Tucson Water Conservation Program

Fiscal Year 2025 Annual Report

CITY OF TUCSON | TUCSON WATER

Water Conservation Program
Fiscal Year 2025 Annual Report

December 2025

City of Tucson

Regina Romero, Mayor

Tim Thomure, P.E., City Manager

John P. Kmiec, MPA, Tucson Water Director

City Council Members

Lane Santa Cruz, Ward One

Paul Cunningham, Ward Two

Kevin Dahl, Ward Three

Nikki Lee, Ward Four

Rocque Perez, Ward Five

Karen Uhlich, Ward Six

Prepared by

Candice Rupprecht, Conservation Program Manager

James MacAdam, Conservation & Stormwater Resources Administrator

Jaimie Galayda, Project Manager

Valeria Galindo, Conservation Specialist

Acknowledgments

Thank you to the Conservation & Stormwater Resources team members at Tucson Water for helping to execute our programs and gather data for this annual report. We are grateful for our partner organizations who make our high-quality conservation program possible, by working in our community every day, educating and providing services to our customers. This report reflects our collective conservation ethic and commitment to a thriving Tucson, with a focus on delivering programs that conserve water, while increasing access and delivering equitable solutions.

Table of Contents

Fiscal Year 2025 (FY25) Conservation Snapshot

In FY25, total water use was 129 gallons per capita per day (GPCD) with a residential GPCD of 72, continuing a two-decade downward trend. The conservation fee, now in its 16th year, has allowed Tucson Water to offer our customers high-quality conservation and education programs and robust efficiency incentives, detailed in this report.

In FY25, programs funded by the conservation fee have resulted in:

- 26.5 million gallons conserved
- $0.6 million invested in rebates and incentives
- 624 high-efficiency toilet (HET) and urinal installations
- 235 rainwater harvesting and gray water installations
- 698 water efficiency checkups for customers

To date, programs funded by the conservation fee have resulted in:

- 6.6 billion gallons (20,313 acre-feet) conserved
- Over $17 million invested in rebates and incentives
- Over 75,000 HET and urinal installations, including 9,500 free toilets for low-income customers
- Over 4,000 rainwater harvesting and gray water installations, including over 372 subsidized systems for low-income customers
- Over 20,000 Zanjeros water efficiency checkups for customers

In FY25, our partner education programs reached over 30,000 students, teachers, and adults.

In the last 15 years with a dedicated conservation fund, our education partners have reached over 700,000 students and community members.

Milestones for FY25 include:

- Continued implementation of Tier 2 Drought Preparedness and Response Plan measures, including direct efficiency checkup scheduling.
- Continued focus on equity-based program offerings, including more data collection about program participation and launching two new low-income programs.
- Received our second WaterSense award for Excellence in WaterSense Label Promotion.
- Launched two new programs with grant funding from the Water Infrastructure Finance Authority of Arizona (AZWIFA):
    - Ornamental turf replacement rebate for commercial & multifamily customers
    - Low-income multifamily plumbing fixture retrofit direct install program

Looking Ahead: One Water 2100 Implementation

Tucson Water's conservation efforts are aligned with the One Water 2100 guiding principles and goals adopted in 2023, particularly focused on Demand Management actions. The Conservation Program continues to provide direct services, incentive programs and educational opportunities to help achieve One Water 2100 strategies. To this end, the FY25-26 program priorities include:

- Executing deliverables for the two AZWIFA funded programs (turf rebates & multifamily retrofits)
- Identifying additional commercial conservation programs & services to offer
- Developing outdoor conservation messages & educational opportunities
- Conducting more rigorous program analysis and evaluation that includes metrics like water savings, customer engagement and equity
- Targeting outreach efforts and services to high-use and low-income customers
- Continuing drought response implementation to targeted customers

Conservation Program Budget

This report describes the expenditures and activities of the Tucson Water Conservation Program for the Fiscal Year July 1, 2024 through June 30, 2025, (FY25). Funding for the Conservation Program is collected by a conservation fee assessed on all potable water sales. These funds are kept in a restricted fund that may only be used for water conservation and education purposes.

The Conservation and Education subcommittee of the Citizen's Water Advisory Committee (CWAC) reviews and advises the Mayor and Council on the budget and programs funded by the water conservation fee. The subcommittee meets monthly with staff and makes recommendations to the full CWAC.

Water Conservation Program Expenditures

The Conservation Fund expenditures listed below reflect a financial summary from the City's financial reporting system. The total fund expenditure for FY25 was $4,186,429 and Figure 1 shows the categories and their percentage of expenditures. See Appendix B for historic financial information.

The five categories are:

1. Employees ($867,562)

   Salaries and employee expenses for four full-time program staff, and three part-time staff:
   a. 1.0 FTE Conservation Manager
   b. 1.0 FTE Water Conservation Specialist
   c. 1.0 FTE Lead Planner
   d. 1.0 FTE Commercial Program Manager
   e. 0.5 FTE Urban Landscape Manager
   f. 0.5 FTE Administrative Assistant
   g. 0.75 FTE Temp Assistant

   Six Zanjeros (including 1 Supervisor) are covered by Tucson Water Enterprise Fund.

2. Professional Services ($2,588,033)

   Contractors that support research, resource development and program implementation of education, green stormwater infrastructure (GSI) and low-income services.

3. Rebate Programs ($623,987)

   Incentive and rebate programs designed to offset customer expense of implementing water efficiency retrofits.

4. Outreach & Marketing ($36,550)

   Public relations, advertising, and printing to promote conservation programs and resources.

5. Operations ($70,297)

   Travel, training, memberships, subscriptions, uniforms, computers, fixtures and devices, promotional materials, etc.

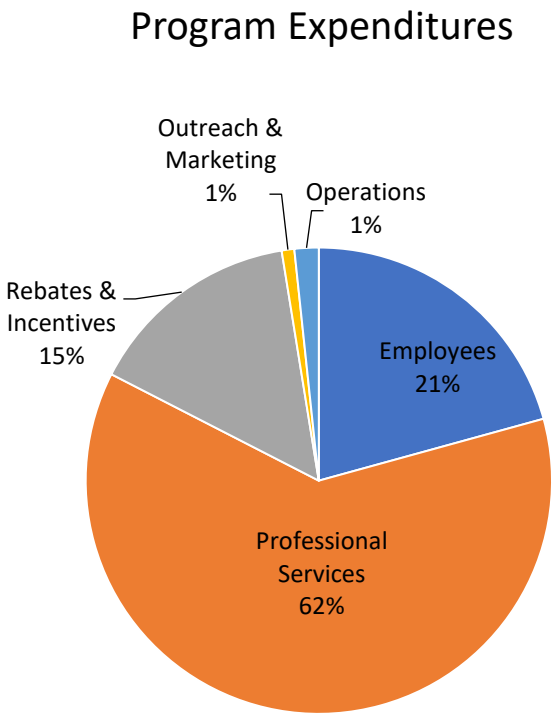


Figure 1: FY25 Water Conservation Program expenditures by percentage.

Conservation Program Overview

The Conservation Program serves the community through three key areas: conservation services, rebates and incentives, and education programs.

Conservation Services

Tucson Water and our partners provide a range of services directly to customers, described on pages 7-9, including:

- In-person water efficiency checkups provided by Tucson Water Zanjeros
- Consumption reports that provide customers with their usage trends and savings opportunities
- Low-Income installation services including:
  - free toilet installations
  - emergency plumbing repairs
  - rainwater harvesting and gray water grants and no-interest loans
  - discounted clothes washers
  - multifamily plumbing retrofits
- Grants for neighborhoods to install green stormwater infrastructure
- Water Waste code enforcement

Rebates & Incentives

Incentives are available to residential and commercial customers and help offset the cost of implementing conservation solutions for households and businesses. Program administration and metrics are presented on pages 9-13. In FY25 incentives included:

Single-family Incentives:

- toilet rebate
- clothes washer rebate
- gray water rebate
- rainwater harvesting rebate

Multifamily Incentives:

- toilet rebate

Commercial Incentives:

- toilet rebate
- urinal rebate
- ornamental grass replacement

Other Incentives:

- free customized conservation kits mailed directly to customers
- bill credits for completing a Home Water Works Calculator and survey

Education & Resources

Educational programs are provided to K-12 classrooms throughout each school year, and teachers can request a variety of water-focused presentations, curriculum and festivals.

Landscape education is also offered throughout the year to landscape professionals and City of Tucson employees who care for public landscape.

National and regional partnerships have also provided high-quality content and shared messaging opportunities. The impacts and updates of these various programs and efforts are described on pages 15-17.

Drought Plan Implementation

As drought conditions on the Colorado River have changed, Tucson Water has implemented additional drought response measures in line with the City of Tucson's Drought Response and Preparedness Plan. Tier 2 response measures included promoting existing conservation programs, developing new self-help tools for customers and communicating directly to customers exceeding their water use guidelines, including offering water efficiency checkups. Details are included on page 17.

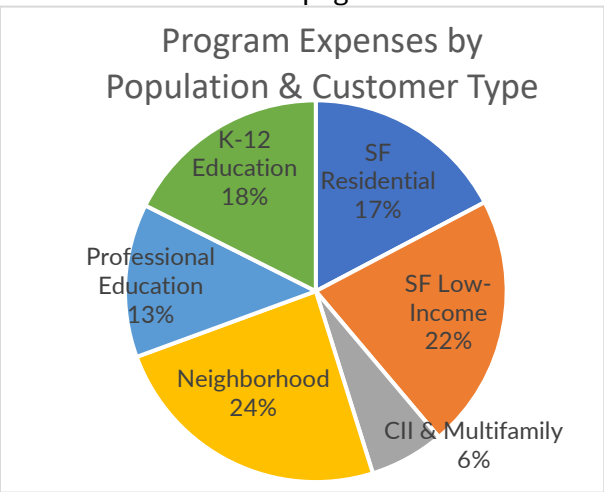


Figure 2: FY25 financial expenditures, broken out by customer class or population served. *CII (Commercial, Industrial & Institutional customers)

Zanjeros Water Efficiency Services

Zanjeros serve as Tucson Water's conservation experts, providing customer efficiency checkups, 17 rainwater harvesting inspections and water waste enforcement throughout the community.

> *"Our Zanjero was awesome; he showed me several areas where I could make changes to reduce my water consumption. He was very knowledgeable and extremely easy to communicate with. This is an Awesome Program and I have already recommended it to other friends." 3/19/25*

Water Efficiency Checkups

Efficiency checkups are requested by customers, usually driven by a high bill and high consumption concerns. Checkups are scheduled in two-hour blocks at the customer's convenience. The onsite checkup includes a download and review of hourly, 40-day water use data recorded at the meter when available, a review of all onsite water uses, identification of leaks and additional water efficiency opportunities at the property. A total of 698 checkups were performed in FY25; 681 were residential and 17 were commercial accounts. Checkups for commercial customers, including homeowners' associations (HOAs), also include a survey completed by the customer and a water use data review. This information provides the Zanjeros with better insights about property concerns and savings opportunities.

> *"Since we are multi-family, it is difficult for us to pinpoint any issues we may have with our water use. We are so grateful for the Zanjero helping us in this matter. We appreciate his patience in explaining how our water meter worked. (He made it easy to understand). Also, he took the time and effort to thoroughly check possible issues causing our high water usage. Through his guidance we learned that we could save water if we took care of the following: toilets in need of repair and replacement, to correctly position a submeter, a clear understanding of our billing so that we may read our submeters on the correct dates. In addition to keeping an eye on the drip irrigation. For example, check water times and making sure the battery is properly working. Thank you for your interest in helping us to do better! Your knowledge and kindness is admirable and greatly appreciated. Our goal is to take care of this as soon as possible." 8/27/2024*

> *"He uncovered several areas of concern. I learned how to schedule my irrigation timer properly. As a result of his visit, I have a specialist coming to fix problems and I am much more aware of how to save water. He provided great resources & was very professional. This is a great service and I sent a message to my HOA. I am sure several will take advantage of your service." 3/27/25*

Leaks, determined by continuous flow at the meter, were identified at 40% of the properties that were visited. The total excess usage at properties with continuous flow was 5.8 million gallons, assuming the continuous flow persisted for one month. Additionally, properties without continuous flow saved 6.1 million gallons. Irrigation, pools and toilet issues were the leading causes of high-use issues identified during checkups, accounting for 75% of reported causes.

In follow-up surveys sent to customers when they receive an email with their checkup report, 97% of customers indicated they would recommend a Tucson Water Zanjero visit to friends and family. Customers report very high levels of satisfaction with the service.

How often customers report being Very Satisfied			
Friendliness of Staff	Knowledge of Staff	Issue(s) Resolved	Quality of Service
100%	92%	100%	98%

Water Waste Enforcement

Enforcement of the City of Tucson's Water Waste Ordinance (27-15) is under the purview of the Conservation Program staff. Water waste typically involves overwatering, leaks, improper discharge of water, malfunctioning irrigation systems, hose washing of hard surfaces, and misting systems operating in unoccupied areas.

Water waste complaints are made by email, voicemail and Tucson's 311 system. A small number of violations are also reported by conservation staff. Water waste enforcement is first seen as a opportunity to educate the public on best practices, usually related to irrigation system maintenance and operation. The fine

structure for a first offense is a minimum of $250. Subsequent offenses within three years are a minimum of $500.

In FY25 the Zanjeros responded to 558 water waste complaints. 217 complaints resulted in an educational opportunity, and the property owner was given a chance to make repairs, 62 were verbal warnings about water waste violation and 3 were written warnings about water waste violation. No citations were issued this fiscal year.

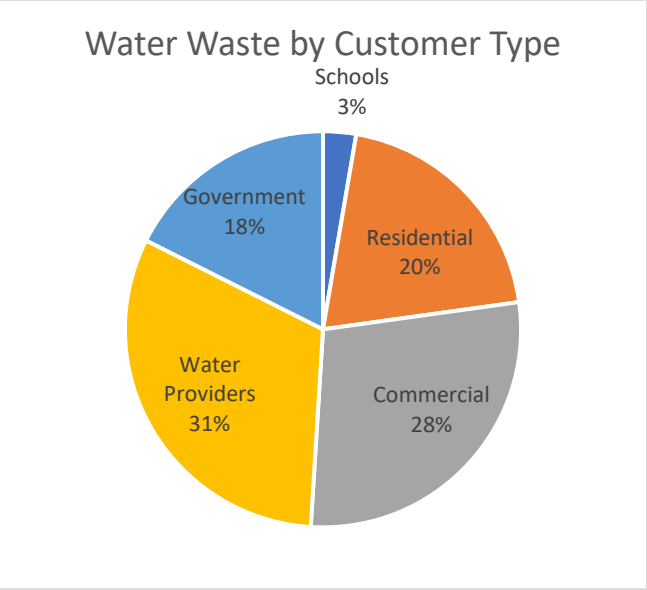


Figure 3: Percentages of water waste violations reported by customer type in FY25.

Low-Income Services

Three local organizations provide low-income conservation services on behalf of Tucson Water: Community Home Repair Projects of Arizona (CHRPA), Sonora Environmental Research Institute (SERI) and Tucson Clean and Beautiful (TCB).

CHRPA Services

High-efficiency Toilet Replacements

CHRPA has been installing free, high-efficiency toilets for low-income customers since 2009. In FY25, 426 toilets were installed, and over 9,500 since inception.

Emergency Plumbing Repairs

This service was launched in 2019, in response to increasing needs for major leak repair assistance. Services range in scope and cost, depending on the plumbing issue. In FY25, CHRPA completed 248 emergency repairs, bringing the total to over 1,000 since inception.

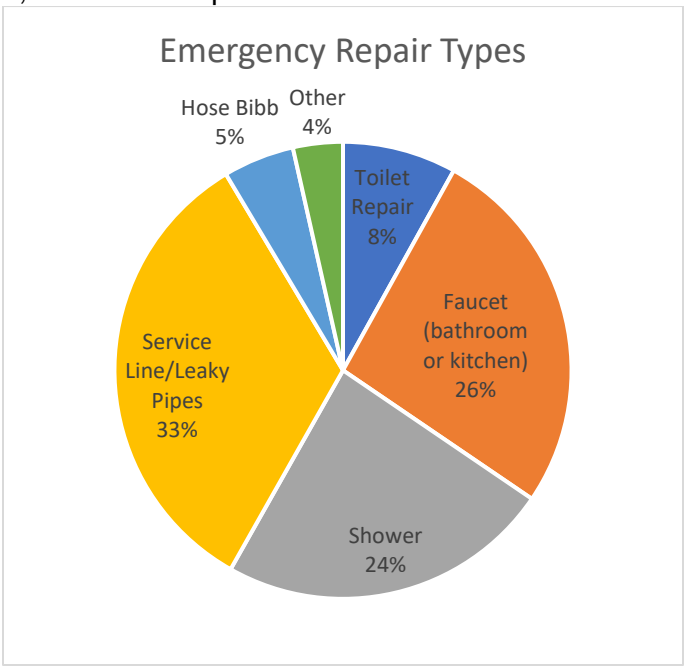


Figure 4: Percentages of emergency repair types completed by CHRPA in FY25.

SERI Services

Low-Income Rainwater Harvesting Grants & Loans

SERI has been installing rainwater harvesting systems for low-income customers since 2017. Currently, qualifying customers can receive grants up to $1,000, zero-interest loans up to $2,000 and access to the $2,000 rebate. In FY25, SERI installed 30 systems, bringing the total to 372 since inception.

Discounted Clothes Washers

Recognizing that many customers cannot utilize the existing $200 clothes washer rebate because of the up-front cost, SERI is now offering a limited selection of high efficiency, front-load washers for $200. A $50 down payment is required and the balance can be paid over six months. In FY25,

SERI installed 48 washers, bringing the total to 81 since the program launched in March 2023.

Low-Income Graywater Harvesting Grants & Loans

In 2023, SERI launched graywater grants and loans to accompany the existing $1,000 rebate and expand access to installing graywater systems. Similar to graywater rebate performance, to date only two graywater systems have been installed.

Green Stormwater Infrastructure (GSI) Mini-Grant Program

Tucson Clean & Beautiful works with community organizations and neighborhoods to install GSI in heat-vulnerable, low-tree canopy neighborhoods within high and moderate priority areas ranked by the Tucson Tree Equity Score. In FY25, 11 new projects were installed, bringing the total to 87 projects since 2017. These projects account for 164,608 square feet of new GSI, which include 5,613 new trees and plants.

Rebates and Incentives

Rebate Program Administration

Currently, all rebates are processed online using the city's Laserfiche system. Rebates less than $600 are processed as bill credits on customer accounts and rebates greater than $600 are issued as checks.

Rebate performance is tracked year-to-year to identify trends and opportunities. Presently, several of the rebates have lower participation than in previous years, so staff is in the process of trying to understand market drivers and changes that could be impacting performance. See Table 1 for program performance details.

Equity-driven Program Participation

The program has historically tracked incentive participation by customer class and City ward to identify any areas of underperformance. Steady progress has been made over the last decade to develop low-income services that mirror traditional rebates while removing access barriers. Internal targets for these low-income services are to provide at least 20% of a given rebate type through the low-income program. This target reflects the percentage of Tucson residents who are below the poverty line and would likely qualify to participate.

To help inform next equity steps, more program data is being collected and analyzed. As of 2024, voluntary demographic data is being collected during the application process for all rebates. Over the next year, a GIS analysis will be performed overlaying conservation program participation data with the City's TEPI (Tucson Priority Equity Index) map to inform where to prioritize outreach and engagement.

Distribution of Programs by Customer Class

In FY25, residential rebates accounted for 70% of the total estimated water savings from incentives, while commercial rebates accounted for 30%. This compares to commercial customers using, on average, 25% of total utility consumption. In previous years the water savings from commercial programs was much lower. It has been a goal of the conservation program to increase water savings in the commercial sector to better align customer class usage and savings. The WIFA grants have helped provide resources for new commercial and multifamily conservation.

Water Savings

Annual water savings are calculated for each program by multiplying the number of fixtures installed with an estimated annual savings number. Tucson Water calculates water savings for each incentive program using a mix of field research and customer consumption analysis. Savings for each program are calculated with the known information about fixture usage and behavior patterns. Program savings are highlighted in Figure 6 and Figure 7.

The cumulative savings are calculated for each program by summing the annual savings calculated for each year a given program has been running. This calculation is done for the expected lifetime of the fixtures, which is based on industry research for fixture devices and has been adopted by conservation organizations such as the Alliance for Water Efficiency. Specific program savings multipliers and useful life factors are listed in Appendix A.

WIFA Water Conservation Grants

In 2023, the Conservation Program received two Water Infrastructure Finance Authority of Arizona grants to launch new water conservation programs in Tucson. This funding must be expended by June 2026. The first grant provides $1.5m funding to replace 200,000 sf (square feet) of ornamental grass with desert-adapted landscaping in select city parks and through a rebate program for multifamily and commercial customers. The rebate provides up to $5/sf and bonus incentives of $100 per native tree and $1/gallon (up to 5,000 gallons) of passive water harvesting. Five properties have received their rebates and combined with city parks projects, over 188,000 sf has been replaced with low water use landscape.

The second grant directs $1.7m to underserved multifamily properties to install efficient plumbing fixtures and appliances in at least 600 housing units within economic priority areas with the city. This program utilizes city contractors to retrofit qualifying properties, or property owners can complete the work with their own contractors and apply for a rebate. Two properties, totaling 78 units have been completed and many more properties are being inventoried and scheduled in the coming months.

Additionally, the Conservation Program is providing matching funds for a third WIFA grant received by the Housing & Community Development Department to retrofit plumbing fixtures in city-owned, single-family properties leased to low-income tenants with the goal of saving water and reducing utility costs at these properties.

Conservation Kits for Customers

In 2019, Tucson Water, in partnership with Environmental Education Exchange (EEExchange), began mailing conservation kits to customers upon request. Customers complete an online request form in English or Spanish. In FY25, kits were distributed to 1,672 customers.

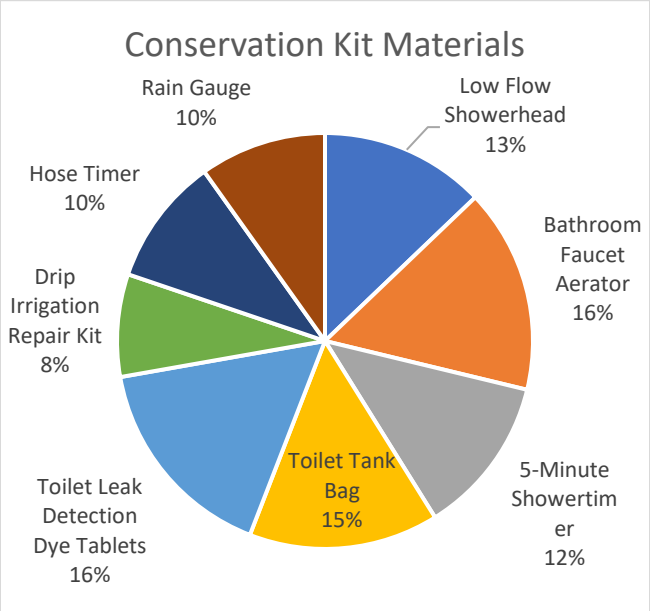


Figure 5: Percentages of materials in conservation kits to date.

Home Water Works Calculator

The Home Water Works Calculator walks the customer through a series of questions about water-using devices in the home and behaviors regarding them and provides them with a report comparing the water use to the average and efficient households within their zip code area. The report also provides customized recommendations with direct links to Tucson Water resources. The campaign to promote the use of the calculator was launched in January 2024. Customers were required to take a 30-minute online workshop, use the calculator, and answer a survey to get $25 bill credit. Since the launch up to the end of FY25, 896 customers have completed the calculator and received a $25 bill credit.

Program and Start Date	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
Clothes Washer (2015)								1,328	1,953	1,420	1,344	1,380	1,223	1,132	814	779	461	**11,834**
Low-Income Clothes Washer (2023)																33	48	**81**
Emergency Repairs (2019)												167	164	197	143	165	248	**1084**
Gray Water (2011)			2	9	11	10	33	38	23	21	17	18	20	18	19	19	19	**273**
Low-Income Gray Water (2024)																	2	**2**
Multifamily Retrofit (2025)																	2	**2**
Rainwater Harvesting (2012)					296	272	303	315	402	285	277	240	360	299	288	224	235	**3796**
Low-Income Rainwater Harvesting (2014)							30	6	28	80	56	61	11	35	20	20	30	**377**
Multifamily Toilets (2009)	29	378	284	1,237	3,638	4,942	6,580	1,419	3,023	2,146	3,036	2,941	1,663	907	702	306	278	**33,509**
Single Family Toilets (2009)	1012	2,959	2,627	1,722	1,918	2,481	2,168	2,296	1,890	1,526	1,565	1,342	991	800	188	164	76	**25,725**
Low-Income Toilets (2010)		373	317	273	702	1,014	1,015	708	758	490	771	571	299	428	660	717	426	**9,522**
Commercial Toilets (2009)	4	428	382	345	137	363	418	698	249	409	133	474	905	61	282	223	46	**5,557**
Ornamental Turf Removal (2025)																	5	**5**
Urinal (2011)			10	6	3	108	423	205	14	32	0	2	277	95	429	13	10	**1,627**

Table 1: Total Rebates by Fiscal Year.

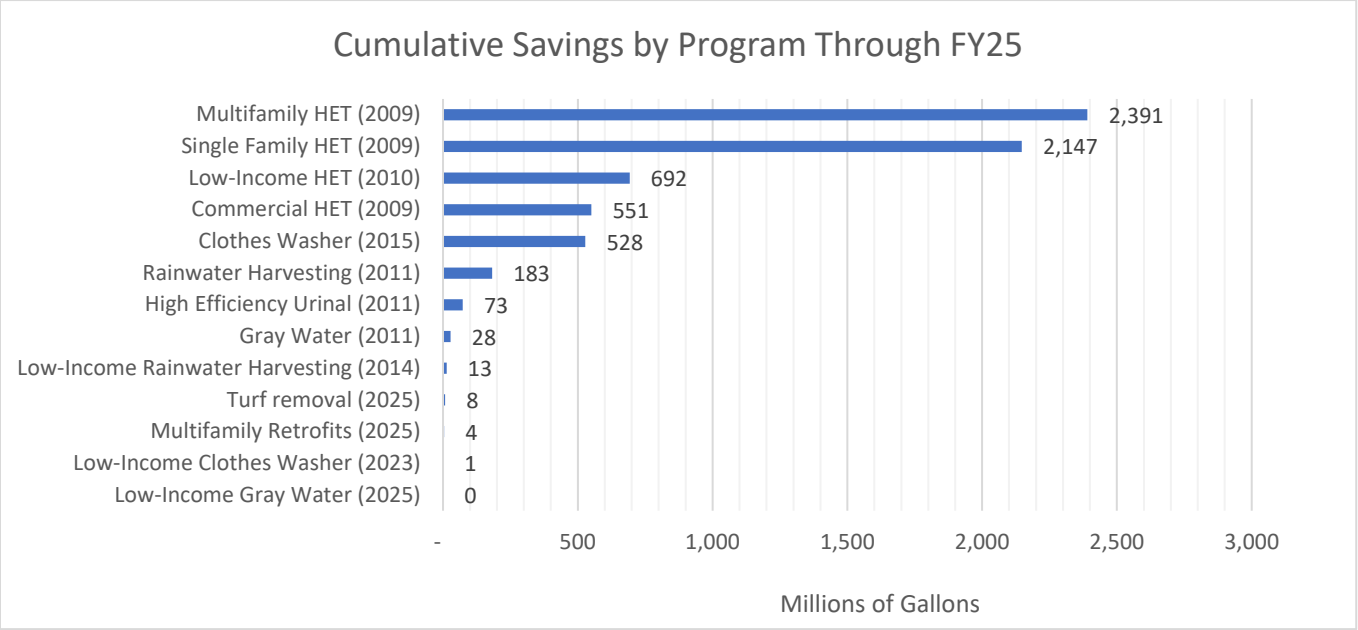


Figure 6: Cumulative Water Savings shown by program achieved from Tucson Water's Incentive Programs.

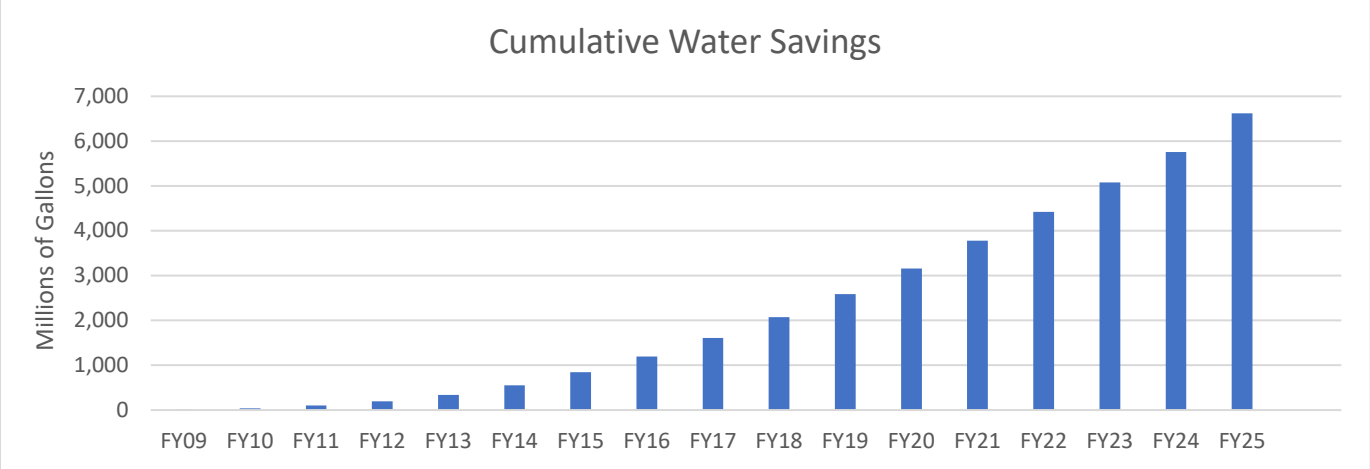


Figure 7: Total program water savings calculated from incentives since Conservation Fee inception.

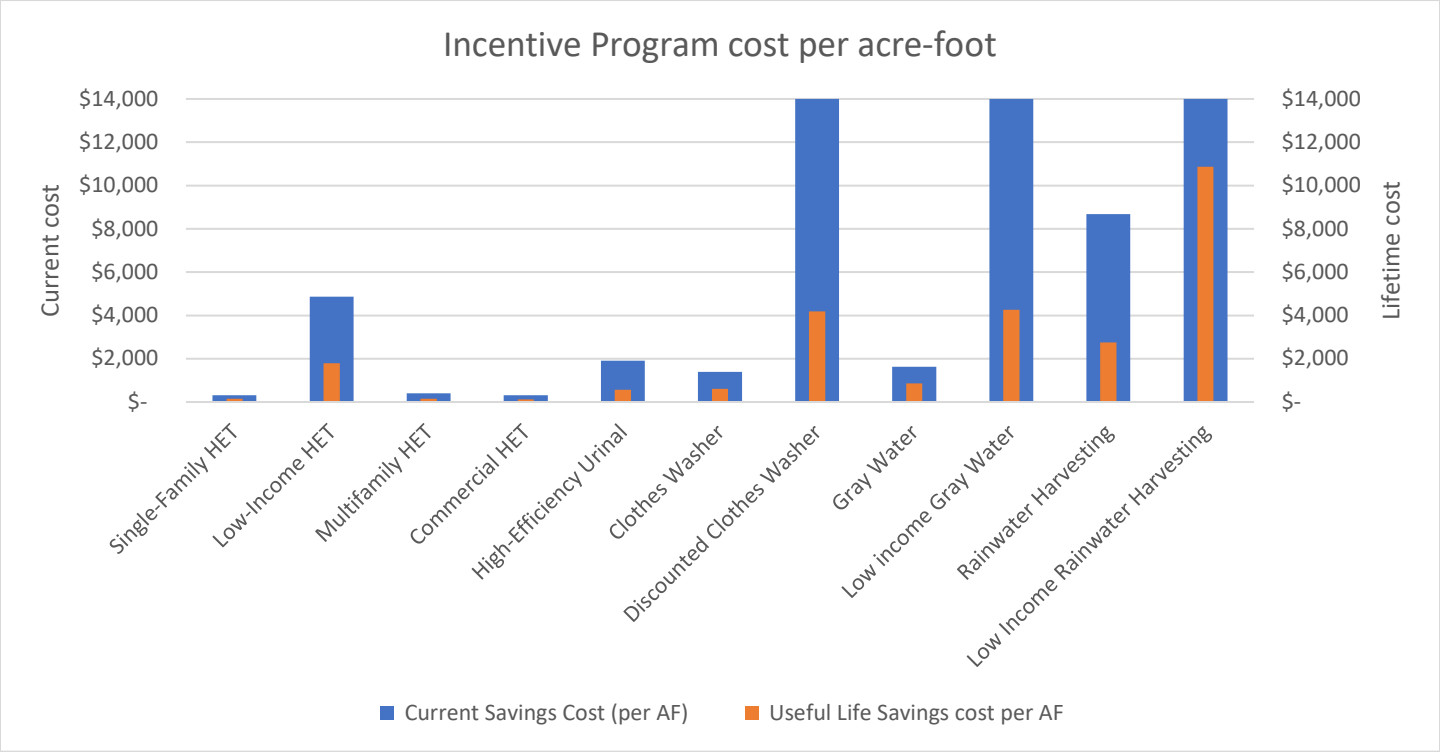


Figure 8: Cost per acre-foot of savings per program, to-date and for projected fixture life.

Community Education & Outreach Programs

Tucson Water, with the support of several community partners, provides outreach, education and conservation services throughout our service area. Together, our community partners have reached over 700,000 students, teachers, and community members in the last 15 years.

K-12 Education Programs

Tucson Water partners with Arizona Project WET (APW) and Environmental Education Exchange (EEExchange) to offer youth education programs in classrooms at various grade levels throughout the school year. These programs are both designed to meet Arizona Department of Education K-12 Academic Standards.

Arizona Project WET (APW)

Since 2006, APW has engaged 6,614 teachers, 338,721 students, and 39,227 adults in STEM-based water education throughout the Tucson Water service area. APW provides four programs to elementary through high school students, which includes professional development for teachers.

FY25 Activity:	
Students Reached	5,471
Teachers Reached	254
Adults Reached	37

Programs include:

- 4th grade Water Festivals
- Water Festival volunteer training for adults and High School students
- 3rd-5th grade groundwater presentations
- 6th-12th grade Water Scene Investigations

Environmental Education Exchange

Since 1998, EEExchange has engaged 285,237 students and 9,578 teachers in classroom-based water education programs throughout the Tucson Water service area. EEExchange provides four programs to elementary through high school students.

FY25 Activity:	
Students Reached	24,550
Teachers Reached	1,003

Programs include:

- 1st-3rd grade Water Smart Kids presentations
- 4th-5th grade Our Water, Our Future presentations
- Middle School Watching Our Water presentations
- 8th-12th grade Student Stories of Climate Change presentations

Total Student Engagement by Fiscal Year

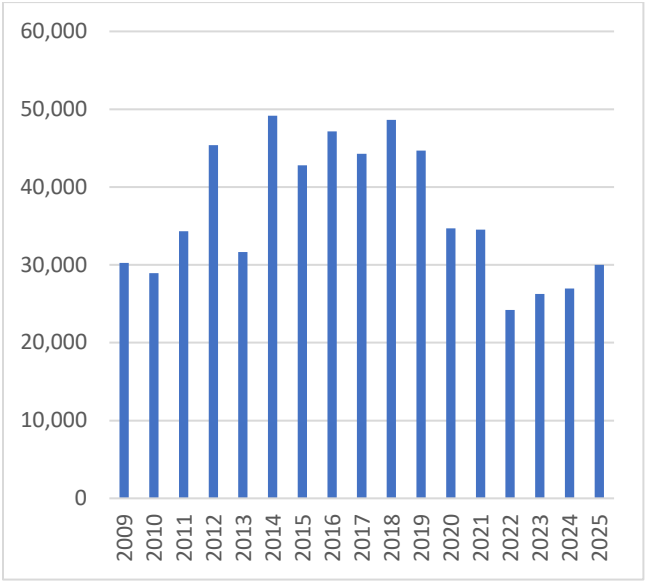


Figure 9: Reported number of students engaged each school (fiscal) year through APW and EEE.

Smartscape: Landscape Pro Training

Since 1989, Tucson Water has funded Smartscape, a University of Arizona Cooperative Extension Program. Smartscape trains landscape professionals and residents to properly manage urban Sonoran Desert landscapes. University faculty and industry experts teach Smartscape classes, which are a mix of classroom learning and field experience.

FY25 Activity:	
Smartscape Series Courses	7
Advanced Courses	9
Total Professional Classes	84
Pro Workshop Attendees	363
Pro Certificates	217
Hours of Instruction	287

The keystone training program for landscape professionals, the *Smartscape Series*, offered in both English and Spanish, includes classes on:

- Plants, Soils and Water
- Landscape Irrigation Systems
- Landscape Water Management
- Desert Adapted Plants
- Maintaining Desert Adapted Plants
- Plant Disorders
- Landscape Design and Renovation
- Plant Selection and Installation

Completion of the Smartscape Series allows participants to take advanced classes. Additional advanced classes for professionals include:

- Advanced Irrigation Green Stormwater Infrastructure
- Sustainable Landscapes
- Plant Material
- Urban Forestry Management

City of Tucson employees who have a role in landscape management and tree care attend a one-day bootcamp instead of the *Smartscape Series* and can then take the Green Stormwater Infrastructure and Urban Forestry Management courses.

Additionally, Smartscape launched a HOA Landscape Transformation pilot program which provides condensed *Smartscape Series* training, guidance and a toolkit for transitioning to water efficient landscapes for Homeowners Associations. The goal of this pilot program was to provide targeted assistance for HOAs through all phases of landscape transformation, and to lower the financial barrier of having new, desert-adapted landscape designs created. Grants were made available to support HOAs with landscape designs.

The first three participating HOAs completed their landscape plans the previous fiscal year, and five additional HOAs were selected to participate in a cohort to continue HOA engagement. Two of the five HOAs completed landscape designs and one is moving forward with a turf removal project to apply for the rebate. In addition to establishing a cohort model of engagement, Smartscape also created a toolkit for HOAs wanting to transform their landscapes with many useful documents and templates. While the pilot program ended this fiscal year, it yielded important information about the barriers and challenges of supporting HOA water conservation and resources that can be carried forward to future HOA engagement.

EPA WaterSense Program

Tucson Water, along with over 2,000 organizations across the county, is a proud partner of the U.S. Environmental Protection Agency's (EPA) WaterSense program, which provides water conservation outreach resources and water efficiency product labeling. Tucson Water earned its first WaterSense award for Excellence in WaterSense Label Promotion from the EPA in 2023 and earned another award in 2024 for continued Excellence in Promoting the WaterSense label.

Through the end of 2024, WaterSense has helped Americans save a cumulative 9.9 trillion gallons of water, 1.1 trillion kilowatt-hours of electricity, and $245 billion in water and energy bills. Tucson

Water reports data annually to WaterSense, contributing to these national savings numbers.

Water Use It Wisely Regional Partnership

Tucson Water has been a steering committee member of Water Use It Wisely since 2022. This Arizona-wide campaign provides tips and resources on water conservation to the public and provides partners with a toolkit of outreach materials. The campaign targets audiences through diverse platforms such as billboards, print ads, paid and organic social media, Google Search, display ads, Connected TV and innovative partnerships. Tucson's steering committee participation has expanded media buys into the Tucson market including multiple billboard ads in 2025.

This fiscal year, there were 302,399 unique visits to the website and there was a 10% increase in newsletter opens. The statewide Water Use It Wisely program routinely receives some of its highest levels of engagement from Tucson residents.

Building of the success of Tucson's water conservation kits, Water Use It Wisely, with funding from Salt River Project (SRP), is now offering conservation kits to homeowners across the state.

Drought Response Measures

Based on Bureau of Reclamation Drought Contingency Plan guidelines, a Tier 2 drought level was declared for the Colorado River Basin in 2023, triggering a level 2 drought status for the City of Tucson. While the basin drought status went back to Tier 1 in 2024 and 2025, Tucson Water has maintained level 2 response measures, include developing new self-help tools for customers and communicating directly to customers exceeding their water use guidelines. Conservation staff has continued to promote new resources created in 2024, including a new series of seven DIY videos and a customized water calculator. The DIY videos, available on the Tucson Water website, cover how to read your meter, how to find and fix leaks and landscape care and irrigation scheduling. A Home Water Works calculator from the Alliance for Water Efficiency was customized to include Tucson-specific features and has been promoted in conjunction with a virtual workshop. Customers are eligible to receive a $25 bill credit for attending the workshop and completing the calculator.

High-use letters were sent to 8,778 single family customers, 203 multifamily customers and 50 duplex/triplex customers who exceeded the annual Water Use Guideline by 250%; the Water Use Guideline is calculated based on the annual water use average for a certain customer class. The Water Use Guidelines are calculated annually based on previous calendar year consumption and customers with 2 ½ times higher than average usage receive high-use notifications. Results of this annual effort are presented in Figures 10, 11 and 12.

Sixty-two percent of the residential customers had also received a high-use letter the previous year. The initial open rate for emails sent to single-family residential customers was 35% with a 2% click through rate and follow-up emails sent a month later had a 61% open rate and a 3% click through rate. This outreach yielded 222 self-scheduled water efficiency checkups for high-use customers. On average, the water use decreased by 20% in the year after the intervention.

Customers receiving these high-use letters who also receive low-income bill assistance were targeted with additional outreach including phone calls and home visits to offer water efficiency checkups. Of the 133 low-income accounts who received the high-use letters, Zanjeros made contact with over half of these customers and provided water checkups for 6%. Toilet and irrigation issues were the most frequent causes of higher-than-average water consumption.

Single-Family High-Use Indicators			
Communication Year	2023	2024	2025
Data Year	2022	2023	2024
Number of customers exceeding Water Use Guideline	7,789	6,566	8,778
Annual Average Water Use Guideline (CCF)	90	94	86
Annual Average Water Use Guideline (gallons)	67,365	70,359	64,371
High-use threshold (gallons)	168,000	176,000	162,000

Figure 10: Summary indicators of high-use campaign for single-family residential customers since Tier 2 drought status was initiated in 2023.

Duplex & Triplex High-Use Indicators		
Communication Year	2024	2025
Data Year	2023	2024
Number of customers exceeding Water Use Guideline	32	50
Annual Average Water Use Guideline (CCF)	120	98
Annual Average Water Use Guideline (gallons)	89,772	73,215
High-use threshold (gallons)	224,430	183,037

Figure 11: Summary indicators of high-use campaign for duplex & triplex residential customers since Tier 2 drought status was initiated in 2024.

Multifamily High-Use Indicators		
Communication Year	2024	2025
Data Year	2023	2024
Number of customers exceeding Water Use Guideline	70	203
Annual Average Water Use Guideline (CCF/unit)	69	53
Annual Average Water Use Guideline (gal/unit)	50,759	39,423
High-use threshold (gal/unit)	126,899	98,557

Figure 12: Summary indicators of high-use campaign for multifamily customers since Tier 2 drought status was initiated in 2024.

Appendix A – Water Savings Factors and Useful Life Projections for Conservation Programs

The table below lists the useful life of fixtures used to project out lifetime incentive savings and to calculate cost per achieve the savings. All numbers are from the Alliance for Water Efficiency except for Rainwater Harvesting, which was taken from Batchelor, C., Fonseca, C. and Smits, S., 2011. *Life-cycle costs of rainwater harvesting systems.* <http://www.irc.nl/op46>.

Incentive Program	Useful Life (years)
Single-Family HET	25
Low-Income HET	25
Multi-Family HET	25
Commercial HET	25
High-Efficiency Urinal	25
Clothes Washer	15
Discounted Clothes Washer	15
Gray Water	15
Low-Income Gray Water	15
Rainwater Harvesting	20
Low-Income Rainwater Harvesting	20

The table on the following page lists the per unit savings, annual savings and the source of those savings for each of the incentive programs in the Conservation Fund that data is available for. Savings estimates are only assumed for the number of years after the incentive is given, based on the useful life specific to each fixture listed in the table.

Incentive Program	Per Unit Per Day Savings (gallons)	Annual Savings Per Unit (gallons)	Source of Savings
Single-Family HET	20.5	7,483	The Alliance for Water Efficiency determined this value in their Conservation Tracking Tool 2.0.
Low-Income HET	26	9,803	2024 analysis of program participants that had participated between 2018 and 2022.
Multi-Family HET	20.5	7,483	The Alliance for Water Efficiency determined this value in their Conservation Tracking Tool 2.0.
Commercial HET	23 (tank-type) 50 (flushometer)	8,366 (tank-type) 18,240 (flushometer)	Differentiated water savings were calculated for flushometer-type and tank-tank types based on the CII estimated toilet savings in the CCTF 2006 report. These original estimates were based on ULFTs (1.6 gpf), so a 20% additional savings is added for WaterSense HETs (1.28 gpf).
High-Efficiency Urinal	17	6,206	The Alliance for Water Efficiency determined this value in their Conservation Tracking Tool 2.0. This number compares closely with a study completed in California that looked at potential savings from large-scale urinal retrofits.
Clothes Washer	19.3	7,043	The Alliance for Water Efficiency determined this value in their Conservation Tracking Tool 2.0. This value is a mid-range estimate, as published literature has indicated both higher and lower potential savings.
Gray Water	37.2	13,615	Calculated by multiplying the percent end use of clothes washers (16%) and Tucson's GPCD, to get 13.5 GPCD. This number is multiplied by the average persons per single-family household (2.76).
Rainwater Harvesting		FY13-FY23: 6,773 FY24 & beyond: 12,985	Calculated from the assumption that tanks will fill, on average, five times per year, based on historic weather and assumed tank usage patterns. This "engineering estimate" provides a total savings number based on total tank storage for all participants. Weighted average calculated of total estimated savings and number of participants for each fiscal year. Savings from FY13-FY23 only include tank capacities, but after July 2023 rebate revamp, savings also includes basin capacities, so savings value increased significantly.
Low-Income Rainwater Harvesting	N/A	N/A	Preliminary tracking of water use for the thirty-one participants was about 0.8 ccf more per month than the class average. The passive water harvesting installations have not shown a decrease in usage since installing the systems.
Residential Water Efficiency Checkup		Continuous flow: 30,000 (for two months post audit) No flow at meter: 14,400 (for 2 years post audit)	Based on internal analysis of residential customer usage before and after a Zanjero water audit, for cases where meter indicated continuous flow at the time of audit.
Turf Removal		36.5 per square foot	The Alliance for Water Efficiency determined this value in their Conservation Tracking Tool 4.0, determined by A&N Technical Services (2018); estimated a mean treatment effect of 0.1 gpd/sq ft for five turf replacement programs operated by California utilities.

Appendix B – Conservation Fund Annual Budget

This table includes annual fiscal year financial information since the inception of the Water Conservation Fund in FY09. The fund was established by the Mayor and Council through adoption of ordinance 10555 on May 20, 2008.

Fiscal Year	Conservation Fee ($/ccf)	Approved Budget	Expenditures	Revenue	Ending Fund Balance
FY09	$ 0.03	$ 997,000	$ 794,462	$ 1,217,280	
FY10	$ 0.04	$ 997,000	$ 831,883	$ 1,716,880	
FY11	$ 0.05	$ 1,086,690	$ 1,720,075	$ 2,124,838	
FY12	$ 0.07	$ 2,902,630	$ 1,795,082	$ 2,816,241	
FY13	$ 0.07	$ 3,356,820	$ 2,727,541	$ 2,830,967	
FY14	$ 0.07	$ 2,950,000	$ 2,725,288	$ 2,832,950	
FY15	$ 0.07	$ 3,050,000	$ 2,771,450	$ 2,726,208	
FY16	$ 0.08	$ 3,540,250	$ 2,785,621	$ 3,000,905	
FY17	$ 0.08	$ 3,540,250	$ 3,445,812	$ 3,035,932	
FY18	$ 0.09	$ 3,540,250	$ 3,108,333	$ 3,524,361	
FY19	$ 0.10	$ 3,895,620	$ 3,036,034	$ 3,613,761	
FY20	$ 0.10	$ 3,829,450	$ 3,776,282	$ 3,766,785	$ 3,220,804
FY21	$ 0.10	$ 3,707,690	$ 3,309,792	$ 4,019,836	$ 3,930,847
FY22	$ 0.10	$ 3,612,590	$ 3,733,428	$ 3,728,730	$ 3,926,150
FY23	$ 0.10	$ 3,649,160	$ 5,166,411	$ 3,539,055	$ 2,298,794
FY24	$ 0.10	$ 3,921,156	$ 4,099,592	$ 3,719,035	$ 1,918,237
FY25	$ 0.10	$ 6,531,566	$ 4,186,429	$ 3,712,979	$ 1,444,786

Appendix C – Demographic Data on Conservation Program Participation

The Conservation Program has continued collecting voluntary demographic data from program participants to better understand customers who are and are not participating in rebate programs and water efficiency checkups. This approach began in Spring 2024 and supports direction from the City's Equity Office to collect and understand participation gaps and is further supported by Tucson Water's larger efforts to drive equity in its operations. The Office of Equity provided guidance on the type and structure of data to collect for the survey.

Zanjero Water Efficiency Checkup Demographic Data

Demographic data is collected during a follow-up survey emailed to all customers who had a water efficiency checkup, along with their report. The survey response rate was 16%, representing 109 customers who provided demographic information, summarized below.

- 72% of respondents identified as White, followed by Hispanic
- 40% below and 37% above median household income; 23% prefer not to say
- 77% age over 60
- 86% reported higher education
- 85% reported English as their primary language

Residential Rebate Program Demographic Survey Data

Demographic data collection began in April of 2024 for the following rebates: high-efficiency toilets, high-efficiency clothes washers, rainwater harvesting, and gray water. This survey is embedded in the rebate request forms, which means the survey is voluntary, but not anonymous. The following is a summary of the 805 responses.

- 67% of respondents identified as White, followed by Hispanic
- 48% below and 37% above median household income; 15% prefer not to say
- 50% under age 60 and 50% over 60
- 72% reported higher education
- 96% reported English as their primary language

Voluntary Demographic Questions

The questions asked, and the options given for each question as responses, are provided below.

Race and Ethnicity

"Which of the following describes your racial or ethnic identity?"
Options: American Indian or Alaska Native; Asian; Black or African American; Latinx or Hispanic; Middle Eastern/North African; Native Hawaiian or Pacific Islander; White; Prefer not to say

Tribal Affiliation

"Are you an enrolled member and/or a descendant of a Federal or State recognized American Indian Tribe? Which one(s)? Please select ALL that apply."
Options: Pascua Yaqui Tribe; Tohono O'odham Nation; Not listed; Not a member or descendent; Prefer not to say

Household Income
"Which of the following options best represents your annual household income?"
Options: $10,000 ranges from $0 to $150,000 or more; Prefer not to say. For reference, the 2025 median household income for Tucson, Arizona is $96,100, provided by the U.S. Department of Housing and Urban Development.

Age
"What age range are you in?"
Options: 18-29; 30-39; 40-49; 50-59; 60-69;70+; Prefer not to say

Educational Background
"What is the highest degree or level of education you have completed?"
Options: less than high school; some high school; high school diploma or GED; some college; associate's degree; bachelor's degree, graduate degree; Prefer not to say

Primary language
"What is your primary language spoken at home?" (fill in blank)

Analysis of Results
The data suggests that these programs primarily attract higher income participants with moderate participation of middle-income customers. Lower-income customer representation is very minimal; however, this data does not include participation from our Low-Income Programs aimed specifically at helping customers participate, based on income qualification per the Federal Income Poverty Guidelines. This income qualification is standard across all City of Tucson assistance programs.

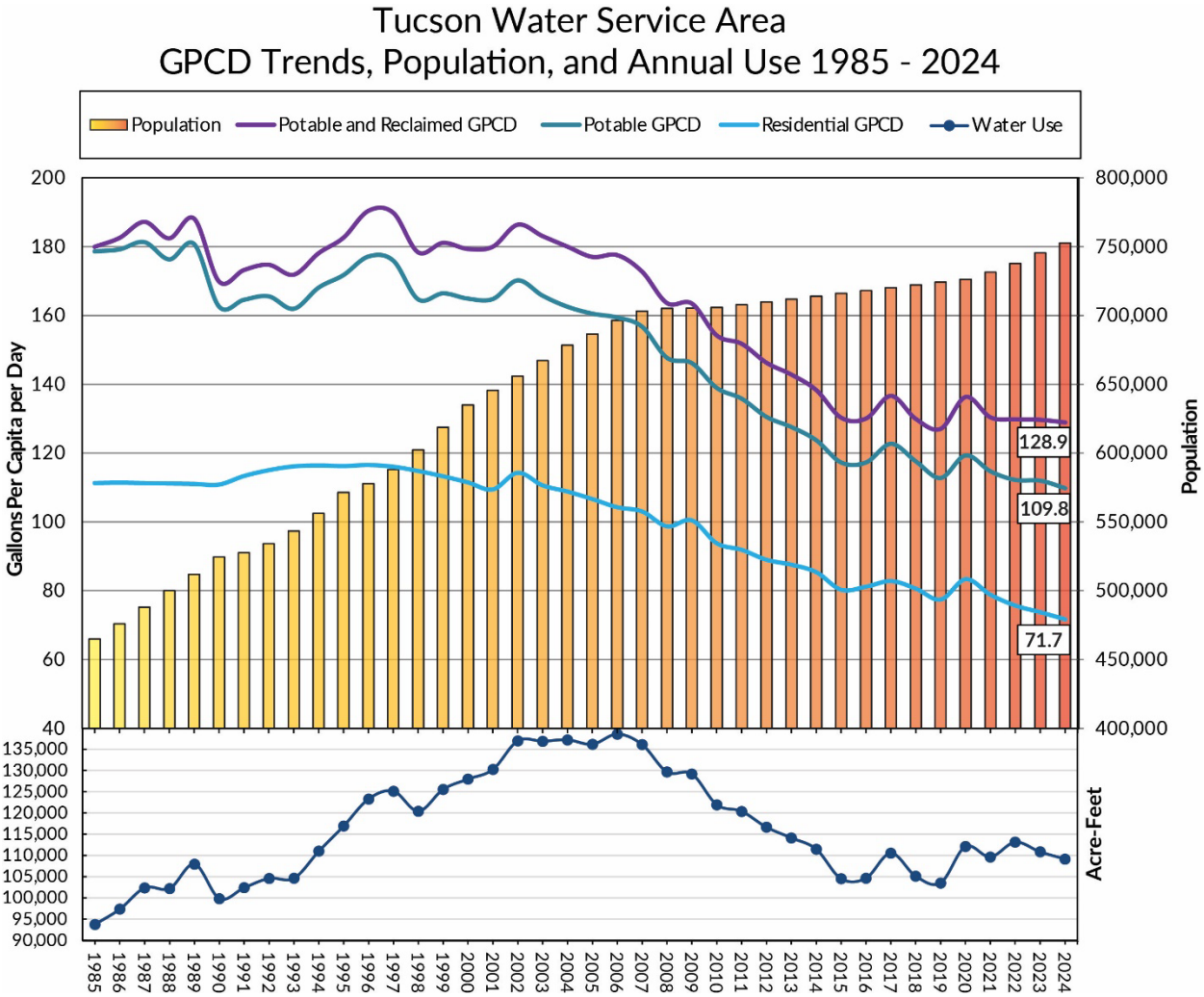
Throughout the survey questions, there is significant response in the "Prefer not to say" option, which can be an indicator of comfort in relation to answering the some of these questions and an indicator of the need for an anonymous data collection method.

The Conservation Program will continue to utilize the Office of Equity's expertise and resources to guide our understanding of the needs within the Tucson Water service area. Better integrating this data with low-income program data and the Equity Priority Index maps will help inform current program participation and identify gaps for future targeted outreach.

Appendix D – Annual GPCD (Gallons per Capita per Day)

Year	Potable GPCD	Reclaimed GPCD	Potable and Reclaimed GPCD	Residential GPCD
2000	164.9	14.5	179.4	111.5
2001	164.8	15.2	180.0	109.4
2002	170.2	16.2	186.4	114.3
2003	165.8	17.4	183.1	110.6
2004	162.6	17.5	180.0	108.8
2005	160.5	16.5	177.1	106.6
2006	159.4	18.2	177.6	104.3
2007	156.7	16.0	172.8	103.0
2008	147.7	15.9	163.6	98.7
2009	146.1	17.3	163.5	100.4
2010	138.9	15.3	154.2	93.8
2011	135.8	16.0	151.8	91.9
2012	130.5	15.7	146.3	89.0
2013	127.6	15.2	142.8	87.6
2014	123.7	14.6	138.3	85.4
2015	117.3	13.0	130.3	80.3
2016	117.3	12.8	130.1	81.2
2017	122.7	13.9	136.6	82.8
2018	117.6	12.3	129.9	80.6
2019	112.8	14.3	127.0	77.4
2020	119.3	17.0	136.3	83.3
2021	114.7	15.7	130.4	78.8
2022	112.2	17.6	129.8	75.7
2023	112.0	17.7	129.7	73.8
2024	109.8	19.1	128.9	71.7

Below, annual data from 1985 through 2024 is displayed, that includes GPCD values, service area population and total annual water use. These data highlight that while the community has grown, conservation and efficiency have decreased per capita use, resulting in total community use comparative to 30 years ago.


Tucson Water Service Area
GPCD Trends, Population, and Annual Use 1985 - 2024
Population
Potable and Reclaimed GPCD
Potable GPCD
Residential GPCD
Water Use
Gallons Per Capita per Day
Population
Acre-Feet
128.9
109.8
71.7