



*The mission of the Mississippi Department of Environmental Quality is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.*

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# Mississippi Department of Environmental Quality Environmental News

VOLUME 12 ISSUE 3

SEPTEMBER 2015

## Public Meeting Held on Draft Initial Funded Priorities List

A meeting was held in Biloxi on September 10 to collect comments from the public about the draft Initial Funded Priorities List (FPL). The list released by the Gulf Coast Ecosystem Restoration Council on August 13 focuses on 10 key watersheds across the Gulf for restoration following the Deepwater Horizon oil spill. Using funds from the settlement with Transocean Deepwater Inc., the Council is seeking to provide near-term, on-the-ground ecosystem benefits, while also conducting planning activities designed to build a foundation for future success as additional funds become available from other parties.

This draft FPL would fund approximately \$139.6 million in restoration activities such as hydrologic restoration, land conservation and planning for large-scale restoration projects. In addition, the Council is reserving approximately \$43.6 million for implementation of additional activities in the future, subject to further Council review.



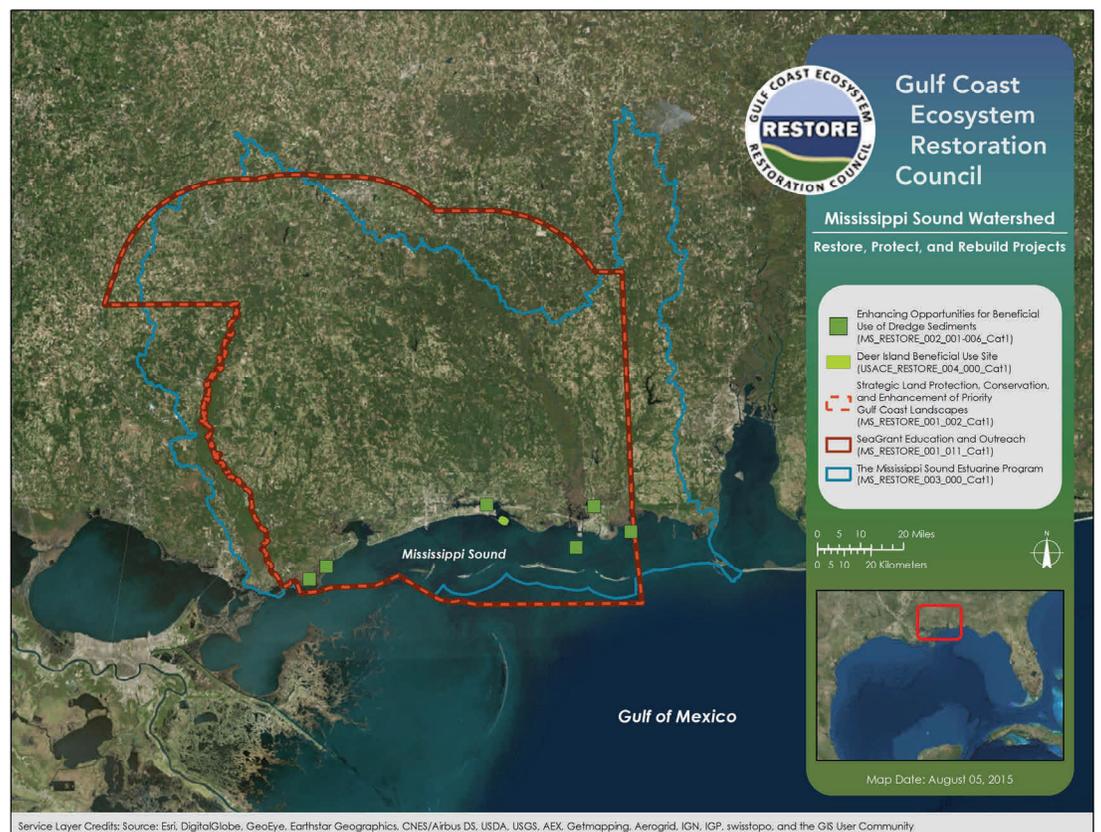
MDEQ Executive Director Gary Rikard (center) addresses the crowd at the Biloxi meeting. More than 125 people attended with approximately 23 comments.

The proposed Mississippi projects that are included on the draft FPL include:

- ▶ Land Conservation (~\$15.5 million).
- ▶ Education and Outreach of the benefits of Land Conservation (~\$750,000).
- ▶ The Mississippi Sound Estuarine Program (~\$2.3 million).
- ▶ Enhancing Beneficial Opportunities for Use of Dredge Sediments (~\$2.2million).

The draft FPL is available for review and comment through September 28, 2015. Comments can also be submitted online at [www.RestoreTheGulf.gov](http://www.RestoreTheGulf.gov); by mail to Gulf Coast Ecosystem Restoration Council, Attention: Draft FPL Comments, Hale Boggs Federal Building, 500 Poydras Street, Suite 1117, New Orleans, LA, 70130; by e-mail to [draftfplcomments@restorethegulf.gov](mailto:draftfplcomments@restorethegulf.gov).

Comprehensive information about all aspects of Mississippi's restoration efforts can be found at [www.restore.ms](http://www.restore.ms).





## Triennial Review of Mississippi's Water Quality Standards Comment Period

The Clean Water Act requires all states to develop, review, revise, and adopt water quality standards every three years--the Triennial Review. Water quality standards must include three components: (1) the designated uses of the state's water bodies, (2) the water quality criteria (narrative or numeric) necessary to protect those uses, and (3) antidegradation provisions to protect water quality.

The modifications proposed for the 2015 Triennial Review include:

- ▶ Water quality criteria for Mississippi's recreational waters have been updated based on EPA's most recent recommendations that were released in 2012. Based on these recommendations, MDEQ proposes to update the bacterial indicator for freshwaters from the current indicator, fecal coliform, to the recommended indicator, *E.coli*.
- ▶ Based on the latest science and recommendations within EPA's 2012 guidance for Recreational Water Quality Criteria, seasonal criteria for bacteria are no longer recommended. Therefore, MDEQ proposes to remove the seasonal bacteria option from the following water body classifications: Fish and Wildlife Support and Public Water Supply. Under the proposed modifications, waters within these classifications would have the same criteria for *E.coli* throughout the entire year.
- ▶ The pH standard was slightly modified to clarify the intent of the standard.

MDEQ proposes the above listed modifications to water quality criteria for recreation based on the latest guidance from EPA. The recommendations from EPA rely on the latest research and science, including studies that show a link between illness and fecal contamination in recreational waters. These studies are based on the use of two bacterial indicators, *E.coli* and *enterococci*. The new criteria are designed to protect primary contact recreation, including swimming, bathing, surfing, water skiing, tubing, water play by children, and similar water contact activities where a high degree of bodily contact with the water, immersion and ingestion are likely. MDEQ has chosen the recommended values for *E.coli* to replace the current criteria values for fecal coliform.

*Coliforms* are bacteria that live in the intestines of warm-blooded animals. *Fecal coliform* bacteria are a kind of coliform associated with human or animal wastes. *E.coli* is a portion of the fecal coliform measurement. However, *E.coli* has performed better than fecal coliform as an indicator showing a relationship to illness. For permitted discharges, the use of *E.coli* as the indicator organism will have additional benefits. The use of *E.coli* should also reduce incidences of false positives. Fecal coliform measurements can be affected by multiple sources and may show high results even if the particular organisms present and measured are not the specific organisms that would cause a risk to human health.

In addition to the change in indicator, the latest EPA guidance does not include recommendations for seasonal bacteria values. Studies completed did not show a statistical difference in the chances of becoming ill between exposure due to incidental contact activities such as wading (typically described as Secondary Contact Recreation) and exposure due to higher contact activities such as swimming (Primary Contact Recreation). Therefore, the proposed modifications state that MS's water body classifications that previously had seasonal bacteria values will now have the same criteria for *E.coli* for the entire year.

MDEQ believes the proposed modifications are based on sound science and will allow for more effective and improved protection of human health. The public comment period for the triennial review of water quality standards will begin on October 1, 2015. Any interested party may submit comments regarding the proposed modifications in writing to the Mississippi Department of Environmental Quality, Attn: Kim Caviness-Reardon, P.O. Box 2261, Jackson, Mississippi, 39225. Written comments must be provided by the close of business on Thursday, November 5, 2015. Comments may also be provided at the public hearing scheduled at 6 p.m. on Thursday, November 5, 2015, in the Commission Hearing Room at the MDEQ office located at 515 East Amite Street in Jackson.

An electronic copy of the proposed water quality standards along with additional information on the proposed triennial review modifications can be found on the MDEQ website at <http://bit.ly/1Qfip43>. For further information, contact Kim Caviness-Reardon at [Kim\\_Caviness-Reardon@deq.state.ms.us](mailto:Kim_Caviness-Reardon@deq.state.ms.us) or Alina Young at [Alina\\_Young@deq.state.ms.us](mailto:Alina_Young@deq.state.ms.us).



### **Billy Van Devender Selected for Ole Miss Alumni Hall of Fame**

Billy Van Devender, a member of the Commission on Environmental Quality, has been selected to be inducted into the University of Mississippi's Alumni Hall of Fame this year. Created in 1974, the Hall of Fame honors select alumni who have made an outstanding contribution to their country, state or the University of Mississippi.

Van Devender graduated from the University of Mississippi with a bachelor of science in civil engineering in 1971, and was a starting defensive back on the 1970 Sugar Bowl champion football team. He received his MBA in 1973 from Southern Methodist University, and then joined the Central Intelligence Agency. After four years with the CIA, he moved back to Mississippi to begin his business career in the oil and gas industry, followed by investments in real estate development and the forest product industry where his family is now primarily in timber management and lumber manufacturing.

Van Devender has contributed a substantial amount of philanthropic work to his community. He has served as commissioner for the Mississippi Department of Environmental Quality since 1998, and was recently elected Chairman. He joined the board of the Mississippi Fish and Wildlife Foundation in 1997. He served on the board of Mississippi's Young Life organization and the Mississippi Baptist Health System. He is an active board member of But God Ministries, an organization that works to build sustainable living communities in Haiti, and he is a member at First Baptist Church of Jackson. In past years, Van Devender was a member of the Young Presidents' Organization, the World Forestry Center and the Chief Executive Organization.

Van Devender and his wife, Mollie Magee, have been married for 36 years and have four children: Laura, William, Anne and Clinton. His favorite activities are spending time with his four grandchildren, hunting, golf and timber business.

*(Information courtesy of Ole Miss Alumni Association)*

## NetDMR Training Offered in October and November

MDEQ is implementing the use of EPA's NetDMR for the submittal of Discharge Monitoring Reports (DMRs). Any permittee in the State of Mississippi that is required to submit DMRs in order to demonstrate compliance with their NPDES, Pretreatment, or General Permit, is eligible to submit electronic DMRs.

MDEQ will be offering classroom training sessions for the regulated community to provide an overview of NetDMR including registration, data entry, and importing data. Each class will include a hands-on training exercise that will allow permittees to register and submit a DMR to the training environment.

Classes are limited to 25 people, and registration is required. To register, please contact Annette Brocks at 601-961-5252 or by email at [Annette\\_Brocks@deq.state.ms.us](mailto:Annette_Brocks@deq.state.ms.us). Please include name, phone number, and the class to attend. If more than one person is attending from a company, each person must register separately.

### **Class #1 (full)**

Date: October 7, 2015, 8:30 am-11:30 am

Location: McLendon Library, Media Center Classroom # 3, Hinds Community College, Raymond.

### **Class # 2 (full)**

Date: October 7, 2015, 1:00 pm-4:00 pm

Location: McLendon Library, Media Center Classroom # 3, Hinds Community College, Raymond.

### **Class # 3**

Date: October 12, 2015, 8:30 am-11:30 am

Location: McLendon Library, Media Center Classroom # 3, Hinds Community College, Raymond.

### **Class # 4**

Date: October 12, 2015, 1:00 pm-4:00 pm

Location: McLendon Library, Media Center Classroom # 3, Hinds Community College, Raymond.

### **Class #5 (full)**

Date: November 3, 2015, 8:30 am-11:30 am

Location: Fleming Education Center, Room 302, USM Gulf Park Campus, Long Beach.

For any questions or additional information, please contact Kayra Johnson, Data Administration Branch, at 601-961-5106 or via email at [Kayra.Johnson@deq.state.ms.us](mailto:Kayra.Johnson@deq.state.ms.us).

**Class # 6**

Date: November 3, 2015, 1:00 pm-4:00 pm

Location: Fleming Education Center, Room 302, USM Gulf Park Campus, Long Beach.

**Class #7**

Date: November 4, 2015, 8:30 am-11:30 am

Location: Fleming Education Center, Room 302, USM Gulf Park Campus, Long Beach.

**Class # 8**

Date: November 4, 2015, 1:00 pm-4:00 pm

Location: Fleming Education Center, Room 302, USM Gulf Park Campus, Long Beach.

**Class #9 (full) –Participants will need to bring own laptop**

Date: November 16, 2015, 8:30 am-11:30 am

Location: Trotter Seminar Room, Center for Advanced Vehicular Systems (CAVS), Mississippi State University, Starkville.

**Class # 10- Participants will need to bring own laptop**

Date: November 16, 2015, 1:00 pm-4:00 pm

Location: Trotter Seminar Room, Center for Advanced Vehicular Systems (CAVS), Mississippi State University, Starkville.

**Class # 11 Participants will need to bring own laptop**

Date: November 17, 2015, 8:30 am-11:30 am

Location: Trotter Seminar Room, Center for Advanced Vehicular Systems (CAVS), Mississippi State University, Starkville.

**Class # 12- Participants will need to bring own laptop**

Date: November 17, 2015, 1:00 pm-4:00 pm

Location: Trotter Seminar Room, Center for Advanced Vehicular Systems (CAVS), Mississippi State University, Starkville.

## MDEQ Sponsors Sustainability Workshops

This year MDEQ's enHance program is sponsoring a series of workshops to promote waste and energy reduction practices. Workshops were conducted in July and August and a third workshop, *Practical Energy Management*, will be held on September 29.

On July 30, MDEQ partnered with Toyota Motor Manufacturing Mississippi to host a workshop, *Optimizing Operations through E3*, at the Toyota manufacturing plant in Blue Springs. E3, which stands for Energy-Environment-Economy, focuses on sustainable manufacturing practices that benefit both the environment and the bottom line of manufacturers. Workshop topics included changes to the ISO 14001 environmental management standard, Toyota's energy reduction efforts through Energy Star, solid waste-to-landfill reduction opportunities, and guidance on how to reduce the environmental footprint of operations. In addition to presentations, participants were able to view how Toyota is implementing these principles into everyday operations.



On August 27, MDEQ partnered with the Mississippi Development Authority's Energy and Natural Resources Division to sponsor a workshop on building energy reduction opportunities. There are approximately 346,000 industrial facilities and 5.6 million commercial buildings in the United States. It is estimated that 30% of energy used in buildings is wasted, and it has been found that a 10% reduction in energy use can be achieved with little or no cost. If the energy efficiency of commercial and industrial building improved by 10%:

- ▶ the collected annual savings would be \$40 billion and
- ▶ the amount of greenhouse gas emissions prevented would equal the emissions from about 49 million vehicles – or about 19% of all registered highway vehicles in the United States. (Source: <http://www.energystar.gov/buildings/about-us/facts-and-stats>.)

Workshop participants learned about Heating, Ventilation, and Air Conditioning (HVAC) Management, Lighting Technologies, Energy Measurement, and other pertinent topics. Successful case studies on building energy reduction projects were presented.



A third workshop in this series, *Practical Energy Management*, will be held on September 29 at the CAVS Extension Center in Canton. Topics will include Motors, Chillers, Boilers, Air Compressors, Lighting and Heating, Ventilation and Air Conditioning. More information on this workshop can be found in the registration flyer in this newsletter (next page). Information about future workshops will be available at [www.enhance.ms](http://www.enhance.ms) and upcoming editions of this newsletter.

# Practical Energy Management

## Low-cost energy solutions for high payback



**When:**  
**September 29, 2015**  
**8:00 — 4:30**

**Where:**  
Mississippi State University's  
CAVS Extension Center  
153 Mississippi Parkway  
Canton, MS 39046

**Who Should Attend:**  
Managers and Staff  
responsible for energy management  
Maintenance,  
Engineering,  
Production,  
Environmental & Safety,  
Accounting

- Cost:**
- No Cost to Attend
  - Advance Registration Required
  - Sponsored by the enHance Stewardship Program



Facility host:  
Mississippi State



- Reduce your energy usage  
⇒ Good for your bottom line  
⇒ Good for the environment



**Instructor:**  
**Dr. Joe Davis, PE, CEM, CEA, CxA**

Experience includes 29 years of engineering and energy training and projects in public and private sectors.

### Energy Training Topics

- ◆ Lighting
- ◆ Heating, Ventilation, Air Conditioning (HVAC)
  - ◆ Chillers & Cooling Towers
  - ◆ Boilers, Steam & Hot Water Systems
  - ◆ Motors
  - ◆ Compressed Air

Past attendees have assessed an average savings of \$20,417 within the year following this training.

### Participant Comments

- ◆ *“Translated difficult concepts into practical and useful knowledge via good handouts, checklists and demos that can be immediately put to use.”*
- ◆ *“Instructor’s approach of less theory and more applications is right on.”*
- ◆ *“Overall, one of the best technical workshops I’ve attended in years!”*

[Click here](#) to Register.

No cost, but register early as seating is limited.

Registration ends September 25.

For additional information contact:

Mary Jean Gates

[maryjeangates@bellsouth.net](mailto:maryjeangates@bellsouth.net)

662-846-0448



## Join enHance!

MDEQ is accepting applications for the enHance program from July 1 to September 30. Check out the enHance website for information on current members, a calendar, training workshop materials, and information on how to apply.

enHance is open to all types of facilities with a separate initiative for municipalities.

enHance is a voluntary initiative to recognize environmental leaders in Mississippi. Participating organizations make a commitment to address and achieve on-going environmental improvements. More information, benefits, an application, and application instructions can be found at [www.enhance.ms](http://www.enhance.ms). Send the completed application to [enhance@deq.state.ms.us](mailto:enhance@deq.state.ms.us).



enHance hosts an annual training workshop and awards luncheon along with other educational opportunities throughout the year.

# Greater Metro Area Business E-Waste Collection & Paper Shred Day

**Friday, October 23, 2015**

**8:00 AM - 2:00 PM**

at:



MISSISSIPPI FARMERS MARKET

**929 High Street  
Jackson, MS 39202**

## Contact Info

### Greater Jackson Chamber Partnership

Ms. Niki Carr Lowery  
(601) 948-7575, ext. 234  
nlowery@greaterjacksonpartnership.com

### Keep Jackson Beautiful

Ms. Marsha Hobson  
(601) 398-5219  
keepjack@bellsouth.net

### Iron Mountain

Mr. Corey Johnson  
(601) 324-6727  
Corey.Johnson@ironmountain.com

### Magnolia Data Solutions

Mr. Christopher Lumaghini  
(601) 919-0062  
christopher@magnoliadatasolutions.com

## Acceptable Electronics

Computers, Desktop Copiers, Computer Components, Fax Machines, Radios, Televisions, Cell Phones, Desk Phones, VCR Players, DVD Players, Electronic Games, Monitors, Keyboards, Printers, Laptops, Scanners, and Stereos/Radios

**\$2 Fee for LCD Monitors**

**\$5 Fee for CRT Monitors**

**\$15 Fee for ALL Televisions**

**No cost for other items!**

Contact Magnolia Data Solutions (see Contact Info) to inquire about items not listed above or make arrangements for large loads.

## Event Information

- Businesses or individuals from the Jackson Metro area (Hinds, Madison, & Rankin County) may participate.
- All traffic in the drop-off area is **one-way only!**
- For your safety, stay in your vehicle as event staff unload materials from your vehicle.
- **♻️ All materials collected will be recycled! ♻️**
- The fee charged for televisions and monitors is to pay for the proper handling of hazardous components such as lead and mercury contained in these devices.
- Paper and document shredding will be available and provided by Iron Mountain. Please direct inquiries to the them (see Contact Info) if you have other document destruction/handling needs.

## Sponsored by:

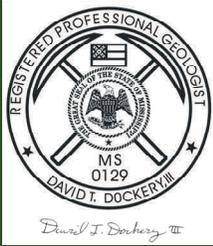


## National Prescription Drug Take-Back Day

The next Drug Take-Back Day sponsored by the Drug Enforcement Administration will be September 26 nationwide. Use this website to find local drop off locations: [http://www.deadiversion.usdoj.gov/drug\\_disposal/takeback/index.html](http://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html).

The National Prescription Drug Take-Back Day aims to provide a safe, convenient, and responsible means of disposing of prescription drugs, while also educating the general public about the potential for abuse of medications. In addition, taking advantage of this opportunity keeps prescription medication out of the household waste stream and from being flushed down toilets.





## A Fourth Madison County Earthquake

David T. Dockery III, RPG, and Barbara Yassin, Office of Geology

The fourth in a series of earthquakes this year in Madison County struck southwest of Canton, Mississippi, a little after 1:00 pm on Monday, August 17, 2015. Media outlets began receiving calls of the event around 1:30 pm that afternoon. WLBT-TV cited a Gluckstadt resident as saying: “she felt her whole house shake about 2 or 3 seconds.” It would be several hours before the U.S. Geological Survey confirmed that a magnitude 2.6 earthquake had occurred at 1:00 pm, with an epicenter near Germantown Middle School located five miles north of Madison. Roslyn Anderson of WLBT-TV interviewed Principal Wesley Quick who was inside Germantown Middle School when he heard a loud boom followed by slight shaking. Minutes after the earthquake, the school took the opportunity to conduct an earthquake drill.

Figure 1 (at top) gives the epicenters of the four Canton area earthquakes and the fault attributed to them. The buried fault is also shown in cross section at bottom. Figure 2 compares the felt reports received at the U.S. Geological Survey earthquake report website between the third and fourth Canton earthquakes. The third earthquake, with a magnitude of 3.2, was the most widely felt of the four; the fourth was the least felt. Figure 3 compares the seismograms of earthquakes 3 and 4 as recorded by the AS1 seismograph of Louis Lyell at his home on Old Canton Road in Jackson. The fourth earthquake seismogram at right, with vertical units extending to 100 top and bottom, is reduced to match the scale of the larger earthquake, with vertical units extending to 240 top and bottom. The vertical scale measures amplitude (wave height) in digital units, which is a relative scale in an AS1 seismogram. According to Dr. Jamie Harris, Professor of Geology at Millsaps College, the shaking for the magnitude 3.2 earthquake was about four times greater than the magnitude 2.6 earthquake, and the energy release was about eight times greater.

# Madison County, Mississippi 2015 Earthquakes with Volcano Cross-Section

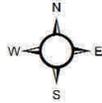


Figure 1

- Epicenters (uncertainty ~4 km horiz.)
- fault
- Interstate Highway

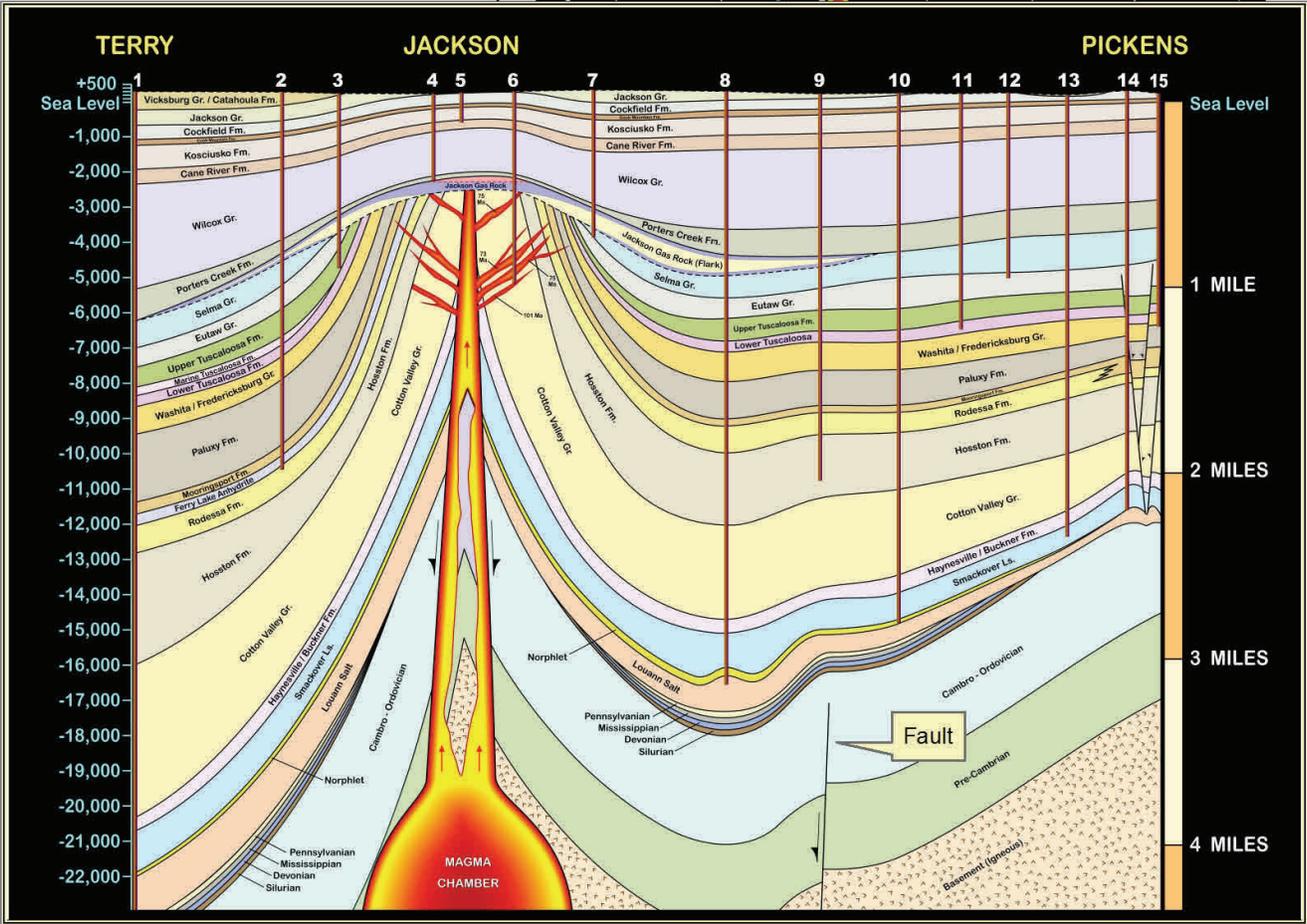
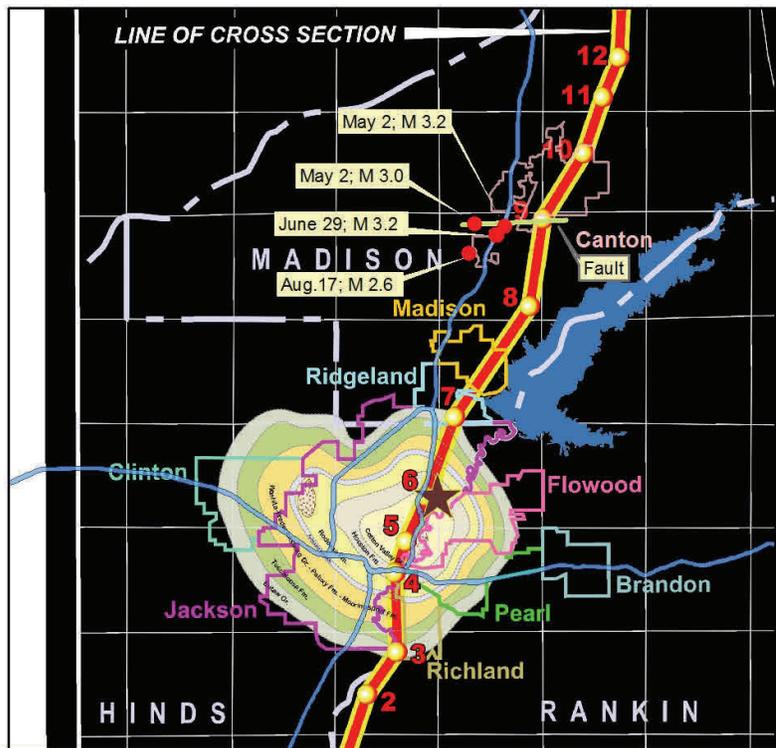
Figures from Steve Walkinshaw and Candy Goolsby published in Dockery, 2008, "Office of Geology Cross Section of Jackson Defines Inactive Volcano:" Environmental News, July 2008, v. 5, issue 7, p. 4.



GIS by Barbara Yassin, MDEQ 8/17/2015

Epicenter and Cross Section Location Map

5 2.5 0 5 Miles



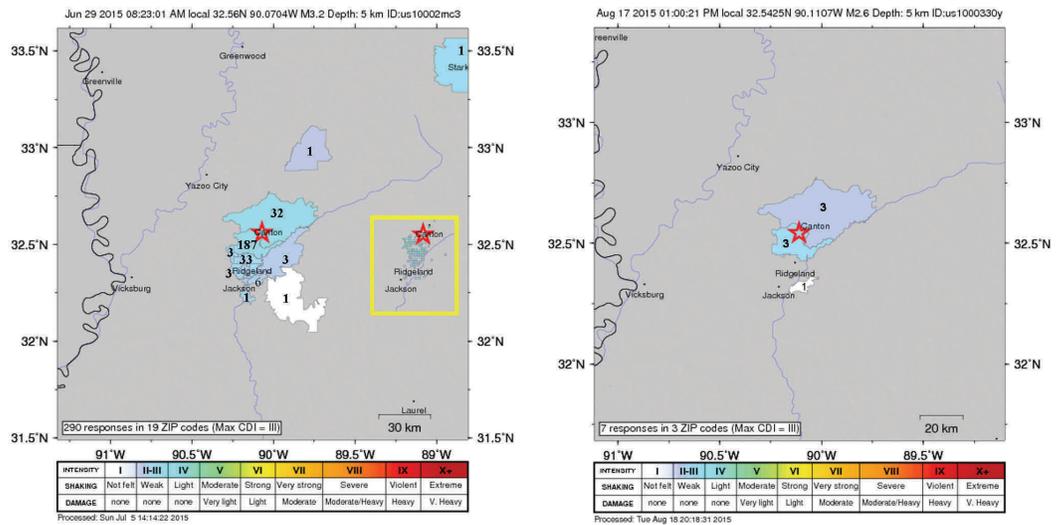


Figure 2. Composite of the USGS Community Internet Intensity Map for the third Canton, Mississippi, earthquake, June 29, 2015, 08:23:01 AM local time (left) and the fourth Canton earthquake, August 17, 2015, 01:00:21 PM local time (right). Responses by Zip Code for the fourth earthquake: Madison 39110, 3 responses; Canton 39046, 3 responses, and Flowood 39232, 1 response. The red star indicates the earthquake epicenter.

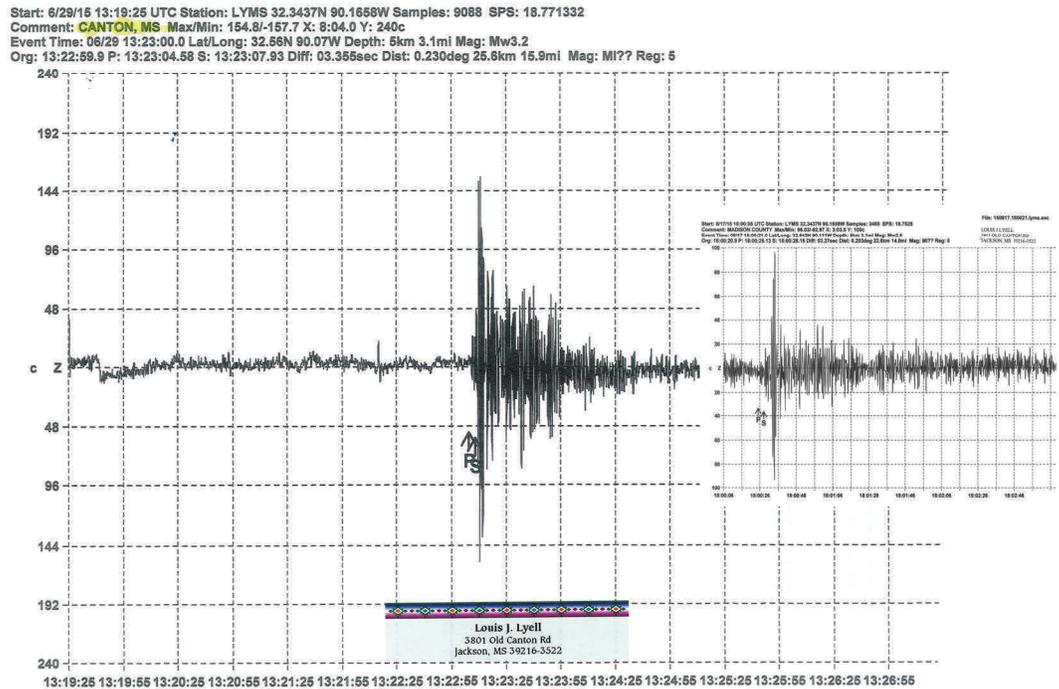


Figure 3. Seismogram of the 3.2 magnitude June 29, 2015, Canton earthquake at left. At right is the reduced to scale seismogram of the 2.6 magnitude August 17, 2015, Canton earthquake. Both seismograms are from the seismograph of Louis Lyell on Old Canton Road, Jackson, Mississippi.

Readers are encouraged to report their observations if they feel earthquakes in the future. One good way to do that is to use the “Did You Feel It?” feature on the website of the U. S. Geological Survey’s Earthquake Hazards Program, <http://earthquake.usgs.gov/>.

## MDEQ ENVIRONMENTAL ACTION LINKS



- Draft permits currently at public notice, <http://opc.deq.state.ms.us/publicnotice.aspx>.
- Permits and certificates issued in the last 90 days, [http://opc.deq.state.ms.us/report\\_permits.aspx](http://opc.deq.state.ms.us/report_permits.aspx).
- General permit coverages issued in the last 90 days, [http://opc.deq.state.ms.us/report\\_gnp\\_issued.aspx](http://opc.deq.state.ms.us/report_gnp_issued.aspx).
- Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division, [http://opc.deq.state.ms.us/report\\_gnp\\_notice.aspx](http://opc.deq.state.ms.us/report_gnp_notice.aspx).
- List of the 401 Water Quality Certifications currently at public notice, [http://opc.deq.state.ms.us/report\\_wqc\\_public\\_notice.aspx](http://opc.deq.state.ms.us/report_wqc_public_notice.aspx).
- List of the compliance inspections recently conducted, [http://opc.deq.state.ms.us/report\\_eced\\_tasks.aspx](http://opc.deq.state.ms.us/report_eced_tasks.aspx).
- Orders issued by the Mississippi Commission on Environmental Quality, [http://opc.deq.state.ms.us/report\\_orders.aspx](http://opc.deq.state.ms.us/report_orders.aspx).

## CONNECT WITH MDEQ



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## PICTURE OF THE MONTH

Yazoo River at  
Greenwood.

Taken by Shawn Clark,  
Surface Water Division.

