

Sept. 2018



**Maj. Gen. Richard G.  
KAISER**  
*President*



**Hon. Sam E.  
ANGEL**  
*Member*



**Hon. Norma Jean  
MATTEI, Ph.D.**  
*Member, Civil Engineer*



**Hon. James A.  
REEDER**  
*Member*



**Rear Adm. Shepard  
SMITH**  
*Member*



**Maj. Gen. Mark  
TOY**  
*Member*



**Brig. Gen. Paul E.  
OWEN**  
*Member*



# Mississippi River Commission

## 2018 Executive Summary Sessions 399 & 400

*Listening, Inspecting, Partnering & Engineering since 1879*



# MISSISSIPPI RIVER COMMISSION

The Mississippi River Commission has a proud heritage that dates back to June 28, 1879, when Congress established the seven-member presidential commission with the mission to transform the Mississippi River into a reliable commercial artery, while protecting adjacent towns and fertile agricultural lands from destructive floods.

The Mississippi River Commission oversees the Mississippi River & Tributaries (MR&T) project authorized by the 1928 Flood Control Act. The MR&T project employs a variety of engineering techniques, including:

- An extensive levee system to prevent disastrous overflows on developed alluvial lands.
- Floodways and backwater areas to provide expansion room for the river to prevent undue stress on the levee system.
- Channel improvements and stabilization features to protect the integrity of flood control measures and to ensure proper alignment and depth of the navigation channel.
- Tributary basin improvements, to include levees, headwater reservoirs and pumping stations, to maximize the benefits realized on the main stem by expanding flood protection coverage and improving drainage into adjacent areas within the alluvial valley.

Since its initiation, the MR&T project has brought an unprecedented degree of flood protection to the more than 4.5 million people living in a 35,000-square-mile area within the lower Mississippi valley. The nation has contributed \$15.5 billion toward the planning, construction, operation and maintenance of the project. To date, the nation has received a 67 to 1 return on that investment, including \$1 trillion in flood damages prevented.

The performance of the MR&T system during the Great Flood of 2011 validated this wise investment. Despite record high flows and stages, not a single life was lost as a result of

the flood. Water lapped at the top of floodwalls and levees, exerting unprecedented pressure on the backbone of the protection system, but the levees withstood the record stages and pressure due in large part to the operation of three floodways and the storage capacity provided by non-MR&T reservoirs in the Ohio and Arkansas-White basins. The MR&T project prevented in excess of \$234 billion in damages.

In 2012, with much of the drainage basin under exceptional drought conditions and river stages plunging to near historic lows (more than 50 feet lower than the 2011 highs on the major gages between Cairo and Red River Landing), the performance of the MR&T system again validated the nation's wise investment, as the navigation channel remained viable.



The Mississippi River Commission continued its 139-year process of listening to the concerns of partners and stakeholders in the Mississippi valley, inspecting the challenges posed by the river and partnering to find sustainable engineering solutions to those challenges through the 2018 high-water (Session 399) and low-water (Session 400) inspections. The official record of the proceedings of the Mississippi River Commission are kept in Vicksburg, Mississippi, or can be accessed at: <http://www.mvd.usace.army.mil/About/Mississippi-River-Commission-MRC/>



<https://www.facebook.com/mississippirivercommission/>



<https://www.twitter.com/msrivercomm/>





# Inspection Trips

## Purpose

The intent behind the Mississippi River Commission inspection trips, carried out under the authority of Section 8 of the 1928 Flood Control Act, is two fold:

1. Site visits and inspections provide the commission with the opportunity to get boots-on-the-ground understanding and inspect key MR&T project features that convey floods or facilitate commerce. Likewise, the commission visits public infrastructure, businesses and other enterprises from the transportation, agriculture, manufacturing, commerce and energy sectors that benefit from flood control and navigation improvements. Through this process, the commission is able to meet with local sponsors and entrepreneurs and gain a deeper understanding of the impacts of federal investments on the local, regional and national economies.
2. Public meetings and partnering sessions allow stakeholders, partners and members of the public to meet with the commission to discuss local and regional concerns related to the MR&T project and other flood control, navigation and water resources challenges. The commission uses the knowledge gained to foster a better understanding of the needs of the region and improve the management of the watershed and inform policymakers.

## Objectives

**GOAL 1:** Expose leaders and representatives - from the Trump Administration, the Office of Management and Budget, the Office of the Assistant Secretary of the Army for Civil Works, the U.S. Fish and Wildlife Service, Headquarters U.S. Army Corps of Engineers and members of Congress - to the Mississippi River Commission public engagement process and the benefits of the Mississippi River and Tributaries project.

**GOAL 2:** Allow for partners, stakeholders and the public to share their concerns through public testimony and through the submission of formal written statements. Through this process, commission members hear first-hand accounts from those impacted and develop a dialogue centered on providing solutions for the challenges facing the region. The commission responds publicly to questions and provides formal written responses to each speaker. This democratic process allows the commission to inform policy makers and determine key regional issues. (See "Public Meetings," page 16.)

**GOAL 3:** Conduct face-to-face discussions, site visits and presentations that provide the commission and its staff with the opportunity to meet with stakeholders, partners and the public on a more intimate and personal level. Through this process, the commission is able to gain a better understanding of the needs of the region so that these needs can be better communicated to key leaders and policy makers to improve the management of the watershed.



# Strategic Messages

## We Are A Maritime Nation

- The greater Mississippi River basin is our nation's middle coast connecting the vast interior to the Gulf of Mexico, the Great Lakes and global markets.
- Our economic prosperity, standard of living and environmental quality are increasingly vulnerable to threats posed by aging infrastructure.
- Reliable ports, harbors and channels matter.
- Reliable living in highly productive areas makes our nation great.
- Citizens of the alluvial valley drive productivity and help feed the world.
- National security and global stability are assured through success in the Mississippi valley.

## Infrastructure Investment

A multigenerational commitment to invest in our water commerce infrastructure transformed this great nation from a largely agrarian nation to the world's pre-eminent economic power.

- Our nation's inland waterway system has more miles of navigable river than the rest of the world combined.
- Inland waterways connect the main industrial centers of the interior (Pittsburg, Pennsylvania; Chicago, Illinois; Cincinnati, Ohio; Memphis, Tennessee; St. Louis, Missouri; Kansas City, Missouri) with coastal ports.
- The inland navigation system overlays the largest contiguous section of farmland in the world. Most prime agricultural lands are within 120 miles of a navigable river.
- 95 percent of all U.S. imports and exports (\$4.1 trillion) move on our waterways and ports.
- Inland waterways account for 2 billion tons of domestic and imported cargo annually.







# Strategic Messages

## Without Flood Control, Nothing Else Matters

Flood control is necessary to achieve energy security, economic security, food security and job security. The Mississippi River & Tributaries project has prevented more than \$1 trillion in flood damages since 1928, or \$67 for every dollar invested.

### **The MR&T protects ENERGY:**

- 108 power plants that account for 26% of the total power generated in the five states of the lower Mississippi: Louisiana (45%), Arkansas (27%), Mississippi (23%), Missouri (11%) and Tennessee (5%). <sup>1</sup>
- 108 power plants that employ 2,700 workers and generate \$6.8 billion in revenues annually. <sup>1</sup>
- 12 major oil refineries with a 3 million barrel per day capacity.
- 33,911 oil and gas wells that produce \$7.6 billion in revenues (398 billion cubic feet of natural gas and 56 million barrels of oil in 2004). <sup>1</sup>
- 4,574 miles of natural gas transmission pipelines. <sup>2</sup>

### **The MR&T protects COMMERCE:**

- 4,364 miles of highways, including major sections of Interstates 10, 20, 40, 55 and 57. <sup>2</sup>
- 2,364 miles of rail used by four major Class I freight carriers with combined (nationally) operating revenues of \$50 billion annually. <sup>2</sup>
- Infrastructure supporting 4 of the top 15 deep-draft ports, including the largest port (Port of South Louisiana – 246 million tons). <sup>1</sup>
- Infrastructure supporting commercial navigation on the lower Mississippi River that generates \$4.6 billion in revenues and 18,700 jobs. <sup>1</sup>
- Tourism and travel industries that generate \$15.5 billion in expenditures and 190,000 jobs. <sup>1</sup>
- 563 manufacturing facilities that generate \$106 billion in revenues and employ 207,000 workers. <sup>1</sup>

### **The MR&T protects AGRICULTURE:**

- 22.5 million acres of cropland valued at \$51 billion. <sup>1</sup>
- 22.5 million acres of cropland that generate \$8.7 billion in agricultural revenue annually and employ 56,000 people. <sup>1</sup>
- 53,525 farms with an average of 422 acres per farm lie within the lower Mississippi River corridor and are protected by MR&T levees. <sup>1</sup>
- MR&T levees protect lands producing 133 million bushels of rice annually, or 67 percent of the total rice produced in the United States. <sup>2</sup>

### **The MR&T protects PEOPLE and CRITICAL INFRASTRUCTURE:**

- 4.5 million people and 1.2 million residential structures. <sup>2</sup>
- 1,147 schools and 91 colleges/ universities. <sup>2</sup>
- 646 fire stations and 346 police stations.
- 102 hospitals and 240 nursing homes. <sup>2</sup>
- 158 airports and 86 heliports. <sup>2</sup>

<sup>1</sup> Economic profile of the Lower Mississippi River, Final Report Feb. 2014 (Industrial Economics Inc.).

<sup>2</sup> Data sources include the latest available data from the National Levee Database for Levees and Leveed Areas and Infrastructure Data from FEMA HSIPGOLD 2015.



# Strategic Messages

## Mississippi River & Tributaries Project

### Authorized Work Remaining Necessary to Convey the Project Design Flood

MAY 2018

*MR&T System Component	Funds Required to Complete	Funds Required to Complete (Critical)
<b>Main Stem Improvements Total:</b>	<b>\$7.0 B</b>	<b>\$3.1 B</b>
MS River Levees / Floodwalls	\$3.1 B	\$2.0 B
Floodway Levees / Floodwalls	\$1.3 B	\$347.4 M
Channel Improvement	\$1.6 B	\$230.8 M
Structures	\$1.0 B	\$542.4 M
<b>Tributary Improvements Total:</b>	<b>\$1.4 B</b>	<b>-</b>

#### Levees & Floodwalls

##### MS River : (\$3.1 B) (\$2.0 B)

- 138 levee & floodwall segments encompassing over 370 miles remain to be raised
- 97 levee segments have confirmed seepage encompassing approximately 395 miles

##### Atchafalaya Floodway : (\$1.3 B) (\$347.4 M)

- 35 levee enlargement segments encompassing over 115 miles remain to be raised
- 19 floodwall segments that do not meet stability standards & require structural evaluation

##### MS River Channel Improvements: (\$1.6 B) (\$230.8 M)

- 29 miles of revetments to be constructed & extended
- 52 dikes remaining to be raised/ extended

##### Structures: (\$1.0 B) (\$542.4 M)

###### MS River:

- Improvements to the Old River Overbank are required

###### Atchafalaya Floodway:

- Bayou Sorrel, Berwick, & Bayou Boeuf navigation locks are below design elevation
- Charenton, East Calumet, & West Calumet floodgate replacements
- Yellow Bayou Pump Station requires reconstruction

#### Tributary Improvements Total: (\$1.4 B)

##### Tributary Levees & Floodwalls:

- 67.5 miles of levees remain to be constructed
- 33 levee reaches are below design grade
- Approximately 40 miles of levee segments require seepage or stability berms

##### Tributary Channel Improvements:

- 30 channel enlargements & one dike remain to be constructed

##### Tributary Structures:

- Yazoo Backwater Improvements
- St. Johns New Madrid Improvements
- Various locations where work required to complete is still under evaluation:
  - Little Bayou Meto-drainage, Tillatoba Creek grade control structures, Panola-Quitman grade control structures, & 47 stoplog water control structures

#### MR&T Deferred Maintenance: (\$300 M)

- Proper operation & function of the features of the system are critical
- Known deficiencies require enhanced readiness and increased flood-fighting measures
- Does not include unknown channel improvement deficiencies due to dynamic changes in the river or maintenance incurred from recent flood events

#### NOTE:

- Critical** items pose the greatest performance concern and higher probability of catastrophic consequences combined with urgent construction needs.
- Remaining items reflect data per the MR&T Strategic Investment Plan dated July 2015 and preliminary cost estimates from the Economic Re-evaluation Report dated April 2018. Costs shown have been updated for construction completion of items as of May 2019.





# High-Water Inspection Trip

**April 15-20, 2018**

Session 399 of the Mississippi River Commission took place April 15-20, 2018. The annual high-water inspection included approximately 1,000 miles of the lower Mississippi River between Cape Girardeau, Missouri, and New Orleans, Louisiana. Approximately 500 people, representing boards, agencies and associations with memberships and constituencies numbering in the tens of thousands, partnered directly with the commission through public hearings, partnering sessions, site visits and inspections and other engagements. (See "Partners Engaged," pages 18-19).

Deputy Commander for Civil and Emergency Operations Maj. Gen. Scott Spellmon, Principal Deputy Assistant Secretary of the Army for Civil Works Ryan Fisher, and Deputy Assistant Secretary of the Army for Management and Budget Joseph Bentz also joined the commission during the inspection trip.

The Senate confirmed the Hon. R. D. James, who served on the commission since Dec. 1, 1981, as Assistant Secretary of the Army for Civil Works on Jan. 30, 2018. James' vacancy on the commission has since been filled. President Donald Trump appointed the Hon. James A. Reeder to the commission May 17, 2018.

Mississippi River Commission members present during Session 399:

- Maj. Gen. Richard Kaiser, appointed president Sept. 7, 2017
- Hon. Sam E. Angel, reappointed Dec. 30, 2010
- Hon. Norma Jean Mattei, PhD, civil engineer, appointed Dec. 3, 2012
- Rear Adm. Shepard Smith, appointed Jan. 3, 2017
- Brig. Gen. Paul Owen, appointed July 27, 2017
- Brig. Gen. Mark Toy, appointed Dec. 13, 2016
- Col. Richard Pannell, secretary (a non-voting position)



***From left to right: Brig. Gen. Paul Owen, Brig. Gen. Mark Toy, Hon. Sam Angel, Maj. Gen. Richard Kaiser, Dr. Norma Jean Mattei and Rear Adm. Shepard Smith***



# High-Water Inspection Trip

## Site Visits and Inspections

### CONFLUENCE TOUR

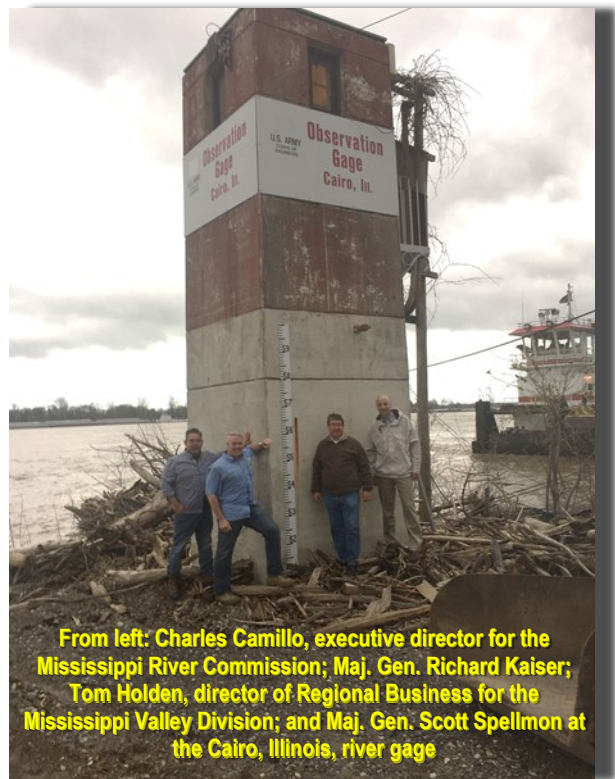
**April 15:** USACE Deputy Commander for Civil and Emergency Operations Maj. Gen. Scott Spellmon, Principal Deputy Assistant Secretary of the Army for Civil Works Ryan Fisher, and Deputy Assistant Secretary of the Army for Management and Budget Joseph Bentz joined the commission on a tour of the confluence area of the Mississippi and Ohio rivers. The site visit also included tours of the city of Cairo, Illinois, and the Birds Point-New Madrid Floodway. Activation of the floodway when the stage reaches 60.5 feet is critical to protect Cairo. Reconstruction of the floodway levee following activation is critical for those who live and work within the floodway and ensure that the floodway is ready for use during subsequent floods.



Maj. Gen. Scott Spellmon at Birds Point-New Madrid with Mississippi Valley Division staff

### CARUTHERSVILLE FLOODWALL AND PEMISCOTT COUNTY HARBOR

**April 16:** The commission and staff toured the Caruthersville, Missouri, floodwall, which came within six inches of overtopping during the 2011 flood. The floodwall, which was constructed in the 1930s and protects a town of 6,700 people, sits around two-feet lower than the levees on either side and is badly in need of serious repair or replacement.

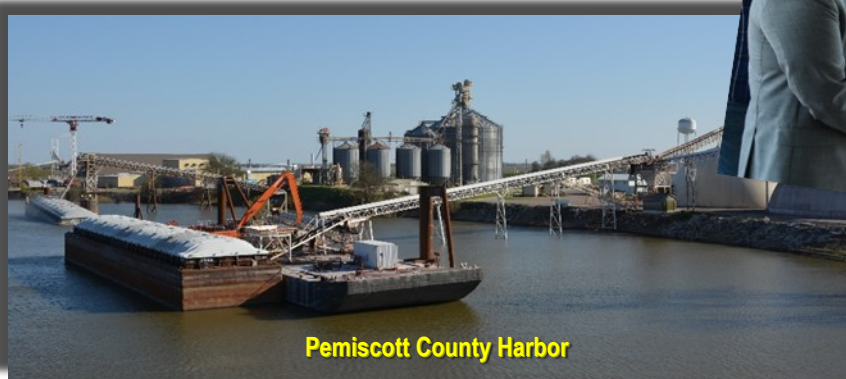


From left: Charles Camillo, executive director for the Mississippi River Commission; Maj. Gen. Richard Kaiser; Tom Holden, director of Regional Business for the Mississippi Valley Division; and Maj. Gen. Scott Spellmon at the Cairo, Illinois, river gage

John Ferguson, director of the Pemiscot County Harbor, then briefed the commission on the harbor from the pilot house of the motor vessel *MISSISSIPPI*.



Briefing at Caruthersville floodwall



Pemiscott County Harbor





# High-Water Inspection Trip

## Site Visits and Inspections

### OLD RIVER CONTROL COMPLEX & BLACKHAWK EMERGENCY LEVEE REPAIR

**April 19:** Commission members and staff visited the Old River Control Complex to inspect the navigation lock, and the overbank, low-sill and auxiliary structures. Russell Beauvais, operations manager for Old River Control, then briefed the commission on operation of the control complex, the flow distribution and Mississippi River channel aggradation near the structure, which has contributed to higher stages between Baton Rouge, Louisiana, and just above Natchez, Mississippi.

Commission members also toured an emergency sand boil repair site near the levee at Blackhawk, Louisiana. During high water in February/March, a large sand boil developed that threatened to undermine the Blackhawk levee just north of the Old River Control Complex. The Vicksburg District transported sand from a nearby sandbar down a ramp running from the levee to the boil. The sand was then used to fill the boil and prevent it from undermining the levee.



Old River Control Complex



Commission members and staff visit the Old River Control Complex



Old River Control Complex



Commission members and staff visit Blackhawk Levee



Blackhawk Levee



# High-Water Inspection Trip

## Partnering Sessions

As part of the 399 Session, the Mississippi River Commission hosted roundtable and panel discussions to facilitate a deeper dialogue among its partners, Corps of Engineers staff and the commission on key issues and challenges confronting those who live, work and prosper along the Mississippi River.

**April 15, Cape Girardeau, Missouri** – Members of the commission held a roundtable discussion with members of the River Industry Executive Task Force.



Members of the Mississippi River Commission and the River Industry Executive Task Force meet in the public hearing room onboard the motor vessel MISSISSIPPI.

**April 16, New Madrid, Missouri** – Dr. Charles Langston, director of the University of Memphis Center for Earthquake Research, gave a presentation on the New Madrid fault and the potential impacts of an earthquake on the MR&T system. Charles Davis and John Ferguson then briefed the commission from the pilot house of the motor vessel MISSISSIPPI on the Caruthersville floodwall and the Pemiscott County Harbor.



Dr. Charles Langston

**April 17, Memphis, Tennessee** – Jimmy Ogle, Memphis city historian, gave a presentation on the history of the river near Memphis and the various engineering projects in the area that have allowed the city to flourish.



Jimmy Ogle





# High-Water Inspection Trip

## Partnering Sessions

### April 18, Greenville, Mississippi –

Angie Rodgers and Paul Hartfield of the U.S. Fish and Wildlife Service and Lower Mississippi River Conservation Committee provided a briefing on the collaboration of the USFWS and U.S. Army Corps of Engineers on numerous environmental projects within the MR&T project footprint.



Paul Hartfield gives a briefing in the public hearing room onboard the motor vessel MISSISSIPPI.

### April 19, Baton Rouge, Louisiana –

More than 90 stakeholders and partners from across south Louisiana joined the commission aboard the motor vessel *MISSISSIPPI* to discuss the numerous challenges they face, including sediment diversions, the permitting process, and wetlands and coastal loss. Angie Colamaria, the executive director of the Federal Permitting Improvement Steering Council, also provided a briefing to the commission and its partners on improvements to the permitting process.



Angie Colamaria gives a briefing in the public hearing room onboard the motor vessel MISSISSIPPI.

### April 20, New Orleans, Louisiana –

The commission visited the president of Tulane University's home to celebrate the opening of the River Science and Engineering Program. The certificate program, which is the product of a collaborative effort between the U.S. Army Corps of Engineers and the university, will provide graduate level courses on river engineering.



Commission members and staff at the home of Tulane University's president.



# Low-Water Inspection Trip

**Aug. 19-24, 2018**

Session 400 of the Mississippi River Commission took place from Aug. 19-24, 2018. The annual low-water inspection included approximately 1,000 miles of the lower Mississippi River and Atchafalaya River between Cape Girardeau, Missouri, and Morgan City, Louisiana. Approximately 400 people, representing boards, agencies and associations with memberships and constituencies numbering in the tens of thousands, partnered directly with the commission through public hearings, partnering sessions, site visits and inspection, and other engagements. (See "Partners Engaged," pages 18-19).

Assistant Secretary of the Army for Civil Works R. D. James joined the commission for the entirety of the trip and met with stakeholders and partners from across the valley to listen to their concerns in order to communicate them to the administration and Congress. The commission was also joined by Lt. Gen. Todd Semonite, chief of engineers and U.S. Army Corps of Engineers commanding general; Maj. Gen. Scott Spellman, U.S. Army Corps of Engineers deputy commanding general for Civil and Emergency Operations; and Edward Belk, Senior Executive Service member and chief of Programs Integration for the U.S. Army Corps of Engineers Headquarters. Session 400 was also the first for newly appointed member Hon. James Reeder.

Members of the Mississippi River Commission present during Session 400:

- Maj. Gen. Rickard Kaiser, appointed president Sept. 7, 2017
- Hon. Sam E. Angel, reappointed Dec. 30, 2010.
- Hon. Norma Jean Mattei, PhD, civil engineer, appointed Dec. 3, 2012
- Hon. James Reeder, Civil Engineer, appointed May 17, 2018
- Rear Adm. Shepard Smith, appointed Jan. 3, 2017
- Brig. Gen. Paul Owen, appointed July 27, 2017
- Maj. Gen. Mark Toy, appointed Dec. 13, 2016



***From left to right: Hon. James Reeder, Rear Adm. Shepard Smith, Hon. Sam Angel, Maj. Gen. Richard Kaiser, Dr. Norma Jean Mattei, Maj. Gen. Mark Toy, Brig. Gen. Paul Owen and Col. Robert Hilliard***





# Low-Water Inspection Trip

## Site Visits and Inspections



Mississippi River Commission members, the Assistant Secretary of the Army for Civil Works and representatives from the city of Caruthersville, Missouri, pose at a historic marker in Caruthersville

### CARUTHERSVILLE FLOODWALL

**Aug. 20:** Members of the Mississippi River Commission, Assistant Secretary of the Army for Civil Works R.D. James and commission staff joined representatives from the city of Caruthersville, Missouri, for a ceremony to commemorate a new floodwall. The Memphis District will oversee construction of the floodwall using funds from the fiscal year 2018 supplemental.

The floodwall, which came within six inches of overtopping during the 2011 flood, was constructed in the 1930s to protect a town of 6,700 people. The floodwall sits around two-feet lower than the levees on either side and has been badly in need of serious repair and replacement for years. The commission visited the floodwall during the spring and for years has heard local partners call for its replacement.



At Big River Steel Mill (from left): R.D. James, Hon. Sam Angel, Hon. James Reeder, Maj. Gen. Richard Kaiser, Brig. Gen. Paul Owen, Maj. Gen. Mark Toy and Dr. Norma Jean Mattei

### BIG RIVER STEEL MILL

**Aug. 20:** Members of the Mississippi River Commission, Assistant Secretary of the Army for Civil Works R.D. James and staff toured the Big River Steel mill in Osceola, Arkansas, and were able to see first-hand what the MR&T system means to the local economy. The approximately \$2 billion steel mill has been a boon to the local economy, directly creating hundreds of high-paying jobs as well as hundreds of indirect jobs.

The commission and Chief of Engineers Lt. Gen. Todd Semonite first visited the steel mill while it was under construction in Aug. 2016 during the commission's low-water inspection trip.

Construction is now complete on the mill and the company is already investing another \$1.2 billion in an expansion, which will directly create another 500 high-paying jobs.

Management chose the location of the mill based on the flood protection and navigable waterways provided by the MR&T system. The location provided a competitive advantage because of the low cost of river transportation and access to the river. Approximately 70 percent of the mill's product comes in from the river and 30 percent goes out on the river. The massive complex would also not exist without the flood protection provided by MR&T levees.



# Low-Water Inspection Trip

## Site Visits and Inspections

### MAT SINKING UNIT

**Aug. 21:** Commission members; Assistant Secretary of the Army Civil Works R.D. James; Maj. Gen. Scott Spellman, U.S. Army Corps of Engineers deputy commanding general for Civil and Emergency Operations; and Edward Belk, Senior Executive Service member and chief of Programs Integration for the U.S. Army Corps of Engineers Headquarters; joined the Mat Sinking Unit on the Mississippi River near Greenville, Mississippi, where they witnessed the channel and bank stabilization work being done on the river.

The visit provided the commission with a boots-on-the-ground perspective of the daily efforts of blue-collar, manual laborers, whose hard work stabilizes the river channel and makes navigation of the river possible. The unit consists of barges for transporting and placing the articulated concrete mattress that is used to stabilize riverbanks, and a motor vessel to move what is essentially a floating plant filled with workers, machines and materials along the river.

The U.S. Army Corps of Engineers is also working with the National Robots and Engineering Center on a complete re-design of the Mat Sinking Unit known as the ARMOR ONE project, which will cut costs and produce even more effective bank protection. The state-of-the-art ARMOR ONE project is in its final design phase and will revolutionize the way riverbanks are stabilized once it is complete.



Front back left : Brig. Gen. Paul Owen, Hon. Sam Angel, Maj. Gen. Richard Kaiser, Dr. Norma Jean Mattei, Maj. Gen. Mark Toy, Rear Adm. Shepard Smith, Hon. Jim Reeder and Col. Robert Hilliard



MRC members and staff visit the Teche-Vermillion Pumping Station in Krotz Springs, Louisiana

### TECHE-VERMILION PUMPING STATION

**Aug. 23:** Commission members, Assistant Secretary of the Army for Civil Works R.D. James and staff traveled to Krotz Springs, Louisiana, to visit the Teche-Vermillion Pumping Station. The New Orleans District constructed the project in cooperation with the Teche-Vermillion Fresh Water District. The project was completed in 1982 and diverts fresh water from the Atchafalaya River into the heart of the Acadiana region, which includes the St. Martin, Iberia, Lafayette and Vermillion parishes. The MR&T levees along the west bank of the Atchafalaya River provide essential flood protection for the region, but they severed Bayou Courtableu's connection to the Atchafalaya,

which had historically supplied fresh water to the region via the bayou. The Tech-Vermillion project restores this connection and supplies fresh water to the region for irrigation, agriculture, drinking water, water quality, fishermen and the environment. The project also deters saltwater intrusion and keeps the region from depleting its groundwater supply because it allows for the use of surface water. The project keeps the people of the region from having to compromise between flood protection and fresh water, without either of which the local economy would be devastated and the region largely uninhabitable. With the project, the people of the Acadiana region can continue to live and thrive in what is the historic heart of French Louisiana.





# Low-Water Inspection Trip

## Partnering Sessions

As part of the 400 Session, the Mississippi River Commission hosted roundtable and panel discussions to facilitate a deeper dialogue among its partners, U.S. Army Corps of Engineers staff and the commission on key issues and challenges confronting those who live, work and prosper along the Mississippi River.

### Aug. 20, Wilson, Arkansas

Commission members, Assistant Secretary of the Army for Civil Works R.D. James, Chief of Engineers Lt. Gen. Todd Semonite, Memphis District Commander Mike Ellicott and commission staff joined partners from the St. Francis Basin Levee District of Arkansas and the Mississippi Valley Flood Control Association to discuss the various challenges they face. Both James and Semonite spoke at the meeting and communicated what the U.S. Army Corps of Engineers is doing to address their concerns and listened to partners' ideas for policy changes to help more effectively manage flood control challenges in the region.



Hon. Sam Angel speaking with partners



Lt. Gen. Todd Semonite (center) with members of the St. Francis Basin Levee District of Arkansas

### Aug. 23, Krotz Springs to Morgan City, Louisiana

Commission members, Assistant Secretary of the Army for Civil Works R.D. James and staff met with more than 80 partners from south Louisiana aboard the motor vessel MISSISSIPPI to discuss the various challenges facing the region. Partners expressed particular concern with the 408 permitting process; unrealistic levee standards under the Levee Safety Program and Levee Safety Action Committee; coastal and wetlands loss; and the need for continued funding at high levels to complete various projects and to dredge ports and harbors.

Partners from Terrebonne and Lafourche parishes communicated concern regarding recent increases in the cost estimates for the Morganza to the Gulf hurricane protection system and the potential for the high price tag to deter completion of the project. Congress authorized the project in the Water Resources Development Act of 2007 with a price tag of less than \$1 billion; however, the U.S. Army Corps of Engineers redesigned the project using new construction standards after levee and wall failures in New Orleans during Hurricane Katrina. The redesign increased the estimated cost of the project to more than \$10 billion.



Col. Mike Clancy, New Orleans District commander, speaks to partners in the public hearing room onboard the motor vessel MISSISSIPPI.



# High-Water & Low-Water Inspection Trips

## Public Meetings

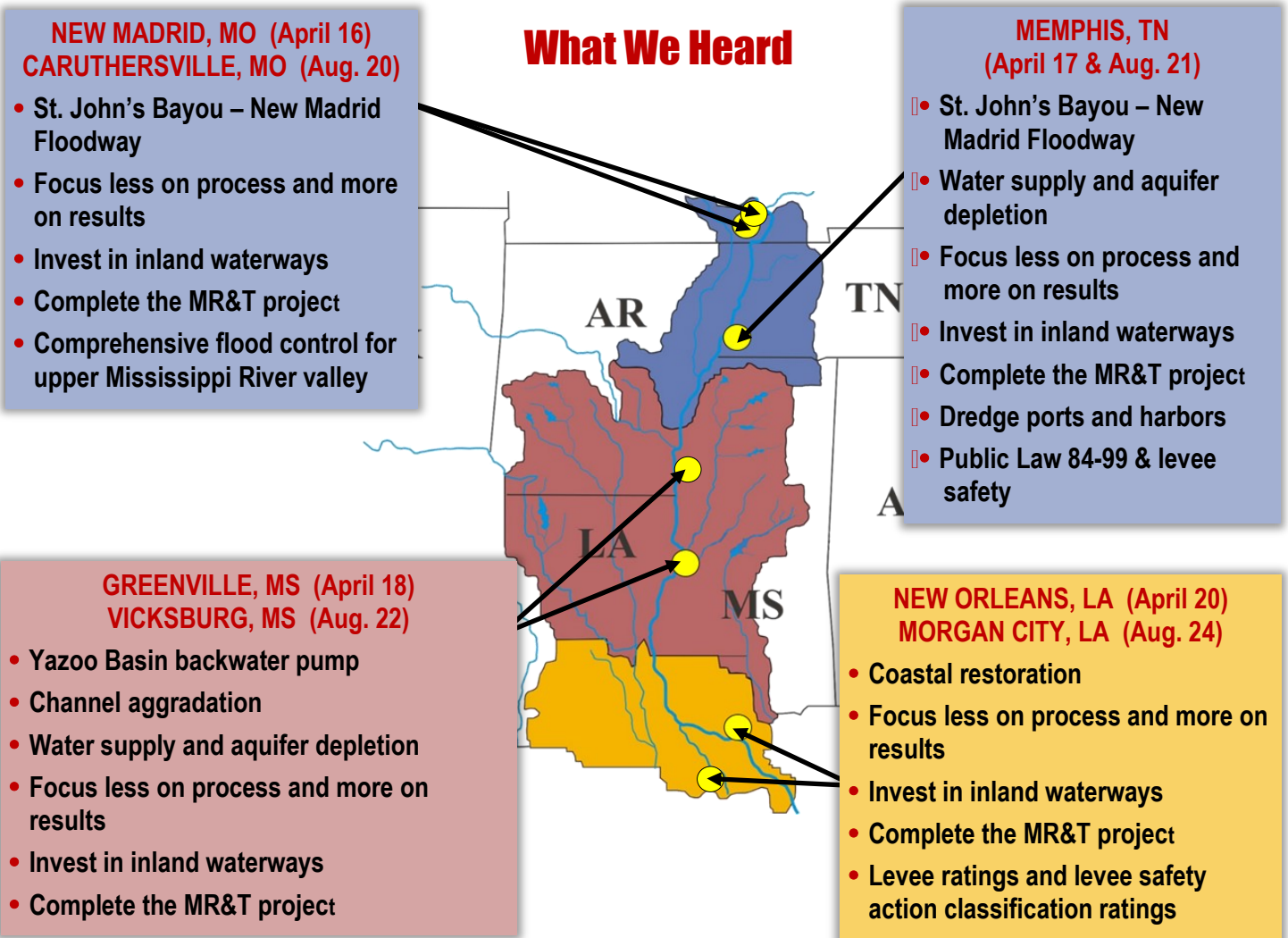
**High-water trip:** Public hearings were held at New Madrid, Missouri; Memphis, Tennessee; Greenville, Mississippi; and New Orleans, Louisiana. Approximately 300 members of the public attended the meetings and listened to testimony presented by 60 individual speakers.

**Low-water trip:** Public hearings were held at Caruthersville, Missouri; Memphis, Tennessee; Vicksburg, Mississippi; and Morgan City, Louisiana. Approximately 400 members of the public attended the meetings and listened to testimony presented by 57 individual speakers.

Mississippi River Commission hearings are held in accordance with Section 8 of the 1928 Flood Control Act:

*"Sec.8....The commission shall make inspection trips of such frequency and duration as will enable it to acquire first-hand information as to conditions and problems germane to the matter of flood control within the area of its jurisdiction; and on such trips of inspection ample opportunity for hearings and suggestions shall be afforded persons affected by or interested in such problems."*

The hearings, engagements and dialogue help maintain a consistent connection - an exchange of viewpoints and ideas among the public, partners, stakeholders, elected officials, the Mississippi River Commission, the U.S. Army Corps of Engineers and agencies from the private, state and federal sectors. This process provides a greater voice for those who live and work in the region in shaping federal management and policy of the river.







# High-Water & Low-Water Inspection Trips

## Public Meetings: What We Heard

### FOCUS LESS ON PROCESS AND MORE ON RESULTS

- Stop wasting money cutting through red tape and start moving dirt.
- Overregulation prevents projects from reaching completion, stunts economic growth and puts the U.S. at a global disadvantage (408 and 404 permitting, Federal Flood Risk Management Standards, National Levee Safety Program, Waters of the United States and National Environmental Policy Act process).
- Regulatory and environmental processes must be streamlined to ensure federal dollars are spent on projects, not process.

### INVEST IN INLAND WATERWAYS NAVIGATION SYSTEM

- The greater Mississippi Basin is the "middle coast" that connects the nation's vast interior to the world and drives the economy. We must invest in this system and provide consistent funding for dredging and maintenance.
- Funding to dredge small ports: small ports have a symbiotic relationship with large ports; economically support communities across the region; and are essential for the U.S. to remain globally competitive.
- Flood control and navigation are symbiotic; you cannot have efficient commerce without a reliable waterway system.

### COMPLETE THE MR&T PROJECT

- The system is not complete and cannot perform its authorized function of passing the project design flood.
- Adequate funding (\$500 million per year) is essential to complete the project and for annual maintenance of the system.

### COMPREHENSIVE FLOOD CONTROL PROJECT FOR THE UPPER MISSISSIPPI RIVER VALLEY

- Citizens of the upper valley request passage and funding of a comprehensive flood control project. Delaying a project will only lead to billions of additional damages to the region and prolonged and costly levee wars.

### YAZOO BASIN BACKWATER PUMP

- Congress authorized backwater flood protection 77 years ago and residents of the Mississippi South Delta are still waiting.
- 450,000 acres, including 170,000 acres of farmland, flooded during the 2018 flood.
- Floods damage trees, wildlife and the environment.
- The Yazoo Basin backwater area is the ONLY backwater area in the MR&T system without a pump.

### WATER SUPPLY-AQUIFER DEPLETION

- Partners want water supply added as a U.S. Army Corps of Engineers mission.
- Aquifer depletion can lead to saltwater intrusion, a lack of clean drinking water, and the crippling of agricultural industry critical to the regional economy.

### CHANNEL AGGRADATION

- Siltation in the Mississippi River between Natchez, Mississippi, and Baton Rouge, Louisiana, is causing the batture land (unprotected lands on the river side of levee) to be underwater more frequently and for a longer duration.

### ST. JOHN'S BAYOU – NEW MADRID FLOODWAY

- Our partners request the completion of the St. John's Bayou-New Madrid Floodway project.
- Congress authorized a project to close the 1,500-foot levee in 1954 and a pump in 1986, but locals have been flooded more than 20 times while waiting for the flood protection they were promised.

### COASTAL LOSS AND RESTORATION

- Southeast Louisiana is losing approximately 25 square miles of coastal wetlands each year due to coastal erosion and subsidence.
- Losses impact the environment, cause saltwater intrusion and negatively impact industries that are vital to the economy (oil and gas, commercial fisheries and waterborne commerce).
- Our partners support solutions such as the beneficial use of dredge material and sediment diversions to rebuild and restore wetlands.

### LEVEE STANDARDS AND RATINGS

- The Levee Safety Action Classification, P.L. 84-99 and Levee Safety Program set unrealistic expectations and unachievable maintenance standards for levees.
- Using language such as "acceptable" and "minimally acceptable" inaccurately communicates to the people living under the protection of these levees that levees are substandard and deters investment and development of the local economy.
- The levee ratings changed from "outstanding" to "acceptable" then "minimally acceptable" and now "unacceptable." Our partners would like to see the language changed to accurately reflect the level of protection provided by these levees.



# High-Water & Low-Water Inspection Trips

## Partners Engaged

### **AGRICULTURE AND ECONOMIC DEVELOPMENT**

- Delta Council
- Delta F.A.R.M.
- Farmers Grain Terminal
- First Grain
- Global Economic Development Consulting
- GNG Farm Partnership
- Illinois Farm Bureau
- Lake Mary Planting Company
- Mississippi Farm Bureau Federation
- Rye Development

### **BUSINESS AND MANUFACTURING**

- Brice Civil Construction
- Danos
- GIS Engineering
- J.M. Jones Lumber Co.
- Lion Oil Refinery
- Marathon Petroleum Company
- Mississippi Valley Associated General Contractors
- Southern Delta Construction Company
- South Central Industrial Association
- Tropicana Casino

### **EDUCATION AND RESEARCH**

- Mississippi State University
- Presbyterian Day School, Memphis, TN
- Quaternary Resource Investigation
- University of Memphis-Center of Earthquake Research
- The Water Institute of the Gulf

### **ENVIRONMENTAL CONSERVATION, RECREATION AND TOURISM**

- Arkansas Game and Fish Commission
- Audubon Society
- Coalition to Restore Coastal Louisiana
- Coastal Protection and Restoration Authority
- Great Rivers Habitat Alliance
- Grenada Lake Champion
- Lake Pontchartrain Basin Foundation
- Louisiana Department of Wildlife and Fisheries
- Lower Mississippi River Conservation Committee
- The Nature Conservancy
- Okanashoba Chickasaw Tribe, TN
- Sierra Club
- U.S. Fish and Wildlife Service

### **FLOOD CONTROL**

- Association of Levee Boards of Louisiana
- Atchafalaya Basin Levee District, LA
- Atchafalaya Levee Board, LA
- Bigger Pie Forum, MS

- Bossier Levee District, LA
- Consolidated Drainage District No. 1, MO
- Cotton Belt Levee District, AR
- Des Moines & Mississippi Levee District No. 1, MO
- Drainage District No. 7, MO
- Dyer County Levee & Drainage District No. 1, TN
- Elk Chute Drainage District, MO
- Fulton County Levee Board, KY
- Fifth Louisiana Levee District, LA
- Horn Lake Creek Drainage District, MS
- Laconia Levee District, AR
- Lake County Levee Board, TN
- Levee District No. 3, MO
- Little River Drainage District, MO
- Mississippi Levee Board, MS
- Mississippi Valley Flood Control Association
- Neighbors of the Mississippi
- North Lafourche Levee District, LA
- South Lafourche Levee District, LA
- Pointe Coupee Parish Drainage District, LA
- Sny Island Drainage District, IL
- Southeast Louisiana Flood Protection Authority-West
- St. Francis Levee District, MO
- St. Francis Levee District, AR
- St. Francis Drainage District, AR
- St. Johns Levee and Drainage District, MO
- St. Mary Levee District, LA
- Tensas Basin Levee District, LA
- Terrebonne Levee and Conservation District, LA
- Yazoo Mississippi Delta Levee Board, MS

### **PORTS AND HARBORS**

- City of Hickman/Fulton County Riverport Authority, KY
- Claiborne County Port Commission, MS
- Greenville Port Commission, MS
- Hickman Riverport, KY
- Madison Parish Port, LA
- Memphis and Shelby County Port Commission, TN
- Mississippi County Port Authority, MO
- New Madrid County Port Authority, MO
- Plaquemines Port, LA
- Port of Greenville, MS
- Port of Iberia, LA
- Port of Krotz Springs, LA
- Port of Memphis, TN
- Port of Morgan City, LA
- Port of Pointe Coupee Commission, LA
- Rosedale-Bolivar County Port Commission, MS
- Terrebonne Port Commission
- Terrebonne Port, LA
- Yazoo County Port Commission, MS





# High-Water & Low-Water Inspection Trips

## Partners Engaged

### RIVER BASIN ASSOCIATIONS

- Acadiana Planning Commission
- Amite River Basin, LA
- Arkansas Waterways Commission
- Delta Regional Authority
- Greater Lafourche Port Commission
- Lower Mississippi River Subbasin Committee
- Ouachita River Valley Association, LA & AR
- Red River Valley Association
- Red River Waterway Commission
- West Tennessee River Basin Authority
- White River Coalition, AR

### RIVER INDUSTRY

- American Commercial Barge Line
- American River Transportation Company
- American Waterways Operators
- Arkansas Waterways Commission
- Big River Coalition
- Bollinger Shipyards
- Campbell Transportation Company
- Canal Barge Line Company
- Central Boat Rentals
- Conrad Shipyard
- Gulf Intracoastal Canal Association
- Ingram Barge Company
- JB Marine Services
- Kirby Inland Marine
- Marquette Transportation Company
- Marquis Management Group
- River Industry Executive Task Force
- Turn Services

### WATER SUPPLY / WATER MANAGEMENT ENTITIES

- Bayou Meto Water Management District
- Boeuf-Tensas Irrigation Water Distribution District, LA & AR
- Sparta Groundwater Commission
- Teche-Vermillion Fresh Water District, LA
- Union County Water Conservation Board, AR
- Yazoo Mississippi Delta Joint Water Management District, MS

### MAYORS, PARISH PRESIDENTS & ELECTED OFFICIALS

- Governor Asa Hutchinson, AR (Allison Williams)
- Louisiana Senator Francis Thompson
- Mayor Steve Birch, Sikeston, MO
- Mayor Richard Bodi, New Madrid, MO
- Mayor David Carmardelle, Grand Isle, LA
- Mayor Tyrone Coleman, Cairo, IL
- Mayor Londell Eanochs, Fayette, MS
- Mayor Chuck Espy, Clarksdale, MS
- Mayor Sue Grantham, Caruthersville, MO
- Mayor Frank Hash, El Dorado, AR

- Mayor Denny Johnson, Lake County, TN
- Mayor Allen Latimer, Horn Lake, MS
- Mayor David Lattus, Hickman, KY
- Mayor Benny McGuire, Obion County, TN
- Mayor Frank Reeves, Port Gibson, MS
- Mayor Errick Simmons, Greenville, MS
- Mississippi Senator Albert Butler
- Mississippi Senator Briggs Hopson
- St. Landry Parish President, Bill Fontenot, LA
- Terrebonne Parish President, Reggie Dupree, LA

### STATE & LOCAL AGENCIES

- Acadiana Planning Commission
- La. Dept. of Transportation and Development
- Louisiana Governor's Office of Coastal Activities
- Louisiana Governor's Office of Homeland Security and Emergency Preparedness
- Mississippi Department of Marine Resources
- Miss. Department of Wildlife, Fisheries and Parks
- Mississippi Department of Transportation
- New Orleans Office of Homeland Security and Emergency Preparedness
- Sikeston Regional Chamber of Commerce

### FEDERAL AGENCIES

- Federal Permitting Improvement Steering Council
- Maritime Administration
- U.S. Coast Guard
- U.S. Department of Agriculture

### U.S. HOUSE OF REPRESENTATIVES

- Rep. Steve Cohen, TN-9 (Rick Maynard)
- Rep. Rick Crawford, AR-1
- Rep. Garret Graves, LA-6 (John Lombardo)
- Rep. Gregg Harper, MS-3 (Chip Reynolds and Patrick Seale)
- Rep. Trent Kelly, MS-1 (Walt Starr)
- Rep. David Kustoff, TN-8 (Ed Jackson)
- Rep. Jason Smith, MO-8 (Kyle Aubuchon and Leslie Herbst)

### U.S. SENATE

- Sen. Lamar Alexander, TN (Chris Connolly)
- Sen. Roy Blunt, MO (Darren Lingle and Caroline Yeilding)
- Sen. John Boozman, AR (Chase Emerson and Gene Higginbotham)
- Sen. Bill Cassidy, LA (Michael Eby and Angela Robert)
- Sen. Cindy Hyde-Smith, MS (Gregory Alston, Bill Crump and Umesh Sanjanwala)
- Sen. John Kennedy, LA (Jay McNair)
- Sen. Claire McCaskill, MO (Christy Mercer)
- Sen. Rand Paul, KY (Christina Peterson)

# **America's Watershed: A 200-year working vision**

## ***An Intergenerational Commitment***

**Our people enjoy a quality of life unmatched in the world:**

- **We lead secure lives along the river or tributary.**
- **We enjoy fresh air and the surrounding fauna, flora and forests while hunting, fishing and recreating.**
- **We travel easily, safely and affordably.**
- **We drink from and use the abundant waters of any river, stream or aquifer.**
- **We choose from an abundance of affordable basic goods and essential supplies that are grown, manufactured and transported efficiently and reliably along and by the river to local and world markets.**



*The Mississippi watershed is 41% of the U.S., 31 states, 1.25 million square miles, more than 250 tributaries.*

### ***Balancing needs for:***

- ✓ **National security, flood control and flood damage reduction**
- ✓ **Environmental sustainability and recreation**
- ✓ **Infrastructure and energy**
- ✓ **Water supply and water quality**
- ✓ **Movement of goods; agriculture and manufacturing**

***Leveraging local citizens' input, international dialogue, science, engineering, technology and public policy.***

**Join the dialogue, visit:**

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