

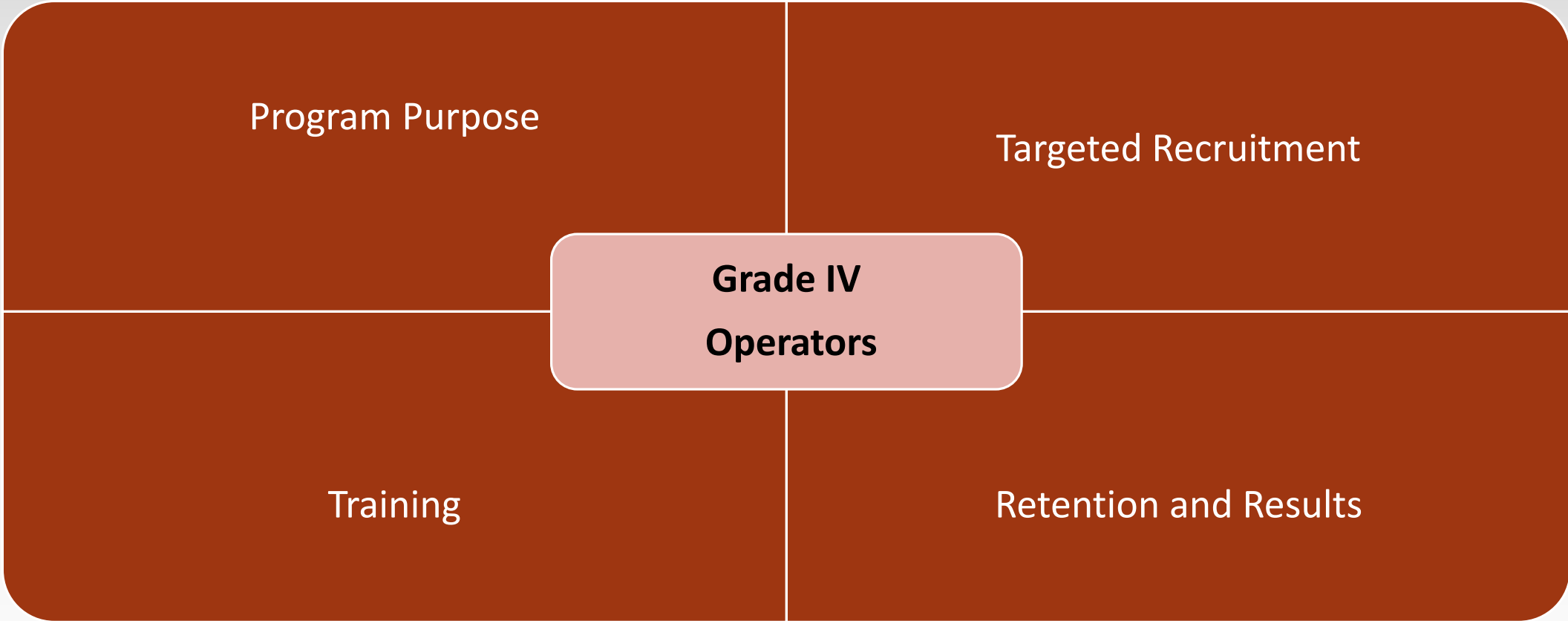


Water Reclamation Apprenticeship

ENVIRONMENTAL SERVICE DEPARTMENT

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WATER RECLAMATION FACILITY (WRF) Operator Apprenticeship Program



Jefferson County

Currently

- ESD has 42 WRF Operator Grade IV positions
 - More WRF Operator Grade IV positions are needed
- 67% WRF Operator Grade IV positions are vacant
- Of the 33% remaining – ~60% can retire in 5 to 8 years (leaving about 6 Grade IV Operators)
- Increases in automation and environmental regulations will require a more skilled workforce

Historical Trends

National shortage of water industry workers

- Aging workforce – 50% retiring in the next 5 years in both public and private sectors from facilities that are already understaffed
- There are over 210 “unique” water occupations
- Many of these require greater technical skills than similar levels in other industries
- Much of the nations infrastructure requires major reinvestment with a better trained workforce to construct, manage, and operate

ADEM Certification

Alabama Department of Environmental Management (ADEM) certifies WRF Operators

- Certification exams have changed to better align with national standards
- Grade IV Certification Exam has about a 33% pass rate
 - The vast majority of candidates have taken the exam multiple times
- Lower Certification (Grade II and Grade III) levels have a higher pass rate
 - Grade III – ~50%
 - Grade II – ~68%

Jefferson County's WRF Operator Apprenticeship Program – Purpose

- To develop a strong pipeline of certified and skilled employees/operators
- To fill future Operator vacancies
- To gain ADEM Grade IV Wastewater Certification to fill the vacant position(s) of WRF Operator IV
- To provide additional Grade II and III Wastewater Certifications to fill vacant position(s)

WRF Apprenticeship Program

Purpose

Program includes

- Online
- Classroom
- Laboratory
- On the Job Training

Training is structured to be

- Progressive
- Correspond with ADEM certification levels
- Representative of the duties of WRF Operator II, III and IV

WRF Apprenticeship Program

Targeted Recruitment

The recruitment methods will take on multiple approaches to attract talent to the Apprenticeship Program by:

Targeting graduates of the ESD Water Reclamation High School Internship Program who are interested in further pursuing a full-time career with the County.

Targeting current County employees who may be seeking career advancement opportunities within ESD Wastewater Reclamation Facilities.

WRF Apprenticeship Program

Targeted Recruitment

As part of our overall strategy, We started the Water Reclamation High School internship in the summer of 2019.

This 8 week program allowed graduating high schools senior the opportunity to receive exposure and hands on training in our wastewater facilities. We partnered with local career tech coaches from 6 high schools

Our focus was: Students that are proficiency in math and science.

Students that are environmentally conscious

We conducted in person and virtual presentations about the program, then follow up with in person plant tours.

WRF Apprenticeship Program

Targeted Recruitment

Building positive relationships with community organizations to share the Apprenticeship career opportunity.

Promoting and branding the Apprenticeship Program with internal employees.

Directing outreach to external prospects such as veterans transitioning out of the military to the civilian workforce.

Directing outreach to employment agencies.

Directing outreach to community organizations that align jobseekers' career pathways to skilled positions.

WRF Apprenticeship Program

Targeted Recruitment

Public Relations Results for Water Reclamation Facility Operator Apprentice Program					
Article Type	Media Outlet	Date	Paid/Earned	Views	Link if Applicable
News Story on MiKayla Stinson	Birmingham Times	3/21/2019	Earned/Print and Online	online: 2,341 views	https://www.birminghamtimes.com/2019/03/area-students-get-skilled-workforce-training-under-jeffco-sewer-dept-s-apprenticeship-program/
Full Page Ad	Birmingham Times	3/28/2019	Paid/Earned	print	
Repost of Birmingham Times Story	County Facebook Page	3/21/2019	Earned	2,863 people reached - 190 engagements, 26 shares	
News Story on Brenda White	Birmingham Now	5/20/2019	Paid/Earned	online: 313,000 views	https://bhamnow.com/2019/05/20/unlikely-apprentice-clean-water-business-with-new-paid-jefferson-county-program/
Repost of Birmingham Now Story	County Facebook Page	5/21/2019	n/a	870 people reached - 62 engagements, 13 shares	
Repost of Birmingham Now Story	County LinkedIn Page	5/29/2019	n/a	278 impressions, 3 reactions, 3 shares, 9 clicks	
Video on Program	County Facebook Page	5/20/2019	n/a	7,197 views, 596 engagements, 81 shares	
Video on Program	County LinkedIn Page	5/29/2019	n/a	276 impressions, 5 reactions, 6 shares, 4 clicks	
Flyer	PBJC Facebook Page		n/a	424 people reached - 16 reactions (5 likes, 2 smiles, 5 comments, 4 shares); 33 post clicks (10 views, 1 link clicks, 22 other clicks); 0 negative feedback	
Flyer	PBJC LinkedIn Page		n/a	802 views, 9 likes, 1 comment	

**Job was announced May 19, 2019 - June 7, 2019

WRF Apprenticeship Program Training

- A minimum of **60 hours** of classroom instruction
- Based on the requirements of ADEM Grade II, III and IV exams
 - Association of Boards of Certification (ABC) Need-to-Know Criteria
 - Other necessary knowledge identified for WRF Operators
 - Math for WRF Operators
 - Laboratory Sampling and Analysis
 - Fundamentals and Maintenance of Mechanical and Electrical Equipment
 - WRF Treatment Processes
 - Safety Procedures in the WRF Environment

WRF Apprenticeship Program Training

Up to 50% of work and program hours in the classroom and self-study

Remaining time (including overtime) under the guidance and mentorship of existing certified personnel

Progression requires passing

- Program's knowledge tests and comprehensive exams
- Satisfactory or better performance evaluations
- Successfully passing the required level of ADEM examination

(Failure to progress results in exiting the Apprenticeship Program)

Apprentices continued employment shall be subject to all other Merit System

WRF Apprenticeship Program

Retention and Results

230 Applications were Received

191 Individuals met the Minimum Qualifications

153 candidates registered for the Realistic Job Preview

106 candidates attended the Realistic Job Preview

30 candidates were accepted into the Apprenticeship

The second cohort of the WRF Apprenticeship will start September 2019 and the third started September 2020

WRF Apprenticeship Program

Retention and Results

As part of our retention strategy, we provide apprentice with the follow:

Onboarding with a peer mentor

Upfront investment in each apprentice

Employee input with scheduling and work location for work/life balance

JCC pension program after receiving the ADEM certification

Achievable Career Opportunities

Thank You

