



Col. Minor Meriwether
Chief Engineer
1865-67



Charles H. West
Chief Engineer
1898-1910



Wm. Earl Elam
Chief Engineer
1946-51



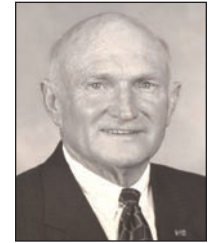
L. Martin Heard
President
1965-80



Newman Bolls
Chief Engineer
1956-89



James E. Wanamaker
Chief Engineer
1989-2004



Fred A. Ballard, Jr.
President
1998-Present

150 Years Old and Still Working

MS Levee Board celebrates its Sesquicentennial Anniversary

BY HANK BURDINE, *Levee Commissioner*

For 150 years, the Mississippi Levee Board has been working diligently to keep us in the Delta dry. Since its inception in 1865 and up until 1927, numerous floods demanded that levees be built bigger, higher and stronger. And in 1927, the big one happened. 16.6 million square miles of the most fertile farmland in the world was inundated with yellow, seething river water and over 250 lives were lost, not to mention thousands of head of cattle, mules, horses and other livestock. Homesteads, barns and outbuildings were swept away in the fast moving water after the Mainline Mississippi River Levee broke at Mounds Landing about 12 miles



north of Greenville. The 1927 flood, the worst natural disaster ever to befall the United States until Hurricane Katrina, was the catalyst to the Flood Control

Act of 1928 which authorized the Mississippi Rivers & Tributaries (MR&T) Project that protects us today.

Rainwater and snowmelt from 41% of the continental United States and

parts of two provinces of Canada flow by our doorsteps every day. Floods are not just a local problem to us in the Delta, but a national concern. The U.S. Congress authorized the Mississippi River Commission to oversee the massive MR&T Project which consists of floodways, levees and floodwalls, channel improvements and stabilization and also tributary basin improve-

ments. This entailed a massive construction project of levee building, creation of river cutoffs which shortened the river by many miles and reservoir building. All pertinent levees were combined into one system and put under the jurisdiction of local levee boards. These levee boards work in conjunction with the U.S. Army Corps of Engineers (Corps) to ensure that the rights of ways and all legal matters are in place for the Corps projects to be built according to plans and specifications.

Mississippi Levee Board Commissioners are elected by voters from Bolivar, Washington, Issaquena, Humphreys and Sharkey Counties. The Commissioners serve without pay and share a common desire and commitment to serve their communities. A Chief Engineer and Assistant Engineer oversee a



2012 Board in front of U.S. Capitol



2014 Board



Chief Engineer Bill Beanland - 1950s

See 150 YEARS on Page 5 ➔



1952 Board



1964 Levee Inspection Trip



1968 Board



1976 Board

2011 FLOOD PROBLEM AREAS BEING CORRECTED

Deficiencies being corrected at 11 Problem Areas

There were (12) major problem areas discovered during the Historic 2011 Flood that needed attention and remedial work.

In December 2011 Congress passed an \$802 Million Supplemental Appropriation for disaster relief to repair the MR&T System following the 2011 Flood. The Mississippi Levee Board and the Vicksburg District Corps of Engineers are using part of this money to correct 11 problem areas.

FIVE PROBLEM AREAS FIXED

In the Summer of 2011, the Corps contracted to remove and recycle the poly-sheeting from the landside slope of the **Yazoo Backwater (YBW) Levee**, the Corps Hired Labor Crew permanently raised the low areas up to elevation 107.0', and the Corps let a maintenance gravel supply contract, which added new limestone on 7.3 miles of the YBW Levee (Sta. 0-385 YBWL).

In mid-September 2011 the Corps contracted with Phylway Construction, LLC to build a 1,700' long, 200-240' wide landside seepage berm and install 30 relief wells at **Buck Chute (Item 458L)** and build a 2,500' long, 150' wide landside seepage berm at **Albemarle (Item**

465L). Phylway completed the Buck Chute berm and relief wells by mid-December 2011. Phylway completed the dirt work for the Albemarle berm in April 2012

In 2012, the Vicksburg District contracted with Gulf Group, Inc., to rebuild and extend the landside seepage berm and install 16 relief wells at **Francis (Item 616L)** and to rebuild and extend the landside seepage berm and install 11 relief wells at **Above Greenville (Item 543L)**. Item 543L was accepted by the Corps of Engineers in July 2014 and Item 616L is complete.

SIX PROBLEM AREAS UNDER CONSTRUCTION

In 2013 the Corps contracted with Harding Enterprises, LLC to build a 11,500' long landside seepage berm and install 32 relief wells at **Tara (Item 456L)**. All of the relief wells have been completed and the landside seepage berm is under construction. Item 456L is currently 78% complete.

The remaining five (5) reset items have been consolidated into one project called Operation Watershed Recovery. This project was awarded to Magruder Construction Co., Inc., in



AVON - Placing Sand Filter Pack

December 2013. The contractor has constructed a 4,400' long, 110' wide landside seepage berm and install 26 of 43 relief wells at **Avon (Item 526L)**, 6 relief wells at **Greenville (Item 539L)**, 12 relief wells at **Leota (Item 514L)**, 21 relief wells at **Lake Jackson (Item 509L)** and 16 relief wells at **Ben Lomond (Item 488L)** remain. Operation Watershed Recovery is currently 52% complete.

CONSTRUCTION TO BE COMPLETED BY THE END OF 2015

By the end of 2015, 11 prob-

lem areas discovered during the Epic 2011 Flood will have been corrected. The 11 problem areas will be corrected by installing 187 relief wells and constructing 20,405' (3.9 miles) of landside seepage berm. The Vicksburg District Corps of Engineers has utilized 5 separate contracts totaling \$11.3M. The Mississippi Levee Board would like to thank Congress for appropriating the emergency money and the Corps of Engineers for designing and contracting out the work to repair these problem areas. ■



AVON - Pushing down Surface Casing



AVON - Relief Well construction



AVON - Relief Well Installation



AVON - Vibrating in the Well Casing

Levee Enlargement Projects

Work continuing despite limited funding from Congress



511L - Clearing the riverside toe

Work continues on the levee enlargement and berm projects in the Mississippi Levee District. The Corps has completed 35.4 miles of levee and currently has another 14.7 miles under contract of the original 69 miles of deficient levee. Item 468L, a 4.7 mile conventional levee enlargement project is 97% complete. This item is on the northern portion of MS Hwy 465 to Goose Lake Road. Item 463L, a 2.7 mile conventional levee enlarge-

ment project along Lake Chotard, was awarded in October 2012 to Circle Construction, LLC and is 72% complete. Item 509L, a 3.9 mile conventional levee enlargement project south of Lake Jackson, awarded to Af-folter Construction is 72% complete. Item 511L, a 3.4 mile conventional levee enlargement project north of Lake Jackson was awarded in November 2014 to My Company, Inc. and is 5% complete. ■



511L - Dumping material for base enlargement



511L - Dumping material for base enlargement



511L - Loading material

Levee Enlargement Project Update:

Completed Work – 35.4 miles
Items 474L, 477L, 488L, 496L & 502L

On-going Construction:
Item 468L – 4.7 miles – 97% Complete
Item 463L – 2.7 miles – 72% Complete
Item 509L – 3.9 miles – 72% Complete
Item 511L – 3.4 miles – 5% Complete

Future work remaining – 18.9 miles



511L - Dumping material for haul road



511L - Spreading material

Helicopter Application

146.7 miles of interior streams sprayed in 2014

The U.S. Army Corps of Engineers began work on the Big Sunflower River & Tributaries Project in 1947. This project included channel improvements to over 700 miles of interior streams located within the Mississippi Delta. These streams provide the outlet for flood water in the Delta. In 1950, the Mississippi Legislature authorized the two (2) Mississippi Delta levee boards to participate as local sponsors of Corps of Engineers projects within the Yazoo Basin. The Mississippi Levee Board is responsible for minor maintenance for 350 miles of interior streams within the Mississippi Levee District.

To perform this much needed maintenance, the Mississippi Levee Board contracts with a helicopter applicator to spray a portion of the interior streams

each year. A mixture of aquatic herbicides is sprayed on the underbrush and privet that is encroaching into the required clear width of the channel. This required clear width must be maintained to ensure the streams have adequate flood storage and passage capacity.

This year the Mississippi Levee Board treated 146.7 miles of its interior streams. This included 1,326 acres of interior streams located primarily in the northern half of the Mississippi Levee District. Provine Helicopters sprayed on October 6 and 21, 2014. Streams treated this year included Big Sunflower River, Dowling Bayou, Bogue Hasty, Bogue Phalia, Ditchlow Bayou, Hushpuckena River, Snake Creek, Clear Creek and the Holly Bluff Cut-Off. ■



Helicopter loading chemical



Helicopter spraying



Mississippi Levee Board Meeting Recaps

OCTOBER 2014

The Board took the following action at the October 6, 2014 regular board meeting: reviewed bids and awarded purchase of one used tractor to Wade, Inc., Greenville, MS; authority was given to advertise for worker's compensation insurance; concurred with permit issued to C-Spire for fiber optic line crossing YBW Levee Sta. 555, Connecting Channel Sta. 325, Black Bayou Mile 3.5, Main Canal Mile 4.5, Bogue Phalia Mile 63.5 & Snake Creek Mile 4.5; November 6, 2014 was set as the date for annual levee inspection trip; and received report from the Chief Engineer on all ongoing projects in the Mississippi Levee District.



insurance, chemicals and vehicles; concurred with permits issued to: AT&T Mississippi, Inc. for underground fiber optic line land-side and opposite Sta. 736+50 to 855+00; authorized advertisement for a half-ton 4 wheel drive pick-up and for chemicals for use in 2015; authorized a delegation to the MVFCA Congressional Meetings March 16-18 in Washington, D.C. to discuss FY 2016 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 2015

The Board took the following action at the April 6, 2015 regular board meeting: reviewed bids and agreed to accept low bids on chemical purchases for next 12 months, awarded general liability, automobile and property insurance to South Group Insurance, and awarded purchase of a 2015 half-ton pick-up truck to Cannon Ford; concurred with permits issued to: AT&T

Mississippi for fiber optic line crossing YBW Sta. 558+15 & Sta. 327+27 of Connecting Channel; and received status reports on all ongoing projects in the Mississippi Levee District and meetings attended.

JULY 2015

The Board took the following action at the July 13, 2015 regular board meeting: adopted 2015-2016 budget; set ad valorem tax rate of 2.90 mils (no change); received Chief Engineer's Annual Report; accepted bid on helicopter application work by Provine Helicopters; concurred with permits issued to: City of Greenville for Schelben Park Improvements and to Break Land Company for concrete boat ramp near Mounds Landing Dike at River Mile 561.6; authorized a delegation to the MVFCA Annual Fall Congressional Meeting September 28-30 in Washington, D.C. to discuss FY 2016 Appropriations for Corps projects in the Mississippi Delta; authorized a delegation for the National Waterways Conference September 16-18 in Little Rock, AR; and received status reports on all ongoing projects in the Mississippi Levee District and meetings attended. ■

staff profile:

Heath Douglas

Levee Board Attorney

Heath Douglas, a partner in the Lake Tindall Law Firm of Greenville, was appointed by the Mississippi Levee Board to replace recently retired Board Attorney Charlie Tindall.

Heath, a Cleveland native, holds a Master's Degree in History from Delta State University and is a graduate of the University of Mississippi School of Law. Prior to beginning his law practice he was engaged in farming in Bolivar County helping run a 5,000 acre row crop operation.

Heath and his wife Janelle are the parents of two children; a daughter Darby and son Parker.

Heath is a volunteer coach



for the Washington School girls soccer team as well as coaching in the Greenville Youth Soccer Association.

Heath enjoys duck hunting and gardening in his spare time. ■

2015 MISSISSIPPI LEVEE BOARD

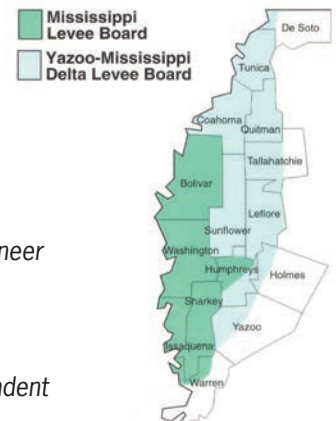


COMMISSIONERS:

- 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*

STAFF:

- Peter Nimrod**, *Chief Engineer*
- Robert M. Thompson**, *Assistant Engineer*
- Heath Douglas**, *Attorney*
- Judy B. Ross**, *Treasurer*
- Ginger Morlino**, *Secretary*
- Patrick Bolls**, *Maintenance Superintendent*
- Rick Boyd**, *Engineering Technician*



Charlie Tindall-Board Attorney Retires

Longest serving Board Attorney in the history of the Mississippi Levee Board



June 30, 2015 marked the retirement of long serving Mississippi Levee Board Attorney Charles S. Tindall, III. In 1981 Charlie succeeded his father, Charles S. "Chick" Tindall, Jr. as Board Attorney matching his record-setting 33-1/2 years of service to the Board.

Board President Fred Ballard said, "Charlie served this Board in so many ways, whether in Board meetings, doing title work at the courthouse for right-of-way or helping with getting laws passed at the State Legislature his advice and counsel and experience will be missed." ■

150 YEARS from Front Page

staff of devoted employees charged with keeping records and maintaining 212 miles of levee and 350 miles of interior streams within the district. This work includes maintaining the access road atop the mainline levee and making minor repairs as needed.

Each year the Mississippi Levee Board travels to Washington, D.C. to lobby our local Congressmen to ensure a steady stream of funds continue to be allocated to allow the much needed repairs, new construction and maintenance dredging.

Since its inception, the MR&T has cost the American taxpayers over \$14 billion, yet has prevented damages over \$652 billion, resulting in a 45:1 benefit to cost ratio, all but unheard of in present day times. In 2011, during the greatest flood of our recorded history, almost \$246 billion in damages was averted. Not one acre of ground flooded that was not supposed to flood and not one life was lost during this time due to high water. That is a great success story put into place almost 100 years ago by the engineers of the MR&T.

The MR&T is 89% complete. Congressional funding is critical in order for the rest

of the project to be built. The system was designed to withstand 8' more of water than we received in 2011 to reach the Project Design Flood. The Great Flood of 2011 carried 26% more water than 1927 and broke all flood elevation stages except that in Greenville, due to the 36 miles of cut-offs designed and built right upstream in the MR&T.

Our beloved Mississippi Delta is protected by a great marvel of engineering foresight and construction. The Mississippi Levee Board is committed to ensure that this protection continues for another 150 years.

2014 Annual Bus Inspection



Members of the 2014 Annual Levee Inspection take a photo in front of Harlow's Casino.

On November 6, 2014, the Mississippi Levee Board hosted its Annual Levee Inspection. This year's trip inspected the south portion of the levee system starting at Hwy 61 and the Yazoo Backwater Levee and proceeding north through Item 456L – Tara Seepage Control Project on the Brunswick Extension Levee and continuing north on the Mainline Mississippi River Levee through Item 463L – Levee Enlargement Project.

Lunch was served at Harlow's Casino, Greenville, Mississippi. ■

IN MEMORIAM: Matthew Taylor (1944-2015)



The Mississippi Levee Board Staff was saddened upon the death of Mr. Matthew Taylor. Matthew had retired in December 2013 after 15 years of service to the Levee Board as an equipment operator. ■

Levee Board Attends Meetings in D.C.



Cong. Harper with Mississippi Levee Board, Greenville Port and Greenville Mayor John Cox

The Mississippi Levee Board traveled to Washington, D.C., and met with the Mississippi Congressional Delegation during March 16-18, 2015. 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 all the Reset Items following the 2011 Flood. Funding requests for U.S. Army Corps of Engineers projects within the Mississippi Delta were presented to the Delegation.

The Board also heard testimony before the House Mississippi River Congressional Caucus on March 18. ■



Corey Horton with Cong. Bennie Thompson with Mississippi Levee Board



Sen. Roger Wicker with Mississippi Levee Board, Greenville and Rosedale Ports



Sen. Thad Cochran with Mississippi Levee Board



Sen. Thad Cochran with Fred Ballard & Peter Nimrod



Sen. Wicker with Mississippi Levee Board and Yazoo Mississippi Delta Levee Board

2015 Highwater Event

The first time River above Flood Stage in July in 80 years

Due to the above average rainfall in May and June, plus the heavy rainfall from Tropical Storm Bill in mid-June, and then the heavy rainfall in late June and early July, the Mississippi River was above floodstage in July. The last time the Mississippi River was above flood stage in July was in 1935 — 80 years ago. On July 16th the Mississippi Levee Board hosted a Flood Fight Organizational Meeting at the Levee Board office. Inspectors with the

Corps of Engineers and the Yazoo-MS Delta Joint Water Management District inspected the levee on that same day. This proved to be a good flood fight exercise for new flood fight levee inspectors that have never ridden before. We have not had to patrol the levee for flood fighting purposes since the Epic 2011 Flood.

The River was 2' to 3' above floodstage. This flooded most riverside cropland and riverside

access was mostly cut-off. We experienced a little seepwater, half of the relief wells started flowing, but no sandboils were discovered during this relatively low highwater event. Steele Bayou Structure was closed for well over 6 weeks (June 23rd – August 7th) resulting in a Backwater stage of 87.4' which flooded over 40,000 acres of cropland in the Backwater area on the protected side of the levee.

The Mississippi River crested



on July 26th at Arkansas City at 38.2' (134.86' m.s.l.); July 24th at Greenville at 50.7' (125.62 m.s.l.); and July 26th at Vicksburg at 46.0' (92.23' m.s.l.). On August 1st we were still above flood stage at Greenville. This is the first time we have been above flood stage in August in recorded history — since 1901. ■



Above Greenville Relief Well Flowing



Buck Chute Relief Wells flowing



Flood Fight Organizational Meeting



Flood Fight Organizational Meeting



Flooded Camper at Lake Beulah



Francis Relief Well Flowing, Seepwater in Field & Irrigating



Francis Relief Wells Flowing



Seepwater near the Hanger Building in Greenville



Greenville Boat Ramp Flooded



Lake Beulah flooding



Lake Beulah flooding



Magna Vista Relief Well flowing



Road Closed - Laney's Camp



Road Closed - Lower Lake Ferguson Road



Road closed - Ziegler Road



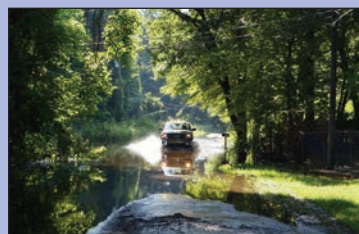
Road Closed Signs at Wayside



Steele Bayou Drainage Structure



Trop Casino - lower parking area flooded



Truck driving over flooded Lake Ferguson Road



Water against the Levee

BACK IN TIME: James Seguine Allen

Chief Engineer 1922-1946

James Seguine Allen was born in 1865 — the same year the Mississippi Levee Board was established. Allen spent his youth in Warren County where his family owned 7,000 acres of land that came to the family in a Spanish Land Grant in 1790. In 1922 at the age of 57 he was named the 11th Chief Engineer for the Mississippi Levee Board. Prior to his appointment, he worked for the Mississippi River Commission. He endured the tragic 1927 Flood and, unbelievably, was not run out of town nor hung from a tree! Instead, he stayed on as Chief Engineer for 19 more years until he retired in 1946 at the age of 81. His 24 year tenure as Chief Engineer has only been eclipsed by Newman Bolles who served 33 years from 1956-1989.

During his tenure as Chief Engineer, he saw the majority of the construction improvements on the Levee and the Mississippi River following the passage of the 1928 Flood Control Act which established the Mississippi River & Tributaries Project. Following the 1927 Flood, the entire length of the levee was raised an average of 10'. The Corps of Engineers designed (through the help of Mississippi Levee Board Assistant Engineer W.E. Elam) and, from

1933 until 1935, built the Mississippi River Cut-Offs which included shortening the River 36 miles near Greenville by utilizing 3 cut-offs — Ashbrook, Tarpley & Leland. He saw the construction of floodways down in Louisiana and up in Missouri. He was instrumental in helping push for and passing the Flood Control Act of 1936 and 1941. In the early 1940s he saw the Corps of Engineers begin building the flood control reservoirs along the headwaters of the Yazoo River. He oversaw the safe passage of the 1937 Flood which was the third highest flood in history following the devastating 1927 Flood and the Epic 2011 Flood.



James Seguine Allen
Chief Engineer – 1922-46

J.S. Allen served through one of the lowest moments in the 150 year history of the Mississippi Levee Board with the failure of the levee and the resulting tragedy of the 1927 Flood. But he also helped bring about the beginning of the MR&T Project which transformed our levee system into one of the finest comprehensive flood control systems in the world. The improvements made during his tenure helped us pass the Epic 2011 Flood without a levee failure.

J.S. Allen died in 1948 at the age of 83. ■

Visit us online at: www.msleveeboard.com



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