



Smart Management for
Small Water Systems

Workforce Planning for Illinois Water Systems

Sept. 18, 2019 | Webinar

www.efcnetwork.org



Government Finance Officers Association

This program is made possible under a cooperative agreement with the U.S. EPA.



Today's Topics

- ✓ Why Water is Important
- ✓ The State of the Water Workforce
- ✓ Succession Planning Tips
- ✓ Recruiting Water Workers
- ✓ How to Keep Great Workers



WATER





H2O Reality

the glass is half empty

- Crumbling infrastructure
- Aging treatment plants
- Economic vitality at risk
- Rising costs
- Deteriorating sources
- Shrinking workforce



Although our public water problems are real, they are *fixable*.

Nice work!



Illinois Webinar Series:
Water Financial Management
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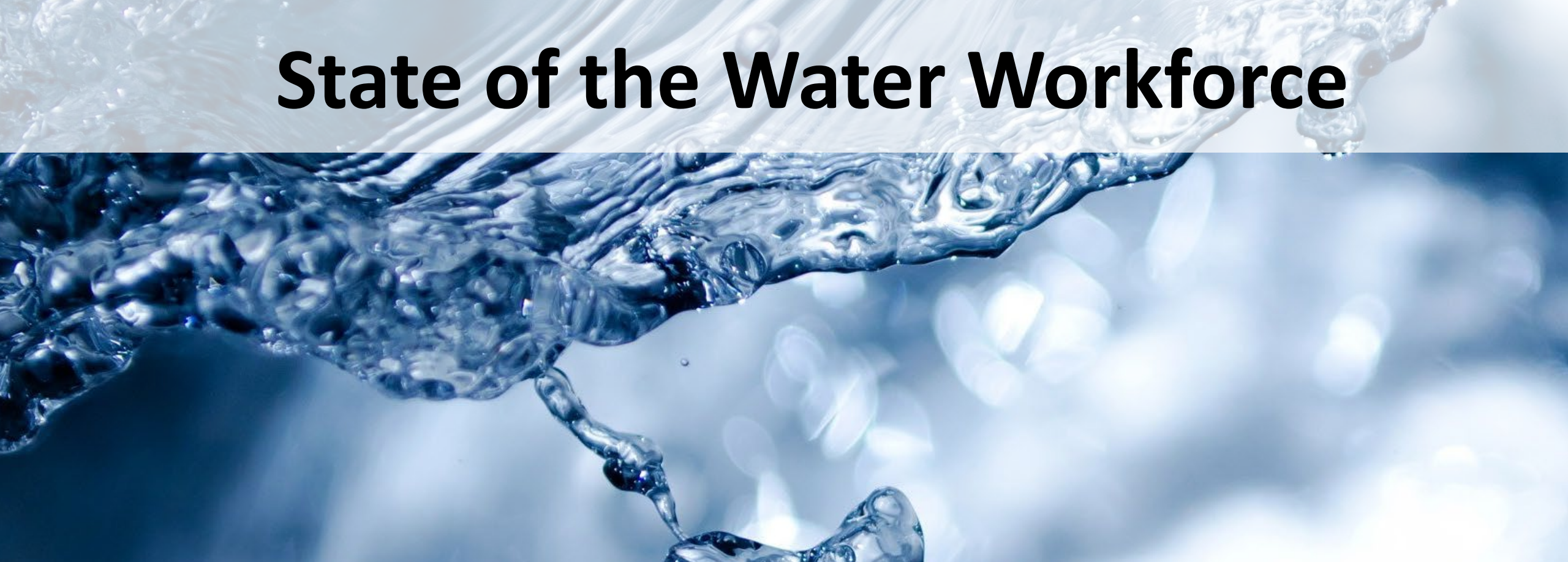


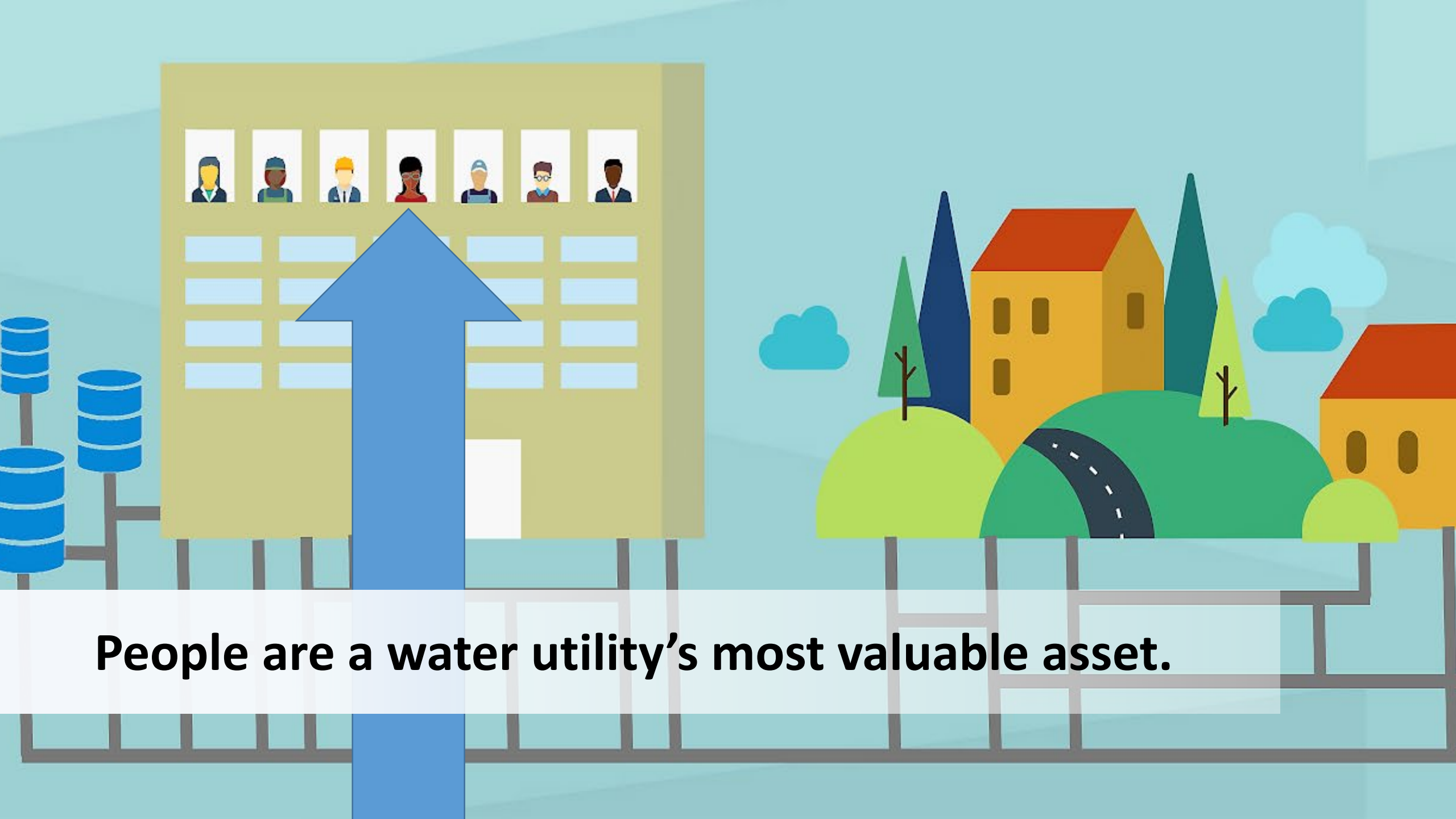
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State of the Water Workforce





People are a water utility's most valuable asset.

2019 State of the Water Industry: A Rising Tide?

Dawn Flancher

First published: 01 July 2019 | <https://doi.org/10.1002/awwa.1327>

*2,000 survey responses from a
variety of water professionals*



2019 Ranking	Category	Average	Critically Important %
1	Renewal and replacement of aging water and wastewater infrastructure	4.56	63
2	Financing for capital improvements	4.47	55
3	Long-term water supply availability	4.39	55
4	Public understanding of the value of water systems and services	4.16	40
5	Watershed/source water protection	4.15	39
6	Public understanding of the value of water resources	4.13	37
7	Groundwater management and overuse	4.08	34
8	Aging workforce/anticipated retirements	4.06	39
9	Emergency preparedness	4.06	33
10	Cost recovery (pricing water to accurately reflect the cost of service)	4.03	30

The Water Workforce Problem

Economic Disparity

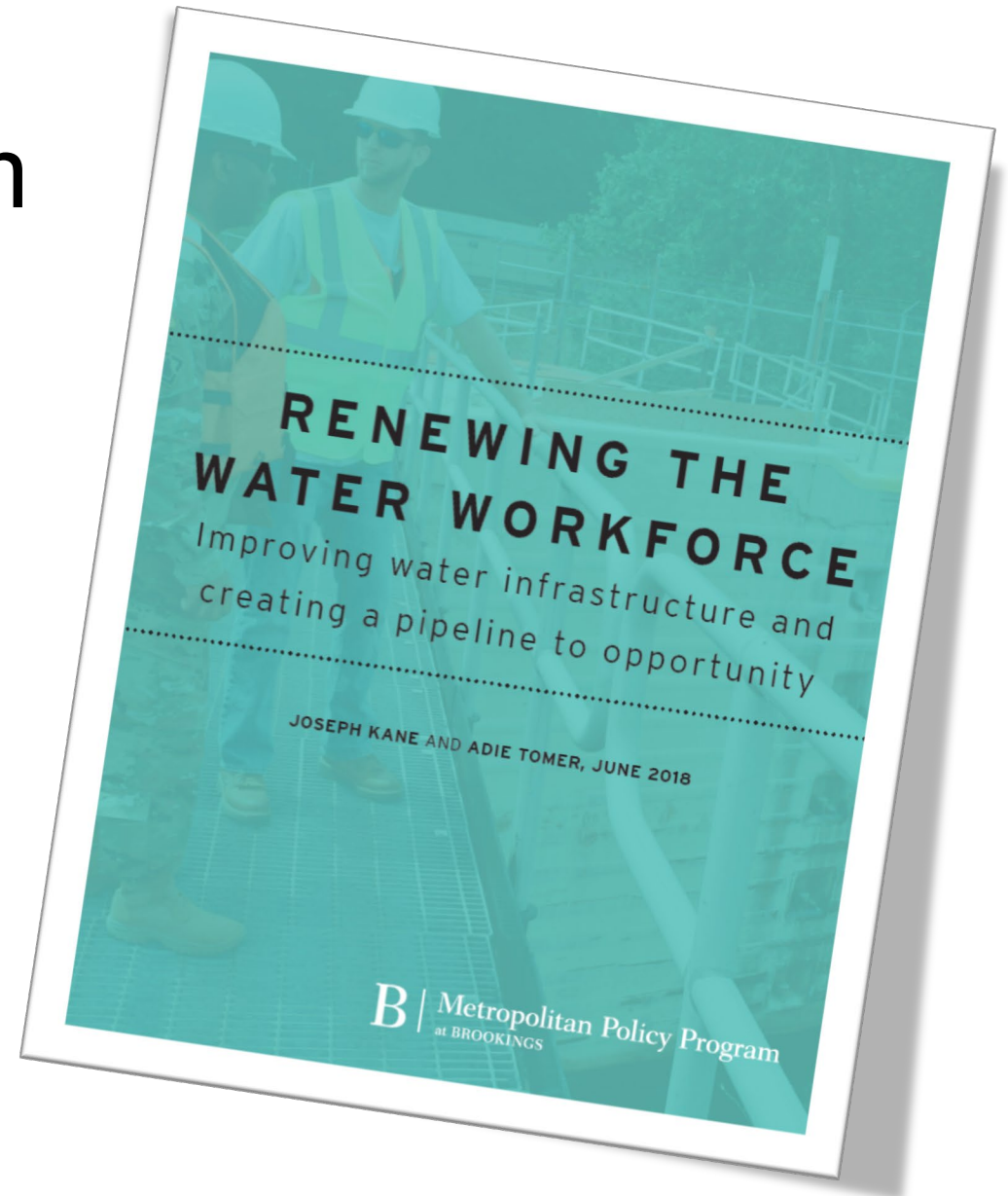
- Struggle to achieve equitable and inclusive employment opportunities

Aging Infrastructure

- Urgent repair, maintenance, and restoration needs

Employment Gap

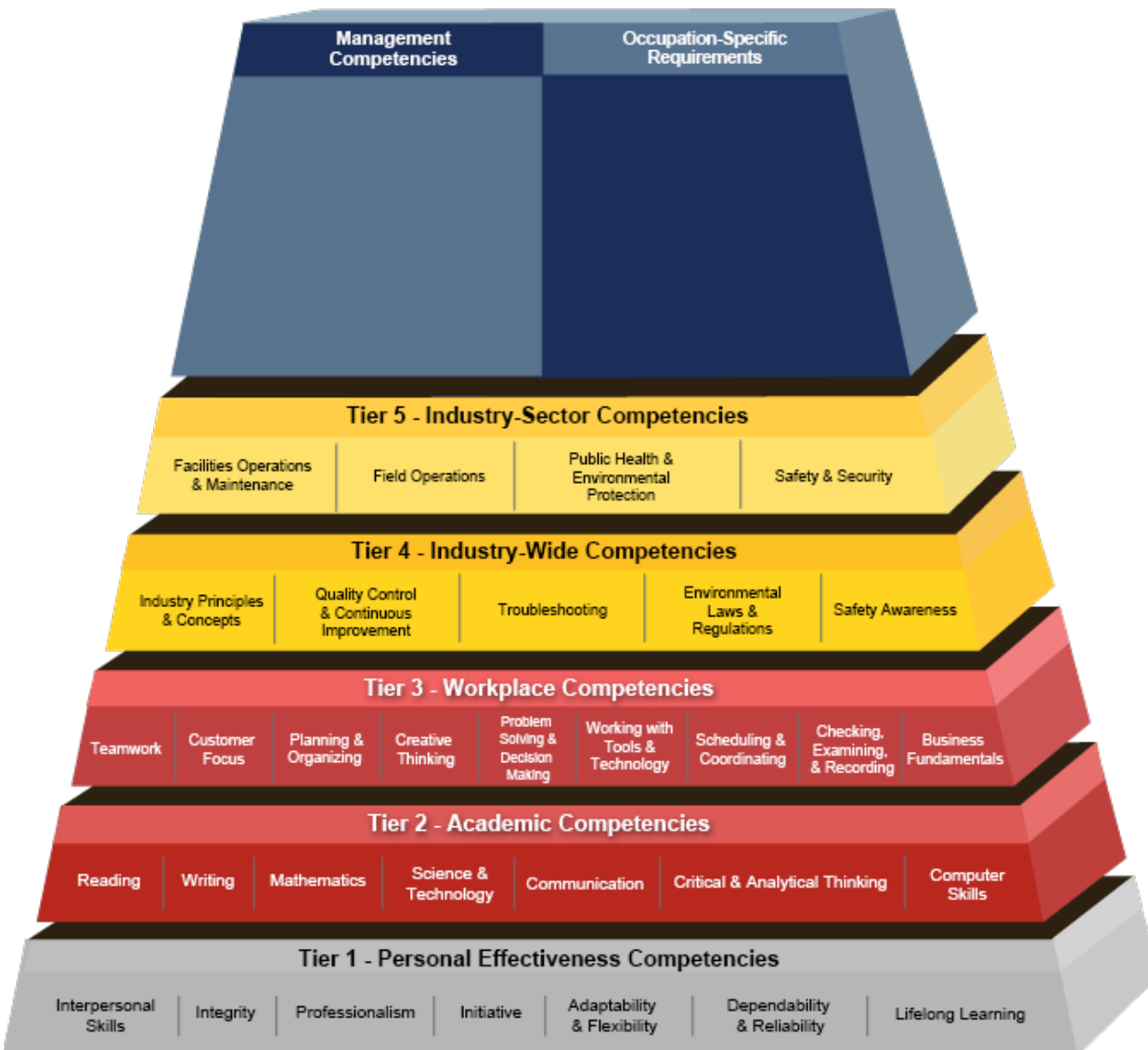
- Short supply of capable new talent.







Water and Wastewater Competency Model



- Facilities Operation/Maintenance
- Field Operations
- Public Health & Environmental Protection
- Environmental Law/Regulations
- Safety & Security
- Troubleshooting
- Quality Control/Continuous Improvement
- **Teamwork**
- Customer Focus
- Planning/Organizing
- **Creative thinking**
- Problem solving/decision-making
- Working with technology/tools
- Computer skills
- **Integrity**
- **Interpersonal skills**
- **Initiative/Drive**
- **Flexibility**
- **Dependability**
- **Lifelong Learning**



Succession Planning

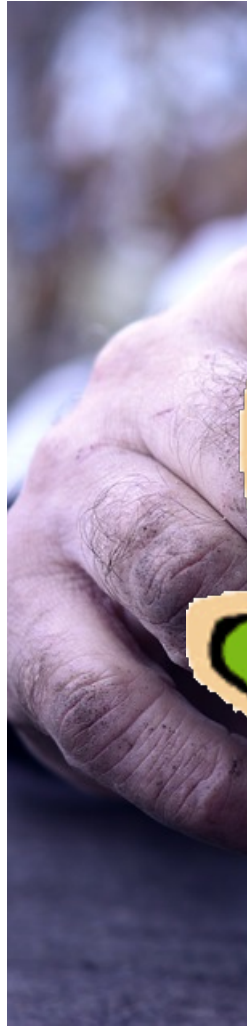
A close-up photograph of a white pressure gauge with a black needle and scale, mounted on red industrial machinery. The gauge has markings for 20, 40, 60, 80, 100, 120, 140, 160, 180, and 200 PSI.

Succession Planning

Systematic approach to **building replacement workers** to **ensure continuity**, by identifying potential successors in ***critical*** work processes



Why We Plan: 2 Stories



Are You Ready for People to Leave?

Retirement

Leaving for a different job

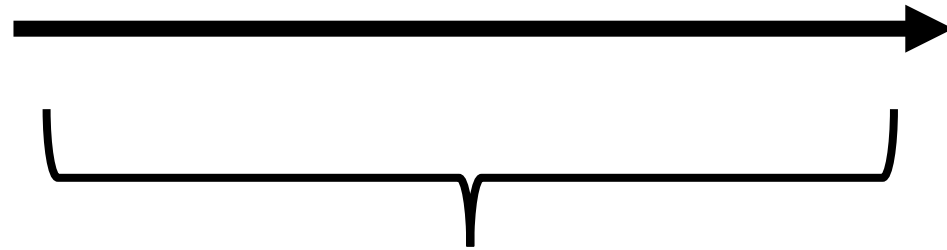
FMLA

Other circumstances...





Current State



Desired State

Action Plan

- Step 1 _____
- Step 2 _____
- Step 3 _____
- Step 4 _____

First: Current State of workforce

What do you have today?

Employee Profile

- Age and years of service
- Competencies, skills and certifications
- Knowledge

Workforce Breakdown

- Managers
- Lab staff
- Operators
- Maintenance

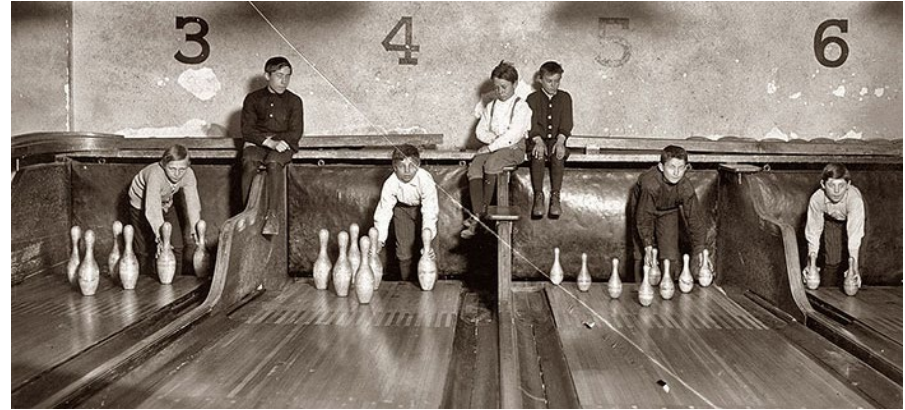
Community Demographics

- Population
- Businesses
- Tourism



Second: Desired State of workforce

What do you need 5 – 10 years from now?



External Changes

- ▶ Local demographic changes
- ▶ Environmental changes
- ▶ Political changes
- ▶ Technological changes
- ▶ Regulatory changes

Internal Changes

- The way work is done
- Interagency agreements
- Contractors
- Job structure
- Shift changes



Analyze Workforce Gaps



Workforce Demand Desired State

- ✓ Knowledge
- ✓ Skills
- ✓ Competencies
- ✓ Positions Needed
- ✓ Technologies



Workforce Supply Current State

- ✓ Knowledge
- ✓ Skills
- ✓ Competencies
- ✓ Age/Years of Service

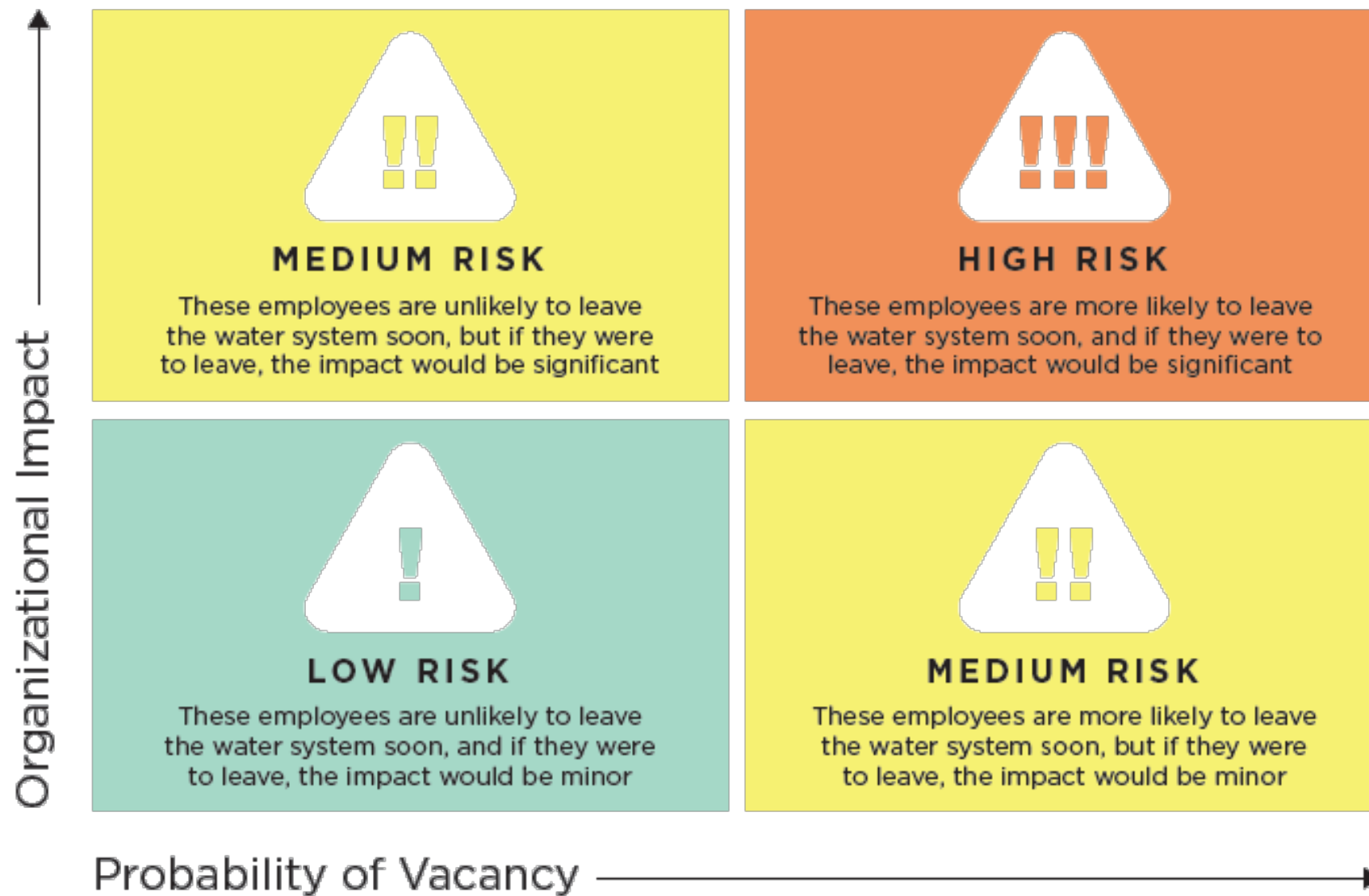


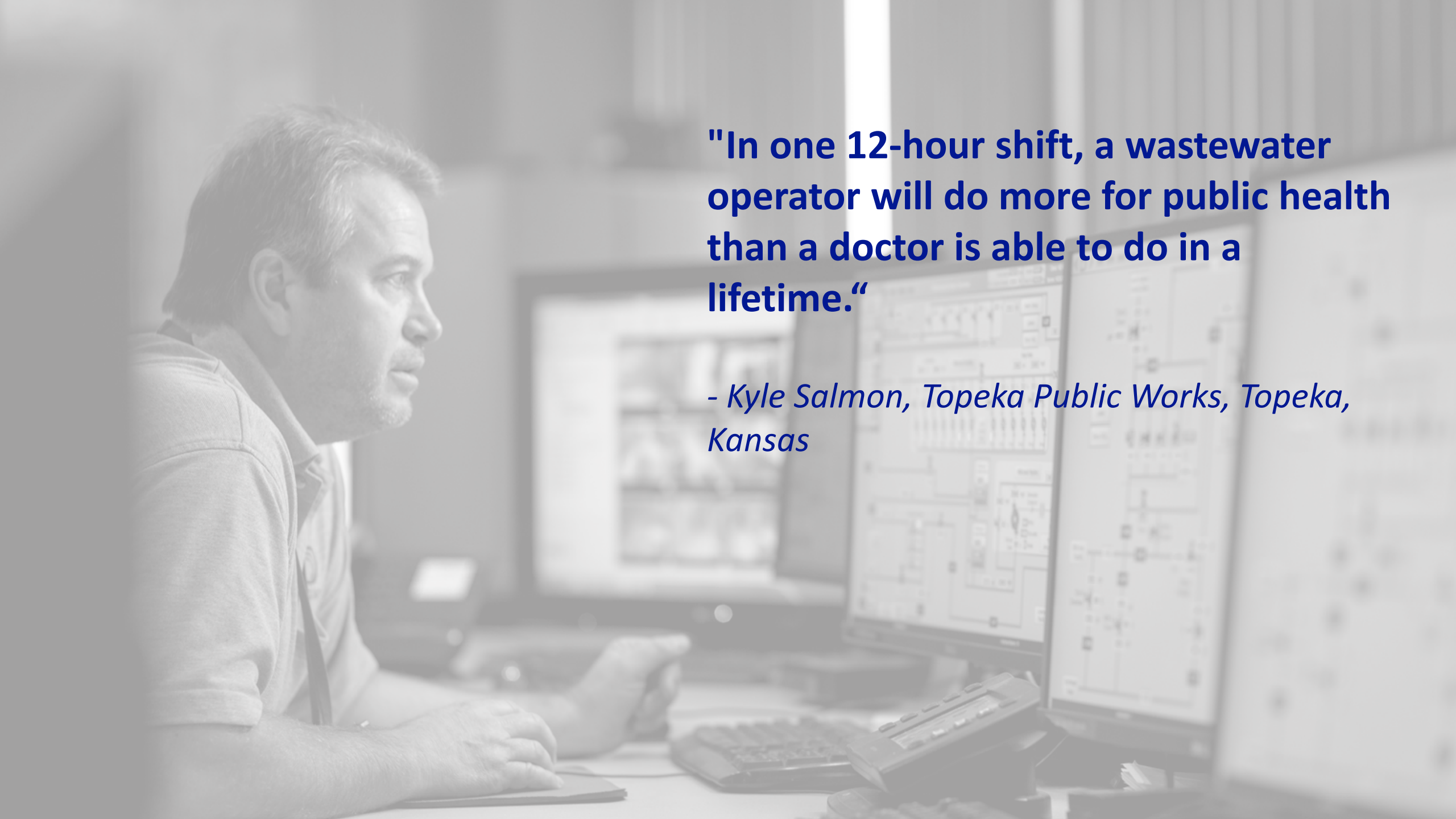
Your Human Resource Gap

- ✓ Identify what is missing
- ✓ Succession Plan is formed to fill the gap



Human Capital Criticality





"In one 12-hour shift, a wastewater operator will do more for public health than a doctor is able to do in a lifetime."

- Kyle Salmon, Topeka Public Works, Topeka, Kansas



Recruiting Water Workers

How can we get others Excited About Working in Public Works?



We Can Do It!





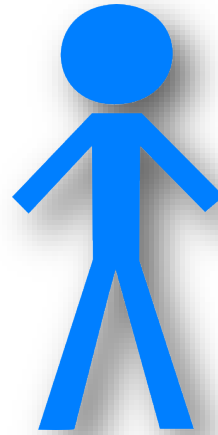
Promote Benefits of Working in Water



Environmental
Stewardship



Public Service



Personal Benefits



High-Tech Nature



Environmental Stewardship

Are you ready to...
improve the environment
and make a profound
difference in the
community?

At DC Water, you can look forward to a satisfying career that offers a competitive salary and excellent benefits. We're committed to providing world-class water and wastewater services as a leading environmental steward. By joining DC Water you too can make a difference.

DC Water is a government employer for purposes of the Federal Public Service Loan Forgiveness Program.

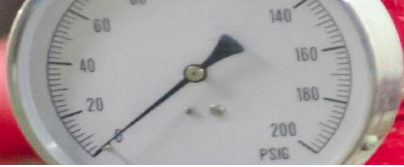
Your search for a rewarding career with DC Water starts here.

FIND A JOB

[Find An Internship](#)

[Find a job with partner](#)

Source: [Dcwater.com/careers](https://dcwater.com/careers)



Public Service

50	Million gallons of water pumped everyday
6,000	Customers that rely on our clean water everyday
2,000,000	gallons of water used per day to care for the animals at the San Antonio Zoo
300,000,000	gallons the National Hockey League Uses per season – <i>it takes 12,500 gallons to make ice for each rink</i>



Operators Say...

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



2015 New York Water Environment
Association Survey

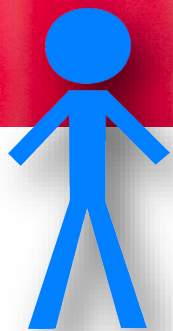


Advancement Opportunities

***“You have the opportunity
to move around and try
a variety of jobs with
Public Works”***

***Deshonia Moore
~ Power Sweeper Operator***





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Professional Organizations





Showcase Technology



Develop & Update Job Descriptions

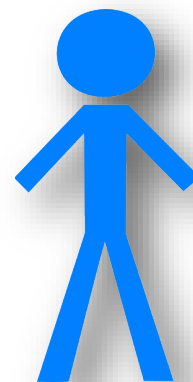
Communicate knowledge, skills and abilities that align with industry re-branding



Environmental
Stewardship



Public Service

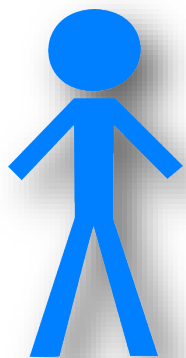


Personal
Benefits



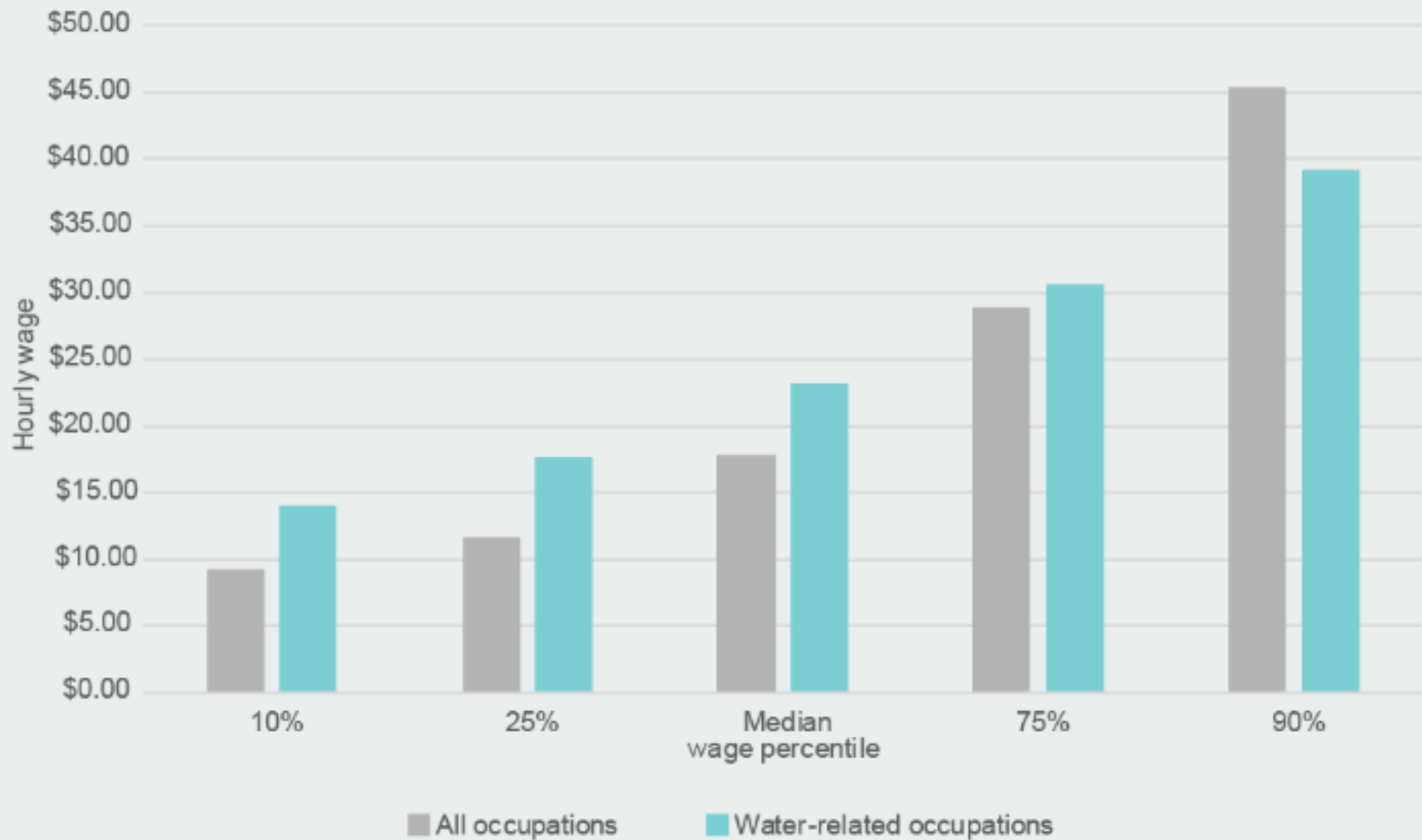
High-Tech
Nature

Tip: Look to previous job postings and first-hand input to make job description




Competitive Wages

U.S. Hourly Wage Comparison: Water Occupations vs. All Occupations, 2016



Source: Brookings analysis of BLS Occupational Employment Statistics

A grayscale photograph of a water operator wearing a hard hat and safety vest, working on a large pipe at a water treatment facility. The operator is in the foreground, leaning over the pipe. In the background, there are large storage tanks and industrial buildings.

Do we pay water operators like we pay pharmacists? Because that's essentially what a water operator is, a pharmacist for the entire community.

*- Bill Teichmiller, CEO of EJ Water Cooperative, Inc.
Dieterich, Illinois*



Staff Retention Strategies



Retention

- Compensation and Salary
- Evaluation
- Training
- Continual Employee Focus



Fifty-two percent of exiting employees say their manager or organization could have done something to prevent them from leaving. (*Gallup.com report*)

A female scientist with dark hair and glasses, wearing a white lab coat and purple gloves, is working in a laboratory. She is holding a small vial with a blue liquid and a graduated cylinder. The background is a blurred laboratory setting with shelves of equipment.

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

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

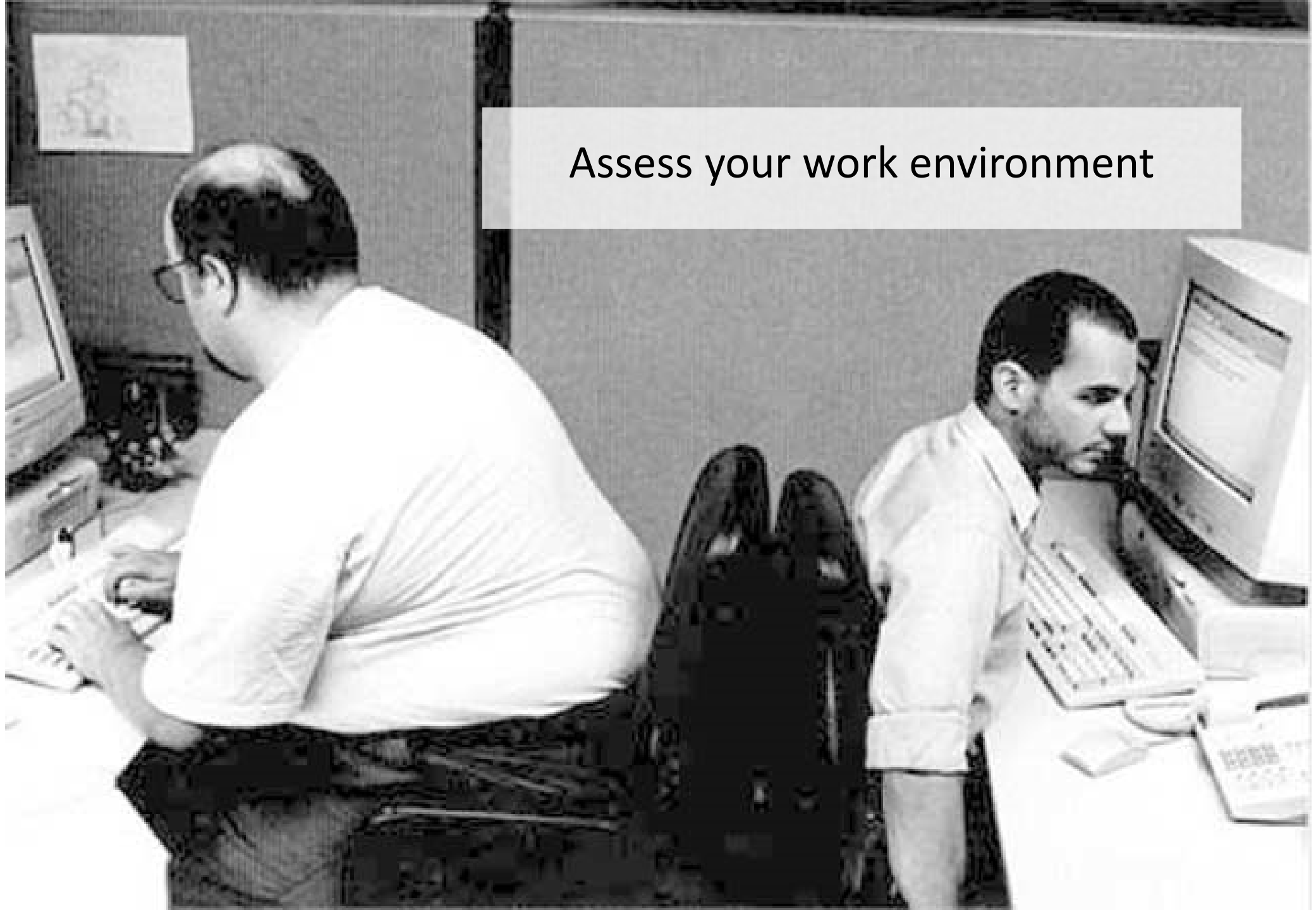


Retention

- Compensation and Salary
- Evaluation
- Training
- Continual Employee Focus

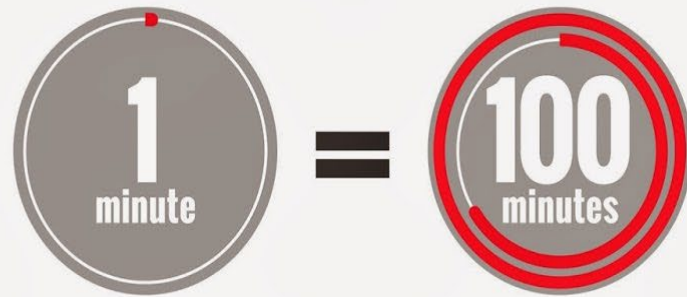


Assess your work environment



Recognition!

“Recognition is proven as among the best method of improving work motivation and employee engagement.”



1 minute spent on recognising behaviour
= 100 minutes of initiative in return.



Yet 2 out of 3 people receive no workplace recognition in a given year.





The Wrap-up

- Why Water jobs are important
- Water Workforce Challenges
- Succession Planning
- Recruitment
- Retention





Questions?

*If you think of questions or are viewing this webinar
later: just email us at **smallsystems@syr.edu***