MISSISSIPPI LEVEE BOARD

NEWSLETTER

"Where people come first"

Fall 2011 • Vol. 10, No. 1

THE GREAT FLOOD OF 2011 - A SUCCESS STORY

Overview of the 2011 Flood

The 2011 Flood was a historical event all along the Lower Mississippi River. The 2011 Flood was a multihundred year event on the Mississippi River with the crest being 3.2' above the 100-year flood. The fact that the levee contained the 2011 Flood Event limiting the flooding to the riverside and no flooding occurred on the protected side of the levee was a tremendous success story. The 2011 crest was 6' above 1973 crest and, depending on the gage location, broke or came very close to breaking the 1927 & 1937 record levels. A total of 2.272 million cubic feet per sec (mcfs) flowed past Vicksburg at the crest. The flow of the Mississippi River during the 2011 Flood broke all previous record flows. In 2011 the MR&T levees protected 4.1 million people and prevented 10 million acres from being flooded and prevented \$108 billion in damages.

> 2011 Weather Patterns: How Did this Happen?



Non-MR&T Levee overtopping and failing during 2011 flood.

On February 22 the Mississippi River at the Greenville gage was 17.3'. This stage was 12' below average for this time of year. A massive rainfall event over the Ohio River system combined with the snow melt caused a very sharp rise in the Mississippi River. In 10 days the Greenville Gage rose 20.5' to stage 37.8'. The Greenville Gage crest-

ed on March 29th at 48.8'. By April 13 Greenville dropped to 40.2'. Then rainfall events 600 percent to 1000 percent above average over a two-week period over the entire Mississippi River Valley occurred and the Greenville Gage was forecast to reach 65'. Luckily, over the next few weeks leading up to the crest there was very little rainfall

over the Mississippi River Valley. This dry weather kept us from reaching a crest closer to the Project Design Flood (PDF). The PDF for the Greenville Gage is 72.2'. The Mississippi River at Greenville crested at 64.2' on May 17th which is 8' below the PDF.

MR&T Project Fully Implemented Following the devas-

tating 1927 Flood, the U.S. Congress passed the 1928 Flood Control Act, which authorized and created the Mississippi River & Tributaries Project (MR&T). The MR&T

Project includes uniform levees, floodways, channel improvements and major tributary improvements. 2011 was the first year where all the features of the MR&T Project had to be utilized at the same time. The Birds Point/New Madrid Levee was intentionally breached by the U.S. Army Corps of Engineers (Corps) on May 6, 2011 at 61.0' at the Cairo Gage. The only



Greenville, MS

other time in history the Corps blew this levee was in 1937. This was done to save the city of Cairo, IL. This feature did not help the Mississippi Levee District.

In Kentucky both the Kentucky Dam along the Tennessee River and Barkley



Morganza Spillway opens Dam along Cumberland River were filled to maximum capacity in order to reduce the flow into the Mississippi River.

the

The Old River Control Structure was operated and it helps maintain a 70/30 latitude flow between the Mississippi River and the Atchafalaya River. The Bonnet Carre Spillway was operated on May 9, 2011, when the flow in the Mississippi



River reached 1,250,000 cfs. The Morganza Floodway was opened on May 14, 2011, when the flow in the Mississippi River reached 1,500,000 cfs. The only other time in history this floodway was opened was in 1973.

All three of these floodways were opened to save Baton Rouge and New Orleans, L.A. The operation of these three floodways did not help the Mississippi Levee District.



Crest at Greenville city front.

Summary

The 2011 Flood is the new benchmark highwater event that will be used from this point forward. The safe passage of this multi-hundred year event is a testament to the daily maintenance activities of the Levee Board Staff and Crew, the Levee Board Commissioners leadership and dedication to flood control for the Mississippi Delta, Congress's yearly wise appropriations for construction and maintenance for the MR&T Project, and the Corps of Engineers vision, foresight, engineering and construction. Those involved in this event will remember the 2011 Flood for the rest of their lives. All these people were needed, much appreciated and heros for the Mississippi Delta.



Corps Assists In Providing Protective Measures

Buck Chute



Corps building earthen water berm around sandboils at Buck Chute.

n early 2010 several large sandboils were discovered at Sta. 110 Brunswick Extension Levee (BEL) at Buck Chute. This area was considered the weakest part of our entire levee system. The Vicksburg District performed surveys and borings and designed a plan to build a 1,500' long, 200' to 240' wide landside berm and (25) relief wells. This contract was scheduled to be advertised when the 2011 highwater event started. In March 2011, the Levee Board crew filled in large holes (10-15' diameter and 6' deep) with sand and placed engineering fabric over the sand filled holes and re-built the sandbag rings around the holes. The crew also built a small earthen dike around the entire area to place additional head over these boils.

On April 20th the National Weather Service (NWS) predicted Greenville to reach 49'. On April 23rd the Corps Hired Labor Crew began building an earthen water berm around the entire sandboil site at Sta. 110BEL at Buck Chute. They removed all the trees from within this two acre site and filled the area with 20,000 c.y. of sand.

For extra precautionary purposes, the Corps decided to raise the water level in Eagle Lake from 77.7' to 90'. This would be done by opening Muddy Bayou Structure



Corps filling Buck Chute sandboil area with sand

allowing Steele Bayou water to flow into the lake. This would put a 5' head of water over the covered boils. At 90' no homes along Eagle Lake would be flooded but many docks and piers would be covered with water and possibly damaged. A public meeting was held April 29th at Eagle Lake to discuss what was happening at Buck Chute and the need to raise the lake level. Approximately 300 people attended this meeting. Most residents understood that this action was being taken to prevent a levee failure and devastation to the area including their homes and property. The Corps began raising water levels in Eagle Lake on April 30th and finished on May 13th.

After all these protective measures were taken, we did not have any issues at Buck Chute during the duration of the epic 2011 Flood. \blacksquare

Yazoo Backwater Levee Predicted to Overtop

The Yazoo Backwater (YBW) Levee is designed to overtop during a major flood event to take pressure off the Mainline Mississippi River Levee. The YBW Levee is approximately 12' lower than the Mainline Mississippi River Levee.

The YBW Levee is designed at a uniform 107' elevation. The U.S. Army Corps of Engineers had predicted that the YBW Levee would overtop at a Vicksburg Gage reading 56.3. On May 2, 2011 the NWS raised the forecast to 57.5 at Vicksburg.

Corps Armors the Landside Slope of the YBW Levee



Poly sheeting being installed on landside slope of YBW Levee.

On May 4th the Vicksburg District Corps decided to "armor" the landside slope of the YBW Levee from Sta. 0 YBWL to the Steele Bayou Structure (Sta. 212 YBWL) to prevent the levee from eroding during a prolonged overtopping event. The Corps used poly sheeting (40 mils thick) as the armor. The poly sheeting was placed in a 1' wide by 2' deep trench at the landside crown of the YBW Levee and rolled down to the landside toe. The poly sheeting was pinned and the trench was backfilled with material and sandbags lined the top and bottom of the poly sheeting. The poly sheeting seams were "welded" together to make one continuous sheet for approximately four miles. The Corps contracted with Fordice



US Army Corps of Engineers ®

Construction to install this poly sheeting and work started May 7th and was completed by May 11th. The Corps had predicted that this four mile section of the YBW Levee was the only part subject to overtopping with a forecast of 57.5 at the Vicksburg Gage.

If the YBW Levee overtopped and the poly sheeting kept the levee from eroding away and failing, only 1 foot of water was predicted to be added to the protected landside of the YBW Levee in the YBW Area. If the YBW Levee failed. it was predicted that the YBW Area would reach 106'. At this elevation 1.2 million acres would be flooded, Hwy 61 would be underwater, numerous towns and cities such as Rolling Fork and Mayersville would be flooded. This would be a devastating event. In 1973 the South Delta was flooded up to elevation 101.5'. In 1973, Hwy 61 remained above water and Rolling Fork and Mayersville were not flooded. A public meeting was held May 4th at the National Guard Armory in Rolling Fork. Over 1,500 people attended. The South Mississippi Delta residents were notified that the YBW Levee was predicted to overtop, but the Corps was going to armor the slope to prevent the YBW Levee from failing. Residents were warned that the YBW Levee might not survive the overtopping and if it failed it would flood up to elevation 106'. Residents were told to prepare and make plans to evacuate if the YBW Levee failed.

Yazoo Backwater Levee Did NOT Overtop

As it turned out the Vicksburg Gage crested at 57.1' and the water came within 4" of overtopping the YBW Levee but it did not overtop and the YBW Levee held.

In fact, at its peak on May 19, 2011, the YBW Levee held out 16.33' of water at the Steele Bayou Structure. The Corps prediction of overtopping at 56.3' proved to be 1.2' conservative. It appears that the YBW Levee will overtop at Vicksburg Gage 57.5'. If the forecast is greater than 58' at Vicksburg, the entire 28 miles of YBW Levee will be overtopped. There are plans to eventually raise the entire YBW Levee from elevation 107.0' to 112.8'. ■



Water within 4" of the top of the YBW Levee.

12 Problem Areas During the Flood

Gage 60.2' and rising, the sandboils started moving material. The sandboils finally slowed down by May 26th at Greenville Gage 60.4' and falling.

There were (12) major problem at Sta. 151 — Levee Board built areas discovered during the 2011 Flood that needed attention and remedial work:

(1) YBW LEVEE PREDICTED **TO OVERTOP** — The Corps armored the landside slope with poly sheeting. Low areas along the YBW Levee below elevation 107' were filled in.

(2) BUCK CHUTE — Sta. 110 BEL — sandboils — The Corps built earthen water berm, filled with sand, covered with stone, and raised Eagle Lake water levels

(3) ALBERMARLE — Goose Lake Road — Sta. 8170 — Levee Slide and sandboil — Levee Board built stone dike around boils and filled with sand and



POST FLOOD AC

The MR&T Project proved to

be very successful during the

2011 Flood. It will take

~\$1B to restore the MR&T

system before the next

highwater season. The

Birds Point/New Madrid

Levee will need to be re-

built, major repairs need to

be made to the Floodways, and

major maintenance money will

be needed to reset the levee sys-

tem. The Mississippi Valley

Flood Control Association will

\$1 BILLION SUPPLEMENTAL APPROPRIATION NEEDED

May 8th at Greenville covered with stone. The Corps built a stone dike at the landside toe of the levee and filled from the dike to the levee with sand in order to stabilize the levee slide.

> (4) FRANCIS. MS — sandboils sandbag ring around boils. The Corps built an earthen water berm around boil area. **NORTH TO SOUTH:**

> (5) BLACK BAYOU CUT-OFF — Sta. 3650 — Levee Board built an earthen weir at Sta. 3650 just downstream of the old sandbag weir. This earthen weir placed 5 of head over numerous sandboils in the bottom of the ditch.

> (6) WINTERVILLE — Sta. 3703-3715 — Levee Board built sandbag rings around several sandboils and placed barrels over 3 other sandboils.

> (7) **GREENVILLE** — Buck Shot Marine — Sta. 4030 — Levee Board built sandbag rings around several sandboils.

(8) WAYSIDE — Avis Road



(9) LEOTA — Sta. 5615 -Levee Board built sandbag rings around several sandboils

(10) CLARENCE HALL ROAD Sta. 6050-6065 - Levee Board Wayside, MS placed barrels over numerous sandboils.

(11) BEN LOMOND ROAD & **ATCO WOODS** — Sta. 7110-7175 – Levee Board blocked off ditches to flood ditch and landleveled field with sandboils, and placed barrels over numerous other sandboils.

(12) TARA WILDLIFE — Sta. 208-327 BEL - Levee Board built sandbag rings around several sandboils and placed barrels over numerous sandboils.











Lake Albermarle

Francis, MS

Francis, MS





2011 **FLOOD ASSISTANCE**

Numerous agencies helped during this historic flood event. The Corps of Engineers Greenwood Area Office provided inspection vehicles and employees to patrol and inspect the levee 24 hours a day. The Corps of Engineers Vicksburg District provided engineers to provide technical assistance. The Corps of Engineers Hired Labor Crew mobilized and fixed several problem areas along our levee system. The Yazoo-Mississippi Delta Joint Water Management District provided employees to serve as inspectors. The Washington, Bolivar and Issaquena County Emergency Management Agency (EMA) directors were engaged and helped with

providing filled sandbags, lights, and workers.

Washington, The Bolivar Issaguena and Warren County Sheriffs provided deputies for patrolling the levee and keeping the public off the levee while it was closed. Washington, Bolivar and Issaquena Counties provided Department Mississippi of Correction inmates for assistance in filling and placing sandbags. This is the first time that the Levee Board has used inmates for the physically draining sandbag work. Numerous organizations, churches and people provided the Levee Board staff and crew with lunches during the flood event. Numerous people volunteered their time, services and equipment to help in the fight.

2011 FLOOD YAZOO BACKWATER FLOOD EVENT

Steele Bayou Structure was closed on April 25th at 87.0'. This Structure remained closed for 55 days until it reopened at 89.9' on June 18th. The normal rainfall for this time of year is 7" which would have brought the backwater up to 94'. Fortunately during this period while the

gates were closed, the Mississippi Delta had very little rainfall and the Yazoo Backwater Area only got to 89.9'. This flooded 215,000 acres including 68,000 acres of farmland. The estimated crop damage for the Yazoo Backwater Area is \$62,397,000.



IMPACT NEWSLETTER • 3



for a \$1B Supplemental Appropriation for the MR&T Project in order to repair, restore and rebuild the levee system following the 2011 Flood.

Board Meeting Recaps

OCTOBER, 2010: The Board took the following action at the October 4, 2010 regular board meeting: authority was given to advertise for worker's compensation insurance; concurred with permits issued to Montgomery Island Hunting Club for a mobile home. Twin County Electric for a service line to Valewood Plantation, and Lakeside Telephone Company for a fiber optical line construction; presented a Resolution of Appreciation to Johnny Robinson for his 10 years of service as a Levee Commissioner for Washington County from 2000-2010; November 9, 2010 was set as the date for annual levee inspection trip; received report from the Chief Engineer on all ongoing projects in the Mississippi Levee District.

JANUARY, 2011: The Board of Mississippi Levee Commissioners held their regular board meeting on January 10, 2011. The Levee Board took the following action during it's January meeting: reviewed bids and awarded Worker's Compensation Insurance to South Group Insurance; authorized advertisement of bids for Business Auto/ Public Officials & Employees/ Liability/ Contractors Equipment Insurance, chemicals, vehicles and fence material; concurred with permit issued to Valewood Plantation for a Lodge on the top bank of the Old River Chute and Sunoco Pipeline for a communication tower; presented a Resolution of Appreciation to Laurance Carter for his 12 years of service as a Levee Commissioner for Sharkey County from 1998-2010; authorized a delegation to the MVFCA Congressional Meetings March 28-30 in Washington, D.C. to discuss FY 2012 Appropriations for Corps projects in the Mississippi Delta; and received status reports on all the ongoing projects in the Mississippi Levee District and meetings attended.

APRIL, 2011: The Board of Mississippi Levee Commissioners held their regular board meeting on April 4, 2011: reviewed bids and awarded general liability, automobile and property insurance to South Group Insurance and a 1/2-ton 4-wheel drive pick-up to Cannon Ford; authorized advertisement of bids for helicopter application; awarded purchase of fence material from McCoy's; awarded purchase of a hydraulic excavator from Lyle Machinery; concurred with permits issued to Twin County Electric for aerial electrical service lines to span the levee at Laney's Camp and Chotard Resort; and received status reports on all ongoing projects in the Mississippi Levee District and meetings attended. 🔳

JULY, 2011: The Board took the following action at the July 11, 2011 regular board meeting: hosted a public hearing on the proposed ad valorem tax increase; adopted 2011-2012 budget; set ad valorem tax rate of 2.64 mils; received Chief Engineer's Annual Report on the levee, interior drainage and on all ongoing projects in the Mississippi Levee District; accepted bid on helicopter application work by Provine Helicopters; authorized advertisement of bids for two tractors, low-boy trailer, skid steer and a heavy duty trailer; authorized a delegation to the MVFCA Annual Congressional Meeting September 13-14 in Washington, D.C. to discuss FY 2012 Appropriations for Corps projects in the Mississippi Delta; authorized a delegation for the National Waterways Conference September 19-21 in Fort Worth, TX; received a report of the historic 2011 Flood on the Mississippi River; and received status reports on all ongoing projects in the Mississippi Levee District and meetings attended.

Commissioner Profile

Paul Hollis: New Sharkey County Commissioner



was sworn in as the new Mississippi Levee Board Commissioner for Sharkey on County January 10. 2011 and he hit the ground

running. Paul had two Board meetings under his belt before

the spring rains gave birth historic 2011 to the Mississippi River flood. Paul was heavily involved in the Levee Board's flood fight activities from relief



Paul Hollis equipment operator on the Lake Albemarle landside slide to sandbagging numerous sandboils to attending public meetings.

> Paul is a native of Amory. Mississippi. He attended Baylor School in Chattanooga, TN where his football team was the 1973 State and National High School Football Champion. Paul graduated from Mississippi State University and has lived in Rolling Fork since 1979 where he

is actively engaged in farming corn, sovbeans and wheat.

He and his wife Laura are active members of the United Methodist Church in Rolling Fork.

Commissioner Hollis stated, "While I

am not originally from here, this is my home and it was truly an honor for me to be able to serve the people of Sharkey County during this historic 2011 highwater event."



COMMISSIONERS:

FRED A. BALLARD, JR., PRESIDENT, Washington County KENNETH RODGERS, VICE-PRESIDENT, Humphreys County JAMES W. HOUSE, JR., Bolivar County

NOTT WHEELER, JR., Bolivar County **Roy Nichols**, Issaquena County HANK BURDINE, Washington County **PAUL HOLLIS,** Sharkey County

Yazoo-Mississipp Delta Levee Board

STAFF:

PETER NIMROD, Chief Engineer **ROBERT M. THOMPSON,** Assistant Engineer CHARLES S. TINDALL, III, Attorney JUDY B. Ross, Treasurer **GINGER MORLINO**, Secretary PATRICK BOLLS, Maintenance Superintendent RICK BOYD, Engineering Technician



4 MISSISSIPPI LEVEE BOARD

Levee Board Attends Meetings in D.C.

Annual meeting with the Mississippi Congressional Delegation seeks appropriations for flood control projects and provides ongoing project updates The Mississippi Levee Board traveled to Washington, D.C. and met with the Mississippi Congressional Delegation during March 28-30, 2011. This annual trip provides the delegation with a status update of ongoing flood control projects in the Mississippi Delta and it is an opportunity for the Levee Board to discuss funding requirements for U.S. Army Corps of Engineers projects in the Mississippi Delta.

During the visits with the Congressional Delegation, Chief Engineer, Peter Nimrod provided updates on the existing Mainline Mississippi River Levee Enlargement & Berms project and the status of the lawsuit against EPA over the Yazoo Backwater Project. Funding requests for U.S. Army Corps of Engineers projects within the Mississippi Delta were presented to the Delegation. ■



Steele Bayou Sedimentation Reduction Project

Phase VI to be awarded soon

The Steele Bayou Sedimentation Reduction Project was started in 2007 and includes the installation of grade/water control structures (flash board riser pipes) at headcut sites along Steele Bayou. These structures have enhanced property and keep Steele Bayou from receiving too much sediment which is bad for flood control and water quality. This project does not cost the landowner anything but they have to supply borrow material from their spoil bank to cover the structure. Phases I through IV are now complete and include 45 sites on Steele Bayou. Phase V is currently 74% complete and includes 10 sites on Main Canal and 1 site on Black Bayou. Phase VI will be awarded this Summer and will include 4 sites on Steele Bayou, 2 sites on Main Canal and 3 sites on Black Bayou.

Of the original 100+ headcut sites identified by the Corps on Steele Bayou, 45 sites have been completed or are under construction by the Corps and another 37 sites have been completed by Delta FARM. This is a great success story for minimizing erosion and keeping sediment out of Steele Bayou thereby helping flood control and at the same time improving water quality. ■

STEELE BAYOU SEDIMENTATION REDUCTION PROJECT UPDATE:

Completed Work:

Phase I, II, III & IV - 45 sites On-going Construction: Phase V - 10 sites - 74% Complete Future Work:

Phase VI – 9 sites – to be awarded this Summer











Levee Enlargement Projects

Work continuing despite limited funding from Congress

Work is progressing on the levee enlargement and berm projects in the Mississippi Levee District. The Corps has completed 32.0 miles of levee and currently has another 8.1 miles under contract of the original 69 miles of deficient levee. Item 474L, a 3.4 mile conventional levee enlargement project which ties into MS State Highway 465 on top of the levee, is 83% complete. Item 468L, a 4.7 mile conventional levee enlargement project is 45% complete. This item is on the northern portion of MS Hwy 465 to Goose Lake Road. Item 463L, a 2.7 mile conventional levee enlargement project was scheduled to be awarded this Spring but the advertisement was cancelled when Congress did not

provide enough money for the MR&T Project. The Levee Board has obtained all right-of-way for this item of work. ■



LEVEE ENLARGEMENT PROJECT UPDATE:

Completed Work - 32.0 miles -Items 477L, 488L, 496L & 502L On-going Construction: Item 474L - 3.4 miles - 83% Complete Item 468L - 4.7 miles - 45% Complete Future work remaining - 28.9 miles





Members of the Washington County Leadership Class came to the Levee Board office on January 12, 2011 for a presentation on the history, activities and projects of the Mississippi Levee Board.

2010 Annual Bus Inspection

Members of the 2010 Annual Levee Inspection take a photo in front of the Onward Store.

On November 9, 2010, the Mississippi Levee Board hosted its Annual Levee Inspection. This year's trip inspected the southern third of our levee system starting at Hwy 61 at the Yazoo Backwater Levee and proceeded north to the Mainline Mississippi River Levee at Fitler, MS. Lunch was served at the Onward Store in Onward, MS. ■

MLB vs. EPA Lavvsuit – Judge Rules in Favor of EPA Appeal has been filed with the 5th Circuit Court of Appeals

The Vicksburg District officially released the Final Report for the Yazoo Backwater (YBW) Project on November 16, 2007. On February 1, 2008, the Environmental Protection Agency (EPA) wrote a letter notifying that they were going to use their authority under Section 404(c) of the Clean Water Act to veto this project.

The Levee Board repeatedly told EPA that the YBW Project is exempt from a 404(c) veto because it conforms to a Section 404(r) exemption. EPA said that the 1982 EIS was never properly submitted to Congress. EPA claimed it could not find the transmittal

letter to Congress. Therefore, EPA claimed that the YBW Project is not exempt from an EPA 404(c) veto because it did not conform to all the requirements for a 404(r) exemption.

On Sunday, August 31, 2008, the day before Labor Day, EPA officially vetoed the Yazoo Backwater

Project. A few days later on September 5, 2008, the Levee Board received the results of a FOIA which revealed transmittal letters dated March 28, 1983 in which the Corps officially transmitted the 1982 EIS to Congress.



These are the very documents that EPA claimed that the Corps did not

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have! EPA rushed to veto the YBW Project before we got this FOIA information! The only option left for reviving the

Yazoo Backwater Project was to sue EPA. The YBW Project is exempt from

an EPA Section 404(c) veto by Section 404(r). EPA does not believe that a Section 404(r) exemption applies to the YBW Project, and the Levee Board believes that EPA did

not have the authority to veto the YBW Project because it is exempt by Section 404(r). At this point, it appeared that a judge would have to decide.

Given the huge expense of a lawsuit against EPA and the resources of the Federal Government, the Levee Board contacted Pacific Legal Foundation (PLF) to see if they could help the Board with the lawsuit. PLF agreed to take the case and a Complaint was filed against EPA on August 11, 2009. Private environmental groups National Wildlife Federation, Mississippi Wildlife Federation,

Environmental Defense Fund, Sierra Club, Gulf Restoration Network and American Rivers all intervened on behalf of EPA in this lawsuit.

Unfortunately on March 28, 2011 Federal Judge Sharion Aycock ruled against the Levee Board. The Levee Board and PLF reviewed the ruling and decided that grounds for an appeal existed. A

Notice of Appeal was filed on April 26, 2011. This appeal will be heard in the 5th Circuit Court of Appeals in New Orleans, LA. The Opening Brief was filed June 13, 2011. ■

FY 2012 Appropriations

\$335M needed for the MR&T Project for FY 2012 \$1B needed to rebuild MR&T System after 2011 Flood

The President's Fiscal Year (FY) 2012 Budget released in February had only \$210M for the Mississippi River & Tributaries Project (MR&T). On July 15, 2012 the House Appropriations on Energy & Water Subcommittee provided only \$210M for the MR&T Project. The Corps needs \$335M to fully fund all of our much-needed flood control projects. Also included in this House Bill is \$1B in disaster relief funding to the Corps for use in areas affected by storms, tornadoes and flooding along the Mississippi and Missouri Rivers in 2011. This amount, intended as emergency funding in 2011, would be offset by unobligated stimulus funds for high-speed rail projects. The Senate Appropriations Energy & Water Subcommittee has not passed anything to date.

In FY 2010, \$340M was appropriated for the MR&T Project. In FY 2011 \$263.9M was appropriated for the MR&T Project. Unfortunately, Congress rescinded \$22M from the reserves for the Yazoo Backwater Project in FY 2011. Now the House has passed a \$210M Bill which includes rescinding the remaining \$35M in reserves for the Yazoo Backwater Project. If the Senate doesn't add money for the MR&T Project and protect the YBW Project reserves, the funding levels will dramatically drop to levels where almost all our critical flood control projects will be completely shut down and all the reserves for the Yazoo Backwater Project will be eliminated.

MR&T Project Appropriations

FY 2010	\$340M
FY 2011	\$263.9M
FY 2012	\$210M (OMB and House Bill) \$335M Request

The MR&T Project protects over 4 million people living in the Mississippi River Valley. In 2011 the MR&T Project prevented \$108 Billion in damages. Adding this to the previous damages prevented since 1928 of \$370.3



Billion results in a total damages prevented since 1928 of \$478.3 Billion. Through FY 2011 a total of \$13.9 Billion has been invested in the MR&T Project with a 34 to 1 return on each dollar invested! It is a shame that Congress continues to neglect and ignore one of the most beneficial and useful projects in American history.

\$1B needed as a Supplemental Appropriation to rebuild, repair, reset and restore the MR&T system before the next highwater season in 2012. ■





The Mississippi Levee Board would like to thank the following for assistance during the historic 2011 Highwater Event

U.S. Army Corps of Engineers - Greenwood Area Office U.S. Army Corps of Engineers - Vicksburg District Mississippi River Commission Yazoo Mississippi Delta Joint Water Management District **Mississippi Department of Corrections** Mississippi Department of Wildlife, Fisheries & Parks Mississippi Army National Guard Mississippi Department of Transportation **Bolivar County Board of Supervisors Bolivar County Sheriff's Department Bolivar County Emergency Management Agency** City of Greenville, Mississippi **Greenville Public Works Department Greenville Police Department** Washington County Board of Supervisors Washington County Sheriff's Department Washington County Road Department Washington County Office of Emergency Management Issaguena County Board of Supervisors Issaquena County Sheriff's Department Issaquena County Emergency Management Agency Sharkey County Board of Supervisors Joe Reed and Co., Inc. Avis Construction, Inc. Hanos Excavators Larry Goss, Nutra-Green Wilkerson Trucking McCoy's Building Supply Contech



A Multi-Hundred Year Event.

Greenville Gage Crested May 17, 2011 at 64.2'

6' Higher than 1973

1.2' Higher than 1937

3.2' Above the 100 Year Event

A HISTORIC EVENT









www.msleveeboard.com

Before the MR&T Project & After The Catastrophic 1927 Flood vs. The Great 2011 Highwater

1927: Multiple Levee Failures, 246+ Deaths, 700,000 people displaced, 162,000 homes inundated.

2011: Not 1 MR&T Levee Failure, Not 1 Death, Not 1 acre flooded that was not designed to flood, Not 1 Home Flooded that was on the protected side of the levee.









GAGE	CREST DATE	2011 Stage	PREVIOUS RECORD STAGE & DATE
Cairo, IL	May 2, 2011	61.72*	59.51 in 1937
Memphis, TN	May 10, 2011	47.87*	48.70 in 1937
Arkansas City, AR	May 16, 2011	53.14	59.20 in 1927
Greenville, MS	May 17, 2011	64.22	65.4 in 1927 (calc.)
Vicksburg, MS	May 19, 2011	57.1*	56.20 in 1927
* New Record Stage			



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