

2024 ALABAMA
WATER WORKFORCE
RECRUITING AND
RETENTION SURVEY
REPORT

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Survey Questionnaire, Report and Infographic prepared by Pamela L. Monaghan, Senior Environmental Engineer, Alabama Department of Environmental Management, pam.monaghan@adem.alabama.gov

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INTRODUCTION

WE RAN A SURVEY TO ESTABLISH A BENCHMARK FOR ALABAMA'S WATER WORKFORCE

A SNAPSHOT OF THE OPERATOR WORKFORCE IN 2024

The Alabama Department of Environmental Management's (ADEM's) Operator Certification (OpCert) Program conducted the 2024 Water Workforce Recruiting and Retention Survey, from October 6 – November 15, 2024.

The survey was designed to gather information about Alabama's water workforce to **gain a better understanding of our water workforce in 2024** and the **challenges and opportunities in hiring and retaining operators**.

OUR TWO "MOST CRUCIAL QUESTIONS"

1. Are the numbers in Alabama's water workforce adequate?
2. If not, what can we do to improve water workforce recruitment and retention?

A SHORTAGE OF NEW OPERATORS IN ALABAMA'S WORKFORCE

We learned that most operators started working while they were in their 20s ([Chart 54](#)) and in Fall of 2024, only 6% of operator respondents were in their 20s ([Chart 3](#)).

HOW TO IMPROVE RECRUITING AND RETENTION

1. **Advertise the career field.** It's a great job, but 76% of operators think the public does not know the job exists and 67% wish the public did know about their career ([page 24](#)).
2. **Improve exam preparation.** 60% of managers say lack of operator certification was the greatest barrier to hiring ([Chart 46](#) and [Chart 47](#)).
3. **Designate operators as "essential personnel".** Operators and managers wrote in detail about their desire for state-wide designation as "essential personnel" ([Pages 27-31](#)).
4. **Train Board Members and Utility decision makers on the functions and importance of the water workforce** ([Pages 27-31](#)).

METHOD

STUDY DESIGN AND SURVEY DEVELOPMENT

WE DESIGNED TWO STUDIES

To understand who our operators are and to discern the challenges and opportunities facing the water workforce, we issued two surveys. One survey was for certified water and wastewater operators and another one for managers of water and wastewater operators at facilities permitted by ADEM.

OUR SURVEY WAS BUILT ON THE SHOULDERS OF GIANTS

We conducted a sample survey with a small and motivated cadre of operator volunteers. Many of our initial questions were refined and clarified because of their feedback.

After running the sample survey, we learned of similar water workforce surveys conducted in Tennessee in 2024, West Virginia in 2023 and Kentucky in 2022. We augmented our original questionnaire to include many of the questions asked in these surveys. We did not run a sample test of this larger questionnaire.

The survey was developed as a web-based survey on Microsoft Forms. While the survey was open, copies of the questions were available on the Alabama Operator Certification webpage.

The operator questionnaire that was posted to the webpage is included here as *Appendix A*; the manager questionnaire is included as *Appendix B*.

METHOD

HOW SURVEY INVITATIONS WERE DISTRIBUTED

Surveys were open for six weeks from October 4, 2024, through November 15, 2024.

Operator and utility email addresses were compiled from the following sources: (1) operator emails were extracted from ADEM's Operator Certification database; (2) drinking water utility emails were extracted from the State Drinking Water Information System (SDWIS); (3) municipal wastewater utility emails were reported out from ADEM's Environmental Permitting and Compliance System (AEPACS); and (4) water and wastewater contact emails were exported from ADEM's State Revolving Fund (SRF) database. Also, survey QR codes were included in Alabama Water Environment Association's (AWEA's) publication, *The Wave*.

Surveys could be accessed from the link sent in the emails, from scanning the QR code in *The Wave*, or from the Microsoft Form embedded in ADEM's Operator Certification webpage.

Of the 2871 emails sent to **operators, 247 responded** to the operator's survey. Of the 1722 emails sent to **managers, 73 responded** to the manager's survey.

SURVEY RESPONSES ARE INCLUDED IN THE APPENDICES

Survey responses were saved from Microsoft Forms to Microsoft Excel and coded with Excel's Power Query and PowerPivot tools. In each survey, the only required question was whether to continue. The total number of responses for each question varies, as not every respondent answered every question.

Answers that were not in an appropriate format were removed from the dataset. Free response answers were lightly coded for clarity and to remove any identifying information.

Lightly coded raw *data from the operator survey is in Appendix C* and *data from the manager survey is in Appendix D*.

UNDERSTANDING THE WORKFORCE

RESPONDENTS COMPARE WELL TO THE POPULATION OF ALABAMA'S WATER WORKFORCE

Survey results sample a small number of people from a given population. In order to know whether the results from our sample can be inferred to be representative of the population, we asked the following questions:

- 1) What county do you work in? ([Chart 1](#) and [Chart 2](#));
- 2) What is your age and gender? ([Chart 3](#) and [Chart 4](#));
- 3) At what type and size of utility do you work? ([Chart 5](#) and [Chart 6](#)); and
- 4) What's the highest grade of certification you hold? ([Chart 7](#))

Chart 1: Managers from 51 of Alabama's 67 counties responded

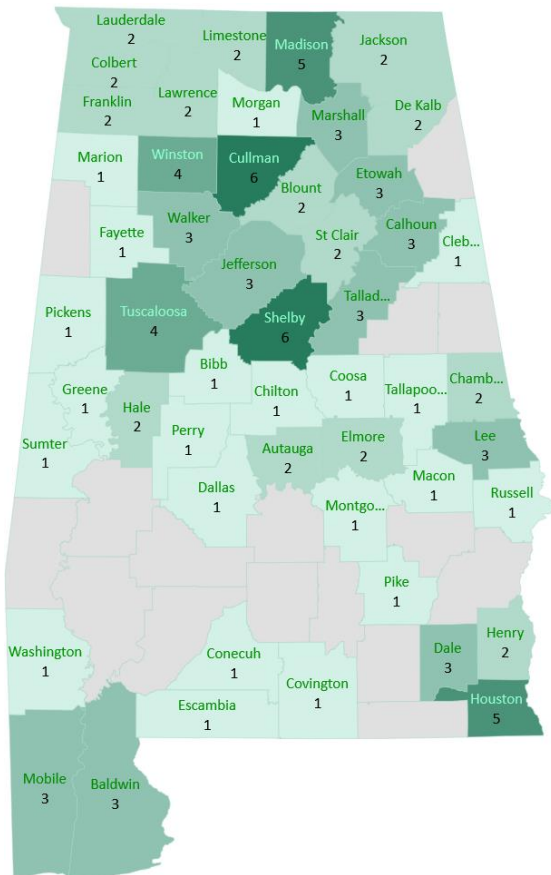
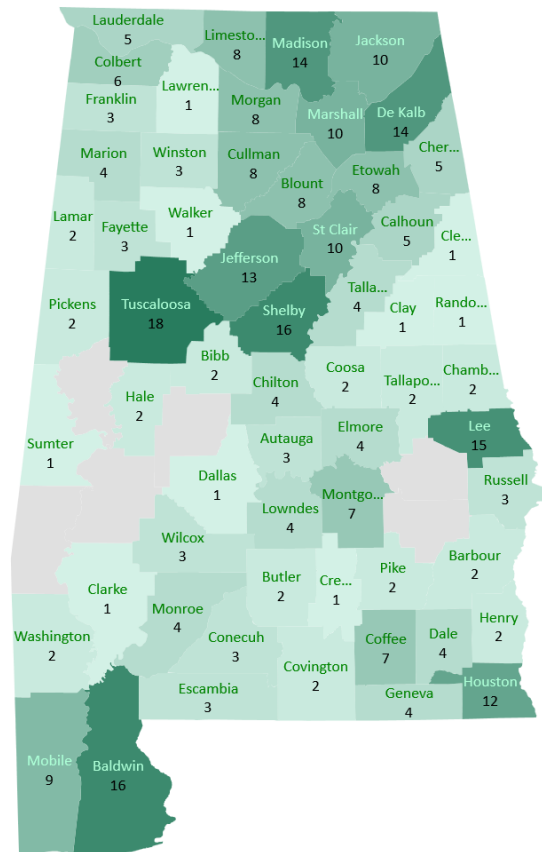


Chart 2: Operators from 61 of Alabama's 67 counties responded



UNDERSTANDING THE WORKFORCE

Chart 3: Age of respondents

Ages	Operators	Managers
20-29	6%	1%
30-39	20%	17%
40-49	26%	31%
50-59	30%	29%
60-69	16%	21%
70-79	1%	-

Chart 4: Gender of respondents

Responses	Operators	Managers
Woman	7%	7%
Man	91%	93%
Prefer not to say	1%	

Chart 5: Utility type

Treatment plant grades	Operators	Managers
Wastewater I (Lagoon)	6%	5%
Wastewater IC (Collections)	7%	9%
Wastewater II	7%	5%
Wastewater III	12%	15%
Wastewater IV	12%	11%
Water I (Distribution)	12%	15%
Water II (Basic Groundwater)	14%	14%
Water III (Advanced Groundwater)	5%	6%
Water IV (Surface Water)	23%	20%

Chart 6: Service area

Population size served	Operators	Managers
1,500 or less	12%	15%
1,501 - 10,000	27%	31%
10,001 - 15,000	13%	10%
15,001 - 30,000	12%	13%
30,001 - 50,000	13%	14%
More than 50,000	21%	17%
I'm not sure	2%	1%

UNDERSTANDING THE WORKFORCE

Chart 7: Operator Certifications

Certification grades	%
I don't have a certificate, yet	1%
I don't have a certificate, and won't be getting one	0%
Water I	9%
Water II	19%
Water III	7%
Water IV	25%
Wastewater I	3%
Wastewater IC	6%
Wastewater II	6%
Wastewater III	5%
Wastewater IV	20%
None	0%

UNDERSTANDING THE WORKFORCE

WE ASKED WHERE OPERATORS ARE WORKING, FOR HOW LONG, HOW OFTEN THEY CHANGE JOBS AND WHAT KIND OF WORK THEY DO AS OPERATORS

Chart 8: Years at current employer

Years	%
0-10 years	41%
10-20 years	29%
20-30 years	20%
30+ years	11%

Chart 9: Current operator role

Operator responses	%
Certified operator	84%
Operator trainee	0%
Contract operator	0%
Field operator	3%
I no longer work as an operator.	12%

Chart 10: Systems worked at right now

Number of systems	Water	Wastewater
1	92%	87%
2	7%	8%
3	1%	5%

Chart 11: Systems worked at in your career

Number of systems	Water	Wastewater
1	61%	57%
2	20%	24%
3	9%	11%
4	4%	1%
5	1%	1%
6+	3%	5%

UNDERSTANDING THE WORKFORCE

Chart 12: Hours worked per week

Hours	%
0-20	2%
20-40	2%
40-60	91%
60-80	2%
80-100	3%

Chart 13: Do you work part-time?

Operator responses	%
Yes	4%
No	96%

Chart 14: Job Duties

Responses	Operators	Managers
Office work	74%	62%
Collecting payments	14%	14%
Equipment maintenance	71%	95%
Trash services	13%	9%
Natural gas services	2%	6%
Electrical utility services	2%	5%
City maintenance (e.g., mowing)	24%	32%
I am not responsible for any other job duties	7%	0%
I left the water sector more than 12 months ago.	2%	0%

Chart 15: Operator roles

Operator responses	%
Manager/Supervisor	68%
Office Manager/Administrator	16%
Laboratory	33%
Instructor/Trainer	28%
I left the water sector more than 12 months ago.	2%

OPERATOR WAGES START AT \$12.50 PER HOUR AND GO AS HIGH AS \$53 PER HOUR.

Chart 16: Does your utility have a formal documented pay scale?

Operator responses	%
Yes	68%
No	32%

Chart 17: Water operator wages according to managers

Manager's responses	minimum	maximum	mean
Starting wage	\$12.50	\$38.00	\$21.40
Highest wage	\$19.50	\$53.60	\$33.90

Chart 18: Wastewater operator wages according to managers

Manager's responses	minimum	maximum	mean
Starting wage	\$13.90	\$38.00	\$23.10
Highest wage	\$19.50	\$53.60	\$35.60

Chart 19: Operators' actual wages

Operator's responses	minimum	maximum	mean
Actual wages	\$15.00	\$81.40 *	\$33.50
"Ideal" wages	\$20.00	\$100.00	\$40.70

*Some operators are also managers. This may explain why some operators' wages are much higher than the maximum wages listed in the manager survey.

OPERATORS WERE ASKED ABOUT THEIR PLANS TO LEAVE THEIR CURRENT EMPLOYER

Charts 20 and 21 were answered by all respondents

Chart 20: Do operators plan to leave their current job?

Operators responses	%
Yes, as soon as I find a new job	7%
Yes, when I retire	58%
I'm not sure	25%
N/A I do not have an employer	2%
Other	9%

Chart 21: How soon do operators plan to leave current job?

Operators responses	%
Within the next 12 months	10%
In 1-3 years	25%
In 4-6 years	18%
In 7-9 years	11%
In 10+ years	29%
Other	8%

UNDERSTANDING THE WORKFORCE

Charts 22, 23, and 24 were only seen by the 35% of respondents who indicated they plan to leave their employer in the next 3 years.

Chart 22: Will you let your certifications lapse?

Operators responses	%
Yes	6%
No	63%
Maybe	8%
I don't know yet.	23%

Chart 23: What are your plans after you leave?

Operators responses	%
I plan to continue working in the water sector.	47%
I plan to continue working, but not in the water sector.	15%
I do NOT plan to continue working.	23%
Other	15%

Chart 24: Do you plan to work as a treatment operator?

Operators responses	%
Yes	61%
No	8%
I don't know	28%
Other	3%

OPERATORS WERE ASKED ABOUT THEIR PLANS TO LEAVE THE WATER WORKFORCE

Chart 25: Are you planning to leave the water workforce?

Operators responses	%
Yes	19%
No	57%
I'm not sure	22%
I have already left the water industry.	2%

Chart 26: When do you plan to leave the water workforce?

Operators responses	%
Within the next 12 months	20%
In 1-3 years	35%
In 4-6 years	30%
In 7-9 years	7%
In 10+ years	9%

Chart 27: Leaving in next 3 years

Operator responses	%
I plan to continue working, but not in the water sector.	36%
I do NOT plan to continue working.	36%
I will be taking a break from work. I may return in the future.	16%
Other	12%

OPERATORS AND MANAGERS REPORT SIMILAR BENEFITS

Chart 28: Benefits

Responses	Operators	Managers
Health insurance	96%	99%
Retirement benefits	95%	94%
Life and disability insurance	74%	79%
Paid sick and vacation days	97%	100%
Annual raises	97%	100%
Annual raises	80%	82%
Overtime	74%	90%
Comp time	40%	38%
Paid time and travel to attend trainings	83%	93%
Paid or reimbursed tuition or training expenses	70%	77%
Paid or reimbursed certification fees	83%	89%
Paid or reimbursed certification renewal fees	84%	92%
Paid time to study for exams	46%	56%

Chart 29: Does your utility offer opportunities for promotions and career advancement?

Responses	Operators	Managers
Yes	58%	78%
No	32%	21%
I'm not sure	10%	1%

CHALLENGES

OPERATORS AND MANAGERS ON JOB SATISFACTION

Chart 30: Pay

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-10%	-25%	12%	39%	14%
Managers	-3%	-23%	13%	45%	15%

Chart 31: Availability of preferred shifts

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-4%	-6%	20%	25%	31%
Managers	0%	-6%	28%	38%	21%

Chart 32: Hours

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-2%	-9%	24%	32%	30%
Managers	0%	-6%	24%	38%	30%

Chart 33: Workload

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-7%	-19%	27%	29%	16%
Managers	-1%	-15%	17%	49%	15%

Chart 34: Type of work

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-1%	-7%	24%	30%	37%
Managers	0%	-4%	23%	49%	21%

Chart 35: Certification exam process

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-9%	-21%	29%	20%	16%
Managers	-13%	-27%	30%	15%	6%

Chart 36: Certification renewal process

Response	Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Operators	-1%	-6%	29%	31%	29%
Managers	-1%	-8%	21%	44%	18%

CHALLENGES

Chart 37: Tools and equipment needed to do their jobs effectively

Responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Operators	-5%	-13%	7%	35%	41%
Managers	-3%	-1%	4%	35%	57%

Chart 38: Utility has the right people and skills to do the work that needs to be done

Responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Operators	-5%	-21%	14%	36%	25%
Managers	-3%	-6%	10%	46%	35%

Chart 39: Work is distributed evenly among operators at my utility

Responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Operators	-15%	-25%	18%	25%	16%
Managers	-3%	-10%	15%	39%	33%

Chart 40: Operators are satisfied with the benefits they receive

Responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Operators	-4%	-14%	10%	39%	33%
Managers	-6%	-10%	11%	40%	33%

Chart 41: My utility has a succession plan in place ...

Manager responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
... if a manager leaves or retires.	-27%	-8%	23%	30%	13%
... if an operator leaves or retires.	-22%	-15%	15%	32%	15%

Chart 42: Fair pay and task enjoyment

Operator responses	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am being paid a fair amount for the work I do.	-15%	-27%	13%	31%	14%
I like doing the tasks I do at work.	0%	-3%	16%	42%	38%

CHALLENGES

Chart 43: Motivation for you to work in the water industry

Operator responses	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Pay and benefits	0%	-1%	8%	33%	57%
Provide a service to the community	-1%	-3%	13%	35%	49%
Protect the environment	-1%	-3%	11%	32%	53%
Work close to home	0%	-2%	19%	32%	46%

Chart 44: Importance of your job as seen by others

Operator responses	Not at all important	Slightly important	Moderately important	Very important	Extremely important
City council or utility board	-5%	-17%	28%	23%	24%
Community	-11%	-27%	33%	12%	12%
Friends and family	-2%	-7%	26%	34%	30%
Coworkers	-1%	-3%	16%	29%	50%
Supervisors	-4%	-4%	16%	25%	49%

CHALLENGES

Chart 45: Challenges in last two years

Responses	Operators	Managers
Increased number of job openings	-	57%
Decreased number of job openings	-	7%
Increased number of applicants for jobs	-	7%
Decreased number of applicants for jobs	-	57%
Increased workloads	76%	63%
Decreased workloads	3%	1%
Increased work hours	42%	-
Decreased work hours	2%	-
Higher morale	13%	11%
Lower morale	47%	32%
Financial hardships	31%	-
Financial benefits	12%	-
Increased funds coming in	-	7%
Decreased funds coming in	-	21%
Increased stress	73%	54%
Decreased stress	2%	3%
Delays in receiving chemicals, parts, etc	-	36%
None of the above	9%	3%

Chart 46: Barriers to hiring operators

Manager responses	%
Rate of pay	61%
Financial limitations at the utility	28%
City Council or Utility Board	24%
Lack of qualified applicants	76%
Applicants are unwilling to become certified	34%
Certification requirements	38%
Certification process	34%
Lack of benefits	11%
Type of work	28%
Available shifts are not desirable	18%

CHALLENGES

Chart 47: What qualifications were lacking?

Manager responses	%
Lack of operator license	60%
Lack of experience in relevant positions	21%
Failure to meet minimum education requirement	13%
Failure to pass a drug test	6%

Chart 48: Reasons operators are leaving the job

Manager responses	%
Retiring	69%
They no longer want to work in the water sector	17%
Renewal fees are too expensive	1%
Better pay in another job opportunity	66%
Better benefits in another job opportunity	34%
Another job opportunity allows for career advancement	27%
Too many regulations	19%
Too much responsibility	21%
Undesirable working hours	21%
Certification exam and process is too difficult	33%

Chart 49: Dual -certified operators managers need most

Manager responses	%	Starting wage	Highest wage
Water 1; Wastewater 1	10%	\$16-\$24	\$24-\$44
Water 1; Wastewater 2	3%	\$24	\$26
Water 1; Wastewater 4	3%	\$36	\$38
Water 2; Wastewater 1	3%	\$34	\$42
Water 2; Wastewater 2	14%	\$17-\$26	\$20-\$45
Water 2; Wastewater 3	14%	\$22-\$25	\$25-\$42
Water 2; Wastewater 4	3%	\$17	\$33
Water 3; Wastewater 2	7%	\$21	\$48
Water 3; Wastewater 4	3%	-	-
Water 4; Wastewater 3	7%	\$28	\$39
Water 4; Wastewater 4	31%	\$17-\$38	\$27-\$48

CHALLENGES

Chart 50: Operator Grade Positions in last 12 months

Manager responses	Hired	Certified	Left
Water I	25	12	22
Water II	7	15	5
Water III	1	1	1
Water IV	20	12	15
Wastewater I	30	5	4
Wastewater IC	10	9	4
Wastewater II	21	11	9
Wastewater III	2	1	3
Wastewater IV	9	14	11

Chart 51: What are the most effective things utilities can do to encourage operators to stay in the water industry?

Manager responses	Not at all effective	Somewhat not effective	Neutral	Somewhat effective	Very effective
Create incentive programs	-1%	-2%	17%	39%	42%
Have more certified operators on staff	0%	-3%	27%	34%	35%
Increase base pay	0%	0%	3%	13%	83%
Increase overtime pay	-1%	-3%	18%	20%	58%
Offer more training opportunities	-1%	-2%	28%	35%	33%
Provide better benefits	0%	-2%	9%	22%	68%
Provide comp time	-2%	-2%	35%	25%	36%
Provide new equipment	0%	-2%	16%	34%	48%
Provide new supplies	0%	-1%	20%	35%	43%
Offer more opportunities for professional development and career advancement	0%	-1%	14%	34%	51%

Chart 52: Operator rewards/appreciation

Manager responses	%
Provide pay increases based on employee performance	71%
Provide pay increases based on certification achievements	74%
Provide longevity awards	35%
Recognize employees for their contributions	22%
Offer leadership skills training to employees	25%

CHALLENGES

OPERATORS AND MANAGERS RATE EXPERIENCES

How well do your decision makers understand your job?	★ not well	★★	★★★	★★★★	★★★★★ extremely well
Operators	19%	23%	24%	18%	18%
Managers	24%	24%	20%	17%	15%

Do you think the general public knows the operator career exists?	★ not at all	★★	★★★	★★★★	★★★★★ definitely yes
Operators	34%	42%	18%	4%	2%
Managers	35%	31%	25%	7%	3%

Do you wish the general public knew the operator career exists?	★ doesn't matter	★★	★★★	★★★★	★★★★★ very much
Operators	6%	5%	22%	27%	40%

How often do your decision makers communicate with operators?	★ never	★★	★★★	★★★★	★★★★★ very frequently
Operators	36%	20%	19%	14%	11%

How much do you feel appreciated by your utility?	★ not at all	★★	★★★	★★★★	★★★★★ a great deal
Operators	20%	19%	21%	18%	21%

How well do your managers listen to your opinions on matters that you deal with on a daily basis?	★ not well	★★	★★★	★★★★	★★★★★ extremely well
Operators	16%	13%	21%	21%	28%

How satisfied are you with your choice to work in the water sector?	★ very dissatisfied	★★	★★★	★★★★	★★★★★ very satisfied
Operators	0%	4%	17%	29%	50%

OPPORTUNITIES

WATER WORKFORCE RECRUITING IS MOSTLY ONLINE AND SHOULD TARGET 20 YEAR OLDS.

Chart 53: Advertising

Responses	Operators	Managers
Newspaper	20%	31%
Online job post (e.g. Indeed, ZipRecruiter, CareerBuilder, LinkedIn, etc.)	52%	60%
Job fair	6%	9%
School guidance counselor	1%	6%
Unemployment office	4%	4%
Industry-specific website (e.g. NRWA, ARWA, WEF, AWEA, AWPCA, etc.)	28%	25%
Social media	19%	53%
Video ad (e.g. Live TV or streaming service)	0%	0%
Audio ad (e.g. radio, podcast, Spotify, Pandora, etc.)	0%	1%
Billboard	0%	7%
Local government website	33%	34%
Temp agency	1%	1%
Friend or family	56%	41%
Industry contacts (networking)	21%	35%

Chart 54: Age when you started working as an operator

Operator responses	%
Under 20	5%
20-29	46%
30-39	26%
40-49	16%
50-59	5%

OPPORTUNITIES

Chart 55: How long did you work as an operator before taking your exam?

Operator responses	%
Less than 1 year	51%
1 year	27%
2 years	10%
3 years	1%
4 years	2%
5+ years	6%
Not applicable	2%

Chart 56: Highest education level

Responses	Operators	Managers
High school/GED	50%	48%
Trade School	9%	6%
Associate's Degree (2 year)	17%	9%
Bachelor's Degree (4 year)	17%	29%
Master's Degree	5%	6%
Prefer not to say	1%	2%
Other	1%	

Chart 57: Community College

Responses	Operators - certificates	Operators - degrees	Managers - degree or certificate
Yes	12%	16%	20%
No	88%	84%	80%

Chart 58: Does your utility have enough operators?

Responses	Operators	Managers
Yes	35%	43%
No	65%	57%

OPPORTUNITIES

OPERATORS AND MANAGERS ON CHALLENGES AND OPPORTUNITIES IN THEIR OWN WORDS

Operators: Is there something else you'd like to add to this list?

1 At the top of the list, Water and Waste Water Operators in public works **need to be considered as essential workers in the state of Alabama.** We face the same dangers as paramedics in the wastewater industry dealing with human waste and the same dangers on the side of the roads when repairing or replacing water lines and sewer lines as police officers making traffic stops. This would go a very long way in retention of current operators in my humble opinion.

2 Employee benefits provided by the utility at the cost of the employee vary greatly. Usually the higher the base pay the higher the benefit costs. **Gross pay means less if benefits cost more.**

3 **Better pay, period, is more important than incentives that do not make paying your bills easier.**

4 Our department is understaffed and overworked and it is **difficult to compete with fast food chains for potential employees when the pay is about the same.**

5 **Our Utility Manager and Board and city council members don't have a clue about Water/Wastewater.**

6 As a water operator we are required to have the on-the-job training, and to have the required class time. Then go take a test based upon memory alone. However, if i am going after a master pipe fitter license or plumbing and HVAC or even an electrical master license on a state level, those test takers get to take an open book exam. **Why do they get to do an open book exam and not a water/wastewater operator?**

Operators: Is there anything else you'd like to tell us about Recruiting or Certification?

1 Get into high schools and talk with the sophomores juniors and seniors. High school students do not know this career exists; the guidance counselors have no idea these careers exists. We need to get into the high schools ... We need the younger people that can make a career out of this industry.

2 More Local in-person \ in-depth classes. Online classes are to speedy, lack depth and basically just reading books back to participants. Virtual hand raising often gets missed and the whole class has moved on before it is noticed ...

3 The test is difficult, and most would say "too difficult". I find the certification procedure fair, and indicative of the responsibilities of the job.

4 There needs to be more of a set curriculum to study from instead of giving an overwhelming amount of study resources and basically just throwing trainees out to "sink or swim".

5 More prep classes. More support for new operators in training.

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Operators: Do you want to tell us anything else about your education?

- 1 At one point I started a water/wastewater certificate program at Northwest Shoals Community College. I took four out of six classes that the program offered and did well in all of them, but was unable to finish the program because I moved from north Alabama to south Alabama. I would still like to finish the program, but the schools near me don't offer the program.
- 2 The water and wastewater field is not so glamorous so it's often overlooked. Would love to promote the water industry at local colleges to young professionals.
- 3 This job, if done right, needs blue collar workers that have a work ethic and problem solving intelligence. I've had a couple years of college but it never taught any of those values.
- 4 Water and wastewater degrees are hard to come by as colleges either do not offer the programs or can't keep them going.

Operators: Is there anything else you'd like to tell us about recruiting?

- 1 Hard to recruit with the test requirements so tough and the state does not have a training program
- 2 I believe that offering training/classes in high school and/or trade school would be a big help.
- 3 Nothing you can do about Toxic Management.
- 4 Ask municipalities to get involved with schools.
- 5 Maybe try a recruitment program for high schools. Not all kids can afford to go to college.
- 6 Utilities need to be active at school job fairs and show that there are good career options that do not require going to college. I knew nothing about water operators until I was hired as a trainee and I only put in for that job because my family member said it would be a good position.
- 7 A public ad campaign on both television and radio would be a good thing to consider.
- 8 I think this is a field not many people know about. Most young people getting out of high school have no idea this career even exists unless their parent is a water operator. The general public doesn't even know that you need certified water operators to run daily operations.
- 9 College courses to offer information on this career. And making people aware of the benefits of this career such as ability to find a job almost anywhere with reciprocity or just a declining operator field nation/statewide. No need for a college degree and going into student debt right out of high school

Operators: Is there anything else you'd like to tell us about retention?

- 1 **Municipalities will have a hard time with retention, until the city council and mayors understand our importance.**
- 2 To retain employees, **board members should be REQUIRED to attend Board Member Decision Maker Training classes** that are offered, so they better understand the need to keep the employees they have and listen to the employees when they have a need. Should have to attend at least every election year to stay in the know
- 3 **Including our profession in Section 36-27-59, Code of Alabama 1975, as amended by Acts 2023-101 and 2023-533 of the 2023 Regular Session** would probably help retain those who are already in this field as well as aid in recruiting.
- 4 Retention only happens when an employee feels they have worth and is reflected in pay to the best of a company's ability. **They will leave to better provide, but will stay with you for less if they feel treated fairly.**

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Operators: Is there anything else you'd like to tell us about the operator career field?

- 1 **Awesome career you can do without obtaining a college degree.**
- 2 **Get the word out about this industry.**
- 3 It's a great career but we (all of us collectively) tend to stay out of the limelight by nature. The absence has created a shortfall when it comes to advancing the recruitment of the next generation.
- 4 **Can be a great position but people with families have to make sacrifices to do the job with the rotation of shifts and 24/7/365 job requirement.**
- 5 **I love the operator career field.** Do I wish some changes were made in the way of testing? Sure, I do, but I also know this type of industry is an acquired taste. It's not for everyone. But I enjoy it each and every day.
- 6 **Probably the best thing I ever did.** Pensions are almost unheard of these days and I was lucky enough to retire and be allowed to come back for the same employer as well as keep my pension.
- 7 It needs more attention in community colleges.
- 8 Offer a course at a community college.

Operators: Is there anything else you'd like to tell us about ADEM's Operator Certification Program?

- 1 It is good that certification is challenging to obtain. Keep it that way.
- 2 Many people want the testing easier. Please do not do that.
- 3 Very thankful to have the support of the program and all of ADEM's staff.
- 4 Revise division 10 to include distribution and collections licensing.
- 5 ADEM needs a certification for decentralized wastewater systems
- 6 I think there [is] not enough availability [of] live teaching for test prep in many locations of the state.

Operators: Is there anything else you'd like to tell us?

- 1 80 straight hours is illegal with no overtime. Being forced to clock out at midnight and clock right back in a second later on Saturday night to divide a week on paper is illegal.
- 2 ADEM needs to make the testing process easier. It seems like it's a money racket on their end, and I got the impression that they don't want you to succeed. ADEM could easily make their testing and training easier and more accessible
- 3 Getting small towns to recognize the serious need for proper equipment and tools and service trucks is one of the top priorities, as well as having a real budget that looks into the future needs and necessary improvements of the systems. relying on grants only goes so far. and allows system to degrade faster than grants can be acquired.
- 4 I stumbled into this profession by word of mouth, and it was best career decision I made.
- 5 Need a simpler process for testing study or offer a one year 40 hour class that is offered by the state to get more operators qualified.
- 6 This has been and still is the best job, career and skilled trade that I have attempted. I just wish I had known or even heard- about it sooner so I wouldn't have wasted those 10-12 years working in another industry.
- 7 Better management and training for managers; mental health help for the stresses of the job.
- 8 Thanks for the survey. I appreciate what your organization does.

OPPORTUNITIES

Managers: Do you want to tell us anything else about wages?

- 1 If we had more qualified applicants as a utility, we could start them out at a much higher wage.
- 2 Wages are not in line with other comparable utilities.
I believe wages in the water industry are going to have to increase throughout all municipalities. In my opinion the pay scale needs to be comparable for larger and smaller systems so that the smaller systems are not a training ground for the larger ones. Small systems lose employees to larger systems because of higher pay. Also at a small system we do everything where as a larger system operators have the option to just "operate". Water is the most important resource we have, we have to have it to survive, so why are them
- 3 people who treat, distribute, collect and treat again not compensated that way? Every utility screams "we have great benefits" but are willing to only pay you the minimum. Smart, dependable, loyal employees cost money, those are the people who can go to different job sectors and easily get a 6 figure job, with good benefits as well. Why would they work somewhere that does not pay them their worth and have to go out during storms, night, work holidays and weekends, and do it and extremely low wage compared to other jobs?
The value of water is not fully recognized by elected officials and the water industry does not do a good job
- 4 of telling that story. Utilities are usually underfunded and the as new regs come down, they are expected to provide the same service without an increase in rates or wages.
- 5 Wastewater collections and treatment industry workers should be qualified for hazardous job duty and first responder benefits.

Managers: Do you want to tell us anything else about hiring or retention challenges?

- 1 I strongly feel we could do better state wide if our certified operators had first responders status and benefits as the police and fire. EPA recognizes certified operators nation wide as first responders.
- 2 It is hard to retain certified operators in rural areas.
- 3 Lack of awareness of profession makes the hiring pool small.
- 4 Need More classes to certify people going for Grade IV water certification
Once a utility has hired an employee they need to treat them well and give them a fair work life balance.
- 5 Along with a good wage and fair and respectable treatment that is how you keep good employees who are loyal to you.
- 6 Our pay attracts neighboring certified operators, and we do not have to train them or invest in them since our applicants typically have a Grade IV operator certificate.

Managers: Do you want to tell us anything else about dual-certified operators?

- 1 Very valuable, but having an operator certified in water or wastewater is hard enough. Dual certifications are very rare and almost impossible for a small system.

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

- 1 High pay scale and great benefits attract highly skilled and certified operators to our company. The smaller communities struggle with pay scale and employee retention.
- 2 As a Grade 4 operator of a small system, that has worked his way up to from a ditch man to the manager's position. I can tell you , it has been a challenging experience and still is. That being said, if I could find dedicated and qualified operators. It would make our jobs as managers more enjoyable. I still enjoy getting my hands dirty along side my crew in the ditch. Thanks.
- 3 For a system to work correctly, the board, operators, and ADEM must have an understanding that surpasses pointing fingers. Our whole country has old infrastructure, and some things should be priorities. More mandated training for board members and investment to recruit operators are vital.
- 4 The employees are the backbone of the industry it time they started being treated like it!
- 5 ... A Wastewater Treatment Plant Operator is a jack of all trades. An operator's job covers everything at the wastewater plant. The operator is responsible for meeting the NPDES permit requirements as well as staffing requirements. An operator is also responsible for painting, lawn care, plumbing, minor electrical repairs, maintaining electronics, mechanics, record keeping, laboratory testing, equipment and meter calibrations, sample collection and testing. Most of the public does not understand the complexities of wastewater treatment or the vast biological, mechanical, mathematical, troubleshooting, and problem solving knowledge requirements. The general public does not recognize the many dangers a Wastewater Treatment Plant Operator faces. Here is a list of a few: slips and falls, drowning, crushing injuries, electric hazards, waterborne diseases, confined spaces, unknown chemicals, entering the wastestream, unknown industrial and hospital waste byproducts, explosive gases being produced in collection system as well as from treatment process, possible asphyxiation from poisonous gases produced in the collection and treatment proceses, the carcinogenic chemicals in the wastestream as well as those produced in the treatment process such as chloramine formations from disinfecting with chlorine and sulfur dioxide gases, risk of exposure to chlorine and sulfur dioxide gases. Wastewater Operators ... clean and protect water, which is one of the most valuable commodites to humans, plants, and animals. We all rely on clean water to survive.