



Aurora Water

Water Conservation in Low-Income Households

Project at a Glance

Utility Overview

- Utility: Aurora Water
- Location: Aurora, CO
- Population served: 381,057
- Service area: 162 square miles

Challenges

- Low participation from low-income households in rebate programs.

Solution

- Partner with non-profit, Mile High Youth Corps, to implement the Low-Income Water Efficiency Program (LIWEP).

Costs and Funding Sources

- Total project cost: \$242,335.88
- Funding sources: Aurora Water Operating Budget

Benefits



Provides water conservation resources and fixtures to low-income households



Provides training and education to more than 200 MHYC corpsmembers annually



Over 500 toilets, 150 showerheads and 300 faucet aerators installed in low-income households



Saved an estimated 21.1 million gallons (~65 acre-feet) since 2012



Encourage water efficient behaviors and water savings

BACKGROUND

As the third largest city in Colorado, Aurora is located just east of the state's capital of Denver. The city reaches into three different counties and has a diverse population of 381,057 (15.35% poverty status; 38.8% non-white; 19.8% foreign born) that is expected to double in 30-40 years. With a mild and dry climate, Aurora receives approximately 15 inches of rain annually, less than half of the U.S. average of 39 inches. In a naturally water constrained region, the city has constructed a diversified water resources portfolio and robust water system, with water traveling up to 180 miles from three different water basins. Through a strong commitment to conservation, Aurora promotes the efficient use of water resources through several programs, projects and education.

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CHALLENGE

Like many communities along Colorado's Front Range, Aurora has a rapidly growing population. Meeting future water demands requires not only additional acquisition, but wise use of its existing water supply through conservation. To educate and encourage conservation efforts, the city has developed several conservation programs for residents, including audits, rebates and classes. Additionally, the city is actively engaged in updating local and state regulations to promote greater water savings, as well as encouraging changes in local regulations to promote water savings. A review of which communities and customers were being serviced by these programs showed that there was low participation from low-income households due to financial constraints that cannot be met through a traditional cost reimbursement rebate program. Aurora needed to create a program that would overcome the various obstacles of participation for low-income households, such as a potential lack of financial stability to purchase efficient products up-front, prohibitive up-front installation costs ineligible for rebates, and a possible lack of trust in government.

SOLUTION

The Aurora Water Low-Income Water Efficiency Program (LIWEP) was created in 2011 to help low-income households become more water efficient by replacing old fixtures with new, high efficiency models. Instead of conducting this program entirely in-house, Aurora partnered with the non-profit, Mile High Youth Corps (MHYC). As an Americorp grantee, MHYC was established in 1992 to give youth, ages 16 to 24, a chance to earn an income and learn hands-on job skills while serving in their communities. The LIWEP program would utilize the partnership between the two organizations to serve low-income customers with Aurora providing in-home assessments of inefficient fixtures while MHYC would install the fixtures for eligible customers. The partnership with MHYC was a win-win for both the city and the community as there

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was greater flexibility within the program regarding staffing needs and scheduling, as well as providing on-the-job training and education for MHYC corpsmembers and an essential program for low-income households.

The initial pilot of LIWEP in 2011 was launched with minimal marketing for eligible customers with a household income of 80% or less than Aurora's median household income. The application process required financial verification from customers, including tax and bank documents as well as mortgage statements. Applicants must also own their home, as renters are ineligible. However, customers who are renters are informed that their landlords can apply for our toilet rebate program to take advantage of the savings. Also, if the renter is responsible for paying the water bill and is having financial hardships, they reach out to participate in the Aurora Water Cares program bill assistance program

In the first year, 142 customers applied and 36 were approved to participate. Program participants were eligible to receive a replacement of up to two 3.5 gallons per flush (gpf) for two 1.28 gpf toilets, as well as up to two water-efficient showerheads and three faucet aerators.

The Low-Income Water Efficiency Program fully launched in 2012. During this year, changes were made to the median income requirements at the request of Aurora's Citizens' Water Advisory Committee from 80% to 60% based on Housing and Urban Development Income Limits; for example, per 2019 standards, a household of 2 with an annual income of \$43,200 or less would qualify. In 2018, the income level was \$44,580. Aurora also increased marketing to reach the low-income communities, utilizing direct mail and printed collaterals for its neighborhood liaisons, which help residents connect to valuable information, access services and programs discover community resources and develop self-reliance through capacity-building.

In 2013, Aurora and MHYC incorporated the use of Colorado's Low-Income Energy Assistance Program (LEAP) database for income qualifications and outreach. This allowed Aurora customers who were LEAP recipients to automatically become income-qualified for the LIWEP. As a result, staff review, and approval time dramatically decreased and increased the outreach base for the program. Other program changes include newly installed toilets were changed to 0.8 gpf from 1.28 gpf in 2016 and eligible old toilets changed from 3.5 gpf to 1.6 gpf in 2020. Since 2012, 339 residential and commercial customers have participated in the program.

RESULTS

Water Resource Benefits

Since the inception of LIWEP, over 500 toilets, 150 showerheads and 300 faucet aerators have been installed in low-income households. The program continues to adapt and grow to address challenges for success in the future, such as market saturation of eligible homeowners, decrease in homeownership versus an increase in renters and effective marketing strategies. Aurora and Mile High Youth Corps continue to work together to promote and increase the awareness and success of the Low-Income Water Efficiency Program. In addition, Aurora's overall water conservation education programs, the utility aims to target homeowners and renters alike by, for example, improving outreach efforts.

Environmental benefits

Aurora's water supply is highly dependent upon surface water and utilizes its conservation program to help offset its water acquisition program, since the cheapest water available is the water you already own. By increasing customer efficiency through low-flow fixtures installation, Aurora's future acquisition needs are reduced, reducing the potential environmental impact of further diversions from rivers and streams.

Water resources benefits

The LIWEP not only provides highly efficient water fixtures to low-income households, but also education on how to change behavior to use water more efficiently. Through this combination, the customers can effectively lower their water bills and conserve water for future use. Since its inception in 2011, the LIWEP has saved over approximately 21.1 million gallons of water. With these savings, Aurora has been able to further defer the purchase of new water resources.

Economic benefits

Not only has the LIWEP saved millions of gallons of water each year, it has saved customers and Aurora money in the long run. For the city of Aurora to purchase water, the cost ranges from \$16,000 to \$24,000 per acre-ft (an acre foot of water is 326,000 gallons, enough to meet the annual demands of approximately 3 households in Aurora).



Social benefits

In addition to the monetary savings that uplift communities and conserve previous resources, Mile High Youth Corps gives youth ages 16 to 24 a chance to earn an income and learn hands-on job skills while serving their communities and safeguarding the environment. Today, the MHYC engages more than 200 corpsmembers every year through several comprehensive programs that integrate paid work experience on community service projects with leadership development, career and college exploration and education.

For more information about the Low-Income Water Efficiency program, check out Aurorwater.org. For more information about Mile High Youth Corps, check out MileHighYouthCorps.org.

