

Cultivating Water & Community Leaders

Transformative Water Leadership Academy

Introduction

The American Water Works Association (AWWA)/WaterNow Alliance (WaterNow) Transformative Water Leadership Academy (TWLA)¹ is a program that addresses all four of the key elements necessary to develop the water workforce: recruitment, retention, competency, and community partnerships. This case study focuses on the TWLA's emphasis on **recruitment** and **retention**. Recruitment requires a stable, robust, and qualified pool of applicants and utilities that can compete for needed skills and talent. Effective retention programs are supported by a utility's human resources programs and an organizational culture of continuous improvement, growth, and development.

TWLA supports recruitment by strengthening the connection between future water leaders and their communities. Connecting water sector leaders and communities builds a critical network that demonstrates the opportunities available in the utility sector and creates paths for prospective employees to be guided towards water sector positions. TWLA supports retention by instilling an organizational culture of growth and development in current

¹ To accelerate career pipelines in the water utilities sector and provide access to water utility workforce opportunities Congress, the American Water Infrastructure Act of 2018 authorized the Environmental Protection Agency (EPA) to develop a grant program under Section 1459E of the Safe Drinking Water Act (SDWA). EPA is authorized to award grants to nonprofit professional or service organizations, nonprofit labor organizations, nonprofit community colleges, institutions of higher education, or other nonprofit training and educational institutions to (1) assist in the development and use of innovative activities relating to water workforce development and career opportunities in the drinking water and wastewater utility sector, and (2) expand public awareness about drinking water and wastewater utilities and to connect individuals to careers in the drinking water and wastewater utility sector. In 2021 for the initial grant cycle, EPA selected a total of 9 organizations to receive grant funding under the "Innovative Water Infrastructure Workforce Development Program." TWLA is one of these 9 recipients.

utility employees, building the number and capacity of current water sector employees that are positioned to be the water utility leaders of the future.



One of the critical challenges facing the water sector in the next decade is the aging water workforce. The median age of water employees is 48 years old and 30 to 50 percent of these workers will be eligible to retire within the next 5 to 10 years.² At the same time, utilities are simultaneously seeking to enhance the diversity of their workforces³ to better reflect the communities they serve. Workforce solutions are critically needed as utilities address one water challenges such as emerging-contaminants, water shortages, digital technologies, cybersecurity, and rapidly changing treatment technologies and processes are placing greater demands on our drinking water and wastewater utilities. By investing in the leadership qualities, experiences, and community connections of current water sector employees, TWLA is building the skills they will need for utility leadership and helping to address the recruitment and retention challenges the water sector faces.

TWLA Pillars

The TWLA is designed to cultivate the skilled leadership and talent needed to address emerging water issues. The Leadership Academy's curriculum and ongoing support and experiential opportunities are all geared to increase leadership capacity in areas essential to America's utilities, teach innovative approaches to solving community problems, and through participant training provide opportunities for professional advancement while improving management and protection of water and environmental resources.

The five pillars that form the foundation of TWLA include:

Diversity. Expanding the pool of utility talent and leadership to be inclusive of and reflect all parts of the communities that utilities serve, including marginalized or underserved populations.

Commitment. Developing a guiding mission to create sustainable, community-centered utilities of the future.

Action. Identifying challenges facing communities and developing practical, community-centered solutions.



"The future of water is inclusive and sustainable. We are going to look for sustainable practices that include everyone that it effects."

Gabriel Evans – Equity Intern, City of Scottsdale, AZ

² America's Water Sector Workforce Initiative (EPA 2020). Available at: https://www.epa.gov/sites/default/files/2020-11/documents/americas_water_sector_workforce_initiative_final.pdf

³ The water industry lacks both gender and racial diversity when compared to overall occupational employment. <https://www.brookings.edu/articles/water-workforce/>

Network. Building participants' connection with one another and a body of nationally, regionally, and locally influential organizations.

Community Engagement. Encouraging direct community involvement with a goal of anchoring participants and their utilities more strongly to the communities they serve and fostering deeper understanding and empathy for all parts of their community.

Cohort and Curriculum

TWLA Cohort

Intentionally bringing diversity into the water sector workforce is a key tenet of TWLA and the America's Water Sector Workforce Initiative. TWLA embeds the values of diversity, inclusion, and social equity throughout the program, in both the development of the cohort and the curriculum.

The TWLA commitment to diversity begins with its applicant recruitment process by actively recruiting participant cohorts that are from diverse racial, ethnic, and gender perspectives. Cohort members are also diverse in terms of geography, utility type, and job positions. Developing a diverse cohort of TWLA participants will build a workforce where utility leaders bring a variety of experiences and perspectives to key issues and reflect the diversity of the people they serve. The inaugural cohort of 50 participants fulfilled this program goal and graduated in August 2023.

TWLA 2023 Cohort by the numbers:



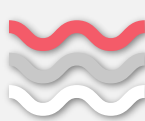
DIVERSITY

People of Color: 46%
Women: 62%



GEOGRAPHY

10 EPA Regions
2 Canadian Provinces



ONE WATER

94% Drinking Water
28% Reuse
54% Wastewater
25% Stormwater



UTILITY ROLES

Engineering, Operations, Finance, Communications, Government Relations, Capital Projects, Community Outreach, Project Management, Customer Service, Laboratory, Conservation, Regulatory Compliance

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"Being in a cohort of 50 members from every area of the nation is great; we are able to discuss things that happen in other regions we wouldn't normally discuss and looking at things from a broader lens has definitely opened my eyes."

**Esther Baptiste – Management
Professional Systems Planning, Great
Lakes Water Authority, MI**

TWLA Curriculum

The TWLA program is a 10-month leadership academy focused on fundamental concepts of sustainable community leadership to prepare participants for higher-level supervisory or management-level positions. The Sustainable Community Leadership Principles are each developed through key issues and topics addressed in the curriculum.

- **Protecting Public Health:** This principle is discussed through topics on the Safe Drinking Water Act, the human right to water, affordability, customer assistance, environmental justice and the history of redlining, and lead and Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS).
- **Safeguarding the Environment:** This principle is discussed through topics on Anchor Institutions, watershed protection, source water protection, One Water, conservation and water management, the Clean Water Act, EPA's Environmental Justice Directives & National Environmental Policy Act integration, climate change and climate adaptation planning, PFAS, and green infrastructure.
- **Strengthening Public Trust:** This principle is discussed through topics on community mistrust (why public trust is vital), transparency and accountability, restoring community confidence, utility roles and responsibilities, communication, and building relationships.
- **Inspiring Innovation:** This principle is discussed through topics on institutional and cultural innovations, innovative water infrastructure and management solutions, water technology, water finance including inter-generational equity, affordability and debt, and inclusive community approaches.
- **Advancing Diversity, Equity and Inclusion:** This principle is discussed through topics on environmental justice and structural/institutional inequity, strategies for regressing systemic inequity and restoring trust, organizational culture, personal awareness and commitment, personal identity, power and privilege, and unconscious/conscious bias.
- **Thinking Globally and Acting Locally:** This principle is discussed through topics on the importance of context for effective problem-solving through design thinking and contextual engineering, global challenges of climate change, motivating participants to take action and make a difference, gaps to access clean and safe water, historical and structure political and social inequities, and environmental justice.

The learning experiences include 12 virtual lectures and discussion, four interactive small groups and sharing, two in-person workshops, a capstone project, and report-outs on the experience (including leadership knowledge and skills developed). Through in-person and virtual learning sessions, participants engage in full group meetings and smaller group sessions to encourage depth of conversation and sharing. The curriculum provides engagement with mentors and exposure to rich array of organizations and resources to support emerging water utility leaders. TWLA program graduates receive a certificate documenting the certified contact hours received for the program participation, provided by Water Professionals International (WPI).

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"The future of water looks like clean, safe and most importantly affordable drinking water – and providing those through an equitable and inclusive lens."

Kevin Rodier – Engineering Project Manager, New Jersey American Water

Collaborating Organizations

The TWLA has developed a collaborative of nationally and regionally influential organizations to share their expertise by enhancing discussions of biases and inequities in the learning process. In addition to the collaborative, speakers for the learning sessions and workshops come from a wide range of organizations and utilities such as: Community Water System Alliance

- DigDeep
- Engineers Without Borders
- EPA Office of Environmental Justice and External Civil Rights
- Pacific Institute
- Moonshot Missions
- River Network
- Schuykill Action Network
- Central Arkansas Water
- Moulton Niguel Water District, California
- Water Replenishment District of Southern California
- University of Illinois, Contextual Engineering Research Group
- Southern Nevada Water Authority
- Water First Education and Training
- WaterNow Alliance
- Los Angeles County Public Works
- D.C. Water
- City of Greeley Water and Sewer
- Denver Water
- Toho Water Authority
- Aurora Water
- Water Professionals International
- Charlotte Water
- Greater Cincinnati Water Works
- Philadelphia Water Department
- Milwaukee Metropolitan Sewerage District

Capstone Project

The capstone project enables participants to apply the TWLA sustainable community leadership principles to real world water challenges so they can then develop and amplify solutions. These projects help to address important needs or unmet opportunities in the participants' organizations and communities. In many cases, the participants' organization has recognized the value of the capstone project such that it became an organizational project, tangibly demonstrating the value TWLA can bring to utilities and their communities.

Many of the completed capstone projects can be adapted for any utility to use, such as workforce development, customer service programs, affordability strategies, community outreach initiatives, as well as best management practices for technical projects. Capstone projects are presented using specific presentation methodology designed to refine participants' essential communication skills over the 10-month cohort period.

In the 2023 cohort, several of the capstone projects focused on workforce development, leveraging the EPA Innovative Water Infrastructure Workforce Development Program support of TWLA even further, by spawning more workforce development projects.

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"I am most excited to take back to my home utility more marketing and communication strategies to connect and build trust in the community— and also how I can foster diversity, equity and inclusion to prepare and be a champion of the change that is needed to propel the utility into the future."

Dom Bennett – Assistant Director of Customer Care, City of Lee's Summit, MO

Highlights of a few of the workforce-related capstone project ideas include:

Black in Water: The Importance of Black Mentorship in Black Water Professional Careers

Through interviews and research, this participant set out to encourage water utilities, organizations, and leaders to invest in formal and informal mentorship for young black professionals in the water industry, as well as increasing the representation and visibility of Black voices within the industry.

Recruitment and Retention for the Next Generation of Water Industry Employees

The vision of this project is to bridge the gap for students enrolled in community college or trade schools into internship positions at utilities. This TWLA participant plans to meet with state and regional human resource agencies and community colleges in order to facilitate these entities working together on internship programs. The project includes evaluating the success rates for student interns filling entry level positions.

Developing the Water and Wastewater Workforce through a Community-Driven Approach

This project identified opportunities through the City of Tulsa Water and Sewer Department to develop a focused approach to improve recruitment in positions with historically high vacancy rates and to create community partnerships that are mutually beneficial for connecting people with meaningful employment opportunities.

Ongoing Support of Graduates

TWLA provides ongoing support to cohort participants after the program graduation to continue developing these future leaders. This ongoing connectivity provides continuity with newer cohorts to leverage the benefits of the program into as large as possible a group of future utility leaders. TWLA offers ongoing support to its graduates by:

- Hosting quarterly webinars to graduates;
- Inviting graduates to share their capstone projects and offer feedback to current participants;
- Providing opportunities for graduates to serve as assistants for small group discussions with current program participants;
- Sharing cohort success stories.

Because communication is an important component of the TWLA experience, upon completion each graduate is challenged to exercise their communication leadership and share their knowledge and experience with the water sector by making an oral presentation on how to lead within their utility and/or writing an account of how the TWLA experience affected their understanding of the impact leadership can make positive change.

By tracking communication and leadership milestones, TWLA can show that several of its participants have had job promotions or advancement within their utilities, presented at panels and



“Through this academy...we're doing transformative work to help leaders all around the country emerge. I'm excited that the academy will provide me with the tools and resources to grow as a leader, and then to give that back to my community through our programs and resources, as well as to my colleagues who are young professionals, as well.”

Lily Lopez - Director of External Affairs and Sustainability, Walnut Valley Water District

conferences, written or published articles, been accepted to other leadership programs, received leadership awards, and been appointed to volunteer professional committees. These accomplishments further embed these water sector leaders into their profession and their community, building a pipeline of well-trained and community-minded leaders to guide the water sector into the future and through the challenges to come.

Below are just a few of the beneficial experiences that participants identified after completing the TWLA:

- Becoming a leader that coworkers turn to for expertise.
- Being able to see bigger picture of utility and higher goals.
- Sharing resources and activities from TWLA with their home organizations.
- Being more innovative.
- Building greater trust with public and community partners.
- Facilitating system prioritizations and improvements.
- Recognizing the impact and importance of water utility work.



“The TWLA program reminded me that I have peers across the country who are going through the same challenges, whether the challenge was personal development, workforce development, climate change, or regulatory shifts. TWLA provided the experiences and opportunities for participants to build strong relationships and support systems where we could be encouraged, seek guidance, or give advice during challenging times.”

**Gregory Williams – Deputy Operations Office,
Valley Water**



Lessons Learned

AWWA, WaterNow, and other founding partners created the TWLA to build a network of emerging utility leaders to a) expand their leadership opportunities; b) strengthen ties between communities and utilities; and c) help drive recruitment and retention in water sector jobs. The challenges and needs of the water workforce are vast and require this kind of collaboration across the sector and in local communities to ensure a sustainable and resilient water workforce in the years to come.

Lessons learned from implementation of the inaugural TWLA program include:

- Build in plenty of time for networking, interaction, and sharing best practices. The topical knowledge transfer is important, but building relationships across the cohort, and therefore the water industry, is also critical to a successful program outcome.
- Determine whether any parts of a program may qualify for continuing education units/professional development hours, which provides a double benefit for operators or engineers.
- Be flexible and prepared to deal with travel challenges, including travel expenses.
- Account for program attrition.
- Continue to invest in recruitment of a diverse cohort, especially Tribal participants.
- Begin with the end in mind, not only the goals for the program, but how you can build a lasting, sustainable community of leaders.
- Build in performance metrics for tracking and quantifying results – think about the metrics that define success for your program and track them from the start.



"I feel much more solid in my ability to identify future industry trends and challenges. I also now have much more confidence leading employees towards meaningful changes that may be necessary to shape future success."

Melissa Gray – Utilities Operation Manager, City of Tulsa Water and Sewer Department

Next Steps

The second TWLA cohort (2024) is well underway, and the host organizations are hoping to be able to continue the program for some time to come. With a recently awarded additional EPA Innovative Water Infrastructure Workforce Development Grant, TWLA will increase their ability to track cohort members once they have graduated from the program and use the data to create reports on the successes of the program in preparing future water leaders. TWLA is also looking to expand the pool of participants into three complementary leader groups that will all benefit from leadership development, mentoring, and cross-training. TWLA will continue to explore sustainable and diverse funding models since the program's commitment to diversity and inclusion requires that the cost of the program is not a barrier to participation.

Conclusion

The collaboration between AWWA, WaterNow and other partners in establishing TWLA highlights the transformative potential of partnerships in advancing sustainable water management practices and workforce development opportunities. By harnessing the synergies between government agencies, industry organizations, and non-profit organizations, these organizations are addressing complex challenges more effectively and drive meaningful change. As the water sector grapples with unprecedented challenges, the collaborative efforts highlighted in this case study serve as a testament to the power of collective action in shaping a more resilient and sustainable water future.



Transformative Water Leadership Academy panel – from left to right: Alane Boyd, TWLA Leadership Team; Lily Lopez, 2023 Graduate; Gabriel Evans, 2023 Graduate; and Skylar Reed, 2023 Graduate