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## Carlyle Lake Celebrates 40 Years

Story by Fred Venturini, Carlyle Lake; Photographs by Alan Dooley, PA

Carlyle Lake marked its 40<sup>th</sup> anniversary with a commemorative ceremony on June 30, 2007.

Themed “Past, Present, and Future,” the event featured a variety of speakers and was well-attended by distinguished guests involved in the success of Carlyle Lake over the last 40 years.

Among the speakers were Robert Wilkins, Carlyle Lake Project Manager;

Van Johnson, Mayor of Carlyle; Colonel Lewis Setliff, St. Louis District Commander; Steve Jurgens, Kaskaskia Watershed Association President; Gary Clark with the Illinois Department of Natural Resources and U.S. Congressman John Shimkus.

Gathered under a day tent near the Dam West Beach, the guests and speakers were treated to a backdrop that encapsulated the lake’s growth and

success—people packed the beach for the Independence Day celebration, boats dotted the lake waters and visitors milled into the area for the evening’s Fireworks Spectacular.

Wilkins emceed the event, stressing the importance of the lake’s future even as the past was celebrated—a common sentiment among speakers.

“As we look back on the last forty years, we want to remember to keep a watchful eye on the next forty as well,” said Wilkins.

Mayor Johnson briefly welcomed everyone to the City of Carlyle and then turned the ceremony over to Colonel Setliff.



A commemorative plaque marking the 40th anniversary of Carlyle Lake was unveiled at a celebratory ceremony near the lake’s Dam West Beach on June 30. The plaque will be permanently affixed to the Carlyle Lake main dam. Participating in the unveiling were (L to R) Van Johnson, the mayor of Carlyle; Dale Henry, former president of the Kaskaskia Valley Association; Gary Clark, Illinois Department of Natural Resources; Steve Jurgens, president of the Kaskaskia Watershed Association; U.S. Congressman John Shimkus (R-Ill.); and Col. Lewis F. Setliff III, St. Louis District Commander.

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### Commander's Perspective



Col. Lewis F. Setliff III

I'm sure by now that almost everyone has seen, or is aware of, recent developments concerning the levees and other elements of flood risk management in the St. Louis District. It is a complex issue that has several key components.

So let me try to get us all on the same page.

First, many of you still vividly remember the flood of 1993. Others went south two years ago in the wake of Hurricane Katrina to participate in the huge effort to rebuild New Orleans' hurricane defenses.

Those events are the foundations of what is taking place now in St. Louis and across the nation. Coupled with other vivid events like the recent bridge collapse in St. Paul, there is a new appreciation for the status of our

nation's aging infrastructure that includes its flood risk management systems.

While it is absolutely true that Federal program levees all successfully resisted the flood of 1993, it is equally true that there were a large number of incidents of what we call "under performance." Absent heroic flood fighting efforts, several of these might have resulted in major disasters that would have had regional and national implications.

Numerous drainage and levee districts grasped this and asked us to undertake studies of their levees. In the intervening decade-plus, we did just that, completing studies assessing levee performance.

Some months ago, FEMA came to us and asked, "Are there any levees in your area that would have problems defending against a 100-year event – a flood that can be expected to occur with a one-percent chance in any given year?"

Those same post-1993 studies documented under-performance issues with our levees. We mainly saw under-seepage issues and those concerning closure structures.

So with FEMA and the support of our elected representatives we are embarked on a joint effort to be absolutely transparent in conveying to the citizens of this region that living and working behind levees is not risk free. We are also trying to gain understanding that levees cannot be viewed in isolation from each other, but must instead be seen as parts of systems. Regardless of how well an individual levee performs in a flood, loss of another levee upstream could allow flood waters to get behind a levee

as assuredly as a frontal failure.

We must convey these messages. We are not trying to scare people. We are not pointing fingers. We are not abandoning anyone. But we owe it to the citizens of this region to provide the best engineering and scientific advice we can. Our conclusions are based upon facts, science, and engineering. People who live and work behind these levees need accurate information to make decisions; decisions concerning future development, decisions about flood insurance, and even decisions about staying or relocating.

And we owe them the information they need to go to their elected representatives to seek solutions to their problems – including the engineered alternatives to get under-performing levees up to their authorized level of protection...the real end state here. We, and FEMA, are working as you read this, to meet with people, businesses, and agencies to inform them on what stands between them and the river. So that their current, and future, decisions are informed decisions.

Thanks again to everyone for what you do each and everyday. The lengthy explanation above is just one example of the importance we hold for those we serve. People, businesses, livelihoods depend on all of us to do our jobs. I am very proud of what this District does, and how we do it. You should be too.

Stay safe out there!

Hooah!

COL Setliff



**US Army Corps of Engineers**  
St. Louis District®

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**Bob Wilkins, Carlyle Lake operations manager, welcomes guests to the 40th anniversary ceremony on June 30. Numerous partners, stakeholders and District personnel were in attendance.**

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“The lake is more than a recreational opportunity,” Setliff said. “It has become more than its primary purpose of flood damage reduction. It is a great example throughout the entire Corps of Engineers for other projects to follow.”

Flood damage reduction, however, continues to provide an important purpose. According to the Colonel, Carlyle Lake has provided \$473 million

in flood damage benefits in the last decade.

The Colonel also emphasized the importance of partnerships within the watershed, citing the Kaskaskia Watershed Association as a crucial component of Carlyle Lake’s continued success. The KWA is an organization that represents the interests from all four reaches of the

Kaskaskia Watershed, of which Carlyle Lake is a significant part.

“It’s my honor and privilege to command the St. Louis District with such a great lake like Carlyle Lake within it,” Setliff said.

Steve Jurgens, the President of the KWA, added more detail about the KWA’s role in Carlyle Lake’s history. He explained how similar organizations played an important role in Carlyle Lake’s past, including the Kaskaskia River Valley Project in the ‘30s and the Kaskaskia Valley Association in the ‘50s. He singled out and thanked Dale Henry, a former Kaskaskia Valley Association president who was in attendance.

Jurgens said there is a need for synergy among the watershed’s many interests. He shared a list of KWA accomplishments, including being named as a model for the U.S. Army Corps of Engineers in their five-year

strategic plan, cited as the example for other regions of the country to find and implement watershed-based solutions.

“Today isn’t a day for resting on our collective laurels,” Jurgens said, stressing a progressive attitude. “We (the KWA) don’t want to carry the torch, we want to make it burn brighter as we progress into the future.”



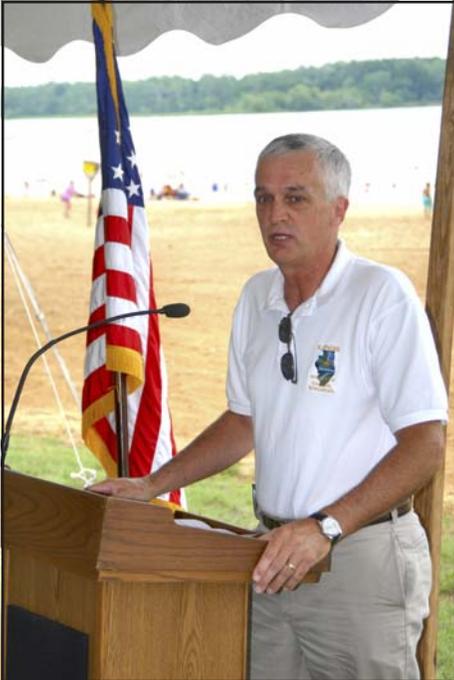
**Col. Lewis F. Setliff III and his wife Lizabeth greet Dale Henry, a former president of the Kaskaskia Valley Association, an organization that played a key role during the lake’s construction.**



**Prior to the 40th anniversary ceremony, Rep. John Shimkus (R-Ill.) visits with Col. Lewis F. Setliff III and Bob Wilkins, Carlyle Lake’s operations manager.**

Gary Clark, the Office Director of the Division of Water Resources with the IDNR, marveled at the lake’s development. “It’s a lot easier to design and build a project like Carlyle Lake than it is to operate a project like Carlyle Lake,” he said. “We appreciate the Corps and their work.”

He also mentioned how the partnerships among the Corps, KWA, IDNR and others have created a haven



Gary Clark, from the Division of Water Resources with the Illinois Department of Natural Resources, highlighted the partnership between the Corps, IDNR and the Kaskaskia Watershed Association. "Nowhere in Illinois is there such a collective force for natural resources," he said.

### Carlyle Lake Celebrates 40 Years Continued from page 3

for natural resources. "Nowhere in Illinois is there such a collective force for natural resources," he said.

Congressman Shimkus also thanked the KWA, noting how their collective voice "simplifies issues and causes success." He thanked Rodney Davis, his pointman for the watershed, and mentioned how many advancements and issues will be upcoming for inland waterways such as the Kaskaskia Watershed. The growth of rural communities will require potable water, and advancements in competitive liquid fuels will call for water access.

"Our founding fathers couldn't predict growth," Shimkus said, adding



Carlyle Lake, the largest man-made lake in Illinois, hosts an average of 3 million visits annually. Here, on the day of the 40th anniversary dedication ceremony, visitors enjoy a day of recreation on this valuable water resource.

that Carlyle Lake will be a microcosm of the multiple issues growth will cause.

Almost summarizing the collective ideas of all the speakers, Shimkus complimented the KWA for a unified voice and how those partnerships will nourish Carlyle Lake for the years to come, preparing it for the stresses of growth.

To close the ceremony, a bronze plaque was unveiled. The plaque reads:

"The formation of Carlyle Lake is the result of the Kaskaskia Valley Project, promoted by many individuals with a dedicated purpose to build, to improve and to progress. Today those efforts are mirrored by the labors of numerous stakeholders working in partnership with

federal, state and local governments to enhance and promote the many facets of Carlyle Lake and the surrounding watershed."

The plaque will be permanently affixed to the Carlyle Lake main dam in commemoration of the 40<sup>th</sup> anniversary.



Steve Jurgens, the president of the Kaskaskia Watershed Association, emphasized the need for continual coordination between the many interests in the watershed and looks forward to building on past accomplishments.



## St. Louis Archaeologist is Named Top U.S. Army Corps of Engineers Civilian Employee

Dr. Michael “Sonny” Trimble has been honored by receiving the LTG John W. Morris Civilian of the Year Award, recognizing him as the top performing civilian employee among 34,000 counterparts in the U.S. Army Corps of Engineers. The award was presented to Trimble in Providence, Rhode Island by Corps commander LTG Robert Van Antwerp on August 6.

Trimble was recognized for his leadership and work as Director of the Iraq Mass Graves Investigation Team, a small cadre of forensic specialists, archaeologists, and subject matter specialists from allied fields, who investigated the deaths of victims in nine mass graves from the deposed dictator Saddam Hussein’s reign. The Mass Graves Investigation Team often performed its mission under hazardous combat conditions for the Department of Justice and the U.S. Embassy in Baghdad, working carefully with Iraqi law enforcement counterparts to help

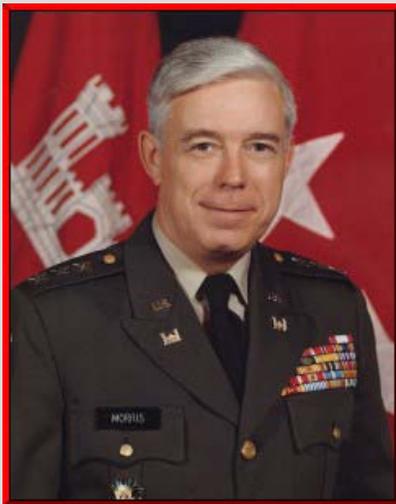
provide them with forensic evidence for current and future legal work on the former regime’s crimes of the past two decades.

Trimble, who has been to Iraq six times in connection with his work, spent several hours testifying in front of Saddam Hussein and the so-called Chemical Ali in an Iraqi courtroom in Baghdad before both of those men were sentenced to death for their crimes against the Iraqi people.

The slender, intense archaeologist, who heads up the St. Louis District Curation and Archives Analysis Branch, which is also a center of expertise for archaeological work throughout the Corps of Engineers, says that in the



end, the Iraq Mass Graves Team’s mission became one of giving voices to those who had been so brutally murdered, often for no crime at all other than their birth origin. Recovery of human remains from mass graves continues in northern Iraq by local professionals who received training from the Mass Graves Investigation Team.



**Lieutenant General John W. Morris  
Chief of Engineers  
(July 1, 1976-September 30, 1980)**

### ***The LTG Morris Civilian of the Year Award***

This award is presented by the Comander, USACE to a current civilian employee of the U.S. Army Corps of Engineers. The award, which was established by Lieutenant General John W. Morris, former Chief of Engineers, under the auspices of the Corps of Engineers Historical Foundation, consists of a photoetched, gold plated walnut plaque that depicts an engineer’s hard hat. It also includes, as permitted by governing regulations, consideration for advanced executive, managerial, or technical training for a period not to exceed one year.

This recognition of distinguished civilian service is awarded by the Commander, USACE at the annual awards ceremony conducted in conjunction with the Corps of Engineers anniversary and Engineer Day activities. The award is presented to the civilian employee determined to have achieved the highest overall standards of excellence as a Corps employee and who individually has made the most significant and noteworthy contributions to the mission, reputation and prestige of the total Corps of Engineers.

A biography of LTG Morris can be found at: <http://www.hq.usace.army.mil/history/coe4.htm#47>



## Work at Mel Price Finishes Eight Days Early

By Alan Dooley, PA

Some of us remember our Moms telling us as kids that it was always good to be early. Mine sure did. Apparently a six-district, two-division crew of lock maintenance experts heard and took that advice to heart at the Melvin Price Locks and Dam near Alton, Ill. They finished a critical \$5.6 million project eight days ahead of schedule, Monday, June 25.

When the 1200-foot main lock chamber there closed at 6 a.m., Thursday morning, May 10, an almost audible groan was heard on commercial tow boats up and down stream from the facility. What was normally a twenty minute procedure to lock through the modern main chamber suddenly changed to a 90-minute to two hour ordeal for tows larger than nine barges – the majority of the tows.

With the closure, all traffic was suddenly diverted to the adjacent 600-foot chamber. This meant that standard 15-barge tows had to be broken into two sections – or cuts – moved through the shorter chamber and then reassembled. This is routine at the smaller, less busy locks up stream, but it was suddenly a hardship at the busier Mel Price.

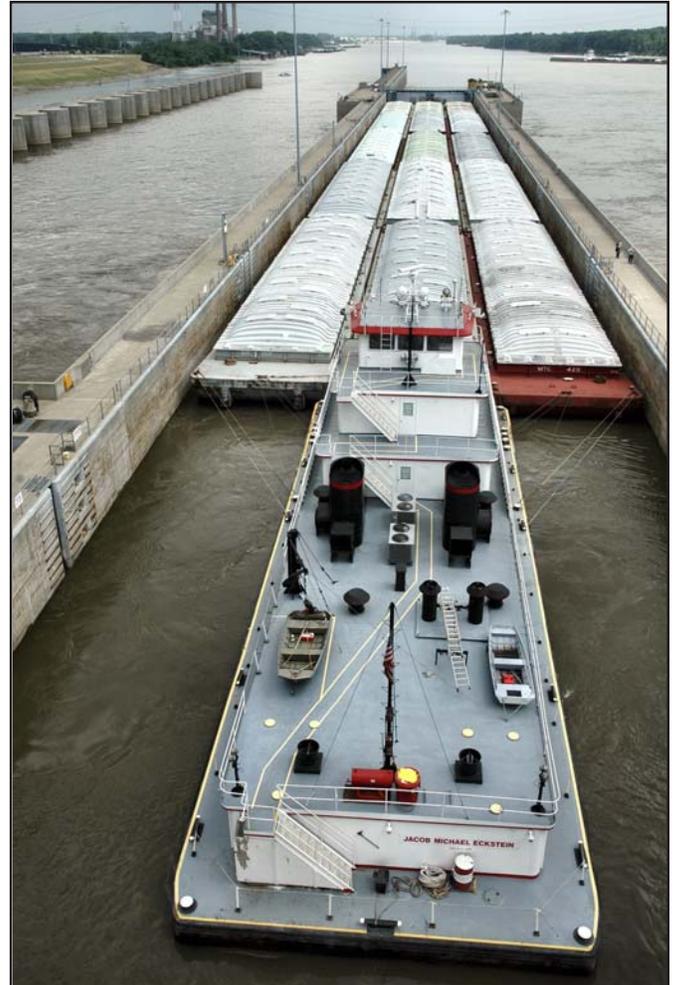
The St. Louis District of the U.S. Army Corps of Engineers put two helper boats into action to help make lockages faster and safer – an expensive but necessary measure – but at some points in following days, queues of waiting tows grew to as many as 20 tows hoping to transit in both directions.

The closure had been known since planning began late in July 2006. Navigation industry people, personnel from the Corps of Engineers and the U.S. Coast Guard worked to ensure that things would go as smoothly as possible.

A combined team was led by project manager Mike Feldmann. It featured mainly, personnel from the Mississippi Valley Division's Rock Island and St. Louis Districts and included individual hands from the Division's St. Paul and Vicksburg Districts, as well as personnel from the Great Lakes and Ohio Rivers Division's Louisville and Pittsburgh Districts. Throughout most of the grueling schedule, two shifts worked around the clock, seven days a week.

According to Andy Schimpf, Rivers Project Manager, who oversees the navigation business line in the St. Louis District, "This project took three critical items from the very top of the MVD prioritized maintenance list and effectively and economically combined them into one closure. This produced significant savings for our industry partners. A true regional team was assembled to complete the work."

The team split roughly into two groups. One, led by the St. Louis District, focused on repairing and upgrading the lock chamber's upstream end and the three 140-ton lift gate segments and replacing their more than two miles of 1.5 inch steel cable and all electric motors and control boxes.



**Marquette Transport MV Jacob Michael Eckstein was the first tow through the main chamber of the Mel Price Locks when they reopened eight days early on the afternoon of June 25. Shown here headed downstream with 15 barges, this image was captured by Park Ranger Janet Mifflin.**

A Rock Island-led team took on the massive miter gate at the down stream end. There, though challenged by thunder storms and lightning that caused a brief safety delay, they lifted one of the 220-ton miter gate leafs from the Mississippi (plus an estimated 85 tons of accumulated silt and sand) and hauled it to the Illinois shore where they laid it down in a prone position on a waiting flat work barge.

The Rock Island District "have heavy crane, will travel" gang showed off both their towering heavy gate lifting crane Quad Cities, and their experience and skills born of lifting and



replacing 31 similar gate leaves in the previous year.

Any one of those projects reworking gates at both ends of the lock chamber and replacing all electrical equipment and heavy cabling at the lift gates, could have been an individual project, requiring three separate closures for a combined longer period.

Those most responsible for bringing the project in on time and on budget had volumes of praise for the team and how well it worked as one unit.

Rod Stover, Rock Island District Mississippi River Project Office General Maintenance Supervisor, who led the Rock Island group noted that the teamwork was not an accident. He noted how he and St. Louis personnel worked side by side for nine months to plan the job ahead.

Stover went on to say, "...workers from several districts came to the jobsite with one thing in mind, getting that job done safely and getting it done ahead of schedule. We achieved both



The Quad Cities maneuvers the 220-ton miter gate Missouri leaf back into place on June 13 after replacement braces were attached. (Photo by Nicole Dalrymple)

objectives. Not only did we get done early, we performed the work without a lost time accident, we performed it without a scratch. That in itself is a major feat when you think about how many man hours were consumed on this project."

The feat was magnified when visitors watched the Rock Island-led team lift and maneuver the 57 by 65-foot gates with the precision of a Swiss watch, albeit a 220-ton watch, ahead of schedule and injury free.

While gate leaves were being snatched from the river, laid down and upgraded, a feverish pace was set at the upstream end of the lock chamber where a mainly St. Louis District crew first lowered three 110-foot wide, 140-ton lift gate segments to rest on sections of salvaged steel dredge pipe.

Then they removed some 108 lengths of 1.5-inch steel cable, ranging from 106 to 149 feet long, salvaged reusable components and cut and installed replacements from massive spools situated on the lock wall and a barge below.

Personnel from the Vicksburg District played a key role in replacing the cables. The experts, normally assigned to the mat laying unit there, routinely work with segmented concrete mats that are held together and anchored with heavy steel cables. Their skills and experience in handling unwieldy cables, threading them into the machinery and securing them safely went forward around the clock.



Workers from the Vicksburg District thread new steel cables on top of rollers so they can raise and lower the upstream lift gates. Workers from the Vicksburg District thread new steel cables on top of rollers so they can raise and lower the upstream lift gates. Pictured L to R: Elbert Williams, Johnny Allen, and Malcolm Gibbs. (Photo by Alan Dooley)

Another group of electricians and electrical engineers removed worn electric motors and replaced them with new ones. Old electrical controls and cabling were also ripped out and replaced by modern equipment.

Deep in the bottom of the concrete lock chamber as the project neared completion, inspectors found serious fatigue cracks in steel plating on the lift gate segments. "We engineered a response plan and then moved it toward completion," Feldmann told. Feldmann went on to note that as more cracks were revealed, it quickly became apparent that he didn't have enough qualified welders to finish the job on time. "So I turned to the Rock Island team and they said, 'Can do.'" They joined to create two shifts that could work in concert with the cable replacement work and a possible show stopper was avoided."

As work moved toward completion, at one point project manager Feldmann told how the work showed a true strength of the Corps of

**Mel Price Finishes Early**  
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Project Manager Michael Feldmann inspects a bronze bearing in the pintle socket, the bottom pivot point for one of the huge miter gate leaves. (Photo by Alan Dooley)

### Mel Price Finishes Early Continued from page 7

Engineers. He pointed out that people from all over the region were able to work as a unit because they used the same processes and language in their work at home. He also told how the ability to move specialized equipment across geographical boundaries, like Rock Island District’s heavy gate lifter crane Quad Cities, showed flexibility. Both capabilities – being able to shift equipment and personnel to where the work was critical – also demonstrated



Jeff “Spinner” Mayers and Rod Stover (L to R), from the Rock Island District’s “have heavy crane, will travel” gang, reconnect the Missouri leaf’s strut arm, which connects to the machinery and does the actual opening and closing of the leaf during locking operations. (Photo by Nicole Dalrymple)

the U.S. Army Corps of Engineers ability to both work efficiently and be ready to respond to emergencies when commercial assets might be tied up as many are now in New Orleans.

Rock Island’s Stover added, “I can’t say enough about the great experience I had working on this project. I wish they all went as smooth as

this one did. I hope the ‘higher ups’ take a good look at the results from this project and see that working together regionally when the opportunity arises, will benefit everyone.

Mike Feldmann said that one characteristic of the team was a positive, “can do” spirit in facing challenges.

“We had encountered and handled some similar tasks in the past, but a lot of ‘first time’ tasks also cropped up,” Feldman added.

“From start to finish,” Feldmann observed with satisfaction, “I never heard anyone speculate that they couldn’t do any job. Instead, what I heard from supervisors like Rod Stover, Matt Thurman, Pete Coleman, Mike Quinn, Shane Nieukirk, Rob Kelsey were always responses that started with “I’ll need (resource, person, overtime authorization, material, equipment, etc.) to get this done on time. Never once did anyone even start to tell me something couldn’t be done on time,” he concluded.

In the end, even with the early finish, the pain of the delays amounted to millions of dollars in added costs for navigation industry interests. But anyone who might have grumbled quickly realized again, that while there was no good way to do the required work, this was the only way. It was accomplished at a relatively slower time before new harvests started to move south for export. And everyone realized that the increased reliability afforded by refurbished and replaced equipment reduced the risk of one or more lengthy closures that might arise at the worst times for shippers.

At 2 p.m. on June 25, the lift gate segments, riding on new cables and powered by new electric motors, slid ponderously down, disappearing into the murky Mississippi River. The recently dry steel miter gates stood solidly at the downstream end of the chamber. The Marquette Transportation Motor Vessel Jacob Michael Eckstein slowly pushed 15 loaded barges into the reopened 1200-foot chamber. Her gleaming white paint made her a fitting first tow boat to inaugurate the newly refurbished lock chamber. Business as normal was again resumed.

“And oh yes Mom, we got done early. Just like you told us to.”

#### Editor’s Note

On June 26 Raymond Hopkins, chairman of the River Industry Action Committee, a coalition of tow companies and other navigation interests, sent out an e-mail to all RIAC members announcing the conclusion of repair work on the main lock chamber of the Melvin Price Locks and its reopening at 2 p.m. on June 25. He noted with an exclamation point that the work was completed eight days ahead of schedule and concluded with a congratulatory “Good Job” to the Army Corps of Engineers. This is the story of the extraordinary effort and teamwork that made it all possible.



Col. Lewis Setliff, St. Louis District Commander presented a plaque designating Claude Strauser as the District's 24<sup>th</sup> Distinguished Civilian in a ceremony aboard the Mississippi River Commission's flagship, MV Mississippi, moored at the foot of the Arch in the St. Louis Harbor, Tuesday, August 14, 2007.

## Claude Strauser Named to District Distinguished Civilian Gallery

Aboard MV Mississippi – Former Chief of the Hydrologic and Hydraulics Branch, Claude Strauser, was inducted into the Gallery of Distinguished Civilian Employees by the U.S. Army Corps of Engineers, St. Louis District, Tuesday, August 14. The induction took place appropriately, aboard the Mississippi River Commission's flagship, Motor Vessel Mississippi, at the Mississippi River waterfront at the foot of the Arch in St. Louis. The award was announced and presented by District Commander, Col. Lewis Setliff.

Strauser, whose name has been tied inextricably with the rivers of mid-America for decades, became the 24<sup>th</sup> member of a roster of distinguished employees that dates back to 1882. His photo and citation were posted in the headquarters building in downtown St. Louis.

Claude Strauser began work for the Corps, fresh out of engineering school

at the University of Missouri, Rolla, MO in 1969. This first assignment in the St. Louis District was as a junior engineer trainee.

He quickly realized that he wanted to work in the field of river engineering and was assigned to the River Stabilization Branch. That office was eventually made part of the Hydrologic and Hydraulics Engineering Branch and Strauser rose steadily through the ranks to become chief of that branch in 1999.

Throughout his career Strauser developed a philosophy quite unlike his predecessors, through which he came to believe and espouse, that traditional navigation goals and work could be accomplished in an environmentally friendly manner.

Strauser was a strong proponent of what he called "and" solutions to challenges. He described this philosophy by saying that if someone offers an "either-or" solution, by

definition, there must be a loser. But by achieving this, and this, and this, we create multiple winners and stakeholders in the final solution, he reiterated.

Strauser's contributions to and support of innovative engineering solutions of techniques such as micro modeling and bendway weir river structures demonstrated his engineering prowess and skills.

But Claude is perhaps best known in the Corps and partnering groups for his people skills – his ability to start and then leverage consensus between formerly adversarial people and groups. He knew that if he could get them to sit down and talk, there was likelihood they would find first one, and then more common grounds.

He was cited at his induction ceremony for developing subordinates, preparing them to advance and even eventually to take his job when he retired in 2005. He was known and loved as a boss who made people move around his branch to broaden their backgrounds and eventually find tasks at which they excelled.

Since his retirement in 2005, Strauser has been called back to the Corps several times to help with areas of special expertise and continues to maintain close, friendly ties with St. Louis District and Mississippi Valley Division colleagues.





## The Business of Communicating Flood Risk Management

Story and Photos by Alan Dooley, PA

Dave Busse is the Chief of the Hydrologic and Hydraulics Branch of the Engineering Division. He took over that assignment when Claude Strauser retired.

And, he's the Flood Risk Management Business Line Manager.

*Esprit* caught up with Dave late one afternoon, asked questions and took notes furiously as he explained his work as a business line manager.

"My tasking as the Flood Risk Management Business Line Manager crosses disciplines, divisions, branches and halls. It doesn't mean that Emergency Operations has been placed under me. It doesn't mean that we are discarding anything we have done in the past, like training and preparing to fight floods.

"It does mean that as the Business Line Manager for Flood Risk Management, Col. Setliff has charged me with looking across the District to help him keep tabs on the many interrelated parts that make up the totality of that mission."

"Huh," we asked?

"Flood risk management is not just about levees. It's about seeing the various parts of the District as elements of a flood risk management system. That includes such parts as levees, dams, reservoirs, and our ability to confront flooding. It includes oversight of the operation and maintenance of the parts of this system. It includes training and preparedness of our people, including assigning them in such a manner as to best meet the needs of the system."

Busse went on to cite concepts such as shifting people between flood fighting teams to ensure that the teams are all best ready to fight floods in specific areas – to play their roles in an overall system. "Maybe to meet needs arising from retirements, deployments

or other losses, we need to consider transferring an experienced person from a region he is very familiar with to another a hundred miles away to restore the level of technical expertise as opposed to being focused on intimate knowledge of a geographic area."

Busse's new assignment has taken him into a maelstrom of issues such as those concerning the integrity of levees protecting hundreds of thousands of citizens who live or work behind levees, or more broadly, depend on them and the protected infrastructure.

"An awfully big part of my mission is communication," Busse said.

And communicating has recently been a large part of Busse's work as the Flood Risk Management Business Line Manager.

Busse has been a key member of the District team informing government officials, stakeholders and citizens of the status of the levees and other elements of the region's flood risk reduction system.

"I'm not trying to scare people," he said. "But I want to convey two basic messages. People, property and infrastructure behind levees and floodwalls are at some degree of risk. Whatever man can construct can be overcome by nature. Also I want them to understand the true system nature demanded by effective flood risk reduction," he said.

"We're partners in this with FEMA. FEMA has asked us if we know of any reasons parts of the flood



Seen here in his office, Dave Busse talks with one of the many stakeholders interested in how policy and requirements related to flood risk management are impacting the region.

risk management system might not withstand a 100 year flood event. That's not an event that occurs every century, but rather, one that has a one percent statistical chance of occurring every year.

"In the wake of the 1993 floods, we were asked by several drainage and levee districts – our stakeholders – to examine their levees and other parts of their protection. With congressional authorization and funding we did so. The end results were studies and reports. We examined examples of under performance by these systems during the 1993 flood, applied our best engineering skills and identified problems, many associated with under seepage, or movement of water and foundation material under levees during prolonged floods," Busse said.

The reports were provided to the stakeholders operating the levees and forwarded up the Corps command chain for review and concurrence. In some cases these reports have resulted in funding and work to correct deficiencies.

"Many of the levees and other parts of the flood risk management system were built in the 1930s and 40s," Busse explained. "They were built



using the best engineering we had then. They have been maintained well by stakeholders for decades. But simply put, we have better tools today to analyze system needs and the benefit of 50-plus years of observation of these levees. We know what the problems are and how to fix them.

“So when FEMA asked us if we knew of problems, we certainly could not turn a blind eye. That would not have been the right thing to do,” he affirmed.

“We also have the unfortunate experience of Hurricanes Katrina and Rita and New Orleans,” he added.

“The same kinds of studies and reports were available down there. They were available to stakeholders and the public. Nobody hid them. Nobody swept bad news under the rug. But in more than a hundred public meetings, we heard: ‘I never knew...I had no idea...I had heard but never really considered the risk...’ from citizens who had lost their homes, businesses or worse.”

“The previous Chief of Engineers acknowledged the Corps’ role in what happened. Lt. Gen. Van Antwerp has

taken that to the next level, and I can tell you from my own personal experience, Col. Setliff is onboard. We are going to do our level best to inform people, to be absolutely transparent, to give them our best analysis of the risks. We are going to explain the technical elements and we are going to keep doing it as long as necessary.

“Is it popular to tell this story, a story that may result in a requirement for people to buy flood insurance or that the levee we built is not adequate to ensure the authorized level of protection? Is it fun to tell people things that may persuade them to move? Is it easy to explain why levees built to provide a 500-year level of protection might not in fact be reliable in the face of a lesser threat? No!

“But it’s wrong not to tell them,” he said.

“We’ve done the studies, written the reports. Now we’re telling citizens, stakeholders, elected officials and partner agencies, like FEMA and state partners the facts. The answer isn’t in changing the rules or moving the goal line. Mother Nature doesn’t care how we want to view risk. It is what it is.

“Armed with the engineering facts, educated concerning what they mean, the next step is up to our customers,” Busse said. “The answer is in fixing the levees. It is in reducing the risk.”

The U.S. Army Corps of Engineers, other federal agencies, state and local governments are onboard. “Congressman Jerry Costello (D-III. 12<sup>th</sup> District) called the first Illinois



**Dave Busse communicates the level of risk associated with some urban levees within the St. Louis District at the Illinois Levee Summit held August 15. Rep. Jerry Costello (D-III.) and Col. Lewis F. Setliff III, looking on from the front row, are both dedicated to fixing the levees and communicating the present risk openly and honestly with those impacted.**

Levee Summit with us and FEMA on August 15. He gets it,” Busse told. “I am, we all are, on the road ahead. We are telling people what’s needed to lower flood risks to acceptable levels – levels that they understand and accept. We are in this for the long haul and the Flood Risk Management Business Line is our system to do this.

“When the business line management approach was first discussed, it was about budgeting. But that’s not the whole case any more. For flood risk management it is about levees, reservoirs and water control for sure. But instead of any single elements it is now about putting all the pieces together into a working system.”

**For additional information:**  
 District’s Flood Risk Management Website  
<http://www.mvs.usace.army.mil/pa/floodriskmang.html>  
 National Flood Risk Management Program  
<http://www.iwr.usace.army.mil/nfrmp/guidance.cfm>  
 Federal Emergency Management Agency  
[www.fema.gov](http://www.fema.gov)  
 National Flood Insurance Program  
[www.floodsmart.gov](http://www.floodsmart.gov)

## **Flood Risk Management Business Line**

**Vision:** Provide and sustain a comprehensive flood-risk reduction system within the St. Louis District watershed boundaries that reliably minimizes risk to lives and property damage.

### **Goals:**

- Develop a comprehensive risk-based plan for addressing all needs.
- Integrate stakeholder and customer needs and concerns into the plan.
- Operate and maintain existing systems to the authorized levels.
- Communicate risk and reliability to stakeholders and customers.
- Provide the technical expertise needed in an emergency.



## District Hydraulic Engineer Recognized For Excellence

By Nicole Dalrymple, PA

Don Duncan, a hydraulic engineer in the District's Hydrologic Engineering Section, received a 2007 St. Louis Federal Executive Board Excellence in Government Award in the Professional Category at a banquet in May. It is a well deserved honor as he is often assigned to the District's highest priority and most complex studies in the field of hydrology and hydraulics, explained Dennis Stephens, his section chief.

The award recognizes Duncan for work he has performed in the District, as well as interagency support he's provided the Federal Emergency Management Agency, and steps he's taken during his personal time to develop himself and further the engineering profession.

Duncan's responsibilities include being the engineering technical lead on the fish passage study for the Melvin Price Locks and Dam. This assignment has required him to work closely with a regional project delivery team comprised of team members from Rock Island, St. Louis and St. Paul Districts.

The study has utilized a tool bar that Duncan developed using ArcGIS that takes water velocity data and imports it into a user friendly, visual format. He explained that biologists are able to use it to understand where fish are at in the river and what type of flows they may be attracted to. Engineers are also using the tool to check calibration of hydraulic models.

"This fish passage study requires the highest level of hydraulic engineering expertise and may be the most important study on river ecology completed by the Corps of Engineers in decades," Stephens pointed out.

Duncan's responsibilities took on a new twist in October 2006 when he began working with FEMA Region III

in Philadelphia, Penn. The agency was experiencing a heavy workload and a shortage of experienced hydraulic engineers due to new levee certification procedures and a \$1 billion, multi-year directive to update and modernize all flood plain maps nationwide. This required FEMA Region III to look outside its internal staff for support.

Prior to this the St. Louis District had been participating in a FEMA project delivery team managed by staff at the Cold Regions Research and Engineering Laboratory, part of the U.S. Army Engineer Research and Development Center. Thanks to the solid work and good products produced by the District, the Hydrologic Engineering Section was approached about supporting map modernization effort. Stephens in turn asked Duncan to take on the mission.

As part of his work, Duncan assisted with various aspects of Region III's efforts to update all the flood plain maps in the District of Columbia, Delaware, Maryland, Pennsylvania, Virginia and West Virginia. He created a standard operating procedure for the review of hydrologic and hydraulics model used to assess the baseline flood, commonly called a 100 year flood.

Duncan explained that the procedure provides a checklist, to be used by the Corps engineers doing the work, to ensure the model is properly calibrated and that components such as ground conditions, flow rates and bridges are all mapped properly. "These steps ensure the 100 year flood plains are shown accurately on the maps," he said.

While this aspect of his work for FEMA Region III is complete, Duncan remains the subject matter expert for this effort in the interagency agreement



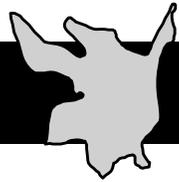
**Don Duncan, hydraulic engineer, received a 2007 FEB Excellence in Government Award for exemplary work supporting the District, the Mississippi Valley, and FEMA. (Photography by Alan Dooley.)**

between the U.S. Army Corps of Engineers and FEMA.

"Don's engineering knowledge and can-do attitude has had a positive influence on the workplace here in the District and at FEMA Region III," Stephens said. "He has raised the working standards higher with FEMA as the subject matter expert, which is a first-time honor for a Corps of Engineers' employee. We are all extremely excited about his creative engineering solutions."

Additionally, Duncan has also been working on his Master of Science Degree in Civil Engineering from the University of Missouri-Rolla, and tested for and received his Professional Engineer license in June 2007.

"I couldn't be more pleased with Don's recognition in the professional category at this year's FEB Excellence Award ceremony," Stephens concluded. "I've been an engineer for over 33 years and I'm excited by the talent I see in our younger engineers and Don is certainly one of our best."



# Across the STL District

## Army Corps Projects Recognized as Wonders of Illinois

The second largest land impoundment in Illinois and a portion of the third largest river system in the world were both named ‘Wonders of Illinois’ by the Illinois State Bureau of Tourism on April 30. Rend Lake and the Meeting of the Great Rivers National Scenic Byway, part of the Mississippi River, were announced as wonders at the conclusion of an online competition.

Rend Lake, located in Franklin and Jefferson counties, was built by the U.S. Army Corps of Engineers. The 18,900-acre lake, completed in 1971, is about 13 miles long and three miles wide with 162 miles of shoreline.

The lake draws more than three million visitors a year, according to Jim Lynch, the lake’s operations manager. Visitors can enjoy nearly 20,000 acres of public land, close to 800 campsites, hiking and biking trails, 27 boat ramps, beaches, numerous lakeside picnic facilities, as well as hunting and fishing opportunities.

The public lands are home to deer, quail, rabbits, squirrels, doves, turkeys, ducks and geese. The lake is stocked with largemouth bass, crappie, bluegill, channel catfish and white bass.

The other wonders of Illinois are: Wrigley Field in Chicago, Baha’i House of Worship in Wilmette (Chicagoland), Starved Rock State Park in Utica, Allerton Park and Retreat Center in Monticello, and Black Hawk State Historic Site in Rock Island.

Information about all Seven Wonders is available online at <http://www.enjoyillinois.com/sevenwonders/>



**Rend Lake in Benton, Illinois was selected as the southern Wonder of Illinois in April 2007. The 18,900-acre lake draws more than three million visitors a year and supplies over 15 million gallons of water per day to 300,000 people in over 60 communities. The multi-purpose lake offers nearly 20,000 acres of public land, nearly 800 campsites, hiking and biking trails, 27 boat ramps, beaches, as well as hunting and fishing opportunities. (Photograph by Russell Elliott)**



**The Meeting of the Great Rivers National Scenic Byway, a 33-mile-long byway along the Mississippi River, was selected as the southwestern Wonder of Illinois. The byway, which starts in Hartford, Illinois and heads north to Grafton, provides visitors the opportunity to see the confluences of three great rivers – the Illinois, Mississippi and Missouri. Pictured here is the confluence of the Mississippi (L) and Illinois (R) Rivers near Grafton. (Photograph by Alan Dooley)**

## Meeting of Great Rivers Byway is One of Illinois’ Seven Wonders

*By Alan Dooley, PA*

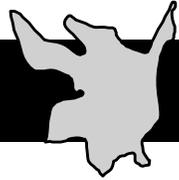
The 33-mile Meeting of the Great Rivers National Scenic Byway has been proclaimed by the state’s citizens as one of Illinois’ Seven Great Wonders. Beginning in Hartford at the intersection of Illinois Route 3 and New Poag Road, the byway winds west and north via Illinois Routes 3, 143 and 100. Illinois Route 100 picks up travelers north of Alton and bends along the forested river bluffs approximately 25 miles to Grafton and Pere Marquette State Park.

The byway is a natural wonder of the region. Visitors traveling on it can



**(L) Mayors Fred Ufert, of Wood River (back) and Fred Bright of East Alton join Lewis and Clark Community College president Dr. Dale Chapman and Alton Mayor Don Sandidge to unveil the new state sign identifying the new River Heritage Parkway.**

**Meeting of Great River Byway  
Continued on page 14**



# Across the STL District

## Meeting of Great River Byway Continued from page 13

see the convergence of three great rivers - the Mississippi, Missouri and Illinois. Sites along the route include the Army Corps of Engineers' Melvin Price Locks and Dam in Alton, Illinois, as well as the National Great Rivers Museum, located there. The Army Corps' Rivers Project Office offers numerous boating, fishing, hiking and wildlife viewing opportunities along the byway, and the area is a renowned bird flyway.

Along with this designation as an Illinois Wonder, the part of route from Illinois Route 143 heading west from its intersection with Illinois Route 3 in Wood River, to U.S. 67 in Alton, just east of the Clark Bridge, has been renamed The River Heritage Parkway. The road's common name has been the "Berm Highway."

The first of the new signs for the highway was unveiled following the "Wonder of Illinois" road show, an economic impact and marketing initiative campaign of the Illinois Department of Commerce and Economic Opportunity and the state Bureau of Tourism.

The unveiling was conducted by Mayors Don Sandidge of Alton, Fred Bright of East Alton and Fred Ufert of Wood River, along with Lewis and Clark Community College President Dale Chapman, unveiled the new green-and-white sign displaying the road's new name on Thursday morning, June 14 at the National Great Rivers Museum, adjacent to the Melvin Price Locks and Dam.

## Illinois Senate Files Resolution Declares June 18 'Rend Lake Day'

A ceremony honoring the selection of Rend Lake as one of the Seven Wonders of Illinois was held Monday, June 18 at the Rend Lake Resort & Conference Center located in Wayne Fitzgerald State Park in Whittington, Illinois. Elected representatives, Rend Lake partners and stakeholders, and state and Federal officials including U.S. Army Corps of Engineers staff gathered to celebrate Rend Lake's designation as a superior example of the best of Illinois.

State Senator Gary Forby filed a Resolution in the Illinois Senate making June 18, 2007 "Rend Lake Day" in the State of Illinois. In addition to other remarks, making the keynote speech was retired U.S. Congressman Kenneth J. Gray, who was instrumental in championing and securing the authorization for funds for the construction of Rend Lake.

On April 30 Governor Rod R. Blagojevich and the Illinois Department of Commerce and Economic Opportunity, Bureau of Tourism announced that Rend Lake had been chosen by consumers as one of "The Seven Wonders of Illinois" in a contest launched at the 2007 Illinois Governor's Conference on Tourism.

Rend Lake, located in Franklin and Jefferson counties, is the second largest man-made impoundment in Illinois.



The Illinois Senate made June 18 'Rend Lake Day' in the State of Illinois. Former Congressman Kenneth Gray and Peggy O'Bryan, Chief of Operations for the St. Louis District, accepted the proclamation from District Representative John Bradley (L) and State Senator Gary Forby (R) at a ceremony marking the occasion.

The 18,900-acre lake, completed by the U.S. Army Corps of Engineers in 1971, is about 13 miles long and three miles wide with 162 miles of shoreline. It is a multi-purpose project designed to enhance the region's quality of life. The lake supplies over 15 million gallons of water per day to 300,000 persons in over 60 communities.





## Just call her “Chief”

Chief Leanne J. Cruitt was retired from the U.S. Naval Reserve Friday, Aug. 31 in a time-honored Navy ceremony at the Naval Surface Warfare Center, Crane, Ind. As she was “piped over the side” with the traditional bosun’s pipe, she concluded 20 years of service in the Naval Reserve.

Cruitt’s brother Stan, a former member of the U.S. Army’s Presidential Honor Guard (The Old Guard) in Washington, DC, was the guest speaker at the event.

Cruitt, who is currently serving on a detail with the regulatory branch is normally employed as a park ranger at Lake Shelbyville.

In her other life in the Naval Reserve, she served as a Chief Storekeeper – “SKC” in Navy terminology. Store Keepers receive, maintain, issue and dispose of Navy equipment and spare parts.

The pay grade or rank of Chief – Chief Petty Officer – is one of the most coveted achievements of an enlisted Sailor’s career and Cruitt was promoted to Chief in September 2002. That promotion is marked by a change of uniform to reflect new responsibilities and privileges accorded to the Navy’s enlisted leadership.

During her retirement ceremony, Chief Cruitt was awarded the Navy Commendation Medal for her service and also received American flags that had flown over USS Constitution and at Camp Victory, Baghdad, Iraq,



**Navy Chief Store Keeper Leanne J. Cruitt is honored in a traditional “piping aboard” ceremony before her retirement ceremony at the Naval Surface Warfare Center, Crane, Ind. On Aug. 31. Cruitt retired from the U.S. Naval reserve after 20 years of service.**

where she served as a Department of the Army Civilian during Operation Iraqi Freedom.

Cruitt joined the Naval reserve in 1987, affiliating with the Decatur Naval Reserve Center in Decatur, Ill.

For the next 15 years she was assigned to various supply units, including Naval Supply Depot Subic Bay, Republic of the Philippines; Naval Supply Depot Guam; Fleet and Industrial Supply Center Yokosuka, Japan; and the USS Frank Cable AS-40.

She has performed annual active duty training in the Philippines, Guam, Japan, Hawaii, Maine, Key West, San Diego, San Francisco, Pensacola, and Crane, Ind.

After the terrorist attacks of 9-11 she was called up for active duty in support of Operation Enduring Freedom/ Noble Eagle. She served until May of 2002 with Security Forces at Crane Naval

Warfare Center in Indiana. In 2003 Chief Cruitt transferred to the Indianapolis Naval Operational Support Center and began drilling with the NAVSEA 126 unit at Crane, Ind. where for the last 5 years she has served as the Supply/Admin Chief.

If you see her in the halls of the headquarters building or on the trails at Lake Shelbyville, just call her “Chief” to get her attention. She’ll answer to that honor for the rest of her life.

*In Tribute for Your Service to Your Country*



# SAFETY DAY



## JUNE 6



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