

Appendix B
2024 Alabama Water Workforce Survey
Utility Manager Questionnaire

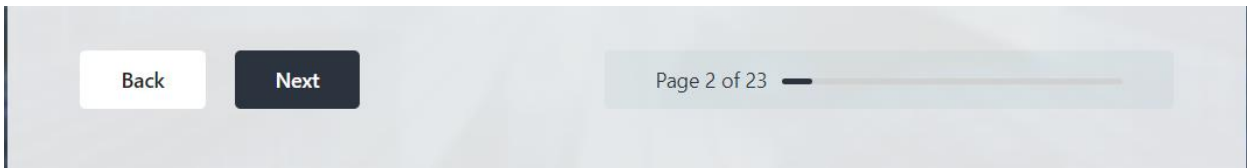
Appendix B contains the full text of the survey Questionnaire. Surveys were developed and distributed on Microsoft Forms. Question types included multiple choice, single choice, dates, and free text or free number responses.

Questions were presented in “Sections”. The bottom of each section had “Back” and “Next” buttons to allow survey respondents to navigate. The survey progress was indicated by a progress bar.

Here’s a screenshot of the opening screen:



Here’s a screenshot of a typical section end:



Each section of the digital survey will start on a new page in this Appendix.

Section 1

About this survey

The Alabama Department of Environmental Management's (ADEM's) Operator Certification Program invites you to take part in **a survey about your experiences as a water/wastewater utility manager**. The purpose of this Water Workforce Recruiting and Retention Survey is to serve as our benchmark and **to help us direct new Outreach opportunities**. We hope to follow up annually to track the progress of our outreach efforts.

We are asking you to participate because you have experience as a manager at a utility in Alabama which qualifies you to take the survey. The survey will help us gather information about Alabama's water/wastewater workforce to gain a better understanding of the **challenges, barriers, and opportunities in hiring and retaining operators**.

The survey **will take about 15** minutes to complete. There are no known risks to participating. Your response to the survey is **anonymous** which means **no names, IP addresses, email addresses, or any other identifiable information will be collected** with the survey responses. We will not know which responses are yours if you choose to participate.

We hope to receive completed surveys from utility managers in every Alabama county. Your participation is very important to us; however, you have a choice about whether or not to complete the survey. **If you do participate, you may choose to skip or refuse to answer questions**. There is no penalty for skipping questions or discontinuing the survey.

This survey borrows a few questions from similar water workforce surveys conducted in Tennessee in 2024, West Virginia in 2023 and Kentucky in 2022. By aligning our questions with these surveys, we can start to form a regional picture of the water sector workforce.

If you have any questions about the study, please feel free to ask at any time.

Thank you in advance for your assistance with this important project.

Sincerely,

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Pam Monaghan [monahan]
ADEM's Operator Certification Program
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334-271-7872

>>

*Required

M1. Do you want to continue with this survey?

The questions on the Manager Survey start with "M".

On multiple choice questions, there is a number in parentheses, like this (1). This is to help us analyze the results of the survey. It's not a part of the choices.

Yes (1)

No (2)

Section 2

Utility Type, Size and County

The following questions ask about the utility where you currently work as a manager/supervisor/superintendent.

If you work at multiple utilities, please answer questions for the utility where you work the greatest number of hours per week.

If you are not currently working as a manager/supervisor/superintendent, answer the questions about your most recent job as a manager/supervisor/superintendent.

>>

M2. Which of the following best describes your utility? (Select all that apply)

Wastewater I (Lagoon) (1)

Wastewater IC (Collections) (2)

Wastewater II (3)

Wastewater III (4)

Wastewater IV (5)

Water I (Distribution) (6)

Water II (Basic Groundwater) (7)

Water III (Advanced Groundwater) (8)

Water IV (Surface Water) (9)

I'm not sure (10)

Other

>>

M3. How many people does your utility directly serve? (Select the highest range for the drinking water or wastewater services provided.)

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>dropdown<

1,500 or less (1)

1,501 - 10,000 (2)

1,501 - 10,000 (2)

15,001 - 30,000 (4)

30,001 - 50,000 (5)

More than 50,000 (6)

I'm not sure (7)

>>

M4. In what county is your utility located?

>dropdown<

Autauga (1)

Baldwin (2)

Barbour (3)

Bibb (4)

Blount (5)

Bullock (6)

Butler (7)

Calhoun (8)

Chambers (9)

Cherokee (10)

Chilton (11)

Choctaw (12)

Clarke (13)

Clay (14)

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Cleburne (15)

Coffee (16)

Colbert (17)

Conecuh (18)

Coosa (19)

Covington (20)

Crenshaw (21)

Cullman (22)

Dale (23)

Dallas (24)

Dekalb (25)

Elmore (26)

Escambia (27)

Etowah (28)

Fayette (29)

Franklin (30)

Geneva (31)

Greene (32)

Hale (33)

Henry (34)

Houston (35)

Jackson (36)

Jefferson (37)

Lamar (38)

Lauderdale (39)

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Lawrence (40)

Lee (41)

Limestone (42)

Lowndes (43)

Macon (44)

Madison (45)

Marengo (46)

Marion (47)

Marshall (48)

Mobile (49)

Monroe (50)

Montgomery (51)

Morgan (52)

Perry (53)

Pickens (54)

Pike (55)

Randolph (56)

Russell (57)

Shelby (58)

St. Clair (59)

Sumter (60)

Talladega (61)

Tallapoosa (62)

Tuscaloosa (63)

Walker (64)

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Washington (65)

Wilcox (66)

Winston (67)

>>

M5. If your utility covers more than one county, select the second one here

>see county list for question M4<

>>

M6a. Here's room for a third county, if you need it.

> see county list for question M4<

>>

M6b. More than three counties? Type the others here.

Section 3

Recruiting

>>

M7. When you have an open position for an operator at your utility, where do you advertise the position? (Select all that apply)

Newspaper (1)

Online job post (e.g. Indeed, ZipRecruiter, CareerBuilder, LinkedIn, etc.) (2)

Job fair (3)

School guidance counselor (4)

Unemployment office (5)

Industry-specific website (e.g. NRWA, ARWA, WEF, AWEA, AWPCA, etc.) (6)

Social media (7)

Video ad (e.g. Live TV or streaming service) (8)

Audio ad (e.g. radio, podcast, Spotify, Pandora, etc.) (9)

Billboard (10)

Local government website (11)

Temp agency (12)

Friend or family (13)

Industry contacts ("networking") (14)

Other

Section 4

Operator roles and responsibilities

The following questions ask about the utility where you currently work.

If you work at multiple utilities, please answer questions for the utility where you work the greatest number of hours per week.

>>

M8. What job duties are operators responsible for at your utility, other than basic system/treatment works? (Select all that apply)

Office work (1)

Collecting payments (2)

Equipment maintenance (3)

Trash services (4)

Natural gas services (5)

Electrical utility services (6)

City maintenance (e.g., mowing) (7)

They are not responsible for any other job duties (8)

Other

Section 5

Benefits, Opportunities and Appreciation

>>

M9. What benefits does your utility provide? (Select all that apply)

Health insurance (1)

Retirement benefits (2)

Life and disability insurance (3)

Paid sick and vacation days (4)

Paid holidays (5)

Annual raises (6)

Overtime (7)

Comp time (8)

Paid time and travel to attend trainings (9)

Paid or reimbursed tuition or training expenses (10)

Paid or reimbursed certification fees (11)

Paid or reimbursed certification renewal fees (12)

Paid time to study for exams (13)

Other

>>

M10. Does your utility offer opportunities for promotions and career advancement?

>dropdown<

Yes (1)

No (2)

I'm not sure (3)

>>

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M11. How does the utility reward and/or show appreciation for its operators? (Select all that apply)

Provide pay increases based on employee performance (1)

Provide pay increases based on certification achievements (2)

Provide longevity awards (3)

Recognize employees for their contributions (e.g., suggesting cost saving measures) (4)

Offer leadership skills training to employees (5)

Other

Section 6

PayScale and Wages

The following questions ask about the utility where you currently work.

If you work at multiple utilities, please answer questions for the utility where you work the greatest number of hours per week.

>>

M12. Does your utility have a formal documented pay scale for certified operators?

>dropdown<

Yes (1)

No (2)

>>

M13. What is the **starting hourly wage** for an **entry-level certified drinking water** operator at your utility?

>>

M14. What is the **highest hourly wage** a **certified drinking water** operator working at your utility is paid?

>>

M15. What is the **starting hourly wage** for an **entry-level certified wastewater** operator at your utility?

>>

M16. What is the highest hourly wage a certified wastewater operator working at your utility is paid?

>>

M17. **Think about the dual certified operator position you most need to fill. Tell us what is the Water Grade / Wastewater Grade for that position?**

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For example, if you require a Waster IV and Wastewater IV, type **Water 4 / Wastewater 4 or W4 / WW4**.

Please put the Water grade first!!

>>

M18. What is the **starting hourly wage** for the **dual-certified** operator described in M17 above?

>>

M19. What is the **highest hourly wage** for the **dual certified** operator described in M17 above?

Section 7

Hiring Challenges

>>

M20. In your opinion, which of the following are **barriers to hiring** operators? (Select all that apply)

Rate of pay (1)

Financial limitations at the utility (2)

City Council or Utility Board (3)

Lack of qualified applicants (4)

Applicants are unwilling to become certified (5)

Certification requirements (6)

Certification process (7)

Lack of benefits (8)

Type of work (9)

Available shifts are not desirable (10)

Other

>>

M21. If you indicated that a “lack of qualified applicants” was a barrier to hiring operators. What qualifications have been lacking among potential operator applicants that prevented your utility from hiring them? (Select all that apply)

Lack of operator license (1)

Lack of experience in relevant positions (2)

Failure to meet minimum education requirement (3)

Failure to pass a drug test (4)

Other

>>

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M22. Over the last two years, which of the following has your utility experienced? (Select all that apply)

Increased number of job openings (1)

Decreased number of job openings (2)

Increased number of applicants for jobs (3)

Decreased number of applicants for jobs (4)

Increased workloads (5)

Decreased workloads (6)

Higher morale (7)

Lower morale (8)

Increased funds coming in (9)

Decreased funds coming in (10)

Increased stress (11)

Decreased stress (12)

Delays in receiving chemicals, parts, etc. (13)

None of the above (14)

Other

Section 8

Retention Challenges

>>

M23. As the manager of the utility, you have firsthand knowledge about your operators' job satisfaction. Consider each of the following and indicate whether your operators are extremely dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, somewhat satisfied, or extremely satisfied with that aspect of their job. If you aren't sure, you can mark the answer "I don't know."

>from Extremely dissatisfied (1) to Extremely satisfied (2) and I don't know

Pay (1)

Availability of preferred shifts (2)

Hours (3)

Workload (4)

Type of work (5)

Certification exam process (6)

Certification renewal process (7)

>>

M24. In your experience, what reasons do operators give for leaving the job? (Select all that apply)

Retiring (1)

They no longer want to work in the water sector (2)

Renewal fees are too expensive (3)

Better pay in another job opportunity (4)

Better benefits in another job opportunity (5)

Another job opportunity allows for career advancement (6)

Too many regulations (7)

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Too much responsibility (8)

Undesirable working hours (e.g., being on-call, working on holidays, shifts) (9)

Certification exam and process is too difficult (10)

Other

Section 9

Your opinions – part 1

M25. In your opinion, does your utility have enough operators?

>dropdown<

Yes (1)

No (2)

>>

M26. In your opinion, do you think the general public knows the operator career exists?

1 Star: Not at all

5 Stars: Definitely yes

>>

M27. In your opinion, how well do your utility's decision makers (e.g., city council or utility board) understand the challenge of recruiting and retaining operators?

1 Star: Not well

5 Stars: Extremely well

Section 10

Your opinions – part 2

>>

M28. Consider the following statements and indicate whether you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree with each.

>Strongly disagree (1) to Strongly agree (5)

Operators at my utility are given the equipment and tools needed to do their job effectively. (1)

My utility has the right people and skills to do the work that needs to be done. (2)

Work is distributed evenly among operators at my utility. (3)

My employees are satisfied with the benefits they receive. (4)

My utility has a succession plan in place if a manager leaves or retires. (5)

My utility has a succession plan in place if an operator leaves or retires. (6)

>>

Section 11

Number time

In the next few sections, we will be asking a series of questions for each of the water and wastewater certification grades. **Only fill in for those grades that you need at your utility. It's OK to leave some sections blank if they do not apply.**

This is to help us understand exactly what the operator needs are. We know sometimes there is a difference between the positions you have *budgeted for* and the *positions you need* to fully cover all shifts.

We also know that even though you hire an operator, you may not be able to get them certified. And once hired and certified, sometimes you can't hold on to them.

We will ask about the number of operator positions your utility has **Budgeted** for, **Filled**, and **Need**. These may be the same or they may not. **Please fill in all three so we can do the math.**

We will also ask how many you have **hired in the last 12 months, how many have certified in the position and how many have left.**

For counting those that "left", they could have been promoted or moved to the lab and still work at your utility; but if they created an opening at that grade that you now need to fill, then put that in the "left in the last 12 months" bucket.

Section 12

Water I

>>

M29. Water I – Budgeted

>>

M30. Water I – Filled

>>

M31. Water I – Need

>>

M32. Water I (trainee) - Hired in last 12 months

>>

M33. Water I - Certified in last 12 months

>>

M34. Water I - Left in last 12 months

Section 13

Water II

>>

M35. Water II – Budgeted

>>

M36. Water II – Filled

>>

M37. Water II – Need

>>

M38. Water II - Hired in last 12 months

>>

M39. Water II - Certified in last 12 months

>>

M40. Water II - Left in last 12 months

Section 14

Water III

>>

M41. Water III - Budgeted

>>

M42. Water III – Filled

>>

M43. Water III - Need

>>

M44. Water III - Hired in last 12 months

>>

M45. Water III - Certified in last 12 months

>>

M46. Water III - Left in last 12 months

Section 15

Water IV

>>

M47. Water IV - Budgeted

>>

M48. Water IV - Filled

>>

M49. Water IV - Need

>>

M50. Water IV - Hired in last 12 months

>>

M51. Water IV - Certified in last 12 months

>>

M52. Water IV - Left in last 12 months

Section 16

Wastewater I

>>

M53. Wastewater I - Budgeted

>>

M54. Wastewater I - Filled

>>

M55. Wastewater I – Need

>>

M56. Wastewater I (trainee) - Hired in last 12 months

>>

M57. Wastewater I - Certified in last 12 months

>>

M58. Wastewater I - Left in last 12 months

Section 17

Wastewater IC

>>

M59. Wastewater IC – Budgeted

>>

M60. Wastewater IC – Filled

>>

M61. Wastewater IC - Need

>>

M62. Wastewater IC (trainee) - Hired in last 12 months

>>

M63. Wastewater IC - Certified in last 12 months

>>

M64. Wastewater IC - Left in last 12 months

Section 18

Wastewater II

>>

M65. Wastewater II - Budgeted

>>

M66. Wastewater II - Filled

>>

M67. Wastewater II - Need

>>

M68. Wastewater II - Hired in last 12 months

>>

M69. Wastewater II - Certified in last 12 months

>>

M70. Wastewater II - Left in last 12 months

Section 19

Wastewater III

>>

M71. Wastewater III – Budgeted

>>

M72. Wastewater III - Filled

>>

M73. Wastewater III - Need

>>

M74. Wastewater III - Hired in last 12 months

>>

M75. Wastewater III - Certified in last 12 months

>>

M76. Wastewater III - Left in last 12 months

Section 20

Wastewater IV

>>

M77. Wastewater IV - Budgeted

>>

M78. Wastewater IV - Filled

>>

M79. Wastewater IV - Need

>>

M80. Wastewater IV - Hired in last 12 months

>>

M81. Wastewater IV - Certified in last 12 months

>>

M82. Wastewater IV - Left in last 12 months

Section 21

Managers - Education

>>

M83. What's your **highest** level of education?

>dropdown<

High school/GED (1)

Trade School (2)

Associate's Degree (2 year) (3)

Bachelor's Degree (4 year) (4)

Master's Degree (5)

Doctoral Degree (6)

Prefer not to say (7)

Other

>>

M84. Have you earned a degree or certificate from an Alabama Community College?

Yes (1)

No (2)

>>

M85. What degree or certificate did you earn? Tell us the degree or Certificate program, e.g. General Studies, Music, Electronics, etc.(If more than one, name ones most relevant to your work experience.)

>>

M86. At which Community College did you earn your degree or certificate?

>dropdown<

Beville State Community College (1)

Bishop State Community College (2)

Calhoun Community College (3)

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Central Alabama Community College (4)

Chattahoochee Valley Community College (5)

Coastal Alabama Community College (6)

Drake State Community and Technical College (7)

Enterprise State Community College (8)

Gadsden State Community College (9)

Ingram State Technical College (10)

Jefferson State Community College (11)

Lawson State Community College (12)

Lurleen B. Wallace Community College (13)

Marion Military Institute (14)

Northeast Alabama Community College (15)

Northwest Shoals Community College (16)

Reid State Technical College (17)

Shelton State Community College (18)

Snead State Community College (19)

Southern Union State Community College (20)

Trenholm State Community College (21)

Wallace Community College – Dothan (22)

Wallace State Community College (23)

Wallace Community College – Selma (24)

Other

Section 22

Managers - Demographics

>>

M87. What is your age?

>>

M88. What is your gender?

>dropdown<

Woman (1)

Man (2)

Prefer not to say (3)

Section 23

Thank you

>>

M89. Do you want to tell us anything else about wages?

>>

M90. Do you want to tell us anything else about hiring or retention challenges?

>>

M91. Do you want to tell us anything else about dual-certified operators?

>>

M92. If there's anything else you'd like to tell us, please do so below:

END