

# REGIONAL WORKFORCE DEVELOPMENT FOR THE WATER INDUSTRY

August 04, 2023

North Bay Watershed Association Board Meeting

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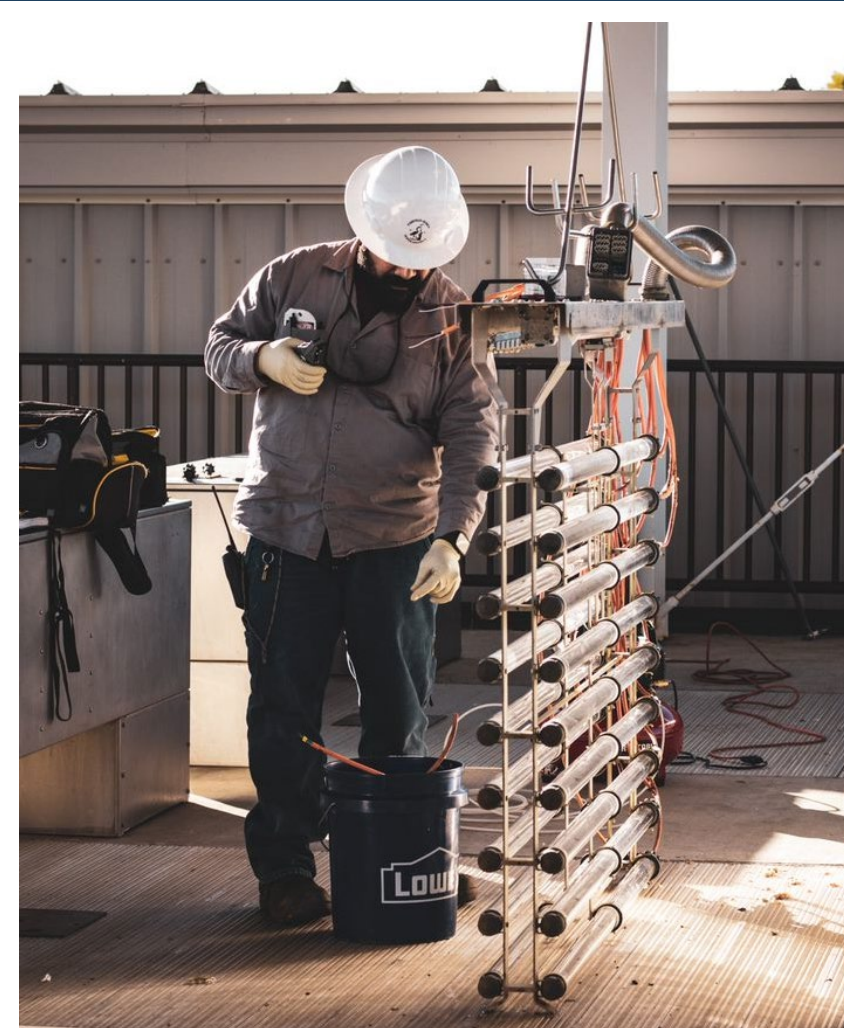


# AGENDA

- ❖ What is the problem?
- ❖ Introduction to BAYWORK and key efforts
- ❖ Introduction to BACWWE and key efforts

WHAT IS THE PROBLEM?

# OUR MOST VALUABLE ASSET IS IN SHORT SUPPLY....



- ❖ According to U.S. Bureau of Labor Statistics (July 2023), significant number of job openings in 2021-2031:
  - Water/Wastewater Operators: **10,800** openings per year
  - Maintenance/Repair Workers: **160,100** openings per year
  - Machinists: **44,100** openings per year
  - Electricians: **79,900** openings per year
  - Electrical/Electronic Repairers: **9,900** openings per year
- ❖ Primarily driven by retirements
- ❖ 3.7M high school graduates expected in '23 – '24



# BAYWORK

*“Operational reliability depends on workforce reliability”*

# WHAT IS BAYWORK?

- ❖ Established in 2009
- ❖ 501(c)(3) non-profit organization
- ❖ ~45 signatory water/wastewater agencies
- ❖ Dues based on size of agency (\$765 – \$20,500 per year based on FTEs)
- ❖ Charter:
  - Create a unified voice for w/ww workforce development programs
  - Develop cost-effective programs for prepare staff
  - Build relationships with partners and stakeholders
  - Provide a forum and framework to discuss workforce development issues

## **BAYWORK/NBWA Members:**

- Marin Municipal Water Dist.
- Napa Sanitation Dist.
- North Marin Water Dist.
- Novato Sanitary Dist.
- Ross Valley Sanitary Dist.
- Sonoma Co. Water Agency

# BAYWORK ROADMAP

## GOAL

Operational reliability of Bay Area water and wastewater utilities will be supported by a high-performance workforce.

STRATEGY

1

PROCESSES

Develop qualified candidates for mission critical jobs

- Organizational recruitment
- Candidate development
- Outreach

STRATEGY

2

PROCESSES

Provide staff with the information they need to do quality work

- Competency analysis
- Documentation
- Staff development
- Technical training
- Knowledge management

STRATEGY

3

PROCESSES

Modify work processes to optimize use of available staff

- Redesign work processes
- Improve use of information technology
- Modify job classifications and institutional working relationships

STRATEGY

4

PROCESSES

Maximize cost-effectiveness of workforce reliability investments through collaboration

- Collaboration among utilities and with stakeholders (e.g., educational institutions)

# MAJOR INITIATIVES – FY 23/24

- Stackable internships
- Instrumentation apprenticeship
- Outreach – women, veterans, community colleges

## Candidate Development



- Cross-Agency Mentoring Program
- Workshops on Wheels
- Training Buffet
- Webinars

## Prepared Staff



- Engage membership
- Spread the word about BAYWORK
- New digital and physical collateral

## Strengthening BAYWORK





# HIGHLIGHTS – STACKABLE INTERNSHIPS



- ❖ 22/23 Stackable Internship Pilot
  - Wastewater operators at EBMUD, Delta Diablo, Central San
  - 6 candidates
  - <960 hours at each of two agencies; provides enough hours to obtain WWTP Grade I license (drinking water: would qualify for T3/D3)
- ❖ Goals for 23/24:
  - 2<sup>nd</sup> cohort in East Bay
  - 1<sup>st</sup> cohort in North Bay—Veronica Siwy/Town of Windsor and Santa Rosa Junior College part of discussions
  - Streamline challenges of hiring/HR concerns, employer of record

# HIGHLIGHTS – INSTRUMENTATION APPRENTICESHIP

- ❖ Valley Water taking lead on registering an Instrumentation Apprenticeship through the State
  - Aiming to hire an apprentice by January 2024



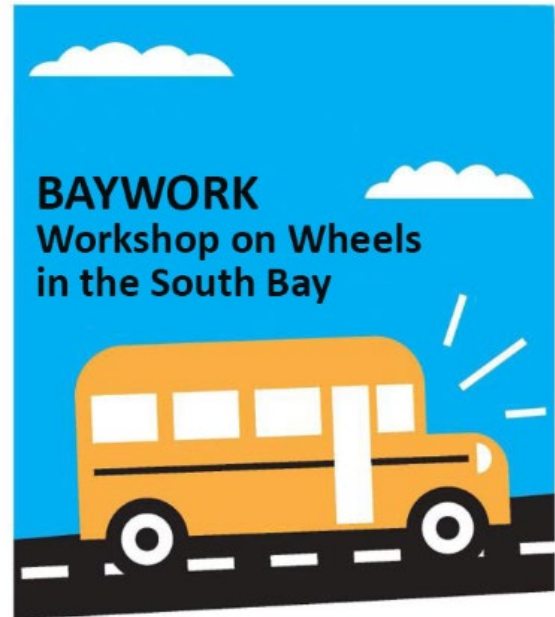
# HIGHLIGHTS – CROSS-AGENCY MENTORING PROGRAM (CAMP)



- Investigating using commercially-available Chronus software, designed for professional mentoring
- Matches mentors and mentees
- Small cost to employer agency for Chronus license fees
- Mentoring across BAYWORK agencies allows for expanded perspectives and broader experience
- **Fall 2023** – smaller, limited pilot with a few agencies
- **Spring 2024** – seeking to expand more broadly across BAYWORK

**Seeking both mentors and mentees for Spring 2024 program!**

# LEARNING OPPORTUNITIES



## Workshops on Wheels

- Knowledge sharing between peer agencies
- Visit ~4 agencies in a close geographical location
- Hear presentations and tour facilities

May 29, 2019



## BAYWORK Training Buffet

- mini-conference
- Variety of technical, professional development, and workforce development sessions
- Free for BAYWORK signatory agencies

## BAYWORK TRAINING BUFFET 2019

East Bay Municipal Utility District  
375 11th Street  
Oakland, CA 94607

November 14, 2019

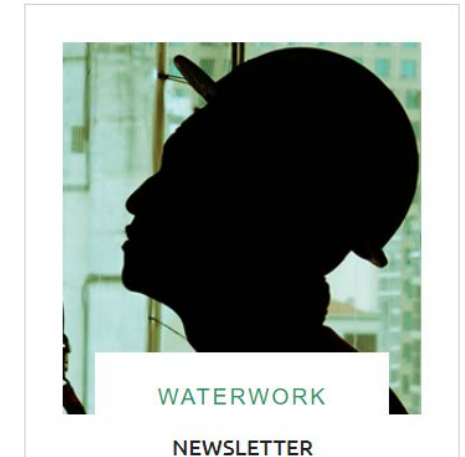
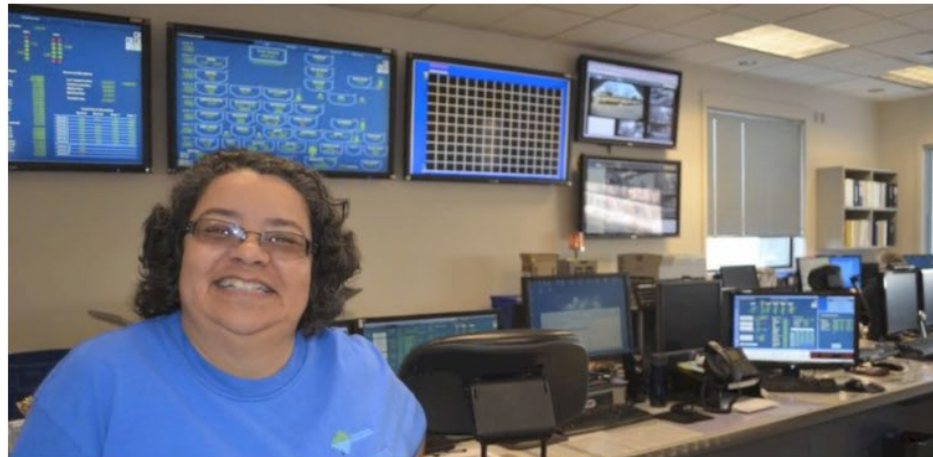


# BAYWORK WEBSITE




❖ <https://baywork.org>

❖ Career profiles and interviews for different mission-critical job classifications



# USEFUL RESOURCES (FREE!)

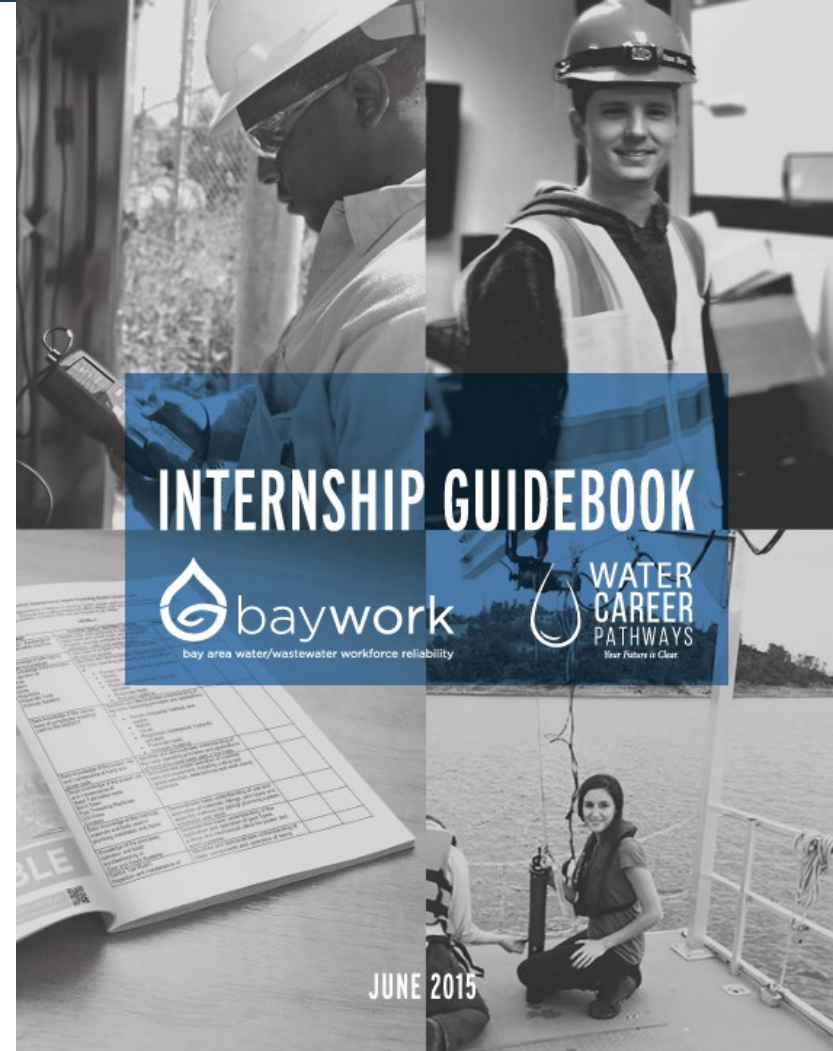


## **DIGITAL COMPETENCY IN THE WATER INDUSTRY**


**Skills Required for Mission-Critical Jobs**


**JVS** WORK TRANSFORMS LIVES  baywork  
bay area water/wastewater workforce reliability

Cheryl K. Davis, Author



## **INTERNSHIP GUIDEBOOK**

 baywork  
bay area water/wastewater workforce reliability

 WATER CAREER PATHWAYS  
Your Future is Clear

**JUNE 2015**



# BAY AREA CONSORTIUM FOR WATER & WASTEWATER EDUCATION

# BACWWE BACKGROUND

- ❖ Mission: Increase the number of qualified workers for water/wastewater
- ❖ Operating for 15± years as a BACWA Program of Special Benefit – “Water/Wastewater Operator Training”
- ❖ 22 Supporting Agencies (drinking water and wastewater) pay annually into a fund that supports education of water/wastewater workers
- ❖ Dues vary depending on treatment plant capacity (\$3k - \$12k per year)
- ❖ Original focus on:
  - Water/wastewater treatment plant operators
  - Distribution system operators
  - Collection system personnel



# BACWWE 2.0



W/WW



W/WW



W/WW



LANEY COLLEGE

Mechanical  
Tech

LOS MEDANOS COLLEGE

E&ITech



EVERGREEN VALLEY COLLEGE

W/WW



Students Take  
On-Campus Courses

- *Students reimbursed for fees and textbooks upon passing course*
- *Low \$/student*

## Concerns:

- Low enrollment in scholarship
- Many other sources of community college funding
- College courses are still relatively well-attended

# THE CHALLENGE

- ❖ BACWWE program has not been very impactful for several years
  - College courses have medium-to-high enrollment without BACWWE support
  - Varying levels of support from college administrators to publicize/promote the program
  - Low turnout for BACWWE scholarships
  - A lot of other money is available for community college education (California Community College Promise Grant, etc.)
  - And yet, agencies appear to still have difficulty filling positions

# WHAT WE'RE EXPLORING....

## EDUCATION

- Financially support students at community colleges in mission-critical job training programs
  - Operators
  - Electricians/Instrument Techs
  - Mechanics
- Technical certification advancement and staff development

## SUPPORTING JOBS

- Support internship development/creation
  - Assessment of Bay Area utility internship availability, gap analysis
  - Creation of minimum qualifications for interns that agencies could adopt
  - Facilitate agencies hiring more interns
- Provide stipends to students who accept volunteer internships
- Develop mentoring program to help trainees find a path from school to jobs in water/wastewater

# WHAT ELSE WE'RE EXPLORING....

## OUTREACH

- Outreach to high school guidance counselors
- Outreach to vocational training programs and adult learning centers (e.g., Castro Valley Adult School)
- Outreach to veterans' groups
- Outreach to unions to see how training efforts can be aligned
- Develop new messaging framework: **environmental stewardship** and **sustainability** to resonate with the next generation

## ADMINISTRATIVE

- Hire a program coordinator
  - Administer scholarship program
  - Outreach
- Increase member engagement
  - "We all have day jobs"
  - Spread the workload to accomplish more

# THANK YOU

[baywork.org](http://baywork.org)

[bacwwe.org](http://bacwwe.org)

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