



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

VOL. 14 ISSUE 9

OCTOBER 2017

EPA Administrator Visits Mississippi

On October 12, U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt met with Governor Phil Bryant, farmers, and other state leaders to discuss ways to strengthen partnerships with EPA.



MDEQ Executive Director Gary Rikard, Administrator Scott Pruitt, Governor Phil Bryant, and EPA Region 4 Administrator Trey Glenn.

"Our job at EPA is not to look at folks in Mississippi as adversaries, but as partners," said Administrator Pruitt. "It is of the utmost importance to continue to collaborate with state and local leaders to provide American farmers and ranchers the regulatory certainty they deserve."

"Mississippi farmers are the original conservationists," said Gov. Bryant. "I am grateful for Administrator Pruitt's commitment to working with us to develop strategies that will strengthen

Administrator Pruitt and Governor Bryant meeting with representatives of Mississippi's various agricultural sectors.

Information sourced from EPA.

agriculture in Mississippi while protecting our environment."

Administrator Pruitt began his trip with a stop at the State Capitol where he met with Governor Bryant and other state leaders. Following their meeting, Administrator Pruitt and Governor Bryant hosted a roundtable along with Mississippi Commissioner of Agriculture and Commerce Cindy Hyde-Smith, Mississippi Farm Bureau Federation President Mike McCormick, MDEQ Executive Director Gary Rikard, and other stakeholders to discuss EPA's recent proposal to rescind the 2015 "Waters of the United States" (WOTUS) rule to help ensure regulatory certainty and prioritize keeping America's water clean.



2017 Mississippi Restoration Summit Schedule

November 14, 2017 | Mississippi Coast Coliseum & Convention Center

The Mississippi Department of Environmental Quality invites you to attend the 2nd Annual Mississippi Restoration Summit on November 14, 2017, at the Mississippi Coast Coliseum & Convention Center in Biloxi.

The Restoration Summit is an opportunity for any member of the public to learn about current restoration projects in Mississippi and the announcement of new projects for 2017. For questions about the 2017 Restoration Summit, please email info@restore.ms.

The Restoration Summit is open to the public from 5:00 pm to 8:30 pm, and will include the 2017 annual public meeting of the Mississippi Trustee Implementation Group (MS TIG). Registration to attend the Restoration Summit is not required.

OPEN HOUSE:	5:00 PM – 8:30 PM The Restoration Summit will feature an Open House where you are invited to learn about current and planned restoration activities. Information on new and current projects will be available as well as representatives from various local, state, and federal organizations.
SUMMIT KICK-OFF:	6:30 PM – 7:30 PM Hear from MDEQ leadership about current restoration projects in Mississippi and the announcement of new projects for 2017.
STAKEHOLDER CONVERSATIONS:	7:30 PM – 8:30 PM Participate in discussions to inform future project planning.

In addition to the modules outlined above, MDEQ is also offering two educational breakout sessions: Restoration Finance and Restoration through Resource Management. Participation in both educational breakout sessions is open to the public. Registration is required for the educational breakout sessions.

BREAKOUT SESSION 1	2:15 PM – 3:15 PM	Procurement Standards (2 CFR 200) and Contracting Workshop
RESTORATION FINANCE:	3:15 PM – 5:15 PM	Waste, Fraud, Abuse*
*CPE credit hours available pending approval of presentation materials by Mississippi State Board of Public Accountancy.	This session will provide information for financial professionals, contractors, and the general public about regulations and standards that govern the funding of restoration projects.	
*MDEQ has applied to the MS Commission on Continuing Legal Education for approval of this course or a portion thereof for a maximum of three hours of credit.	Registration information is available at www.restore.ms .	
BREAKOUT SESSION 2	3:15 – 5:15 pm	Water Quality Land Conservation Beneficial Use/Marsh Restoration Oysters
RESTORATION THROUGH RESOURCE MANAGEMENT	This session will occur at the same time as the Restoration Finance session and will provide information about how Mississippi is achieving restoration within a variety of resources.	
*PDH credit hours available.	Registration information is available at www.restore.ms .	
*MDEQ has applied to the MS Commission on Continuing Legal Education for approval of this course or a portion thereof for a maximum of two hours of credit.		

Office of Pollution Control Reorganization

Last month's [newsletter](#) detailed the changes to the structure of three divisions within MDEQ's Office of Pollution Control—the Environmental Permits Division (EPD), the Environmental Compliance and Enforcement Division (ECED), and the Waste Division. For more detail on where staff are located, a copy of the agency's organizational chart can be found [here](#).

This month's newsletter features short profiles of the managers within those three divisions. There are familiar faces in new positions along with several new managers.

Environmental Permits Division

Jeffrey Bland

Jeffrey is Manager of the Air I Branch in the Environmental Permits Division. Previously he worked in the New Standards Group in the Air Division. He is originally from Cayce, Mississippi, and earned a BS degree in Chemical Engineering from Mississippi State University. He's been with MDEQ for 10 years.



Kayra Johnson

Kayra is serving as the Manager of the Air II Branch in EPD. She's been with the agency since January of 1997, and headed the Data Administration Branch in ECED before accepting her present position. She earned a BS in Chemical Engineering and an MS in Environment Engineering from the University of Mississippi. She was born and raised in the Republic of Panama, and has been a Mississippi resident for the past 25 years.



Tracy Tomkins

Tracy is heading up EPD's Water I Branch, and she served previously as the head of the Agricultural Branch. She has worked for MDEQ for 20 years and earned a BS in Civil Engineering from Mississippi State University. Tracy is originally from Vicksburg and currently lives in Brandon.



Becky Nester

Becky is the new head of the Water II Branch in EPD. Previously, she was Manager of EPD's Metals and Metal Manufacturing Branch. She earned a BS in Chemical Engineering from Mississippi State University and has worked for MDEQ for 21 years. She is a native of Jackson and lives in Madison.

**Bradley Crain**

Bradley heads the Municipal Branch within EPD. His prior position within EPD was as the Manager of the Municipal and Private Facilities Branch. He's worked for the agency for 14 years and earned a BS in Biological Engineering from Louisiana State University. He is originally from Franklinton, Louisiana.

**Florance Bass**

Florance is the Manager for the 401/Stormwater Branch. Previously she headed the Water Quality Certification Branch. She is originally from Sand Hill in Greene County and earned a BS in Biological Engineering from Mississippi State University. She's been with the agency for 18 years.

**Adam Smith**

Adam has been with MDEQ for more than 28 years most recently as an Environmental Engineer in EPD's enSite Branch. He was just named as the head of EPD's Support Branch. Adam is originally from Amory and earned a BS in Chemical Engineering from Mississippi State University.



Environmental Compliance and Enforcement Division

Tyler Hardy

Tyler is the Air I Branch Manager for ECED. He previously worked as an Environmental Engineer in ECED's Energy and Transportation Branch. He is originally from Byram and has worked for MDEQ for nine years. He earned a BS in Civil and Environmental Engineering from Mississippi State University.



Michelle Root

Michelle is the new Manager of ECED's Air II Branch. Under the old structure she was head of ECED's Timber and Wood Products Branch. She has worked for the agency for 13 years and is originally from Gulfport. She has a BS in Chemical Engineering from Mississippi State University.



Danny Beasley

Danny has assumed the role as head of ECED's Water I Branch. He has been with MDEQ since 2008, and worked in ECED's Construction and Building Materials Branch. Danny lives in Brandon and earned a BS in Civil Engineering from Jackson State University.



Michael Griffith

Michael is head of the Water II Branch in ECED. He previously worked in EPD heading up the Construction and Building Materials Branch. He has worked for MDEQ for more than 20 years and earned a BS in Biological Engineering from Mississippi State University. Michael was born and raised in Jackson and has lived in Brandon for the last 20 years.



Les Herrington

Les is head of ECED's Municipal Branch which is essentially the same under the division's previous structure. He has worked for MDEQ for 15 years and is originally from Greenwood. He has a BS in Chemical Engineering from Mississippi State University and an MS in Environmental Engineering from the University of Mississippi.

**Steve Bailey**

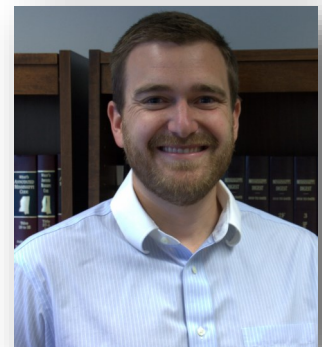
Steve is the new 401/Stormwater Manager after serving previously as the Manager of the Construction and Building Materials Branch. He has been with the agency for 20 years and earned an Environmental Engineering degree from Louisiana State University. Steve is originally from Vicksburg and still lives in Warren County.

**Brad Kennedy**

Brad's position remains the same in ECED as the Management Support Branch Manager. He has worked for MDEQ for 18 years and earned a BS in Civil Engineering from Mississippi State University. His hometown is Summit, Mississippi.

**Thomas Tynes**

Thomas is a new manager and heads up the Enforcement Branch within ECED. Previously he worked as an Environmental Engineer in the Energy and Transportation Branch. He has been with the agency for nine years. He has a BS in Mechanical Engineering from Mississippi State University and an MBA from Belhaven University. He currently lives in Brandon.



Waste Division

Trent Jones

Trent is Manager of the Solid Waste Permitting and Certification Branch. Previously he managed the Waste Tire and Annual Reporting Programs. He is originally from Meridian and earned a Chemical Engineering degree from Mississippi State University. He has been with MDEQ for more than 16 years.



Ethan Mayeu

Ethan is Manager of the Solid Waste Compliance and Enforcement Branch. This branch moved from ECED to the Waste Division where it was the Solid Waste and Mining Branch. He has been with the agency for 21 years and is originally from Gulfport. He has a BS in Biological Engineering from Louisiana State University.



Krista Caron

Krista was selected this year as the head of the Hazardous Waste Branch. She previously worked in EPD for the past 17 years dealing with air, water, hazardous waste, and non-hazardous waste permitting. She is originally from Pascagoula and has a BS in Biology from Mississippi State University, a BS in Chemical Engineering from the University of South Alabama, and an MS in Environmental Engineering from the University of Mississippi.



Taaka Scott-Bailey

Taaka is the Manager of the Grants and Management Support Branch. She has been with MDEQ for more than 16 years and most recently worked for the Office of Community Engagement. She is originally from Vicksburg and earned a BS in Biological Engineering from Mississippi State University.



Jennifer Milner

Jennifer is the State Recycling Coordinator and Manager of the Recycling and Waste Reduction Program Branch. Previously she managed the Organics Recycling Program, was the State Coordinator of the Landfill Methane Outreach Program, and the Biosolids Coordinator. She's been with the agency for almost 14 years and earned a BS in Biology from the University of Mississippi. She is originally from Clinton.



In addition to the manager positions listed, the Waste Division has a vacancy for the Manager of the Policy, Planning and Special Programs Branch. That person has not yet been selected.

A rubbish site regulated by the Waste Division.



Implementing Conservation Practices Reduced Polluted Run-off and Restored the Biological Integrity of Limekiln Creek

The following is a success story published by the Environmental Protection Agency.

Waterbody Improved

Organic enrichment from agricultural activity impacted water quality in Mississippi's Limekiln Creek. As a result, the Mississippi Department of Environmental Quality (MDEQ) placed Limekiln Creek on the state's 1998 Clean Water Act (CWA) section 303(d) list of impaired waters for aquatic life use impairment. Implementing best management practices (BMPs) as part of the Bogue Chitto Creek Watershed Project significantly reduced organic material entering Limekiln Creek. As a result, Limekiln Creek was assessed as attaining the aquatic life use in the state's 2014 CWA section 305(b) report and removed from the impaired waters list.

Problem

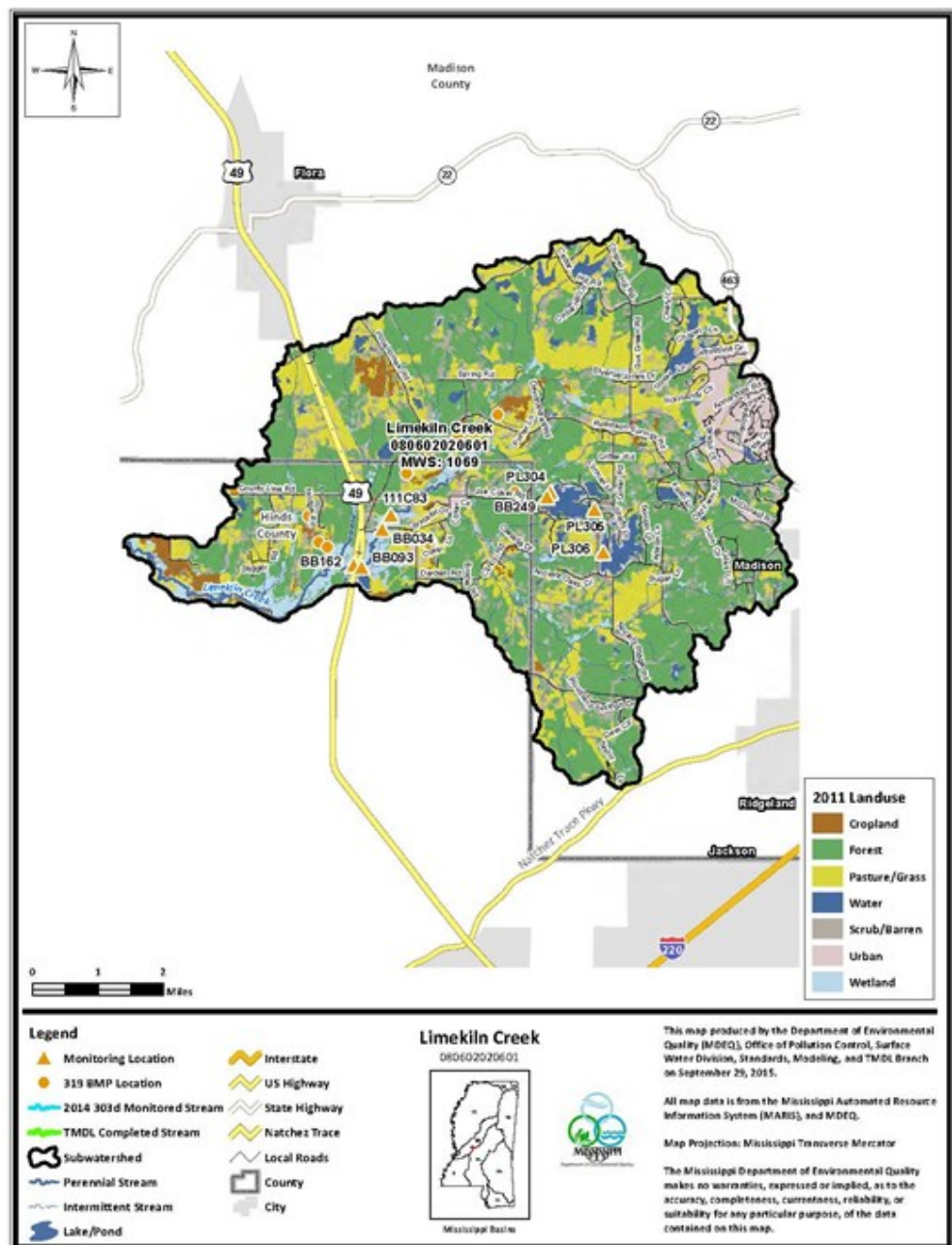
Limekiln Creek is in the Limekiln Creek Watershed in central Mississippi's Hinds and Madison counties. The watershed spans approximately 28,880 acres, and is comprised of 45% forest, 21% pasture/grassland, 14% scrub/barren, 8% urban, 5% wetland, 4% water, and 3% cropland (Figure 1). The primary source of pollution in Limekiln Creek was organic enrichment from agricultural processes. Biological community data are routinely used by MDEQ to determine if streams are healthy enough to support a balanced aquatic community. Limekiln Creek (Waterbody ID: MS106911) was monitored in 2003 as part of Mississippi's biological monitoring program. Using MDEQ's index of biological integrity, the Mississippi Benthic Index of Stream Quality (M-BISQ), Limekiln Creek scored 30.93, less than the assessment threshold of 38.5 required to attain aquatic life use support for this region.

Project Highlights

Between 2004 and 2007, MDEQ partnered with the Mississippi Soil and Water Conservation Commission, the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) and the Hinds County and Madison County soil and water conservation districts to implement the Bogue Chitto Creek Watershed Project. BMP installations within the Limekiln Creek-Bogue Chitto Creek area began in 2005 and concluded in 2007. Supported with CWA section 319 funds, the implemented BMPs included 25 water and sediment control basins, 13 grade stabilization structures, 10 acres of critical area planting, six acres of permanent vegetation, 84 acres of

Insert: the 28,880 acre Limekiln Creek subwatershed in central Mississippi.

of pasture and hayland planting, 25 nutrient management practices, 14,642 feet of fencing, a heavy use area, a diversion, and a stream crossing. A total of 77 practices were installed, affecting approximately 2,024 acres and saving an estimated 9,525 tons of soil per year with additional load reductions of 2,320 pounds per year of phosphorus and 4,611 pounds per year of nitrogen. In addition to this project, NRCS implemented 12 BMPs in the Limekiln Creek watershed between 2009 and 2015 and plans to install 15 more practices. Some of the implemented BMPs include critical area stabilization, heavy use area protection, livestock pipeline, seasonal high tunnel systems for crops, and watering facilities.



Results

In 2011, MDEQ returned to Limekiln Creek to collect biological community data. The score was 45.54, above the assessment threshold of 38.5 required to attain aquatic life use support for this region. Using this 2011 data, Limekiln Creek was assessed as attaining the aquatic life use in the 2014 CWA section 305(b) report and was removed from the state's impaired waters list.

Partners and Funding

The restoration of Limekiln Creek was a collective effort between the Mississippi Soil and Water Conservation Commission, MDEQ, U.S. Environmental Protection Agency, NRCS and the Hinds County and Madison County soil and water conservation districts. The total cost of the Bogue Chitto Creek Watershed Project was \$701,100, of which \$356,556 was comprised of CWA section 319 funds. Participating state and local stakeholders contributed a total of \$344,544 towards the implementation of this watershed project. Additionally, NRCS contributed \$36,483 towards practices installed during the 2009–2015 period, and has planned additional expenditures of \$39,847 towards future practices.

Water and sediment control basins were used to trap sediment and runoff from agricultural areas.



Fencing was used to provide a barrier to control livestock and manage sensitive riparian areas.



Pearl River Clean Sweep

MDEQ was a sponsor for the Pearl River Clean Sweep on September 23 organized by Pearl Riverkeeper. More than 1,015 volunteers collected 36,782 pounds of trash along the Pearl River in Mississippi.





Recycling Outreach

On October 5, more than 100 students gathered at Brown's Landing on the Ross Barnett Reservoir to attend the annual Madison County Conservation Fair. This event was hosted by the Madison County Soil & Water Conservation District and drew organizations from the surrounding areas such as Keep Mississippi Beautiful, the National Park Service, and MDEQ.

James Eagles and Collin Selman from MDEQ's Waste Division volunteered at the event to teach the elementary students about the importance of recycling and sustainability. The Waste Division promotes and coordinates recycling efforts and activities across the state. Conservation fairs and similar events are just one of the many ways in which MDEQ partners with other organizations to educate current and future generations of the importance of recycling.

During this particular educational presentation, the kids learned what items can or cannot go into the recycling bin, where every day products come from, why it is important to conserve resources through activities such as recycling, as well as the many other benefits associated with recycling.



Registration for MRC State Recycling Conference Now Open!

The Mississippi Recycling Coalition (MRC) invites you to Mississippi's largest annual recycling meeting to be held Wednesday, October 25, 2017, at Holmes Community College in Ridgeland from 8:30 a.m. to 4:30 p.m. at the McGowan Workforce Training Center.

The MRC State Recycling Conference draws representatives from local governments, state and federal agencies, universities and colleges, businesses and non-profit organizations as well as recycling and solid waste professionals to participate in informative sessions and networking opportunities.

This year, we're headed to Ridgeland, one of Mississippi's most decorated communities for its great shopping, beautiful green spaces, and long-standing commitment to growing recycling.

In addition to the conference, MRC invites you to attend the 20th Anniversary Celebration reception to be held the evening prior to the conference on Tuesday, October 24, beginning at 5:30 p.m. at Anjou Restaurant located in the Township of Ridgeland. We hope you will join us as we celebrate MRC's 20 years of service to the State of Mississippi by meeting up with old and new friends alike to enjoy fun, food, fellowship and live entertainment from Chris Gill!

Registration, conference agenda, lodging, and additional program information is available on the conference [webpage](#) of the MRC [website](#). Also, be sure to like MRC on [Facebook](#) and follow on [Twitter](#) for conference updates and other recycling news and information.



Jackson Metro Area Business E-Waste Collection Day

Friday, November 3, 2017

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. Alicia Crudup
(601) 953-1123
keepjacksonbeautiful@gmail.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 Monitors

\$15 Fee for Televisions

No cost for other items!

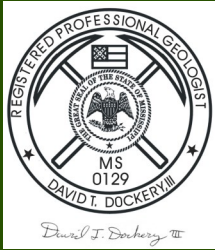
Contact Magnolia Data Solutions (see Contact Info) to inquire about items not listed above or make arrangements for large loads.

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.

Sponsored by





The Wiggins Uplift, a Large Chunk of Appalachian Piedmont Terrain Beneath Jackson County

David T. Dockery III, RPG, and Paul Parrish, RPG, Office of Geology

The Permian Period, some 280 million years ago, was a time of continental collision along the North American Eastern Seaboard and eastern Gulf of Mexico. The northern supercontinent Laurussia (containing North America, Europe, and Asia) converged with the southern continent Gondwana (containing Africa, South America, Australia, Antarctica, and India) to form one large continent named Pangea (Ancient Greek for "all lands"). Suturing the new continent was a chain of collision-created mountains that make up today's Allegheny and Appalachian Mountains. The name of this Permian-age mountain building event is the Alleghanian orogeny (Figure 1). According to Wikipedia: "Evidence for the Alleghanian orogeny stretches for many hundreds of miles on the surface from Alabama to New Jersey and can be traced further subsurface to the southwest" (i.e. southeastern Mississippi and southwestern Alabama). At the core of this continental collision is a migmatitic gneiss, a metamorphic rock at the highest end of the metamorphic spectrum. Such metamorphic rocks make up portions of the Piedmont Mountains, which run along the eastern flank of the Appalachian Blue Ridge or Valley and Ridge Mountains.



Figure 1. Continental collision between the supercontinents Laurussia (north) and Gondwana (south) at 300 and 270 million years ago. Image created by the Paleomap Project.

Figure 2 shows the migmatitic (with melted and recrystallized zones) Old Lyme Gneiss from the Piedmont of southcentral Connecticut. Figure 3 shows a core of Alleghanian-age migmatitic gneiss from an oil exploration well drilled into the Wiggins Uplift in Jackson County, Mississippi. This core comes from a depth of 18,678 to 18,689 feet below the surface and has a radiometric age of 282 ± 14 million years old. Four other wells that reached basement rock on the Wiggins Uplift had radiometric ages ranging from 275 to 300 million years old.



Figure 2. USGS geologist Greg Walsh explaining an outcrop of the migmatitic Old Lyme Gneiss in south central Connecticut on a field trip of the 2012 Northeastern Section meeting of the Geological Society of America.. The parent rock is of NeoProterozoic (Precambrian) age. The metamorphic folding and migmatization occurred about 285 million years ago during the Permian Alleghanian orogeny.

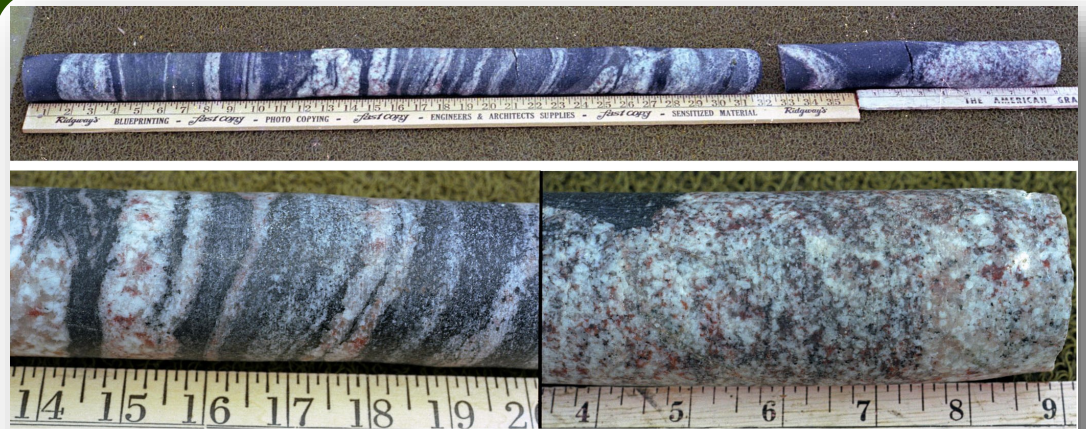


Figure 3. Permian migmatitic gneiss (282 million years old) from the Wiggins Uplift in the Champlin Oil Company #1 International Paper Company wildcat well in Jackson County. This portion of an eleven-foot core was taken from 18,678 to 18,689 feet below the surface. The bottom of the core is to the right and enlarged in the lower view. Pictures were taken in January 1981.

The buried mountain of Piedmont basement rock under Jackson County (Figure 4) and the buried Appalachian Valley and Ridge Fold Belt under Lauderdale County are separated by an intervening basin named the Mississippi Interior Salt Basin. Mississippi's Interior Salt Basin formed by rifting during the breakup of Pangea, the same rifting that created the Atlantic Ocean and Gulf of Mexico, and which moved continents to their present position. In the early stage of rifting, the Wiggins Uplift was moving southeast with North Africa, but was stranded under Jackson County when the focus of rifting switched to the Atlantic Ocean and Gulf of Mexico.

So, what does all this mean for us? Stranded blocks of Piedmont terrain beneath the coastal counties of Mississippi and Alabama anchor the shoreline against land loss due to subsidence. If not for the bedrock geology of the coast, the erosion of Mississippi's coastal marshes due to sea level change would be worse.

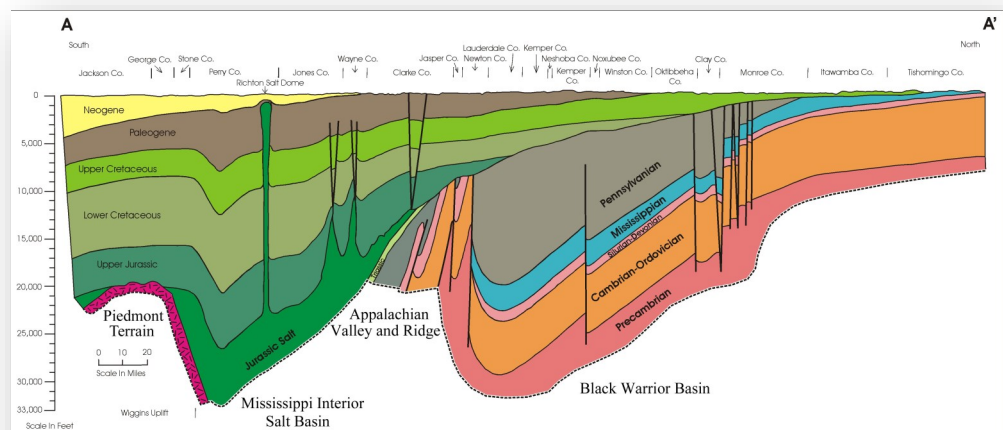


Figure 4. Cross section of eastern Mississippi from the Tennessee line (right) to Horn Island (left), showing the basement structure of the state.



MDEQ Environmental Action Links

- [Draft permits currently at public notice](#)
- [Environmental Permits Division Scheduled Public Hearings](#)
- [Geology Permit Application Public Notice](#)
- [Permits and certificates issued in the last 90 days](#)
- [General permit coverages issued in the last 90 days](#)
- [Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division](#)
- [List of the 401 Water Quality Certifications currently at public notice](#)
- [List of the compliance inspections recently conducted](#)
- [Orders issued by the Mississippi Commission on Environmental Quality](#)



Connect with MDEQ



Mississippi Department of Environmental
Quality

Post Office Box 2261

Jackson, Mississippi 39225

601-961-5171

www.deq.state.ms.us

Picture of the Month

Sunset at the Ross
Barnett Reservoir.

Taken by Ginny
Weilenman, Surface
Water Division.

