



# Workforce Development

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Who will replace your best colleagues when they leave?

Who will replace you?



# By another name...

- Human Capital Management
- Or Asset Management for your staff

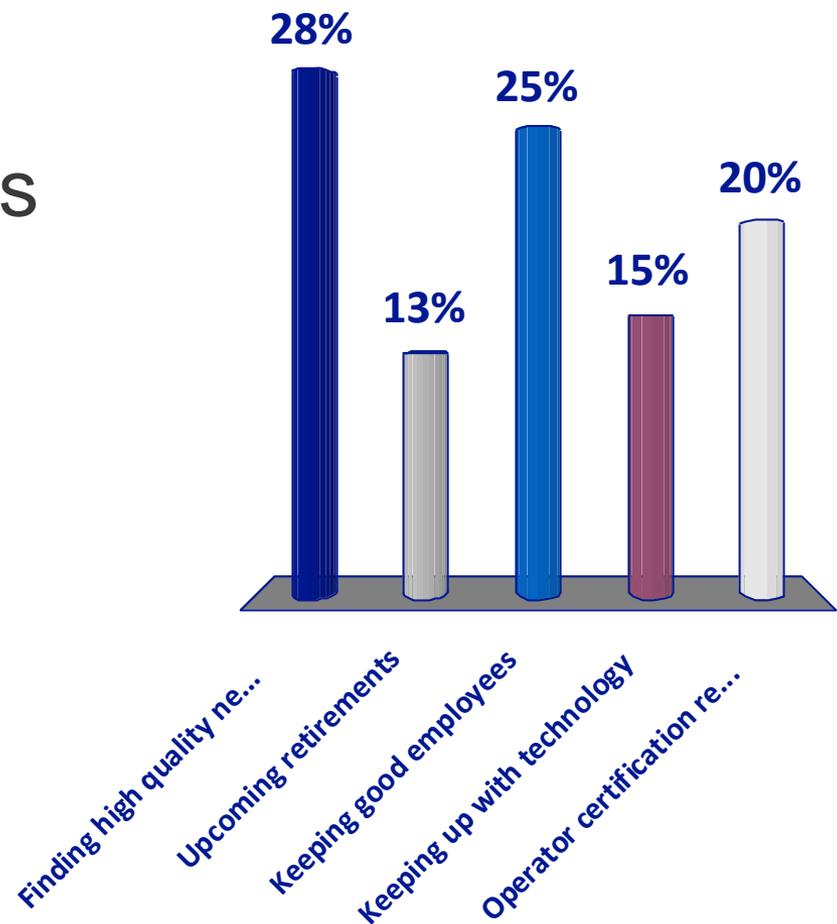


# Who Works in Water

- All of us “work in water”
- How did you get into the water business? What is your story?

# Your biggest workforce concern?

- A. Finding high quality new employees
- B. Upcoming retirements
- C. Keeping good employees
- D. Keeping up with technology
- E. Operator certification requirements





# Workforce Development Process

- Review your workforce
- Identify who's leaving
- Consider changes in your needs
- Analyze skill gaps
- Find new people



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# Who Works in Water

- What people within your organization work in water? Let's make a list
- How critical are these people to your operations? How easy will it be to replace them?



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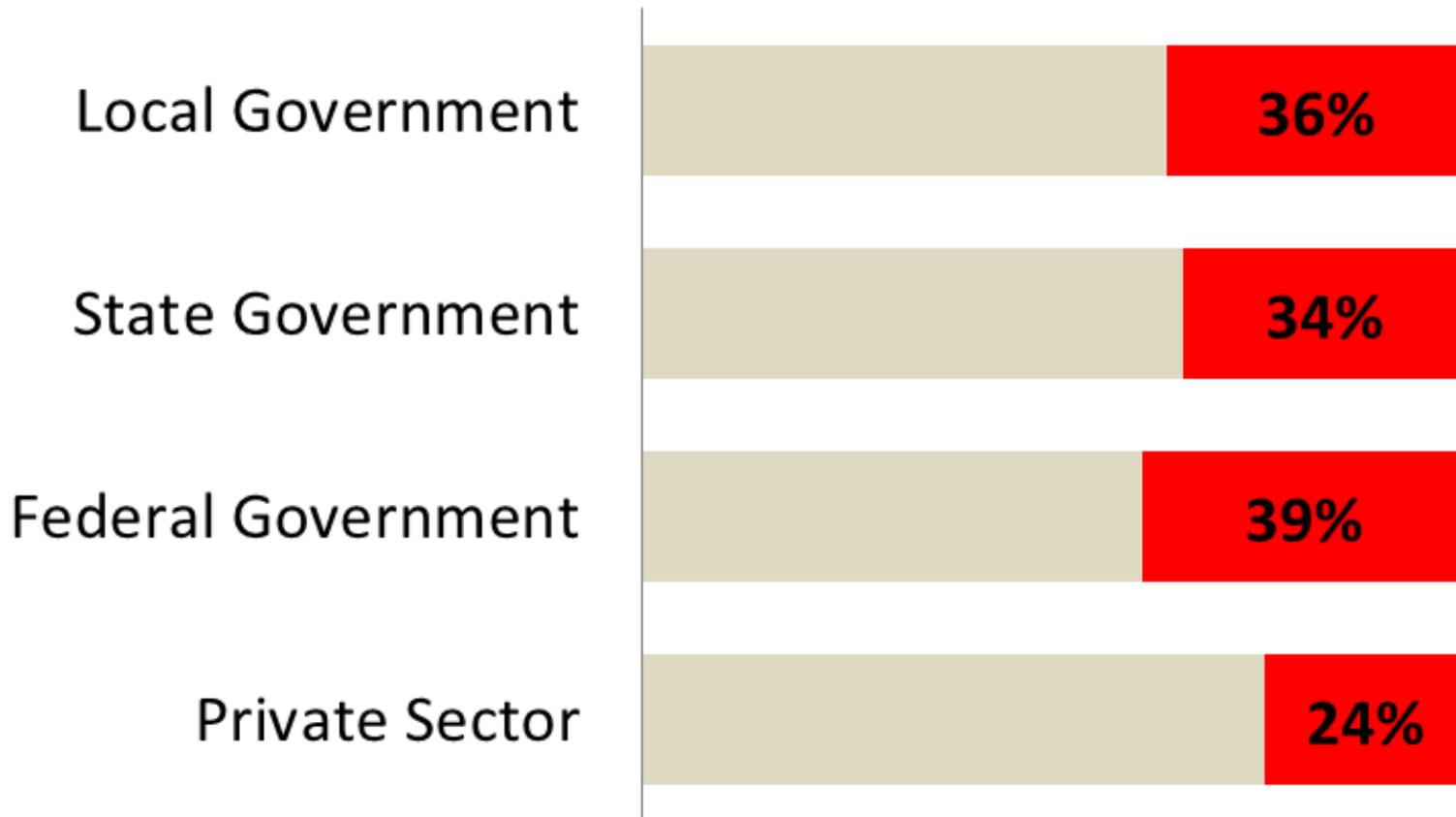
# Are you ready for people to leave?

- Retirement
- Leaving for a different job
- Other circumstances...

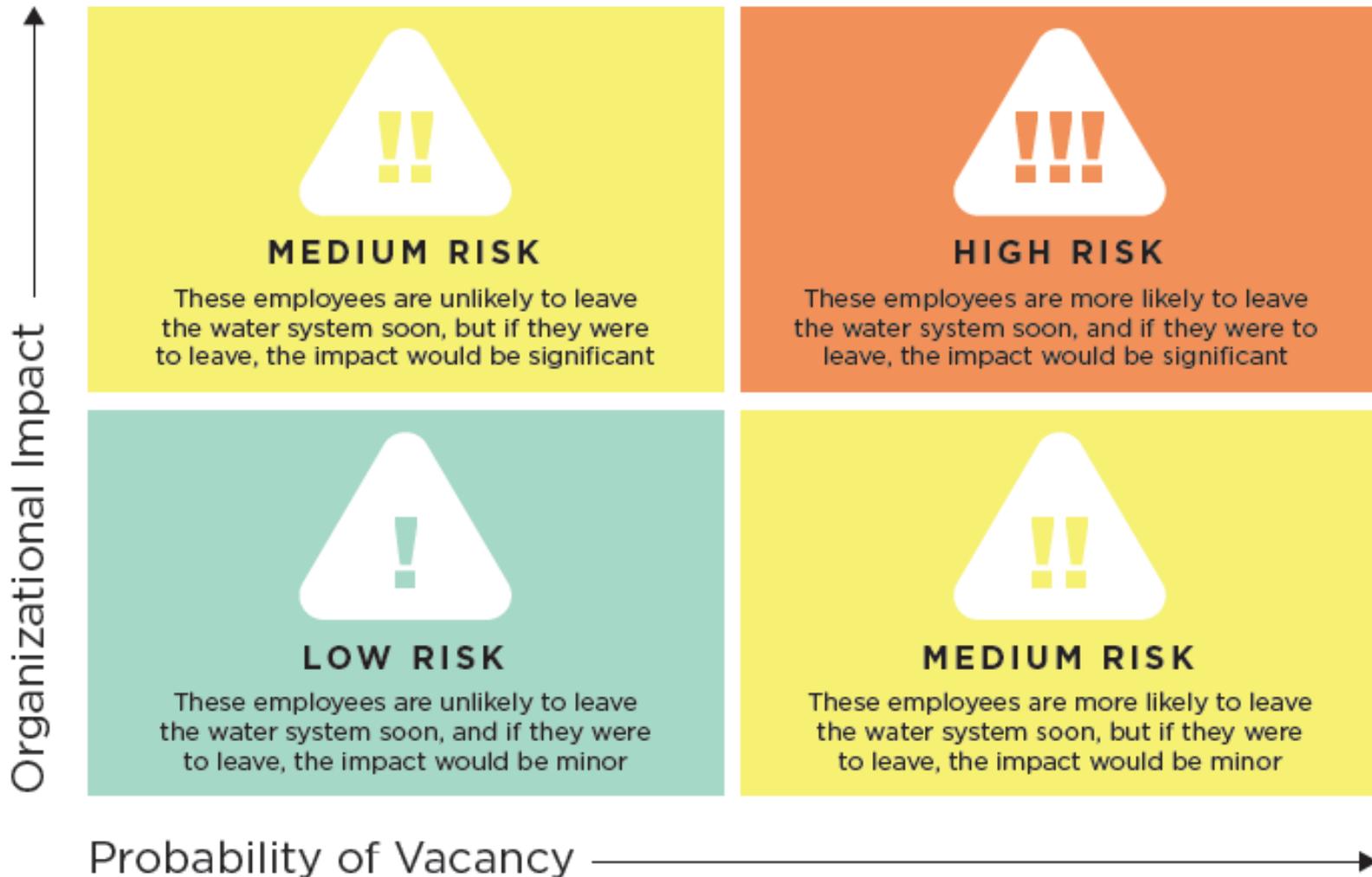




# Many U.S. workers are **aged 50+**



# Human Capital Criticality





# What knowledge, skills and abilities are needed today?

- Think across the board—not just for operators. Think about everyone who tied to your water system



# Knowledge, Skills and Abilities Needed by the Operator of the Future

## Technical Background

- Science, engineering, technology, and math (STEM)
- Ability to use computers and software programs as a tool

A blue-tinted photograph of industrial machinery, including pipes and valves, is positioned at the top of the slide.

# Knowledge, Skills and Abilities Needed by the Operator of the Future

## Personal Characteristics

- Dedication and reliability
- Drive, ambition and initiative



# Knowledge, Skills and Abilities Needed by the Operator of the Future

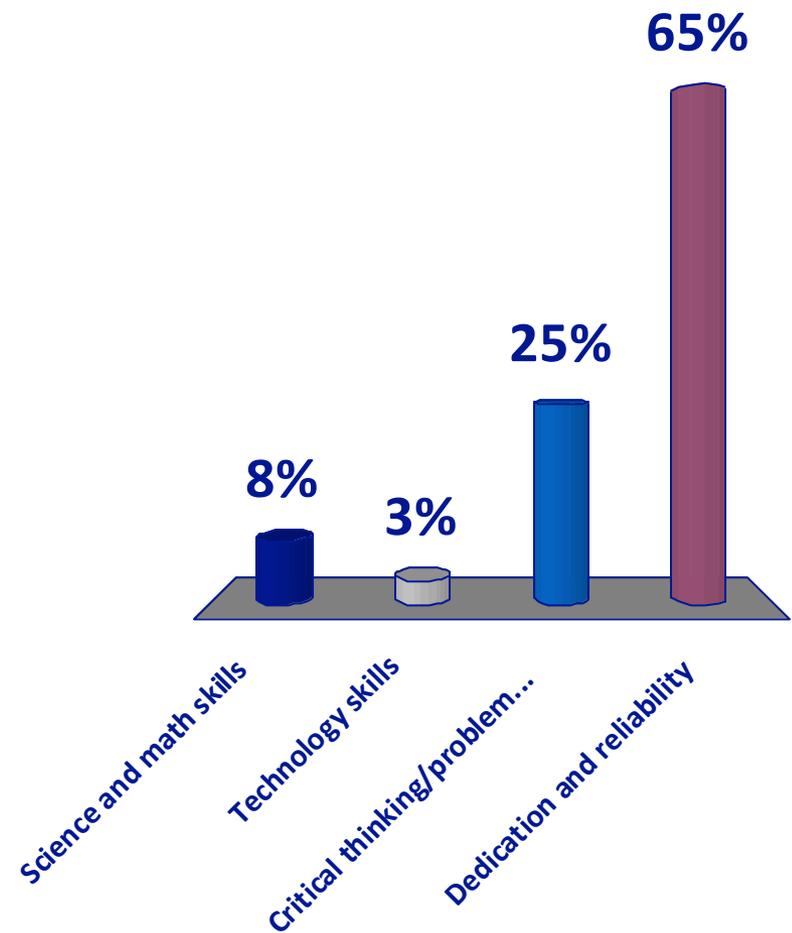
## Soft Skills

- Critical thinking, problem solving and decision making
- Planning, organizing, directing and controlling



# Which is the hardest to find?

- A. Science and math skills
- B. Technology skills
- C. Critical thinking/problem solving
- D. Dedication and reliability





# Keep in mind...

- Even if you don't have key people leaving, you may need workforce development to make sure your current employees keep up with the changing demands of the water sector



“People worry about paying to train staff who then leave...

...But what happens if we don't pay to train them and they stay?”



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# Analyze Skill Gaps

## Workforce Requirements (Demand)

- Number
- Competencies
- Grades
- Locations

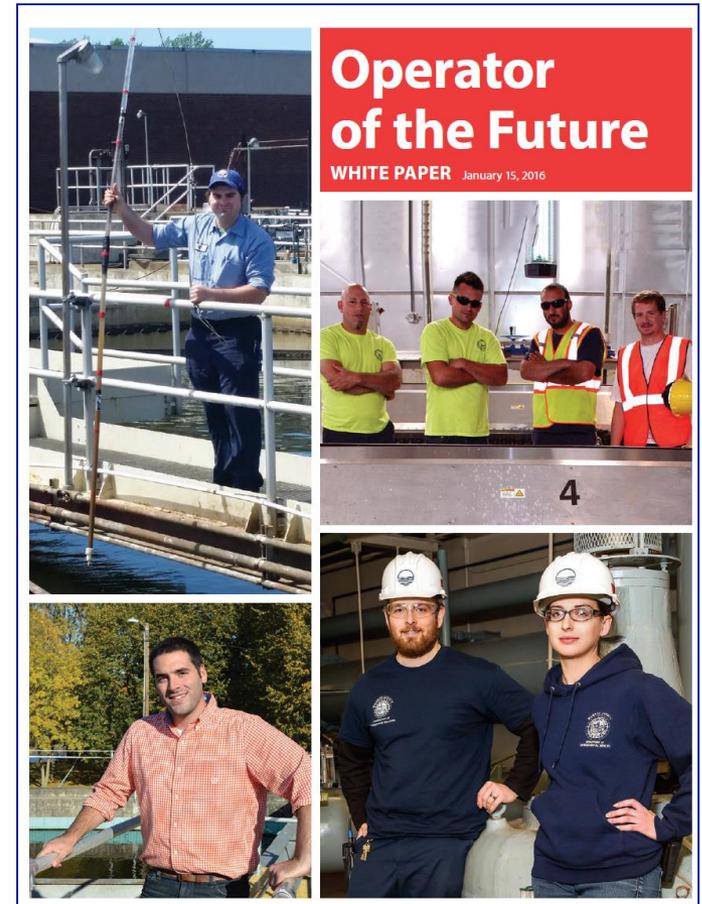
## Workforce Supply

- Number
- Competencies
- Grades
- Locations

## The Human Resource Gap

# New York Water Environment Association Survey

- 2015 survey of 300 water operators and 13 managers on operator needs and recruitment challenges



A blue-tinted photograph of industrial machinery, including pipes and valves, is positioned at the top of the slide.

# Operator-Identified Challenges

- Lack of management support and insufficient communication
- Time needed to become certified and compensation
- Tight budgets, loss of staff, lack of public appreciation, and few opportunities for advancement



# Operators also say...

- The most satisfying aspect of their work is contributing to the environment and public health



# Manager-Identified Challenges

- Many current employees are not interested in obtaining higher levels of certification
- Candidates holding high school diplomas or GEDs often struggle to pass the grade 3 and 4 certification exams



# Both Say

- Inadequate pool of replacement certified operators to meet present needs



# Both Say

- Candidate pool lacks needed skills
  - Science and math skills
  - Soft skills like management capabilities
  - Desirable personal characteristics

A blue-tinted photograph of industrial machinery, including pipes and valves, serves as the background for the top portion of the slide.

# Workforce Development Process

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- **Find new people**

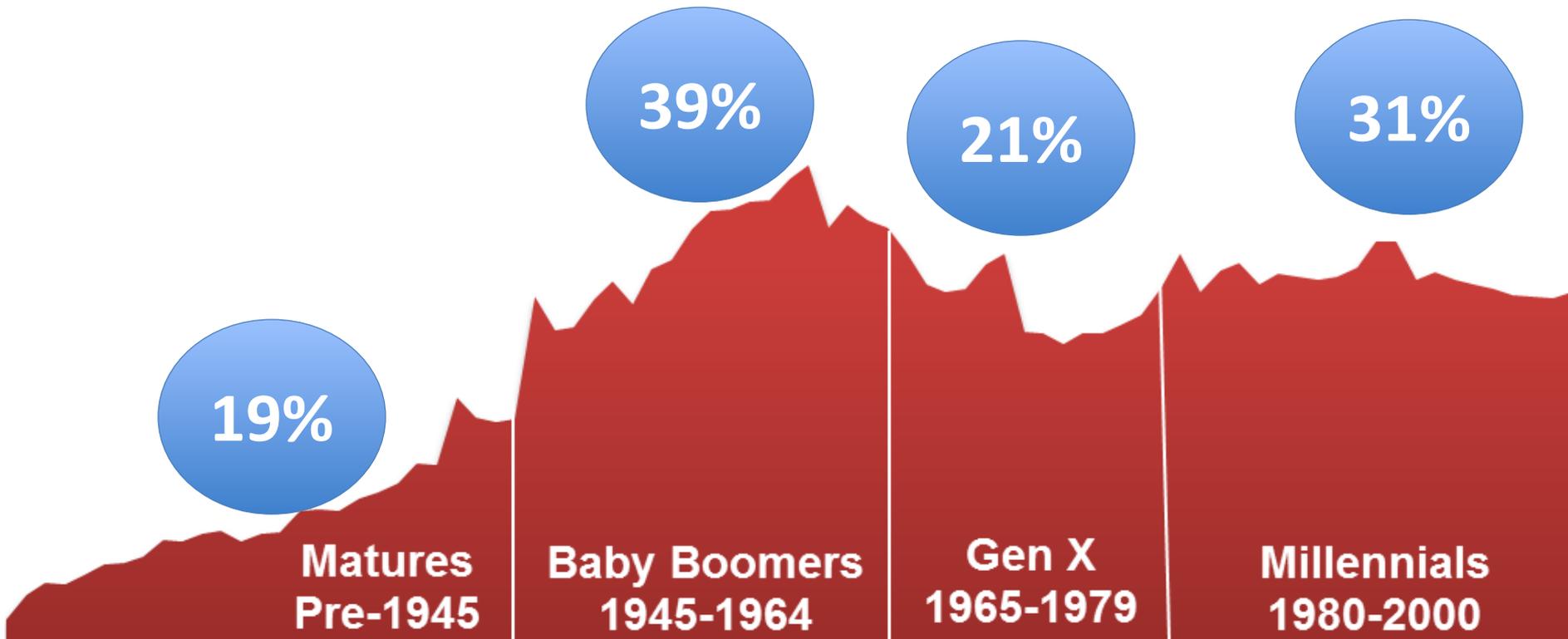


**It's important to understand  
why and how people get into  
the water business**



# Demographics

# The US Population Today





# Creating Interest in Water Careers



**WE ARE  
HIRING**

COME CHANGE THE WORLD WITH US





# Meaningful, Important Work

*Operators say the most satisfying aspect of their work is contributing to the environment and public health*





**But...**

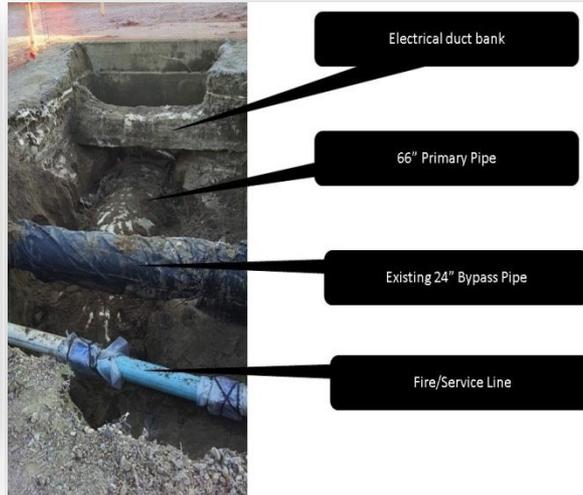
**People are not necessarily  
aware of jobs in the water  
sector**

# Barriers to Awareness: Water is...

## Commonplace



## Complicated



## Political





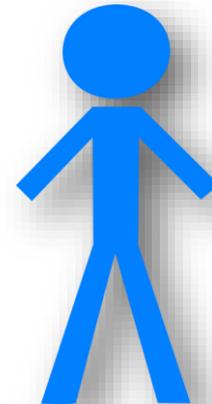
**Public  
Service**



**Environmental  
Stewardship**



**High-Tech  
Nature**



**Personal  
Benefits**

Public Service

We need  
water to  
live













MEASURING  
LINE

THE FAMILY  
**Handyman**





# Environmental Stewardship



## **We Are Committed to Sustainable Business Practices**

The Middlesex Water family of companies is committed to the support of sustainable business practices that reflect responsible water and wastewater management. As a provider of water and wastewater services, we look to continuously improve our environmental performance through economically sound, ecologically sensitive, and technologically practical processes.

***70% of the Earth is water. From seas to lakes, to rivers and creeks, water is everywhere. Valuing water means valuing our future.***

**– Value of Water Coalition**

# High Tech Nature



Nano Filtration  
Membrane System  
(Pilot Butte,  
Saskatchewan, Canada)



The Aqua Drone  
(VITO)



SCADA with remote  
access (Shrader  
Engineering)



# Personal Benefits





Don't let  
anyone tell  
you water  
isn't sexy

Do you know  
how often you  
turn me on?

If only the water faucet could talk to us. It might remind us how often we turn to it for safe water to drink, to wash our clothes, to prepare our food, to provide us with the everyday quality of life we enjoy. It might remind us that the water pipes below our streets make so many everyday conveniences possible.

Our water bills pay to keep our community tap water safe, reliable and there for us — 24/7 without fail. For more information about what your tap water delivers, visit *[insert utility web address here]*.



Only Tap Water  
Delivers<sup>SM</sup>

(Place Utility  
Logo Here)

Presented in cooperation with

 American Water Works Association

# How to Find Good Employees



# Employee Referral Program

COMMERCIAL CENTER PARTNERS

## REFERRALS

THEY REALLY PAY OFF



**\$150** THAT'S RIGHT! YOU CAN MAKE UP TO \$150 FOR EVERY PERSON YOU REFER!

### BONUS DETAILS

Applicants must put your FULL NAME on their application when they apply. For more details, please refer to our Internal Recruitment Manual, page 254. Thank you!

## Who do you know?

- ▶ You know great people.
- ▶ We're looking for great people.
- ▶ You refer them to us.
- ▶ We hire them.
- ▶ You earn cash or extra PTO for every referral hired, and gift opportunities for every referral interviewed!

1 = \$750  
2 = \$1,500  
3 = \$2,250

Get the idea?  
Now there's...

Even More  
to Think  
about

Get more details about  
the program at:

[www.drivetime-erp.com](http://www.drivetime-erp.com)



# Cast a Wide but Targeted Net



**Professional Organizations**



# K-12 Outreach Opportunities



High school internship (The Urban Water Institute, KSU)



Kid's Camp  
(City of Fresno Water Division)



In school programming  
(Jacksonville Electric Authority)

# Post-Secondary Outreach Opportunities



## INTERN PROGRAM

Inland Empire Utilities Agency provides college students (undergraduate or graduate level) or an individual who has graduated from an accredited college or university the opportunity to explore a wide range of career paths within a regional wastewater treatment agency. Interns are assigned to an Agency department for a specific period of time to learn the administration and operation of the Agency. Assignments may include general administrative duties as well as working on special projects.

# Professional/Mid-Career Outreach Opportunities



## **What Is The Citizens' Academy?**

The City of Richmond Department of Public Utilities (DPU) Citizens' Academy is a four-week program that provides Richmond citizens an inside look at the operations of DPU. Participants will be introduced to the five utilities DPU operates: natural gas, water, wastewater, stormwater, and electric streetlighting. Tours of various DPU facilities and demonstrations of equipment will be conducted. This program will provide citizens an opportunity to ask questions about the department's operations.



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