ADECA-OWR Update 2023 ADEM Surface Water Meeting

October 17, 2023
Michael Harper and Mary Blackmon
ADECA Office of Water Resources



ADECA-OWR WATER MANAGEMENT STAFF

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Alabama Water Use Reporting Program Management Application (eWater) Upgrade



Background Information

▶eWater is the cumulative term used to describe the various hardware and software tools and capabilities that support OWR's management of the Alabama Water Use Reporting Program





Reasons for Upgrading eWater

- Created in the 2002-2004 timeframe as a custom client-server application
- Supports a paper-based process and has no capability for external access
- Code is unable to be updated
- Various reviews have resulting in a determination that a complete code rewrite or new application was required



eWater Upgrade

Replacement will consist of COTS solution (Laserfiche) with Alabama custom developed eWater portal

- Cost efficient
- Maintainable
- Will improve process efficiency.
- Estimated to take 2-3 years depending on funding.





eWater 2.0



Water
User/OWR
Web Input
such as DBU
application
and water-use
reporting



new and improved with more options!





Development Progress eWater Portal

- > Phase 1 efforts:
 - A website, database, and Laserfiche application has been developed
 - eWater Administration Portal is complete
 - Laserfiche infrastructure complete
 - Workflow processes, forms, and PDF templates completed
 - eWater Portal is fully integrated with Laserfiche application



Development Progress eWater Portal (continued)

- ▶Phase 2 is underway
 - Enhanced GIS Integration
 - Improved User Administration Functionality
 - Guided External User Declaration of Beneficial Use (DBU) Application Process
 - Guided External User Annual Reporting Process
 - Development of User Training Videos
 - Enhanced User Communication Capability
 - Development of Data Reporting Platform
 - Completion date September 2024



eWater Portal

Register for access to eWater. Create a new account or Log in.	
Email	
Password	
Confirm password	
	Password requirements
	Minimum length should be at least eight (8) characters Must include at least one special character (~!#\$%^&*)
	Must include at least one upper case letter (A-Z)
	Must include at least one number (0-9)
	Must include at least one lower case letter (a-z)

- Email based registration system
 - Users will be able to use existing email accounts
 Email associated with ADEM
 - OWR will create initial accounts before launch and provide them to users



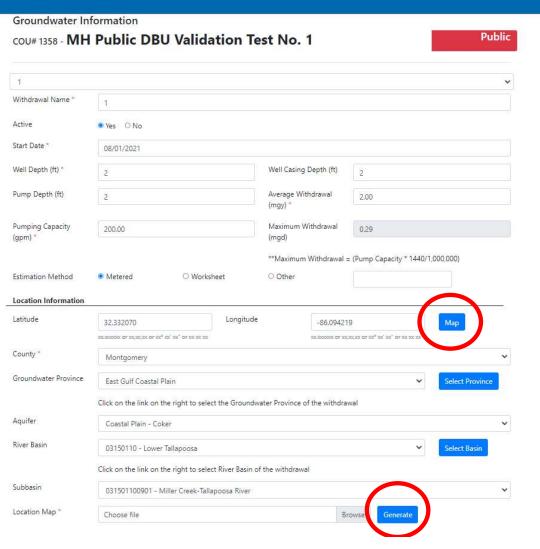
Glimpse of eWater Portal

- Looks like current paper DBU forms
 - Collecting new information:
 - PWSID Number
 - NAICS Code
 - Subcategory
 - Primary County



Glimpse of eWater Portal (cont.)

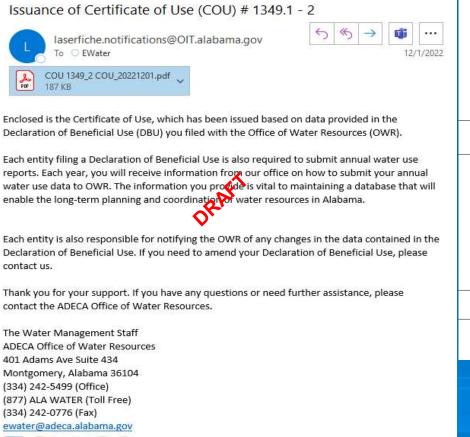
- Developing GIS mapping integration for populating location information
 - Will be available for all entity types (GW,SW,DC, and Bulk Sales and Purchases

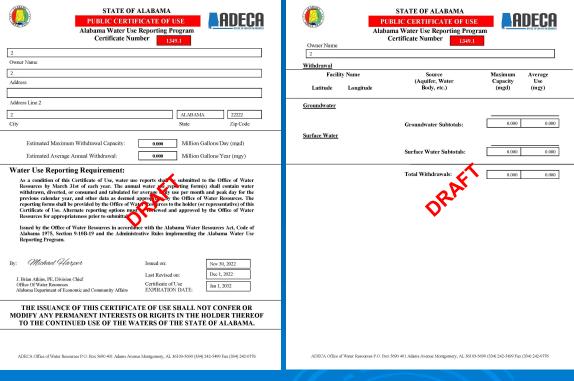




Glimpse of eWater Portal (cont.)

Issued Certificates will be emailed to registered users after approval

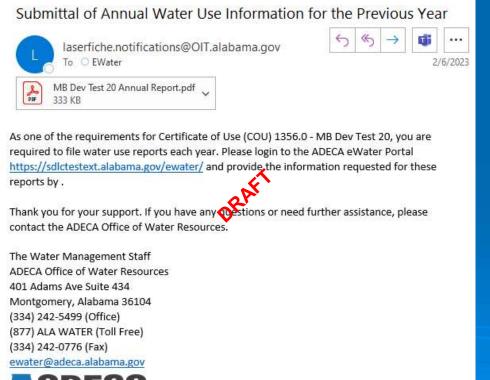


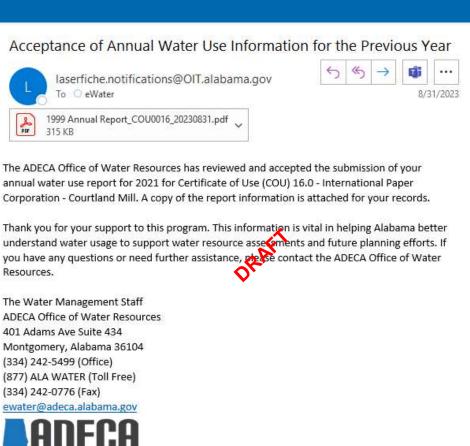




Glimpse of eWater Portal (cont.)

- Annual Use Reporting reminders will be emailed out to users
 - Portal used for entering data
 - OWR will review the data electronically
 - Once accepted, OWR will email user with confirmation with PDF of annual use submitted to keep for record retention.





Glimpse of eWater Portal (cont.) Annual Use

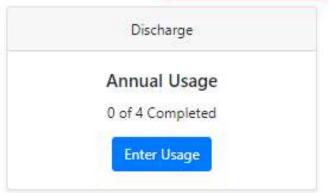
Annual Usage Home

COU# 1358 - MH Public DBU Validation Test No. 1

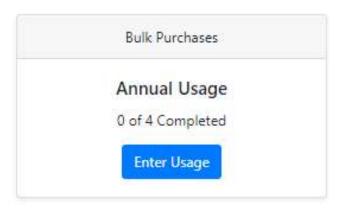
Public

Annual Usage
0 of 4 Completed
Enter Usage





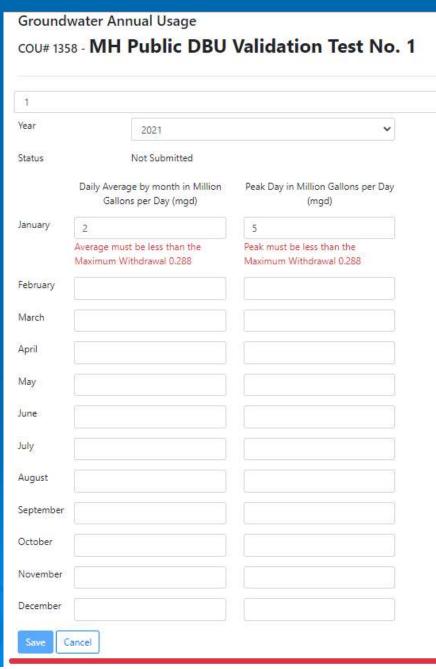
Annual Usage
0 of 4 Completed
Enter Usage





Glimpse of eWater Portal (cont.) Annual Use

- User can enter data directly into portal
- Allows for user to enter previous years data or any missing year data
- Advanced error checking
 - Checks that Average and Peak Withdrawal is less than Maximum Withdrawal Capacity on COU
 - Checks that the Average
 Withdrawal is less than the
 Peak Daily Withdrawal



Benefits to Upgrading

External access to information

Ability to apply and register (or modify) online

Online Annual Use Reporting

Eliminates paper-routing

Improved data quality

Enhanced data analysis

Improved reports and data summaries

Improved customer efficiency



Summary

- >eWater 2.0 will
 - Provide long term support for the management of the Water Use Program
 - Improve the quality of the data
 - Allow external Certificate holders access to information and data
 - Improve efficiency and customer support



Drought Planning and Response



Alabama Drought Planning & Response Act (Act 2014 – 400)

Alabama Drought Planning and Response Act Code of Alabama, 9-10C-1 through 9-10C-10

Section 9-10C-1

Short title.

This chapter may be known and cited as the Alabama Drought Planning and Response Act. (Act 2014-400, §1.)

Section 9-10C-2

Definitions.

As used in this chapter, the following words shall have the following meanings:

- (1) ADAPT. The Alabama Drought Assessment and Planning Team as created by this chapter.
- (2) ADECA. The Alabama Department of Economic and Community Affairs.
- (3) ADCNR COMMISSIONER. The Commissioner of the Alabama Department of Conservation and Natural Resources.
- (4) ADEM DIRECTOR. The Director of the Alabama Department of Environmental Management.
- (5) AEMA DIRECTOR. The Director of the Alabama Emergency Management Agency.
- (6) ALABAMA ADJUTANT GENERAL. The Commanding General of the Alabama National Guard.
- (7) AGI COMMISSIONER. The Commissioner of the Alabama Department of Agriculture and Industries.
- (8) COMMUNITY PUBLIC WATER SYSTEM. A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
- (9) DROUGHT CONSERVATION PLAN. A written plan that addresses graduated drought response procedures with implementation of specific measures based on drought severity. The drought conservation plan may be a separate plan or a component of a broader emergency response plan.
- (10) DROUGHT DECLARATION. A written summary, issued by OWR, containing a description of drought conditions throughout the state.
- (11) DROUGHT EMERGENCY. A written declaration by the Governor that drought conditions in all or any part of the state are of such severity that public health or safety is threatened.

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**(NOTE: This copy is provided for informational purposes but should not to be considered as an official version of the Alabama Drought Planning and Response Act. An official copy can be found in the Code of Alabama, Annotated, 1975, §9-10C-1, et seq.)

- ➤ Signed on April 9, 2014
- Codified in Code of Alabama as § § 9-10C-1, et seq.

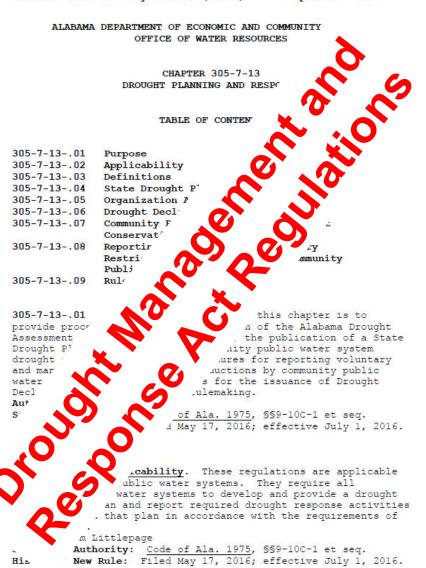
Legislative Acts Details

ACT NUMBER 2014 - 400	
er	H - 49
pe	Regular
1	General
	BOOTHE
ho	AL DROUGHT ASSESS TEAM
hat	CODIFY ESTABLISHMENT OF
iere	STATE OF AL
n	Codify establishment of the AL Drought Assessment and Planning Team created by Exec Order # 19
vernor	Yes
nd Time	4-9-2014 1:02 PM
nd Time	4-9-2014 4:14 PM

OWR Drought Regulations

Economic and Community Affairs (ADECA)

Chapter 305-7-13



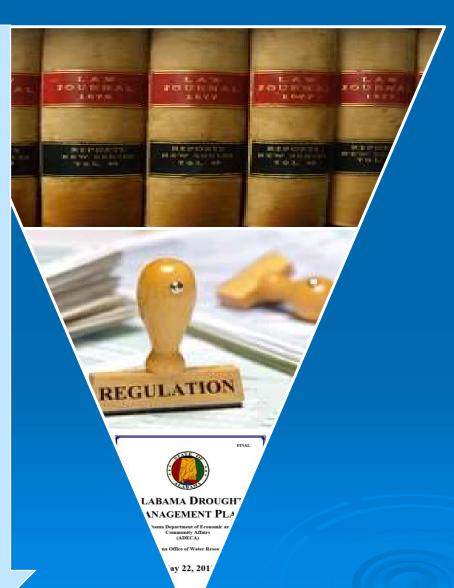
Implementation of Drought Planning& Response Act

> Focus:

- State drought plan criteria
- ADAPT/MIG operating procedures
- State drought declaration process
- Establishes requirement for drought conservation plan but allows for use of existing plans if they address drought response
- Establishes reporting requirements for public water systems



Alabama Drought Management Approach



- Drought Act provides broad overview of drought management policies, priorities, structures, processes, and agency responsibilities
- Drought regulations provide more detailed information on specific procedures and responsibilities for drought reporting and publication of Alabama Drought Plan
- Alabama Drought Plan provides specific criteria on drought declarations, drought reporting information and format, and meeting procedures

FINAL



ALABAMA DROUGHT MANAGEMENT PLAN

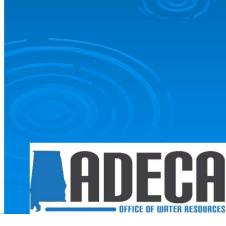
Alabama Department of Economic and Community Affairs (ADECA)

Alabama Office of Water Resources

November 30, 2018







Alabama Drought Plan History

- Plan provides the basic operating guidelines for responding to droughts
- ➤ Last revised on November 30, 2018
- Required review every five years in accordance with the Alabama Drought Planning and Response Act



Alabama Drought Planning Structure

Governor Kay Ivey

Alabama Drought Assessment and Planning Team (ADAPT)

Monitoring and Impact Group (MIG)



Alabama Drought Planning Structure

Alabama Drought Assessment and Planning Team (ADAPT)

- Senior advisory body to the Governor and OWR
- Composed of key state and federal agencies and Governor's appointees
- Receive inputs from OWR, MIG, and others
- Focal point for coordination of governmental drought responses

Monitoring and Impact Group (MIG)

- Develop triggers and indicators of drought
- Collect climatic, meteorological, stream flow, groundwater, reservoir, soil moisture, and impact data
- Perform data analysis
- Make recommendations based on data analysis
- Assess the potential and real impacts of drought
- Develop mitigation recommendations





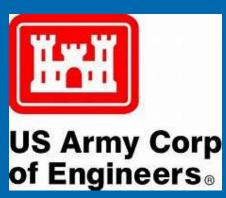
Alabama Drought Planning Regions



Reservoir Drought Operations

- Corps of Engineers
 - ACT Master Water Control Manual
 - ACF Master Water Control Manual
- Tennessee Valley Authority
 - Reservoir Operations System
- Alabama Power Company
 - Alabama Drought Response Operations Proposal (ADROP)
- PowerSouth
 - Conecuh River below Point A Dam









Local Level Planning

- > Key aspects for water utilities:
 - Requirement for local Drought Conservation Plan
 - Reporting to OWR upon activation (or deactivation) of plan
- Examples of Drought Conservation Plan or and emergency action plan details:
 - Identification of drought region(s)
 - Tiered levels of response actions to reduce water usage
 - A means of implementation and enforcement
 - Procedures for regulating compliance with the plan
 - How customers will be informed
 - Designation of staff responsible for notifying OWR
 - Procedure for variances



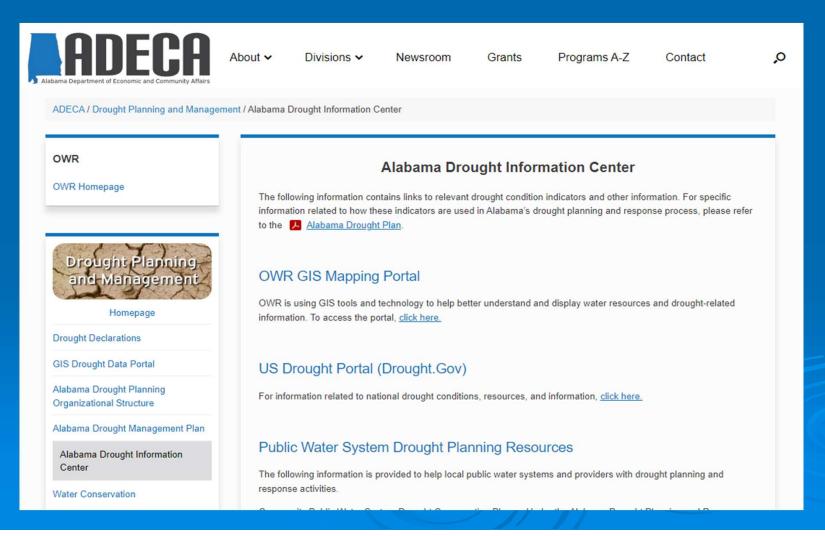
Drought Plan Update Process

- Drafts were distributed to MIG members including: AWRC / State Climatologist / TVA / Alabama Power / PowerSouth / SWCC / GSA / ADEM
- OWR has received comments from MIG for proposed revisions
- Monthly updates are provided to the MIG group as proposed revisions are evaluated
- Once approved by the MIG group, the revised Drought Plan will be submitted to ADAPT for approval
- > Your comments are welcome and encouraged



Drought Management Plan

Current plan can be found at https://adeca.alabama.gov/drought/alabama-drought-plan/







Release Date: October 11, 2023



For Public Dissemination Alabama Drought Declaration

In accordance with the Alabama Drought Planning and Response Act (<u>Code of Ala. 1975</u>, §9-10C-1, et seq.) and the Alabama Drought Management Plan, the ADECA Office of Water Resources (OWR), based on a review of current and anticipated conditions, has declared the following portions of Alabama to be under the specified drought declaration levels.

Declaration Level

Emergency Non

Warning Drought Regions 7, 9, and portions of 5 and 8 which include the counties of: Baldwin, Butler, Clarke,

Conecuh, Covington, Crenshaw, Escambia, Geneva, Mobile, Monroe, Washington, and Wilcox

Watch Drought Regions 1, 2, 3, and portions of 5 and 8 which include the counties of: Barbour, Bibb, Blount, Cherokee, Choctaw, Coffee, Colbert, Cullman, Dale, Dallas, DeKalb, Etowah, Fayette, Franklin, Greene, Hale, Henry, Houston, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Limestone, Madison, Marengo.

Hale, Henry, Houston, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Limestone, Madison, Marengo, Marion, Marshall, Morgan, Perry, Pickens, Pike, Shelby, St.Clair, Sumter, Tuscaloosa, Walker, and Winston

Advisory Drought Regions 4 and 6 which include the countles of: Autsuga, Bullock, Calhoun, Chambers, Chilton,

Clay, Cleburne, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Randolph, Russell, Talladega, and

Tallapoosa

None None



Legend
No Drought
Declaration
Advisory
Watch
Warning

Drought conditions are continuing to expand across the entire state of Alabama as precipitation deficits continue to climb. As a result, Drought Region 9 remains in a Warning status. The Warning status has been expanded into region 7 and parts of regions 5 and 8. Drought Regions 1, 2, 3, and parts of Drought Regions 5 and 8 have been upgraded to a Drought Watch. Drought Regions 4 and 6 are still classified as Drought Advisory. OWR will continue monitoring our water resources and update this Declaration as needed.

Water managers are urged to carefully monitor conditions and encourage the wise and efficient use of our water resources. Public water system customers are encouraged to follow their local water system's recommendations regarding water use. All other water users should make prudent decisions on their water use to protect available resources.

For further information, please visit our web site at water.alabama.gov and follow the links for Drought Planning and Management. You may also reach our office at (334) 242-5499, fax at (334) 242-0776, or e-mail at water@adeca.alabama.gov.

Current Alabama Drought Declaration

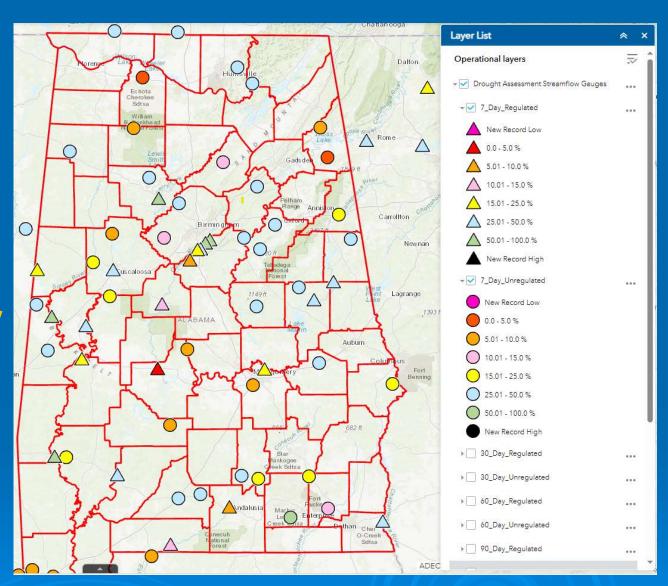
October 11, 2023

Public entities
must report any
drought actions
to OWR



OWR GIS Drought Data Portal

(http://adecagis.alabama.gov/ DroughtMap/)



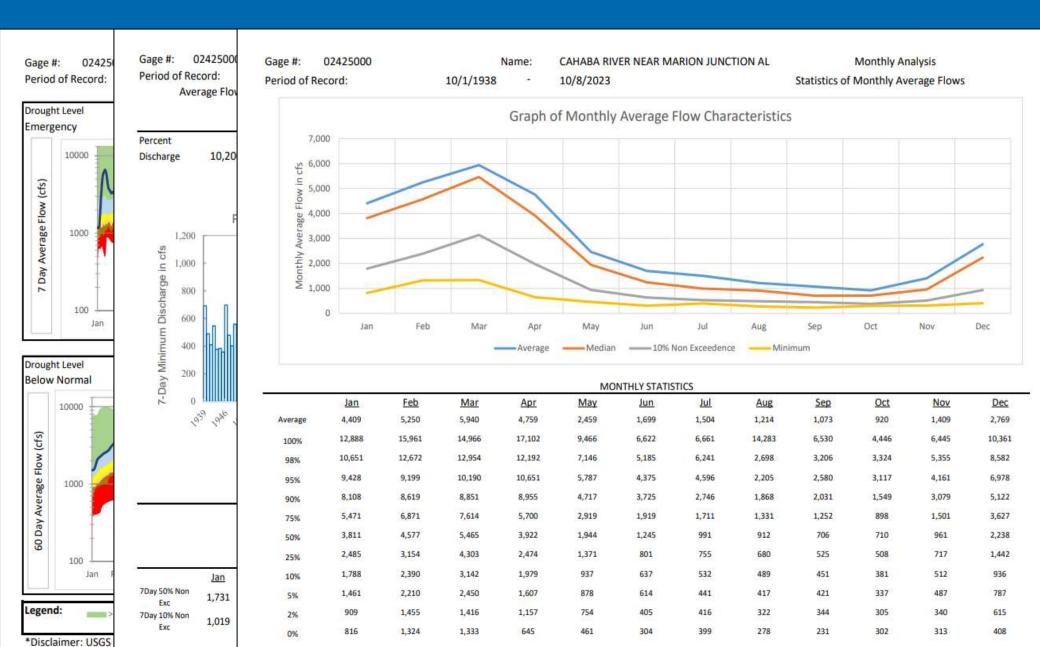


Drought Flow Assessment Tool

- > Total of 72 gages tracked weekly
 - Unregulated USGS gages 47 gages
 - Regulated USGS gages 25 gages
- > 7, 30, 60, and 90-day rear looking average streamflow based on period of record for each gage up to the previous Monday
- Shows graphical summary of flows, exceedance statistics, and monthly flow characteristics



GIS Drought Data Portal (http://adecagis.alabama.gov/Drought)



Summary

- Alabama has a successful and robust drought planning and response program
- Focus is on communication and coordination of conditions, impacts, and forecasts
- Current focus is on the review of the Alabama
 Drought Management Plan. Comments are welcome
- ➤ OWR website maintains updated drought information



Questions? Michael Harper Mary Blackmon

Alabama Office of Water Resources

Email: water@adeca.alabama.gov

Web: water.alabama.gov

Phone: Toll Free 1-877-ALAWATER

(1-877-252-9283) or (334) 242-5499

FAX: (334) 242-0776

