



A Reliable Workforce for Reliable Water Infrastructure

CUWA agencies and others nationwide are facing staffing shortages due to retirements and attrition. At the same time, agencies are planning for the personnel needed to build and operate critical water infrastructure investments. Tackling this workforce challenge through a diversity, equity, and inclusion (DEI) lens provides opportunity to increase the talent pool with historically underrepresented groups.

INVESTING IN INFRASTRUCTURE BOLSTERS THE ECONOMY AND WORKFORCE

Ongoing investments are needed to maintain reliable water delivery into the future, including renewal of existing infrastructure, treatment plant improvements, and new water supply, storage, and conveyance projects. These capital investments also serve as a catalyst for economic growth by generating employment opportunities and fostering local business development. As the water industry adapts to emerging challenges, there are opportunities for innovation and entrepreneurship, further advancing job growth while addressing an essential need: water.

WORKFORCE NEEDED TO MAINTAIN CALIFORNIA'S WATER SUPPLY

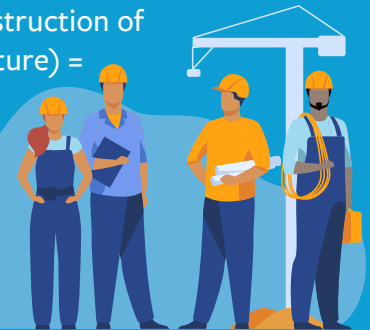
California's [Water Supply Strategy](#) acknowledges the need for water reliability investments as the state adapts to a hotter, drier future, setting ambitious targets for new water supply and storage projects. CUWA agencies, who collectively serve two-thirds of the state's population, could achieve a significant portion of California's supply and storage goals through future planned projects. These projects alone could create more than 700,000 jobs over the next 15-20 years, to support an estimated \$45 billion in capital investments. While a portion of these jobs would be filled by the current headcount, a large number would need to be filled by new hires. Many will also be needed outside the agency (e.g., new positions with consultants and contractors).

Direct jobs
(design and construction of
water infrastructure) =

277,000

Indirect jobs
(related goods
and services) =

427,000



**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.*

LEVERAGING DEI AS A TOOL TO SUPPORT FUTURE PROJECTS

Water supply work, as a component of needed infrastructure, can leverage DEI as a strategy to fill resourcing gaps while also supporting economic growth and public health.

As agencies work to fill these jobs, there can be an intentional emphasis on recruiting with a DEI focus to close the gaps that exist in current demographics.

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

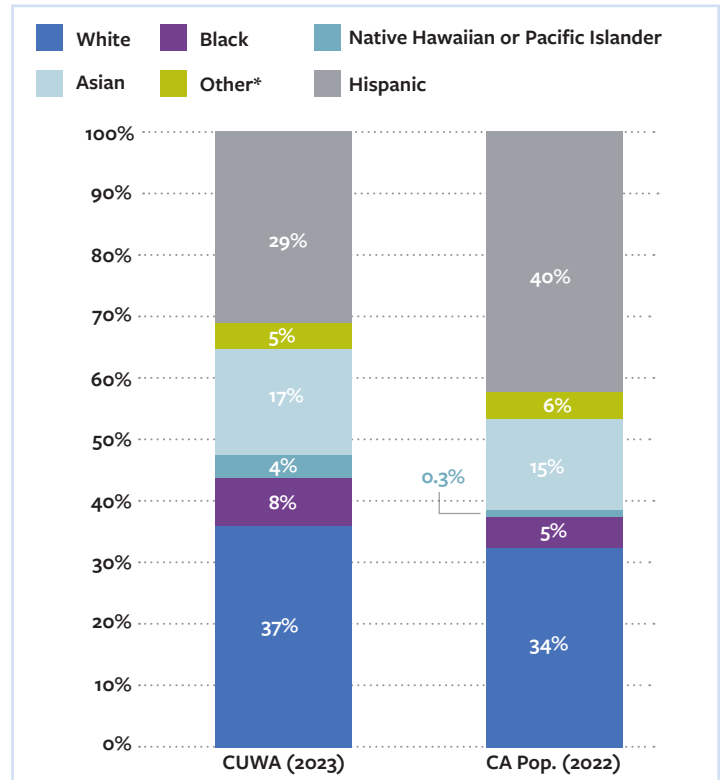
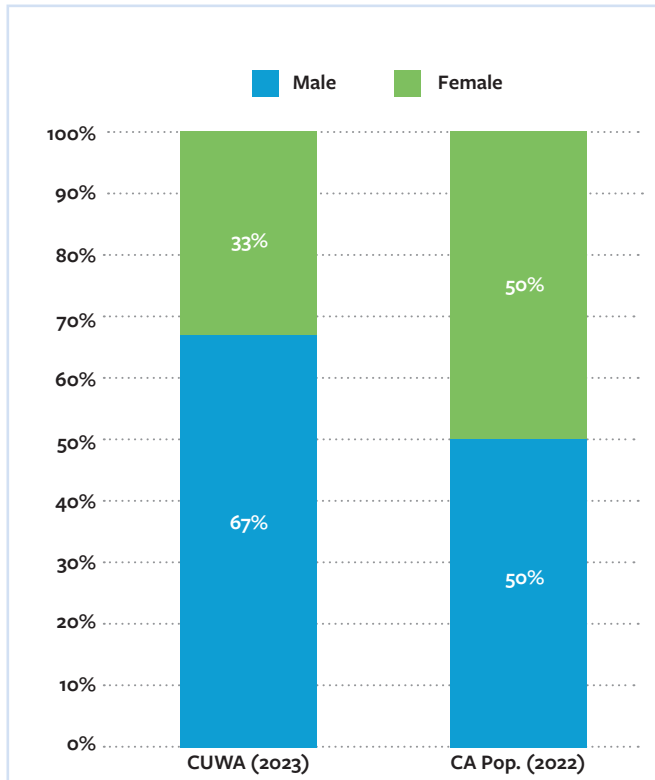
About CUWA

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.

For more information, visit [cuwa.org](https://www.cuwa.org)

Understanding the Current Workforce to Inform Strategies

A better understanding of the current workforce landscape can inform strategies to build a robust resourcing pipeline. This landscape was derived from CUWA-compiled workforce data per Equal Employment Opportunity (EEO) filings common to all agencies. The aggregated data is compared to 2022 California demographics collected by the US Census Bureau, which reveals where gaps in representation may exist. Given that CUWA agencies serve two-thirds of California’s population, this comparison provides valuable insight into statewide opportunities.



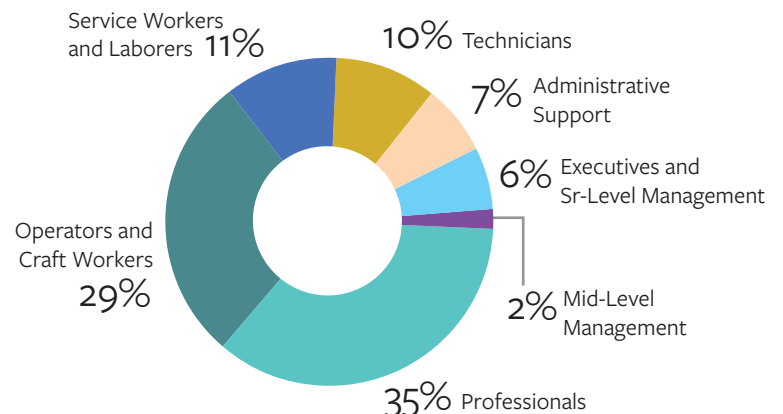
* "Other" includes "American Indian and Alaska Native" and "Two or More Races".

As shown from the data, there are gaps between the CUWA workforce and California demographics that serve as 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 29% Hispanic while California’s overall population is 40% Hispanic.

USING JOB CATEGORIES TO EVALUATE FUTURE WORKFORCE NEEDS

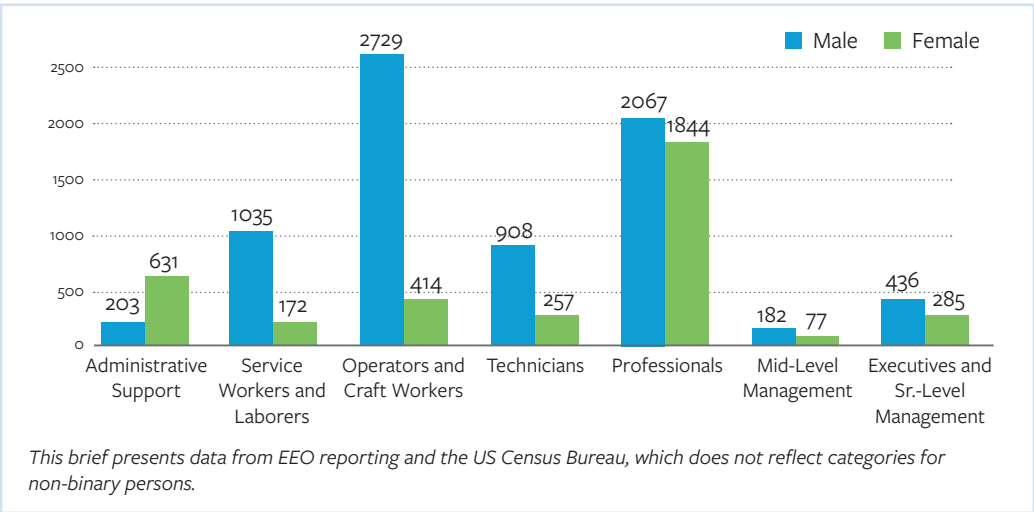
Understanding the current makeup of job categories identifies both current and future workforce needs. In this snapshot of 11,240 workers, the greatest percentage of jobs occur within the "Professionals" and "Operators and Craft Workers" categories. Diving into the gender and ethnic representation within these job categories can illuminate where the opportunities exist to inform recruiting focus.



IDENTIFYING GAPS IN GENDER REPRESENTATION TO PINPOINT FOCUS

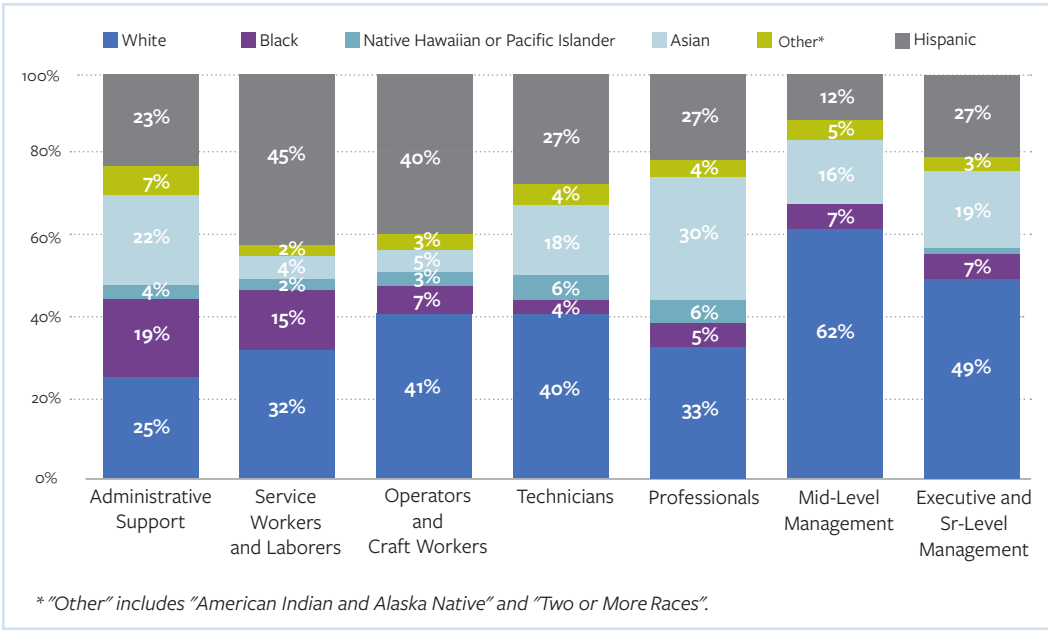
In 2018, [Brookings Institute](#) noted that women were 14.9% of the water workforce. While CUWA is showing stronger representation at 33%, the data illuminates that there are more opportunities. For example, there is a significant disparity between men and women in “Operators and Craft Workers” and “Service Workers and Laborers”. This has led agencies to focus on female recruitment into trades, like LADWP’s efforts described on page 4. Women are strong in the “Professionals” category at 47%, but that representation drops to 30% in Management (i.e., “Mid-Level Management” and “Executives and Sr-Level Management”). This emphasizes the opportunities of not just recruiting with a DEI lens, but also supporting advancement of women already within the industry.

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



BUILDING TRUST WITH A WORKFORCE OF THE COMMUNITY

Having a workforce that mirrors or enhances the service area’s diversity is valuable as it enables a deeper understanding, empathy, and cultural responsiveness to meet community needs. It also creates meaningful economic growth opportunities for community members. Currently, the collective CUWA agency workforce does not reflect the communities served as well as it could. White workers are overrepresented in “Executive and Sr-Level Management” and “Mid-Level Management” as shown in the graph below. When certain groups appear more in leadership level positions than they do in the overall workforce, it helps us recognize the opportunity to focus greater attention on recruitment, training, and development of minorities.



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

Creating Partnerships to Achieve Collective Progress

CUWA agencies are partnering with non-profit organizations to support and strengthen their workforce development programs. Some examples include engaging organizations that focus on outreach, recruitment and engagement of minority and underrepresented groups, organizations that network with Historically Black Colleges and Universities (HBCUs), developing STEM programs for minority and underrepresented communities, engaging with women in trades, and leveraging employee resource groups to connect with their university diversity groups on the local level.

Currently, much of this activity is localized and each agency must seek out individual agreements with partners. [BAYWORK](#) is an example of a successful regional workforce collaboration in the Bay Area; however, it requires a robust resourcing strategy for long-term sustainability. The Inland Empire is replicating this model through IEWORKS, but other areas of the State have not yet developed such regional partnerships.

CUWA'S CALL TO ACTION

TO 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

TO 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.

LADWP PARTNERSHIPS HAVE INCREASED FEMALE REPRESENTATION IN TRADES

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 for skills that can be applied towards 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 provide exposure to students within the LA Unified School District system to learn about trades and interact with equipment.
- Partnered with the non-profit organization WINTER (Women in Non Traditional Employment Roles) to increase awareness of opportunities within the water construction industry.

As a result of these efforts, female participation in the UPCT program has increased an average of 4x per class since the beginning of 2023. LADWP plans to continue to build upon these efforts in the future.



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

