

Sustainability

- How do you define sustainability?
- Workshop in a Box
- Succession Planning



National Rural Water Association

NRWA Registered Apprenticeship 101- the Apprenticeship Advantage

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NRWA®

NATIONAL
RURAL WATER
ASSOCIATION

America's Largest Utility Membership

Apprenticeship 101

- *Apprenticeship is a training model that combines on-the-job training with related theoretical instruction (RTI) that increases an apprentice's skill level and wages*
- *Registered Apprenticeship is formal registration of a structured training plan*



What is the Program Goal

- Recruit New Operators
- Build a Strong Knowledge Base
- Advance Current Operators to Higher Certification
- Improve Sustainability

Fun Facts

- Benjamin Franklin apprenticed in cutlery before he apprenticed as a printer
- Paul Revere apprenticed in his fathers goldsmith shop
- In the 1950's Elvis Presley served as an electrical apprentice
- Ozzy Osbourne completed an apprenticeship in plumbing
- Chef Gordon Ramsay apprenticed in hotel management

Registered Apprenticeship

- Programs are “Registered” with the US Department of Labor or State Apprenticeship Agency (Registration Agency)
 - Apprentices are “registered” and their progress is monitored and recorded
- Meet the Federal Regulation 29 CFR 29
- Outlines the structure or the “standards” of training model
 - Occupation
 - Term or length of the apprenticeship
 - Wages
 - Minimum Requirements
 - Work Processes
 - Related Technical Instruction

Registered Apprenticeship



- Every graduate of a Registered Apprenticeship Program receives a completion certificate from the US Department of Labor and is a nationally-recognized credential
- It is important when designing programs to ensure the apprentice is receiving training to master every skill and have the knowledge needed to be fully proficient in the occupation

Myth Busting

- Not just for unions
 - Only approximately 24% of programs registered are union programs
- Dead-end job
 - 98% of apprentices are still working for the industry that trained them 5 years after apprenticeship
- Average \$50,000 per year

Who Qualifies For The Apprenticeship

- Current Employees Seeking Higher Certification
- Current Employees Seeking Initial Certification
- New Hires
- **Recently Discharged Veterans**

Apprenticeship 101

- Employer driven
- Earn while you learn model
- Systematic structured training

Apprenticeship 101

- More than certification/licensing
 - Occupational Training
 - Develops a well rounded apprentice
 - Teaches how to perform the job, not how to pass a test

Top 4 Blue Collar Jobs-of the Future

- By CareeBuilder.com Competitive wages and predicted industry growth mean the future is looking bright for numerous blue collar positions. So which manual and technical labor jobs are the most Promising?
- According to the Bureau of Labor Statistics, construction and extraction jobs are expected to grow 12% by 2014 adding 931,000 jobs to the field. Installation, maintenance and repair jobs have a predicted expansion of 11.4% with 657,000 additional jobs over the same time period. The transportation and material moving industry is another growing blue collar niche, increasing by 11.1% and adding 1.1 million jobs by 2014.
- Here are the top 10 blue collar jobs based on current salary medians and expected growth by 2014*:
- **Construction and Building Inspectors** *What it pays: \$43,670 per year Employment projected to increase: 18-26%*
- **Waste and Wastewater Treatment Plant and System Operators**
What it pays: \$34,960 per year or \$16.80 Per Hour
Employment projected to increase: 9-17%
- **Elevator Installers and Repairers** *What it pays: \$28.23 per hour Employment projected to increase: 9-17%*
- **Subway and Streetcar Operators** *What it pays: \$23.70 per hour Employment projected to increase: 9-17%*

WHY Apprenticeship in This Industry?

- Rural Water workers tend to be significantly older than the national median according to *Brooking Institution, Renewing the Water Workforce 2018*
 - *In the midst of a concentrated retirement bubble*
 - *Losing between 30-50 percent of employees to retirement this decade*
- *Small communities struggle to recruit and retain qualified staff*
 - *Cannot offer same wages as large systems*
 - *Lack of public visibility*
 - *Nationwide decline in technical education*

WHY Apprenticeship in This Industry?

- *Long Term Solution*
 - *Change the industries perception*
 - *Increase wages*
- *By...*
 - *Higher Quality systematic training*
 - *Educating public of the industry opportunities through recruitment efforts*
 - *High School Counselors*
 - *Vocational Schools*
- *For the industries future.....a training solution for tomorrow*

What is this Industry doing now?

- Somewhat haphazard on-the-job training
 - No structure
 - Reactionary vs. proactive
- Classroom training
 - Primarily focused on different state certification requirements
 - Takes a lifetime advancing skills in a non-systematic method

Benefits of Apprenticeship

- Return on Investment (ROI)
 - For every \$1 spent with apprenticeship there is \$1.50 return
- Reduce turnover & liability costs
- Create flexible training options that ensure workers develop the right skills
- Military veterans who have benefits available to them, can utilize those benefits in a Registered Apprenticeship Program- great for recruitment purposes

The Rural Water Apprenticeship Network

Created National Guideline Standards for State Affiliates to modify and adopt locally creating a *system of Registered Apprenticeship Programs*

National Rural Water Association

State Associations develop and register their programs in each state becoming a Registered Apprenticeship Program Sponsor that administer *all aspects* of the program

New York
RWA

Idaho
RWA

Rural
Water

California
RWA

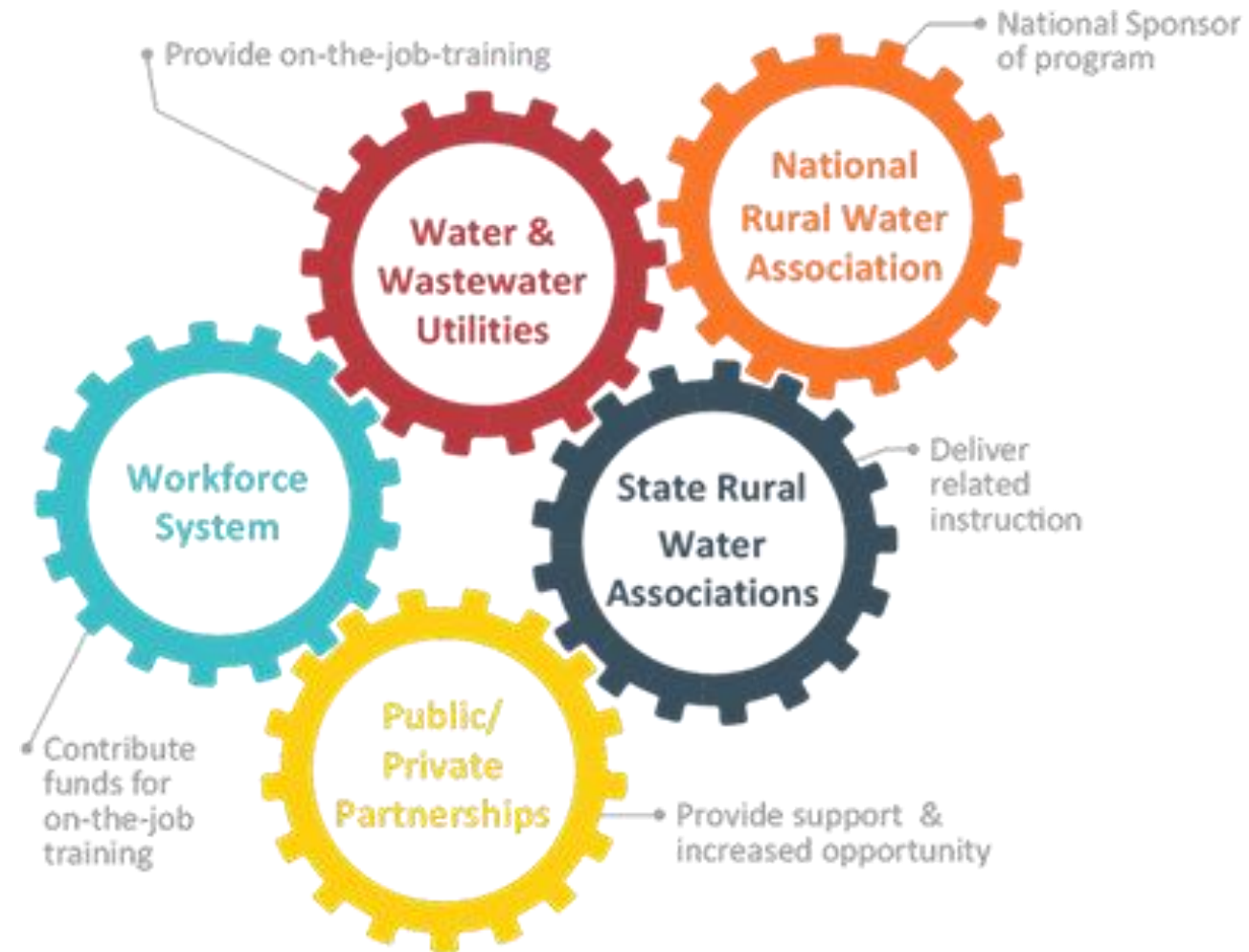
Rural
Water

The System signs an “Employer Agreement” in order to “participate” in ORWA’s Apprenticeship Program. They provide the SME, pay apprentice wages; and provide the OJT to the apprentice

System A

System B

Participating
Employer



Survey Says.....

- Over 1,050 water utility employers from 40 states and one US territory said:
 - *70% Employers would consider participating in apprenticeship*
 - *89% believe participation would benefit their community, employees and water sector in general*
 - *Anticipated hiring 1,522 new employees in the next year*

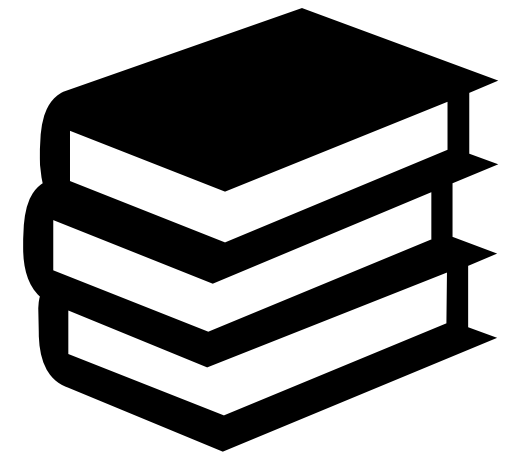
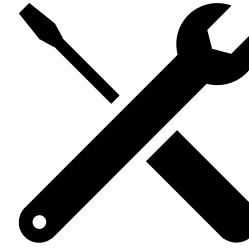
70%

89%

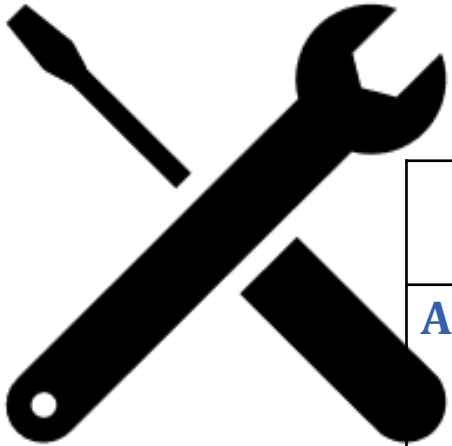
1,522

Summary of the NRW Apprenticeship

- Two Year time-based program with 4,000 hours of on-the-job training combined with related theoretical instruction (course work) of approximately 144 hours per year
- Two Occupations
 - Water System Operations Specialist
 - Wastewater System Operations Specialist
- Identifies Minimum Qualifications for entry into the program
- Sets a wage scale with incremental wage increases as skills are gained
- This is NOT an out of the box product



On-the-Job Learning



WORK PROCESSES	Approximate Hours
A. Tools, Equipment and Work Place Safety 1. Become familiar with tools, pipe and other materials used out on the job 2. Understand and use personal protective equipment and safety procedures 3. Demonstrate general plant safety and security operations 4. Plan and set up work areas for safety of crew and public 5. Confined spaces and traffic control zones 6. Perform all work in conformance with OSHA regulations	240
B. Vehicles and Heavy Equipment 1. Ensure that vehicles and equipment are adequately stocked & serviced 2. Become familiar working with excavation and other heavy equipment	400

Wage Structure Example

Period of Apprenticeship	Wage	Advancement Requirements
Period 1	\$ xx.00 per hour	1,000 hours of on-the-job training (OJT)+ completion of the identified curriculum with a passing grade + satisfactory evaluation + obtain the <i>CAN INSERT LICENSING REQUIREMENT</i>
Period 2	\$ xx.00 per hour	1,000 hours of on-the-job training + completion of the identified curriculum with a passing grade + satisfactory evaluation + obtain <i>CAN INSERT LICENSE IF NEEDED</i>
Period 3	OR 75% of Completion Rate	1,000 hours of on-the-job training + completion of the identified curriculum with a passing grade + satisfactory evaluation
Period 4	85% of Completion Rate	1,000 hours of on-the-job training + completion of the identified curriculum with a passing grade + satisfactory evaluation + <i>CAN INSERT LICENSE IF NEEDED</i>
Completion	\$xx.00 per hour	Completion of all the above identified requirements



Curriculum

Year 1 Curriculum			
Course title	CEU's	Course Material	Instructor
Orientation		Program overview	Staff
Introduction to Mathematics	12 hours	CRWA Basic Wastewater Math course	Staff
Beginning Wastewater Collections Systems	36 hours	Operation and Maintenance of Wastewater Collection Systems, Volume 1 (Sac State)	Staff
CMOM and SSMP Regulations	12 hours	CRWA overview of required collection system reporting	Staff
Security/Emergency Response	12 hours	State approved ERP and Security training class material	Staff
Beginning Wastewater Treatment	36 hours	Operation of Wastewater Treatment Plants, Volume 1 (Sac State)	Staff
Advanced Mathematics	6 hours	CRWA Advanced Math course	Staff
Backflow Tester Course/AWWA CERT	36 hours	CRWA course USC version 10 manual	Staff
Total Formal Training Hours	144 Hours		

It takes a village.....to complete an apprentice

- Water/Wastewater Systems
- State Association
- Mentor/Journey worker
- Apprentice

Water/Wastewater System

- They provide the on-the-job training
 - They employ the Apprentice- provide on-the-job training
 - Pay the apprentice wages
 - Provide the mentor that the apprentice will learn from
- Input of what curriculum is needed
 - For licensing/certification and general knowledge to be a well-rounded apprentice
- Provide evaluations and feedback
 - On the apprentice, the program, curriculum, etc.

State Association

- Developed the State Apprenticeship Program
 - Minimum Qualifications
 - Wage Scale
 - Work Processes
 - Curriculum- delivery & schedule
- Program Sponsor
 - Responsible for facilitating/coordination and administration of the program
 - Is responsible for the training and completion of each apprentice
 - Evaluations of the system, the mentor, and the apprentice
- Records keeping
 - Tracking of application process, all apprentice progress, on the job, classroom, wage increases, disciplinary, etc.
 - Subject to US DOL Reviews

Mentor/Expert/Journeyworker

- Serving as the Subject Matter Expert
 - The apprentice is gleaning the knowledge from this industry expert
 - Sharing a lifetime of skills and experience on to the next generation
- Pay it Forward
 - Is responsible for the day to day on-the-job training of the apprentice
 - Can pass on a bad attitude or a good attitude
 - Responsible for providing feedback regarding the apprentice to the Program Sponsor
 - Helping the apprentice know which work processes they are experiencing

Apprentice

- Meet the Minimum Qualifications for entry into the program
- Must have the aptitude to learn both on-the-job and in the classroom
- Meet the expectations and requirements set by the program
- Provide on-the-job training work process progress to Program Sponsor
- Work ethic, employability, classroom attendance and grades
- Be respectful of the mentors knowledge, time, effort and energy

Department of Labor Regulation

- 29 CFR 29 & 29 CFR 30 - Governing Documents
- Outlines what it takes to be a Program Sponsor of Registered Apprenticeship
- Approximately 1300+ Apprenticeable Occupations
- Minimum of approximately one-year (2,000 OJT Hours)
 - Separates Apprenticeship from Employment Training
- Recommended 144 Hours of Related Technical Instruction per year of the program
- Must be a starting wage and a wage upon completion with one wage increase as skill's gained

Questions?

You've Got Support

New York Rural Water Association Apprentice Program

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