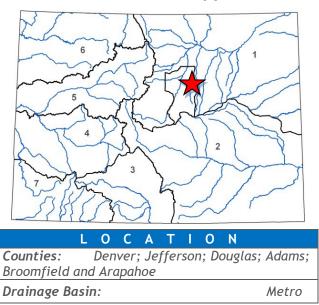


# Single Family Home Water Audits & Installs Year One, Inc. DBA Mile High Youth Corps

September 2023 Board Meeting



## Water Plan Grant Application

DET	AILS
Total Project Cost:	\$391,813.55
Water Plan Grant Request:	\$183,201.50
Recommended amount:	\$183,201.50
Other CWCB Funding:	\$0
Other Funding Amount:	\$208,612.05
Applicant Match:	\$0
Project Type:	Construction/Implementation
Project Category: Conser	rvation and Land Use Planning
Coloradans impacted by inco into land use planning; 2 engagement activity; \$410 sa	vings per household (\$209,100 gallons of water saved per

Mile High Youth Corps (MHYC) addresses the educational and employment needs of Denver's youth while connecting them to their community and the outdoors. They have requested funding for their Energy & Water Conservation (E&W) Program to employ young adults (Corpsmembers) to provide 510 water-efficiency service visits to low-income households over 18 months. Service visits will include an assessment of the household's water and energy usage and the replacement of inefficient water fixtures and toilets with low-flow fixtures and ultra-high efficiency toilets. Leveraged funding from other E&W program partners will also allow for the installation of LED lighting and programmable thermostats to further reduce a household's energy consumption.

The goals of the project are to:

- 1.) Complete 510 service visits in the Denver Metro area for homes qualified as "low-income" using 60% State Median Income ("SMI"; set by US Dept. of Health and Human Services July 2022, updated on annual basis)
- 2.) Assess existing water fixtures and usage, replace inefficient fixtures with low-flow fixtures and ultra-high efficiency toilets, and conduct conservation education and behavioral coaching during each service visit.
- 3.) Install an estimated 410 ultra-high-efficiency toilets (UHETs).
- 4.) Track conservation totals from installs including client water savings (gal), water heating estimates (Therms), household financial savings (\$), and low efficiency toilets recycled. Additional conservation totals for energy installs (lighting, thermostats) will also be tracked.

Match funding has been secured through Denver Office of Non-Profit Engagement, City of Westminster, City of Lakewood, and Energy Outreach Colorado.

Funding Recommendation: This project is recommended for full funding of the \$183,201.50 requested.



## **Colorado Water Conservation Board**

# Water Plan

#### Water Project Summary

Name of Applicant Name of Water Project	Year One, Inc. DBA Mile High Youth Corps Single Family Home Water Audits and Installs	
Grant Request Amount		\$183,201.50
Primary Category		\$183,201.50
Conservation & Land Use Planning		
Total Applicant Match		\$0.00
Applicant Cash Match		\$0.00
Applicant In-Kind Match		\$0.00
Total Other Sources of Funding		\$208,612.00
Denver Office of Non-Profit Engagement		\$98,717.00
City of Westminster		\$63,487.00
City of Lakewood		\$23,208.00
Energy Outreach Colorado		\$23,200.00
Total Project Cost		\$391,813.50

Applicant & G	rantee Information	
Name of Grantee: Year One, Inc. DBA Mile High Youth Mailing Address: 1801 Federal Bouldevard Denver CO FEIN: 841,182,631	•	
Organization Contact: Colleen Wallace Position/Title: Phone: 7209740500 xt 544	Email: grants@mhyc.net	
Organization Contact - Alternate: Antonio Barreiro Position/Title: Phone:	Email: antoniob@mhyc.net	
Grant Management Contact: Colleen Wallace Position/Title: Phone: 7209740500 xt 544	Email: grants@mhyc.net	
Description of Grantee/Applicant		

#### **Description of Grantee/Applicant**

Mile High Youth Corps addresses the educational and employment needs of Denver's youth while connecting them to their community and the outdoors.

Type of Eligible Entity

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### Public (Municipality)

- Ditch Company
- Private Incorporated
- Private Individual, Partnership, or Sole Proprietor
- Non-governmental Organization
- Covered Entity
- Other

## **Category of Water Project**

Agricultural Projects
Developing communications materials that specifically work with and educate the agricultural community on
headwater restoration, identifying the state of the science of this type of work to assist agricultural users
among others.
Conservation & Land Use Planning
Activities and projects that implement long-term strategies for conservation, land use, and drought planning.
Engagement & Innovation Activities
Activities and projects that support water education, outreach, and innovation efforts. Please fill out the
Supplemental Application on the website.
Watershed Restoration & Recreation
Projects that promote watershed health, environmental health, and recreation.
Water Storage & Supply
Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging
existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those

Location of Water Project		
Latitude	39.731700	
Longitude	-105.022500	
Lat Long Flag	Default/Proponent headquarters: If the location cannot be defined with flags above, use	
	location of project proponent headquarters	
Water Source	N/A	
Basins	Metro	
Counties	Denver; Jefferson; Douglas; Adams; Broomfield; Arapahoe	
Districts	2-South Platte: Denver Gage to Greeley; 7-Clear Creek; 8-South Platte Cheesman to	
	Denver Gage	

projects identified in basin implementation plans to address the water supply and demand gap.

#### Water Project Overview

Major Water Use Type Type of Water Project Scheduled Start Date - Design Scheduled Start Date - Construction Description

Municipal Construction / Implementation 9/1/2023

Mile High Youth Corps' Energy & Water Conservation (E&W) Program will employ young adults, ages 18-24, to provide 510 water efficiency service visits to low-income households over an 18-month period. Service visits will include a robust assessment of each household's water and energy usage and the replacement of inefficient water fixtures with ultra-high-efficiency toilets, faucet aerators, and high efficiency showerheads. Leveraged funding from other E&W program partners will allow for the installation of LED lighting and programmable

thermostats to further reduce a household's energy consumption. Outdated, inefficient materials within a home lead to higher water and energy consumption and financial drain for low-income households. Installing new, efficient devices immediately reduces consumption and monthly expenditures. CWCB funds will be used to support 300 service visits and 200 toilet installs.

Corpsmembers will work on small crews while gaining the customer service skills and technical training necessary for careers in "green" industries. Corpsmembers will provide one-on-one client education and coaching for conservation behavior and act as a community resource agent during each visit. Based on assessment findings and personal need, Corpsmembers will provide information and referrals to outside agencies for weatherization and HVAC upgrades, bill assistance, and other health and human services connections.

MHYC provides Corpsmembers with hands-on experience and greater knowledge and understanding of the environmental issues facing their community and the planet. In 2022, MHYC strengthened E&W program Corpsmember workforce readiness training by offering an array of "green industry" recognized certificates. This programming includes certificates and trainings in water resource management and testing.

Corpsmembers are enrolled in AmeriCorps, earn a bi-weekly stipend, and earn post-secondary education scholarships upon completion of their service term. MHYC offers young adults a unique opportunity for career development while serving their local community. Communities and the environment benefit from Corpsmembers' work through improved quality of life, increased conservation skills, and utility cost-savings.

#### Measurable Results

New Storage Created (acre-feet) New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive Existing Storage Preserved or Enhanced (acre-feet) New Storage Created (acre-feet) Length of Stream Restored or Protected (linear feet) Length of Pipe, Canal Built or Improved (linear feet) \$66,990 Efficiency Savings (dollars/year) Efficiency Savings (acre-feet/year) Area of Restored or Preserved Habitat (acres) Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet) 1,530 Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning 250 Number of Coloradans Impacted by Engagement Activity Other Estimated \$410 savings in upgraded efficient materials per household (\$209,100 total) Average of 27,077 gallons of water saved annually per household (13.8 million gallons total annually)

## Water Project Justification

Colorado's current population of 5.8 million is projected to increase to almost 9 million people by 2050. One of the overall themes highlighted in the Colorado Water Plan is the importance of conserving the state's natural resources through action, including increasing public awareness and engagement. CWCB states on page 4 of the Water Plan Executive Summary that a main difficulty is "Developing a statewide conservation ethic that recognizes the need to work within Colorado's naturally arid environment, increases the understanding of conservation practices, and reduces wasteful behavior." The Colorado Water Plan goal of "Education, Outreach, and Innovation" sets a measurable objective to "Engage Coloradans statewide on at least five key water challenges (identified by CWCB) that should be addressed by 2030."

As noted on the Water Information Program (WIP) website, "energy production requires an abundant, predictable, and reliable source of water", and "the electric industry is second only to agriculture as the largest

user of water in the United States." According to WIP, "it has been estimated that water use can be reduced by more than 40% over business as usual by simply incorporating more conservation, efficiency, and renewable energy alternatives. That equates to 82 billion gallons of saved water or 252,000 acre-feet per year." Launched in 2006, MHYC's Energy & Water Conservation (E&W) program provides low-income residents of Denver with an array of services that lower utility bills while reducing energy and water consumption. Over the last five years alone, the E&W program has retrofitted over 5,800 low-income residential units and non-profit facilities, installing over 1,600 ultra-high efficiency toilets (UHETs), conserving over 20 million gallons of water annually, and providing over 40 million kWh in lifetime energy savings. (Xcel Energy Calculator). A reduction in household consumption directly impacts the financial stability of E&W clients. The burden of monthly utility bills is more acute for residents living at or below 200% of the Federal Poverty line (comparable to 60% CO State Median Income), and investment in efficient home fixtures may be cost prohibitive to these individuals. The E&W program enables low-income households (60% SMI) to upgrade their homes, reduce household demand for utilities, and realize savings on monthly energy bills. These savings are especially

A central component of MHYC's E&W program is a focus on educating clients and the community on conservation and resource saving efforts. MHYC's E&W program participants, called Corpsmembers, work with clients one on one in their homes to engage in conversation about resource stewardship and behavioral changes on topics including water waste during household activities (dishwashing, laundry, hygiene etc.). MHYC has found that clients are interested in reducing their environmental impact, but do not have the resources or awareness of energy and water savings techniques to do so. Corpsmembers deliver tangible household upgrades alongside personalized education to sustain household efficiency.

important in times of high inflation and a rising cost of living in Denver Metro communities.

In 2023, alongside Denver's Climate Action, Sustainability & Resiliency (CASR) Office, MHYC launched a new initiative called the Community Climate Ambassador program. This project aims to deepen the E&W program's connection to neighborhoods most at risk for water scarcity and heat vulnerability. The Corpsmember team dedicated to this project is completing community surveys and designing public education campaigns to promote the adoption of climate change mitigation and adaptation strategies. The outreach and education conducted by this team will connect local residents to resources like the E&W program that provide home efficiency services, and combat heat vulnerability and water scarcity.

Corpsmembers in the E&W program are full-time AmeriCorps members and most serve a full year of service. Each year, 20-25 new young adults engage in this service experience and learn about energy and water conservation. As they complete their terms and move on, often to careers in conservation, the lessons learned at MHYC remain with them. Corpsmembers leave with greater knowledge and understanding of environmental policy and management, of communities most vulnerable to climate change, drought and water scarcity, and community-based climate action. These experiences continue to be passed on to friends and family and help to create life-long environmental stewards for generations.

#### **Related Studies**

According to the US Energy Information Administration, the residential sector represented 22% of Colorado's total energy consumption in 2020. Energy Outreach Colorado's 2021 annual report stated that 21,747 Colorado households received help paying for their utilities; after home improvements based on an audit are put in place, a family can save up to 30% on monthly energy bills According to the Department of Energy,

The impact of home audits and upgrades is most impactful to households serviced by the E&W program; low-income residents that struggle with the affordability of monthly utility bills. A National Consumer Law Center Study ("Utility Bill Affordability in Colorado") notes that 17% of Colorado families live at or below 200% of the federal poverty level and "this income is simply insufficient to pay regular monthly bills without incurring debt or foregoing necessities". MHYC's Single Family Home Water Audits and Upgrades Project enables low-income residents to upgrade their in-home fixtures and secure future savings on monthly bills.

In 2015, Drs. Ken Seeley, Antonio Olmos, and Krystina Finlay, in addition to University of Denver doctoral

student Ksenia Polson, conducted a three-month study to determine the historical effectiveness of Denver's Energy Efficiency Program for single and multi-family housing as well as structures for nonprofit organizations. The results showed MHYC's E&W program "produces significantly higher electricity savings compared to each of the other contractors individually, for a fraction of the cost."

https://www.watereducationcolorado.org/publications-and-radio/headwaters-magazine/spring-2020-pursuing-water-

https://www2.ed.gov/policy/highered/reg/hearulemaking/2021/codoraholdharmreportfin.pdf https://www.nacwa.org/docs/default-source/resources---public/nacwa-affordability-report\_dec22.pdf?sfvrsn=1ab5c7

#### **Taxpayer Bill of Rights**

N/A