We will start in a couple minutes.
Thank you.
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• Participants will be in listen-only mode
• To submit a question, use the Q&A function

• Webinar slides and recording information will be sent out to all participants following the webinar
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  +1 669 216 1590
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Webinar ID: 161 958 0928
Opening Poll: Please indicate the sector that you work in:

- Utility
- State or Local Government
- Federal Government
- Consultant
- Academia/Educator
- Other
Water Sector Workforce at EPA

• Reminders:
  • Check out our website for resources and updates:
    https://www.epa.gov/sustainable-water-infrastructure/water-sector-workforce
    • Workforce Initiative
    • Past Workforce Webinars
    • Workforce Case Studies

• Stay tuned for information on our next webinar. If you are registered for this webinar you are automatically on the email list for future webinars!
Transforming the Water Workforce

Jim Horne, Sustainable Utilities Program Manager, U.S. EPA Office of Wastewater Management
Webinar slides and recording will be sent to registrants within a week after the webinar.

Speakers:

Korey Gray, Vice President, Compliance and Development, DC Water

Sharon Talley, Compliance Officer, DC Water

Barbara Martin, Director, Engineering and Technical Services, American Water Works Association (AWWA)
CREATING THE WATER WORKFORCE OF THE FUTURE
WEBINAR SERIES

Transforming the Water Workforce

In today's world, water sector utilities need to work with many partners to recruit and retain a motivated and sustainable 21st century workforce—they can't do it alone! Partners can include employment and training organizations, educational institutions, contractors, and others. There is also a pressing need to help current utility leaders develop the transformative skills they will need to lead the water workforce in the 21st century. Please join us on December 15, 2022, to hear from two leading utility workforce leaders from DC Water and AWWA as they take steps to develop a truly sustainable workforce for their utility and also help leaders across the sector develop the skills to address the myriad of challenges they will face moving forward.

This webinar is part of an ongoing webinar series hosted by EPA, in partnership with leading water sector organizations around the country. More information on this webinar series can be found at https://www.epa.gov/sustainable-water-infrastructure/water-sector-workforce-webinars

ATTENDANCE IS FREE – REGISTER NOW!
Register at:
https://www.zoomgov.com/webinar/register/WN_8U5HLVBCRAaWfowtY1FPA
Prepared for the
Environmental Protection Agency
Water Workforce Webinar

December 15, 2022
Ensuring efficient use of economic resources
Resources are required to upgrade aging infrastructure, protect against impacts of climate change, undertake digital transformation, retain talent and institutional knowledge among other necessary costs. It is critical that we maintain our usual level of service and pivot to the future, while balancing this with ensuring our rates are affordable for all. An operational efficiency program to identify opportunities to better control expenditures will enable us to find cost savings and invest them back in the organization. A new investment model will be considered to ensure we continue to make optimal investment decisions.

Ensuring inclusive and diverse representation
We cannot deliver the best for our customers, employees and wider communities if we do not reflect them. We need to continue to ensure diversity flows through all levels of our organization and is embedded in our culture. Our diverse leadership team is setting the example for our organization to follow. We must ensure the principles of diversity, equity and inclusion are an integral part of our decision making and extend to the talent we attract and retain at DC Water.
Background

2014 - Summer of Discontent
### Background

Unemployment Rates for States
Monthly Rankings
Seasonally Adjusted
May 2016

<table>
<thead>
<tr>
<th>National Rank</th>
<th>State</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>VIRGINIA</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Fairfax County</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Loudoun County</td>
<td>2.9</td>
</tr>
<tr>
<td>23</td>
<td>MARYLAND</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Montgomery County</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Prince Georges County</td>
<td>4.3</td>
</tr>
<tr>
<td>44</td>
<td>DISTRICT OF COLUMBIA</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>National Average</td>
<td>4.9</td>
</tr>
</tbody>
</table>
Background

Ward 7 Statistics
- 7.4% unemployment rate
- 25% between 19-34
- Highest education achieved: 71% high school / some high school
- Median income: $30.5k
- 21.6% of families in poverty
- Homicide is the 5th leading cause of death

Ward 8 Statistics
- 11.6% unemployment rate
- 30% between 19-34
- Highest education achieved: 66% high school / some high school
- Median income: $28k
- 33% of families in poverty
- Homicide is the 4th leading cause of death

The largest employer located in Ward 8
- Very few job openings
Background

DC Water Works Program 1.0

➢ Heavy focus on Job Placement and Community Outreach

➢ Pilot Program
  ○ Paid contractors to hire DC residents


**Background**

DC Water Works Program 1.0

- **Pilot Program was 0% successful**
  - None of the new hires maintained employment
    - New Hires Failed Drug Tests
    - Lack of interest in utility work
    - New Hires had an aversion to working in cold
    - New Hires had an aversion to working long hours
    - New hires had an aversion to working early hours
    - New hires were not prepared for the workforce (no soft skills)

- **Job Fairs were equally unsuccessful**
  - attracted large crowds
  - But too few got hired

- The program was not designed to support people to be successful
Background

DC Water Works Program 1.0

Barriers to entry for Youth and Hard to place adults
- Unfamiliarity with the Water Utility industry
- Criminal history
- Low education attainment
- Lack of economic resources to sustain employment
- Lack of access to transportation
- Housing instability
- Lack of job readiness skills
Chauncey Anderson
Graduate and DC Water employee

CDL Training Program


www.wusa9.com
 District of Columbia Water and Sewer Authority

David L. Gadis, CEO and General Manager

Background

DC Water Works Program 2.0

In 2017, DC Water refined its Water Works Program designed to empower local and District residents to establish a meaningful employment on DC Water construction and service projects.

Program Elements

- New Hire Goals: Seventy-Five percent (75%) of new jobs created by contracts or procurements entered into by DC Water with contractors will be filled by local residents.
- Job/Candidate Referral Process
- Job Readiness and Skills Training Program
- Community Outreach
- Comprehensive Monitoring and Reporting
Wrap Around Support

Administered by DC Water Works
Supported by the District Department of Employment Services (DOES)
(Consistent with existing protocols)
**Background**

Skills Training and Placement Process

1) Stage 1 partners create the pipeline and send DC Water candidates for training and/or placement.

2) DC Water reviews the candidates for immediate placement or consideration for Stage two training.

3) Completion of technical skills training.

4) Upon completion of the training program, DC Water working with the Stage 2 partner will: coordinate the targeted job fair; add the graduates to the Water Works database; share the profiles of the graduates with DC Water’s Contractors.

5) Contractors will consider the candidates for apprenticeship and other employment opportunities. Larger and selected firms will also participate in the targeted career fairs.
Background
DC Water Strategic Partners

DC Water Works maintains a group of 21 Strategic Partners consisting of:
- Government agencies
- Community-based organizations,
- Churches
- Union-affiliated groups
Background

Employment Opportunities Filled Through DC Water Works

*75% Annual Local Hiring Goal
In 2018, DC Water established an Apprenticeship Program designed to empower District of Columbia and local residents to establish a long-term career with DC Water. By creating new employment pipelines, we are helping the economy of the local community to grow organically and nurturing a ratepayer first mindset.

**Key Components of a Registered Apprenticeship Program**

- **DC Water Involvement**
  - Our Registered Apprenticeship program is based on our strengths and workforce needs. We are specifically dedicated to expanding our workforce pipeline.

- **Structured On-the-job Learning**
  - Apprentices receive paid “On-The-Job Learning” from an experienced mentor. (Minimum of 2,000 hours per year)

- **Related Training And Instruction**
  - Apprentices receive technical education either on-line or at the job site. (Minimum of 144 hours per year)

- **Rewards for Skill Gains**
  - Apprentices progressive wage increases as they gain higher level skills.

- **National Credential**
  - Upon completion, apprentices receive a nationally-recognized credential.
## DC WATER APPRENTICESHIP PROGRAM

**Cohort 2**

<table>
<thead>
<tr>
<th>Trade</th>
<th># of Apprentices</th>
<th>Length of Apprenticeship</th>
<th>Journeyman Title (Upon Graduation)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACILITIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings and Grounds</td>
<td>2</td>
<td>2</td>
<td>Building and Grounds Maintenance Worker (RW 07)</td>
</tr>
<tr>
<td>Paint Shop</td>
<td>2</td>
<td>3</td>
<td>Painter (RW 09)</td>
</tr>
<tr>
<td><strong>PUMPING AND SEWER OPERATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility Systems Operations</td>
<td>5</td>
<td>5</td>
<td>Utility Systems Operator (RW 11)</td>
</tr>
<tr>
<td>Utility Services*</td>
<td>2</td>
<td>2</td>
<td>Utility Service Worker (RW 8)</td>
</tr>
<tr>
<td><strong>WASTEWATER OPERATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Services (Mechanical)</td>
<td>4</td>
<td>4</td>
<td>Maintenance Services Worker (Mechanical) (RW 10)</td>
</tr>
</tbody>
</table>
Sample Labor Cost Differences between Apprentices and Journeymen

Utility Systems Operator Labor Cost Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Apprenticeship</th>
<th>Journeyworker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$16.10</td>
<td>$36.79</td>
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<tr>
<td>2</td>
<td>$23.91</td>
<td>$27.59</td>
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<tr>
<td>3</td>
<td>$31.27</td>
<td>$23.91</td>
</tr>
<tr>
<td>4</td>
<td>$34.95</td>
<td>$27.59</td>
</tr>
</tbody>
</table>

Apprenticeship vs Journeyman Labor Costs Comparison (5 Year Period)

- Apprenticeship: $3,869,280
- Journeyworker: $4,536,620

Maintenance Mechanic Labor Cost Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Apprenticeship</th>
<th>Journeyworker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$16.10</td>
<td>$23.91</td>
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<tr>
<td>2</td>
<td>$22.84</td>
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<tr>
<td>3</td>
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<td>$29.87</td>
</tr>
<tr>
<td>4</td>
<td>$35.14</td>
<td>$31.27</td>
</tr>
</tbody>
</table>
“Thank you DC Water for this opportunity. Starting as a Facilities trainee and now as an apprentice, I am able to care for my family.”

“This has meant so much to me, thanks again.”

Anthony Strother
Waste Water Apprentice
Mr. Raymond Coates, DC Water Green infrastructure Training Program Graduate
District of Columbia Water and Sewer Authority
David L. Gadis, CEO and General Manager
Lessons Learned

1. Must have Executive Leadership Buy-in
2. Have a strategic approach – can’t just be a series of tasks
3. Requires dedicated staff with decision making authority
4. Must be able to recognize potential barriers to success and provide ongoing support to target employees
5. Robust monitoring and reporting structure
6. Everyone has a portion of ownership in the program
7. Reach out to external entities for support and guidance
Cohort-based, experiential leadership development program that is a collaborative effort of AWWA and WaterNow Alliance

www.AWWA.org/TWLA
Overview

• Why the Transformative Water Leadership Academy (TWLA)?
• Inaugural Cohort
• TLWA Program Focus: Sustainable Community Leadership Principles
• Expected Outcomes
Why TWLA?
Why Now?

The water sector is facing a workforce crisis.

- **Aging workforce/anticipated retirements ranked #4** of top 20 water sector challenges in AWWA’s State of the Water Industry Survey

- **30-50% of water employees** eligible for retirement in next 5-10 years
Why TWLA? Why Now?

“Water workers tend to be older and lack gender and racial diversity in certain occupations, pointing to the need for younger, more diverse talent”

Kane, J.W. and Tomer, A. “Renewing the water workforce: Improving water infrastructure and creating a pipeline to opportunity,” Brookings, 2018
Why TWLA? Why Now?

Utility leadership does not always reflect the demographics of the communities they serve.

<table>
<thead>
<tr>
<th>Gender (2012)</th>
<th>Water Utility CEOs</th>
<th>Fortune 500 Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>93.9%</td>
<td>96%</td>
</tr>
<tr>
<td>Female</td>
<td>6.1%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Why TWLA? Why Now?

Utility leadership does not always reflect the demographics of the communities they serve

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>95.6%</td>
<td>72.8%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>1.2%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Latino</td>
<td>1.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Other/Multiple</td>
<td>2.8%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

TWLA Strives to Change That: Introducing the 2022-2023 Inaugural Cohort

Representation from all 10 EPA Regions & Canada
In her Own Words: Lily Lopez, Walnut Valley Water District
Creating Change

• TWLA designed to prepare a diverse group of emerging leaders to confidently address current and future water challenges through sustainable community leadership practices.

• Sessions blend leadership competencies with today’s most critical water sector knowledge.
November 22:
Session #1:
Leadership vs. Management (virtual)

February 23:
Session #3:
Advance Diversity, Equity & Inclusion (in-person)

March 23:
Session #4:
Safeguard the Environment (virtual)

April 23:
Session #5:
Strengthen Public Trust (virtual)

May 23:
Session #6:
Inspire Innovation (virtual)

June 23:
Session #7:
Think Globally & Act Locally (virtual)

January 23:
Session #2:
Protect Public Health (virtual)

March 23:
Session #4:
Safeguard the Environment (virtual)

April 23:
Session #5:
Strengthen Public Trust (virtual)

May 23:
Session #6:
Inspire Innovation (virtual)

June 23:
Session #7:
Think Globally & Act Locally (virtual)

August 23:
Session #8:
Bringing it All Together & Graduation (in-person)
Program Structure

- Two, 2-day **in-person workshops**
- **Virtual sessions** every 5-8 weeks
- **Small group** working sessions for hand-on guidance and peer-to-peer exchange
- Completion of community-based **capstone project** and sharing of results

**Goals:**
- Protecting public health
- Safeguarding the environment
- Advancing diversity, equity, and inclusion
- Strengthening public trust
- Inspiring innovation
- Thinking globally and acting locally
Anticipated Outcomes

• Knowledge sharing
• Professional development
• Retention & advancement
• Innovative approaches to addressing utility challenges
• Collaboration & partnerships
• Sustainable and resilient utilities that reflect the communities they serve

Building community!
Get Involved!

- Apply for TWLA
- Share the opportunity
- Volunteer
  - Mentor for TWLA small groups
  - Capstone project coach
Q&A Session

Webinar slides and recording will be sent to registrants in the next week.
Closing Poll

On a scale of 1-10, with 10 being the best score and 1 being the worst, how would you rate today’s webinar?

If you do not see a poll window pop up, please use the Chat function to type in your answer.
Thank you!