-5289
Apply, ask questions, or report violations	
Contracting & Bids	(601) 631-7706
Vendors, status of bids, specs	
Community Support	(601) 631-5223
Tours, speakers, volunteers	
Historical Questions & Research	(601) 634-7023
Mississippi River History Center	
Real Estate Issues	(601) 631-5220
Corps impacts to your property	
Employment Questions	(601) 631-5859
Vacancies, status, qualifications	
Historical Photographs	(601) 631-5021
Environmental	(601) 631-5410

Other Vicksburg Engineer/Federal Organizations

Mississippi Valley Division
(601) 634-5760

Engineer Research and Development Center
(601) 634-2504

412th Engineer Command
(601) 636-1686

168th Engineer Group
(601) 313-5290

Vicksburg National Military Park
(601) 634-5760

U.S. Coast Guard Cutter Kickapoo
(601) 636-8304

U.S. Fish & Wildlife Service
(601) 629-6607

U.S. Army Recruiter
(601) 618-1203

U.S. Army Corps of Engineers
Vicksburg District PAO
4155 Clay Street
Vicksburg, MS 39183-3435

First Class Mail
Postage & Fees Paid
U.S. Army Corps of Engineers
Vicksburg District
Permit NO. 56