



# Community Engagement

ADEM is committed to keeping the public informed and involved regarding the environmental activities in their local communities.

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# Introduction

# **INTRODUCTION**

ADEM has a long history of community outreach. Many outreach programs have been developed to involve everyone in Alabama. This document highlights many of the Department's efforts to ensure people are involved and informed regarding environmental activities in their communities. These efforts involve community-based studies, education, and priorities that support the Department's objectives. In addition, this information highlights compliance and enforcement activities as well as the development of electronic tools that enhance communication and provide access to environmental data.

The ability to provide all people with access to more information and data that is science-based provides each person with a better opportunity to participate in the decision-making processes at ADEM. One of the long-term keys to ensuring the sustainability of Alabama's air, land, and water resources is to provide individuals and communities with a vested interest in protecting those resources at the local level. Recognizing that some people may have less access to resources needed to become fully informed and for various reasons, to be less active in participating in the outreach process, the Department has made special efforts to involve those communities to assess environmental results in their local area.

As the steward of Alabama's air, land, and water resources, ADEM not only strives to ensure participation by encouraging public input, but also ensures transparency in its decision-making processes. Through the implementation of electronic features, such as "What's Happening In Your County", e-File, and e-Complaint systems and community training events on how to use those features, ADEM is fulfilling its goal of ensuring the fair treatment and meaningful involvement of all Alabamians.



# Enhanced Community Participation in Rulemaking



# PUBLIC PARTICIPATION IN RULEMAKING AND PERMITTING

## PUBLIC PARTICIPATION IN THE ADEM RULEMAKING AND PERMITTING PROCESSES

Presented by



*An environmental permit is issued to control air emissions, water discharges, and to provide for the proper management of solid and hazardous wastes. Specific constituent limits that comply with Federal and State of Alabama standards are assigned for each permit in order to effectively measure and manage our state's air, land, and water resources, to ensure protection of human health and the environment, and to assure compliance with applicable environmental statutes.*

*If you need additional information, please contact our Permits and Services Division at (334) 271-7714 or email to [permitsmail@adem.state.al.us](mailto:permitsmail@adem.state.al.us)*

The Alabama Department of Environmental Management (ADEM) acknowledges and solicits the public's involvement in its rulemaking and permitting processes. These processes are important in sustaining and protecting Alabama's air, land, and water resources. Public participation in the rulemaking and permitting processes is a valuable tool to help the Department and the Alabama Environmental Management Commission (EMC) make environmental decisions. With the public's continued interest in, and support of, ADEM's efforts, our state's environment will be protected and preserved for the enjoyment of future generations.

This publication is intended to acquaint the public with the procedures that the Environmental Management Commission follows in establishing the environmental regulations that the Department enforces. This publication also outlines the process ADEM uses to review environmental permit applications from an activity whose operation could affect the state's environment. These procedures are designed to afford the public and those affected by the Department's regulations notice and opportunity for input prior to a final decision.

# GUIDE FOR CITIZEN PARTICIPATION



## **Guide for Citizen Participation**

*How to make your voice heard on community environmental issues*



# **STAKEHOLDERS MEET WITH THE ENVIRONMENTAL MANAGEMENT COMMISSION RULES COMMITTEE**

The Rulemaking Committee of the Alabama Environmental Management Commission (EMC) meets in Montgomery with numerous stakeholders and ADEM officials to discuss all pertinent rules. The work sessions are held in ADEM's Main Conference room before or following the regularly scheduled Commission meetings.

Public announcements are issued prior to work sessions of the Rulemaking Committee. During the work sessions, committee members listen to comments and questions from the stakeholders and ADEM officials. The meetings are designed to seek constructive input on how to improve the Commission's existing rules. If rule changes are recommended, those proposed changes must be presented to the full Commission for consideration.

One example was a meeting to discuss the public comment section of the rules. The topics discussed and considered included email delivery of public requests to appear before the Commission, a process for encouraging written public comments, deadlines for submitting presentations, and deadlines to clarify the procedures for being approved to address the full Commission. Twenty-eight people attended that work session with most having substantial comments or questions.





# **BENEFICIAL USE OF BY-PRODUCTS FOR LAND APPLICATION**

In an effort to provide oversight to a previously unregulated agricultural practice, ADEM initiated rule making procedures for the practice of using municipal and industrial by-product materials in place of traditional commercial fertilizer.

In 2019, input was gathered from the public and stakeholders during phone conversations and meetings to ensure a full understanding of the land application universe and impacts on communities and landowners. The result of the community interaction was the start of the Beneficial Use Program (ADEM Regulations - Chapter 335-13-16 *Requirements for the Beneficial Use of By-Product Materials for the Purpose of Land Application*). It became effective April 13, 2020.

The new regulations created first-of-its-kind state guidelines governing the land application of by-products for beneficial use. This included by-products from chicken and other food-processing facilities, biosolids from wastewater treatment plants, and other materials. Prior to the new rules, Alabama was dependent on the U.S. Environmental Protection Agency for the regulation of biosolids. However, EPA regulations do not address the use of other by-product materials - including food processing residuals - leading to the adoption of state regulations.

Since the new regulations went into effect, ADEM has collected data and conducted research to identify problems. Based on the data and research, ADEM revised rules that became effective in August of 2022. The revised rules were designed to enhance the previously adopted regulations and set tighter controls on the use of by-product materials, while providing more protections for adjacent residents and landowners.

The revised rule includes an additional requirement for notice to be submitted to ADEM prior to land application of material, allowing individuals to be aware of activities occurring in their community. The Department continues to evaluate the program and will consider future enhancements so that by-product materials are utilized in a safe, effective, and responsible manner.



# STAKEHOLDER INVOLVEMENT FOR MEDICAL WASTE

In 2020, Alabama residents were deeply impacted by COVID-19. At that time, there was not much information known about COVID or how to handle any material contaminated by the virus. The Department received numerous calls from Alabama citizens regarding the handling of COVID contaminated materials. ADEM reached out to the Alabama Department of Public Health for guidance on the issue. It was determined that material contaminated with the COVID-19 virus should be managed as a medical waste. A fact sheet on the Management of COVID-19 wastes was developed and posted on the Department's website in an effort to provide information quickly to Alabama citizens. COVID highlighted the need to renew ADEM's medical waste regulation and the value of citizens' input in the modification of regulations.

Public participation is a key component in the rulemaking process. During the process of updating promulgated rules, the Department takes into consideration a number of items such as current industry practices, other states' practices and regulations, and inspections, before initiating the formal rulemaking process. Including these practices in the rulemaking process is important in sustaining and protecting Alabama's air, land, and water resources. Stakeholder input and participation in this process is a worthwhile endeavor that helps the Department along with the Environmental Management Commission make important environmental decisions.

Another valuable tool in the informal rulemaking process is stakeholder input. Stakeholder input can be solicited from various organizations and associations regarding specific regulations or programs. In 2022 and 2023, the Department pulled together a stakeholder work group related to the Medical Waste Regulations. The members of the work group were selected not only for their medical expertise, but also for their direct association with community members receiving their services. The work group was comprised of various associations representing doctors, dentists, hospitals, and nursing homes. Also, medical industry groups were included in the work group. The work group met virtually in late 2022 and again in person at the Department in early 2023 to discuss various proposed changes to the regulations.





# Enhanced Community Engagement in Permitting



# WHAT'S HAPPENING IN YOUR COUNTY

The “What’s Happening in Your County” button is available on the ADEM website to provide people with information on environmental efforts within their county and local community. By clicking on any county on the state map, people can have access to permit applications that have been received within the last thirty days, public notices that are currently open, and information about public hearings. This feature also includes information such as press releases, general statewide events, and schedules for meetings of the Alabama Environmental Management Commission, which take place in Montgomery.

ADEM is focused on ensuring transparency in all of its decision-making processes and this feature makes information easily available. This feature is another tool that ADEM utilizes to support the meaningful involvement of all people regardless of race, color, national origin, or income.

The collage features several key elements:

- Top Left:** A man in a white shirt and tie, identified as 'JEFFERSON COUNTY'.
- Top Center:** A waterfall in a forest, identified as 'Lower High Falls, Tallapoosa Forest - Bill Wilcox'.
- Top Right:** A large stadium with a mascot, identified as 'TUSCALOOSA COUNTY'.
- Center:** A map of Alabama with county names and a list of counties. The list includes: Autauga, Baldwin, Barbour, Bullock, Blount, Calhoun, Butler, Chambers, Cherokee, Chilton, Choctaw, Clarke, Clay, Cleburne, Coffee, Colbert, Conecuh, Coosa, Covington, Crenshaw, Cullman, Dale, Dallas, DeKalb, Elmore, Escambia, Etowah, Fayette, Franklin, Geneva, Greene, Hale, Henry, Houston, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Lee, Lowndes, Macon, Madison, Marengo, Marion, Marshall, Mobile, Monroe, Montgomery, Morgan, Pickens, Perry, Pike, Randolph, Russell, Shelby, Sumter, Tallapoosa, Tuscaloosa, Walker, Washington, Wilcox.
- Bottom Left:** A mascot in front of a brick wall, identified as 'ALABAMA UNIVERSITY EST. 1856' and 'LEE COUNTY'.
- Bottom Right:** A screenshot of the ADEM website showing the 'What's Happening in Your County' button and a list of counties.

By selecting a permit notice, a copy of the complete project file, which includes a fact sheet and draft permit, is available directly through this online access portal.

Public Hearings			
Subject	Date	Time	Location
Proposed Revisions to Division 2 Public Notice	November 12, 2020	10:30am	Main Hearing Room, ADEM Central Office
Proposed Revisions to Division 13 Public Notice	November 5, 2020	1:30pm	Main Hearing Room, ADEM Central Office
Proposed Revisions to Division 6 (UST) Public Notice	November 5, 2020	10:00am	Main Hearing Room, ADEM Central Office
Proposed Revisions to Division 6 (CAFO) Public Notice	November 4, 2020	10:00am	Main Hearing Room, ADEM Central Office
Alabama Power Company - Gadsden Steam Plant Public Notice	October 29, 2020	6:00pm	Beck Conference Center, Gadsden State Community College
Alabama Power Company - Greene Plant Public Notice	October 22, 2020	6:00pm	Carver Community Center, Eutaw, AL
Alabama Power Company - Miller Plant Public Notice	October 20, 2020	6:00pm	West Jefferson Town Hall, Quinton, Alabama
UOP, LLC - Proposed Title V Permit Public Notice	October 20, 2020	6:00pm	Chickasaw High School Gymnasium, Chickasaw, AL

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
NOTICE OF PUBLIC HEARING  
FOR PROPOSED REVISIONS TO THE SOLID WASTE PROGRAM  
DIVISION 335-13, ADEM ADMINISTRATIVE CODE  
PUBLIC NOTICE - 422**

Notice is hereby given that a hearing before the Department of Environmental Management of the State of Alabama will be held on **Thursday, November 5, 2020, at 1:30 PM in the Main Hearing Room of the ADEM – Central Office location at 1400 Coliseum Boulevard in Montgomery**, to consider proposed revisions and additions to Division 335-13 of the ADEM Administrative Code (Solid Waste Program).

The Alabama Department of Environmental Management proposes to amend the ADEM administrative code. Revisions to the Division 13 Regulations are being proposed to incorporate changes to ensure consistency with State and Federal Statutes and provide clarification of State requirements for the management of solid waste. The Department is also proposing to correct typographical and citation errors in the existing regulations.

Copies of the proposed rules are available at a cost of 30 cents per page at each of the locations listed below. The summary of reasons supporting the revisions are available free of charge. Copies of the proposed rules and summary of reasons can also be found on the internet at <http://adem.alabama.gov/newsEvents/pubHearings.cnt> at no cost. For additional questions or comments, please contact one of the following offices:

**ADEM, Office of General Counsel**  
Attn: Christie Lacey  
1400 Coliseum Boulevard  
Montgomery, AL 36110-2400  
(334) 260-4510

**ADEM, Birmingham Field Office**  
Attn: Mary Taylor  
110 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168

**ADEM, Decatur Field Office**  
Attn: Jan Childers  
2715 Sandlin Road, SW  
Decatur, AL 35603-1333  
(256) 353-1713

**ADEM, Mobile Field Office**  
Attn: Jenika Haywood  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400

The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. Attendance at the hearing is not necessary to present such data, views, arguments, or comments. The same may be submitted in writing, but must be received by the Hearing Officer prior to **5:00 p.m. on Thursday, November 5, 2020**.

Written submissions and other inquiries should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2400) or by e-mail at [hearing.officer@adem.alabama.gov](mailto:hearing.officer@adem.alabama.gov)

Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits & Services Division at (334) 271-7714 at least five working days prior to the hearing.

This notice is hereby given this **20th day of September, 2020**, by authorization of the Alabama Department of Environmental Management.

Lance R. LeFleur

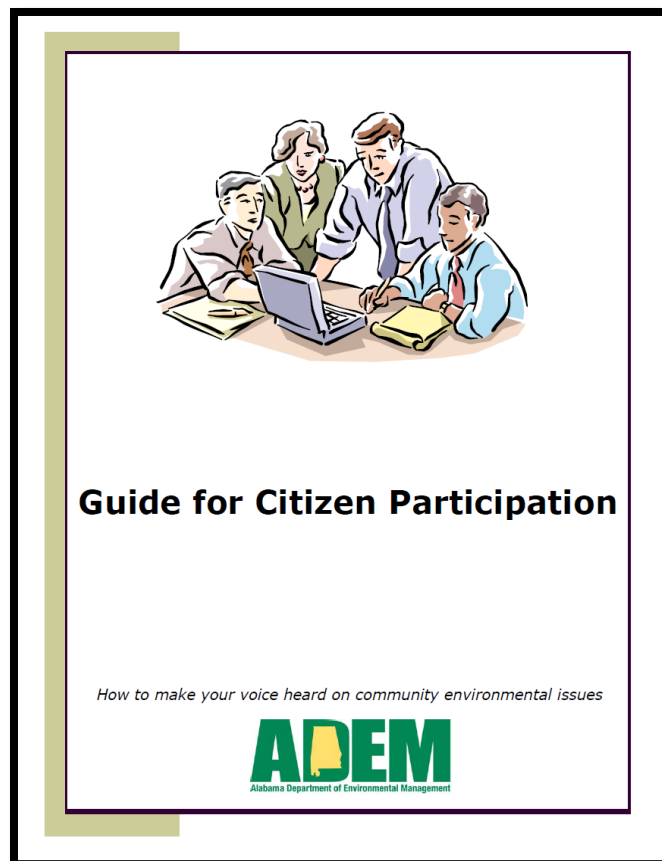


# EXPANDED OPPORTUNITIES FOR COMMUNITY COMMENTS

ADEM offers expanded community commenting opportunities for all permitting decisions. Public commenting opportunities for permits are available during the public comment period for new environmental permits, renewal permits, permit modifications (in some cases), and other environmentally related activities. The purpose of the public comment period is to allow any member of the public to add their voice to the decision-making process. The comments are submitted in writing to the Department via mail, email, fax, or personal delivery.

Public meetings, which are informal, may be conducted during the comment period and allow comments to be spoken and noted. A public hearing, which is formal, may be determined necessary by the Department. At a formal hearing, all comments are recorded and a transcript is made. It should also be noted that written comments may be submitted at public meetings or hearings.

Detailed information regarding public commenting opportunities are available in the Guide for Citizen Participation on the Department's website.



# **ADEM HOLDS AVAILABILITY SESSION AND PUBLIC HEARING FOR CHEMICAL WASTE MANAGEMENT, INC. PERMITTING ACTION**

ADEM scheduled a Public Hearing and Availability Session at the Livingston Civic Center on April 18, for the proposed renewal of the hazardous waste permit for Chemical Waste Management, Inc. facility located at 36964 Alabama Highway 17 North, Emelle, in Sumter County. A public comment period was available from March 9 until April 25. Every Door Direct Mail (EDDM) postcards were sent to approximately 360 entities within a 3-mile radius of the facility to ensure the public was notified of the Availability Session and the Public Hearing. Notice of the event was posted on the ADEM Website, emailed to all individuals who signed up to receive email notifications from ADEM, sent out as an ADEM news release, published in the Sumter County Record Journal, and broadcast on 106.5 FM-WZMJ. In addition, a second EDDM postcard was sent just prior to the event to inform the public of options to make a comment which included access to an 800 phone number. The video recording of the hearing was also available on the ADEM YouTube channel.

During the Availability Session, tables were set up by ADEM Staff from Hazardous Waste Permitting, Compliance and Enforcement, Environmental Justice, Emergency Response, and Office of Land Services to assist the public with questions, provide handouts for education, and to gather comments related to the permit application. Also present at the Availability Session were Chemical Waste Management Inc. representatives and the City of Livingston Mayor and Sumter County Commissioners. Handouts included information on how to navigate the ADEM Website, how to access files related to the facility, ADEM's Public Participation Process, Fact Sheets and Diagrams of the Chemical Waste Management, Inc., facility, and blank lined papers for providing written comments in a private comment box.

To help alleviate rural Internet issues and to ensure that everyone had the opportunity for meaningful involvement and public input as it related to this specific permitting action, two computers with monitors, speakers, a mouse, and a keyboard were placed at the Ruby Pickens Tartt Public Library at 201 Monroe Street in Livingston on March 8. The computers were made available for public use during the normal operating hours of 9am to 5pm Monday-Friday and Saturday 9am to 12pm. Three years of ADEM Compliance and Enforcement history along with the draft permit, fact sheet, and permit application were downloaded on the computers prior to placement to assist people in accessing ADEM files. Each file was created in read aloud format and picture format instructions were provided to assist users with utilizing this functionality. The two computers were available for use at the library until May 25.



## OPPORTUNITY FOR COMMENTS

### Chemical Waste Management, Inc. Hazardous Waste Permit Renewal



**PUBLIC HEARING:**

Livingston Civic Center  
101 Country Club Road  
Livingston, Alabama  
April 18, 2023  
6:30 p.m.



**EMAIL:** [permitsmail@adem.alabama.gov](mailto:permitsmail@adem.alabama.gov)



**MAIL:**

Russell A. Kelly, Chief  
Permits and Services Division  
P.O. Box 301463  
Montgomery, AL 36110



**CALL:** 1-833-396-1706 to leave a voice message



Copies of the complete project files are available electronically at <http://adem.alabama.gov/newsEvents/pubHearings.cnt> or can be viewed at Ruby Pickens Tartt Public Library, 201 Monroe St., Livingston, AL 35470

A recording of the public hearing will be available to view on April 20, 2023 on ADEM's YouTube Channel at <https://www.youtube.com/channel/UCDwu2w3FpjGgT4ZOjkk6ZOW>

**Comments must be received by 5 p.m. on April 25, 2023**

# **JOINT PERMITTING ACTIONS AT ARROWHEAD**

## **LANDFILL**

ADEM scheduled a Joint Public Hearing for April 14, 2022, for the proposed issuance of a Major Source Operating Permit (MSOP) (Permit Number 107-0003) and the proposed renewal of the Municipal Solid Waste Landfill Permit (MSW) (Permit Number 53-03) for the Arrowhead Landfill site located at 622 Taylor Road, Uniontown, in Perry County. A public comment period was made available from March 8, 2022, until July 20, 2022. In conjunction with the public hearing, two Availability Sessions were held on January 27, 2022, and April 14, 2022, prior to the Public Hearing. Every Door Direct Mail Postcards were sent to 1,059 households within a 5-mile radius of the landfill to ensure the public was notified of each availability session and the public hearing. Notice of each event was posted on the ADEM Website and emailed to individuals on List 90 who have requested notifications of permitting actions.

During the availability sessions, ADEM Staff was available at tables from Air Permitting and Solid Waste Permitting, Compliance and Enforcement, Environmental Justice, and Office of Land Services to assist the public with questions, provide handouts for education, and to gather comments related to the public comment period. Also present at the availability session were Arrowhead Landfill representatives and the City of Uniontown Mayor and Council Members. Handouts included information on how to navigate the ADEM Website, how to access files related to Arrowhead Landfill, ADEM's Public Participation Process, Fact Sheets and diagrams of the Arrowhead Landfill, and blank lined papers for providing written comments in a private comment box.

To help alleviate rural Internet issues and to ensure that citizens had the opportunity for meaningful involvement and public input as it related to this specific permitting action, two computers with monitors, speakers, a mouse, and a keyboard were placed in the Council Chambers Room at the City of Uniontown - Municipal Building on March 10, 2022. The computers were made available for public use during the normal operating hours of 9am to 5pm Monday-Friday. Three years of ADEM Compliance and Enforcement history along with the Draft MSW Permit, Draft MSOP Permit, Statement of Basis, and Permit Application were downloaded on the computers prior to placement to assist the public with access to ADEM files. Each file was created in read aloud format and picture instructions were provided to assist with utilizing this functionality. The computers were available for public use until August 11, 2022.





Community Engagement



# Enhanced Community Efforts: Compliance and Enforcement



# PUBLIC AVAILABILITY SESSIONS

ADEM continues to improve operations to provide more input from the public. ADEM has numerous reports, documents, records, and forms available on the Department's website at the click of a button. ADEM also has events and public hearings designed to give the public better access.

As a part of the Department's public hearing process, ADEM has developed public availability sessions to enable concerned individuals to have interactions with ADEM staff, ask questions, review maps and charts, and make comments on the record. The sessions provide information to the public, enable questions answered face-to-face, and help the Department interact in a more open dialogue with the public.

ADEM's public availability sessions involve employees from Air, Land, Water, Permits & Services, and/or Field Operations Divisions. ADEM staff members have been trained to conduct public availability sessions that generally takes place prior to public hearings or as information sessions for communities addressing acute environmental issues.

Public availability sessions typically involve personnel from the Public Relations Unit, the Environmental Justice Coordinator, the Office of General Counsel, and the ADEM division hosting the public hearing. The sessions also provide the public with resource materials, maps, graphic displays, and other visual aids. The public is encouraged to attend these events so that ADEM staff can address their concerns.



# COMPLIANCE AND ENFORCEMENT

The Department dedicates significant resources to conducting compliance inspections, performing compliance tests, and providing compliance assistance to ensure facilities are operating in accordance with the applicable rules, regulations, and permit conditions. These efforts serve as one of the key components of the Department's efforts to protect Alabama's air, land, and water resources.

However, when noncompliance issues are documented, the Department has the ability to implement swift and effective enforcement procedures. Through the timely issuance of Warning Letters, Notices of Violation, and Consent/Administrative Orders that include civil penalties, ADEM can require that noncompliance issues be addressed and facilitate a return to compliance.

The following examples from Anniston, North Birmingham, Uniontown, Eight Mile, Anniston, Prichard, Bayou La Batre, and Decatur demonstrate the Department's commitment to go beyond the required minimum to provide local stakeholders with factual information on local environmental issues.

The implementation of an effective inspection program, the initiation of timely enforcement actions, and the collection of accurate data to support a science-based decision-making process are the foundations which support the Department's mission of assuring for all Alabamians a safe, healthful, and productive environment.





# PROPER REMEDIES AND COMMUNITY-BASED OUTREACH

The Department continues to focus resources on the process of reaching out to local communities where environmental concerns have been documented and establishing open lines of communication with citizens and elected officials. Public meetings, especially in communities with environmental justice concerns, provide an opportunity for ADEM to present information to the local stakeholders about specific environmental concerns and allow ADEM to receive feedback from the stakeholders on their views and perceptions of environmental issues in their community.

The following examples from Anniston, North Birmingham, Uniontown, Eight Mile, Anniston, Prichard, Bayou La Batre, and Decatur demonstrate the Department's commitment to provide valuable information to the public in their communities. This investment of time and resources is vital to the Department's efforts of ensuring transparency and for all individuals to be familiar with the ways that they can participate in those decision-making processes.



# **INDUSTRIAL GENERAL PERMIT INSPECTIONS**

## **NORTH BIRMINGHAM**

In October 2014, the Water Division conducted an analysis of all facilities holding Industrial National Pollutant Discharge Elimination System (NPDES) General Permits in North Birmingham, a disadvantaged area. The Water Division identified more than 80 facilities that had the potential to discharge certain metals.

To ensure the Department had a current assessment of each facility's compliance status with regard to its NPDES permit, over 70 of the facilities were inspected during the 2015 fiscal year followed by a full compliance evaluation. The remaining facilities each received a desk audit following recent inspections.

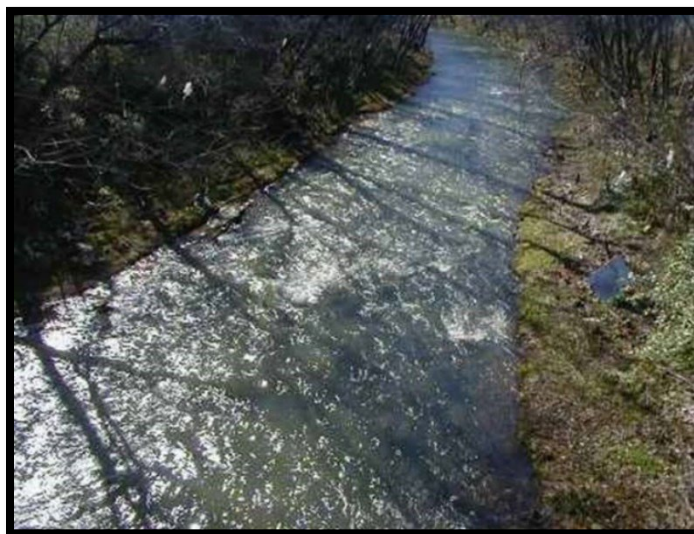


# NORTH BIRMINGHAM ENVIRONMENTAL COLLABORATION PROJECT

ADEM has been an active participant in the *North Birmingham Environmental Collaboration Project*. This project is a coordinated approach to evaluate the environmental condition and potential environmental impacts, in certain areas of the *North Birmingham, Fairmont, Collegetown, and Harriman Park* neighborhoods, as well as portions of *Village Creek, Five-Mile Creek, and Harriman Park* ditch, located in and around Birmingham.

In conjunction with this effort, ADEM participated in the Region 4 Federal Interagency Working Group on Environmental Justice (Regional IWG) meetings in August 2014 and January 2015. The meetings included representatives from the communities, Congresswoman Terri Sewell, Mayor William A. Bell, Sr., and Councilor William Parker, along with other City of Birmingham officials, ADEM, ALDOT, and Federal Agency heads and their staff. Federal agencies in attendance included HUD, COE, DOT, DOL, DOJ, HRSA, HHS, ATSDR DOI, and EDA.

As a member of the watershed planning team, ADEM has continued providing assistance to the City of Birmingham in the development of the *Village Creek Watershed Management Plan*. The watershed planning team has committed to verify and calibrate the hydraulic and water quality models, assess the existing and future conditions of the creek based on comprehensive land uses, implement a public consensus campaign, develop the watershed improvements toolbox, coordinate future conditions with the framers of the North Birmingham Plan, and prepare a final report with recommendations that will include prioritization of capital improvements and funding initiatives to implement project recommendations. This watershed planning team is comprised of technical partnerships that include the U.S. Environmental Protection Agency (EPA), the U.S. Geological Survey (USGS), ADEM, Jefferson County Stormwater Management, Jefferson County Environmental Services and Land Planning, and the University of Alabama at Birmingham.



# UNIONTOWN INITIATIVES

Uniontown is a community with environmental justice concerns in west central Alabama. For many years, the wastewater treatment plant has degraded due to lack of funding for maintenance. In 2003, the facility was unable to meet effluent discharge requirements and was subjected to enforcement action. Details of progress made since then is accessible on the ADEM website in a document titled, [Uniontown Wastewater Treatment System Update](#).

ADEM has initiated multiple efforts and participated in public meetings to discuss citizen concerns related to air, land, and water quality in Uniontown. These public meetings have provided a forum for interested citizens to learn about the issuance of environmental permits, ADEM enforcement activities, and the process for filing environmental complaints. ADEM also participated in a radio talk show with several Uniontown residents to answer questions and provide information to local residents. The show was hosted by WVAS 90.7 FM (a member-supported public radio station) located on the campus of Alabama State University. The program was dedicated to environmental issues in Uniontown providing individuals a question-and-answer exchange with panelists including an ADEM representative.

The Department has invested significant resources in enhanced inspections of the municipal solid waste landfill and the wastewater treatment plant located in Uniontown (Perry County). These inspection efforts have also included joint inspections with EPA. ADEM has issued several enforcement actions related to the operation of the wastewater treatment plant.

In an effort to assist Uniontown in resolving its persistent wastewater treatment problems, the Department took the unusual step in initiating efforts that eventually resulted in Congresswoman Terri Sewell securing a \$5 million dollar package of grants and low interest loans. Through the leadership and guidance provided by ADEM, the residents in the City of Uniontown are better informed, have better access to data, and are more involved with environmental issues in their local community.





# EIGHT MILE TOWN HALL MEETINGS

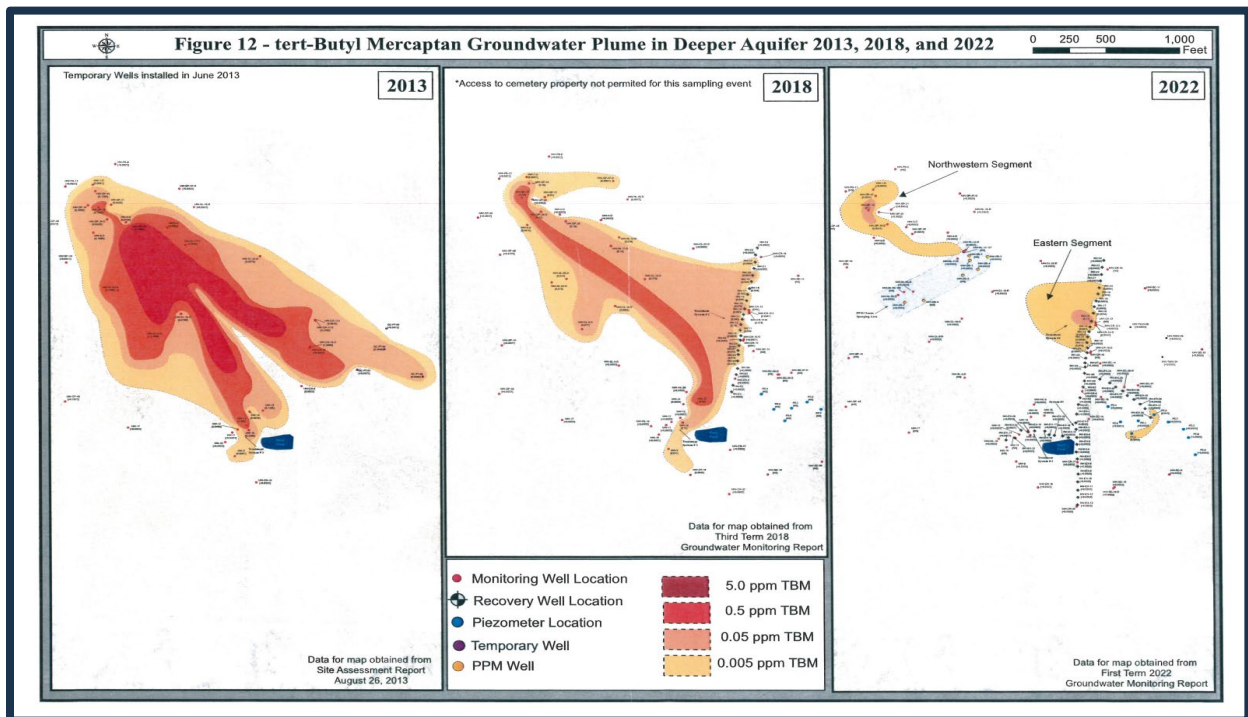
A mercaptan release occurred in the disadvantaged city of Prichard, Alabama, as a result of a lightning strike. Mercaptan is an odorizer with a pungent smell that is often added to natural gas lines to aid in identifying leaks. The mercaptan release was the source of many complaints about poor air quality and odors in the Eight Mile Community.

Although odor is not regulated under the Clean Air Act or the Clean Water Act, ADEM has utilized a two-pronged approach to assist the community in addressing this issue. First, ADEM negotiated a binding non-regulatory agreement with the potentially responsible party to install an odor abatement system. The agreement also required a soil/groundwater investigation to determine the extent of the mercaptan contamination and to support the development of a remediation plan for cleanup. Numerous town hall meetings were held by ADEM to answer questions from the local residents and provide updates on the soil and groundwater investigation.

The town hall meetings involved detailed presentations as well as question and answer sessions with local elected officials and citizens. Other resource agencies such as the Alabama Department of Public Health, the Centers for Disease Control, and the U.S. Environmental Protection Agency have joined the Department in these efforts to provide the local citizens with accurate information about activities to address the environmental impacts of the mercaptan release but also the quality-of-life issues. The open lines of communication established between the local citizens and the Department are ongoing.

A detailed report is accessible on the ADEM website in the ‘What’s Happening in Your County-Mobile County’ [Eight Mile Mercaptan Report](#).

## Success as a result of corrective action.





# ANNISTON LEAD CLEANUP

The United States Environmental Protection Agency (EPA) became aware of soil lead concentrations greater than or equal to 400 parts per million (ppm) in some locations within the Anniston, Alabama area during ADEM and EPA's investigation of the Anniston Polychlorinated Biphenyl (PCB) site during 1999 - 2000. EPA established 400 ppm as the cleanup standard for lead in residential soils at the site. Sampling results showed that some properties contained lead concentrations greater than or equal to 400 ppm, some properties contained PCB concentrations greater than or equal to 1 ppm PCBs, and some Commingled Residential Properties contain both. The Commingled Residential Properties became part of both the Anniston Lead Site and the Anniston PCB Site.

In January 2006, an Administrative Agreement and Order on Consent for Removal Action (hereinafter referred to as the AOC) was signed between the EPA and the Foothills Community Partnership for lead and PCB contaminated properties located in Calhoun County. Although not a party to the AOC, the Department committed to providing technical and field oversight support to EPA to the extent resources allowed. To that end, the Department dedicated staff as an oversight partner for the project to support EPA at its discretion.

Through a partnership between EPA, ADEM, Foothill Community Partnership, and the community, numerous properties were accessed, sampled, and/or remediated. Several community meetings with local churches and other organizations, as well as key stakeholders, facilitated an extensive community outreach effort for this project.

During the course of work at the Anniston Lead Site, Foothills Community Partnership:

- Had more than 6,000 individual contacts with property owners or residents
- Participated in more than 25 community meetings
- Distributed 7 newsletters to more than 3,800 residences
- Sampled more than 4,600 properties, taking more than 15,000 samples
- Cleaned up 596 properties, totaling more than 3 million square feet of property



# OUTREACH FOR CHEMICAL WEAPONS

## DESTRUCTION IN ANNISTON

The Department was instrumental in ensuring the safe and effective destruction of the chemical weapons stockpile in Anniston. The destruction activities conducted by the U.S. Army and its contractors removed the threat of one of the most deadly arsenals of chemical weapons and nerve agents ever stockpiled in the United States and greatly enhanced the safety of Alabamians.

A 95-day public comment period was held prior to the issuance of the original permit, along with 45-day public comment periods for each of the 25 major permit modifications during the life of the facility. In addition, numerous public meetings and public hearings were held providing additional opportunities for citizen education and input.

Throughout the 11-year operations phase of this process, ADEM maintained a 24-hour presence at the site, and committed more than 71,000 man-hours to monitoring on-site activities. In addition to providing this on-site presence, ADEM supported a transparent permitting and decision-making process providing citizens with numerous opportunities to submit comments and learn more about the destruction process.



# **BAYOU LA BATRE WASTEWATER TREATMENT FACILITY**

Due to compliance issues with the discharge of treated effluent from the old Bayou La Batre wastewater treatment facility (WWTF), corrective actions including construction of a new 3.0 million gallon per day wastewater treatment plant and an outfall line were completed by the Utilities Board of the City of Bayou La Batre as required by a 2011 consent decree.

During development of the National Pollutant Discharge Elimination System (NPDES) permit for the new WWTF, a public hearing was held by the Department in June 2008 at the Bayou La Batre Community Center to provide the community with additional information regarding the new WWTF and outfall. Notice of the public hearing was provided in Cambodian, Laotian, Spanish, Vietnamese, and English in order to engage these affected communities with environmental justice concerns.





# PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, FBSA, FBSEE, and thousands of other chemicals. These chemicals have been in use since the early 1940s and are (or have been) found in many consumer products like cookware, food packaging, and stain repellants. PFAS was either produced or used in the production process by several industries in the Decatur area. Wastewater containing PFAS was directly discharged to surface waters, land applied, or discharged through the sanitary sewer system to Decatur Utilities. The treated sewage sludge, known as biosolids, from Decatur Utilities was distributed in accordance with EPA's Biosolids Program as a soil amendment from 1996 to 2008. Sewage treatment sludge has also been disposed in area municipal landfills.

ADEM, along with EPA, the Alabama Department of Public Health (ADPH), and the Agency for Toxic Substances and Disease Registry (ATSDR), has initiated multiple outreach efforts, including conducting public meetings to discuss citizen concerns related to PFAS. The public meetings have provided a forum for interested parties to learn about PFAS in the environment.

During one of the public meetings, the ATSDR released their Exposure Investigation Report, which focused on residents who may have had a higher non-occupational exposure to PFAS than the average person. This included people who live on or near soils that received applications of biosolids from Decatur Utilities, had private water supply wells located near these biosolids application sites, or received water from the West Morgan / East Lawrence public water system.

In 2013, ADPH issued a fish consumption advisory for largemouth bass on the Tennessee River due to elevated levels of PFAS found in fish tissue samples. Additionally, ADPH issued a fish consumption advisory for all fish species on Baker's Creek due to elevated levels of PFAS found in fish tissue samples. Currently there are no water quality-based criteria for PFAS; however, EPA has developed drinking water advisory levels for PFAS, which are currently established at 0.7 micrograms per liter (ug/l) for the combined concentrations of the two PFAS. The Department has required facilities that have historically used, manufactured, or received PFAS to implement monitoring along with reduction plans in an effort to further quantify and reduce PFAS discharges.



*PFAS Removal System*

*Community Engagement*

# ADEM PARTNERS WITH EPA FOR FAIRFIELD NEIGHBORHOOD OPEN HOUSE

As a result of community concerns, EPA conducted a Preliminary Assessment (PA) and subsequent Site Inspection (SI) of the residential properties in several Fairfield neighborhoods adjacent to the U.S. Steel facility in Fairfield, in November 2022. Results from the PA concluded that further investigation was warranted to better determine the nature and extent of contamination at the site, if present. Particularly the PA indicated possible heavy metals and chemical contamination in residential soils.

The SI conducted the week of June 5 revealed that no further response actions were necessary. EPA then decided to sample a second area closer to the U.S. Steel facility and plans to sample the neighborhood were scheduled the week of June 5.

EPA Region 4 - Superfund Division (EPA-R4) held two open houses on May 3, at Fairfield City Hall for residents affected by the second sampling event to be held for the Fairfield Neighborhood Site. EPA-R4 personnel gave a video presentation and explained how soils would be sampled in resident's yards. More than 50 people attended the event, and many residents were able to provide access consent forms for EPA-R4 to perform the soil sampling activities.

In conjunction with these meetings, ADEM staff provided information to each attendee on "What's Happening in Your County?," e-File, and how to submit a complaint.

U.S. Environmental Protection Agency  
**Fairfield Neighborhood Investigation**  
Fairfield, Alabama  
November 2022

**Fact Sheet #1**

**Introduction**  
The U.S. Environmental Protection Agency is investigating possible heavy metal and chemical contamination in the soil of the Fairfield neighborhood. EPA will be in your area November 14-16, 2022 going door-to-door seeking access to perform soil sampling at properties within our established boundary. EPA will also have an open house with a short video presentation to provide more information to homeowners and residents regarding the sampling process.

**Residential Sampling**  
EPA will use its discretion consistent with agency policy to sample and clean up residential properties at no cost to homeowners and tenants. The study area includes about 240 residential properties between Aaron Aronov Drive, Bessemer Super-Highway/Bessemer Road, Greenbriar Road, and Dr. Martin Luther King Boulevard (see map).

The samples will be taken from outside the home, and tenants/homeowners do not have to be present. Individual results will be kept confidential and shared directly with residents and property owners. EPA should have results in 6 to 8 weeks after sampling.

If the sampling indicates additional properties may be impacted, the study area will be expanded, as necessary. The results will determine what, if any, additional response actions are necessary to protect human health and the environment.

**We Need Your Help to Test Soil**  
EPA will be in your neighborhood during the week of the December 5, 2022 for soil sampling. EPA is offering soil testing for possible contamination to residents or property owners in the Fairfield study area (see map). EPA will use its discretion consistent with agency policy to sample and clean up residential properties at **no cost** to homeowners and tenants.

If you are the **renter or owner**, please sign the access authorization forms to give EPA permission to sample your yard.

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# COMPLIANCE ASSISTANCE VIDEOS

The Alabama Department of Environmental Management has an integral compliance assistance program. It was developed to ensure environmentally safe operations at facilities statewide in all mediums of air, land, and water programs.

Compliance assistance takes many forms as a means of getting regulated entities to meet the requirements of all laws, regulations, and codes designed to safeguard the environment.

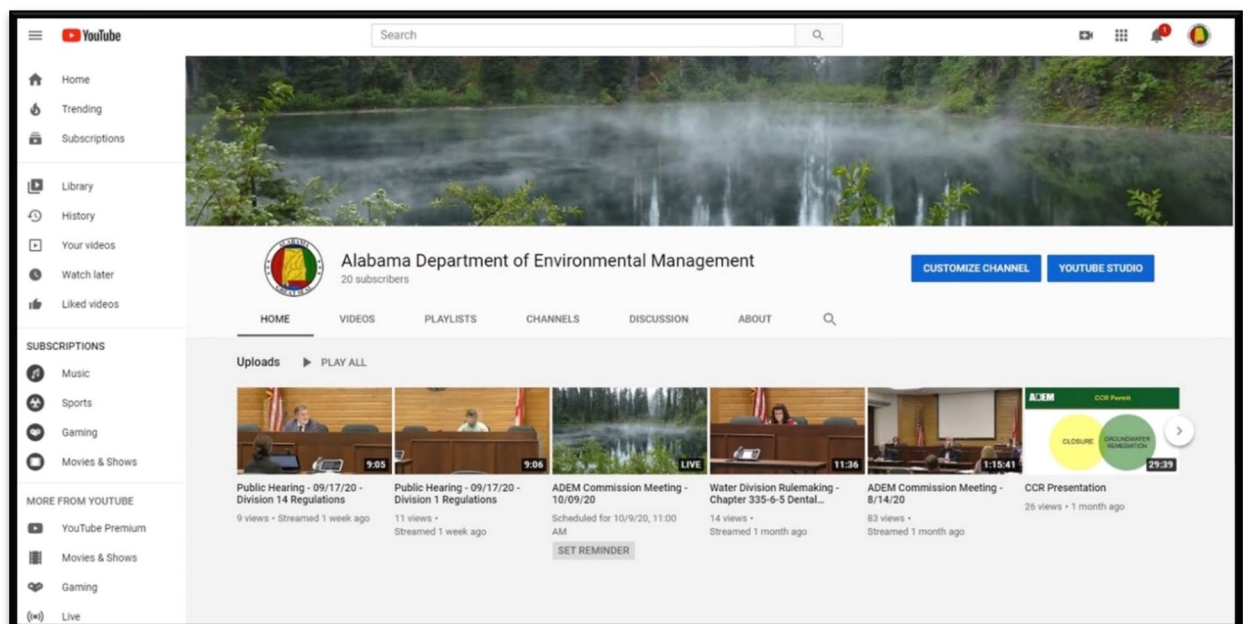
ADEM's approach to compliance assistance provides businesses, facilities, and even local governments with tools they need to help them meet regulatory requirements. These tools and methods include fact sheets, guides, training, and online resources.

One way that ADEM provides compliance assistance is through compliance assistance videos, which are available on ADEM's website.

ADEM has eight videos posted on its YouTube Channel to assist with compliance assistance. The videos are easy to access through a button on the home page of the ADEM website. Each video offers technologies and processes to assist companies with understanding their responsibilities and specific regulations that are required as part of their permits.

ADEM provides these videos for communities and individuals as an educational tool to help industries in their communities maintain compliance.

These videos are very helpful to the regulated community and enable both the Department and the regulated facilities and operators to save time and resources while improving compliance. All of this supports ADEM's mission of assuring for all Alabamians a safe, healthy, and productive environment.



# ENERGY CONSERVATION INITIATIVE

The Department has provided significant financial and technical resources through its Clean Water State Revolving Fund Program and its Drinking Water State Revolving Fund Program to local municipalities, including some in disadvantaged areas. This enables them to complete energy efficiency upgrades at their drinking water treatment plants and their wastewater treatment plants. These upgrades have included the installation of new, energy efficient pumps and motors resulting in significantly reduced operating costs for these municipalities.

In addition to the state revolving funds provided by ADEM, as part of a clean air agreement with the Tennessee Valley Authority (TVA), the State of Alabama, and other entities, ADEM has provided guidance on the disbursement of over \$1 million in settlement funds to local municipalities that are located in the TVA service area, some of which are in disadvantaged areas. These funds have also been used to support energy efficiency enhancements at local drinking water and wastewater treatment facilities.

These upgrades not only provide environmental benefits by reducing energy consumption but also provide economic benefits by reducing operating costs and allowing these municipalities to maintain lower rates for their local customers. To date, the ADEM Clean Water State Revolving Fund Program and the ADEM Drinking Water State Revolving Fund Program have provided over \$2.2 billion in low interest loans to local municipalities.





# Enhanced Community Based Practices





## COMMUNITY-BASED PRACTICES

The Department's regulatory activities, while based on sound science, are driven by the legal authorities given to ADEM by the Alabama Legislature and the corresponding regulations that have been adopted under those legal authorities. The regulations, which have been adopted after lengthy public comment periods, provide the foundation of the Department's mission to assure for all people of the State a safe, healthful and productive environment.

In many instances, the regulations allow ADEM to prioritize resources based on the composition of the local community. For example, when prioritizing the allocation of resources for the cleanup of illegal solid waste dumps, ADEM takes into account whether or not it is located in a minority and/or low-income community. ADEM also considers the Median Household Income (MHI), when providing funds to local municipalities through its Drinking Water State Revolving Fund. These prioritization features are supportive of the Department's goal of assisting minority and/or low-income populations in addressing environmental issues in their local communities.



## STATEWIDE STAKEHOLDER MEETINGS

During 2017, ADEM's Nonpoint Source Management Program (NPS) sharpened its focus with a series of meetings with individual river basin stakeholder groups around the state. The meetings were designed to showcase the NPS Program to new partners, to build and strengthen existing partnerships, and to help identify the issues being faced in watershed restoration efforts.

This effort began with a Cooperators' Meeting in January 2018 at the ADEM office in Montgomery. This meeting included stakeholders who held a Clean Water Act (CWA) Section 319 grant contract with the Department targeting nonpoint sources of pollution to streams and rivers identified as impaired.

In February 2018, two meetings were held in Birmingham with stakeholders from the Cahaba River and Black Warrior River Basins. The sessions drew more than 55 attendees who learned about how to become an integral part of the CWA Section 319 Grant Program, which focuses on improving water quality by reducing pollutant loads in surface runoff. The sessions provided opportunities for open dialogue regarding urban and agricultural NPS issues, the development and implementation of watershed-based plans, and protecting rivers and streams.


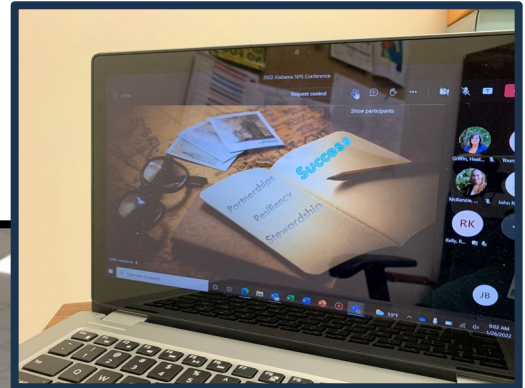
Due to COVID-19 concerns, the NPS unit hosted a virtual conference in April of 2021 that targeted the Coastal River Basins (Escatawpa, Mobile, and Perdido). Presentations focused on updates from ADEM's NPS Unit, ADEM's Water Quality Branch, and ADEM's Field Operations Division. Stakeholder presentations focused on Mobile Bay National Estuary Program's watershed approach and leadership in the local basin; Pensacola and Perdido Bay Estuary Program's leadership, education/outreach, and building of a cross state estuary program; discussions by EPA on community resilience, sustainability, and collaborative partnerships; and a presentation by Kentucky Division of Water on how to partner flood mitigation plans with NPS watershed management plans and goals. There were 46 attendees.

In June of 2021, the NPS unit hosted a virtual Cooperators Conference (also due to COVID-19 concerns). Information was presented to cooperators and potential cooperators on NPS pollution, Section 319 updates, match, documentation, and partnering.

A virtual NPS conference was held in January of 2022 which allowed speakers from other states to present information to over 160 attendees. Presentation topics covered water quality improvements, community engagement and education, revegetating difficult soils, and tree care in the urban environment. ADEM's Water Quality Branch provided updates on their program as well, through a bonus online session.

In April of 2023, the NPS unit hosted the Alabama River Basin Conference at the Town of Pike Road Agriculture, Recreation, and Performing Arts Center in Montgomery. Thirty-seven stakeholders attended allowing basin wide networking which helped to understand stakeholders' concerns and priorities. The NPS unit highlighted its NPS Management program, ADEM's Water Quality Modeling

and Analysis Section the Standards and Planning Section provided updates on water quality within the Alabama River basin, and ADEM's Field Operation Division discussed the Stormwater Quality Management Plan, Rivers and Reservoirs, Rivers and Streams, and Fish Tissue sampling programs.



**ADEM**  
Alabama Department of Environmental Management

**Nonpoint Source  
Management Program**

**A CLEAN WATER ACT § 319  
GRANT TRAINING  
WORKSHOP SERIES**

The complex block contains a map of Alabama on the left, showing various river basins such as the Black Warrior, Coosa, Tallapoosa, Lower Tombigbee, Alabama, Perdido-Southern, and others. To the right of the map is a blue banner with the ADEM logo and the text "Nonpoint Source Management Program" and "A CLEAN WATER ACT § 319 GRANT TRAINING WORKSHOP SERIES".



## **OPEN MEETINGS AT ADEM**

For many years, the ADEM director has hosted open meetings for environmental groups and members of the public to meet in an open forum to discuss topics of interest. An agenda was compiled by a spokesperson for the environmental groups and submitted to the director prior to each meeting. Based on the topics, executive and technical staff members attended the meetings to assist the director in addressing any issues or questions.

The meetings followed every other Environmental Management Commission meeting and were held in the Main Hearing Room. Attendees were notified of the meetings via an email from the director's office. Anyone who wished to be notified of the open meeting contacted the director's office to be placed on the email list.

It should also be noted that the director continues to meet with any individual to discuss a specific topic. To make an appointment for a one-on-one meeting, please contact the director's office.





**UNIVERSITY CONDUCTED SURVEYS OF**  
**ALABAMA CITIZENS**

**Omnibus Poll/Survey Comparisons**

**1998--2003--2008--2013--2018**



## Omnibus Poll/Survey Comparisons 1998--2003--2008--2013--2018

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- Overall, how would you rate the quality of the environment in Alabama?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
o Very Good/Fairly Good	76%	86%	90%	88%	92%
o Very Bad/Fairly Bad	23%	12%	9%	10%	8%

- Thinking specifically about the environmental quality of our water, how do you think it compares to 25 years ago?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018*</u>
o Somewhat Cleaner/Much Cleaner	19%	29%	43%	36%	49%
o Somewhat Dirtier/Much Dirtier	50%	40%	31%	27%	18%

\* Question modified to be for the respondents' lifetime.

- Now thinking about the quality of our air, how do you think it compares with 25 years ago?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018*</u>
o Somewhat Cleaner/Much Cleaner	18%	25%	30%	31%	43%
o Somewhat Dirtier/Much Dirtier	54%	51%	49%	32%	16%

\* Question modified to be for the respondents' lifetime.

- How much do you agree with this statement: Environmental standards protect your health and the environment?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
o Strongly Agree/Agree	81%	87%	90%	76%	90%
o Strongly Disagree/Disagree	15%	10%	7%	16%	10%

- How much do you agree with this statement: Environmental laws in effect in Alabama area sufficient to protect public health and the environment?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
o Strongly Agree/Agree	N/A	57%	61%	56%	59%
o Strongly Disagree/Disagree	N/A	37%	33%	33%	28%

## Omnibus Poll/Survey Comparisons 1998--2003--2008--2013--2018

- How much do you agree with this statement: Local zoning laws are needed to address environmental impacts of development not regulated by the state?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
○ Strongly Agree/Agree	75%	71%	74%	68%	73%
○ Strongly Disagree/Disagree	17%	18%	21%	20%	11%

- How much do you agree with this statement: Environmental laws are being enforced in Alabama?

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
○ Strongly Agree/Agree	N/A	39%	49%	43%	56%
○ Strongly Disagree/Disagree	N/A	48%	44%	44%	44%

- Overall, how would you rate the funding of state environmental programs in Alabama? Would you say they are .....

- Significantly under-funded
- Under-funded
- Adequately funded
- Over-funded
- Significantly over-funded
- Don't know

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
○ Over Funded/Significantly Over Funded	N/A	8%	9%	5%	10%
○ Under Funded/Significantly Under Funded	N/A	48%	50%	54%	45%

- When an industry or business is fined for violations of environmental regulations, do you feel the penalty amount is .....

- Too high
- The correct amount
- Too low
- Don't know

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
○ Too High	N/A	11%	10%	9%	8%
○ Too Low	N/A	45%	48%	41%	35%
○ Correct Amount	N/A	27%	23%	26%	26%

## Omnibus Poll/Survey Comparisons 1998--2003--2008--2013--2018

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- What should be the major objective when a violation of environmental regulations is discovered at an industry or business?

- Violations quickly corrected
- Industry or business is fined
- Other
- Don't know

	<u>1998</u>	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2018</u>
○ Quickly Correct Violation	N/A	87%	78%	62%	81%
○ Assess Penalty/Fine	N/A	7%	8%	22%	15%

- What would you say is the biggest source of air pollution?

○ 1998	Automobiles – 44%	Industry -- 39%
○ 2003	Automobiles – 42%	Industry -- 36%
○ 2008	Automobiles – 55%	Industry -- 36%
○ 2013	Automobiles – 38%	Industry -- 26%
○ 2018	Automobiles – 27%	Industry – 40%

- What would you say is the biggest source of water pollution?

○ 1998	Industry -- 39%	Agriculture -- 39%	Run-off -- 4%
○ 2003	Industry -- 36%	Agriculture -- N/A%	Run-off -- 5%
○ 2008	Industry -- 36%	Agriculture -- 12%	Run-off -- 13%
○ 2013	Industry – 22%	Agriculture – 4%	Run-off -- 14%
○ 2018	Industry – 27%	Agriculture – 7%	Run-off – 11%

- What do you say is the most important environmental problem facing Alabama Today?

○ 1998	Water Pollution -- 37%	Air Pollution -- 16%
○ 2003	Water Pollution -- 28%	Air Pollution -- 12%
○ 2008	Water Pollution -- 22%	Air Pollution -- 17%
○ 2013	Water Pollution -- 23%	Air Pollution -- 15%
○ 2018	Water Pollution – 35%	Air Pollution – 14%



# ALABAMA SOLID WASTE STUDY

The disposal of solid waste in Alabama is a decision that impacts the lives of all Alabamians. Enhancing recycling opportunities as well as ensuring the safe, proper disposal of solid waste is a priority for ADEM.

In an effort to evaluate the ADEM solid waste regulations and potentially improve the landfill permitting process, the Department initiated an independent, third-party review that included public input along with a review of how other states implement their landfill permitting processes. An integral part of this evaluation process involved holding at least one public meeting in each of the twelve Regional Planning Commission districts in Alabama, with supplemental meetings in disadvantaged areas. The public meetings provided opportunities for interested parties to learn about the technical requirements of the existing solid waste regulations and to also provide comments on any proposed changes.

The public meetings provide an example of the Department's commitment to seeking stakeholder input and focusing on transparency as part of its decision-making processes.



# ALABAMA CONFERENCE OF BLACK MAYORS

ADEM continues to provide mayors from around the state with valuable environmental information on various programs that are administered through the Department. Information is presented on a number of grant opportunities that could benefit local governments. The redevelopment of old, abandoned industrial sites, known as brownfields, is highlighted along with information about low-interest loans through the Clean Water and Drinking Water State Revolving Loan Funds.

The Department routinely responds to requests to speak and provide information at Alabama Conference of Black Mayors events. The cleanup of illegal solid waste and scrap tire dumps, fish tissue monitoring, air quality forecasting, the management of stormwater, and how to apply for recycling grants are always topics of interest to local elected officials. This investment of time by the ADEM staff to educate local elected officials enables them to make informed decisions on behalf of their constituents to sustain Alabama's air, land, and water resources, which benefits all people.



# ALABAMA CONFERENCE OF BLACK MAYORS





# COMMUNITY LEADERS INSTITUTE

ADEM has participated in three (3) Community Leaders Institute events that were held at the historically black educational institutions of Alabama A&M University (Huntsville), Miles College (Birmingham), and at Montgomery City Hall. The overall focus of the Community Leaders Institute is on the unique relationship between environmental protection, human health, environmental justice, and economic development.

A critical factor in the success of community development programs is a well-informed community. The Community Leaders Institute provides an open forum for local community leaders to engage local government leaders and obtain information on how to access resources and data that is necessary for making the best decisions for local communities.





# **DRINKING WATER STATE REVOLVING FUND**

The Department dedicates significant financial and technical resources to ensure local municipalities provide clean, safe drinking water to their citizens. ADEM issues permits, requires specific monitoring for a wide-range of chemicals, and conducts routine inspections of drinking water facilities to document that Alabamians are receiving clean, safe drinking water from the entity that supplies it.

In an effort to provide these municipalities with the ability to keep their treatment plants modernized and up-to-date, ADEM implements the Drinking Water State Revolving Fund (SRF), which is a low-interest loan program that allows municipalities to borrow money at low interest rates. The money can be used to enhance the drinking water infrastructure through the construction of new treatment plants, storage tanks, and distribution pipes. It should be noted that public meetings are held during this process. The purpose of the public meetings are to provide awareness, gauge public opinion, and solicit comments on various projects from interested persons.

Loan recipients are provided maps depicting disadvantaged communities based on the most recent census data. The information is provided to assist the systems in their public outreach efforts.



# GENERAL BROWNFIELD INFORMATION

The Alabama Land Recycling and Economic Redevelopment Act was signed into law on May 21, 2001, allowing ADEM to create and manage the State’s Brownfield Redevelopment and Voluntary Cleanup Program commonly referred to as the “VCP”. The Act allows for the assessment and remediation of contaminated sites and has certain liability protections, including protection from third-party lawsuits, to those non-responsible entities wishing to redevelop brownfield sites.

A brownfield site is real property that has contamination or is perceived to be contaminated. Brownfield sites are usually idle, underutilized, or abandoned. With the passage of federal and state legislation allowing for significant liability protections to “clean hands” entities, many of these sites have been assessed, cleaned up, and returned to productive use. The granted liability protections are fully transferable to any non-responsible party who may purchase the site, provided all authorized land use controls are adequately maintained. Location and infrastructure are major factors in the reuse of a brownfield site. Prime brownfield sites are usually near major highways with access to existing power, water, and sewer utilities. Many times existing buildings can be used for new industrial or commercial purposes. The potential for immediate use of a brownfield site may well offset the cost of waiting while a greenfield site is prepared and developed for use.

Once redevelopment in an area begins, other sites in close proximity also generally experience a level of rejuvenation and growth. ADEM has funding available for site remediation through the Alabama Land Recycling Revolving Loan Fund Program. The low-interest loans have a term of 10 years and are available only to local governments for site remediation. The Alabama Department of Revenue also has information on the various brownfield tax abatements and incentives offered on both the state and federal levels.



# ENERGY REDUCTION ASSISTANCE

ADEM is helping Alabama utilities and industries preserve resources, obtain significant cost savings, and optimize utility operations by reducing their energy use for wastewater plant operations. This is an initiative of ADEM's Permits and Services Division and has been ongoing for many years. ADEM continues to help utilities and industries reduce energy use, save money, and optimize their wastewater operations each year.

The first project began in 2014 as a joint initiative with EPA Region 4 and the University of Memphis. Under the Phase I EMI, ADEM completed energy assessments at 19 wastewater utilities. ADEM provided recommendations on how to operate their wastewater plants with optimal efficiency. Since then, the outcome of this project has been tracked. The utilities are now saving a great deal of money (in some cases over \$100,000 per year) as a result of using less kilowatt-hours to run their utilities on a monthly basis.

Expanding on the first initiative, ADEM became involved in a larger two-state project with the State of Tennessee. ADEM helped win a competitive Department of Energy (DOE) grant to continue doing energy assessments at Alabama utilities. As a member of the DOE Joint Energy Project Team, ADEM worked with the Alabama Department of Economic and Community Affairs (ADECA), the Tennessee Department of Environment and Conservation, the EPA, and the University of Memphis. Under this DOE grant, ADEM and ADECA assessed 23 additional wastewater utilities in Alabama over a two-year period, helping them to conserve energy, reduce Greenhouse Gas (GHG) generation, and reduce nutrient discharge by improving the operating efficiency of their wastewater plants. ADEM and ADECA also developed a template for other wastewater utilities to follow so that they too may achieve improved energy efficiency, broadening the impact of the project to other Alabama utilities. The DOE is now using this template to leverage energy efficiency improvements at other plants around the nation.

ADEM and ADECA hosted a series of technical workshops around the state to train utility managers and wastewater plant operators on how to implement energy efficiency measures, how to track energy savings, and how to optimize their wastewater utilities. The Department is proud to note that this endeavor has been incredibly successful, and the participating utilities are now saving a great deal of energy, while in fact discharging an improved effluent quality as a result of plant optimization.

The DOE project concluded in July of 2018. However, ADEM continues to work in partnership with ADECA and EPA Region 4 to perform several additional energy assessments per year, as we identify opportunities for additional success. ADEM has also provided similar EMI work for Alabama industries.

To date, ADEM's recommendations have identified a potential energy savings of more than 22 million kWh per year. The improved energy efficiency can potentially reduce greenhouse gas emissions (GHG) by about 32 million pounds per year. In addition, Alabama utilities and industries are

collectively reducing the amount of total nitrogen discharged to receiving waters by more 1.6 million pounds per year through plant optimization.

ADEM is also proud to have assisted the Hanceville Water and Sewer Board with its energy savings initiative. For several years, Hanceville has achieved a notable energy savings by continually improving its plant efficiency. Nevertheless, Hanceville then took the initiative to also install a solar energy facility at its wastewater plant. Commencing operation in July 2018, Hanceville now operates the first-ever solar array constructed in Alabama to support the energy management of its wastewater utility. ADEM provided a low interest loan through the State Revolving Fund to support the solar plant construction.

In 2022, ADEM and the University of Alabama began a partnership to perform pollution prevention assessments of industries in the state. The ADEM/UA team is emphasizing energy efficiency as part of our ongoing assessment efforts. Funded by an EPA grant, ADEM and UA are targeting food and beverage industries around the state, with a special emphasis on industries located in disadvantaged communities. For one Alabama dairy operation, the ADEM/UA team identified 500,000 kWh of annual energy savings, yielding annual cost savings of \$40,000 and 16,000 tons per year reduction in GHG emissions.



*David Moore (Muscle Shoals Plant Manager) receiving an Award for Success in Alabama Wastewater Energy Management Initiative.*



# **ILLEGAL SOLID WASTE DUMP CLEANUPS**

ADEM's efforts to eradicate illegal solid waste dumps from Alabama roadsides is one of the key components in allowing Alabama to live up to its name, "Alabama the Beautiful." These illegal solid waste dumps are an eyesore, serve as a breeding ground for mosquitoes, and can cause negative impacts to water quality in local creeks and streams.

ADEM was instrumental in obtaining a funding mechanism to support this effort through the passage of the Alabama Solid Waste and Recyclable Materials Management Act in 2008. Since the passage of this legislation, ADEM has dedicated both financial and technical resources to cleaning up illegal dumps across Alabama.

Through a prioritization process that includes whether or not the illegal dump is located in a disadvantaged area, the Department makes informed decisions and prioritizes these sites for cleanup. The efforts under this program assist innocent landowners who have had materials dumped on their property, increase community pride, and provide tremendous improvements to Alabama's natural resources.



# SCRAP TIRE DUMP REMEDIATION

The illegal dumping of scrap tires in Alabama has caused environmental impacts. These sites have contributed to problems with mosquitoes and impacted numerous innocent landowners. Due to these facts, the Department actively pursued legislation that would provide a funding mechanism to address this issue. Those efforts were rewarded with the passage of the Alabama Scrap Tire Environmental Quality Act in 2003.

Since the passage of this legislation, ADEM has implemented a regulatory program that ensures the proper disposal of scrap tires and prevents the development of new, illegal scrap tire dumps. In addition, ADEM has provided financial and technical resources to cleanup illegal scrap tire dumps at over 240 locations in Alabama, with many of these being located in minority and/or low-income areas. Almost 10 million scrap tire equivalents have been removed from these illegal dumpsites thereby removing environmental threats and eyesores in these local communities.



# **ABOVE GROUND STORAGE TANK COMPLIANCE ASSISTANCE PROJECT**

In an effort to inform municipalities with disadvantaged populations of regulatory requirements related to above ground storage tanks (ASTs), the Department launched an initiative to provide compliance assistance visits to AST facilities owned by local governments in those areas. The visits gave the Department the opportunity to inform local governments of AST compliance requirements and of Alabama Tank Trust Fund (ATTF) benefits.

The tanks were typically located at county road and maintenance shops, boards of education, city shops, city school systems, and municipal wastewater treatment facilities. The process included contacting each county engineer to discuss the purpose and goal of the project and conducting the compliance assistance visits to provide information, guidance, and points of contact in case questions arise in the future. The specific requirements for a tank to be considered ATTF eligible were explained in detail during the visit.

The total number of sites identified in this project included municipalities in areas with minority populations, low-income populations, and below state average income populations. The priority sites (a subset of the total sites) in the project included municipalities in areas with minority populations and low income/minority populations. All of the priority sites have been visited.



## ADEM WEBSITE TRAINING

The Department has focused significant resources on educating citizens and stakeholders on how to access information and utilize certain tools on the ADEM website. Specific training events have been held at various universities to include Alabama State University (Montgomery), Alabama A&M University (Madison), Auburn University (Lee), Bishop State Community College (Mobile), Lawson State Community College (Jefferson) and the University of Alabama (Tuscaloosa). In addition, other trainings have been held at various public libraries across the state.

These training events, which were widely publicized and offered at no-cost, allowed individuals to receive information on how to utilize the Department's new electronic complaint system (e-Complaint), the electronic filing system (e-File), and the What's Happening in Your County feature. The e-Complaint system allows people to file environmental complaints electronically while the e-File system provides instant access to documents (inspection reports/permits/correspondence) that have been scanned into an electronic format. The What's Happening in Your County feature allows people to view information related to public notices, proposed permits, permit applications, and public hearings in their local community.

The events also focused on educating local citizens, many of which are located in environmental justice areas, about the web-based features that ADEM offers on its website. Accessible from the comfort of their own home, or the local library, this information provides awareness and allows people to become more involved in the Department's decision-making processes.





# ADEM WORKS WITH PARTNERS TO REDUCE DIESEL EMISSIONS

More than \$4 million has been made available in the last 14 years for grant projects and programs to reduce air pollution in Alabama. At least \$2.3 million has been utilized in the Birmingham, Mobile, and Montgomery areas.

The money has been allocated by ADEM to seventeen partners to fund numerous projects all across the State from 2008-2022. Each project has uniquely served to reduce air pollution and was designed to encourage efforts to promote cleaner air.

ADEM has partnered with municipalities, companies, school systems, and other state agencies in Diesel Retrofit Projects to improve air quality through the reduction in diesel emissions, which lowers carbon monoxide, hydrocarbons, and particulate matter. The individual projects were primarily chosen for areas of the state that were exceeding, or were close to exceeding, the National Ambient Air Quality Standards.

The Diesel Retrofit Projects have been implemented from Mobile to Fort Payne with nine taking place in the Greater Birmingham area.

The projects involved school buses, trains, refrigerated trailers, terminal tractors, as well as on-road and off-road vehicles. Many of the projects included the installation of retrofit devices such as diesel oxidation catalysts on vehicles and anti-idling devices installed on trains in order to reduce particulate emissions. Other projects involved the replacement of older diesel vehicles with new, much cleaner diesel or alternatively-fueled vehicles.

The partnerships not only achieved improvements in air quality, but also allowed contractors, vendors, and employers involved in the diesel retrofit industry to retain their current staff and create new jobs. The ability of ADEM to establish these partnerships has enhanced public-private collaboration and allowed the leveraging of resources for the benefit of Alabama's overall air quality.



# GEE'S BEND FERRY RECEIVES ENVIRONMENTAL UPGRADE

The famous Gee's Bend Ferry located in Camden, Alabama has been upgraded as the first zero-emissions powered vessel in the nation. The ferry was previously operating using diesel fuel and has been repowered into a zero-emissions battery-electric vessel. This upgrade will be more energy efficient, safe for the environment, and more cost-effective.

The funding for the repowering project was provided by the U.S. Environmental Protection Agency (EPA) as part of the Diesel Emissions Reduction Act (DERA). The DERA program funds grants and rebates that protect human health and improve air quality by reducing harmful emissions from diesel engines.

Being the first vessel of its kind in the United States and second in the world, the Gee's Bend Ferry operates 362 days a year, providing five round-trip voyages each day.

In 2017, the Wilcox County Chamber of Commerce hosted a 10th Anniversary Celebration in honor of this repowering project at the Gee's Bend Ferry Terminal in Camden. Attendees included representatives from ADEM, Alabama Department of Transportation, EPA, the Alabama-Tombigbee Regional Commission, Governor Kay Ivey, U.S. Congresswoman Terri Sewell, and many others.

ADEM supports DERA and works with the EPA to find opportunities to better safeguard the environment and protect human health.

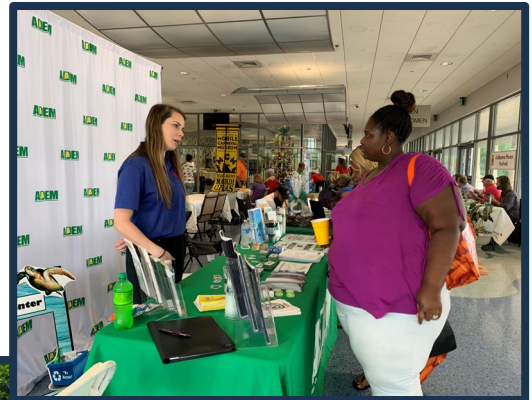


# COMMUNITY ENGAGEMENT COMMUNITY OUTREACH

Community based outreach, education, and engagement with the general public is essential to the overall mission of ADEM.

ADEM and its employees invest a significant amount of time and resources to meeting with and speaking to community-based organizations. The goal is to educate Alabama residents of all ages on ADEM's mission and the importance of safeguarding the state's air, land, and water resources. This is essential from an environmental standpoint and from an economic perspective.

The Department receives and fulfills many opportunities for community engagement with the public. Educating Alabamians of all ages provides benefits and helps keep the lines of communication open between ADEM and the citizens that the Department strives to protect.





# AMERICAN RESCUE PLAN ACT FUNDING

Using \$225 million out of the state's American Rescue Plan Act (ARPA) combined with other federal and state funds, ADEM awarded funding in 2022 to more than 180 drinking water and sewer projects in 63 Alabama counties as part of an ambitious initiative to repair and upgrade old, failing, and overwhelmed water and sewer systems throughout the state.

ADEM's investment in drinking water and sewer projects totaled \$473 million. In addition to the \$225 million from ARFPA allocated for use by ADEM by the Alabama Legislature during a special session called by Governor Kay Ivey, the Department used \$137 million from the Bipartisan Infrastructure Law (BIL) and more than \$110 million through State Revolving Fund (SRF) programs to augment the funding.

In March 2023, the Legislature approved an additional \$400 million in ARPA funds for drinking water and sewer projects. Supplementing that with BIL and SRF funds, ADEM expects to award more than \$600 million this year to needy public drinking water and sewer systems to address longstanding infrastructure needs.

The grants and no- and low-interest loans are financing projects designed to make clean drinking water and proper sewage disposal more accessible and reliable for hundreds of thousands of Alabamians. ADEM was chosen by Governor Ivey and the Legislature to oversee the allocation of funding because of the Department's work in environmental regulatory activities and history of administering low-interest loans to water and sewer systems.

ADEM prioritized funding to ensure public drinking water and sewer systems with the greatest needs and the least ability to finance major infrastructure projects on their own would receive help first.

In its 2022 ARPA allocation, the Legislature designated \$5 million for trial projects to address unique sewer problems in the Black Belt that have plagued families for generations. Those problems stemmed from dense soil that makes regular septic systems ineffective and sparse populations that make conventional public sewer systems impractical. From the funds, ADEM awarded \$2.2 million to the Department of Public Health for a project in Lowndes County using special septic systems, and \$2.8 million to the University of South Alabama for a cluster system demonstration project in Hale County.

The Department awarded \$120 million to public water and sewer systems that have emergency or high-needs projects. Those are systems previously identified by ADEM through the Drinking Water SRF and Clean Water SRF programs or through enforcement actions necessary due to failing infrastructure. (The Clean Water SRF is for sewer projects.) Systems that could afford to pay at least part of the project expense were eligible for matching funds. In its 2023 allocation, the Legislature added a provision that makes stormwater projects eligible for ARPA funding.

ADEM has created a dedicated website, [www.alabamawaterprojects.com](http://www.alabamawaterprojects.com) to inform the public of efforts to improve access to clean drinking water, protect the state's waterways, and ensure adequate

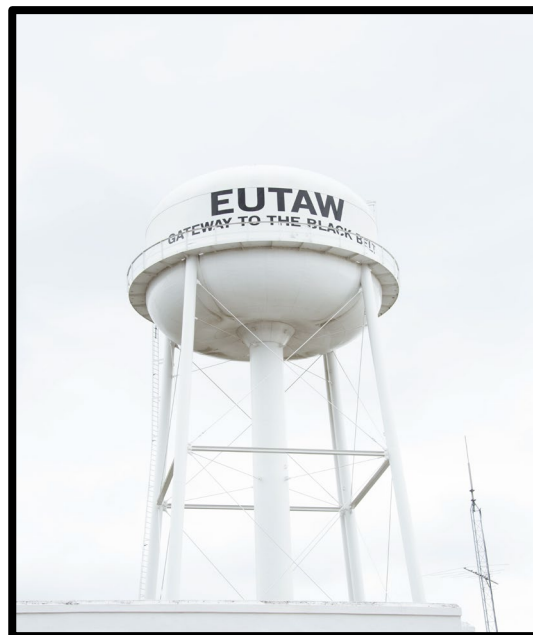


sewers service for residents. ADEM will distribute funding allocated to water and sewer infrastructure through the ARPA program and additional funds through the Bipartisan Infrastructure Law. Together, these funds will be distributed to water systems with high need across the state. The webpage includes links to the application forms for the water and sewer projects.

The process will be open and accessible to the public through regular website updates.

# Alabama Water Projects

*Drinking Water and Wastewater  
Infrastructure*



# **ADEM LAUNCHES RIGHT OF WAY CLEANUP PROGRAM FOR ILLEGAL DUMP SITES**

In May of 2023, ADEM developed the Unauthorized Dump Right-of-Way (UDROW) Cleanup Program. The UDROW Program will grant Alabama counties monies to help clean up illegal dump sites found on roadsides within the county. All 67 Alabama counties are eligible to receive a \$150,000 grant for a period of 3-years to aid in their efforts of keeping Alabama clean.

Counties may use the funding to offset costs incurred from labor performed, equipment rentals, disposal costs of any eligible materials that have been cleaned up from the roadsides. Counties currently benefit from a similar ADEM program, the Scrap Tire Right-of -Way program, in which the department grants monies to offset costs incurred from the cleanup and disposal of scrap tires.



# Interagency EJ Efforts





# SELMA-TO-MONTGOMERY NATIONAL HISTORIC VOTING RIGHTS TRAIL

ADEM has been the driving force behind a concerted effort to assess old brownfield sites along the Selma-to-Montgomery National Historic Voting Rights Trail (Trail) and to assist community leaders in the redevelopment of these abandoned commercial facilities. The goal of this effort has been to address environmental concerns along the Trail while at the same time revitalizing the blighted areas, providing employment opportunities, increasing the local tax base, and creating greenspace along the Trail.

ADEM and EPA conducted assessment activities at over 25 old locations that had previously stored petroleum products and also hosted numerous visioning sessions (charrettes) with the local citizens and elected officials to allow them to identify their visions for the redevelopment of their local communities. Numerous communities along the Trail have participated in this effort including Montgomery, Hayneville, White Hall, Uniontown, Selmont, and Selma.

In addition, ADEM committed over \$400,000 to the restoration of Genetta Creek, which is located in an area where the Trail enters the City of Montgomery. The project, while improving water quality, was also designed to support the EPA Urban Watershed Initiative to get disenfranchised people back in touch with their natural water resources.

A diverse and dedicated group of government and private entities have supported these revitalization efforts along the Trail. ADEM, EPA, the National Parks Service, the Alabama Department of Revenue, the Alabama Department of Transportation, the U.S. Army Corps of Engineers, and others, have all committed financial and/or technical resources to this effort.





# GENETTA CREEK / FAIRVIEW ENVIRONMENTAL PARK

Genetta Creek was channelized during construction activities on US Interstate 65 in the 1970's. Watershed health in the Genetta Stream and Catoma Creek watersheds has been drastically altered from the harmful effects of urbanization. Development throughout the watershed has resulted in increased volumes of stormwater runoff from impermeable surfaces; flashy hydrology associated with armored, man-made stream channels; loss of natural wetlands and riparian areas, inadequate natural flood plains; and threats to aquatic and wildlife species survival and habitat. The installation of conventional, hard-engineered, stormwater containment and conveyance infrastructure has diminished the Genetta Stream watershed's natural capacity to sustain a naturally functioning, hydrologic and ecological condition.

The genesis of the Genetta Park restoration project began in 2008 when Montgomery City Council members proposed a study of West Fairview Avenue. Visioning sessions were held to develop a master plan for all of West Fairview Avenue. Focus was put on providing greenspace at one of the entrances to the Historic Selma to Montgomery Voting Rights Trail and the City of Montgomery. In 2010, the City acquired the project site located at 750 West Fairview Avenue, near to where the Genetta Stream flows past Interstate 65.

The City applied to ADEM for a Section 319 Grant and was subsequently awarded funds from fiscal year 2010 to mitigate the transport of nonpoint source (NPS) pollutants via the Genetta Stream to Catoma Creek - and ultimately to help improve water quality discharged from the impaired Catoma Creek to the Alabama River. In May of 2011, ADEM provided additional funding through a principal forgiveness loan from the Brownfields Revolving Loan Fund.

Constructed wetlands were installed on approximately 1-acre or about 1/3 of the project site in order to moderate stormwater flow and velocity and provide a natural sink to recharge groundwater. Wetland substrate and flora intercept and bioremediate Genetta Stream stormwater as it drains from a significant number of acres north of the project site. In addition, stream daylighting (i.e., deliberately exposing stream flow or stormwater runoff to light by liberating it from pipes, culverts, and paved channels) has been utilized in a segment of the Genetta Stream in order to restore it to a more natural, functioning ecological condition. Natural stream conditions and function is expected to be enhanced as the flow of water is exposed to air, sunlight, vegetation, and soil - all of which may transform, bind up, or otherwise neutralize stormwater pollutants. The walking trails of the park are brick paved to prevent erosion and allow for the infiltration of rainwater to the local aquifer. Trees, shrubs, and other vegetative cover also aid both soil and groundwater remediation, a process known as phyto-remediation.

The Genetta Park project demonstrates to the public and private urban sector in envisioning and validating the benefits of stream daylighting; installing constructed wetlands; and establishing

greenways as stormwater treatment, watershed and water quality protection, and economic benefits of natural “green infrastructure” practices as an implementation option to traditional, hard-engineered, stormwater containment and conveyance systems.



# INTERAGENCY WORKING GROUP ON ENVIRONMENTAL JUSTICE

The EPA is engaged in a coordinated approach to evaluate the environmental condition and potential environmental impacts, in certain areas of the *North Birmingham, Fairmont, Collegeville, and Harriman Park* neighborhoods, as well as portions of *Village Creek, Five-Mile Creek, and Harriman Park* ditch, located in and around Birmingham, Jefferson County, Alabama. This effort, which includes air, water, and waste issues, is known as the ***North Birmingham Environmental Collaboration Project***. The EPA is also working with local stakeholders to develop a plan to revitalize this area and improve the quality of life for its residents.

On August 4, 2014, the EPA convened the Regional Environmental Justice (EJ) Interagency Working Group (IWG) to bring federal support and technical assistance to the myriad of needs facing the City of Birmingham and the citizens in the area that make up the *North Birmingham Environmental Collaborative*. The EPA's goal is to work with other federal agencies to assist with revitalization efforts towards making a visible difference in the communities impacted by potential environmental concerns, blight, and degradation. The meeting included representatives from the communities, along with other City of Birmingham officials, ADEM, ALDOT, and federal agency heads and their staff. Federal agencies in attendance included HUD, COE, DOT, DOL, DOJ, HRSA, HHS, ATSDR, DOI, and EDA.

Since that time, various workgroups, which comprise representatives from federal agencies, the City of Birmingham, state agencies and neighborhood representatives, have worked together to explore opportunities to build interagency collaborative efforts in support of the needs of the North Birmingham communities.

On Thursday, January 22, 2015, the *Regional IWG* met to hear from the workgroups on the priority issues explored, potential long and short-term actions, opportunities for technical assistance and capacity building, and potential funding opportunities explored or initiated to address the concern. The relationship of the priority issues were explored for the *North Birmingham Community Coalition Plan* and the *North Birmingham Community Framework Plan* as well as the *Village Creek Watershed Management Master Plan*.





# CENTERS OF EXCELLENCE IN WATERSHED MANAGEMENT

The Department collaborated with EPA to officially designate Alabama A&M University and Auburn University as Centers of Excellence in Watershed Management. These designations have streamlined communications between the Department, each university, and numerous local stakeholder groups. Their official designation as a Center of Excellence in Watershed Management enhances grant opportunities for the designated universities.

Improving water quality in local communities begins at the local watershed level. One of the keys to the long-term sustainability of water resources is to educate local citizens to recognize that they have a vested interest in protecting their water quality at the local level. Each of these universities, through its designation as a Center of Excellence in Watershed Management, has contributed to this watershed focused effort and assisted local citizens and stakeholder groups to become more engaged in the decision-making process and the protection of water quality at the local level.



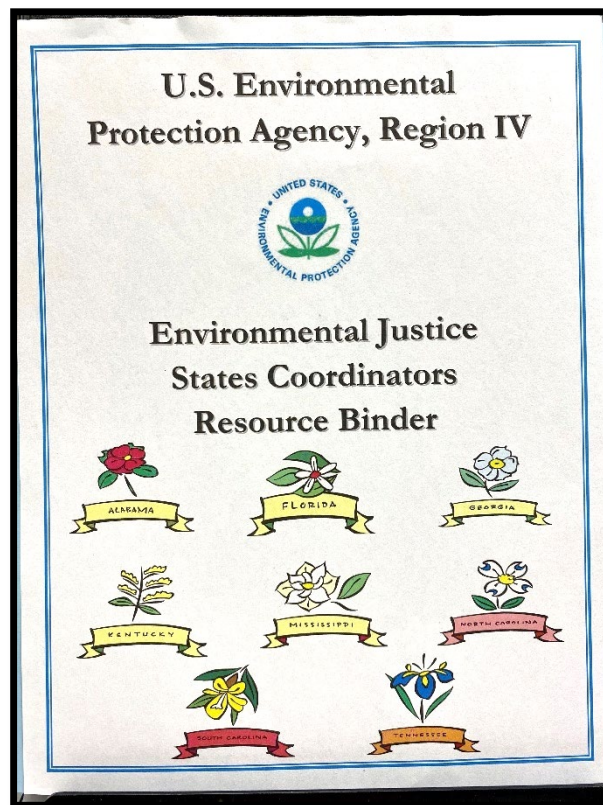


# SOUTHEAST REGIONAL ENVIRONMENTAL JUSTICE CONFERENCE

ADEM, in conjunction with the U.S. Environmental Protection Agency, co-sponsored the 2012 Southeast Regional Environmental Justice Conference that was held in Atlanta. The event provided attendees with information on a variety of topics including developing sustainable partnerships, collaboration with minority academic institutions, effective ways to promote environmental justice, and building blocks to environmental justice.

Over 200 representatives from various stakeholder groups were in attendance at the conference. ADEM provided travel scholarships for a number of community representatives to support their attendance. In addition, ADEM staff met with all attendees from Alabama during a state/community engagement session to hear their concerns and provide information about ADEM programs.

This event “Promoting Environmental Justice through Effective Education, Collaboration, and Mobilization” also provided a venue for ADEM staff to network with representatives from other states to learn more about their environmental justice efforts. The opportunity to share information with other states and network with other environmental justice experts will provide benefits to ADEM in its effort to ensure the fair treatment and meaningful involvement of all people in the environmental decision-making process.



# TUSKEGEE MINORITY AGRICULTURE

Officials with the ADEM and staff from the U.S. Environmental Protection Agency (EPA) joined local farmers, representatives from other state and federal agencies, and officials from Tuskegee University at Al Hooks Produce, an area farm in Shorter, to share ideas related to agricultural activities in Alabama. In the summer of 2010, Al Hooks Produce joined the Tuskegee University Farmer's Cooperative, and supplied fresh produce to Walmart, the largest grocery retailer in the United States.

The farm tour provided an opportunity for EPA to share information with farmers on issues such as pesticide regulations, and also provided area farmers a chance to highlight how agricultural operations interact with state and federal agencies. EPA and ADEM were joined on the tour by members of the National Association of Black Farmers, Tuskegee University, the Association of American Indian Farmers, and the United States Department of Agriculture. Following the farm tour, a roundtable discussion was held at the Kellogg Conference Center at Tuskegee University. The theme of the meeting was "Connecting with the Minority Farming Community." The discussions focused on farmers and landowners developing plans and implementing best management practices to improve water quality and making a visible difference in their communities.

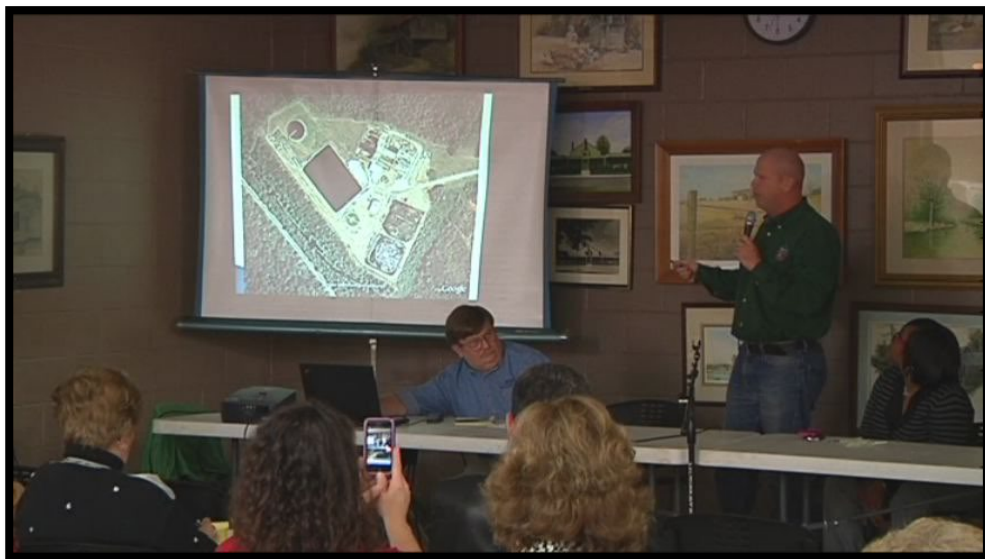


# COMMUNITY ENGAGEMENT AT REEF FACILITY

REEF Environmental Services, in Sylacauga, was a centralized wastewater treatment facility located in a low-income area that was permitted through ADEM to treat industrial wastewater. While operational, ADEM inspected the facility numerous times and initiated enforcement actions due to documented noncompliance. The facility ceased operations in 2010 leaving large surface basins full of untreated, or partially treated, wastewater.

In response to numerous citizen complaints about the facility and based on limited financial resources to address the situation, ADEM contacted EPA and requested federal assistance in dealing with the facility. An emergency response was initiated, and it was discovered that hydrogen sulfide and other sulfide compounds were trapped under two tarps that were partially covering the surface basins. EPA utilized federal resources to remove the hydrogen sulfide gases and to treat/dispose of the wastewater in the surface basins.

As part of this effort, ADEM and EPA hosted three community engagement meetings to answer questions from local citizens and to also keep them up to date on the latest removal activities. In addition to these community engagement meetings, there were continuous meetings with the local elected officials to ensure that they could accurately answer questions that arose from their constituents.





# **MARKET DEVELOPMENT FOR RECYCLED SCRAP TIRE MATERIALS**

ADEM has taken the lead in promoting the reuse/recycling of scrap tires and tire derived materials (TDM) and incentivizing businesses that process scrap tires to locate in the state. This effort provides environmental benefits through the diversion of tires from Alabama landfills and provides economic benefits through the reduced costs for tire disposal and affordable TDM for consumers.

ADEM initiated a Scrap Tire Marketing Program and partnered with other state agencies, municipalities, and schools to implement projects to demonstrate the viable uses of TDM. Tire derived materials have been installed on playgrounds at Buck's Pocket State Park, Joe Wheeler State Park, Lake Guntersville State Park, DeSoto State Park, Roland Cooper State Park, T.R. Simmons Elementary School, Mt. Laurel Elementary School, and more. Also, alternative surfaces that utilize TDM have been installed at Montgomery's Riverfront Park and at Prattville's Pratt Park.

A pilot project to use tire derived material instead of gravel in septic systems has been implemented. ADEM has also partnered with the Alabama Department of Transportation to test rubber modified asphalt at the National Center for Asphalt Technology Pavement Test Track. Additionally, a scrap tire processing facility in Coffee County has been constructed, with partial funding from ADEM, to provide a better supply stream of TDM for commercial uses.





# **SCRAP TIRE USED TO BENEFIT COMMUNITIES**

Recycled scrap tire mulch has been installed on playgrounds at Straughn Elementary School, the Town of Flomaton, the Town of Kennedy, the City of Monroeville, the Town of Summerdale, and many others. Also, alternative surfaces that utilize scrap tires have been installed in the City of Satsuma, Tuscaloosa County, and others.

These projects were selected by an open grant process to solicit, evaluate, and select tire demonstration projects for reimbursement. Such projects are meant to encourage the use of scrap tire derived products and applications within Alabama.

The Alabama Scrap Tire Marketing Program (STMP) demonstrates beneficial end uses of scrap tires. The program supports research and demonstration of end uses which helps overcome current misconceptions and technical barriers. This will also lead to more widespread uses.

The Alabama STMP has partnerships with other state agencies, municipalities, and schools to show other viable uses of scrap tires. The program has provided over \$10.7 million for the implementation of Scrap Tire projects in the State. These projects not only provided environmental and economic benefits in their application, moreover, these projects have improved communities and public facilities across Alabama.

The Department continues to look for new and innovative ways to market scrap tire material and benefit communities.



# **RUBBER MODIFIED ASPHALT DERIVED FROM SCRAP TIRES HELPS COMMUNITIES**

Rubber modified asphalt (RMA) composed of traditional asphalt modified with crumb rubber derived from scrap tires. RMA helps to divert scrap tires away from the landfills and brings them to a beneficial end use. There are many benefits to using RMA. Some of the benefits include but are not limited to increased pavement life, higher resistance to oxidation and rutting, decreased temperature susceptibility, increased resistance to cracking, decreased road noise, reduced maintenance costs due to higher durability and performance, and it is an environmentally friendly reuse of scrap tires.

Currently the Department has partnered with several entities across the state implementing RMA on roads and roadways at Joe Wheeler State Park, Guntersville State Park, DeSoto State Park, Coffee County, and McClellan Development Authority. The National Center for Asphalt Technology is monitoring the RMA and comparing it to traditional asphalt to determine how well it performs in comparison to traditional asphalt.



# **FIRST WATERCARE ANNOUNCEMENT - SELMA**

On January 20, 2016, in Historic Selma, the U.S. Environmental Protection Agency made the first announcement of a new community water assistance program. It was announced that \$50,000 in financial and technical guidance would be provided to help Selma invest in drinking water and wastewater infrastructure.

ADEM nominated Selma as a candidate for EPA's new WaterCARE program, which assists selected communities in developing innovative financial strategies for improving water infrastructure in order to meet long-term needs. WaterCARE stands for Community Assistance for Resiliency and Excellence.

ADEM Director Lance LeFleur, Selma Mayor George Evans, and Ellen Gilinsky, Senior Policy Advisor in EPA's Office of Water made the announcement at a news conference at the historic St. James Hotel in Selma. ADEM, EPA, and city officials also toured the Selma water treatment and wastewater treatment facilities.

Nationally, EPA provided \$500,000 in financial and technical assistance for 10 communities. Through WaterCARE, EPA helps communities conduct financial evaluations, rate and revenue studies, water efficiency studies, and resiliency assessments of existing water infrastructure. Under the WaterCARE program, the selected communities each meet the following criteria: They have a population of less than 100,000; they have a need to address public health challenges; they have median household income considerations; and they have a readiness to start capital improvement projects.

EPA and ADEM work with Selma to collaborate on activities needed to develop a financial strategy to meet the city's local utility needs. The program will provide the following specific avenues of assistance to Selma: 1. Assist the city in developing the appropriate technology needed for its wastewater treatment plant; 2. Determine asset management practices that could be undertaken to implement short and long-term capital planning strategies for replacing aging infrastructure; and 3. Explore possibilities for regional partnerships to assist surrounding communities with water and wastewater needs.



# **ENVIRONMENTAL JUSTICE REGIONAL MEETING**

ADEM hosted the U.S. Environmental Protection Agency's Regional Environmental Justice 2017 Spring Meeting on May 10-11, 2017, in Montgomery. Representatives from EPA Region 4 and several states spent time engaged in meaningful discussions designed to strengthen relationships and build alliances with states across the region with the goal of achieving healthy and sustainable communities for everyone.

Topics discussed at the meeting included recent Title VI Developments at EPA, Community Focused Exposure and Risk Screening, and health impact assessments. The future direction of community engagement was presented along with environmental justice research, and the priorities and strategies for the continual support of Environmental Justice work.

At this meeting, it was discussed that Environmental Justice (EJ) is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Also discussed was EPA's goal for all communities and persons is to have the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

Participants at the EJ Regional Meeting listened to reports and had discussions involving community solutions and the impact results from conferences like this may have in the future. It gives individual state environmental agencies the ability to make recommendations and monitor issues relevant to the needs and circumstances of minority and low-income populations and help facilitate involvement and participation.

The meeting and outreach activities were structured to help broaden mutual awareness of EJ topics, and keep the states connected, so together the state environmental agencies can more effectively identify and address EJ issues impacting their communities.

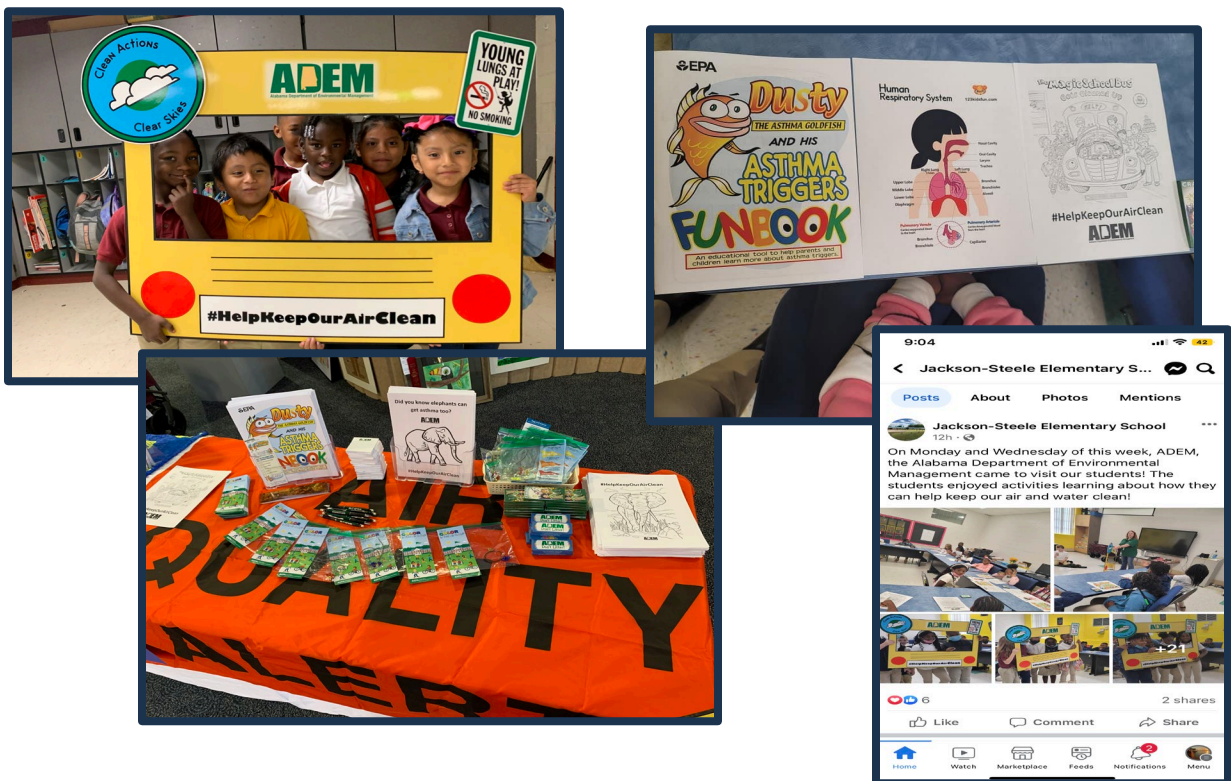




# AIR RELATED COMMUNITY ENGAGEMENT FOR COVID-19 RESPONSE

The Department with funding assistance from an EPA State Environmental Justice Cooperative Agreement is providing education and outreach in targeted communities about air quality issues and the consequences that individual choices can have on air quality. To identify specific project focus areas, information from the Alabama Department of Public Health (ADPH) regarding emerging COVID-19 cases along with the Environmental Justice Screening and Mapping Tool (EJSCREEN) were used to select the vulnerable underserved communities.

The Department provides education and training related to the causes and effects of air pollution (Clean Air Act, Section 103 (b)(3)) within underserved communities that have experienced prolific impacts due to the COVID-19 situation. One of the underlying medical conditions mentioned is chronic lung disease or moderate to severe asthma. Interactive and visually engaging exhibits will encourage participants to learn more about how the community is impacted by air pollution. Exhibits will also provide guidance to allow implementation of practices. Community members have had opportunities to learn about air quality and learn how to use and understand air quality reports to know when their air quality is worse. Community members are also provided with updated information and guidance for COVID resource information.



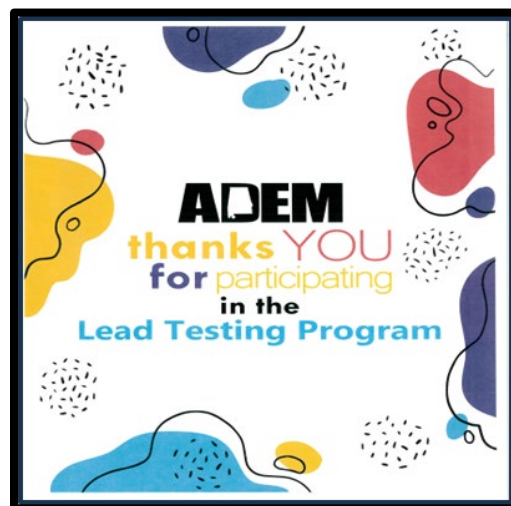
# LEAD TESTING IN CHILD CARE FACILITIES

In 2016, the Alabama Department of Environmental Management received funding from the U.S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act to address lead in drinking water at schools and childcare facilities in the state of Alabama. The ADEM and its partners, Alabama Department of Early Childhood Education (DECE) and Alabama Department of Human Resources (DHR) announced a statewide initiative to help voluntary testing of water at all childcare and Pre-K facilities since children under 6 years of age are the most vulnerable to the harmful effects of lead contamination in drinking water.

During this initiative, ADEM used EPA's 3Ts guidance as a model to communicate throughout the implementation of the program, the results, and important lead information to the public, parents, teachers and staff, and to the larger community. The 3Ts are as follows: (1) **Train** on the risks of lead in drinking water and testing for lead, as well as developing key partnerships to support the program; (2) **Test** using appropriate testing protocols and a certified laboratory; and (3) **Take Action**, including the development of a plan for responding to results of testing conducted and addressing potential elevated lead where necessary.

Since 2020, ADEM staff from the Drinking Water Branch prepared and mailed water sampling kits across the state to childcare facilities. Representatives from DECE and DHR visited with staff members from these facilities and provided them with instructions and assistance on the testing. The sampling kits are used to test the water for any lead contamination from faucets and water fountains within the building and shipped back to the main ADEM laboratory in Montgomery for analysis.

To further provide assistance to the facilities, ADEM created a how-to video on the Department's website with step-by-step instructions for effectively sampling the water. Following the testing, ADEM staff report the results to each facility. These same facilities received thank you packets including a poster, letter of thanks, and coloring books for the children.

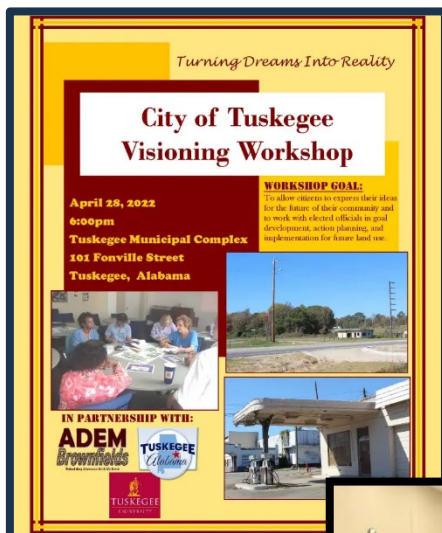


# TUSKEGEE COMMUNITY MEMBERS IDENTIFY NEEDS AND DESIRES FOR REDEVELOPMENT

ADEM held several Visioning Sessions in Tuskegee in 2021 and 2022. During the Visioning sessions, attendees were educated on brownfields and why brownfield redevelopment is so important. They were then given the opportunity to voice their opinions on specific needs and desires for their community. ADEM partnered with Tuskegee University and Auburn University to create artist renderings from the community input gathered at the Visioning Session.

During the March 2022 closeout event, ADEM presented a video which showcased the 12 professional renderings created. Six of these renderings were created by members of Tuskegee University, while Auburn University contributed the remaining renderings.

The Brownfields Redevelopment program closeout session attracted 20 community members including local officials and faculty members from Tuskegee University. Feedback at the event was positive and these sessions helped the City of Tuskegee move forward in their efforts to revitalize their city.





# JOINT LAND AND WATER AVAILABILITY SESSION HELD IN PRICHARD

ADEM scheduled a Public Availability Session at the City of Prichard City Hall on April 11, to offer education and outreach on various Departmental topics to the residents of Prichard. Every Door Direct Mail (EDDM) Postcards were sent to approximately 6,000 residents and businesses in Mobile County to ensure the public was notified in advance of the availability session. Utilizing the U.S. Postal Service and EDDM services provided another avenue for ADEM to notify the public on upcoming Departmental events in the area.

During the event, tables were set up by ADEM Staff from Brownfields, Unauthorized Dumps and Recycling, Wastewater, Drinking Water, GIS Mapping, and Community Engagement. Community Engagement distributed information on how to navigate the ADEM Website, ADEM's Public Participation Process, how to file a complaint, and to access e-file. People were given the opportunity to register on ADEM's website electronically using tablets to receive ADEM email notifications.

Land Division's Brownfields Team offered education on Brownfield redevelopment opportunities, the Removals and Response Team educated attendees on the proper steps to take for unauthorized dumps and promoted recycling, and personnel from the Information Systems Branch demonstrated the many interactive ways to access the e-maps portal on the ADEM website. The Water Division's Drinking Water and Wastewater personnel specifically addressed citizen questions concerning public health and drinking water in the area. More than 80 people attended the event that was held from 4:30 p.m. to 7:30 p.m.





# ADEM AWARDS GRANT TO HAYNEVILLE AND OTHER LOWNDES COUNTY PROJECTS

ADEM and officials with the U.S. Environmental Protection Agency joined state and local officials at a signing ceremony in Hayneville (Lowndes County) in January 2020 to kick off a \$10 million project to repair and upgrade the town's sewer system.

The funding is part of \$463 million awarded by ADEM to public drinking water and sewer systems through a state initiative to repair and upgrade old, failing, and overwhelmed water and sewer systems. In addition to the \$10 million for sewer work in Hayneville, ADEM also awarded the town \$2.9 million for improvements to its drinking water system.

Hayneville will use the funding to overhaul the town's sewer system, including replacing sewer lines. The town is not alone among Lowndes County communities awarded funding by ADEM.

The Town of Lowndesboro received \$1 million for water system improvements, and the Lowndes County Water Authority received \$735,000. In addition, ADEM awarded \$2.2 million to the Department of Public Health for a demonstration project in Lowndes County using special septic systems designed to cope with the dense soil in the Black Belt region that often makes conventional septic systems ineffective.



# PICKENS COUNTY RECEIVES ADEM ASSISTANCE

Gordo was awarded more than \$1.6 million for work on a water well. The town is providing \$325,000 in matching money, bringing the total cost of the project to \$1.99 million. Reform was awarded \$5.5 million to upgrade its water system, and \$1.5 million for sewer work, which includes a new pumping station and repairs. The Pickens County Water Authority received over \$316 million for upgrades to a well and water treatment plant.

The Alabama Department of Environmental Management recently awarded more than \$12 million to repair water and sewer systems in Pickens County in West Alabama.

The grant funds were awarded to the Town of Gordo, the City of Reform, and the Pickens County Water Authority. It is part of \$473 million in grants and loans that ADEM is awarding to public drinking water and wastewater systems to address outdated, malfunctioning, and overwhelmed infrastructure.

Officials in Pickens County held a news conference in Carrollton to announce that help was coming to the communities to improve water and sewer service. State Senator Gerald Allen and State Representative Rodney Sullivan and county and city officials attended the gathering at the Pickens County Judicial Building.



# Enhanced Community Access: Tools Development

The screenshot shows the ADEM website homepage. At the top left is the ADEM logo and the text "Alabama Department of Environmental Management". Below this is a navigation menu with links for "Home", "ADEM Forms", "ADEM Programs", "Alabama Environmental Regulations and Laws", "Compliance Information", "Environmental Management Commission", "Inside ADEM", "More Information", "Notices and Events", and "Contact Us". There is also a section for "Enter your email address to sign up for ADEM Email Notifications!" with a "Submit" button. A search bar is located below the email sign-up section. On the right side of the page, there is a large image of a waterfall with the caption "Lower High Falls, Talladega Forest - Bill Wilson". Below the image is a "Welcome to ADEM" section with a paragraph about Alabama's natural resources and the department's mission. To the right of this text are several colorful buttons for "Videos/Recordings", "eGov Portal", "Complaints", "Calendar", "What's Happening In Your County", "Permit Wizard", "eFile", "Air Daily Forecasts", "UST Delivery Prohibition List", and "eMaps Portal". Below the welcome message is a "Unified Strategic Plan" section with a paragraph about the plan's update and public comment process. To the right of this is an "Upcoming Events and Latest News" section with a list of events: "January 18, 2024: 2024 Alabama NPS Conference Save the Date", "August 22, 2023: 29th UST & 22nd Groundwater Conferences", "July 10, 2023: ADEM Partners with the Boaz City Schools...", "July 10, 2023: ADEM Partners with the Lauderdale County...", and "July 10, 2023: ADEM Partners with the Winston County Board...". At the bottom left of the page, there is a "TRANSLATIONS" section with icons for Spanish, Vietnamese, and Chinese, and the text "Bản dịch Traducciones".



# ELECTRONIC TOOLS DEVELOPMENT

In recent years, ADEM continues to significantly enhance the ability of the public and industry to obtain information and communicate with ADEM staff, via the internet and the ADEM website. In addition, geographical information systems (GIS) and data layers have resulted in people having unprecedented access to information, records, and science-based data. These efforts have not gone unnoticed as ADEM has been the recipient of numerous awards and recognized by numerous organizations as a leader in electronic tool development. The information contained in this section highlights these efforts and provides an insight into how these electronic tools are supporting the Department's efforts to operate more efficiently and ensure all people can have meaningful involvement in the ADEM decision-making process.

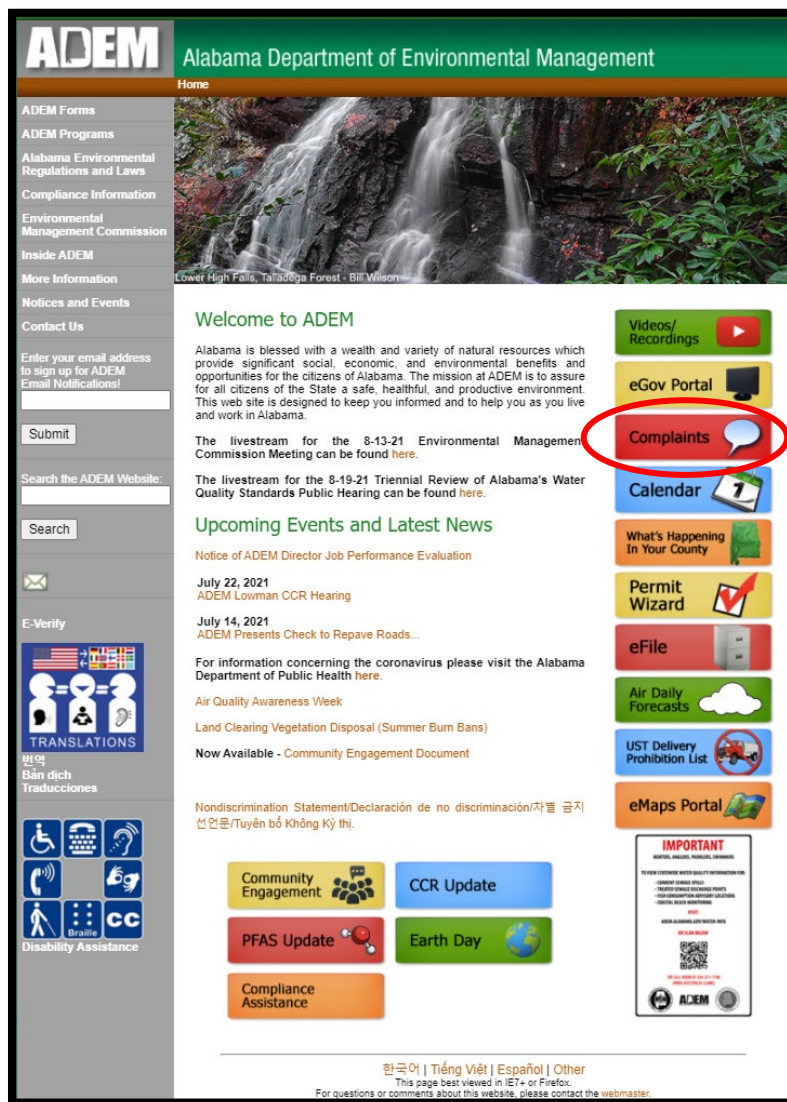




# ELECTRONIC COMPLAINTS (E-COMPLAINT)

ADEM has an electronic complaint system (e-Complaint) to provide the public with information regarding environmental issues in Alabama. The e-Complaint system is housed on the ADEM website and allows a quick, easy-to-use system for the public to file new complaints, search existing complaints, and determine the status of complaints.

Complaints and other inquiries regarding open burning, stormwater runoff, illegal dumping, and other issues have all been submitted through the e-Complaint system. In addition to providing basic information about the complaint, the public can include photographs with their submittal. The e-Complaint system allows ADEM to better focus its inspectors in areas where there is a real, or perceived, environmental issue and to be responsive to the concerns of local residents.



# ELECTRONIC FILES (E-FILE)

In an effort to provide the public and other stakeholders with easier access to ADEM files and records, ADEM has an electronic filing system (e-File) that contains millions of scanned documents. All of these documents can be accessed through the ADEM website and provide tremendous cost savings for the public as well as for ADEM.

The environmental files and records maintained by ADEM are viewed on a regular basis by residents interested in environmental issues in their local community as well as attorneys, environmental consultants, and environmental organizations as part of their daily business practices. Prior to the implementation of e-File, these individuals were required to make an appointment, drive to Montgomery on a designated date/time, look through the paper files, and then pay a copying fee to obtain documents of interest. With the implementation of e-File, all of these files and records can now be accessed from the comfort of their home or office.

By making these files and records more easily available to the public, ADEM can achieve transparency in its decision-making processes and can ensure the fair treatment and meaningful involvement of all people.

The screenshot shows the ADEM eFile web application interface. At the top, the ADEM logo is on the left, and the text "Alabama Department of Environmental Management" is on the right. Below the logo is a "Menu" section with links for "Main", "UST Search", "Director's Correspondence", "Complaint", "Fish Kills", "Disclaimer", and "How-To Guide". The main content area is titled "eFile" and contains a search form. The form includes fields for "Media Area" (with checkboxes for Air, Land, and Water), "Facility" (with a text input field), "Permit Number" (with a text input field), "County" (with a dropdown menu), "File Name" (with a text input field), "Document Date" (with a text input field), and "Document Category/Type" (with a dropdown menu). There are also radio buttons for "Name" (selected) and "Master ID", a link for "Find a Master ID", a "Date Range" checkbox, and a "Custom Query" checkbox. At the bottom of the form are "Search" and "Clear" buttons. A disclaimer is located at the bottom of the page, stating that the application is intended to provide a convenience to stakeholders and that the documents retrieved represent the entirety of documents for a particular area of concern.

# GEOGRAPHIC INFORMATION SYSTEMS

The ability to manage and portray data in an easy to recognize manner is fundamental to achieving the Department's goal of protecting Alabama's air, land, and water resources. This ability provides crucial support to the Department's goal of ensuring transparency in its decision-making processes. Sharing data with others and assisting them with understanding the complex, scientific data that is handled by ADEM yields trust from the Department's valued stakeholders.

The use of geographic information systems, or GIS, allows ADEM to not only make data easily available to interested parties but to also portray that data in an easy-to-understand format such as a map. The Department created a webpage for brownfield sites where people can easily view brownfield locations that are ready for re-development. Underground storage tank sites can be viewed in another webpage. The locations of leaking underground storage tanks can be seen from a different webpage. ADEM has developed several other webpages that provide a variety of data views. Sanitary Sewer Overflows (SSOs) are available for viewing for 10 days after the overflow has ceased. Municipal Outfalls are another dataset provided in an easy-to-understand map interface. ADEM created a Water Info map that provides information such as 303(d) listed waters, TMDLs, water use, and stream classification. ADEM continues to add pages as data and needs dictate.

The ability for people to access information and files within ADEM is at historic levels. However, once people access this information, it must be presented in a format that is easy to read and understand. The GIS applications that have been developed by ADEM support the goal of presenting environmental data in a simple format that everyone can understand. The availability of this data provides the public with a better understanding of current environmental conditions and encourages their participation in the decision-making process.

It should also be noted that ADEM staff continue to receive updated training from EPA on EJSCREEN. Along with that training, the Department's GIS application enhances the staff's ability to utilize environmental data regarding decision-making processes in disadvantaged areas.



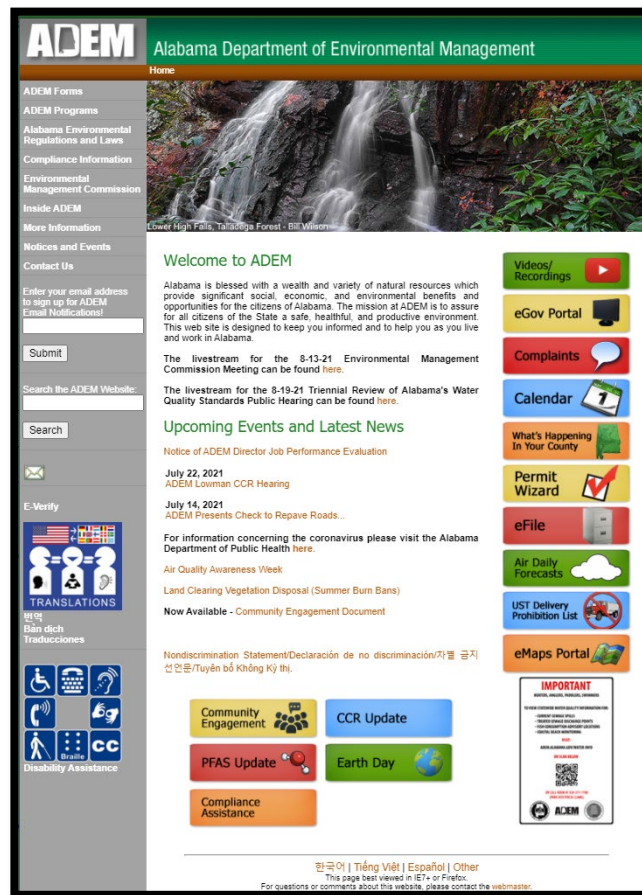
*Community Engagement*

# ELECTRONIC DATA SUBMITTAL (E-DMR)

The Department reviews and processes a tremendous amount of data on a daily basis to ensure facilities are operating in accordance with the limits contained in their environmental permit. As part of their environmental permit, businesses are required to submit to ADEM a discharge monitoring report, or DMR, on a regular basis. This DMR contains monitoring results that are then compared to the limits in their environmental permit.

Historically, the only way for a business to submit its DMR has been via mail with the accompanying data. This process has been time consuming for both the business to compile the data and for ADEM to process the data.

In an effort to streamline this process, ADEM has an electronic reporting process called e-DMR. Through the e-DMR process, a business can submit its monitoring data electronically and ADEM can electronically flow that monitoring data to the appropriate database for review. The e-DMR process is providing significant efficiencies in the handling of e-DMR data for ADEM and is supporting the Department's efforts to streamline its operational processes.





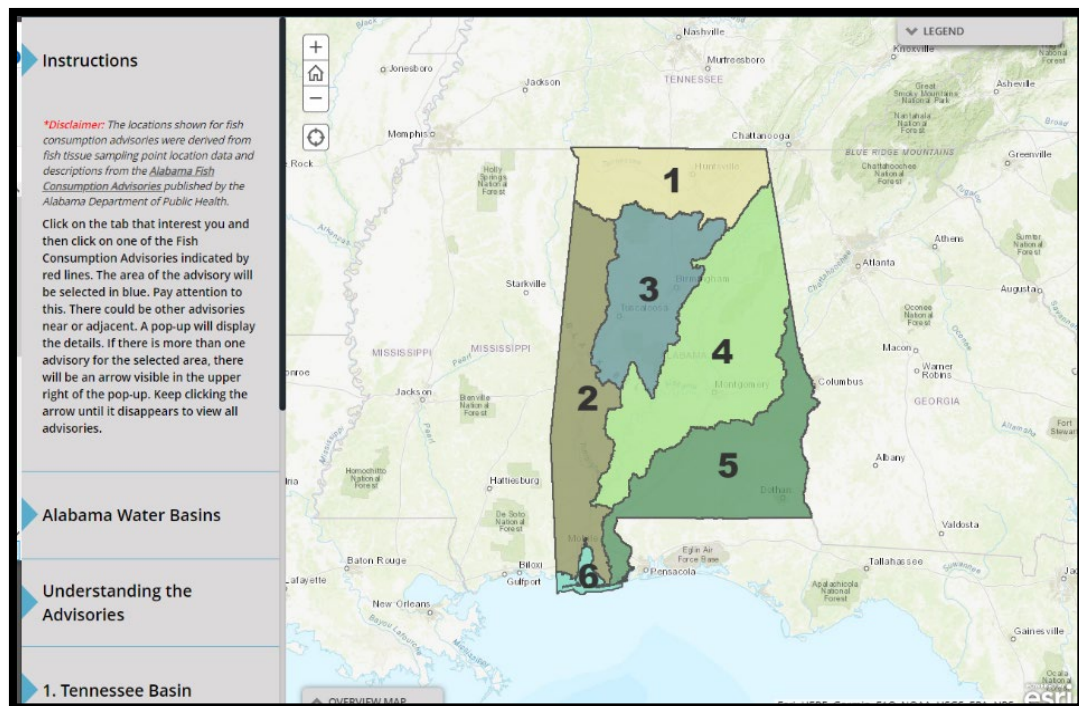
# FISH TISSUE MONITORING

In Alabama, many people fish in various rivers, lakes, and streams and some may consume the fish that they catch. In addition, some of these fishermen are low-income and/or minorities who utilize their fish to feed their families and reduce their overall grocery bill.

In an effort to ensure fish in Alabama’s waterways are safe for consumption, the Department collects over 350 fish each year as part of its Fish Tissue Monitoring Program. These fish are analyzed for a wide range of chemicals/pollutants and the data is provided to the Alabama Department of Public Health so their medical experts can accurately review the data and determine the need for issuing any fish consumption advisories.

The issuance of a fish consumption advisory informs citizens of the need to either reduce or eliminate their consumption of fish species from that specific waterway. Providing citizens with information upon which they can make informed decisions about their consumption of fish from Alabama waterways is another way ADEM is working to keep them up to date on environmental issues in their community.

The Department developed a map that is available on the website that shows the geographic areas described in the Fish Consumption Advisories issued by the Alabama Department of Public Health.



# AIR QUALITY FORECASTS

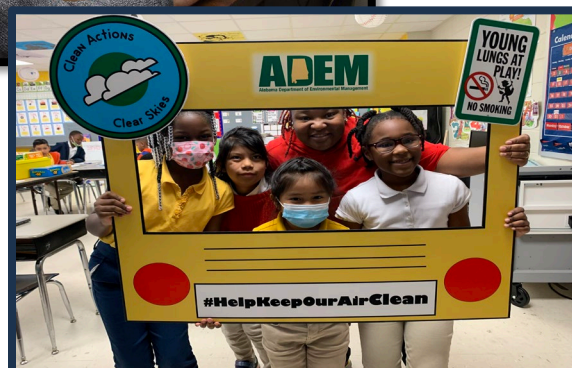
In an effort to provide Alabamians with accurate, science-based information about air quality, ADEM meteorologists issue air quality forecasts for three of Alabama’s largest metropolitan areas. These air quality forecasts are issued in Huntsville, Birmingham, and Mobile providing residents with a “forecast” of what the air quality will be on the following day.

ADEM meteorologists use current and predicted weather conditions in conjunction with computer models to generate the air quality forecasts. Based on the forecast, citizens can adjust their daily routine to reduce their risk of exposure. They can also do things like utilize public transportation, delay the use of lawnmowers, and wait to fill up their automobile in an effort to actually help improve air quality.

The air quality forecasts can be especially beneficial to young children that have respiratory illnesses, like asthma, as well as to the elderly. In addition, businesses that cater to young children such as day care centers and schools can adjust their daily schedules on days when the air quality forecasts predict higher than normal levels of pollutants such as ozone or particulate matter to reduce exposure.



The Air Quality Index	
Index Values	AQI Category
0 – 50	Good
51 – 100	Moderate
101 – 150	Unhealthy for Sensitive Groups
151 – 200	Unhealthy
201 – 300	Very Unhealthy
301 – 500	Hazardous



# COVID TELEWORK PRODUCES COMMUNITY BENEFITS

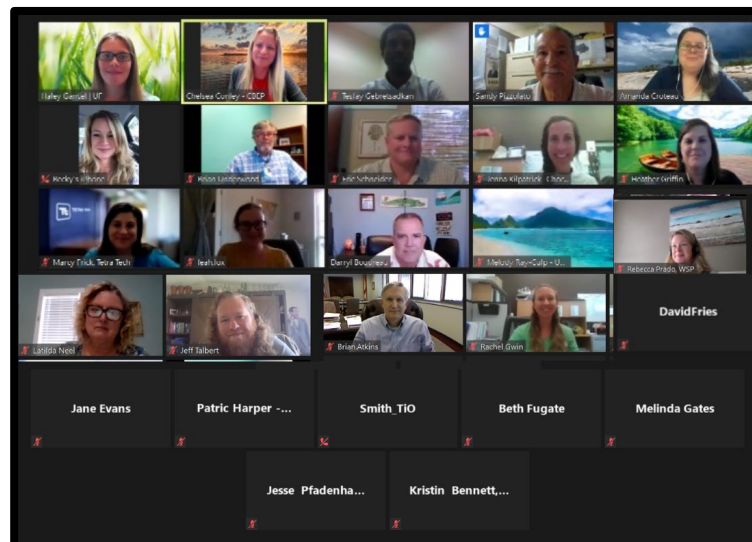
Many of the highly trained and professional staff at the Alabama Department of Environmental Management have been working remotely since 2020. ADEM personnel initially began teleworking three years ago in an effort to protect themselves against COVID-19.

At that time, ADEM was implementing a number of safety measures recommended by the Alabama Department of Public Health and the Centers for Disease Control and Prevention.

The measures were successful, and ADEM staff remained very productive in both inter-office and through closely supervised teleworking. ADEM employees continue to work effectively, and since health measures and protocols have changed, the Department has found many new areas to allow the public to participate in ADEM programs, initiatives, and events.

The Department has set up virtual meetings via Zoom and Microsoft Teams to use in addition to in-person public meetings. The virtual meetings have been utilized for public hearings, staff meetings, industry conferences, webinars, and workshops. The public hearings that have taken place for the last few years have been livestreamed or recorded and placed on ADEM's YouTube Channel and made available to the public.

ADEM continues to update safety protocols and procedures when necessary while keeping the public informed of all activities and events taking place at the Department. ADEM has accomplished this while maintaining the safety of employees, individuals, the regulated community, and stakeholders to maintain its mission of safeguarding the environment.





# WATER QUALITY INFORMATION

ADEM ensures that boaters, anglers, and swimmers are better informed regarding water quality.

ADEM has installed advisory signs around the state at various rivers, bays, boat ramps, and beaches to inform the public of the condition of those water bodies. The signs contain information to direct people to the latest advisories and updates regarding fish consumption, coastal beach monitoring, treated water discharge points, and sanitary sewage spills.

Safeguarding Alabama's natural resources is a priority at ADEM, and notifying the public of changes in water quality is a key component.

The advisory sign has a link to the Department's website where the latest water quality information can be found along with any recent changes. The sign also features a QR code that can be scanned with a smart phone to easily access this information.

The Department has also placed watershed signs along interstates to promote environmental awareness and to educate the public on watersheds and promote stewardship.





# EVERY DOOR DIRECT MAIL (EDDM) SUPPORTS OUTREACH AND COMMUNITY INVOLVEMENT

ADEM is committed to keeping everyone informed and involved regarding the environmental activities of the Department in their local communities. Public participation in the rulemaking and permitting processes is a valuable tool to help the Department and the Alabama Environmental Management Commission (EMC) make environmental decisions. Some citizens may have limited access to internet providers and subsequently lack the necessary resources to help them stay informed on events held by the Department. ADEM has made special efforts to provide tools beyond electronic means to ensure those citizens are reached and given opportunity to be involved in what's happening.

Every Door Direct Mail (EDDM) is such a tool used by ADEM since 2021. EDDM is a service provided by the United States Postal Service (USPS) that allows the Department to send a mail piece to every mailbox on a specific route without having the name and address. Utilizing the EDDM online tool, ADEM has made efforts to ensure that all households can receive notice of events and permitting decisions happening near in their area. The service allows ADEM to target a certain mail radius or zip code in the cities where ADEM events are taking place.

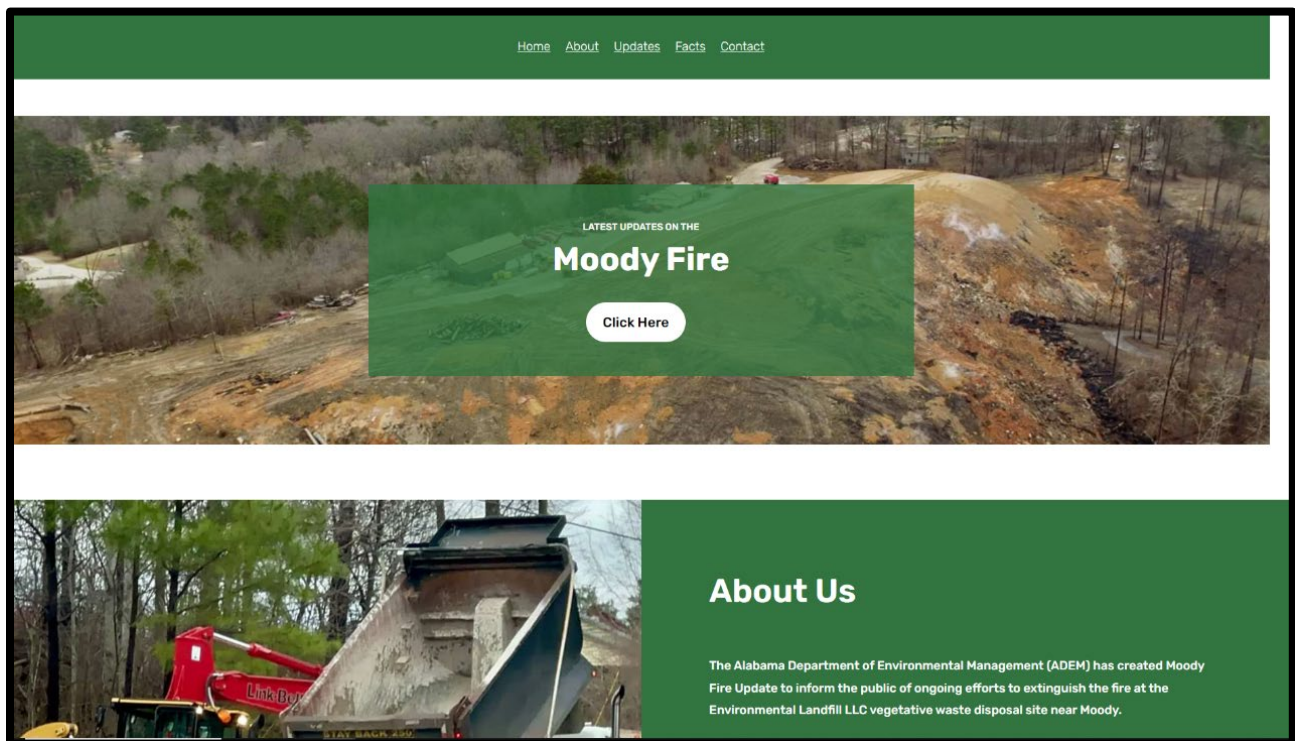


# ST. CLAIR COUNTY VEGETATIVE WASTE DISPOSAL SITE FIRE WEBSITE

In January 2023, ADEM created a website to help nearby residents, the media and the public stay updated on efforts to extinguish the unprecedented underground fire at a vegetative waste disposal site in St. Clair County near the city of Moody.

The fire began in late November 2022 and burned more than 90 days. Local efforts to extinguish the fire were unsuccessful, and the state lacked the resources and expertise to extinguish such a large, underground fire. At ADEM's urging, the U.S. Environmental Protection Agency (EPA) conducted air sampling and agreed to bring in its experienced and vetted contractor to put out the fire by leveling the site and smothering the fire with large volumes of dirt.

The website created by ADEM, moodyfireupdate.com, provided regular updates on EPA's efforts as well as conditions at the site. The website also provided links to pages that included the results of air monitoring tests performed by EPA and water sampling results performed by ADEM. Photos and drone video of the site provided by ADEM were part of the updates.



# AMERICAN RESCUE PLAN ACT WEBSITE

ADEM created the Alabama Water Projects website ([alabamawaterprojects.com](http://alabamawaterprojects.com)) in 2022 to help inform the public about funding made available and awarded to public drinking water and sewer systems across Alabama to improve access to clean drinking water and sanitary wastewater disposal. ADEM awarded \$473 million in 2022 to water and sewer systems from funding made available by the American Rescue Plan Act (ARPA), the Bipartisan Infrastructure Law (BIL) and the Drinking Water and Clean Water State Revolving Fund programs (SRF). ADEM expects to award more than \$600 million in funding in 2023.

The website includes an overview of the program, news events and contact information, as well as links to the Drinking Water and Clean Water pages, and a summary page of funding applications received. The Drinking Water and Clean Water pages list every public drinking water and wastewater system that has applied for funding and identifies those systems that have been awarded funding.

The information is updated on a weekly basis.

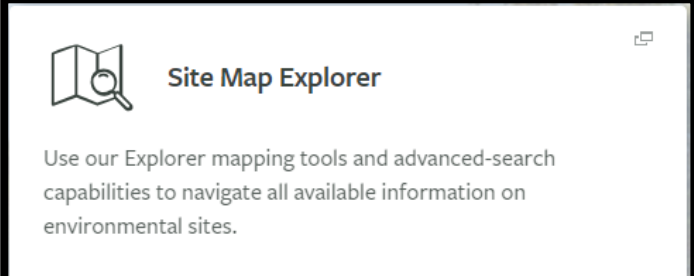



# ALABAMA ENVIRONMENTAL PERMITTING AND COMPLIANCE SYSTEM (AEPACS)

AEPACS modernized the Department’s electronic data systems and allows the citizens of Alabama the availability and flexibility to search for sites in AEPACS with a feature called Site Map Explorer. Site Map Explorer is one of the Department’s mapping tools and provides the user advanced search capabilities to navigate all available information on a site. No account is needed to use this capability.

The user can find a location of the facility on a map or search by site type.

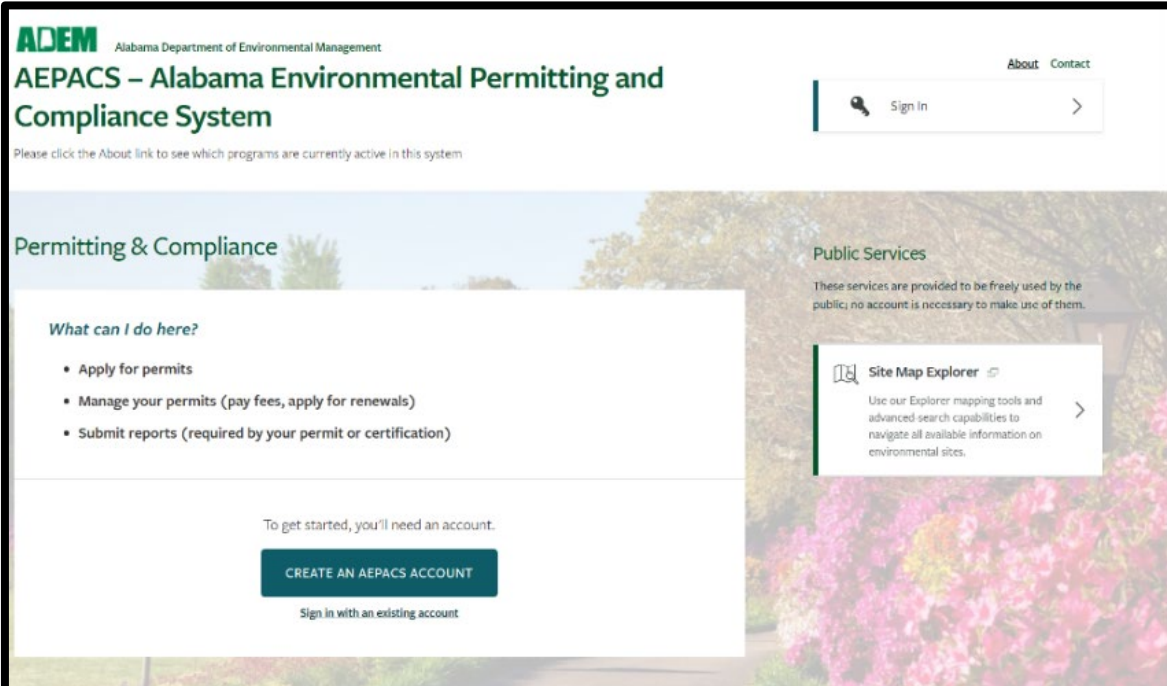
- Water Programs
- Clean Water Act (CWA) §401 Water Quality Certification (WQC)
- Coastal Program
- NPDES/SID/UIC Programs
- UST Program
- Stage 1 - Gasoline Storage Tanks
- Waste/Recycling/Remediation Programs
- Recycling Program
- Scrap Tire Program
- County Right-of-Way Program



 **Site Map Explorer**

Use our Explorer mapping tools and advanced-search capabilities to navigate all available information on environmental sites.

Other ADEM environmental programs will be added to the system in future phases.



**ADEM** Alabama Department of Environmental Management

## AEPACS – Alabama Environmental Permitting and Compliance System

Please click the About link to see which programs are currently active in this system

[About](#) [Contact](#)

### Permitting & Compliance

*What can I do here?*


- Apply for permits
- Manage your permits (pay fees, apply for renewals)
- Submit reports (required by your permit or certification)

To get started, you'll need an account.

[Sign in with an existing account](#)

### Public Services

These services are provided to be freely used by the public; no account is necessary to make use of them.

 **Site Map Explorer**

Use our Explorer mapping tools and advanced search capabilities to navigate all available information on environmental sites.



# DRINKING WATER WATCH (DWW)

The Alabama Department of Environmental Management is authorized by the U.S. Environmental Protection Agency to carry out the provisions of the Safe Drinking Water Act in Alabama.

ADEM exercises this authority through enforcement of state and federal regulations, construction and operating permits, robust monitoring, reporting, and inspections of public water systems from one end of the state to the other.

The Department also provides technical assistance and information to drinking water systems, local governments, and individuals through outreach, news releases, publications, and the ADEM website.

Through the Department's website, ADEM provides a link to Drinking Water Watch - a tool that lets people view data that ADEM maintains about specific water systems.

Drinking Water Watch is a database that drinking water operators and the general public can use to find information about public water systems. The resources on the DWW webpage illustrate how to find the most useful and commonly requested data. This information includes populations served, treatment used, sampling results, and violations for individual drinking water systems.

ADEM works to ensure that compliance information is available online. Through DWW, individuals are able to access data regarding drinking water systems and the Department is better able to safeguard Alabama's abundant water resources for current and future generations.

**Drinking Water Watch**

**Public Water Supply Systems Search Parameters**

Water System No.

Water System Name

Principal County Served

Water System Type

Primary Source Water Type

Point of Contact Type

**Sample Search Parameters**

Sample Class

Sample Collection Date Range  
(The Sample Search always produces results for the last 2 years, unless you provide a specific date range.)  
7/11/2021  To 7/11/2023

[Click Here for the County Map of Alabama](#)

# Enhanced Community Educational Practices



# **ADEM PARTICIPATES IN EARLY CHILDHOOD EDUCATION EVENTS**

ADEM participates in numerous events to better educate the public on their role in safeguarding the environment by their everyday activities. At three separate events, ADEM staff presented educational events aimed at five-year-olds and elementary-aged students in Montgomery.

At one event held at the Coliseum Boulevard Branch library, ADEM presented a program called, “Build a Better World by Beating Pollution.” The program targeted fighting pollution and demonstrated to the students what they can do to prevent this problem. The children learned with a hands-on model how pollution in their community can spread to rivers and streams.

In June 2017, ADEM taught kindergarten and elementary school children about water conservation through a “Build a Better World with Water” presentation. ADEM is dedicated to reaching out and educating young students in Alabama to help continue the mission to “assure for all citizens a safe, healthful and productive environment.”

In September 2018, ADEM was asked to speak to 3–5-year-olds and their parents at the E.L. Lowder Library in Montgomery about the importance of recycling, keeping the environment clean, and water and electric power conservation. A model of a “magic” recycling center was created to educate and entertain the children by showing them the process of recycling. ADEM also donated a children’s book as well as coloring books and crayons for the children to enjoy.

In 2019, ADEM demonstrated a watershed model to numerous library visitors at the E.L. Lowder Library. This was part of the Earth Day celebrations. ADEM also participated in the Montgomery Public Library’s event Summer Reading Party at the Juliette Hampton Morgan Memorial Library in July. ADEM provided children’s coloring books, pencils, stickers, and other learning materials.

Since then, ADEM continues to participate in events that provide environmental awareness and education to preschool and elementary-aged children around the state.



# ADEM EDUCATES CHILDREN OF TRANSFORMATION MONTGOMERY ON IMPORTANCE OF RECYCLING

In February 2021, ADEM staff visited Transformation Montgomery to educate the children and staff about the importance of recycling and how they can make a difference in their homes, community, and the environment. During the visit, ADEM directed a presentation that included various examples of the Three R's: Reduce, Reuse Recycle, and a demonstration of how recycling works using a replica of a recycling facility.

Following the presentation, ADEM staff distributed educational materials including recycling coloring books, pencils, rulers, and more. During this time, ADEM discussed creative ways to reuse materials around their homes.

Transformation Montgomery is a non-profit that focuses on changing and transforming local neighborhoods for the better as well as life skills training and community renewal. The organization works to improve neighborhoods and communities in the area surrounding ADEM's Main Office.





# COMMUNITY INVOLVEMENT

From 2017-2019, ADEM participated in a large community event “Health Fair and Back-to-School Giveaway” in Montgomery. More than 1,000 school children and adults from around the River Region community attend the event each year that was held at Health Services Inc.’s River Region Health Center.

The event’s sponsors included the City of Montgomery, the Montgomery County Commission, and the Alabama Department of Environmental Management. ADEM employees participated in the fair, providing educational items, encouraging environmental awareness, and promoting environmental careers.

ADEM focused on environmental factors, such as air quality, that can impact those affected by asthma, and worked to bring awareness to how the environment relates to the condition.

The Health Fair is focused on health awareness and disease prevention for students and parents with free health screenings and educational information to increase awareness of local, state, and national health services and resources. In addition, hundreds of book bags and school supplies were given away.



# COASTAL YOUTH PROGRAM

In 2017, ADEM's Coastal Nonpoint Pollution Control Program continued its persistent message of environmental responsibility and personal stewardship for Alabama's coastal waters. ADEM was invited by the U.S. Environmental Protection Agency's Gulf of Mexico program to conduct an interactive workshop concerning coastal Nonpoint Source (NPS) issues.

More than 30 students were part of the national Asian Youth Empowerment program. The local Summer Youth Camp class was held in June 2017 at the BP-SOS office in Bayou La Batre.

BP-SOS (Boat People - SOS) is a 501(c)3 non-profit organization devoted to Vietnamese-American civic and political activism. Their mission is to "empower, organize, and equip Vietnamese individuals and communities in their pursuit of liberty and dignity." There are 17 office locations in the U.S. that support individuals, families, and communities.

The participating students were taught about topography, watersheds, types of nonpoint source pollution, and possible impacts to the environment. As part of the program, students first built small-scale table-top watersheds to learn about the concepts of topography and gravity, land use coverage, and their potential role in types of NPS impacts.

The students helped build a large, 20 by 25-foot, "We Live in a Watershed - A Watershed and NPS Pollution Module." Next, the students selected from five color-coded "pollutant" pads and each student designated their placement in the model watershed. The students witnessed the dramatic NPS processes and impacts of surface waters as the simulated rain washed "pollutants" downstream. The exercise was entertaining and educational for the children.





# WATER FESTIVALS

ADEM provides significant resources to support local water festivals that are made available to all 67 counties in Alabama. While the Earth Day event targets various students, the Water Festivals specifically target 4<sup>th</sup> grade students. In addition, volunteers, community leaders, and the public benefit through this effort.

Water Festivals help to educate 4<sup>th</sup> grade students, many of which are minorities or live in low-income households, each year on the importance of protecting Alabama's water resources and allow the students to participate in hands-on events such as making a water cycle bracelet or building an edible aquifer.

ADEM's professional, highly trained, and dedicated staff takes great pride in their work. A tangible measure of our employees' commitment to protecting Alabama's air, land, and water resources is demonstrated by their work ethic along with their willingness to share their knowledge with others, especially with children.



## ASTHMA INITIATIVE ‘YOUNG LUNGS AT PLAY’

In another effort to ensure young children, including those in disadvantaged areas, have clean air, and are protected against the harmful impacts of tobacco products, ADEM has partnerships with the Alabama Department of Public Health and the American Lung Association of Alabama to highlight asthma awareness and designate public parks as tobacco-free. This effort supported the development of numerous outreach and awareness tools such as asthma displays at local libraries, a Girl Scout Asthma Awareness Badge activity, an asthma awareness poster, and the placement of Young Lungs at Play signs at local parks and athletic complexes.

The partnerships have worked with local governments and municipalities to help bring awareness of air quality for the young children that are playing in these areas through the placement of the Young Lungs at Play signs. The signs remind park visitors of the harmful impacts that tobacco products can have on young lungs. While ADEM does not regulate second-hand smoke, it is responsible for clean air in Alabama through its implementation of the federal Clean Air Act. The asthma initiative and the Young Lungs at Play awareness program provide an additional mechanism to protect young children in Alabama.





# NO IDLING CAMPAIGN

ADEM worked through a coalition of various state agencies to develop a No Idling Campaign available to local school systems across Alabama. The program is designed to bring awareness to parents, bus drivers, teachers, and students about the effects of vehicle idling while children are being dropped off and picked up at school. Automobile emissions can have adverse health impacts on young children, especially those with asthma or other respiratory illnesses. The No Idling Campaign was designed to reduce those health impacts, many of which are prevalent in disadvantaged communities.

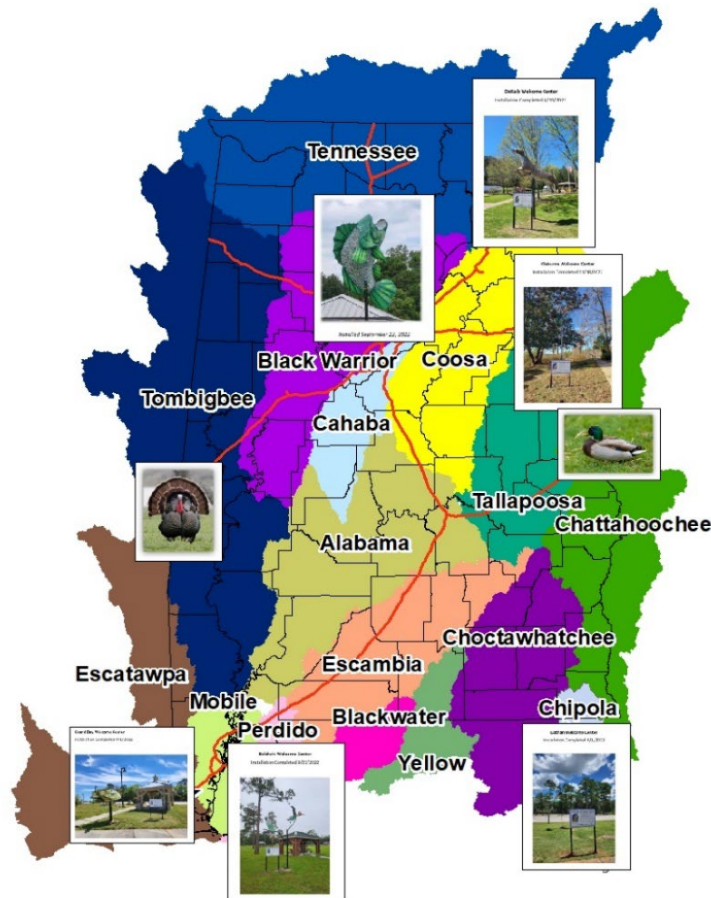
Participating school officials were asked to establish a No Idling Zone and to place signs in the area to serve as a reminder to parents and bus drivers. In addition, many schools established a no idling policy and asked parents to sign a pledge card to document their commitment to the program.



# ADEM INSTALLS SCULPTURES ACROSS THE STATE TO PROMOTE LITTER CAMPAIGN

The Department received a \$500,000 grant from the EPA Gulf of Mexico Division as part of the Trash Free Waters Program in late 2020 and has been working with the Alabama Department of Transportation and the Alabama Department of Tourism to implement the “Help Keep Our Waters Clean” project. The “Help Keep Our Waters Clean” project is designed to promote awareness about watersheds and reduce nonpoint source pollution from entering waterways that drain to the Gulf of Mexico. The goal of the project is to engage Alabama citizens in the fight against litter through education and outreach that encourages the use of voluntary and sustainable best practices.

Perhaps the most visible aspects of the “Help Keep Our Waters Clean” project are watershed signs that were placed along interstates in Alabama to inform motorists that they are entering a watershed and encourage them not to litter. The current phase of the project includes the placement of litter education sculptures targeted at reducing land-based trash from entering waterbodies by focusing on abating roadway litter from motorists. Currently, a loggerhead sea turtle has been placed at the Grand Bay Welcome Center, a pair of American White Pelican have been placed at the Baldwin County Welcome Center, a pair of Sandhill Crane have been placed at the Dothan Welcome Center, a



Largemouth Bass has been placed at the Governor Guy Hunt Rest Stop, an Alabama Black Bear has been installed at the Cleburne County Welcome Center, and a White-tailed Deer has been installed at the DeKalb County Welcome Center.

The sculptures are filled with plastic bottles to raise anti-litter awareness and promote recycling. Plastic bottles are often found discarded along roadsides and other places as trash ends up washing into Alabama's waterways. This campaign is utilizing these sculptures and signs to inform motorists that they are entering a watershed and to encourage people not to litter and help reduce trash from entering waterbodies by increasing litter awareness.

As a part of the Help Keep Our Waters Clean campaign, NPS Unit staff have provided exhibits promoting the project in partnership with the Alabama Department of Tourism's Tourism Days held in the Spring. NPS Unit staff discussed with travelers the importance of not littering and how it can affect everyone that lives in a watershed. Tourism Days attended this year included the Cleburne County Welcome Center on May 3, 2023, the Sumter County Welcome Center on May 10, 2023, the Houston County Welcome Center on May 11, 2023, and the Dekalb County Welcome Center on May 26, 2023.





# LITTER SIGN INSTALLATIONS

The Alabama Department of Environmental Management is promoting voluntary, long-term, sustainable practices of reducing pollution with an anti-litter campaign, Keep Our Waters Clean, aimed at educating the public about the importance of preventing trash from entering waterways.

In 2020, ADEM partnered with the Alabama Department of Corrections to produce metal signs that say “No Littering No Dumping” to distribute to municipalities across the state. The signs are being installed where littering and dumping are considered problem areas and in recreational locations near water such as fishing docks, parks, and more.

Many signs have been given to municipalities in underserved and low-income areas where the need is greater with the help from several organizations such as the Alabama Conference of Black Mayors, Alabama League of Municipalities, Solid Waste Management Association, and local environmental and recreational groups.

Signs will continue to be distributed and installed across the state with the help of these organizations.





# **ADEM PROMOTES ENVIRONMENTAL EDUCATION TO MIDDLE SCHOOL STUDENTS**

Education is a key component to sustaining Alabama’s natural resources for future generations. Educating the state’s youth and increasing their environmental awareness are also essential.

From 2017-2023, ADEM has participated in the Central Montgomery Optimist Club’s annual Dare to Dream Career Fairs for eighth grade students at McKee Middle School in Montgomery.

In 2017, ADEM participated in a career fair at Georgia Washington Middle School in Montgomery. The event was designed to provide career guidance and encouragement to students as they prepare for high school and post-secondary education. The students were able to meet with ADEM representatives to learn about Alabama’s environment and career possibilities in science and engineering.

In addition, ADEM has attended multiple career fairs geared towards middle and high school students hosted by Council on Substance Abuse (COSA). These events have taken place at Lanark in Millbrook and Prattville Junior High School.

ADEM employees were able to spend a few hours talking to the students about their careers. The students had the opportunity to ask questions about what careers are available in the environmental field, what skills were valued in environmental professions, and what classes would be beneficial in providing those skills.

ADEM staff emphasized to these students the importance of individuals of all ages in protecting Alabama’s natural resources. Exposing students to potential opportunities in environmental management fosters critical thinking about future career paths and encourages excitement in learning about the environment. Reaching out and educating students ensures that Alabama will have bright, young professionals to continue ADEM’s mission to “assure for all citizens a safe, healthful and productive environment.”





Community Engagement



# ADEM PARTICIPATES IN SCHOOL SCIENCE EVENTS

The Alabama Department of Environmental Management strives to continue educating the public, especially children, about environmental awareness. In January of 2022, ADEM's recycling team visited Redland Elementary in Wetumpka for their STEM (Science, Technology, Engineering and Math) event geared towards K-6<sup>th</sup> grade students. ADEM encouraged the children to be engaged by asking questions and playing games. The group distributed toys and educational materials including coloring books, bracelets, and bookmarks while engaging with the children on various recycling facts about the state.

In November 2019, ADEM also participated in a similar event at Montgomery Academy. The event consisted of vendors from across Alabama such as Montgomery Museum of Fine Arts and National Society of Black Engineers and was a 'pop-up' children's science museum introducing hands-on activities related to STEM and art. ADEM's Nonpoint Source group introduced the Enviroscape watershed model to educate children on the importance of watershed protection, not littering, and keeping the environment safe.

In February 2020, ADEM engineers were selected to help judge and participate in the Shelby County Schools E3 – Engaging Elementary Engineers event. The event took place at the Shelby County Instructional Service Center in Alabaster. This two-day event aims to provide authentic and engaging STEM experiences for elementary students by challenging them with tasks and competitions that involve science, technology, mathematics, and engineering. More than 450 students from 37 schools participated in a full day of activities to strengthen their STEM skills. Representatives from Honda, Alabama Power, and ADEM helped judge and provide assistance to the students. Students were allowed to ask the professional engineers for guidance and tips on each project. ADEM engineers had the opportunity to speak to the students during their lunch hour about each of their responsibilities in protecting the environment and the importance of their degree in their career.

In March 2022 and 2023, ADEM participated in the Montgomery STEM and Art Fair, which teaches children about the importance of recycling.

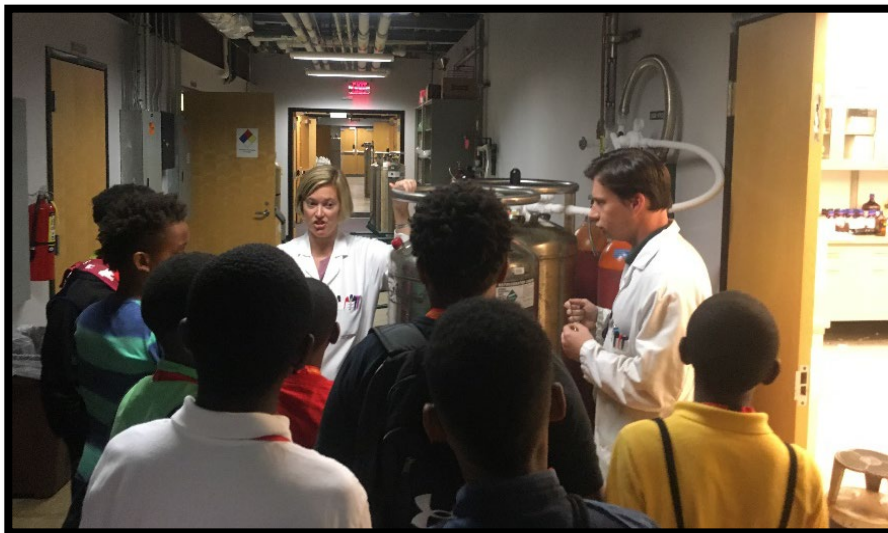


# ADEM HOSTS TUSKEGEE UNIVERSITY VERIZON INNOVATIVE LEARNING PROGRAM

ADEM has hosted approximately 150 students from multiple public and private schools across central Alabama. The students ranged in age from 11 to 14-years-old and were on an enrichment field trip as part of an innovative learning program at Tuskegee University. The students toured the Montgomery Field Operations laboratory along with the “Ozone Room” in the Air Division. The tour and outreach sessions that were part of the field trip to ADEM included presentations on the Department’s computer-based systems, eGovernment portal, electronic reporting, GIS, and ADEM’s web-based innovations.

The Verizon Innovative Learning program at Tuskegee University is a partnership for entrepreneurship and technology innovation for minority males in Alabama. This two-year program is the first of its kind to give minority boys in middle school access to high-level technology and entrepreneurship skills. The program includes hands-on, interactive instruction and mentors. It utilizes a two-prong approach, kicking off with a three-week summer program where students participate in technology classes on college campuses, followed by field trips and visits to locations to introduce the students to careers that require science, technology, engineering, and mathematics (STEM) education.

According to Tuskegee University, minority males are severely underrepresented in STEM fields and are less likely than Caucasian peers to graduate from high school on time and pursue college degrees. In recent years, much more attention has been paid to empowering girls in these subject areas, but very few programs exist that specifically work with boys to spark their interests in STEM disciplines. Verizon identified this need and created a new, innovative program to focus specifically on minority middle school boys, giving them an opportunity for a bright future in these high demand fields.





# ADEM EARTH DAY

While the employees at ADEM fulfill a wide range of educational requests by speaking to students in schools, the Department has also hosted an Earth Day event at the main office in Montgomery to educate tomorrow's leaders on various environmental issues. This event often includes minority schools to encourage students to pursue a future career at ADEM. The Earth Day event provides an opportunity for students to visit ADEM and learn about the environmental programs that are implemented to protect Alabama's air, land, and water resources.

These Earth Day events have allowed ADEM employees to interact with students and provide them with hands-on demonstrations about fish tissue monitoring, water quality sampling, air monitoring, recycling and more.

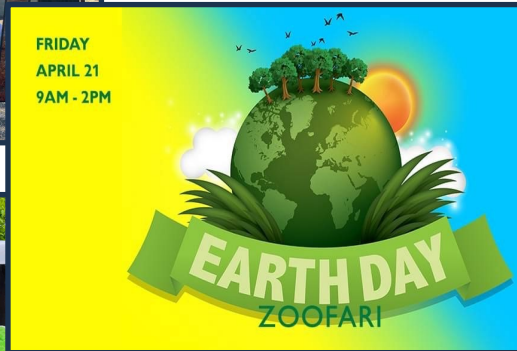
In 2015 and 2017, ADEM took the Earth Day event on the road. The Department held a special event in 2015 for more than 120 middle school students at the School of Discovery in Selma. In 2017, ADEM traveled to Pike County High School where 250 students participated in Earth Day.

Due to COVID-19 in 2020, ADEM celebrated Earth Day on live TV with WSFA 12 News to do an Earth Day special segment. WSFA-TV has continued to feature the Department with a different group to highlight their work and how they celebrate Earth Day.

In lieu of the annual Earth Day event at ADEM, an Earth Day video series was created in 2021. In 2022, the Department deployed various groups within ADEM to participate in Earth Day events across the state. ADEM staff attended the Earth Day festival at the Hays Nature Preserve in Huntsville, Alabama.

In 2023, ADEM staff hosted several booths at the Montgomery Zoo for their Earth Day safari, hosted a Recycling Festival in Selma, Alabama, and had a booth the Alabama Herb Day on Earth Day.







# EARTH DAY VIDEOS

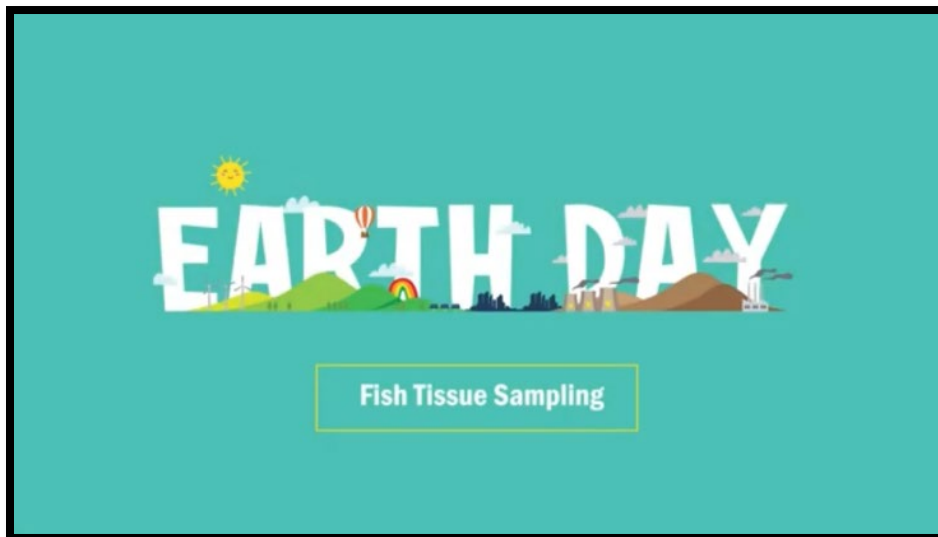
At ADEM, “Every day is Earth Day.”

To celebrate Earth Day and encourage high school and middle school students to pursue careers in the sciences, the Alabama Department of Environmental Management usually hosts an annual event to educate students about ADEM’s efforts to safeguard the environment. Unfortunately, in the spring of 2021, with COVID-19 restrictions in place, ADEM was not able to conduct its annual Earth Day event in person.

In lieu of a live event, ADEM produced a number of videos to feature programs that help Alabamians live with a safe, healthy, and productive environment. The videos were posted on the ADEM YouTube channel and made available for students, teachers, and all people.

The Alabama State Department of Education assisted ADEM with the promotion of the Earth Day videos by providing the YouTube links to educators.

The Earth Day videos cover a wide variety of subjects and programs related to the environment, including air monitoring, fish tissue sampling, macroinvertebrates, water quality, and recycling.



# OUTREACH AT THE MONTGOMERY ZOO

Since 2007, the Alabama Department of Environmental Management has participated in Earth Day activities at the Montgomery Zoo. On many occasions, the displays and activities last for the entire week surrounding Earth Day.

Over the years, ADEM employees have participated in clean air events, safe drinking water tips, an Earth Day Safari, and environmental trivia contests at the Montgomery Zoo along with the Montgomery Clean City Commission and the Montgomery Museum of Fine Arts.

People visiting the zoo on those occasions have been able to learn about various aspects of water treatment, recycling, plant and animal conservation, and air quality protection. The events have enabled students and teachers to roam the zoo exploring and learning about the environment.

The first organized “Earth Day” was held in 1970, with more than 20 million Americans demonstrating in various cities. It is now an annual event in which activities are held worldwide to demonstrate support for environmental awareness.

At ADEM, “every day is Earth Day.” ADEM employees spend Earth Day each year involved in various activities to highlight conservation, education, and outreach efforts to safeguard the state’s natural resources. The Department has also participated in events at the Birmingham Botanical Gardens in celebration of Earth Day and as a way to promote environmental awareness.





# **TOWN OF PINE HILL RECEIVES ADEM GRANT TO UTILIZE RECYCLED SCRAP TIRE MULCH**

The Alabama Department of Environmental Management awarded \$12,750 to the Town of Pine Hill in Wilcox County for a recycled scrap tire mulch project. The town was approved for the grant under the Alabama Scrap Tire Marketing Fund. The grant allowed for the replacement of the deteriorated sand in the playground area with recycled scrap tire mulch.

The mulch is made from recycled scrap tires and other rubber materials. It is a popular alternative to wood mulches to be used on playgrounds due to its physical features, such as durability and safety. The grant from ADEM funds the marketing demonstration project for the Town of Pine Hill which also includes educational outreach.

The recycled scrap tire mulch will be used in the playground at Depot Park, which sees an estimated annual visitation of approximately 35,000 people. The recycled scrap tire mulch will provide a much safer surface for children. The mulch will consist of a 10-foot fall protection for those using the playground equipment. More than 4,800 scrap tires were recycled for this project.

The Alabama Scrap Tire Environmental Quality Act was passed in 2003 to comprehensively regulate scrap tire accumulations and to provide for cleanup and remediation of illegal scrap tire piles.

The Act placed a \$1 per tire fee on all replacement tires sold to establish a scrap tire fund and required ADEM to develop a program to regulate the management of scrap tires.

The regulations detail how scrap tires are managed from the time of generation to their ultimate disposition, whether reuse or disposal. Using funds from the \$1 per tire environmental fee, ADEM awards contracts to remediate scrap tire sites.

Alternatives to scrap tire disposal exist in the beneficial use of scrap tire material in a wide range of applications. One of the more popular applications is scrap tire mulch for parks and playgrounds. The Town of Pine Hill and ADEM have teamed up to make this possible in the small Wilcox County community.



# SCHOOL RECYCLING CHALLENGE

In an effort to increase awareness and provide educational experience on the merits of recycling, the Department has initiated the School Recycling Challenge where local schools can challenge each other to a recycling contest. The School Recycling Challenge is designed to motivate students, teachers, and parents to learn more about the benefits of recycling and encourage them to participate in a recycling program.

As part of the challenge, ADEM provides each school with a recycling trailer and the students collect recyclable materials for a specific period of time. At the end of the collection period all of the materials are weighed and the school with the most pounds of recyclable materials is declared the winner. In addition to collecting money for their recycled materials, each school is provided with a monetary donation from the Department for their participation in the School Recycling Challenge. Since 2014, a total of 86,458 lbs. of recyclable materials has been collected from participating schools.



# ADEM DONATES RECYCLED BINDERS TO LOCAL NEIGHBORHOOD SCHOOLS

ADEM donates binders used by ADEM staff to be reused and made available to low-income families for the upcoming school year. The binders are collected, sorted and cleaned, and also include a flyer with a reminder to always recycle and reuse.

Binders have been given to the following schools: Crump Elementary School, Dalraida Elementary School, Highland Avenue Elementary School, Millbrook Middle School, Stanhope High School, Chisholm Elementary School, Capitol Heights Middle School, Highland Gardens Elementary School, Greenville Middle School, Crenshaw County Schools, and Shelby County Schools.

ADEM also gives binders to various community organizations including Health Services, Inc., Montgomery, Montevallo Family Health Center, Boys and Girls Club of the River Region, and Boys and Girls Club Montevallo.

ADEM continues to donate the binders to help educate children (and teachers) on the importance of recycling and the reuse of everyday materials. Recycling helps reduce material going into landfills, helps the environment, and provides jobs.





# STORYTIME WITH A SCIENTIST

ADEM's Nonpoint Source Unit started a new program entitled Storytime with a Scientist this past year to help engage and educate the community. NPS staff attended schools in various counties, the Graham Creek Nature Preserve in Foley, Alabama, Wheeler State Park in Rogersville, Alabama, and several local libraries. Stories included *Finny the Fish*, *Magic School Bus Gets Cleaned Up*, and *Duffy's Lucky Escape*. Other stories offered include *The Berenstain Bears Don't Pollute (Anymore)* and *The Berenstain Bears Go Green*. Stories are read to the children and an accompanying activity is also done while discussing ways to help prevent pollution to our environment.





# **STEM CAREER ACADEMY 2016**

## **SELMA HIGH SCHOOL - MARCH 8-10, 2016**

Staff from the ADEM Field Operations Division provided a presentation on “The importance of water quality monitoring and how it relates to majoring in college in the fields of Environmental Science and/or Environmental Engineering” to the 2016 STEM (Science/Technology/Engineering/Math) Career Academy, sponsored by the Selma Chapter of The Links Inc. Twenty high school students from the Selma public school system were selected to participate in the Academy.

An introductory presentation on water quality monitoring was provided to the STEM students in 2016, parents and teachers on March 8, while a technical, hands-on demonstration of water quality monitoring equipment, techniques, and biological indicator organisms was provided to the group on March 10. These events highlighted ADEM water quality monitoring programs as well as common causes of poor water quality. Attendees were also provided with information on how ADEM conducts compliance monitoring at wastewater treatment facilities and general information about the wastewater treatment process.

The presentation was followed by concurrent hands-on demonstrations of equipment and biological indicators that Field Operations Division uses to monitor water quality. These demonstrations included the microscopic analysis of water quality indicator organisms (insects/fish), the filtering of water samples collected from a nearby lake to extract algae, and the utilization of backpack electrofishers, waders, and nets to collect biological indicator organisms. All students used the water sample filtering apparatus and the microscopes while several kids tried on the backpack electrofisher. Photometers, turbidity meters, secchi disks, and ISCO samplers were also demonstrated to the attendees.



# MINORITY RECRUITING

Since 2006, ADEM has focused on recruiting and establishing diversity within the Department in entry-level positions. Our Minority Recruitment team continues to visit colleges and universities throughout Alabama each spring and fall in an effort to successfully attract minority applicants.

Specific historically black colleges/universities visited on a continuous basis include Alabama State University, Miles College, and Tuskegee University. Other colleges/universities visited include Auburn University, Auburn University Montgomery, Huntingdon College, Troy University, University of Alabama, University of North Alabama, University of South Alabama, and University of Alabama Birmingham.

In 2011, ADEM initiated a focus on middle and high school aged students to enhance their awareness of science careers in the hopes of sparking interest in environmental fields of study. To accomplish this effort, several scientists and engineers have spoken at various schools and distributed brochures along with career information. ADEM participated in the 2013 and 2014 Inner City Career Connection. This connection targets pre-college aged potential candidates. The 2015 EAWIN Career Discovery Expo presented by Tuskegee University in February of that year, which was held at Auburn University, provided an additional opportunity to showcase environmental careers.

In addition, ADEM attends the Congresswoman Terri A. Sewell's Job Fair each year, in efforts to recruit scientists and engineers.



# COMMUNITY-BASED EDUCATION

Education is a central component to sustaining Alabama's natural resources for future generations. ADEM invests significant resources by speaking to students at various schools, participating in local community events, and speaking to civic organizations like Lions Clubs and Rotary Clubs. The need to educate Alabamians on the ADEM mission and the importance of protecting Alabama's air, land, and water resources not only from an environmental perspective but also from an economic perspective is an endeavor that cannot be underestimated.

ADEM receives and fulfills many speaking requests around Earth Day and throughout the year. In addition to speaking at events that are held in the local community, ADEM also hosts students and other stakeholders at its central office building in Montgomery providing presentations and updates on ADEM initiatives.

The investment in educating today's business leaders, as well as the business leaders and decision makers of tomorrow, will undoubtedly provide benefits as Alabama positions itself to economically compete with other states and at the same time be a wise steward of its resources.





# ENHANCING RECYCLING AWARENESS

A significant key to the long-term sustainability of Alabama's natural resources is recycling. The ability to recycle materials provides environmental impacts, economic impacts, and will allow Alabama to further sustain its valuable resources.

ADEM is working to enhance the awareness of recycling and working to educate Alabamians on the environmental and economic benefits of recycling. ADEM staff routinely travel with the ADEM recycling trailers to large events like the Talladega Super Speedway, the National Peanut Festival, and the Health Services Inc. Health Fair. The recycling trailers provide the attendees at these events with an opportunity to recycle and allow ADEM staff an opportunity to interact with the public and to discuss the importance of recycling.

Included in Earth Day activities, recycling trailers have been placed at schools in disadvantaged areas, so that students could compete by gathering the most recyclable goods. This opportunity allows the students to become more aware of recycling and the school to earn additional financial resources through ADEM's matching incentive.







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**Community Engagement**