

# Competency Models In Action

January 2017

# National Industry Association Developing Apprenticeship Program for Water and Wastewater Operations Specialists

- > Creating a nationally recognized credential
- Developing a competency-based national apprenticeship program
- Raising awareness among youth of water and wastewater career options

### Introduction

The safety and security of public water systems affects all of us, from the quality of our drinking water; the protection of our lakes, streams and groundwater; and our ability to recover from national disasters. It is critical that we ensure the water and wastewater operations specialists charged with these responsibilities are well prepared.

In response to this challenge, the National Rural Water Association (NRWA), an industry champion for the U.S. Department of Labor, Employment and Training Administration's (ETA) Water and Wastewater Competency Model, has created the Workforce Advancement Center. The initial focus of the Center is the development of a competency-based registered apprenticeship program for water and wastewater operations specialists which will serve to advance the professionalism of the industry as a whole.

### **Workforce Need**

Due to retirements, utilities are facing the need to replace many of their most experienced employees. According to the NRWA, between 2010 and 2020 the water sector is expected to lose between 30 and 50 percent of the workforce to retirement. Many of these employees have worked at the same utility for the majority of their careers and will depart with decades of valuable institutional knowledge. Job prospects are projected to be excellent with openings due to replacement needs providing four of every five opportunities for employment for water and wastewater plant and system operators.

### Approach

NRWA has 49 affiliated state associations and conducts a great deal of onsite workplace training. Almost all of its members are employers. Much of NRWA training has been geared towards regulatory compliance and certifications that enable individuals to get and maintain state licenses. One of NRWA's new goals is to broaden that training to enable individuals to acquire a nationally-recognized apprenticeship credential that attests to multiple competencies, closely correlated to ETA's Water and Wastewater Competency Model.

<sup>&</sup>lt;sup>1</sup> NRWA News, November 10, 2016, http://nrwa.org/2016/11/nrwa-to-announce-creation-of-workforce-advancement-center/

<sup>&</sup>lt;sup>2</sup> Bureau of Labor Statistics, Employment Projections, 2014-2024 https://www.bls.gov/emp/ep\_table\_110.htm

# Tier 5 - Industry-Sector Competencies Facilities Operations & Management Competencies Facilities Operations & Management Field Operations Field Protection Field Operations Field Operations Field Operations Field Operations Field Operations Field Operations Field Protection F

### **Water and Wastewater Competency Model**

"There's a tremendous need to get younger people into the industry, particularly for small systems in rural areas," says Matthew Holmes, Deputy CEO, NRWA. "In addition to the general exodus of young people from rural areas, our industry is not viewed as a good career option. High school students are not aware of it. The opportunity to acquire a nationally-recognized apprenticeship credential has the potential to heighten that awareness."

"We are working with the Department of Labor's Energy Sector of Excellence in Apprenticeship (SEA) in Region IV (Dallas) to develop national guideline standards for a water and wastewater operations specialist apprenticeship," says Mr. Holmes. "NRWA representatives participated in an SEA meeting with partner industries to see what they were doing to promote apprenticeship expansion. They also reviewed ETA's Water and Wastewater Competency Model in developing national guidelines for the workplace competencies and technical instruction necessary to prepare students to be successful, well rounded professionals. For example, in addition to the attainment of specific industry-wide competencies, the ability to communicate with engineers and regulators was identified as a critical competency for water and wastewater operations specialists."

## **Next Steps**

"Our goal is to complete the water and wastewater operations specialist guideline standards and training curriculum by summer 2017," says Mr. Holmes. "We hope to begin recruiting 'earn and learn' apprenticeship prospects by the end of 2017."

### **Related Links**

National Rural Water Association <a href="http://nrwa.org/">http://nrwa.org/</a>

WaterPro Community -- a virtual network for water and wastewater professionals to share ideas and resources <a href="http://www.waterprocommunity.org/">http://www.waterprocommunity.org/</a>