



**US Water
Alliance**

Water Workforce and Leadership Library

Introduction

Water management in the United States stands at a critical crossroads, reflected in the anticipated wave of retirements among the 300,000 employees that make up our nation's water utility workforce. In the next decade, one-third of US water utility operators will be eligible to retire.¹ Smaller and rural utilities, which comprise most of the sector, face unique challenges. Eighty-five percent of water utilities have three or fewer employees, and over 80 percent of drinking water utilities serve fewer than 500 people, making it difficult to attract and retain skilled workers.² Additionally, about 37 percent of water jobs are concentrated in just 25 metropolitan areas, leaving smaller communities struggling with capacity gaps.³

To replace those retiring or transitioning to other careers, the water sector will require approximately 10,300 new workers annually.⁴ This urgent need to hire and train the next generation of water workers is aligned with an opportunity to widen the talent pool considering water careers. As of 2017, the national water workforce is 85 percent male and 66 percent white, revealing a need to reach underrepresented groups to develop a water utility workforce that reflects the racial and gender composition of the communities these utilities serve.⁵

Re-thinking how we build the water utility workforce holds transformative potential for communities across the country. Water sector jobs offer higher-than-average wages in addition to requiring less formal training and providing more on-the-job training than other sectors, creating opportunities for workers to achieve economic stability and grow professionally. To help realize the individual and community benefits of working in the sector, water utilities can implement effective training, recruitment, and retention programs to foster the development of a diverse and skilled next generation of water workers.

The Water Workforce and Leadership Library supports those who seek to sustainably cultivate a skilled workforce within the water utility sector by highlighting inspiring, forward-looking examples of training, recruitment, and retention programs that are shifting business-as-usual practices. By collecting and sharing these models, we hope to connect organizations to others working on similar challenges, creating opportunities for workforce programs nationwide to be replicated, refined, and/or scaled.

These programs were submitted following a national call for examples of water workforce **apprenticeship, internship, leadership development, and regional collaborative programs** that could serve as replicable models. The following entries provide a diverse snapshot of programs and strategies from utilities and their partners, initiating a nationwide workforce programming repository of resources.

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Acknowledgments

We would like to express our deepest gratitude to **Spring Point Partners** for their support of this initiative. We also extend our thanks to all the utilities, partners, and organizations who contributed their innovative programs and insights to this library. Lastly, we thank Gabriel Evans, Ruthie Redmond, Emily Simonson, Paula Conolly, Renée Willette, and Anna Yates for their contributions to this project.

Regional Collaboratives



Regional collaboratives unite diverse stakeholders—including employers, education and training providers, community-based organizations, labor unions, and local governments—around a shared vision to address regional workforce needs through collective action. By coordinating efforts, these partnerships expand access to high-quality career pathways, support local economic development, and strengthen organizational resilience across the water sector.

For individuals, regional collaboratives create more equitable access to training, credentials, and employment opportunities, especially for those facing barriers to workforce entry. For employers, regional collaboratives streamline talent development pipelines, reduce the duplication of efforts, and help meet the demand for a skilled and diverse workforce. These collaboratives also foster innovation, leverage funding, and enable place-based solutions that reflect the unique dynamics of local labor markets.

The programs highlighted in this section showcase the power of collaboration to tackle workforce challenges at scale. This section of the Water Workforce and Leadership Library serves as a resource for those seeking to develop, refine, and/or expand regional collaboratives within their own communities. By sharing proven strategies and successful models, we can build industry capacity and support a thriving water workforce for generations to come.

Organization:

BAYWORK, California

Program Name: BAYWORK Regional Workforce Collaborative

Program Type: Regional Collaborative

Program Description

BAYWORK is a nonprofit consortium established in 2009 to address critical workforce challenges within the water and wastewater industry across the San Francisco Bay Area. With a focus on enhancing regional collaboration, the initiative brings together over 43 signatory water and wastewater agencies, community colleges, industry associations, and other stakeholders. BAYWORK develops and implements training, mentorship, and hiring programs through strategic partnerships to cultivate a skilled, diverse, and resilient water workforce.

BAYWORK facilitates a range of workforce programs, including registered apprenticeships for instrumentation technicians and paid internships for skilled trades, aiming to address high retirement risks, increased work digitization, and other evolving industry needs. The collaborative prioritizes equity, striving to increase the participation of underrepresented groups, including women and Communities of Color, in water-related careers.

Key Program Features

- Comprehensive apprenticeship and internship programs
- Equity initiatives
- Strategic workforce planning
- Wraparound support services

BAYWORK showcases the importance of fostering regional partnerships, integrating multi-agency approaches, and prioritizing long-term workforce sustainability. This model not only addresses critical workforce shortages but also contributes to the broader goal of building a skilled, diverse, and resilient water workforce to support thriving communities.

Program Information

Program Creation Year:	2009
Yearly Program Cost:	\$200,000–\$500,000
Number of Dedicated Staff:	1–5 full-time
Yearly Participation Rate:	100+ participants
Job Placement/Retention Rate After Completion:	81–100 percent
Post-Program Completion Employment Types:	Full-time
Academic Credit Offered:	Yes, in partnership with community colleges
Transportation:	Limited support via stipends or agency-provided services
Partners and Collaborators:	Includes 43 signatory water and wastewater agencies, partnering unions, nine associate members (community colleges, industry associations, and nonprofits), and Jewish Vocational Service (an intermediary providing staffing and fundraising)

Organization:

Inland Empire Works, California

Program Name: **Inland Empire Works**

Program Type: **Regional Collaborative**

Program Description

Inland Empire Works is a pioneering initiative established in 2021 to address workforce challenges in the water and wastewater industry across the Inland Empire region of California. This collaboration unites public utilities, community colleges, and nonprofit organizations to build a resilient workforce equipped to meet the region's growing water management needs.

The collaborative offers stackable internships, pre-apprenticeships, and registered apprenticeships, providing participants with hands-on experience and technical training. Partner agencies actively support operations through funding, in-kind contributions, and hiring interns and apprentices. Through strong industry partnerships, Inland Empire Works promotes workforce readiness and innovation, addressing critical needs in skilled trades like operators and instrumentation technicians

Key Program Features

- Diverse and inclusive training programs, notably the Inland Empire Black Worker Center
- Collaborative governance model
- Equity-focused initiatives
- Comprehensive support services
- Strategic workforce development

Inland Empire Works showcases the importance of fostering regional partnerships, integrating multi-stakeholder approaches, and prioritizing workforce equity. This model not only addresses critical talent shortages but also contributes to the broader goal of building a diverse, innovative, and sustainable water workforce to support thriving communities.

Program Information

Program Creation Year:	2021
Yearly Program Cost:	\$180,000
Number of Dedicated Staff:	1–2 full-time
Yearly Participation Rate:	50+ participants
Job Placement/Retention Rate After Completion:	80 percent
Post-Program Completion Employment Types:	Full-time
Academic Credit Offered:	Yes, in partnership with community colleges
Transportation:	Limited support via stipends or agency services
Partners and Collaborators:	Includes six signatory water and wastewater agencies, additional utilities, partnering unions, and Jewish Vocational Service (an intermediary providing staffing and fundraising)

Organization:

Freshwater, Minnesota

Program Name: Minnesota Water Workforce Pathways

Program Type: Regional Collaborative

Program Description

The Minnesota Water Workforce Pathways program is a newly formed and promising regional collaborative designed to bridge the gap between public, private, community, and educational sectors in the water industry. The group collaborates on workforce strategies and tactics to encourage more people to join the water industry and for more diverse candidates to apply. This team aims to increase visibility and access to stable, well-paying careers in water management by connecting communities with abundant job opportunities. The Minnesota Water Workforce Pathways program focuses on K-12 outreach, career prep and readiness, technical training, job placement and hiring, and retention. By leveraging the strengths of various stakeholders, this initiative works to build a resilient and sustainable water workforce equipped to address current and future challenges.

Key Program Features

- Comprehensive One Water approach
- Strategic partnerships
- Workforce development and career pathways
- Focus on sustainability and resilience
- Education and community engagement

The Minnesota Water Workforce Pathways program showcases the importance of fostering partnerships, integrating cross-sector approaches, and focusing on long-term sustainability. This model not only addresses workforce shortages but also contributes to the broader goal of building resilient, thriving communities through effective water management.

Program Information

Program Creation Year:	2022
Yearly Program Cost:	Less than \$50,000
Number of Dedicated Staff:	1-5 full-time
Yearly Participation Rate:	51-100 participants
Job Placement/Retention Rate After Completion:	81-100 percent
Post-Program Completion Employment Types:	Full-time
Academic Credit Offered:	Yes
Transportation:	Member organizations have transportation support
External Partners and Collaborators:	Barr Engineering Co., the City of Blaine, the City of Bloomington, the City of Chaska, the City of Edina, the City of Golden Valley, the City of International Falls, the City of Minneapolis, the City of Plymouth, the City of Rochester, the City of St. Cloud, the City of St. Louis Park, Central States Water Environment Association, Freshwater, Hazen and Sawyer, HDR, HR Green, Jacobs, Kimley Horn, Metro Transit, Metropolitan Council, MN DEED, Minnesota North College, Minnesota Rural Water Association, Minnesota AWWA, Minnesota Watersheds, Ramsey-Washington Metro Watershed District, Rochester Public Utilities, St. Paul Regional Water Services, Sambatek, St. Cloud Technical Community College, Stantec, The Prestigious Professional, and Western Lake Superior Sanitary District

Notes

- 1 US Environmental Protection Agency, “America’s Water Sector Workforce Initiative: A Call to Action,” https://www.epa.gov/sites/default/files/2020-11/documents/americas_water_sector_workforce_initiative_final.pdf.
- 2 Brookings Institution, “Renewing the Water Workforce,” 2018, 32, <https://www.brookings.edu/wp-content/uploads/2018/06/Brookings-Metro-Renewing-the-Water-Workforce-June-2018.pdf>.
- 3 Brookings Institution, “Renewing the Water Workforce,” 18.
- 4 US Bureau of Labor Statistics, “Water and Wastewater Treatment Plant and System Operators,” 2024, <https://www.bls.gov/ooh/production/water-and-wastewater-treatment-plant-and-system-operators.htm#tab-1>.
- 5 Brookings Institution, “Renewing the Water Workforce,” 25–26.



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