

A Reliable Workforce for Reliable Water Infrastructure

*Supplemental information to support
CUWA's April 2024 issue brief*

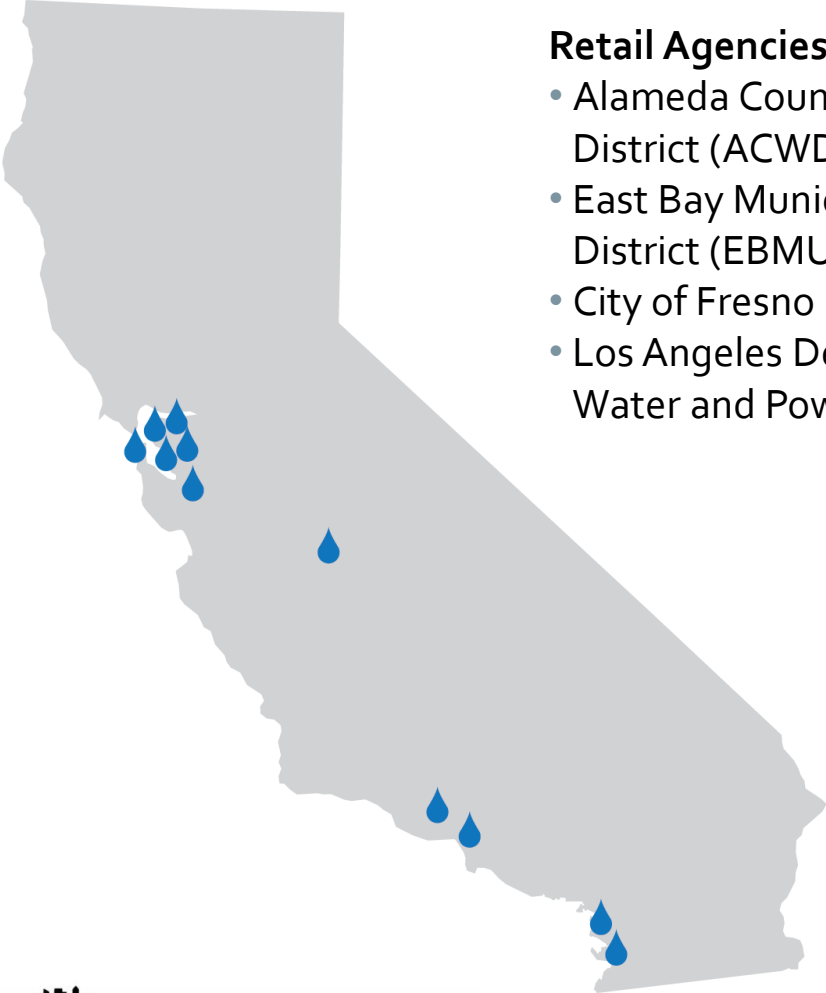


Photo credit: Los Angeles Department of Water and Power



CALIFORNIA URBAN WATER AGENCIES

Providing a unified voice for urban water solutions



Retail Agencies

- Alameda County Water District (ACWD)
- East Bay Municipal Utility District (EBMUD)
- City of Fresno
- Los Angeles Department of Water and Power (LADWP)

Retail/Wholesale Agencies

- Contra Costa Water District (CCWD)
- City of San Diego
- San Francisco Public Utilities Commission (SFPUC)

Wholesale Agencies

- Metropolitan Water District of Southern California (MWDSC)
- Santa Clara Valley Water District (Valley Water)
- San Diego County Water Authority (SDCWA)
- Zone 7 Water Agency (Zone 7)

About CUWA

CUWA's mission is to provide a unified voice for urban water solutions that keep our environment and communities thriving. Established in 1990, CUWA is a non-profit corporation of 11 major urban water agencies that serve drinking water to two-thirds of California's population.

CUWA agencies are committed to supporting the administration's priority of water reliability by delivering safe drinking water and driving actions that prepare communities for climate change.

Working collaboratively to build a reliable workforce

CUWA is proud to partner with ACWA Foundation, CA-NV-AWWA, and CMUA to promote regional and state-wide collaboration on workforce development.



MISSION

To serve all Californians by advancing diversity, equity, and inclusion within the water industry through education, research, and workforce development.

acwa-foundation.org/



MISSION

Lead, educate, and serve the water industry and our communities.

ca-nv-awwa.org



MISSION

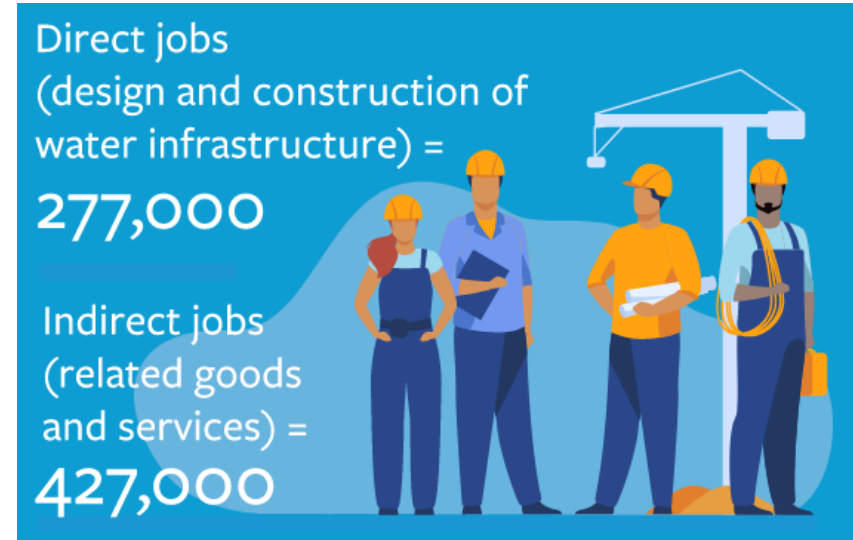
Be a trusted partner and advocate for community owned water, wastewater, and power utilities and their customers.

cmua.org

Investing in infrastructure bolsters the economy

- Agencies are facing staffing shortages while trying to plan for the influx of support needed for future projects.
- [California's Water Supply Strategy](#) acknowledges the need for water reliability investments, and CUWA agencies could collectively achieve two-thirds of the State's new supply target.
- For these projects alone, CUWA agencies are projecting more than 700,000 jobs* will be created over the next 15-20 years to support an estimated \$45 billion in capital investments.

**Job estimate is based on US Water Alliance's "The Economic Benefits of Investing in Water Infrastructure" (2017): Per \$1M investment in water infrastructure, 15.5 total jobs are created.*



Water sector jobs offer a significant opportunity to support California's economy while enhancing the diversity of our workforce.

Understanding the current workforce to inform strategies

Identifying where relative gaps exist between the workforce and the population can inform where strategies can be more effective to increase DEI.



CUWA's collective workforce data was compiled from Equal Employment Opportunity (EEO)* filings common across agencies.



CUWA's collective workforce was compared to California's demographics to reveal where gaps may exist in representation.

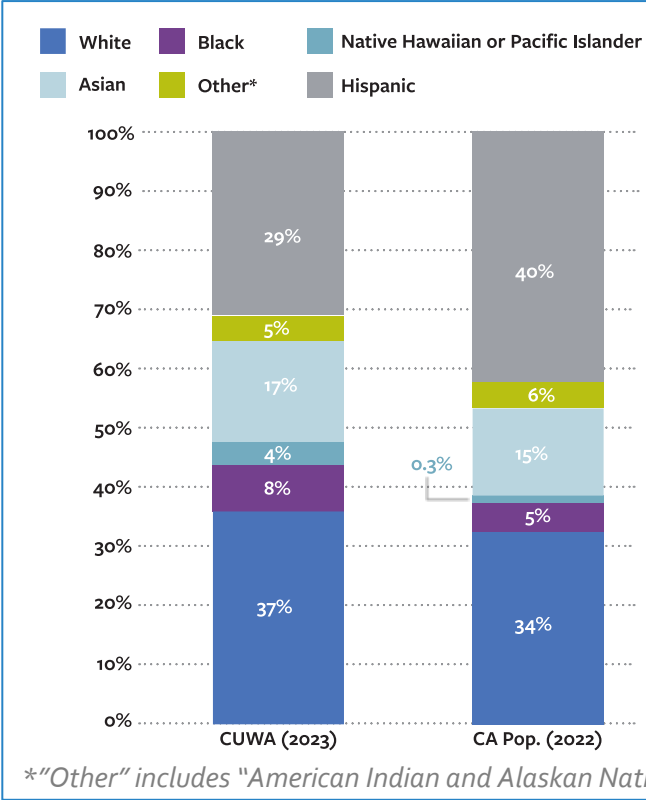
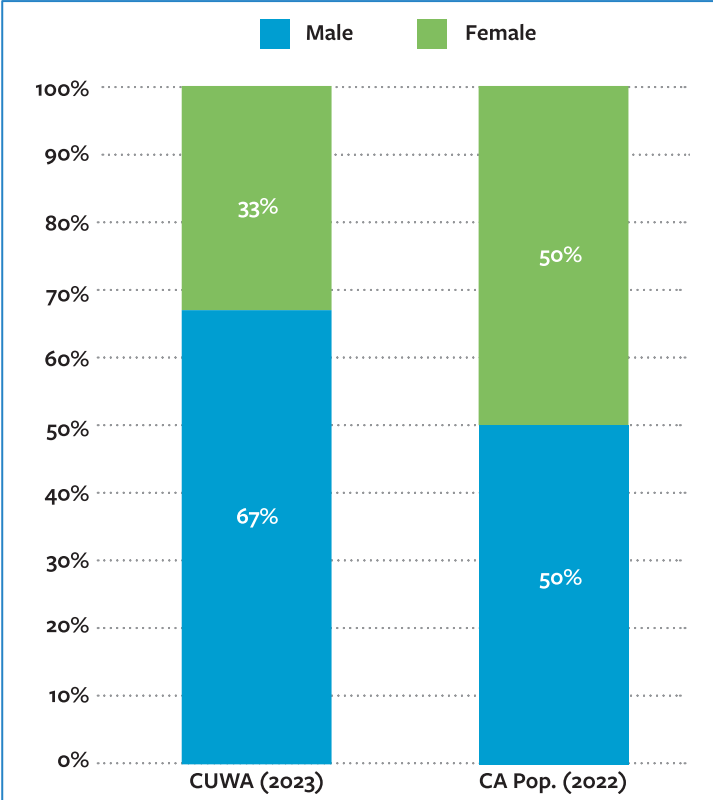


Job titles within the EEO findings were organized into consistent job categories to understand gender and ethnicity representation.

**This includes EEO-1 reporting from private employers and EEO-4 reporting from state and local government entities.*

Comparing CUWA's workforce to CA's demographics

The gaps between California's demographics and CUWA's workforce represent opportunities to recruit and retain diverse talent.



Thoughtfully directing recruitment strategies toward underrepresented groups can support future workforce needs. For example, there is a gap in Hispanic representation as CUWA agencies' collective workforce is only 29% Hispanic while California's overall population is 40% Hispanic.

*"Other" includes "American Indian and Alaskan Native" and "Two or More Races".

Source: CUWA agencies' EEO-1 & EEO-4 filings (2023) and US Census Bureau (2022)

Organizing EEO data to draw meaningful insights

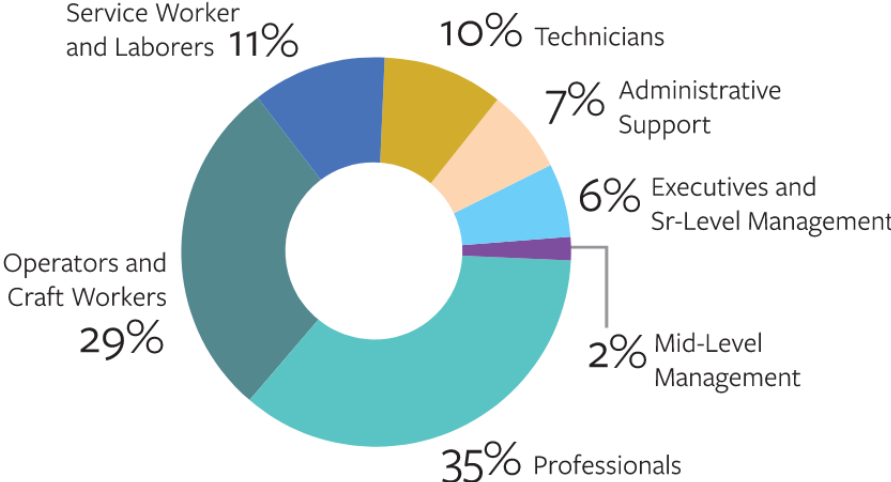
Workforce Job Categories	Examples of Job Titles within Categories*
Executives and Senior-Level Management	General Manager, Assistant General Manager, Director of Finance, Director of Water Resources
Mid-Level Management	Groundwater Resources Manager, Water Resources Manager, Customer Services Manager, Water Production Manager, Principal Engineer, Engineering Manager, IT Manager, Water Quality Manager, Public Relations Manager
Professionals	Accountant, Communications Specialists, Attorney, Chemist, Fisheries Biologist, Business Analyst, Principal Clerk Utility, Executive Assistant, Engineer
Technicians	Associate Engineer, HR Technology
Operators and Craft Workers	Water Treatment Plant Operator, Carpenter, Electrician, Water Utility Worker, Heavy Equipment Operator, Painter, Utility Supervisor, Machinist, Electrician, Water Distribution Supervisor, Water Treatment Supervisor, Plant Inspector, Truck Driver
Services Workers/ Laborers and Helpers	Construction Laborer, Gardener, Utility Laborer, Janitor, Cook, Recreation Area Attendant, Housekeeper
Administrative Support Workers	Water Service Representative, Account Clerk, Customer Services Representative, Receptionist, Buyer

Job titles were grouped into consistent job categories to create a collective dataset.

**Note: table includes an indicative subset of the job titles in each of the categories and not an exhaustive list.*

Using job categories to evaluate future workforce needs

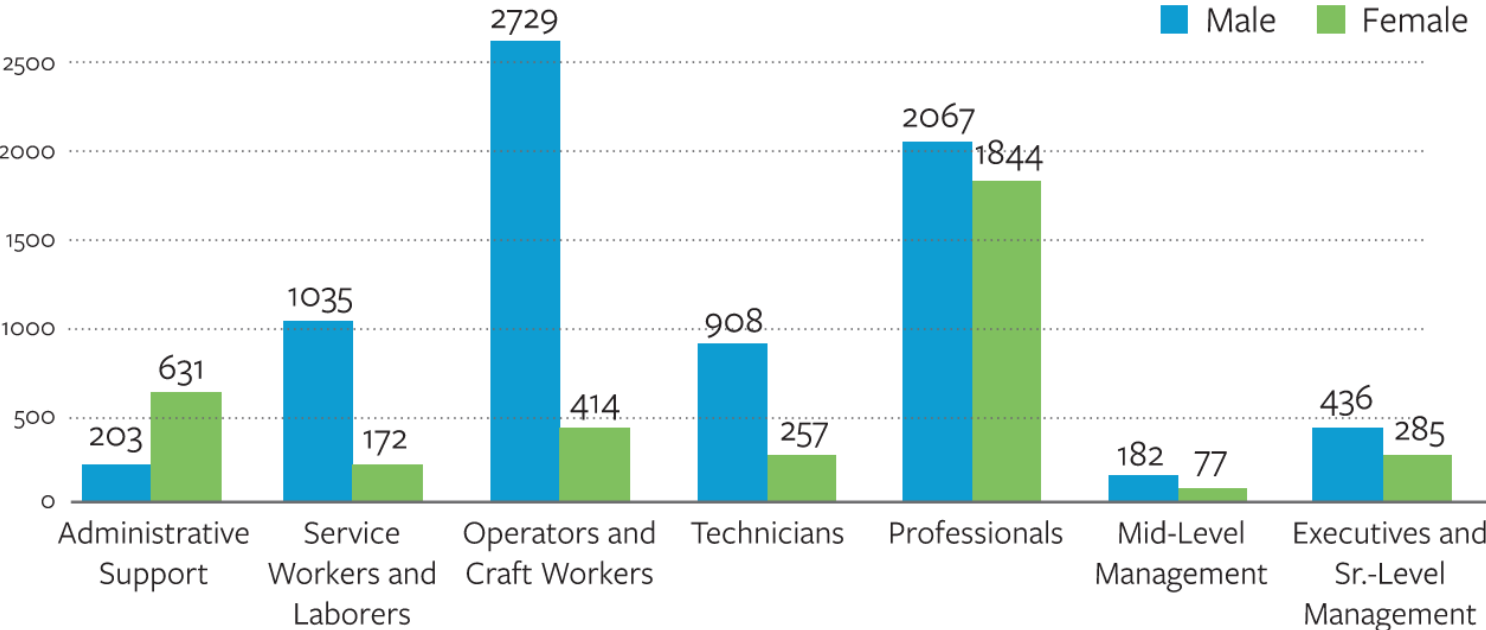
- Understanding the current makeup of job categories can identify both current and future workforce needs.
- In this snapshot of 11,240 workers, the greatest percentage of jobs occurs in the “Professionals” and “Operators and Craft Workers” categories.



Understanding gender and ethnicity representation within these job categories can illuminate where opportunities exist to inform recruiting focus.

Identifying gaps in gender representation to pinpoint focus

There are opportunities to boost representation of women, especially in the “Service Workers & Laborers”, “Operators & Craft Workers”, and “Management” categories.

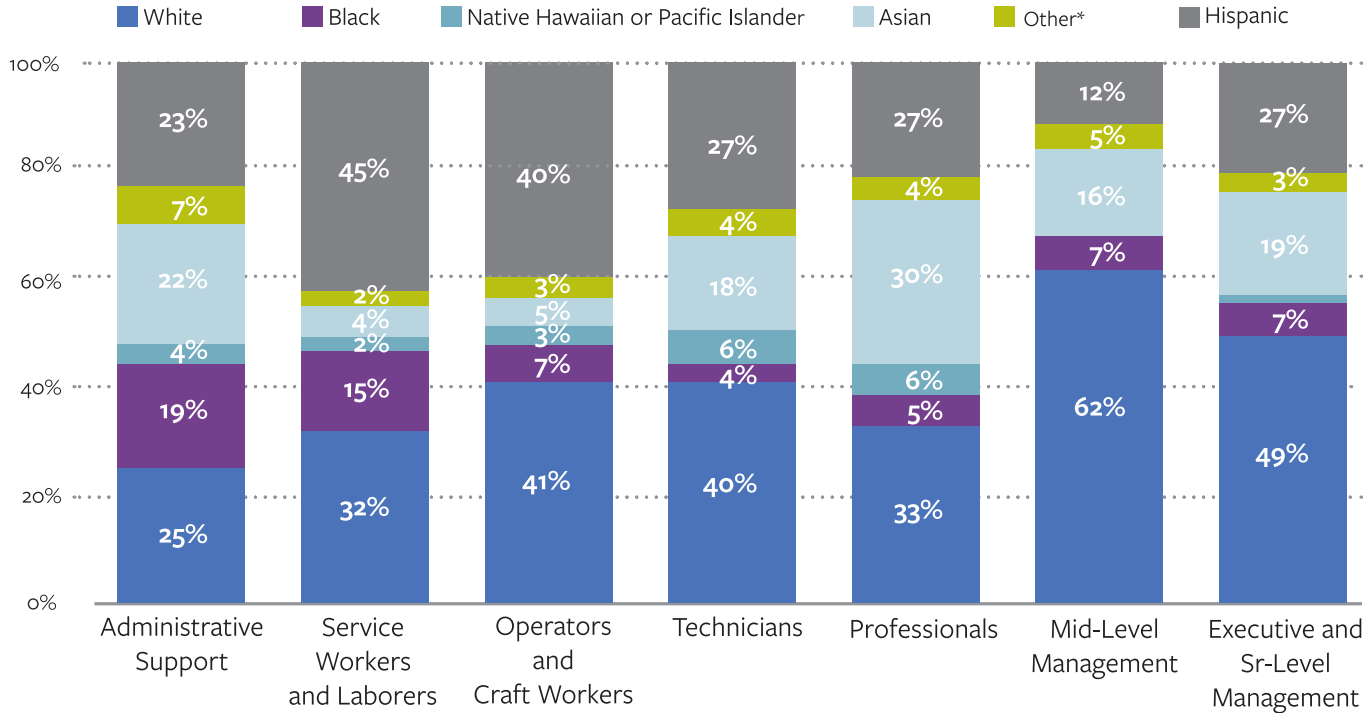


This graph presents data from EEO reporting, which does not reflect categories for non-binary persons.

Targeted mentorship programs, leadership development initiatives, and inclusive policies are crucial to fostering an environment that actively promotes the advancement of women and people of color, addressing the disparity in their representation.

Building trust with a workforce of the community

Having a workforce that mirrors or enhances an agency’s diversity enables a deeper understanding and cultural responsiveness to community needs and creates meaningful economic growth opportunities.



Minorities collectively make up 63% of the workforce, but this representation is not reflected across all job categories. This data provides insight into which categories would benefit most from intentional recruitment and talent development.

*"Other" includes "American Indian and Alaskan Native" and "Two or More Races".

Creating partnerships to achieve collective progress

CUWA agencies are partnering with non-profit organizations that support and strengthen their workforce development programs.



LADWP: IBEW & WINTER



LADWP is partnering with International Brotherhood of Electrical Workers (IBEW) Local 18 on their Utility Pre-Craft Trainee (UPCT) program. The UPCT program provides on-the-job training and mentorship to enable qualification for permanent positions at LADWP or with the City of Los Angeles.

In parallel, LADWP also:

- Hosted a Women's career and wellness expo to expose students to the trades.
- Partnered with Women in Non-Traditional Employment Roles (WINTER) to increase awareness of construction opportunities within the water industry.

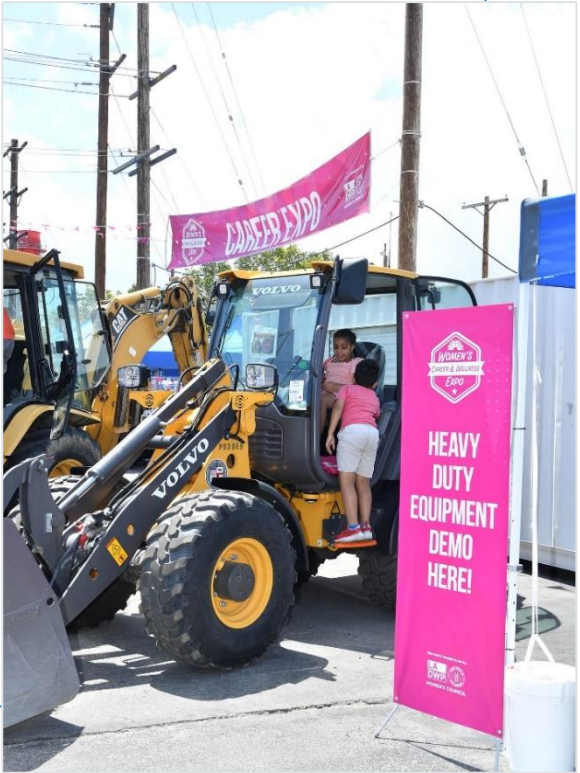


Photo credit: Los Angeles Department of Water and Power

Increasing workforce reliability in the Bay Area



Bay Area Water/Wastewater Workforce Reliability ([BAYWORK](#)) is a network of water and wastewater agencies in the San Francisco Bay Area focused on workforce reliability through regional collaboration. Founded in 2009, BAYWORK shares career opportunities, creates resources, and organizes events open to all Bay region water and wastewater utilities. It currently exists with a volunteer-based model, which requires a robust resourcing strategy for long-term sustainability.

Their events in 2021-2022 include Speed Mentoring focused on women in trades, hosting digital webinars, and partnering with teachers to provide an “inside look” at local water/wastewater agencies. Several CUWA agencies are Signatory Agencies of BAYWORK as shown on the right.

Source: [BAYWORK 2021-2022 Annual Report](#)





ACWA Foundation: Investing in the people in water

The ACWA Foundation is not about the pipes or policies.
It is about the **people in water**...those we serve, those who lead, and those who keep water flowing to the tap.

HOW THE FOUNDATION SUPPORTS THE WATER INDUSTRY

- Improves awareness of strategies to build inclusive, healthy organizations
- Assists industry in attracting, recruiting and retaining the best and brightest for workforce
- Serves as a clearinghouse and provider of DEI training, tools, & best practices
- Offers scholarships to first generation students and connects them to water agencies through internships and mentorships

CA-NV AWWA: Building a diverse and inclusive workforce

With a mission to lead, educate and serve the water industry and our communities, the CA-NV Section engages its diverse volunteers to deliver relevant and innovative education and professional certification opportunities. Over 30 technical committees meet online and in person to share their knowledge and experience.

Student Chapters

fostering strong ties with students interested in water careers



In 2023, \$42,000 in scholarships was distributed to operators, undergraduate and post graduate students

CA-NV AWWA Scholarship Program

Through this program, the Section and its members encourage and support students interested in a career in a drinking water related field. This includes environmental and civil engineers; water, wastewater and recycling treatment plant operators; distribution system operators; chemists; laboratory technicians; biology, ecologists and environmental scientists; mechanical, electrical and plumbing trades; financiers; economists: whatever the role that supports safe drinking water.

CMUA: Training the next generation of workers



CMUA, in partnership with the California African American Water Education Foundation, Water Education for Latino Leaders and Jewish Vocational Service, is implementing the California Water, Wastewater, and Energy Workforce Development Program

- \$4 million grant from the state of California (over three years)
- Designed to uplift and train underrepresented populations in the water, wastewater and energy sectors
- Efforts began June 2023
- Multiple training providers selected thus far
- In summer 2024, the grant will fund a regional consortium in Los Angeles and Orange Counties, similar to BAYWORK and IEWorks

Leveraging proven solutions to replicate local successes

Actions for the state

- Partner with the water industry to elevate workforce opportunities (e.g., CA Workforce Development Board)
- Model a statewide program after BAYWORK with a robust resourcing strategy

Actions for our fellow agencies

- Invest in existing employee development for management roles
- Collaborate with unions
- Develop labor pools from women in trades, veterans, and formerly incarcerated individuals
- Partner with community colleges and other academic institutions
- Provide internships and apprenticeships
- Reach out to students high school aged and younger



**We can build our
workforce of tomorrow
now by investing in the
future of the
communities we serve.**



For more information, visit www.cuwa.org

