

#### Workforce Planning

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# There are about 1.7 million Americans employed

### in water-related jobs, out of a total workforce of about 153 million people

Source: Renewing the Water Workforce Report and Bureau of Labor Statistics data <u>https://www.brookings.edu/research/water-workforce/</u>



#### Water Workforce

























Different water-related occupations, from water operators to positions in the skilled trades like electricians and technicians to financial, administrative, and management positions

Source: Renewing the Water Workforce Report <u>https://www.brookings.edu/research/water-workforce/</u>



### And there is no fixing your workforce with duct tape...





### Who will succeed your best colleagues when they leave?

#### Who will succeed you?

#### **Two Major Workforce Goals**

- Keep your best people around as long as you can
- Bring in great new people to the organization



#### Some questions to start...

## Did you grow up wanting to be work for a water system?

- A. Yes
- B. No
- C. I didn't even know this job existed



#### Who Works in Water

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

#### Do your friends and family really understand what you do for a living?

- A. Yes
- B. Vaguely
- C. Not at all



#### Can you see yourself working in water for the rest of your career?

- A. Yes
- B. Maybe
- C. No



Are you confident that there is someone working for your organization now that could succeed you?

- A. Yes
- B. No



#### Keep Your Best Employees



## What makes you want to stay in your job?



#### **Succession Planning**





#### Asset Management Can Help



#### Larry Covington · Picacho MDWCA



### But no matter how good you are at succession planning...

Your employees will leave, eventually.

Guaranteed.





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





### Are you ready for people to leave?

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

I'm quitting to pursue my dream of not working here.







#### Who Works in Water

- You know who within your organization works in water
- How critical are these people to your operations? How easy will it be to find people to succeed them?



#### Human Capital Criticality



Probability of Vacancy -



#### **Hire Great New People**





#### Job Skills Needed



Andrew Kwan, East Bay Municipal Utility District, CA <a href="https://www.youtube.com/watch?v=ORZIhncbb6Y">https://www.youtube.com/watch?v=ORZIhncbb6Y</a>



# What knowledge, skills and abilities (KSAs) are needed today?

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

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

**Technical Background** 

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



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

- **Personal Characteristics**
- Dedication and reliability
- Drive, ambition and initiative

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

#### Soft Skills

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

## What is the hardest KSA to find?

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



#### How can we evaluate...

- Science and math knowledge
- Technology knowledge
- Critical thinking/problem solving skills
- Dedication and reliability



People are not necessarily aware of jobs in the water sector

It's up to us to explain why this is a good career choice. Here's one view...



#### Why a Career in Water?



#### Jennifer Walsh Senior Principal Engineer Hazen & Sawyer

Interviewed on the Words on Water podcast:

https://wordsonwaterwef.com/2018/02/12/wor ds-on-water-jennifer-walsh-on-being-amillennial-in-the-water-sector/











Environmental Stewardship



Benefits



#### **Public Service**



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

2015 New York Water Environment Association Survey



#### **Public Service**

### We need water to live




















## **Environmental Stewardship**



Andrew Kwan, East Bay Municipal Utility District, CA <a href="https://www.youtube.com/watch?v=ORZIhncbb6Y">https://www.youtube.com/watch?v=ORZIhncbb6Y</a>

## Put the Mission in Your Job Ad

### PURPOSE OF THE POSITION

(The main reason for the position, in what context and what is the overall end result)

The Water Treatment Plant Operator is responsible for of the water plant in order to ensure that residents have safe and clean water in accordance with federal, territorial and municipal legislation, policies and standards.

### **SCOPE**

(The way that the position contributes to and impacts on the organization)

Reporting to the Public Works Foreman, the Water Treatment Plant Operator maintains the water plant. This includes maintaining the water and sewer treatment plant and facilities.

The delivery of safe and clean water is vital to the safety and health of the community. Failure to provide adequate services will jeopardize the health of the community. Failure to meet federal, territorial and municipal legislation and water quality standards will significantly jeopardize the health and well-being of residents and may result in liability for the municipality. Failure to deal with residents and the public in a courteous and respectful manner will lead to complaints concerning municipal services.

### **RESPONSIBILITIES**

(Major responsibilities and target accomplishments expected of the position including the typical problems encountered in carrying out the responsibilities.)

Maintain the water treatment plant systems in order to ensure the availability of a clean

Job Description for a Water Treatment Plant Operator

Northwest Territories – Municipal and Community Affairs



## **High Tech Nature**



**Reverse Osmosis** 



UV Filtration



SCADA



Solar Power



## **Career Benefits**



## More than 50 percent of water workers have a high school diploma or less, which is higher than the national average



Source: Renewing the Water Workforce Report https://www.brookings.edu/research/water-workforce/



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## And water jobs pay much better per hour than average jobs at the low end of the pay scale



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## How to Find Good Employees





## Have a Good Job Description



## **Elements of Good Job Posts**

- Accurate job title and summary
- Explains job responsibilities transparently
- Clearly states skills and qualifications, including physical demands
- Explains the organization

Adapted from <a href="https://theundercoverrecruiter.com/write-effective-job-description/">https://theundercoverrecruiter.com/write-effective-job-description/</a>

## Elements of Good Job Posts

- Opening and closing date
- Specific about hours and location
- Includes salary and benefits range
- Includes contact information

Adapted from <a href="https://theundercoverrecruiter.com/write-effective-job-description/">https://theundercoverrecruiter.com/write-effective-job-description/</a>





# What do you think of Irvindale's job description?

What would you change, if anything?

Please work with your neighbors

# Find People Who Share Your Values



### What types of candidates is SUEZ looking for?

SUEZ welcomes applications from all qualified job candidates, and we embrace diversity. The personal attributes of a successful applicant include:

- A positive attitude
- Motivation and a desire to learn, improve, and succeed
- Ability and willingness to work and communicate as a team
- Dedication to complete customer satisfaction
- Ability to apply business knowledge and build our company

did this answer your question?





## Start Young!

### Another successful Kids 4 Clean Water summer camp

Wednesday, August 23rd, 2017



The children of the San Mateo Subdivision in northern Ambergris Caye participated in the annual Kids 4 Clean Water camp from Monday, August 14th to Sunday, August 20th. The annual event features a five day program that serves as a platform to educate residents of the area on the environmental and health issues associated with its water reserves. The camp aims to teach children about water safety, the water cycle, water pollution, and environmental conservation.





## **Give Tours**

From trucks to tours to treats, our annual Open House gets bigger and better every year. And you are the reason why.

### **Treatment plant tours**

https://www.neorsd.org/community/open-housealways-the-number-1-event-in-the-number-2business/

attending a tour must register for a tour upon arrival at the Open House. Please proceed to the Tours tent to register for

### **Bike tours**

<u>Three bike tours</u> of the Southerly Wastewater Treatment Plant are available. Three tours for 20 visitors each are available while spaces last. Register for a <u>10:00 a.m.</u>, <u>12:00 p.m.</u> or <u>2:00 p.m.</u> tour.



## **Give Tours**



## "I end every tour with a discussion of all of the careers available in water"



## Internships

OUR SCHOOLS: Hartford Public High School Summer Interns Learn an Industry and Help to Bolster Future Workforce of Hartford Water Company MDC



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MDC's Learn and Earn is a 4 week paid program that took place this year from July 11, 2016 to August 5, 2016. 9 students from





Ray Baral Metropolitan District Commission, CT

"The money is a bonus to students. And while a lot of their friends sleep in until noon in the summers, they were here actually learning something and getting prepared for a career after high school. They all appreciated that."





Ray Baral Metropolitan District Commission, CT "Certainly, we wanted them to be good students, but they didn't have to be 'A' students. The most important thing is that they want to be here and they want to learn."



# Be honest. Were you an 'A' student?

- A. Yes
- B. No
- C. Not even close!



## Post High School Training



:: City of Riverside T3 Program - Technical Trades Training

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### So you're a senior in High School – What's Next?

What's next... is your future! And it is never too soon to start thinking seriously about what type of work you want to do in your life, and how you can obtain it.

Opportunities surround you – just like our T3 Program. T3 is a vocational program waiting to be taken advantage of by just the right student. It provides high school students a chance to continue their education, learn a skill, and make a good living.



### **Program Details**

Up to two graduating students from Norte Vista School and up to two students from Ramona High School in Riverside may be selected to participate in the two-year T3 training program.



## **Veterans of Uniformed Services**







EPA guide for applying Military Occupational Specialties (M.O.S.) to civilian drinking water and wastewater operations

https://www.epa.gov/sites /production/files/2015-11/documents/from\_mos to\_job.pdf



## Veterans



- Federal and State funding & career placement services
- Partner with Veterans Upward Bound at local universities (if applicable)





## **Employing Veterans: Programs & Funding**



U.S. Department of Veterans Affairs **On-The-Job Training & Apprenticeship Program** 

### **Recruiting Tool**

## Employers can combine MHA from Post-9/11 GI Bill plus wages to attract Veteran candidates.

Training Period	Stipend Received	
First 6 months of training	110% of the applicable Monthly Housing Allowance (MHA)	
Second 6 months of training	80% of the applicable MHA	
Every 6 months after year 1	Reduced by 20%	



## Employing Veterans: Programs & Funding



U.S. Department of Veterans Affairs Vocational Rehabilitation & Employment On-The-Job Training & Apprenticeships

### Employers who hire using this program receive:

ment up to tools, 50% of the equipment,	Supplies and equipment necessary to complete training	Appropriate accom- modations based on individual needs of the Veteran	VA support during training and placement
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## **Employing Veterans: Programs & Funding**

### **State/Regional Specific Contacts**

For specific program information and program approval



National Association of State Approving Agencies (NASAA)



U.S. Department of Labor Veterans' Employment and Training Service (VETS)



## **Employee Referral Program**



. Applicants must put your FULL MAKE on their application when they apply,  $\overline{\mathbf{x}}_{1}$ 





## **Employee Referral Program**







Recognition









Food & Drink



## **Employee Referral Program**



### Do you offer an employee referral program?

Yes, employees may refer candidates for eligible positions and receive compensation if the hire is successful.

did this answer your question?





OVERVIEW

## A SELECTION OF TRAINING PROGRAMS

CONTRIBUTOR
This is a
DEPARTMENT OF LABOR/
program



SORT BY SPONSOR OR MAJOR

UTILITY ASSOCIATIONS AND OTHER ORGANIZATIONS

SORT BY PROGRAM ELEMENTS

INTERNSHIP

APPRENTICESHIP

MENTORING

FOR NEW OPERATORS

FOR EXPERIENCED OPERATORS

FOR MAINTENANCE/OTHER WORKERS

This is a compilation of fact sheets describing training programs, internships and mentoring programs that help new operators enter the water and wastewater industries, as well as enhance the skills and knowledge of experienced operators.

The fact sheets are intended to promote the sharing of unique ideas and best practices for industry professionals seeking to establish similar training programs. The fact sheets represent the experiences of states, utilities, educational institutions and other organizations that sponsored and developed these programs.

Program sponsors found these programs to have many benefits, including:

- Creation of highly-qualified and highly-trained technical and professional staff;
- ✓ Development of leadership and supervisory skills in new and current staff;
- ✓ Effective way to build a pool of new recruits;
- Promotion of succession planning and knowledge transfer;

 $\checkmark~$  Exposing new audiences to water sector careers.

EPA would like to acknowledge the members of the Workforce / Operator Certification Workgroup for their efforts in developing these fact sheets. EPA compilation of fact sheets describing training programs, internships and mentoring programs

https://www.epa.gov/sust ainable-waterinfrastructure/selectiontraining-programs-waterand-wastewateroperators



## Building a Stronger America: President Donald J. Trump's American Infrastructure Initiative

INFRASTRUCTURE & INVEST IN OUR COUNTRY'S MOST IMPORTANT ASSET - ITS PEOPLE: The President is proposing reforms so Americans secure good-paying jobs and meet the needs of our industries.

- The President's plan would reform Federal education and workforce development programs to better prepare Americans to perform the in-deman jobs of today and the future. This includes:
  - Making high-quality, short-term programs that provide students with a certification or credential in an in-demand field eligible for Pell Grants.
  - Reforming the Perkins Career and Technical Education Program to ensure more students have access to high-quality technical education to develop the skills required in today's economy.
  - Better targeting Federal Work-Study funds to help more students obtain



## Before we go...



## Two Favors and a Reminder

- Please fill out an evaluation form for us before you leave
- Contact us anytime for direct technical assistance on any finance and management topic of our project



## Thank you!