Project Update

September 2013

US Army Corps of Engineers®
Little Rock District

- *Paul steps in as new commander*
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Table Rock Master Plan workshop attendees look over land classification areas around Table Rock Lake during one of the four area workshops. Also see related article .....Page 4

Little Rock District map

Little Rock Key Projects

Project Update

Project Update highlights top Little Rock District issues in Missouri and Arkansas. If you have questions, contact Randy Hathaway, Little Rock District Deputy District Engineer for Project Management, at (501) 324-5053. For more information, visit out web site at www.swl.usace.army.mil.

Paul Assumes Command of Corps' District

Col. Courtney Paul

During a July 2 ceremony at the Witt Stephens Jr. Central Arkansas Nature Center in downtown Little Rock, Col. Courtney W. Paul assumed command of the U.S. Army Corps of Engineers Little Rock District.

He replaces Col. Glen Masset, who is retiring after 31 years in the U.S. Army.

Little Rock District is responsible for a $390 million program in fiscal year 2013. This includes civil works, military construction, environmental stewardship, emergency management and support to other government agencies throughout Arkansas, southern Missouri and the nation.

The district has a staff of about 690 employees. It is responsible for maintaining the Arkansas River and other waterways, including 13 locks and dams, 12 multi-purpose lakes, seven hydroelectric power plants, and more than a half million acres of public lands and water.

Paul came to Little Rock District from the Fort Leonard Wood, Mo., where he was Director, Capabilities Development and Integration, Maneuver Support Center of Excellence.

He was commissioned in the Corps of Engineers in May 1987 as an ROTC Distinguished Military Graduate and graduated from Texas Tech University with a Bachelor's degree in Geography.

Paul also holds a Master's degree in European Studies from Indiana University. Most recently, he studied at the French equivalent of the Industrial College of the Armed Forces as a Fellow at the Institute for Advanced Studies of National Defense, in Paris, France.

Paul is also a graduate of the Engineer Officer Basic and Advanced Course, the Defense Institute for Security Assistance, the Command and General Staff College, Army Force Management School and the Army War College Fellows program.

He has held a number of command and staff assignments both stateside and abroad during his 26 years as an Army officer, to include participation in Operation Iraqi Freedom.

His military awards include the Bronze Star Medal with two Oak Leaf Clusters, Defense Meritorious Service Medal, Meritorious Service Medal with two Oak Leaf Clusters, Combat Action Badge, the Parachutist Badge, and the Bronze Order of the Engineer DeFleury Medal.

Col. Courtney Paul accepts the Army Corps of Engineers flag, and with it command of the Corps' Little Rock District, from Brig. Gen. Thomas Kula, the Corps' Southwestern Division Commander, as Randy Hathaway, Little Rock District's Deputy District Engineer looks on during the district change of command ceremony.

Table Rock Lake Master Plan Update

In 2012, the Little Rock District received initial funding to revise the Table Rock Lake Master Plan. The district held scoping workshops in November and December 2012 and completed the scoping report in February 2013. Public feedback helped develop the preliminary draft master plan and draft environmental assessment.

During May and June, the team met with focus groups to discuss the preliminary draft of the master plan. Their feedback helped us form the draft version of the master plan and draft environmental assessment.

The district released the draft master plan and draft EA to the public for review at the end of July and held a series of public open houses in mid-August throughout the Branson/Table Rock Lake area. The public review and comment period ended August 30.

The district is on schedule for a December 2013 completion of a final master plan and environmental assessment.

The Corps' master plans guide all use and development of a project's federal public lands and waters for environmental stewardship and recreation related purposes, throughout its life.

Little Rock District completed most master plans in the 1970's, with supplements added through the years to document change for that specific time. It is now time for full revisions to the district's master plans in order to plan a long-term vision for these projects.

Table Rock Lake Park Ranger Rodney Raley points out areas of interest on a map of Table Rock Lake to workshop attendees.

Dedication leads to minimum flows dedication

Fishermen below Bull Shoals Dam.

After years of effort by many groups and agencies, the Corps recently began making minimum water releases to improve the trout habitat below Bull Shoals Dams. The Corps of Engineers and the Arkansas Game and Fish Commission officially dedicated the project in an August ceremony.

The Corps activated minimum flows below Bull Shoals Dam in July and will complete the Norfork project this month.

Minimum flow is the release of water into the tailwater on the downstream side of the dams when water is not being released for hydropower generation or flood control. Corps officials said it will benefit trout and non-game species in the tailwater by increasing the wetted perimeter.

The value of trout fishing in Arkansas, mostly below Corps dams, exceeds $130 million, with about half the anglers coming from outside the state. Outfitters and business owners have pitched the benefits of minimum flows since the hydropower plants at these two dams first came on line in the 1940s and 50s and began releasing cold water from deep within the lakes.

Because power generation is intermittent, the demand for electricity rises and wanes during the course of any given day. This leaves periods of time when no cold water is being released. The streams shrink to disconnected pools of water that begin to warm in the summer sun and threaten trout survival. Also, the shrunken 'wetted perimeter' decreases available habitat.

Minimum flows will ensure a slow but steady stream of cold water. A constant minimum flow also raises the river level and inundates shoreline areas that are dry

in low-water periods, and makes more food available for trout. It also increases the amount of overall trout habitat, and makes more cover and structure available for trout.

To provide the water necessary for minimum flow, the Corps raised the level of Bull Shoals Lake 5 feet. It also modified some equipment in the hydropower plant. Minimum flow on the North Fork of the White River required raising the level of Lake Norfork 1.75 feet and installing a siphon through the dam. The siphon pulls water from various depths of the lake and releases it into the tailwater.

The tradeoff caused by the storage reallocations is a small reduction in the ability to capture storm water and reduce downstream flooding. Bull Shoals will lose slightly more than 1 percent of its flood storage capacity, and Norfork Lake will lose less than a percent of its capacity.

The effort required stakeholders to secure legislation from Congress, which authorized and funded Little Rock District to perform the necessary detailed engineering and environmental studies and prepare the plans that led to where the project is today. The studies found that keeping a steady minimal release of cold water flowing during non-generation times will improve the downstream trout population and benefit the local recreation industry by $5 million annually.

About 100 people attended the White River Minimum Flow Ceremony.

The effort also produced a partnership between the Corps and the Arkansas Game and Fish Commission, the non-federal sponsor funding portions of the work. On Jan. 19, 2012, Little Rock District and AGFC signed a Project Partnership Agreement that outlined responsibilities for each agency to implement at Bull Shoals. The two agencies signed a similar agreement in 2010 for Norfork.

Ultimately, minimum flows should increase trout survival in hot weather and improve the overall health of the trout fishery by reducing the physical stress that accompanies warm water and low levels of dissolved oxygen.

McClellan-Kerr Arkansas River Navigation System Long-Term Maintenance Strategy

The Little Rock and Tulsa districts, along with the Southwestern Division, are developing a strategy to focus greater long-range planning and funds on critical maintenance needed in the next five years to ensure that the McClellan-Kerr Arkansas River Navigation System is a reliable, resilient, and relevant system for future generations.

This strategy is the result of Little Rock and Tulsa districts implementing and evaluating the Corps' "Levels of Service" policy on the MKARNS, which correlates lock availability with commercial lock usage in an effort to increase maintenance.

The districts' efforts resulted in a return to 24/7 commercial lockage service at all MKARNS locks in July.

The evolving strategy has five parts:

• Continue to review the MKARNS level of service with input from stakeholders.

• Implement the recreation lockage policy to reduce wear on lock equipment and increase time for maintenance.

• Schedule maintenance-driven lock closures as far in advance as practical to provide industry with confidence in their shipment schedules. Scheduled closures of a few days allow for more beneficial maintenance than daily closures of a few hours. Little Rock and Tulsa districts are collaborating on a five-year maintenance plan to this effect.

• Review MKARNS operations to identify changes that can make more funding available for maintenance.

• Perform a "gap analysis" and work with stakeholders to bridge the gap between current federal investment and the maintenance requirements of the system.

Corps personnel perform maintenance on the Dardanelle Lock and Dam.

Little Rock District projects, issues

Arkansas River Basin

Fourche Bayou Basin

In fiscal year 2009, Congress appropriated $1.1 million for the Corps to work with our non-federal sponsor, the city of Little Rock, to acquire 1,750 acres of Fourche bottomlands and construct nature appreciation facilities. This project work has an estimated total cost of $7.49 million.

The Corps amended the Local Cooperation Agreement in July 2012 giving the sponsor credit for $160,000 of work they performed on the project in regards to real estate acquisition of the bottomlands; however, the Assistant Secretary of the Army for Civil Works determined that the remaining work cannot be funded.

The Corps can use the remaining federal funds and the sponsor's credit refund to acquire bottomlands. The Little Rock District sent the final agreement to Corps headquarters for approval September 3. The Corps will use the bottomlands for environmental preservation, flood risk management, and recreation.

Ozark Powerhouse Major Rehabilitation

The contract for the replacement of the five hydroelectric turbines is ongoing. The contractor has assembled the first unit and is preparing it for operation. The contractor plans to have the second unit re-assembled by the end of 2013 and is preparing the third unit for installation of new components. The contractor will complete the fabrication of major components for all five units soon. Federal power customers and federal appropriations are funding the project. The $125 million major rehabilitation project will improve the continual maintenance problems at Ozark Powerhouse. Maintenance issues caused more than $7.5 million in lost power during FY12.

McClellan-Kerr Arkansas River Navigation System, 12-Foot Channel

There are no remaining funds for this project and all work on it has ceased. The Corps cannot resume work until the project receives a "new start" designation, construction general funds, and cost-shared funding (50/50) with the Inland Waterways Trust Fund. This project was not included in the fiscal year 2014 President's budget. The total project cost is currently estimated at $188.8 million with the most efficient funding in $20 million increments.

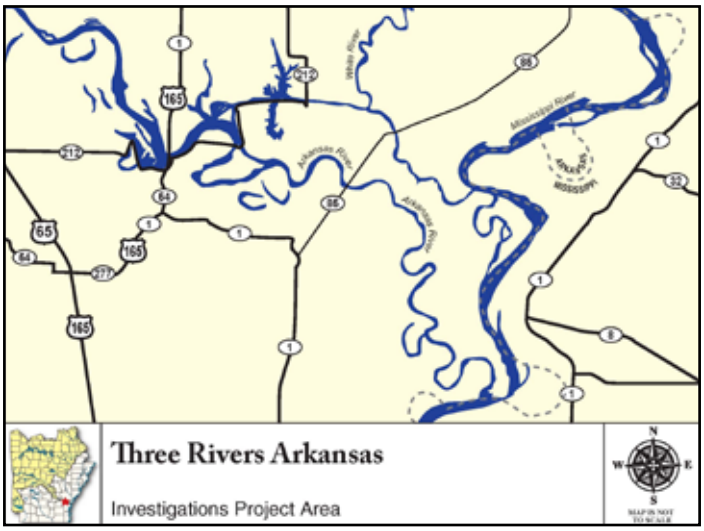
The existing 445-mile long McClellan-Kerr Arkansas River Navigation System consists of 18 locks and dams, providing nine-foot depth inland navigation from the Mississippi River to Catoosa, Okla. This project would deepen the navigation channel to a minimum depth of 12-feet throughout the system.

Montgomery Point Lock and Dam repairs

In December 2012, the Little Rock District completed repairs to two of the four lock gates at Montgomery Point Lock and Dam in Desha County, Ark. The gate hinge pins were damaged in FY12, and their failure would halt navigation at this critical entry point to the McClellan-Kerr Arkansas River Navigation system during low water levels. Since December 2012, water levels have been high enough for navigation traffic to use the navigation pass. The district needs additional funding to complete the repair of the remaining two pins.

Three Rivers Study, Southeast Arkansas

The district needs a "new start" and funding of $100,000 to complete a 905(b) reconnaissance study of the water resource problems in southeast Arkansas where the Arkansas, Mississippi, and White Rivers converge. The study will determine potential solutions, scope, further federal participation, and identify non-federal sponsors to provide a comprehensive watershed analysis of basin conditions and alternatives. Section 216 of the Rivers and Harbors Act of 1970 authorizes this project.



The study will investigate serious hydrologic and hydraulic problems that threaten navigation, aquatic ecosystem habitat, Ark/White Cutoff Structure, recreation, flood damage reduction and watershed protection. We evaluated long-term solutions in a previous Ark/White Cutoff Study to address the navigation reliability problem, but the National Economic Development alternative plan was not environmentally acceptable because extensions of levees would require use of U. S. Fish and Wildlife Service land deemed incompatible with the refuge purpose.

Therefore, the study result was to continue maintaining existing structures and construct new structures to maintain navigation reliability, which is a band-aid approach.

The Ark/White Cutoff Study confirmed that the problems and solutions are interconnected and interdependent throughout the entire region. The study location is at the confluence of the Mississippi, White, and Arkansas Rivers in Desha and Arkansas counties, Ark.

The study area is in three Corps districts (Little Rock, Memphis, and Vicksburg) and two Corps divisions (Southwestern and Mississippi Valley). The area is the starting point for the McClellan-Kerr Arkansas River Navigation System, which begins at the mouth of the White River and runs 445 navigable miles to Catoosa, Okla.

The watershed of these three rivers is home to the White River National Wildlife Refuge and more than 100,000 acres of critical bottomland hardwoods. This is the largest stand of bottomland hardwoods on any tributary to the Mississippi River. The significant erosion is causing the loss of large areas of bottomland hardwoods. The refuge and the surrounding area are habitat for numerous threatened and endangered species, including the Bald Eagle, Interior Least Tern, Pallid Sturgeon, and Ivory-billed Woodpecker.

The erosion in the watershed is also a serious threat to navigation, recreation, and flood risk management. The Montgomery Point Lock and Dam, located on the Arkansas River, became operational in FY05. The dam, located at navigation mile 0.5, is at risk of the severe erosion that is continually under repair between navigation miles 3 and 8 on the White River.

If a full breach occurs, navigation could be impacted for more than 100 days, at an impact of nearly $300 million and the loss of thousands of acres of wetlands and pristine hardwoods. Possible solutions include passive weirs or gated structure that would regulate the flow of water and reduce erosive action. The State of Arkansas understands the cost-sharing requirements and the Arkansas Waterways Commission would be the local sponsor.

White River Basin

Springfield, Missouri

The Little Rock District, in conjunction with the City of Springfield, Mo., completed a Draft Feasibility Report and Environmental Impact Statement. Lt. Gen. Thomas P. Bostick signed the Corps Chief's Report, which makes the final recommendation to Congress, in late August.

The city of Springfield experiences damages from flash floods along Jordan Creek. The area along the creek is heavily urbanized and includes extensive infrastructure associated with both commercial and industrial areas. The Little Rock District developed, evaluated, and screened a wide variety of management measures to address the flood risk.

The district considered 15 plans and closely compared two plans for recommendation. The recommended plan includes flood risk management consisting of five detention basins and 2,100 feet of channeling widening. This plan reduces 65 percent of the damages and includes detention basins in the upper reaches of the watershed and channel modification at the confluence of Wilsons and Jordan creeks.

The fully funded total project cost is about $21.9 million with a sponsor contribution of $7.7 million and a federal contribution of $14.2 million. The recommended plan has a benefit-to-cost ratio of 2.7 (at an interest rate of 3.75 percent). The Office of Management and Budget uses an interest rate of 7 percent to budget items. At 7 percent, the benefit-to-cost ratio of the project is 1.7.

This feasibility report piloted new pre-authorization processes under civil works transformation. Overall, the new process has been a huge success that shortened the study time and created communication processes for all.

White River Comprehensive Study

This past year work continued on the Big Creek sub-basin sediment reduction study and evaluation of ecosystem restoration options on the Cache River and Bayou DeView basins. The Corps held an interagency meeting in February 2013 in Little Rock, Ark. Discussions focused on the breakout of the Cache River Basin Watershed Management Plan (a sub-basin to the White River), using completion of this plan as a platform to further initiate other sub-basin studies. The next potential sub-basin is the James River in southwestern Missouri.

The Little Rock and Memphis Districts are conducting the comprehensive study of the White River basin in Arkansas and Missouri. The FY14 President's Budget includes $650,000 in funds for this project.

The Corps approved the reconnaissance phase study report, known as the 905(b) report, in January 2002 and involved parties signed a feasibility cost sharing agreement in May 2002. The Water Resources Development Act of 2007 changed the cost sharing requirements of the study cost from 50 percent to 25 percent. Project sponsors include the Arkansas Game and Fish Commission, Arkansas Natural Heritage Commission, Arkansas Natural Resources Commission, Arkansas Waterways Commission, Missouri Department of Conservation, Missouri Department of Natural Resources, and the Nature Conservancy of Arkansas. The study will identify the critical resources, water-related problems and needs, and potential solutions.

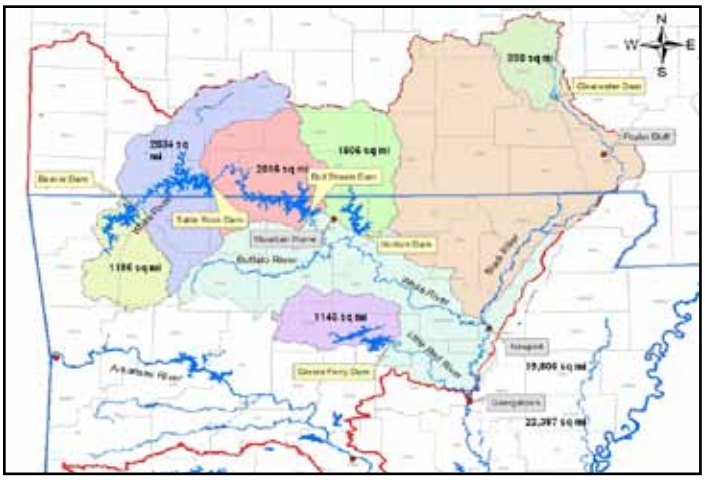
White River Water Control Plan

The district has received requests to initiate a study of the water control plan for the White River System of reservoirs. An extremely wet weather pattern in 2008 through summer 2011 resulted in high lake levels, as well as extended periods of high river stages, contributing to renewed interest in a revision to the water control plan.

However, extreme drought conditions and sustained above average high temperatures in 2012 resulted in low lake levels and extremely low river levels generating additional interest in system operation. Excessive rainfall in the late summer 2013 generated even more interest in revising the water control plan. The district will add a budget request to update this plan subject to funding approval.

Stakeholders have actively engaged their elected officials to seek short-term changes to the White River Water Control Plan that benefit their specific interests. The Little Rock District last implemented a revised water control master plan for its lakes on the White River in December 1998.

The 1998 plan "fine tuned" the existing 1963 plan by calling for seasonal adjustments to the regulating stage at Newport and Georgetown, Ark., when evacuating flood storage from the lakes. The 1998 plan's regulating stage was slightly lower than the 1963 plan during the agricultural season and slightly higher during the non-agricultural season. The Corps did not propose or consider changes to the authorized lake levels. Initiating a review of the plan would require extensive public coordination, engineering, environmental and economic analyses, and $9 million in funding over three years. Also, any change to benefit one group or interest will impact other groups of interest.



White River System drainage basin.

Water Supply

With performance-based budgeting, the district receives very little money to work on water supply studies and reports. The small amount of funding it receives is primarily used for monitoring existing contracts and continuing progress on existing reports.

Studies Funded by District Operation and Maintenance:

Beaver Lake: In July 2000, Benton - Washington Regional Public Water Authority (formerly Benton/Washington County Water Association) requested 8 million gallons per day. In July 2001, Carroll-Boone Water District requested 6 mgd from Beaver Lake and Madison County Regional Water District requested 8 mgd. The district is using operation and maintenance funds to continue the study. To date, the team has evaluated water supply needs and developed reallocation alternative plans. The district used carryover funds from FY12 in the amount of $70,000 in FY13 to continue modeling and analysis of all impacts of the reallocation options. The district needs an additional $150,000 in FY14 to complete the study.

Unfunded Reports:

Norfork Lake: In September 2000, the city of Mountain Home requested 5 mgd from Norfork Lake. In September 2004, Baxter Counter Water Association requested 5.8 mgd from Norfork Lake. The district did not have any funds appropriated or available in FY13 to complete the reallocation report and environmental assessment. The district does not anticipate the funding in FY14.

Greers Ferry Lake: In January 2007, Community Water System requested 2.5 mgd. In December 2004, Searcy County Regional Water District requested 5,000 acre-feet. In June 2006, the city of Clinton requested 2.5 mgd. In May 2013, Mid-Arkansas Water Alliance requested

15.25 mgd. The district did not have any funds appropriated or available in FY13 to complete the reallocation report and environmental assessment. The district does not anticipate the funding in FY14.

Table Rock Lake: Tri-State Water Resource Coalition requested 50,000 acre-feet from Table Rock Lake in July 2007. The district needs $600,000 for a reallocation report and environmental assessment. If public interest warrants, an environmental impact study will require an additional $1 million. The district did not have any funds appropriated or available in FY13 to complete the reallocation report and environmental assessment. The district does not anticipate the funding in FY14. Using new guidance from amendments to Section 111 of the FY12 Energy and Water Development Appropriations Act, the district approached Tri-State Water Resource Coalition about funding. The coalition has verbally agreed to provide contributed funds to complete the reallocation report and environmental assessment.

Bull Shoals Lake: North Baxter County Water Distribution District requested 6 mgd for municipal and industrial water supply purposes. The district did not have any funds appropriated or available in FY13 to complete the reallocation report and environmental assessment. The district does not anticipate the funding in FY14.

Completed but unexecuted Agreements:

Greers Ferry Lake, city of Heber Springs: Officials approved this reallocation report in 2007, but the water supply agreement was not executed because of a dispute over costs for water storage. The city disputed the water supply agreement determination made by the Assistant Secretary of the Army for Civil Works, which included annual operation and maintenance costs. The city has recently contacted the Little Rock District showing interest in executing this agreement and agreeing to pay annual operation and maintenance costs. The Little Rock District is currently reviewing the agreement to ensure compliance with USACE policy.

Planning Assistance to States

Arkansas

The Arkansas Natural Resources Commission is updating the Arkansas Water Plan, which will include ongoing project scoping and scope refinement, resource assessments of surface and groundwater supplies, water demand assessments, identification of data needs, projection of future water needs and challenges, and identification of new or alternative water sources. It also will include integration of input from the public, interested groups, and state and federal agencies in recommending management strategies and policy considerations. The plan should be completed in November 2014.

Under the Planning Assistance to States, Section 22 authority, the commission requested assistance from the Little Rock District to conduct a thorough analysis of the temporal trends in stream flow and reservoirs in Arkansas through 2012. The district is using $140,000 to complete this analysis. The project applies a wide range of sophisticated statistical methods to evaluate temporal and spatial variability on trends for various flow characteristics of streams in Arkansas. These flow characteristics include, but may not be limited to: annual minimum flow; annual maximum flow; annual daily maximum flow; annual median flow; monthly mean flow; and, the 30-day moving average of daily flows for both active and inactive stream flow gauging stations that are or were operated by the U.S. Geological Survey and/or the Corps of Engineers in Arkansas. We also will identify statistical trends for reservoir pool elevation and water supply storage availability in Arkansas from the early- to mid- 1900's through the 2012 water year. This phase of the study will be completed in December.

Missouri

The Little Rock District, in partnership with the Corps' Kansas City District, completed a regional water supply and demand study for the Missouri Department of Natural Resources under the Planning Assistance to States Program. The districts executed the 2011 and 2012 agreements for the phase I water demand analysis, and completed this phase in September 2012. The district is completing phase II which includes evaluating the water supply options of the 16-county study area by comparing it with results of the phase I water demand analysis as well as performing a basic formulation of alternatives addressing deficiencies through 2060. The district cost-shared the $300,000 study with the state.

Water supply is available on a regional scale.

Issues and Other Topics

Continuing Authorities Program Overview

The Continuing Authorities Program is an essential pathway for communities in the district to partner with the Corps on small water resource projects. In FY13, the district awarded two construction contracts for Section 14 Emergency Streambank Restoration Projects, one in Guion, Ark. and another in Augusta, Ark. Both towns are located on the White River.

In the fourth quarter of FY13, the district held an alternative formulation briefing for the Draft Feasibility Report for a Section 205 Small Flood Control Project along Prairie Creek in Russellville, Ark. The district also will conduct the alternative formulation briefing for a Section 107 Small Navigation Project called Northwest Arkansas Port. The district will continue the feasibility work on both of these studies and will identify economically justified plans for construction.

In the next few months, the district expects to sign a record of decision after the Federal Highway Administration completes the final Environmental Impact Statement for the intermodal facility in Russellville, Ark. The district is currently updating the plans and specification for the Section 107 small navigation harbor.

The increasing number of suspended projects that sponsors anxiously want completed adds to the burden of an unfortunate backlog of new projects that need funds and approval under many of these authorities.

Customer Funding for Hydropower capital improvements

The Little Rock District is currently executing 21 projects totaling $38.8 million funded through a memorandum of agreement between the Corps, Southwestern Power Administration, and the city of Jonesboro, Ark. This agreement allows for funding of capital improvements to the seven hydroelectric generating plants in the Little Rock District. The federal power customers have committed to a multi-year program to rehabilitate the Corps-owned facilities in the Southwestern Power Administration system and to preserve the resource for future generations. This type of funding arrangement effectively supplements the limited federal spending in this business line and allows the customer more input into the capital

investment priorities. It also has been an effective tool in limiting the growth of backlog maintenance at the district's hydropower facilities. This maintenance is extremely critical as each of these plants approach the later stages of their economic life.

McClellan-Kerr Arkansas River Navigation System Recreational Lockage Policy

In June, the Little Rock District implemented a recreational vessel lockage policy for the McClellan-Kerr Arkansas River Navigation System. The policy's objectives are to reduce wear on lock equipment, particularly the gates, as well as increase the time available for maintenance. The policy establishes a lockage closure for recreational vessels from 10 a.m. to 2 p.m. Monday through Thursday, excluding federal holidays. It also allows for consideration of special event waivers for groups and organizations, such as large fishing tournaments and civic celebrations. It also establishes the use of a single lock gate instead of both gates for recreational vessels in most situations. The Tulsa District has implemented a similar policy for their Arkansas River locks.

The district developed this policy after extensive engagement with the public and stakeholders. The district conducted eight public workshops in the fall of 2012 on the initial draft policy. Federal and state agencies, representatives of Arkansas' Congressional delegation, local governments, river-related businesses, fishing organizations, and the general public attended the workshops. Stakeholders reviewed the updates to the draft policy throughout the winter and spring of 2013. The district also established and publicized a public comment period for the policy updates in March. The district has received few complaints since the implementation of the policy.

Corps personnel perform maintenance on the lock gates of Dardanelle Lock.

Operations and Maintenance Budget Trends

A continuing trend of flat-line budgets over the past several years in the Civil Works Operations and Maintenance Program has led to the prioritization and subsequent reduction of services the Corps provides. Costs have steadily risen for supplies, utilities, fuel, contracts and other resources needed to execute the program. The rise in costs is limiting the quantity and diversity of services the district can provide.

The district is focusing its recreational resources on strategically located facilities to offer the most efficient return on investment. The district has deferred applications for private exclusive use, such as private boat docks and mowing during the recreation season, so resources can be focused on providing service to the general public. The district has reduced the hours of operation at lock facilities for recreational users; however, all of the locks are operating 24 hours a day, seven days a week, for commercial vessels.

For the past two years, the district has reduced overall maintenance of its aging infrastructure where the risk was determined acceptable. The district has decreased the frequency of dewaterings, inspections, and general maintenance while increasing its response time to breakdowns. The FY14 budget shows increases in funding for non-routine maintenance and special items. While budgets for day-to-day operations will continue to remain flat-lined in comparison to recent years, the district should be able to complete more significant maintenance items in FY14.

Operations and maintenance funding in FY12 was $89 million, $86.2 million in FY13 (after sequestration) and is currently projected at $101.2 million in FY14. As the backlog of high priority maintenance items continues to grow as the infrastructure ages, the district is working to reallocate operations dollars to maintenance in an effort to preserve and repair the Nation's critical infrastructure. The district's annual work plan strategy includes an aggressive approach to use in-house resources to perform major maintenance. There is an overview of the top operation and maintenance unfunded items on Page 15.

Post Flood Tool Box for Local Communities Arkansas Silver Jackets

The Arkansas Silver Jackets team is developing a toolkit and quick reference guide for local floodplain administrators. The "quick guide," will help guide local floodplain administrators during and immediately after a flood event. The team will model the guide after the Arkansas floodplain quick guide and will include forms for recording high water marks, substantial damage software and guidance, sample flagging and tape for recording high water marks, and other items. The toolkit will also outline the responsibilities of the sponsor, community and the Corps of Engineer before, during, and after a flood event. It will describe, in detail, actions of the sponsor in checking known areas of concern, raising low areas, monitoring and inspecting the levee during and after the flood event. The kit will also describe the Corps' responsibility in assisting the sponsor in flood fighting activities and the rehabilitation of the levee if damages occur.

The core of the toolkit is the "quick guide." Its comprehensive design, using easy to understand language and illustrations, will make it easy to understand and employ. Most floodplain administrators wear many hats and need quick helpful information to enforce their community's floodplain management regulations and to help reduce future flood damages.

The toolkit and quick guide is a first step in collaborating with our state partners to create a statewide comprehensive flood risk education program. This program will include all levels of flood risk comprehension, from grade school students to seasoned professionals.

Floodplain Management Services Specific Projects

Randolph County Floodplain Management Plan – The district is using $288,000 in Floodplain Management Services funds to provide Randolph County, Ark., a comprehensive floodplain management plan. This plan includes a detailed floodplain hazard assessment, tools and strategies to reduce residual flood risk, and an action plan to implement the goals and objectives of the floodplain management plan.

Shannon Hills Nonstructural Assessment – The district is using $65,000 in Floodplain Management Services funds to provide the City of Shannon Hills, Ark., a comprehensive assessment of nonstructural measures for repetitively damaged structures along the Otter Creek and Shannon Hills tributary. This assessment will identify and prioritize mitigation options and provide flood risk reduction guidance to the individual home owners.

Real Estate Encroachments

An encroachment is an unauthorized use of government real estate interests. Examples are homes, buildings, roads and other structures built on government property without approval or authorization via a real estate instrument. Encroachments are unauthorized use of government property and result in a loss of income to the treasury and control of government land. With thousands of miles of boundary in the Little Rock District, much of which is in remote areas, encroachments can easily go undetected for long periods of time.

The longer an encroachment is in place the harder it is to resolve as time erodes facts and circumstances associated with the encroachment. Ownership of the structure can change hands, in some cases multiple times, which makes investigation and contact with the proper people very difficult and time consuming. The district has about 300 known complex backlogged encroachments because of these issues, as well as limited personnel and funding. The remaining encroachments will take additional resources to resolve. As the district identifies more encroachments while dealing with the present backlog the numbers of encroachments continue to increase.

Shoreline Management

It is the Corps' policy to protect and manage shorelines of all civil works water resource development projects under Corps jurisdiction in a manner to promote the safe and healthful use by the public while maintaining environmental safeguards to ensure a quality resource for use by the entire public. The district manages seven lakes with shoreline management programs. These programs encompass more than 3,000 miles of shoreline and include the management responsibilities for more than 5,100 private and community boat docks.

In 2009, the district spent $1.6 million to execute the shoreline management program. The appropriation in 2009 was $940,000; the remaining balance of $610,000 was funded from other business lines which cannot continue. In FY12, those costs were reduced to $1.3 million after the district initiated a deferment period during the recreation season. During the deferment period, applications for docks and mowing permits were not accepted or processed. This was in response to the district's Recreation Adjustment Plan and is a part of an effort to focus limited resources on public use areas versus private property ownership.

Shoreline management is one of the few programs that continue to grow, increasing the Corps footprint and operating expenses. Since the program is not sustainable long term, the district is evaluating it and the environmental stewardship business line to assess the impact of maintaining these programs within the appropriated funding. The district wants to identify and assess best management practices that provide a balance between limited resources and private and public uses of government lands and waters.

Military Program

Air Force Medical Mission

The Little Rock District provides a 'one door to the Corps' support to the entire Air Force Medical Service's Medical Sustainment, Restoration, and Modernization Program at worldwide Air Force medical clinics and hospitals. In FY12, the district awarded 37 contracts totaling $285 million and is currently working 24 contract actions for FY13 totaling more than $240 million. The FY14 program is under development.

Little Rock Air Force Base University Center.

Little Rock Air Force Base

Little Rock District manages the design and construction program at Little Rock Air Force Base. The Little Rock AFB is the premiere C-130 operational and training facility for the United States. The district's design and new construction program at the base currently exceeds $33 million.

The district added two projects because of tornado damage at the base in April 2011 and they are currently in the construction phase. These projects are a $2.4 million emergency permanent repair of C-130J aircraft Hangar 245 and a new $1.4 million Pest Management Facility. The Corps awarded the C-130J aircraft Hangar 245 repair project for construction in July 2012 and it should be completed in December. The district awarded the Pest Management Facility construction contract in August 2012 and it should be finished in November.

FY13 military construction projects include the new $26 million C-130J Fuels Maintenance Hangar contract awarded in June. A $4 million C-130J Weapon System Trainer Flight Simulator Facility addition is currently under solicitation with the contract award planned for FY14.

Other DOD Medical Missions

"Initial Outfitting" provides for planning, purchasing, and installation of new and reused furnishings and equipment required prior to occupancy of new and renovated or restored facilities. The initial outfitting program continues to grow each year. The district's current customers include the Air Force, Navy, Army, and the Defense Contract Audit Agency.

The district has forecasted two Navy projects for FY14. The projects are the Naval Academy in Annapolis and the Great Lakes Drug Lab.

Another pending FY14 award is a nationwide three-year, $20 million dollar Indefinite Delivery Indefinite Quantity Contract for the Defense Contract Audit Agency.

Typically, the program does not include Army medical projects, but the district will use the Initial Outfitting Program on projects in Katterback and Stuttgart, Germany in FY14.

The joint task force in the national capital region has requested to use our program for a small renovation project that should come out later in FY14.

Before and after look at a Pine Bluff Arsenal's warehouse upgrade project.

Pine Bluff Arsenal

Little Rock District manages the design and construction program at Pine Bluff Arsenal, Ark. During the past year, the district administered a $20.9 million American Recovery and Reinvestment Act of 2009 funded steam line replacement project, which was awarded in May 2010. The project provides infrastructure, demolition, and remediation to accommodate replacement of central boilers and air compressor plants for more energy efficient systems. The district wrapped up this project in July.

In January, the district finished an $18.5 million project, which upgraded 71 warehouses and brought the facilities into compliance with security standards for storage of category II and IV armed ammunition and explosives.

63rd Regional Support Command

The Little Rock District has had a relationship with the 63rd Regional Support Command dating back to the early 2000's when it was formerly designated the 90th Readiness Reserve Center located at Camp Pike in North Little Rock, Ark. The district provides support for this customer's sustainment, restoration, and modernization work throughout the Southwest Region. Projects are funded with Army Reserve Operation and Maintenance funds.

The Little Rock team is working several task orders on a Small Business Indefinite Delivery Indefinite Quantity Contract currently in place to meet the requirements of the 63rd RSC. The total FY13 program exceeds $4 million. The district anticipates award of all task orders will be done by the end of the FY13 fourth quarter. Little Rock District expects the FY14 program for this customer to be similar to the FY13 program.

Remodeling at Audie L. Murphy Memorial Veterans Hospital, San Antonio, Texas.

Department of Veterans Affairs

The Little Rock District provides planning, design, and construction management for renovation and new construction of Veteran Affairs medical facilities in the Veterans Integrated System Network 17 in Texas. The current project portfolio consists of 56 projects at seven medical facilities with a total construction value of about $125 million. The district awarded architectural and engineering design services in September for the Dallas Medical Center. This project includes the renovation of building one's administrative space located on the third and sixth floors. It also includes programming and conceptual planning for the remaining four floors. The district is preparing to support a potential new $9 million one-story mental health patient ward addition to the Dallas Medical Center in 2014. The district anticipates accomplishing more master planning and design services to support the VA programs in Texas.

Continued Authorities Program Roll-Up

Green means the project is funded. **Yellow means the project is funded but has issues.**
Red means the project has been terminated, suspended or there are no funds to start.

Project Name	District	FY 13 Funds*	FY 14 President's Budget**	Status / Issues
* Includes FY12 carryover funds ** CAP funds are not appropriated to specific projects in the President's Budget. FY14 workplan has not been released; this includes FY13 carryover funds.				
Section 14 – Emergency Streambank and Shoreline Protection of Public Works Projects – Annual Statutory Limit $15 Million				
Highway 58, Guion, AR	AR-01	$369,400	$84,000	PPA signed July 9, 2012. Construction award was Jan. 24. Construction is underway.
White River, Augusta, AR	AR-01	$557,000	$96,000	PPA signed Sept. 7, 2012. Contract award was Aug. 6.
Section 107 Small Navigation Improvement Projects – Annual Statutory Limit $35 Million				
Northwest AR Port, Arkansas River, AR	AR-03	$40,000	$32,000	Draft Feasibility Study complete. Total project cost is about $22 million and exceeds federal limit of $7 million for 35% cost share. It will require a policy waiver from ASA(CW) to continue under CAP
Russellville Slack Water Harbor, Russellville, AR	AR-03	$150,000	$27,000	Design is being updated. FHWA's completed Final EIS in April. We are scheduled to sign ROD and adopt FEIS in the fall.
Section 205 – Flood Damage Reduction Projects – Annual Statutory Limit $55 Million				
Prairie Creek, Russellville, AR	AR-02	$100,000	$0	Strong sponsor support. Work continuing on feasibility study. PPA scheduled for Dec. 30.
Little Black River Watershed, Naylor, MO	MO-08	$0	$0	Backlog/new start. Awaiting federal funds to initiate feasibility study. Site visit and analysis in Oct. 2005 indicated no economically justified project. Additional flooding in 2008 and 2009 warrant re-evaluation. Request – Jan. 10
White River, Oil Trough, AR	AR-01	$0	$0	Backlog/new start. Awaiting federal funds. Request – 2005. Initial assessment $100,000
Crooked Creek, Alexander, AR	AR-02	$0	$0	Backlog/new start. Awaiting federal funds. Request – 2009. Initial assessment $100,000
Section 206 Aquatic Ecosystem Restoration Projects – Annual Statutory Limit $50 Million				
Shirey Bay/Rainey Brake WMA	AR-1	$0		Suspended due to funds revocation. Feasibility phase. Would be a restart. About $32,500 is needed to update the milestone report. AGFC local sponsor and highly supportive.
Little Black Ditch, Naylor, AR	MO-08	$0		Backlog/new start. Awaiting federal funds. Request - FY2006
Maumelle River, Maumelle Lake	AR-02	$0		Backlog/new start. Awaiting federal funds. Request - FY2012
Section 1135 Project Modification for Improvements to the Environment – Annual Statutory Limit $40 Million				
Rock Creek, Boyle Park, Little Rock, AR	AR-02	$0		Suspended due to funds revocation. Feasibility phase. Federal funds of $25,900 are needed to complete milestone report, and an additional $100,000 is needed to complete the cost-share portion of the feasibility report.
Arkansas River Environmental Restoration	AR-02 AR-03 AR-04	$0		Suspended due to funds revoked. Feasibility phase. Federal funds of $87,100 are needed to complete milestone report and determine feasibility of a solution.
Rockaway Beach, Rockaway, MO	MO-07	$0		Backlog. Re-start. City of Rockaway Beach wants to re-evaluate the completed project because implemented solution not providing desired output.

Investigations Program Roll-Up

Green means the project is funded. **Yellow means the project is funded but has issues.**
Red means the project has been terminated, suspended or there are no funds to start.

Project Name	Purpose	District	FY 13 Funds	FY 14 President's Budget	Status / Issues
Tri-State Water Coalition	To study regional water demands/ supply through year 2060.	MO-07 MO-08	$100,000	$0	Phase 1 report completed in September 2012. Phase 2 work began in October 2012. This will include a water supply gap analysis and a basic formulation of alternatives that address deficiencies between demand and supply through 2060.
White River Comprehensive Study	Basin-wide comprehensive watershed study. Conducted by Little Rock and Memphis districts under Section 729, WRDA 1986.	MO-07 MO-08 AR-01 AR-03	$130,000	$650,000	In FY13 used carryover project funds to complete minimal project goals on the White River, Cache River, and Bayou DeView. In FY14 there is $650,000 to develop a watershed assessment and plan for the Cache River Sub-basin. $1.5 million could be used for the study of hydrologic and geomorphic impacts.
Springfield	Flood risk reduction management	MO-07	$0	$0	National pilot study to modernize civil works planning process Corps-wide. Feasibility study was completed in May. The Chief's Report was signed in August and transmitted to ASA (CW). Project authorization is need to construct. Funds are needed in FY14 to start the detailed design for construction of project.
Southwest Arkansas	Develop comprehen-sive watershed plan to include ecosystem restoration, water supply and recreation opportunities.	AR-04	$0	$0	No sponsor; study was terminated.
Fourche Creek and Tributaries	Ecosystem restoration & flood reduction	AR-02	$0	$0	Funding of $100,000 is required to initiate study.
May Branch	Flood risk reduction management	AR-04	$0	$0	Completing 60 percent design using accelerated use of sponsor's cash share under terms of amended design agreement. $440,000 could be used in FY14 to complete plans. Sponsor desires credit to construct a portion of the project. Construction estimate is $30.8 million.
Three Rivers	Navigation and ecosystem restoration	AR-01 AR-04	$0	$0	A "new start" and $100,000 is required to complete a 905(b) reconnaissance study. Need to add ecosystem restoration as project purpose to MKARNS.
Beaver Dam Trout Production Facility	Mitigation for reduced number of warm water fish that resulted from construction of Arkansas dams	AR-03	$0	$0	Water Supply Storage Reallocation Report submitted to Corps headquarters for revision since July. Report approval scheduled for December. O&M funds were used to complete the report. $600,000 could be used for the project design and NEPA considerations.

Construction General Program Roll-Up

Green means the project is funded. **Yellow means the project is funded but has issues.**
Red means the project has been terminated, suspended or there are no funds to start.

Project Name	Purpose	District	FY 13 Funds	FY 14 President's Budget	Status / Issues
Clearwater Dam Safety/Major Rehabilitation	Construct cutoff wall for dam safety	MO-08	$0	$0	The contractor completed the cutoff wall construction in December 2011. Remaining work includes completion of final payment and contract closeout.
White River Minimum Flows	To provide adequate trout habitat downstream of Norfork and Bull Shoals dams	AR-01 AR-03	$0	$0	All work and Bull Shoals and Norfork is complete and water storage has been captured. A dedication ceremony was held in August and the project is complete.
Ozark Powerhouse Major Rehabilitation	Rehabilitation of five turbines	AR-04	$0	$0	First unit is being commissioned for service; expect to be back in service in 1Q 2014. The second unit is in the commissioning process and the third unit is being re-asssembled. The SWPA customers provided $12.8 million for rehabilitation of the third unit. $18 million is needed to complete the project.
Fourche Bayou Basin	Environmental preservation, flood control, and recreation	AR-02	$0	$0	A final agreement is being coordinated with Corps headquarters to use remaining federal funding and the sponsor's credit to acquire bottomlands.
McClellan-Kerr / Arkansas River 12-foot channel	To deepen navigation channel to 12' minimum depth	AR-01 AR-02 AR-03 AR-04	$0	$0	Work on this project has ceased. The project will not resume until the project receives: (1) a "new start" decision, (2) construction general funds, and (3) cost-shared funding (50/50) from the Inland Waterways Trust Fund.

Operation and Maintenance Unfunded Priorities

Project	Purpose	District	Status / Issues
MKARNS – Upstream and downstream river wall gudgeon pin replacement at Montgomery Point L&D	Prevent catastrophic failure and extended unscheduled loss of navigation at intersection of MKARNS and the Mississippi River	AR-01 AR-02 AR-03 AR-04	$2.1 million needed to replace Montgomery Point Lock river wall miter gate gudgeon pins and bushings. Failure has already started on upstream riverwall pin. Temporary measures have been taken in effort to prolong complete failure. Both landwall pins were replaced in Dec. 2012.
MKARNS – Structural rehabilitation and paint tainter gates at Mills Dam	Prevent accident or injury to employees or users of the locks and dams, loss of ability to lock boats	AR-01 AR-02 AR-03 AR-04	$14.8 million needed for structural and skin plate repairs, including replacement of severely corroded members, side seals and cathodic protection. Expect replacement of gates will be required if rehabilitation deferred. Current leakage estimated at 3,000 cubic feet per second.
Dardanelle- Seal leaking monolith joints and back-up pump system	Prevent flooding of dam gallery and loss of either navigation pool or dam structure	AR-03 AR-04	$2 million needed to seal leaking of monolith joints into service and purchase backup dam gallery pump system. Leakage is increasing and there is no room for additional pumps. Flooding of gallery results in loss of power to spillway gates and possible loss of navigation west of Dardanelle.
Dardanelle – Replace 5kV lock service feeder, dam gallery lighting and receptacles	Maintain power at lock and dam and Russellville Project Office and prevent unscheduled loss of navigation	AR-03 AR-04	$1 million needed to replace current 30 year old feeder system. Failure would result in loss of power to Lock and Dam and Project Office, halts navigation, flooding of dam /powerhouse, and loss of data communication. Failure could result in loss of life if insulation fails/breaches.
MKARNS– Replacement of Lock Control Wiring	Prevent accident or injury to employees or users of the locks and dams, loss of ability to lock boats	AR-01 AR-02 AR-03 AR-04	$1.5 million to replace wiring that is beyond its service life. All of these systems are currently experiencing intermediate failures and will not be able to be maintained in the future.
Bull Shoals – Repair/Replace Tainter Gate Side Seal Assemblies and Spot Paint Gates	Prevent gates from binding and becoming inoperative due to failing side seals	AR-01 AR-03	$11.5 million need to repair or replace side seal assemblies on remaining 14 of 17 gates, as well as spot paint gates. Seal assemblies are currently failing and could cause gates to bind and become unusable.
MKARNS, Ozark & Dardanelle – Replacement of Dam Control Wiring	Prevent accident or injury to employees or users of the locks and dams, loss of ability to maintain pool or lock boats	AR-01 AR-02 AR-03 AR-04	$3.3 million to replace wiring that is beyond its service life. All of these systems are currently experiencing intermediate failures and will not be able to be maintained in the future.
MKARNS – Additional Down-stream Bulkhead Closure and Repair Embedded Sills at Toad Suck Lock & Dam	Prevent loss of ability to maintain navigation pools	AR-01 AR-02 AR-03 AR-04	$2.5 million needed to fabricate closure structure to isolate tainter gate and embedded spillway sills to perform critical repairs. Bulkhead closure structure is reusable and can reduce significantly reduce costs for future embedded sill repairs.
MKARNS – Montgomery Point Lock & Dam Study to remove debris from lock chamber	Prevent damage to equipment and structural components that results in loss of navigation or control of pool	AR-01 AR-02 AR-03 AR-04	$400,000 study to develop cost-effective methods for reducing and removing sediment/debris. Repairs to the lock's tainter gate gudgeon pins were triggered by sediment and debris levels in and around the locks. These repairs have interrupted navigation during low water conditions and will cost an estimated $3.7 million.
MKARNS & Dardanelle – Replacement of hydraulic, air and water piping	Prevent failure of equipment and unscheduled loss of navigation	AR-01 AR-02 AR-03 AR-04	$1.5 million to complete the replacement of 40 year old piping that is corroded and failing. Piping is currently having minor failures and will not be able to be repaired with continued corrosion.
MKARNS, Ozark & Dardanelle – Replace overhead lock lighting	Maintain a safe work environment at the locks during low light situations	AR-01 AR-02 AR-03 AR-04	$4.8 million to replace lock lighting that illuminates the lock chambers, guide/guard walls, and parking areas. Failure would result in inadequate night visibility for navigating, operating, and rescue of man overboard. Existing lighting has deteriorated, consists of obsolete equipment that is no longer maintainable and in some cases requires floating plant to access.
Norfork, Table Rock, Beaver, Bull Shoals, Greer's Ferry, Nimrod, Millwood, Clearwater & Gillham Lakes – Develop Corps Water Management System Model (CWMS)	Maintain ability to maintain pool and avoiding possible property damage and loss of life	AR-01 AR-02 AR-03 AR-04 MO-07 MO-08	$2 million to meet requirements stated in ER 1110-2-240. Failure to complete these models within 3 years will cause loss of ability to perform real time pool management, which could result in unnecessary property damage and claims against the Corps with potential loss of life.
Table Rock – Remote operation of tainter gates during high water	Eliminate electrical shock hazard when operating tainter gates during high water events	MO-07	$600,000 to allow operators to safely operate tainter gates during high water situations (such as 2011) where the water can overtop the catwalk on the main spillway.
MKARNS, Dardanelle & Ozark – Replacement of lock and dam power wiring	Prevent accident or injury to employees or users of the locks and dams, loss of ability to maintain pool or lock boats	AR-01 AR-02 AR-03 AR-04	$13 million to replace power wiring that is beyond its service life. All of these systems are currently experiencing intermediate failures and will not be able to be maintained in the future.

Little Rock District Points of Contact

COL Courtney W. Paul
Commander
(501) 324-5531
courtney.w.paul@usace.army.mil

Randy Hathaway
Deputy District Engineer
(501) 324-5053
randy.j.hathaway@us.army.mil

Craig Pierce
Chief
Programs & Project Management Division
(501) 340-1064

Tony Batey
Chief
Engineering & Construction Division
(501) 324-5566

John Balgavy
Chief
Operations Division
(501) 324-5679

Trish Anslow
Chief
Planning & Environmental Division
(501) 324-5023

Sandra Easter
Chief
Contracting Division
(501) 324-5720

Kent Cummins
Chief
Public Affairs
(501) 324-5551