



Alabama Department of Environmental Management
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September 6, 2023

The Honorable Kay Ivey, Governor
State of Alabama
600 Dexter Avenue
State Capitol
Montgomery, AL 36130

RE: Alabama's 2023 Triennial Capacity Development Report

Dear Governor Ivey:

Enclosed is the triennial report on Alabama's Capacity Development program as required by the Environmental Protection Agency. The report summarizes the Department's progress toward improving the capacity development capabilities of the State's public water systems. Capacity development is an essential element in ensuring all public water systems have sufficient resources to provide safe drinking water and to maintain adequate service for their customers. ADEM's Capacity Development strategy includes assisting viable public water systems in maintaining technical, managerial and financial capacity and encouraging the consolidation of non-viable public water systems with other viable public water systems.

Outreach and education are provided by ADEM Drinking Water Branch staff and through coordinated efforts with service providers, including the Alabama Rural Water Association and Communities Unlimited. Development of viable systems has also been accomplished through regular coordination with the USDA Rural Development Program, the Alabama Department of Economic and Community Affairs, and the Department's own State Revolving Fund Program.

Implementation of the State's Capacity Development strategy has resulted in the overall improvement of the State's public water systems, including very high compliance rates. The enclosed triennial report contains information detailing the efforts of the State's public drinking water program to address the federal capacity development requirements.

Should you or your staff have questions after reviewing this report, please do not hesitate to contact me or Mr. Aubrey White at (334) 271-7774.

Sincerely,

A handwritten signature in black ink that reads "Lance R. LeFleur".

Lance R. LeFleur
Director



Alabama's 2023 Triennial Capacity Development Report

In accordance with Section 14-20(b)(2) of the Safe Drinking Water Act, the following Capacity Development Report summarizes Alabama's efforts to address the capacity development capabilities of the State's public drinking water systems, both new and existing, through FY 2023.

The Drinking Water Program (DWP) in Alabama has a long history of working with the State's public drinking water systems to improve overall operation. Despite these efforts, some systems continue to have difficulties maintaining compliance with State and Federal regulations. In most cases, non-viable water systems are those systems with insufficient resources to maintain adequate service to their customers and/or to comply with State and Federal requirements. When necessary, ADEM has encouraged the consolidation of these non-viable water systems with other viable water systems. Alabama realized long ago that a water system with inadequate resources will have difficulty meeting its obligations. EPA has reached the same conclusion, resulting in Federal requirements that all states develop criteria to evaluate a water system's capacity development capabilities.

For existing water systems, Alabama meets the Federal capacity development requirements by evaluating a non-compliant water system's technical, managerial, and financial (TMF) capability. This TMF evaluation can happen during permitting actions, routine inspections, or through administrative actions following a history of noncompliance. The goal of these evaluations is to classify the system's ability to

operate the water system and ensure the system takes steps to ensure adequate water supply to its customers by addressing deficiencies or by taking other actions (i.e., merging with another viable water system). All water systems are inspected at least annually with a full, comprehensive “sanitary survey” occurring every 3 years. When problems arise, additional inspections may be conducted to evaluate the viability of the system.

In 2022, the Alabama Environmental Management Commission adopted two new regulations, effective April 14, 2022, to further address capacity issues and long-term sustainability at public water systems. The first of these regulations is the requirement for all proposed water systems to prepare and submit an asset management plan to the Department. Additionally, systems with a history of noncompliance or deficiencies may be required to submit an asset management plan as a condition of permit renewal. Since this regulation became effective, four water systems have been required to submit asset management plans: Macon County Water Authority (AL0000867), Marion Water Department (AL0001097), Prichard Water Works and Sewer Board (AL0001015), and Reform Water and Sewer Board (AL0001107).

The second regulation contains more prescriptive standards for finished water storage tanks used by public water systems, including the requirement to develop and implement a written maintenance plan that include an inspection/cleaning every 5

years and the requirement to repair significant deficiencies found before returning the tank to service.

The Department has long-standing regulatory requirements for water systems to submit preliminary engineering reports prior to any construction of new or modified water system facilities. This information allows the DWP to assess both the technical feasibility of proposed water system projects and the long-term sustainability of the projects to ensure the long-term success of water systems.

As a result of the current DWP's capacity development efforts, the number of non-viable water systems in Alabama continues to decrease. Since the last triennial report in 2020, eight public drinking water systems in Alabama have been inactivated. Five of these inactivated systems were community water systems and three were non-community water systems. It is important to note that the reduction in the number of non-viable water systems has not curtailed the expansion of water service.

The EPA's Office of Enforcement and Compliance Assistance (OECA) released its Drinking Water Enforcement Response Policy (ERP) in December 2009. The updated enforcement approach replaced the contaminant-by-contaminant compliance strategy, often referred to as "Significant Non-Compliance" (SNC), with a system-wide approach using the Enforcement Targeting Tool (ETT). The ETT assigns a point value to specific violations for each system to bring attention to drinking water

systems with the most serious and unaddressed violations; the sum of these violations is referred to as the ETT score. If a water system receives a score of 11, they are considered a priority system for enforcement response and the state is required to take formal enforcement action within two quarters, unless the system returns to compliance. Seven of Alabama's public drinking water systems scored an 11 on EPA's Quarterly ETT reports since the 2020 triennial report. Six of these compliance issues were related to disinfection byproducts, and one water system did not meet the state's sampling, monitoring, and reporting requirements. Five systems were issued administrative orders to address the noncompliance and two systems returned to compliance without the need for formal enforcement. Alabama's capacity development program assures better water quality, improves customer service, and increases revenues, thus allowing expansion of services to customers needing (or desiring) public water.

Over the last three years, ADEM has continued to work with the Alabama Rural Water Association (ARWA) and Communities Unlimited, operating under the Rural Community Assistance Partnership (RCAP), to evaluate the technical, managerial, and financial capabilities 48 of the state's public drinking water systems. Those water systems are:

- Arley Water Works (AL0001403)
- Akron Water Department, Town of (AL0001767)
- Autaugaville Water Works (AL0000002)
- Bear Creek Water Works (AL0000920)

- Camp Hill Utilities Board (AL0001270)
- Cherokee Water & Gas Department (AL0000311)
- Clark Wilcox Monroe (CWM) Water Authority (AL0001764)
- City of Moulton (AL0000798)
- Coffeerville Water Works, Town of (AL0000252)
- Cowarts Water System (AL0000678)
- Cuba Water Board (AL0001217)
- Double Springs Water & Sewer Board (AL0001410)
- East Central Baldwin Water Authority (AL0001770)
- Eutaw Water Department (AL0000636)
- Fords Valley & HWY 278 Water (AL0000575)
- Glencoe Water Works Board (AL0000578)
- Glenwood Water Works (AL0000388)
- Gordon, Town of (AL0000685)
- Hackleburg Water & Sewer Board (AL0000925)
- Haleyville Water Works & Sewer Board (AL0000925)
- Hayneville Water Department (AL0000847)
- Highland Water Authority (AL0000580)
- Hobson City Water System (AL0000149)
- Hobson Water System (AL0001361)
- Leighton, WSB of the Town of (AL0000319)
- Macon County Water Authority (AL0000867)
- Malvern Water Department (AL0000626)

- Marion County Public Water Authority (AL0001716)
- Mexia Water System, Inc. (AL0001050)
- Millerville Water Authority (AL0000270)
- Millport Water Works (AL0000770)
- Mossess Water & Fire Protection Authority (AL0000853)
- North Choctaw Water & Sewer Authority (AL0000243)
- Plainview Heads Start Program (AL0000181)
- Providence Water Authority (AL0001345)
- Riverview Water Systems, Inc. (AL0000570)
- Quint-Mar Water Authority (AL0001508)
- Reform Water & Sewer Board (AL0001107)
- South Marengo County Water & Fire Protection Authority (AL0001439)
- Sumter County Water Authority (AL0001222)
- Taylor Water System (AL0000702)
- Tillison Bend Water Authority (AL0000538)
- Uniontown, Waterworks and Sewer Board of the City of (AL0001100)
- Waldo Water Department (AL0001250)
- Wagarville Water System (AL0001367)
- White Hall Water Board (AL0000858)
- Wilcox County Water and Sewer District (AL0001371)
- Union Grove Utility Board (AL00000951)

These evaluations have addressed issues such as: excessive water loss, delinquent accounts, poorly organized or missing records and plans required by regulation, and source water issues such as potential contamination or insufficient capacity. The contractors worked closely with the systems to correct the deficiencies by attending board meetings, setting up notebooks which contain all required records and plans, developing source water assessments and sampling plans, and conducting rate studies and extensive leak surveys. The results of their efforts included increased compliance rates, mergers with neighboring systems, reduction in water loss, greater financial stability, and more reliable sources of water.

In the past, the most significant challenges for water systems in Alabama with capacity development issues have been funding and management training. Whether it is unfunded mandates of increasingly complex regulations or maintenance and upgrading of aging infrastructure, many of these water systems have consistently struggled to generate the revenue required to operate and maintain their water systems. Water system managers for these systems often lack the experience needed to properly operate their water systems. They may use water system revenues to subsidize other programs such as sewer or public safety, and they are often reluctant to adjust water rates to produce the revenue required to operate and maintain their water system. ADEM has partnered with ARWA to provide board member training for water board members to meet these challenges. During fiscal years 2021-2023, ARWA hosted 12 board training sessions with 650 total attendees. The DWP actively participated in each session. It should be noted that these trainings were

cancelled during FY2020 and early FY2021 due to Covid-19 restrictions. Were it not for these restrictions, an additional 6 classes would have been held during that time, increasing the total attendance. All water systems are strongly encouraged to send board members to attend these trainings, especially newly elected or appointed board members.

Another program that is instrumental to capacity development is the Drinking Water Branch's Area Wide Optimization Program (AWOP). ADEM continues to be an active participant in the EPA Region 4 Area Wide Optimization Multi-State Pilot Program (AWOP-MSPP). The AWOP-MSPP is a cooperative effort to optimize the performance of existing surface water treatment plants and distribution systems. The main goal of the program is to maximize public health protection from microbial contaminants and disinfection byproducts by coordinating existing system resources with proven performance improvement tools. Other southeastern states participating in the program include Florida, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. The AWOP tools focus on things a water system can do to improve performance with little or no cost. AWOP also offers Performance Based Training which educates operators regarding AWOP tools and how to apply the tools to their plant or distribution system. Active participation in AWOP has consistently resulted in improvement to the technical, managerial, and financial capacity of a water system.

Several members of the Drinking Water Branch participated in and conducted activities associated with AWOP-MSPP. For the period of FY 2021, FY 2022, and FY 2023, the activities included the following:

- In April 2023, ADEM staff hosted the Region 4 AWOP workshop in Muscle Shoals and utilized their water treatment plant for training in optimizing performance in membrane filter plants.
- ADEM staff attended Region 4 AWOP planning meetings and workshops and National AWOP Planning Meetings.
- ADEM resumed its Annual Surface Water Meeting in 2022 after a 2-year hiatus due to COVID.
- ADEM staff provided ongoing Performance Based Training for water plants and distribution systems.
- ADEM staff made presentations at conferences held by the Alabama Water Pollution Control Association (AWPCA)
- ADEM staff regularly provided technical assistance through phone calls, inspections, and special visits to water systems.

ADEM's State Revolving Fund (SRF) program has been an instrumental tool in addressing water systems with aging infrastructure and the inability to consistently support current customer demand. This has been especially true over the last few years with record amounts of funding being provided via the American Rescue Plan Act (ARPA) and the Bipartisan Infrastructure Law (BIL). The SRF Program funded 161 total projects (89 drinking water projects) with the first-round of ARPA funding. The second round of ARPA funding offered through August 16, 2023, represents

232 total projects, with 122 of those projects for drinking water improvements. The SRF utilizes a project ranking system to effectively establish funding priorities which are published in annual Intended Use Plans, as required. The ranking system focuses on the eligibility criteria for the funding, but also includes information about disadvantaged communities (utilizing the Justice 40 Screening Tool), the system's current compliance status, the financial sustainability of the systems, and whether the project is a critical need or not. Audits are required to rank a system and funding assistance is provided for communities lacking such audits, helping to remove a barrier for entry into the funding process. Financial audits are used to determine a funding category and matching fund requirements.

ADEM's Drinking Water Branch continues to meet regularly with representatives from the USDA Rural Development Agency, the Alabama Department of Economic and Community Affairs, the Rural Community Assistance Program, and the ARWA. During these quarterly meetings, the technical, managerial, or financial capacity of water systems and proposed expansions of existing water systems are discussed. Communication with these groups has discouraged the construction of new non-viable water systems and the improvement of marginally viable existing water systems.

Over the last three years, in cooperation with the ARWA, ADEM has participated in training sessions for certified operators and other personnel of Alabama's public drinking water systems. Topics in these training sessions included: creation of asset management plans, establishment of water system legal policies, legal liabilities of

board members, operation and maintenance of water distribution systems, computer training, regulatory updates, water system security, and water conservation. These training sessions have significantly contributed to the improvement of many of the State's public drinking water systems with respect to capacity development.

Alabama has diligently pursued efforts to improve the capacity development capabilities of the State's public drinking water systems. As a result, the sustainability of water systems has continued to improve, and the state has maintained a consistently low noncompliance rate for health-based standards. ADEM is committed to continue to promote and implement programs to address the capacity development capabilities of the State's public water systems.