

Water Sector Workforce Sustainability Initiative [Project #4206]

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PRINCIPAL INVESTIGATORS:

Terry Brueck, Marcia Isbell, Denise O'Berry, and Penny Brink

OBJECTIVES:

The purpose of this project was to (1) frame the challenges causing the crisis in the water and wastewater industry; (2) provide information on the specifics of the challenges and the opportunities for addressing them; (3) review successful utility and other industry collaborative initiatives that are already working; and (4) propose a process for moving the utility industry forward in designing and implementing collaborative initiatives.

BACKGROUND:

Several factors are converging simultaneously to create a perfect storm in today's utility workforce: the mass exodus of utility employees that is anticipated due to retirement in the next 10 years, the increasing diversity in the current workforce, fewer U.S. college graduates earning science or technical degrees, and values differences in younger generations of employees entering the labor market. A shift in approach to utility operations is required in order to be prepared to ensure a sustainable organization. This research project was created to determine mission critical positions and identify collaboration opportunities that can be implemented to minimize the effect of workforce factors on organizations.

APPROACH:

The approach used in this project included primary and secondary research. Primary research consisted of a survey conducted by Steering Committee volunteers, reaching out to 40 utilities on workforce development issues facing water and wastewater utilities. Fifty-two percent of the survey respondents were public agencies that are part of a city, county, or enterprise fund while 24 percent are public with independent governance. The remaining 24 percent of respondents are investor-owned or special operating districts. Utilities were asked to list up to 20 mission critical classifications and functions where they have experienced or anticipate problems with quantity and/or staff work preparedness. The survey also posed a series of open-ended questions related to workforce development best management practices and respondents' experience related to opportunities for collaboration.

Secondary research focused on identifying utility and other industry collaborative programs and funding options that may serve as models or resources to help define and implement collaborative water sector initiatives. The secondary research reviewed previous water sector and other industry research, such as energy, manufacturing, and construction, and resulted in a two-day workshop where utility and industry representatives participated in several facilitated discussions aimed at identifying a series of collaborative initiatives that could be implemented in the water sector at the local, regional, and national levels.

RESULTS/CONCLUSIONS:

The two-day workshop identified opportunities for collaboration within the water utility industry. Workshop attendees included utility presenters and participants, project Steering Team members, water-related organizations, and governmental agencies. The information presented and discussed at the workshop included the following:

- The primary and secondary research conducted for this project on utility and other sector collaborative initiatives
- Utility survey respondents' presentations on workforce management practices in use
- Water sector association presentations on their current initiatives and collaborative efforts
- Updates on activities from government associations such as the Departments of Labor, Education, and Veteran's Affairs and the U.S. Environmental Protection Agency
- Presentation on the energy sector collaborative initiative
- Linking with community colleges

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Recommendations for collaboration included the following:

- Employee development such as training, mentoring, internships, apprenticeships, work sharing, and certification preparation
- Use of new tools and technologies for recruiting, branding, and training such as podcasts, social networks, wikis, splash pages, or Web-based training
- Industry image and branding or, perhaps more appropriately, re-branding the water sector to appeal to Gen X and Y workers
- Certification to support employee mobility
- Compiling and providing meaningful data to quantify workforce shortages
- Connecting with schools to encourage students to consider engineering and science programs and to offer apprenticeship programs
- Working with educators such as the American Association of Community Colleges and Partnership for Environmental Technical Education (PETE) to align education programs for the water sector
- Working with the Department of Labor, Workforce Investment Boards to integrate and fund workforce development initiatives to enhance training for the water sector
- Working with unions to partner on workforce activities
- Addressing civil service regulations that impact a utility's ability to hire and addressing compensation differences

APPLICATIONS/RECOMMENDATIONS:

Several themes emerged during the workshop discussions as opportunities for collaboration and are supported by the research conducted for this project. Three key themes were identified as primary project recommendations that could be completed by a consortium of utilities, industry associations, and funding partners.

Enhance the Water Sector Job Image

Rebrand existing jobs in the water sector by creating an outreach campaign that includes situation analysis, goals, objectives, market research, target groups, potential partners, and communications programs and strategies to appeal to current and future labor pools, and to improve outreach to educational institutions from K-12 to universities. The focus would be to develop an image to attract workers to water/wastewater utilities as the "employer of choice."

Improve Water Sector Career Pathways Definition

Transform existing fragmented, limited job positions into career pathways to accommodate mobile job opportunities and create standard, certified job classifications by determining common skill-based competencies, training requirements, and career clusters as identified by the U.S. Department of Labor and U.S. Department of Education.

Establish a Water Workforce Resource Clearinghouse

Develop and implement a clearinghouse that promotes sharing of content, information, and best practices among utilities and partnering organizations.

RESEARCH PARTNER:

American Water Works Association

PARTICIPANTS:

This project included participation from a variety of utilities across the United States and Canada, along with numerous industry organizations and related industry associations.