EXHIBIT A

CITY OF AUSTIN WATER CONSERVATION PLAN

Developed to Meet Requirements Outlined in 30 TAC §288.2 and §288.5

November 21, 2024

Message from the Director

Thank you for your interest in Austin's most precious natural resource: water. The city was founded in the mid-1800s on the banks of the Colorado River to take advantage of that abundant water resource. Our water supply is just as critical today, but now we face unprecedented challenges: record high temperatures, record low flows into the Highland Lakes, water quality concerns, and continued rapid population growth.

Together, we can meet these challenges. The City of Austin's 100-year Water Forward Integrated Water Resources Plan is focused on water conservation and water use efficiency, as well as strategies to strengthen the diversity of Austin's water supply. Austin has come a long way over the last decade – in 2023, we used essentially the same amount of water as we did in 2011, despite having 140,000 more residents. But the impacts from climate change require us to become even more water-wise and water-efficient.

The update of this Water Conservation Plan is required by the State of Texas every five years to provide short-term strategies to address changing conditions. While Austin Water completed the required plan update in May 2024, we are now providing this November 2024 update to incorporate additional water conservation strategies. Even more importantly, the update is a necessary part of the city's future sustainability. This document describes Austin Water's conservation initiatives, programs, and projects to help residents and businesses increase their water use efficiency. In addition, it describes how Austin Water is maximizing our water supply from the Highland Lakes through conservation and water reuse. Learn more about what you can do to conserve our most precious resource at AustinWater.org.

Shay Ralls Roalson, P.E.
Austin Water Director

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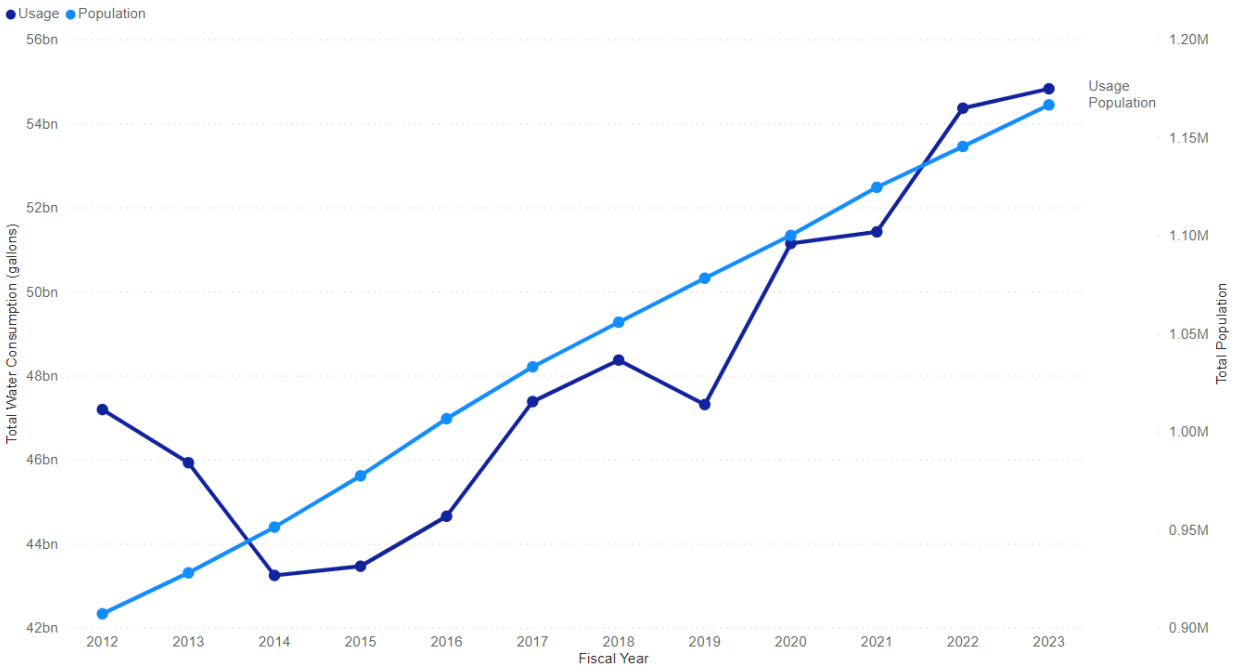
Executive Summary

Since 1983, Austin Water (AW) has demonstrated a strong history of adopting and implementing water conservation strategies to meet the growing and dynamic challenges of Austin's water needs. These challenges include rapid population growth, increasing frequency of extreme weather events due to climate change, and periods of ongoing drought. Current water conservation activities include incentive programs for residential, commercial, and multi-family customers; commercial regulatory programs; water-use restrictions; water reuse; and water loss control.

Current incentive programs offered to residential customers include rebates for ten different indoor and outdoor water conservation activities. The most popular are rainwater harvesting, drought survival tools, irrigation upgrades, and waterwise landscape conversion. AW offers similar incentives for the commercial and multi-family sector, but the most utilized program with the greatest savings for these customers is the performance-based incentive, Bucks for Business.

Figure 1 illustrates the effect watering restrictions have had on lowering the increase in water consumption relative to population growth. Beginning in 2012, mandatory one day per week irrigation restrictions went into effect, which pushed water use downward. In 2016, Austin left drought stages, but the irrigation restrictions were approved to continue at all times. As rains returned to the area in 2015 and the drought receded, the City's water use grew relative to population.

FIGURE 1. AUSTIN WATER RETAIL POPULATION SERVED AND WATER CONSUMPTION



First offered by AW in 1974, reclaimed water helps provide a low-priced source of non-potable water for irrigation, cooling, and toilet flushing. At present, over 185 metered properties use more than 1.4 billion gallons of reclaimed water annually. In March 2024, AW launched a new GoPurple program to increase the use of reclaimed water in and around Austin to make potable water usage more sustainable. Austin City Council approved additional requirements for large developments to connect to the reclaimed system or develop onsite water reuse systems.

To help manage water loss from leaks and aging infrastructure, AW conducts annual water loss audits. Other efforts to control water loss include AW's use of acoustic technology to inspect over 500 miles of water lines annually, implementation of "Renewing Austin" to replace aging water lines, and the full-scale deployment of the My ATX Water advanced metering system. AW also contracted a water loss consulting firm to review the utility's water loss program, validate system input volume and meter accuracy, and provide recommendations for improvements.

Beginning in 2020, the My ATX Water program has been replacing analog water meters with more accurate digital meters, offering water savings through leak notifications, customer awareness about water use, and the opportunity for the implementation of heightened water loss strategies in the future. In 2025, the My ATX Water meter replacement program will be complete.

As one of the fastest-growing metropolitan areas in the nation, Austin faces unique challenges to its water supply. Austin has successfully reduced peak water demand and continues to delay

renewal of the Lower Colorado River Authority contract, resulting in numerous benefits to AW and cost savings to its customers.

The Texas Commission on Environmental Quality and the Texas Water Development Board require an update to the City of Austin's Water Conservation Plan every five years. This document provides additional water conservation goals to the plan that was adopted by Council in May 2024 and how these goals will be met, implemented, and enforced by the City.

Looking forward to the next five and ten years, the City's goal is to decrease our total per-person water use from the five-year average of 127 gallons per day to 121 gallons per day by 2029, reducing our potable water use by almost three billion gallons per year. In addition, our goal is to reduce our per-person water loss from the five-year average of 21 gallons per day in 2024 to 19 gallons per day by 2029. The strategies to achieve these goals are described on page 31.

Conservation Program History

Austin's water conservation program was established in 1983 following adoption of an ordinance allowing the City to implement temporary water use restrictions to address increasing infrastructure constraints. At that time, Austin primarily utilized water demand management as a crisis response tool rather than an ongoing conservation strategy. Since then, and as water demand increased with significant population growth and development, Austin shifted its focus to using water conservation measures as a means of extending the available water supply, lowering greenhouse gas emissions, and extending infrastructure capacity.

Initially, Austin's conservation program focused on rebates and incentives to achieve high volumes of water savings and to provide customers with education about water use. Over time, certain measures such as toilet retrofits and clothes washer rebates reached market saturation and were phased out. Other major milestones for Austin's conservation program include:

2007 – Austin strengthened and prioritized its conservation focus with the adoption of strategies recommended by a City Council-created water conservation task force aimed at reducing peak day water use by one percent per year for ten years. These strategies were anticipated to result in a 25-million-gallon-per-day reduction from peak use by 2017.

2010 – A second task force proposed additional water use reduction measures beyond the 2007 recommendations. This led to City Council adoption of a resolution to reduce water use to no more than 140 gallons per capita per day by 2020.

2012 – The City's Conservation Code was repealed and replaced, restricting outdoor watering to twice a week and establishing commercial assessment programs.

2016 – The City's Conservation Code was again revised following years of drought, restricting automatic irrigation to once a week. During this period, auxiliary water ordinances and Plumbing Code revisions were implemented to improve fixture efficiencies and offset potable water consumption.

2018 – The Austin City Council adopted the 100-year Water Forward Integrated Water Resources Plan. The plan is updated every five years and serves as a demand management strategy roadmap for water conservation.

2020 – The City adopted an ordinance to regulate the collection, treatment, and use of alternative water sources for non-potable uses in multi-family and commercial buildings.

2024 – The Austin City Council adopted the GoPurple program to increase use of reclaimed water and onsite water reuse systems in and around Austin.

Austin continues to explore innovative ways to leverage existing and new technologies to better inform customers, conduct analysis, and achieve water-savings breakthroughs. The new My ATX Water smart meters, digital rebate application forms, and alternative water technologies are helping advance water conservation in Austin to a level never imagined in 1983.

In addition to this Water Conservation Plan, water conservation efforts integral to City planning efforts include:

Water Forward Integrated Water Resource Plan: Water Forward is Austin's 100-year integrated water resource plan. It's an adaptive plan updated on a 5-year cycle, evaluating water supply and demand management strategies for the City of Austin within a regional water supply context. A significant portion of near-term strategies include conservation activities. The initial Water Forward Plan was adopted in 2018 and is currently being updated, with completion anticipated by the end of 2024.

Austin Climate Equity Plan: Austin's Climate Equity Plan was created with input from nearly 200 community members and focused on engaging racially and economically diverse residents about challenges, barriers, and opportunities facing historically excluded groups. A goal for sustainable buildings is to achieve a community-wide water demand of 152,000 acre-feet per year by implementing strategies outlined in the Water Forward Plan.

Drought Contingency Plan: The state-mandated Drought Contingency Plan specifies how the City will respond and manage the water system during drought, as well as during demand or infrastructure events that constrain water supply. The most recent plan was approved in conjunction with the Water Conservation Plan in 2024 (See Appendix B).

Public Education and Information

With one of the most extensive water conservation programs in the nation, AW plays a leadership role at the regional, state, and national levels, sharing experiences and resources with other water providers to promote conservation innovation and effectiveness. AW utilizes public education and community outreach to encourage participation in water conservation programs and incentives, as well as to raise awareness about water use restrictions.

Community Events & Education Programs
AW offers the Dowser Dan School Assembly Program, a musical and theatrical program targeting kindergarten through fourth-grade students in public and private schools served by AW. Since 1990, this program has been a valuable resource for teachers, reaching hundreds of thousands of students in Austin and surrounding communities with educational content about how to conserve water through everyday actions. Although requests for in-person presentations declined during the global pandemic, 2023 saw a resurgence in requests for Dowser Dan performances. During the period of decreased in-person assemblies, AW kept Dowser Dan and his message of water conservation relevant by producing several music videos and downloadable educational worksheets, which are available online and distributed via AW social media channels. These resources remain available for teachers and parents to share with students and families in our community.

In 2015, the Texas Colorado River Rolling Exhibit, also known as the Mobile River, was developed, and launched in partnership with the Austin Independent School District, AW, and the Colorado River Alliance. Housed inside a 40-foot trailer, the Mobile River functions as a mobile science museum featuring interactive exhibits and hands-on activities targeted at middle school-aged students. The program is still active and popular at community events throughout the Austin area and the Lower Colorado River basin.

AW also participates in community festivals, school events, and informational fairs, providing knowledgeable staff to answer common questions and materials to promote water conservation. In 2009, AW developed a Water Conservation Speakers Bureau to provide presentations to local organizations on topics such as conservation, irrigation, leak detection, and water waste.

Advertising and Marketing
Marketing and advertising campaigns are used to disseminate information about water conservation programs, rebates, and incentives through print, radio, and digital outlets; websites; and social media platforms. Strategic ad placements are designed to reach a broad demographic through a variety of formats and languages. Additionally, information is provided to customers through messaging on customer bills and the City of Austin Utilities Now! newsletter that is included in every monthly billing cycle.

AW links digital advertising and social media posts directly to the web page providing information about all available rebates to support water conservation. Clear information about program requirements and checklists were developed to help customers meet all program requirements. The rebate application process has also been improved to be more accessible; customers can complete an application form online or directly from their mobile phone.

AW uses its My ATX Water customer portal and its social media platforms such as Facebook, Instagram, YouTube, and NextDoor to share conservation messaging and program information to the community on a weekly basis and monitor engagement. Graphics, photography, and videos enhance messaging and increase engagement.

Workshops and Presentations
AW provides both in-person and virtual educational workshops about water conservation and available programs at no cost. These are adapted to the specific needs of residential and commercial customers. Beginning in 2024, AW will introduce on-demand videos designed to help residential customers efficiently manage their irrigation controllers, detect toilet leaks, and navigate the online billing portal.

The WaterWise Irrigation Professionals Seminar includes information on water-efficient irrigation systems, water conservation programs, the mandatory watering schedule, electrical troubleshooting, irrigation auditing, and turf grass watering requirements. This seminar provides continuing education credits toward license renewal for irrigation professionals.

AW actively participates in the Central Texas Water Efficiency Network, a coalition of regional water agencies and advocacy groups that meet to share information and promote water efficiency education, legislation, programs, and technologies. This network organizes the annual Central Texas Water Conservation Symposium, a one-day regional event aimed at providing conservation education to over 100 water professionals.

Residential Customer Programs

Digital Garden Hose Meters and Sunlight Calculators

AW has partnered with the Austin Public Library to provide digital garden hose meters and Sunlight Calculators through the library check-out system. The meters, which attach to standard outdoor hoses, spray nozzles, and faucets, enable customers to track their water usage for activities such as watering lawns and washing cars and adjust to conserve. Sunlight calculators determine daylight levels in specific areas outdoors so that appropriate plants can be selected and placed to minimize water consumption.

Household Material Distribution

AW distributes complimentary water-saving tools to residential customers, as well as to households that receive water from one of the other water utilities that Austin sells water to wholesale. These include showerheads, kitchen/bathroom aerators, soil moisture meters, toilet leak detection tablets, and a “Practical Plumbing Handbook.” Historically, customers were required to pick up the items at AW’s headquarters. However, due to challenges posed by the COVID-19 pandemic, participation declined. Beginning in May 2023, materials are now mailed directly to eligible customers upon request, which has resulted in a surge of participation of over 600 percent.

TABLE 1. HOUSEHOLD MATERIAL DISTRIBUTION
Historical program performance

Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
1,479 items	95 items	74 items	780 items	5,923 items

Residential Irrigation Audits

AW offers a free irrigation system evaluation to residential customers who experience unusually high water bills. To qualify, customers must exceed 20,000 gallons of water used in one month or 15,000 gallons for two consecutive months. The residential irrigation audit, conducted by a licensed irrigator from AW, involves examining the system in operation to identify leaks, assess water application rates, and ensure adequate coverage. The irrigator also assists in establishing an efficient watering schedule and making controller adjustments. Finally, the evaluation includes an assessment of equipment adequacy and recommendations for component replacement if necessary.

In Fiscal Year 2023, the number of requests for residential irrigation audits declined substantially. This reduction corresponds with a rise in telephone and online assistance, where customer service staff supported customers through the online My ATX Water customer portal to assess their irrigation system. The new portal provides insights into irrigation usage frequency and the volume of water consumed per irrigation cycle.

TABLE 2. RESIDENTIAL IRRIGATION AUDIT
Historical program performance and estimated water savings

Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Estimated Water Savings
214 audits	234 audits	122 audits	215 audits	140 audits	30,331 gallons per year per audit

Plumbing Program

For over a decade, AW has been helping customers in need with assistance with plumbing repairs. In 2019, AW partnered with the Austin Housing Department's Go Repair! program to support eligible low-income customers of AW by covering qualified large and costly repairs. Repairs covered as part of this program include toilets, showers, plumbing, sinks, and faucets.

In 2022, the Go Repair! plumbing component became a stand-alone program, entitled the Plumbing Program, administered by the Austin Housing Department and funded by AW. The program can be combined with other assistance programs, can fund larger and costlier repairs, and offers broader eligibility requirements to provide greater assistance to eligible low-income customers. To be eligible, customers must have an AW account, maintain an income less than or equal to 100% of Austin's Median Family Income, and reside in a single-family home or duplex.

TABLE 3. GO REPAIR! AND PLUMBING PROGRAM
Historical number of homes that received repairs.

Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
18	55	40	20	11

Austin Energy All-Star Conservation Kits
As a participant in this program since 2022, AW offers energy-saving and water-saving tips and products to educate 6th-grade students within the Austin Energy service area about conservation. This educational initiative involves in-class curriculum and take-home kits provided to teachers, students, and their families at no expense.

Residential Incentive Programs
AW provides opportunities for customers to offset costs and conserve water through rebates and incentives. These programs aim to motivate eligible customers to adopt water-saving measures such as installing high-efficiency fixtures, enhancing the effectiveness of existing irrigation systems, and rainwater harvesting.

Irrigation Upgrade Rebate
Homeowners can receive incentives of up to $1,000 to upgrade irrigation systems to reduce water usage and waste. Eligible upgrades include rain/soil moisture sensors, pressure reduction valves, and converting from spray to multi-stream multi-trajectory rotor nozzles.

Landscape Survival Tools
Rebates are offered to homeowners for water-saving items such as mulch, compost, and core aeration services to facilitate moisture retention, nutrient replenishment, and turf grass health.

Laundry to Landscape
Homeowners can receive incentives of up to $150 for installing a laundry-to-landscape system, which allows the reuse of graywater from laundry activities for landscape irrigation.

Pressure Regulating Valves
A rebate of up to $150 is offered for the purchase and installation of pressure regulating valves to reduce indoor water pressure and prevent water waste and damage to pipes and fixtures.

Pool Cartridge Filter Rebate
Homeowners can receive up to $250 for replacing a sand or diatomaceous earth pool filter with a cartridge pool filter that requires less frequent backwashing.

Pool Cover Rebate
An incentive of up to $200 is offered towards the purchase of a new swimming pool cover to reduce water loss due to evaporation.

Rainwater Harvesting Rebate
Homeowners can receive an incentive of up to $5,000 for the installation of rainwater collection tanks to supplement or offset reliance on potable water for outdoor watering activities.

Water Timer Rebate and Instant Savings
Up to 50% of the pre-tax purchase price for up to two hose timers, for a maximum rebate of $40, is offered to homeowners. Additionally, an instant savings of $5.00 off the cost of a water timer is provided at select retail stores.

WaterWise Landscape Rebate
A rebate is offered for up to $100 for every 100 square feet of turf areas converted to water-efficient landscapes, with a cap of $3,000.

WaterWise Rainscape
A rebate of $0.50 per square foot is offered for the installation of features that direct and retain rainwater for on-site irrigation and other beneficial purposes. An additional $0.50 bonus per square foot is provided for the removal of healthy turf grass. The total rebate, including the bonus, has a lifetime limit of $1,500.

TABLE 4. RESIDENTIAL INCENTIVE PROGRAMS
Historical number of rebate applications and the estimated average water savings

Residential Incentive Program	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Annual water savings per activity
Landscape Survival Tools	108	69	66	72	55	Undetermined*
Laundry to Landscape	-	0	0	0	0	Undetermined*
Pressure Regulating Valves	19	13	4	1	7	37,213 gallons per year
Pool Cartridge Filter Rebate	-	0	2	1	3	6,023 gallons per year
Pool Cover Rebate	0	0	8	5	4	27,153 gallons per year
Rainwater Harvesting Rebate	119	122	163	117	93	4.38 gallons per gallon capacity per year
Watering Timer Instant Savings	-	-	-	3,778	3,384	Undetermined*
Watering Timer Rebate	12	15	8	28	22	Undetermined*
WaterWise Landscape Rebate	11	6	10	3	19	11 gallons per sq. ft. per year

WaterWise Rainscape Rebate	2	5	5	6	7	1.5 gallons per sq. ft. per year

*Potential water savings have varied significantly in different analyses.

Commercial Customer Programs

With almost 16,000 accounts comprising roughly 30 percent of AW's annual customer volume, there is significant potential for water savings through commercial conservation initiatives. AW partners with commercial customers by offering financial incentives, educational resources, and personalized support. We assist businesses in their efforts to seamlessly incorporate sustainable water practices into their operations.

Bucks for Business
AW collaborates with industrial, commercial, and institutional customers to promote water conservation through the Bucks for Business performance-based incentive program. Bucks for Business supports the installation of water-efficient equipment and adoption of process upgrades that offset non-potable water demand. Examples include replacing single-pass cooling with highly efficient systems or air cooling, reusing high-quality rinse water, recovering and using air conditioning condensate, and utilizing stormwater for landscape irrigation and other non-potable purposes. Additionally, incentives are available for installation of water-saving equipment for commercial laundry facilities and car washes. AW provides a rebate of $1.00 for every 1,000 gallons saved annually over a ten-year equipment lifespan or 50 percent of the cost, whichever is lower, with a maximum cap of $100,000.

Participation in Bucks for Business has fluctuated over the years. Some incomplete applications have been due to construction delays. The highest level of participation was due to Austin Independent School District utilizing bond money to upgrade multiple facilities. While the number of applications may be low, the amount of savings for each project can be substantial. Two completed projects in 2023 are estimated to save 920,000 gallons each year.

While the number of the applications for the Bucks for Business program has been low over the last five years, the program saw a significant resurgence in Fiscal Year 2024 with approximately 20 applications from commercial customers. Generally, the applications have come from multi-family facilities replacing fixtures and appliances with more efficient models, but AW has received inquiries from a wider range of commercial facilities, including movie theaters, restaurants, and car washes.

TABLE 5. BUCKS FOR BUSINESS
Historical participation by fiscal year

Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023
1	54*	3	0	2

*One applicant – Austin Independent School District – and 54 unique facilities and activities

Cartridge Pool Filter Rebate Program

AW provides an incentive of up to $250 to homeowner associations and multi-family properties with pools to replace sand or diatomaceous earth pool filters with cartridge pool filters. This high-efficiency filtration technology consumes twelve times less water compared to conventional filters.

Commercial, Institutional, and Industrial Water Efficiency Audit Rebate

AW offers up to $10,000 rebate for a limited number of water efficiency audits of industrial, commercial, and institutional facilities, and up to $5,000 for addition audits. The audit is used to recommend strategies for reducing water use and assess eligibility for applicable AW rebates to enhance and upgrade equipment. Eligibility applies to each separately metered facility surpassing an annual threshold of 100,000 gallons per year.

Commercial Kitchen Equipment Rebate

Commercial and institutional customers can apply for rebates to replace eligible food service equipment with more efficient, cost-saving Energy Star-rated models. Rebate amounts range from $40 to $5,000, depending on the type of equipment. Eligible equipment includes pre-rinse spray valves, spring-loaded food pedal controls for kitchen faucets, boiler less steam cookers, and various dishwashers.

Irrigation System Improvement Rebate

Commercial and multi-family customers can receive incentives for eligible irrigation system improvements, such as central computer irrigation controller systems, pressure regulating components, flow sensors, and conversion to multi-stream, multi-trajectory rotor nozzles.

Pressure Regulating Valve Rebate

Multi-family customers can apply for a rebate of $150 per rental unit, up to a maximum of $750 per property, for the installation of pressure reduction valves to lower indoor water pressure and help reduce water waste. Eligibility requirements include water pressure of 80 pounds per square

inch or higher without a pressure reduction valve, installation by a licensed plumber, and compliance with all permitting requirements.

Rainwater Harvesting Rebate

Commercial customers are eligible for incentives of up to $5,000 for installing rainwater collection tanks for outdoor watering. The rebate amount is determined by the overall capacity of the rainwater system with different rates for pressurized and non-pressurized systems.

Voluntary Reclaimed Water Connection Pilot Rebate

First introduced in 2021, this rebate helps commercial and multi-family customers located along a reclaimed water main to connect voluntarily. Rebates are offered for cooling tower conversions, landscape irrigation conversions, and other uses.

WaterWise Landscape Rebate

This rebate supports the conversion of healthy turf areas to native beds, permeable hardscapes, rock gardens, mulching, or non-irrigated beds. Commercial customers may receive up to $100 for every 100 square feet, with a maximum amount of $3,000. Applicants must comply with planting specifications to ensure the use of native and adaptive plants.

Regulatory Programs

Water Use Restrictions

AW's Conservation Division implements and enforces a comprehensive Water Conservation Code (Chapter 6-4 of the City Code of Ordinances) that applies to all retail water customers. This code includes a year-round Conservation Stage with baseline water use restrictions. In times of drought, additional stages and restrictions are described in the Drought Contingency Plan and Chapter 6-4 of the City Code.

One of the largest water savings and peak day water use reduction measures was adopted in 2016 with year-round Conservation Stage restrictions. It established a watering schedule that limits the use of automatic irrigation systems to no more than once a week for up to fifteen hours. Hose-end (manual) sprinklers are limited to no more than twice a week for up to thirty hours. In 2024, restrictions on drip irrigation were adopted in the Conservation Stage, as well as all Drought Stages. See the 2024 Drought Contingency Plan for additional information regarding irrigation restrictions in Drought Stages.

Conservation Stage also includes time-of-day restrictions that allow irrigation to occur only before 10:00 a.m. or after 7:00 p.m. on designated outdoor water use days unless a hand-held hose or bucket is used. Hand-held watering is permissible anytime.

TABLE 6. LANDSCAPE IRRIGATION RESTRICTIONS IN CONSERVATION STAGE

Property and Irrigation Type	Address	Watering Day
Public Schools, College/University, Homeowner Associations & Golf Course Fairways - Automatic & Manual	ALL	Monday
Public Schools, College/University, Homeowner Associations & Golf Course Fairways - Drip	ALL	Monday and Thursday
Commercial/Multi-family - Drip	ALL	Tuesday and Friday
Commercial/Multi-family - Automatic & Manual	EVEN	Tuesday
Commercial/Multi Family - Automatic & Manual	ODD	Friday
Residential - Automatic & Manual	ODD	Wednesday
Residential Property - Hose-end & Drip Irrigation	ODD	Wednesday and Saturday
Residential - Automatic & Manual	EVEN	Thursday
Residential Property - Hose-end & Drip Irrigation	EVEN	Sunday and Thursday

The Water Conservation Code also contains prohibitions on water waste, which include failing to repair a controllable leak, operating an irrigation system with excessive pressure that creates misting, allowing water to spray onto or over an impervious surface, and allowing irrigation water to run off into the street or pond in parking lots or impervious surface.

If customers have a newly installed landscape (not required by governmental permit) that needs additional watering days to become established, they can apply for a variance from the mandatory watering schedule. To qualify for this variance, the landscape must be xeriscape, and the installed plants must be low or very low water-use xeric varieties selected from AW's approved plant list.

Additional water use restrictions during the Conservation Stage include commercial power/pressure washing equipment efficiency requirements, time-of-day limits on operating commercial patio misters, restaurants may serve water only upon request, and lodging facilities must offer towel/linen reuse programs.

Water Restrictions Enforcement
AW enforces the Water Conservation Code through routine patrols and investigating water waste reports received through the Austin 3-1-1 hotline.

Customers who have been issued a citation with associated penalties are given an opportunity to dispute the violation. The customer may request a Supervisor Review of case details to determine whether to uphold or dismiss the violation. Customers who do not agree with the outcome of the Supervisor Review will be scheduled for an Administrative Hearing. The Administrative Hearing is reviewed by a third-party hearing officer who determines whether to uphold or dismiss the violation. All citations are reviewed at an Administrative Hearing unless the customer waives their right to a hearing. Customers may have assessed penalties added to their utility bill or request separate billing.

AW has a progressive penalty structure for water waste violations, with penalty amounts increasing with drought stages and violation frequency. In 2023, AW implemented a City Council-approved equity-based penalty structure with increased penalties for high water users. When assessing a water conservation fine, staff review the customer's average water usage for the three most recent summer months to determine which tier the customer falls into:

- Top 1% of average usage
- Top 3% of average usage
- Top 5% of average usage
- Top 10% of usage
- Below the 90th percentile of use

For more information regarding the enforcement process and current penalties, please visit www.austintexas.gov/department/find-your-watering-day.

Water-Use Efficiency Assessment Programs

Commercial facilities comprise roughly 30 percent of the city's overall water consumption. Efficient water use by the commercial sector is vital to future sustainability. AW administers three programs that require the submission of mandatory water efficiency reports:

Commercial Facility Irrigation Assessment

Since 2014, industrial, commercial, and institutional facilities situated on one acre or larger must assess permanently installed irrigation systems once every two years. Third-party AW Authorized Irrigation Inspectors conduct these station-by-station inspections to identify potential water waste violations. In Fiscal Year 2023, nearly 3,500 facilities were required to submit biannual assessments with an average compliance rate of 93 percent.

Cooling Tower Efficiency Program

Established in 2017, this program ensures that cooling towers operate in a manner that promotes water conservation. Facilities must adhere to baseline cycle-of-concentration standards and include efficiency components. Annual inspections confirm compliance. In Fiscal Year 2023, more than 300 facilities were required to submit their annual assessments with an average compliance rate of 80 percent.

Commercial Facility Wash Assessment

This program, initiated in 2012, sets water-efficient standards for vehicle wash equipment for commercial, multi-family, and municipal facilities. Facilities must conduct annual efficiency evaluations. In Fiscal Year 2023, more than 200 facilities with vehicle washes were required to submit annual assessments with an average compliance rate of 83 percent.

Commercial customers failing to submit required compliance documentation may face a Water Conservation Fee of $758 assessed to their utility account for each month they are out of compliance.

Metering and Water Loss

Metering Devices
AW meters all customer water connections and our meters meet American Water Works Association accuracy standards. Before each meter is delivered to AW, it is tested by the manufacturer. Upon delivery, all meters 3-inch and larger are tested a second time by AW's Water Meter Operations (WMO) division. Any meter that fails accuracy testing before installation is returned to the manufacturer. For meters 2-inches and smaller, a sample from the pallet of meters from each shipment is tested. If the testing sample of smaller meters fails the accuracy test, the entire shipment is rejected and returned to the manufacturer. Additionally, post-installation meter testing failures are expeditiously repaired or replaced. After installation, large meters are tested annually by WMO or through a contracted service provider.

Water Loss Control
Annual water loss totals fluctuate with weather and demand conditions, with some variation due to data collection. AW conducts annual Water Loss Audits following the Texas Water Development Board (TWDB) methodology and has made significant progress in improving data validity scores while implementing comprehensive water loss strategies.

To enhance water loss management, AW contracted with a consulting firm to review the water loss program, perform a Level 1 Validation of the 2022 Water Loss Audit, review system meter accuracy validation, and provide recommendations for improvement. Recommendations identified in the final report have been incorporated into an implementation plan that is underway.

AW's efforts to control water loss include managing leaks, reducing non-revenue water, and improving data quality. The table below shows water loss volumes over the past five years.

TABLE 7. HISTORICAL WATER LOSS VOLUMES

Year	Water Loss (million gallons)	Water Loss GPCD (Gallons Per Capita Daily)[1]	Infrastructure Leakage Index (ILI)[2]
2019	7,468	18.88	3.71
2020	8,864	23.05	4.44
2021	8,029	20.42	3.86
2022	8,498	21.55	4.09
2023	8,661	21.64	4.18

[1]Austin Water acknowledges that Gallons Per Capita Daily is a metric used throughout this planning document under direction of the State, but also understands that water loss is not dependent on population and therefore this is an imperfect performance measure. Water loss is driven by miles of pipes, number of connections, system operating pressure, accuracy of meters, and by programs to reduce leakage and apparent loss, regardless of the numbers or actions of the population served by the system.

[2] Infrastructure Leak Index (ILI) is a performance measure that expresses system real losses as a multiple of the calculated Unavoidable Real Losses.

Leak Detection and Repair

AW conducts comprehensive leak detection to locate subsurface leaks in the water distribution system. Acoustic technology is utilized to inspect over 500 miles of water lines annually, while smart ball technology is employed to search for leaks inside large transmission mains. Austin Water has budgeted contracts for approximately $2 million per year for these leak detection projects.

The "Renewing Austin" program targets aging water lines for replacement to enhance system reliability, focusing on mains with a history of leakage incidents. This program's purpose is to prevent future leaks before they happen, which reduces losses and service outages. Over 60 Renewing Austin projects have been proposed for the Fiscal Years 2025-2029 Capital Improvement Plan. In addition, there is an ongoing service line replacement program, targeting polybutylene lines that have the highest failure rate.

To ensure that known leaks are addressed promptly, Austin Water has an accelerated leak response and repair program, with approximately 90 percent of emergency leaks responded to within three hours and most being repaired in one day or less, faster than the recommended industry standard of two days.

Non-Revenue Water Use

AW has implemented a comprehensive plan to reduce non-revenue retail water use by routinely analyzing consumption data for zero-reads and suspicious usage patterns. Coordination with the City of Austin Utilities Revenue Measurement Control staff is conducted to investigate meter

tampering and water theft. Reporting of theft from City hydrants is facilitated through the Austin 3-1-1 system.

My ATX Water, Austin's Smart Metering System

My ATX Water began deployment in 2020 to replace analog meters with digital meters citywide. The new meters report near real-time water use and provide information to both AW and customers through a customer portal. In the coming years, My ATX Water will allow AW to implement robust water loss strategies, including district metering, remote leak detection, and pressure monitoring. As part of the My ATX Water deployment process, AW has identified and repaired hundreds of small meter and cut-off valve leaks, while alerting customers to pre-existing leaks on their service lines. Full deployment of My ATX Water is expected in 2025.

The My ATX Water customer portal allows customers to access their water usage data and sign up for customized notifications, including leak alerts and bill forecasting. Customers can also sign up for daily water use updates and water budgeting. In 2023, over 123,000 leak alerts and 81,000 bill-forecast notifications were sent out to customers; repairs and behavior modifications through these notifications are estimated to have saved 495.5 million gallons of water. Customers are also alerted to continuous flow events via email, text, or traditional mail.

Water Reuse

Reclaimed Water System
AW initiated its reclaimed water program in 1974, primarily to dispose of wastewater effluent. The program's objectives evolved over time to include providing a cost-effective source of non-potable water to conserve treated potable water, delay the need for treatment plant construction and expansions, postpone water contract payments, and address environmental concerns. Today, reclaimed water is utilized for irrigation of golf courses, ballfields, parks, and commercial properties. It is also utilized in cooling towers, manufacturing processes, and toilet flushing.

The reclaimed water system comprises four pump stations, two pressure zones, 72.8 miles of main pipelines, and six water storage facilities with a total storage capacity of 6.2 million gallons in the distribution system and 1.58 million gallons at the plants. Additionally, three public bulk water filling stations facilitate reclaimed water distribution. Currently, there are 185 metered properties with an annual demand exceeding 1.4 billion gallons. An additional 14.6 miles of reclaimed main pipelines are either in the design phase or under construction.

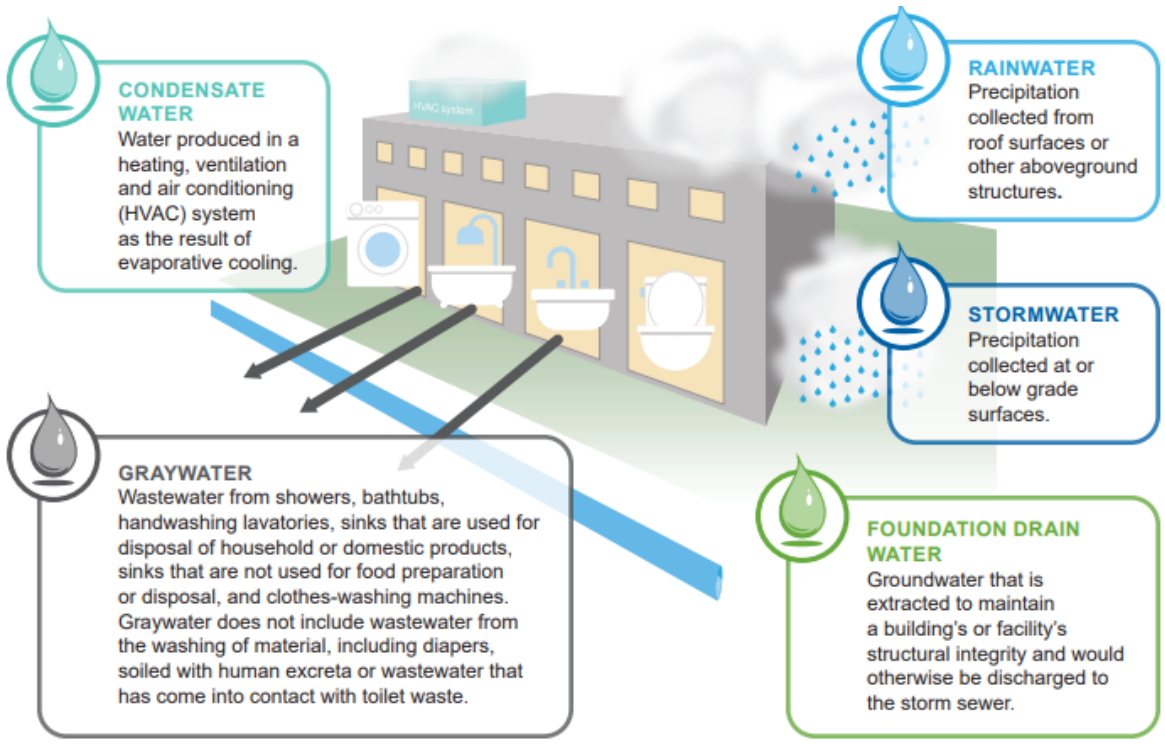
TABLE 8. HISTORICAL USE OF RECLAIMED WATER (MILLION GALLONS)

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1,493	1,569	1,606	1,689	1,634

The Reclaimed Water Mandatory Connection Ordinance, adopted by Austin City Council in September 2021, mandates that any development project within 250 feet of a reclaimed water line must connect to the reclaimed water system for irrigation, cooling, toilet flushing, and other significant non-potable water uses. For large developments with 250,000 square feet or more of gross floor area, the connection mandate extends to 500 feet. In April of 2024, Austin City Council updated the ordinance to exempt certain affordable housing projects but directed staff to look at the feasibility of fully subsidizing the cost of reclaimed connections and dual plumbing for these projects by April 2025.

Onsite Water Reuse
AW has been promoting onsite water reuse for over a decade, encouraging the utilization of non-potable water sources like rainwater, graywater, reclaimed water, and others for irrigation, cooling, and toilet flushing. Several changes to City Codes and Ordinances have facilitated this while ensuring public health and safety. Since September of 2017, new commercial and multi-family projects with cooling towers have been required to reuse condensate or utilize non-potable water to compensate for evaporative losses.

The Onsite Water Reuse System (OWRS) Program was initiated to implement code changes adopted in December 2020 that regulate the collection, treatment, and use of alternative water sources for non-potable uses in multi-family and commercial buildings. Effective April 1, 2024, the collection and treatment of rainwater and condensate for reuse in commercial and multi-family developments of 250,000 gross square feet or greater is required. Additionally, the Onsite Water Reuse Incentive Program provides project reimbursements of up to $500,000 for voluntarily incorporating onsite water reuse systems. Similar to the Reclaimed Water Mandatory Connection Ordinance, certain affordable housing projects are exempt from onsite water reuse requirements, but staff is looking at the feasibility to fully subsidize onsite water reuse for these projects.



GoPurple Program

In March of 2024 AW launched a new GoPurple program to increase use of reclaimed water and onsite water reuse systems in and around Austin. The program aims to support various measures like cost-sharing, grants, and other incentives for reuse. It is funded through a new Community Benefit Charge for AW customers and a voluntary rate dedicated to water reuse. Any new commercial or multi-family development that is connecting to the reclaimed water system or installing an onsite water reuse system is eligible to participate in the program and receive financial incentives from AW to reduce the cost of installing water reuse piping or treatment systems. For more information regarding the Go Purple requirements, incentives, and funding sources, please visit the Go Purple website at www.austintexas.gov/page/go-purple.

Water Benchmarking

Water benchmarking, a strategy derived from the 2018 Water Forward Plan, assists in reducing water demand in new commercial development projects by identifying conservation opportunities. Since 2021, applicants for commercial or multi-family projects must submit a Water Benchmarking Application to assess water usage and identify conservation opportunities. Applicants of large developments with 250,000 gross square feet or greater are also required to meet with AW staff to review their Water Benchmarking Application and available incentives for conservation and reuse. This initiative aims to establish annual water budgets for commercial development projects, with 439 applicants having undergone this process by December 31, 2023. Eventually, AW may institute excess usage charges for commercial projects that exceed an annual water budget.

Following the effective date of the mandatory onsite reuse requirement, water benchmarking meetings will shift focus to ensuring compliance with onsite water reuse and reclaimed water connection ordinances.

Water Rates

AW implements a five-tiered inclining block rate structure for single-family residential customers, aiming to maintain affordability for essential water use while discouraging excessive consumption. This structure is one of the steepest in the nation and has successfully led to a significant decrease in water consumption at the highest tiers. Additionally, reduced rates are provided to customers eligible for the utility's Customer Assistance Programs (CAP).

For multi-family, commercial, and large volume customers, water conservation during irrigation season is promoted through peak and off-peak rates. These rates are designed to incentivize water conservation during times of high demand.

TABLE 9. AUSTIN WATER VOLUMETRIC RATE STRUCTURE BY RETAIL CUSTOMER CLASS (Effective November 1, 2024)

Amount Used	Volumetric Unit Charge (per 1,000 gallons)	
	Single Family Residential	Residential Customer Assistance Program
0-2,000 gallons	$3.13	$1.31
2,001-6,000 gallons	$5.26	$3.84
6,001-11,000 gallons	$9.52	$7.14
11,001-20,000 gallons	$15.05	$13.24
Over 20,000 gallons	$18.06	$17.52
	Multi-Family	**Commercial**
Off Peak (November-June)	$4.67	$5.46
Peak (July-October)	$5.37	$6.22

Water Drought Rate Surcharge

During Stage 3 and Stage 4 drought-response, an additional fee is implemented for all retail and wholesale customer classes, except qualified Customer Assistance Program (CAP) customers.

The Water Drought Surcharge is enacted for all retail and wholesale customer classes during Stage 3, Stage 4, and Stage 5 of drought-response water restrictions to ensure financial stability to Austin Water. These surcharges will take effect the next monthly billing cycle following the

declaration of Stage 3, Stage 4, or Stage 5 water restrictions, and will continue until directed by the City Manager. CAP Customers will be exempt from the Water Drought Rate Surcharge.

Stage 5 is an emergency stage that may be determined by the City Manager due to system outage, equipment failure, contamination of water source, or other emergencies. The goal of Stage 5 is to reduce water use to levels deemed necessary. Actions during Stage 5 may include Emergency Stage Four Regulations or Additional Restrictions, and a prohibition on irrigation. The end condition for Stage 5 is determined by the City Manager based on daily water demand or the end of supply constraints.

TABLE 10. DROUGHT SURCHARGE

Drought Stage	Surcharge
Stage 3	$1.00 per 1,000 gallons
Stage 4	$2.00 per 1,000 gallons
Stage 5	$3.00 per 1,000 gallons

Goals for Water Use and Water Loss

A required component of water conservation plans by the State of Texas are five and 10-year goals for Total Gallons Per Capita Daily (GPCD), Residential GPCD, Water Loss GPCD, and Infrastructure Leakage Index. These four common metrics can vary significantly between cities and utility due to climate, city size, customer composition, and age of system.

Historical water use and loss goals
When the 2019 Water Conservation Plan was adopted, the City of Austin was just emerging from what has been determined to be the drought of record and in 2018 the City Council adopted the Water Forward Integrated Water Resource Plan. Projections and conservation strategies from the 2018 Water Forward Plan were incorporated into the 2019 Water Conservation Plan's Goals (Table 11).

TABLE 11. 2019 WATER CONSERVATION PLAN WATER USE AND LOSS GOALS

	Historic 5-year Average	Baseline	2024 Goal	2029 Goal
Total GPCD[1]	126	126	119	106
Residential GPCD[2]	67	65	61	55
Water Loss GPCD[3]	19.8	19.3	11.0	11.0
Infrastructure Leakage Index[4]	3.68	3.84	2.6	2.4

[1]Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

[2]Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

[3]Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

[4]Infrastructure Leak Index (**ILI)** is a performance measure that expresses system real losses as a multiple of the calculated Unavoidable Real Losses

Despite the water conservation efforts of the community and AW between 2019 and 2023, the five-year averages of water use and water loss did not meet the goals for the year 2024. See Table 7 for historical water loss values and Table 12 for historical water use values.

Various factors contributed to the 2019-2023 average Total GPCD (127) being higher than the 2024 goal in the 2019 Water Conservation Plan (119):

- **Under-projected demands**. The projected water demands in the 2018 Water Forward Plan and the 2019 Water Conservation Plan were based on three years – 2013, 2014, and 2015 – which projected low water use and a downward trend that did not continue when drought restrictions were lifted and the weather moderated.

- **Pandemic impacts.** During the COVID pandemic, many workers and students were required to work and study virtually from their homes, which increased the 2020 residential water use. At the time, this residential water use was largely offset by a decline in commercial water use. However, after the pandemic restrictions were lifted and commercial water use rebounded, residential water use did not have a corresponding decline. The failure to see a corresponding water use decline may be related to workers that have continued to work from home, and the increased installation and use of water-dependent amenities, such as new landscapes and pools installed during and in the years following the pandemic.

- **Extreme weather**. Over the last five years, there have been a number of extreme weather events that have affected Austin's water use. Many customers lost trees and landscapes during Winter Storm Uri in 2021 and Winter Storm Mara in 2022, which required replanting and additional water use for establishment. In addition, the summers of 2022 and 2023 experienced record high temperatures, which contributed significantly to outdoor landscape water use. Climate change modeling shows increasing average and maximum monthly temperatures and greater variability in precipitation. This will likely result in more frequent, longer-duration, and more severe droughts as well as more intense rainfall events.

- **Over-projected strategies.** The 2018 Water Forward Plan included six strategies which were projected to produce 5,300 acre feet (1.7 billion gallons) of new water savings. Of the six, water reuse and water loss mitigation were expected to save 28 and 44 percent of the total savings. In general, the water savings were projected to occur sooner than actual implementation produced, thus leading to a shortfall in anticipated water use reduction.

- **Growth of customers and water use.** Between 2019 and 2023, Austin added new residential (single family and multi-family) and commercial customers and the corresponding water use by residential and commercial customers increased. (See NEW RETAIL CONNECTIONS table on page 48 and HISTORICAL WATER SALES table on page 49.) Changes in population and water use can impact Austin's primary water use metric, gallons per capita per day or GPCD.

GPCD = Total System Water Use (includes all customer types – residential, commercial, industrial, and institutional) / Population Served

Growth in residential water use is accompanied by a corresponding growth in population and generally does not cause major changes in GPCD as long as the per capita water use for those new customer is in line with Austin's water use patterns. Growth in commercial, industrial, and institutional use has a greater impact on GPCD calculations because there is increased water use but no corresponding population growth.

TABLE 12. HISTORICAL TOTAL AND RESIDENTIAL GALLONS PER CAPITA DAILY (GPCD) VALUES

Calendar Year	Total GPCD	Residential GPCD
2019	126	60
2020	127	64
2021	124	64
2022	131	67
2023	129	65
Average	127	64

Future water use and loss goals

AW has set new water use goals (Table 13) and water loss goals (Table 14) that AW believes can be achieved. Reducing GPCD from the baseline of 127 to 121 will require saving an additional 2.25 billion gallons (6,909 acre feet) of water annually by 2029 through the reduction of water loss, the increased reuse of water, and reducing the water use of Austin residents and businesses.

TABLE 13. FIVE AND TEN-YEAR GOALS FOR WATER USE

	Historic 5-year Average	Baseline	2029 Goal	2034 Goal
Total GPCD[1]	127	127	121	114
Residential GPCD[2]	64	64	60	56

[1]Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

[2]Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

TABLE 14. FIVE AND TEN-YEAR GOALS FOR WATER LOSS

	Historic 5-year Average	Baseline	2029 Goal	2034 Goal
Water Loss GPCD[1]	21	21	19	17
Infrastructure Leakage Index[2]	4.06	4.06	3.57	3.31

[1]Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

[2]Infrastructure Leak Index is a performance measure that expresses system real losses as a multiple of the calculated Unavoidable Real Losses. 5-year average is from 2019-2023

Future Water Use and Loss Activities

The specific activities that AW will implement to achieve these savings are described below with major implementation milestones. The projected annual yields of potable water savings are shown in Table 23.

Water loss reduction

While AW employs industry best practices related to water loss control and performs well when compared to peer utilities, our water loss and water use goals can only be achieved if we build upon current efforts. AW contracted with the engineering firm Black and Veatch, experts in water loss mitigation, to review AW's metrics and programs and identify where improvements could be made. The Black and Veatch *Water Loss Program Review, Analysis, and Optimization* report identified over 20 recommendations for improvement and additional investment. The significant implementation milestones for these recommendations are shown in Table 15. Austin Water has launched a cross-department Effective Utility Management team to execute the recommendations and will regularly report on the status of each.

TABLE 15. WATER LOSS REDUCTION IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Launch a cross-functional AW Water Loss Team to implement the recommendations of the water loss report	2024
Continue replacement of polybutylene service lines through the Renewing Austin Program.	2024
Develop an AW Leak Detection Standard Operating Procedure (SOP) for leak detection practices, data management, and continuous training requirements.	2025
Update AW operations response procedures to improve management of service line failures.	To Be Determined
Update AW asset management program to improve management of service line failures.	To Be Determined
Develop an AW Production Meter SOP which include production meter measurement improvement recommendations.	2025
Update the AW Meter Testing SOPs for meter testing, sizing, and replacement.	2025
Create dashboards to integrate SCADA, AMI, pressure monitoring and leak detection data.	To Be Determined
Develop an AW Unauthorized Consumption Mitigation SOP.	2025
Develop an AW Data Handling Errors Mitigation SOP	2025

Implementation Activity Milestone	Fiscal Year Target
Pilot the implementation of two District Metering Areas (DMAs) to reduce water loss through pressure management.	2025
Expand the use of District Management Areas across the city and consider partial conversion to Pressure Management Areas (PMAs).	2026

Drip irrigation restrictions

Since 2016, automatic, manual, and hose-end irrigation has been restricted to one day (for automatic) or two days (for hose-end) per week year-round in the non-drought Conservation Stage, with tightening restrictions during drought stages. However, drip irrigation has had no restrictions in terms of days of the week or time windows.

Drip irrigation systems are typically installed below ground or mulch and consist of porous piping that allows the application of water at a slow and constant rate. A drip irrigation system can be a very efficient way to deliver supplemental irrigation close to the root zone of plants, while avoiding losses to evaporation and wind, which is sometimes the case in automatic spray or hose-end irrigation.

However, if drip irrigation systems were poorly installed, are poorly maintained, run too long, or are installed extensively in an area, then the overall water use can be equivalent to the use of traditional spray irrigation systems. To provide reasonable restrictions on the use of drip irrigation, AW staff met with interested stakeholders to better understand: the investments already made, the need for flexibility for large irrigated areas, and the use of drip for trees, nursery stock, and vegetable gardens.

The additional restrictions listed below provide effective water savings while allowing for reasonable exceptions and variances. The days of use for drip irrigation can be found in Table 6 on page 17, as well as in the Drought Contingency Plan and City Code Chapter 6-4.

- Restrict the use of drip irrigation to two days per week in Conservation Stage and Drought Stages 1-2.
- Restrict the use of drip irrigation to one day per week in Drought Stage 3 (750,000 acre feet, 38% of storage).
- Restrict the use of drip irrigation to one day per week for beds and functional turf in Drought Stage 4 (600,000). No irrigation of nonfunctional turf by any type of irrigation system is permitted.

- Exemptions from the watering schedule related to drip irrigation include:
  - Use of tree bubblers for the establishment of new trees outside of the irrigation schedule.
  - Use of drip irrigation or soaker hoses for trees within the drip line of the tree.
  - Irrigation of commercial nursery stock, including by drip irrigation.
  - Use of drip irrigation or soaker hoses for vegetable gardens.

- Variances from the watering schedule related to drip irrigation include:
  - Large property variance – If property needs additional time to irrigate due to system size and flow constraints, additional days/time may be approved.
  - New xeriscape landscape establishment – additional irrigation time for an establishment period.
  - Commercially applied lawn & tree treatments.
  - Athletic field irrigation during Drought Stages 3 and 4.

Commercial conservation incentives

Significant potential water savings exist for commercial, institutional, and industrial (CII) buildings using water efficient fixtures and appliances, as well as other building-specific water savings devices. AW intends to expand the use of the Bucks for Business performance-based water efficiency program. See page 14 for more information regarding Bucks for Business.

TABLE 16. COMMERCIAL CONSERVATION INCENTIVES IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Pilot an increased rebate for commercial water use audits.	2025
Develop data regarding CII customer categorization to assist in benchmarking and the identification of facilities for water conservation outreach.	2025
Identify opportunities for CII facility owners/managers to benefit from the My ATX Water alerts and information.	2026

New single family landscape transformation

AW has identified activities to transform the landscape of new homes such that less potable water is use for irrigation that include:

- Enforcement of soil depth and composition requirements for home builders.
- Required pressure-reduction devices on new irrigation systems.
- Limiting the area of automatic irrigation systems to 50 percent of the landscape area for new homes.
- Inspecting all new automatic irrigation systems for state and local requirements.
- Offering irrigation checkups for new homeowners.
- Requiring new homes to install laundry to landscape-ready plumbing (exceptions apply).

TABLE 17. NEW SINGLE FAMILY LANDSCAPE TRANSFORMATION IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Coordinate with COA Development Services Department to increase inspections of new-development soil inspections.	Ongoing
Council adoption and implementation of local amendments to the 2024 Uniform Plumbing Code (pressure-reduction devices, irrigation area, laundry to landscape).	2025
Austin Water inspection of all new residential irrigation systems and offering new homeowners follow-up checkups.	2025

My ATX Water

The My ATX Water smart meter system will complete deployment to residential and commercial customers by the end of 2025, allowing AW staff to focus on utilizing the system to communicate directly with all customers and identify water saving opportunities. These opportunities will require gathering and analyzing data and building off of current customer interaction processes in order to realize significant and quantifiable savings.

- **Customer water saving opportunities** – AW will continue to educate customers on the opportunities to save water through leak alerts, high-usage alerts, and the use of the My ATX Portal.

- **Commercial customer engagement** - AW will identify and pursue opportunities to allow commercial property owners and managers to benefit from the My ATX Water alerts and information.

- **Customer irrigation engagement** – AW will identify and pursue opportunities to engage with both residential and commercial irrigators to reduce landscape irrigation water use.

TABLE 18. MY ATX WATER IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Develop data regarding CII customer categorization to assist in benchmarking and the identification of facilities for water conservation outreach.	2025
Expand My ATX Water reporting to better understand customer engagement through the portal.	2025
Investigate additional methods to encourage residential customers to use the My ATX Water portal and water-saving alerts.	2025/2026
Conduct pilot outreach activities to learn the best ways to encourage customers to save water.	2025/2026
Investigate effective methods of contacting CII owners/managers regarding water saving opportunities.	2026

Water use benchmarking and budgeting

AW has begun benchmarking projected water and non-potable water use for new commercial development through a required survey. The results are then used to identify water-saving development actions and the potential for reclaimed or onsite water reuse. Future efforts of benchmarking and budgeting will involve all existing AW customers.

- **Benchmarking** – Future phases will focus on categorizing commercial customers in order to benchmark water use for different types of business. This information can then identify water-efficient businesses, as well those with potential water-saving opportunities. Similar activities will be undertaken for residential customers.

- **Budgeting** – AW will investigate the potential for mandatory water budgeting based upon the benchmarking data in the non-drought Conservation Stage, as well as drought stages.

TABLE 19. WATER USE BENCHMARKING AND BUDGETING IMPLEMENATION MILESTONES

Implementation Milestone Activity	Fiscal Year Target
Develop data regarding CII customer categorization to assist in benchmarking and the identification of facilities for water conservation outreach.	2025
Conduct pilot outreach activities to learn the best ways to encourage customers to set and strive towards voluntary water budgets.	2026
Host public and stakeholder engagement opportunities to collect input on potential residential and commercial mandatory water budgets.	2027

Reclaimed and reuse water

Continue to expand the number of customers who convert to the use of reclaimed water and new developments that connect to the centralized reclaimed water system, one of the decentralized reclaimed water systems, or utilize onsite water reuse. See page 24 for more information regarding the GoPurple program and the various reclaimed/reuse activities. Below are implementation activities for centralized and decentralized reclaimed water systems, as well as for onsite water reuse activities.

TABLE 20. CENTRALIZED RECLAIMED WATER IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Implement new projects to increase supply and extend the centralized service area.	Ongoing
Conduct water benchmarking with all new commercial and industrial customers to identify uses appropriate for reclaimed water and require connection to the reclaimed system in accordance with development requirements.	Ongoing
Implement projects to Complete the Core.	2024 - 2027
Complete Reclaimed Water Long Range Plan update.	To Be Determined

TABLE 21. DECENTRALIZED RECLAIMED WATER IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Collaborate with new developments through the service extension request (SER) process to identify opportunities for decentralized reclaimed and appropriate cost participation by Austin Water.	Ongoing
Complete Wastewater Collection System Long Range Plan, including identifying existing and future wastewater treatment plants and sites.	2025
Develop infrastructure planning and design guidance.	To Be Determined

TABLE 22. ONSITE WATER REUSE IMPLEMENTATION MILESTONES

Implementation Activity Milestone	Fiscal Year Target
Determine the feasibility of fully subsidizing the cost of reclaimed connections, onsite water reuse systems, and dual plumbing for deeply affordable housing projects.	2025
Begin planning for expansion of onsite reuse requirements to include new medium-sized developments.	To Be Determined

Public outreach and marketing

AW is committed to building on its outreach and marketing successes, which include community tabling and educational outreach, advertising, social media engagement, website management, and customer leak notifications. Drought messaging and conservation messaging is integral and foundational to AW. AW's conservation messaging garners millions of impressions and reaches thousands of customers in person and virtually through:

- **Outreach**
  - Fix a Leak Week
  - Water Conservation Outreach at Utility Bill Payment Centers, Lunch & Learns, and Virtual Sessions
  - Ongoing community events
  - Dowser Dan for K-5 education

- **Advertising**
  - Water Wise Landscapes
  - Rebates
  - Irrigation and Outdoor Watering Schedules
  - My ATX Water

- **Social media engagement**

- **Special engagement activities**
  - Summer marketing campaigns, including traditional and digital advertising.
  - Additional infographics regarding the conservation incentive applications will provide customers with a better understanding of incentive requirements. In addition, a new online conservation tracking system will provide rebate applicants with updates regarding where their application is in the approval and payment process.
  - Conservation staff will increase engagement with landscapers and nurseries and investigate the potential for landscaper trainings.

Community partnership grants

To amplify the message of water conservation at the grass roots level, AW will explore the development of partnership grants to local non-profit organizations to support community-led projects furthering water conservation. Similar community grant programs within the City of Austin include:

- **Food and Climate Equity Grants** - administered by the Offices of Sustainability and Resilience to support community-led projects addressing food justice, climate equity, and community resilience. In 2023, the offices awarded a total of $150,000 to 51 unique projects. Additional information can be found at: https://www.austintexas.gov/news/combined-grant-program-offers-funding-food-climate-equity-and-resilience-projects

- **Bright Green Future School Grants** – administered by the Office of Sustainability, providing up to $3,000 in grants to schools that undertake projects that inspire students to become lifelong environmental learners. AW currently contributes to the funding of the Bright Green Future School Grants. Additional information can be found at https://www.austintexas.gov/department/bright-green-future-school-grants

During Fiscal Year 2025, AW will investigate and develop a program to provide $3,000 grants to community organizations to expand outreach of water conservation messaging. The development of the grants will include the eligible entities, the intended focus of activities, grant scoring and reporting criteria, and the necessary city processes. If determined feasible, AW will undertake a pilot program for water conservation grants in Fiscal Year 2026.

Projected Water Saving Yields from Water Use and Loss Activities

Estimated water-saving yields for the activities above are listed in Table 23. Estimates for some activities are not available, and it is not currently known to what degree the projected savings for an activity may be affected by concurrent implementation of other activities. AW recognizes that

the total anticipated water saving yields, expressed as GPCD, do not sum to the calculated decline from the baseline Total GPCD and the 2029 and 2034 Total GPCD goals (Table 13). Total GPCD goals will be achieved through a combination of achievable savings from proposed activities and unknown future activities.

TABLE 23. PROJECTED ADDITIONAL WATER-SAVING YIELDS FROM FUTURE WATER USE AND LOSS ACTIVITIES

Activity	2029 Annual Yield Acre feet / GPCD[1]	2034 Annual Yield Acre feet / GPCD[2]
Water loss reduction	2,240 / 1.6	4,680 / 3.0
Water use reduction		
Drip irrigation restrictions	87 / 0.1	522 / 0.3
Commercial conservation incentives	181 / 0.1	366 / 0.2
New single family landscape transformation	564 / 0.4	1,074 / 0.7
My ATX Water		
Residential water saving opportunities	165 / 0.1	345 / 0.2
Commercial engagement and water saving opportunities	192 / 0.1	432 / 0.3
Customer irrigation engagement	574 / 0.4	703 / 0.5
Water use benchmarking and budgeting	708 / 0.4	2,480 / 1.6
Reclaimed and reuse water		
Centralized reclaimed	880 / 0.6	3,940 / 2.5
Decentralized reclaimed	0 / 0	80 / 0.1
Onsite water reuse	880 / 0.6	2,260 / 1.4
Public outreach and marketing	-[3]	-[3]
Total estimated savings	**6,471 / 4.4**	**16,882 / 10.8**

[1]2029 projection of population served = 1,281,037

[2]2034 projection of population served = 1,391,528

[3]Outreach and marketing activities are widely recognized as water-savings measures that promote all other activities that cannot be quantified at time of the adoption of the Water Conservation Plan.

Program Tracking

To effectively track, evaluate, and quantify the impact of conservation activities and incentive programs, AW determines actual or estimated water savings for each program. While some estimates are based on national studies and utility research, AW increasingly relies on a statistical method (regression analysis) specific to Austin's data for more accurate assessments.

AW utilizes business intelligence tools to monitor performance in achieving conservation goals. These provide staff with dashboards and reports for real-time insights. Through annual audits of incentive programs, AW evaluates various aspects such as application trends, approved projects, estimated savings, cost-effectiveness, market saturation, administrative efficiency, and equity considerations. This information guides decisions on program optimization, expansion, or termination to ensure maximum impact and efficiency in water conservation efforts.

Beyond internal tracking and evaluation, AW will undertake additional reporting of conservation-related metrics and activities to relevant City boards, commissions, and task forces. Currently, AW provides a quarterly water conservation update to the Resource Management Commission which includes information regarding water conservation incentives and enforcement, as well as reclaimed water volumes. Staff will revise those updates to be more focused on the performance of conservation measures and offer it to all interested City bodies. In addition, AW will produce an annual report that describes the implementation progress of conservation activities.

Utility Profile

Contact Information

Name:	City of Austin Water Utility
Address:	625 East 10th Street, Suite 615, Austin, TX 78701
Telephone:	512-972-1000
Water right:	14-5471
Regional Water Planning Group:	Region K, Lower Colorado
Conservation Coordinator:	Kevin Kluge, Water Conservation Division Manager
Contact Information:	512-972-0400, kevin.kluge@austintexas.gov

Population and Service Area Data

The service area for the City of Austin includes both retail customers and wholesale customers. Within this service area, there are several wholesale customer service areas that extend beyond the city's boundaries. These extensions occur due to various factors such as infrastructure design and layout, operational limitations, or specific water supply demands.

CURRENT SERVICE AREA SIZE IN SQUARE MILES

Retail	Wholesale	Total
548	Wholesale Service: 33 Emergency Service Only: 13 Total: 46	592

HISTORICAL SERVICE AREA POPULATION

	Retail	Wholesale	Total
Water service	1,096,486	53,770	1,150,256
Wastewater service	1,075,255	44,367	1,054,662

HISTORICAL POPULATION SERVED

Year	Water - Retail	Water - Wholesale	Wastewater*
2019	1,083,596	54,966	917,416
2020	1,053,756	56,822	947,943
2021	1,077,269	58,540	977,053
2022	1,080,270	59,686	1,003,476
2023	1,096,486	53,770	1,054,662

*Wastewater-served population includes retail and wholesale estimates

PROJECTED SERVICE AREA POPULATION

Year	Water Retail	Water Wholesale	Wastewater*
2030	1,247,528	55,558	1,272,000
2040	1,466,473	57,742	1,494,790
2050	1,687,533	62,117	1,719,567
2060	1,913,291	66,280	1,948,809
2070	2,147,291	70,190	2,186,021

*Wastewater-served population includes retail and wholesale estimates

Sources and Methods Used for Estimates

The size of AW's service area was determined through a Geographic Information System (GIS) process, which identified parcels served by the utility. Historical and current population served by AW is estimated by the City Demographer in conjunction with other city departments, including Austin Water, who provides periodic updates on the population within the city's limited and full-purpose jurisdictions, as well as the population of surrounding counties. These estimates are based on demographic, billing, and consumption data and other relevant factors to provide an accurate representation of the population served by AW. Projected population served by AW is estimated using growth rate projections developed by Austin Water in close consultation with the City Demographer. These projections are typically based on historical population trends, demographic factors, and anticipated changes in the service area. The growth rate projections developed for the Water Forward planning project in 2024 serve as the basis for estimating the future population served by AW. Appendix C includes a map that illustrates AW's retail service area, emergency water service area, wholesale service area, and areas covered by the Certificate of Convenience and Necessity (CCN).

Water Supply and Demand

SYSTEM INPUT

Year	Water produced (gallons)	Purchased or Imported (gallons)	Exported Water (gallons)	Total System Input
2023	54,899,509,000	0	2,731,521,000	52,167,988,000
2022	55,991,985,393	0	3,010,560,408	52,981,424,985
2021	51,744,870,440	0	2,653,337,857	49,091,532,583
2020	52,290,058,519	1,175,510	2,592,908,265	49,698,325,764
2019	50,495,469,807	867,000	2,544,498,300	47,951,838,507
Historic Average	53,084,378,632	408,502	2,706,565,166	50,378,221,968

Water Supply System

Designed capacity of system (gallons): 335 MGD
Storage capacity
Elevated storage (gallons): 15.5 MG
Ground storage (gallons): 156.6 MG

PROJECTED WATER DEMAND

Year	Population	Pumpage (gallons)
2025	1,193,506	56,270,751,407
2026	1,215,276	57,234,218,172
2027	1,237,128	58,197,684,937
2028	1,259,052	59,161,151,701
2029	1,281,037	60,124,618,466
2030	1,303,086	61,088,085,231
2031	1,325,144	62,051,551,996
2032	1,347,244	63,015,018,761
2033	1,369,376	63,978,485,525
2034	1,391,528	64,941,952,290

Source Data for Projected Water Demand

Projected water supply demands for the City's service area over the next ten years are based on population trends, historical water use, economic growth, and expected conservation savings. Projected diversions were estimated using baseline future water demands and estimated Water Forward strategy savings. Baseline future water demands were developed from an average water consumption for 2015 through 2020 and represent future conditions based on demographic projections of population, housing, and employment in Austin along with projected passive conservation. A climate adjustment factor was applied to the baseline future water demands. Savings from Water Forward strategies, which would be expected to reduce demand for potable water, were subtracted from the climate-adjusted baseline demand to generate projected diversions.

High Volume Customers

ANNUAL TREATED WATER USE FOR TOP FIVE HIGHEST VOLUME RETAIL CUSTOMERS IN 2023

Customer Name	Usage (gallons)
Samsung	2,438,050,700
University of Texas	829,212,600
NXP USA, INC	732,270,900
Cypress Semiconductor	389,030,200
Tesla Inc.	329,646,500

ANNUAL TREATED WATER USE FOR WHOLESALE CUSTOMERS IN 2023

Water & Wastewater Customers	Contract Amount (acre-feet)	Usage (acre-feet)
City of Manor	1,680	Less than 1
City of Rollingwood	1,120	355
City of Sunset Valley	716	343
Shady Hollow MUD	554	622
North Austin MUD #1	No contractual limitation	1,029
Northtown MUD	No contractual limitation	950
Southwest Water Company – Mid-Tex	1,274	265
Wells Branch MUD	No contractual limitation	1,245
Water Only Customer	**Contract Amount** (acre-feet)	**Usage** (acre-feet)
Aqua Texas – Morningside	52	5
Aqua Texas - Nighthawk WSC	43	41
Aqua Texas - Rivercrest	1,120	474
Creedmoor-Maha WSC	839	251
High Valley WSC	683	15
Marsha WSC	55	37
Travis County WCID #10	3,360	2,743
Village of San Leanna	325	14
Water Emergency	**Contract Amount** (acre-feet)	**Usage** (acre-feet)
Travis County MUD #4	No contractual limitations	0
Travis County WCID 17	No contractual limitations	0
Southwest Water Company – Windermere	No contractual limitations	0

System Data

CURRENT NUMBER OF ACTIVE RETAIL CONNECTIONS

	Metered	Non-metered	Total
Residential	233,511	0	233,511
Single-Family	*226,679*	*0*	*226,679*
Multi-Family	*6,832*	*0*	*6,832*
Commercial	18,151	0	18,151
Industrial	10	0	10
Institutional	700	0	700
Agriculture	0	0	0
Other (*Wholesale*)	50	0	50

NUMBER OF NEW RETAIL CONNECTIONS FOR THE PAST FIVE CALENDAR YEARS

	2019	2020	2021	2022	2023
Residential					
Single-Family	4,273	4,266	3,065	2,791	1,878
Multi-Family	101	120	92	31	132
Commercial	278	286	175	103	166
Industrial	0	0	0	0	0
Institutional	0	0	0	0	0
Agriculture	0	0	0	0	0
TOTAL	4,652	4,672	3,332	2,925	2,176

The customer types shown in the table above are defined by TWDB in their guidance for the preparation for Water Conservation Plans which can be found online.

HISTORICAL WATER SALES (GALLONS)

	2019	2020	2021	2022	2023
Residential	24,625,694,500	26,485,611,800	25,806,553,700	28,320,264,200	27,809,231,000
Single-Family	14,660,931,000	15,833,103,100	14,824,750,200	16,574,970,200	16,058,699,400
Multi-Family	9,964,763,500	10,652,508,700	10,981,803,500	11,745,294,000	11,750,531,600
Commercial	11,101,200,600	9,953,614,400	10,806,494,300	11,262,707,700	11,529,513,600
Industrial	3,382,623,800	3,423,463,400	3,291,878,400	3,601,480,900	3,607,375,300
Institutional	1,216,558,500	857,728,200	1,388,446,600	1,106,477,700	1,125,001,500
Wholesale	2,544,498,300	2,541,050,100	2,600,271,100	2,950,349,200	2,731,630,163
Agricultural	0	0	0	0	0
TOTAL	42,870,575,700	43,261,467,900	43,893,644,100	47,241,279,700	46,802,751,563

Water Use Data

MONTHLY DIVERSIONS FOR ALL WATER USES (ACRE-FEET)

	2019	2020	2021	2022	2023
January	10,496	11,390	11,266	11,817	12,257
February	9,875	10,634	11,670	10,880	10,988
March	11,335	11,564	12,144	12,675	13,236
April	11,476	11,274	12,652	13,660	12,864
May	12,453	13,086	12,515	14,939	13,657
June	12,471	14,518	13,785	16,654	15,337
July	15,036	16,376	14,486	18,938	18,370
August	17,772	17,178	15,302	17,735	19,576
September	16,610	13,686	16,068	15,988	16,962
October	14,993	14,664	14,192	16,080	14,997
November	11,878	13,106	12,560	12,733	12,687
December	11,627	11,865	12,334	12,676	12,251
Total	**156,021**	**159,342**	**158,974**	**174,777**	**173,181**

TOTAL AMOUNT OF WATER DIVERTED FOR MUNICIPAL USE (ACRE-FEET)

Year	Total Water Pumpage
2019	156,021
2020	159,342
2021	158,974
2022	174,777
2023	172,911

Water Supply Sources

AW receives 100 percent surface water from the Colorado River through a combination of run-of-river water rights granted by the State of Texas and a water supply contract with the Lower Colorado River Authority (LCRA). In 1999, the City of Austin secured a firm water supply totaling 325,000 acre-feet per year (AF/yr) through a key water supply contract with LCRA, utilizing stored water in the Highland Lakes and other sources to support Austin's run-of-river water rights, which are among the oldest in the basin. Under this 1999 agreement, which amended a previous 1987 agreement, Austin prepaid the LCRA for reservation and use fees. Future water use payments to LCRA will be triggered when Austin's annual average use for two consecutive calendar years exceeds 201,000 AF/yr. This has provided a conservation incentive for Austin, as the year after this trigger is reached the City will begin paying for water diversion amounts above 150,000 AF/yr. The term of the 1999 agreement extends through the year 2050, with an option for the City to renew the agreement for an additional 50-year period through the year 2100. In 2007, the City entered into a supplemental water supply agreement with LCRA for an additional 250,000 AF/yr of firm water to be planned and purchased at a future time, likely incrementally, to meet future needs.

Treatment and Distribution System

For over a century, AW has remained dedicated to delivering clean, safe, reliable, high-quality, sustainable, and affordable water to its customers. The utility owns and operates three major surface water treatment plants (WTPs) – Davis and Ullrich, which draw water from Lake Austin, and Handcox, which draws water from Lake Travis. Currently, these WTPs have a combined water treatment capacity of 335 million gallons per day (MGD), including 14 MG of elevated and 158 MG of ground storage capacity. Less than 3 percent of filter backwash is recycled to the head of the plants. The system comprises 3,929 miles of water mains, 9 major pressure zones, 47 water pumping stations and local boosters, and 38 city-maintained reservoirs with 176 million gallons of effective storage capacity.

Austin Water Treatment Plants and Capacity

Plant	Year Constructed	Treatment Capacity (MGD)
Davis	1954	118
Ullrich	1969	167
Handcox	2014	50
Total		335

Wastewater System Data

AW's wastewater system serves approximately 97 percent of the people served by Austin's water system. The treated volume includes those wholesale customers that receive wastewater service by the City. The table below shows the monthly volume of wastewater treated at Walnut Creek and South Austin Regional Wastewater Treatment Plants over the past five years.

MONTHLY VOLUME OF WASTEWATER TREATED (IN THOUSAND GALLONS)

	2019	2020	2021	2022	2023
January	3,708,765	2,800,844	3,044,414	2,899,674	2,999,137
February	2,680,303	2,861,340	2,836,168	3,240,818	2,997,903
March	2,965,722	3,058,785	3,155,101	3,051,613	3,014,295
April	3,323,406	2,974,798	3,020,344	3,055,210	3,353,414
May	4,032,151	3,260,018	3,871,683	3,177,750	3,619,955
June	3,116,667	2,832,939	3,827,024	2,919,609	3,137,860
July	2,997,113	2,726,402	3,283,108	2,953,290	2,932,356
August	2,791,708	2,829,107	3,195,987	3,100,582	2,934,889
September	2,689,971	3,128,329	2,858,197	2,969,567	2,970,899
October	2,811,429	2,638,340	3,286,881	2,860,915	3,274,428
November	2,554,556	2,593,189	3,035,373	3,082,337	3,162,091
December	2,739,583	2,751,468	3,016,548	3,181,447	3,208,378
Total	**36,411,374**	**34,455,558**	**38,430,828**	**36,492,812**	**37,605,605**

Use of Treated Effluent

Walnut Creek Wastewater Treatment Plant uses approximately 2.2 million gallons per day of treated effluent for plant washdown and chlorination/dechlorination. The South Austin Regional (SAR) Wastewater Treatment Plant uses approximately 1.2 million gallons per day of treated effluent for plant washdown and chlorination/dechlorination. Hornsby Bend uses an additional 0.5 million gallons per day of treated effluent from SAR. Irrigation at Hornsby is drawn from an on-site pond system, not treated effluent.

TYPE OF WATER REUSE AND RECYCLING ACTIVITIES IMPLEMENTED, 2023

Type of reuse activity	Total annual volume (in thousand gallons)
On-site irrigation	666.2
Plant wash down	0
Chlorination/de-chlorination	0
Industrial	601,593.8
Landscape irrigation (park, golf courses)	903,159.7
Agriculture	0
Discharge to surface water	359.2
Evaporation Pond	0
Other	46,897.3
Total	1,552,676.2

Appendix A. Water Conservation Plan Requirement Checklist

AW prepared this Water Conservation Plan and Utility Profile for Municipal and Wholesale Water Use to comply with Title 30 Texas Administrative Code §§ 288.2 and 288.5. This plan provides an overview of Austin's current and future water conservation initiatives within the framework recommended by forms TCEQ-10218 and 20162. In addition, the utility profile is used to convey information about the City of Austin's water and wastewater system to the Texas Commission on Environmental Quality (TCEQ).

Water Conservation Plan Requirements	Report Location
Water Conservation Utility Profile, TWDB-1965	Page 31
Conservation Coordinator	Page 31
5- and 10-year goals in GPCD	Page 28
Achieving Targets	Page 27
Tracking Targets and Goals	Page 29
Production Meter(s)	Page 21
Universal Metering Program	Page 21
Water Loss Control Program	Page 22
Leak Detection Program	Page 22
Public Education and Information	Page 10
Water Rate Structure	Page 26
Signed Official Ordinance	Page 153, Appendix H
Regional Water Planning Group Notification	Page 155, Appendix I

Appendix B. Drought Contingency Plan

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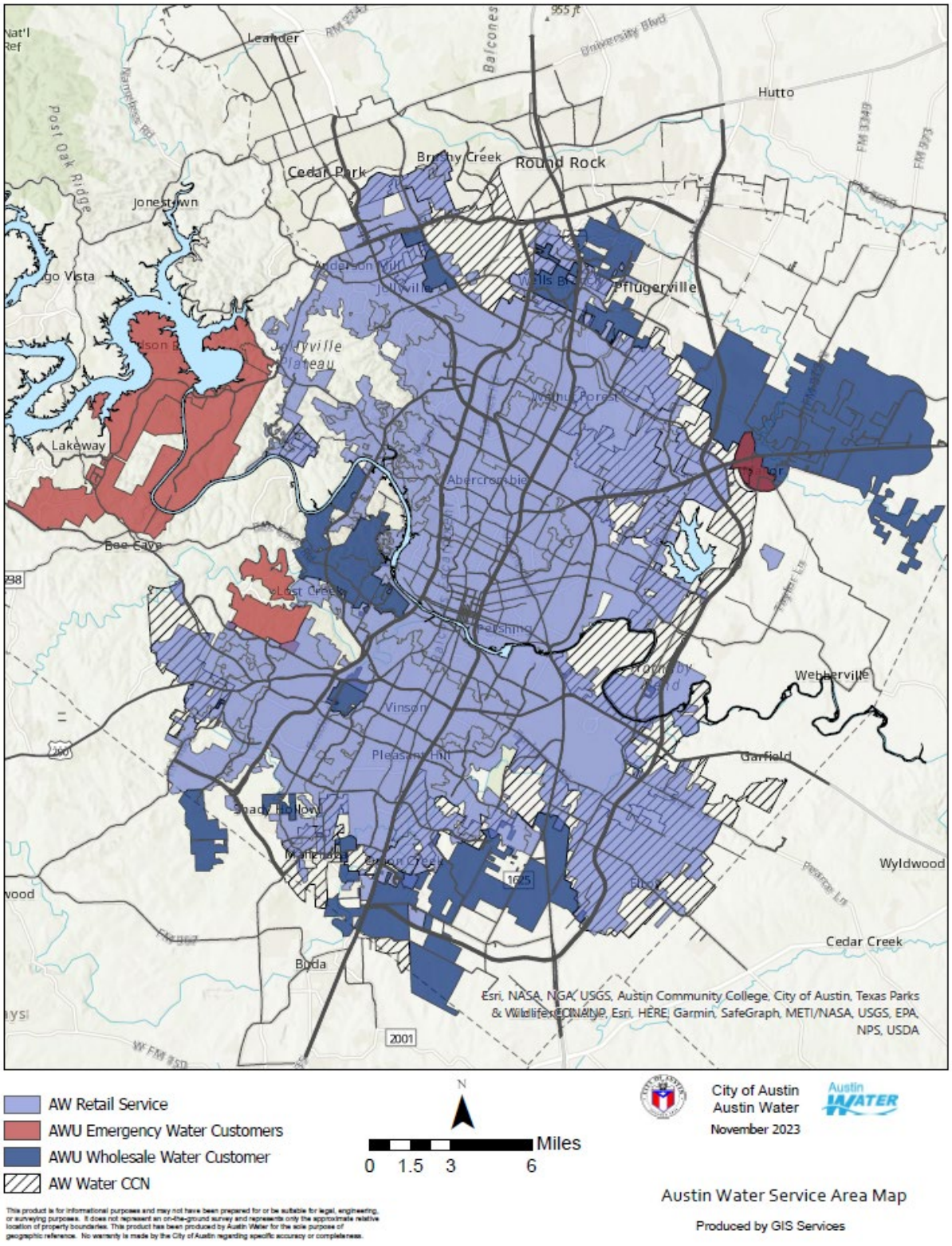
Appendix C. Water Service Area Map



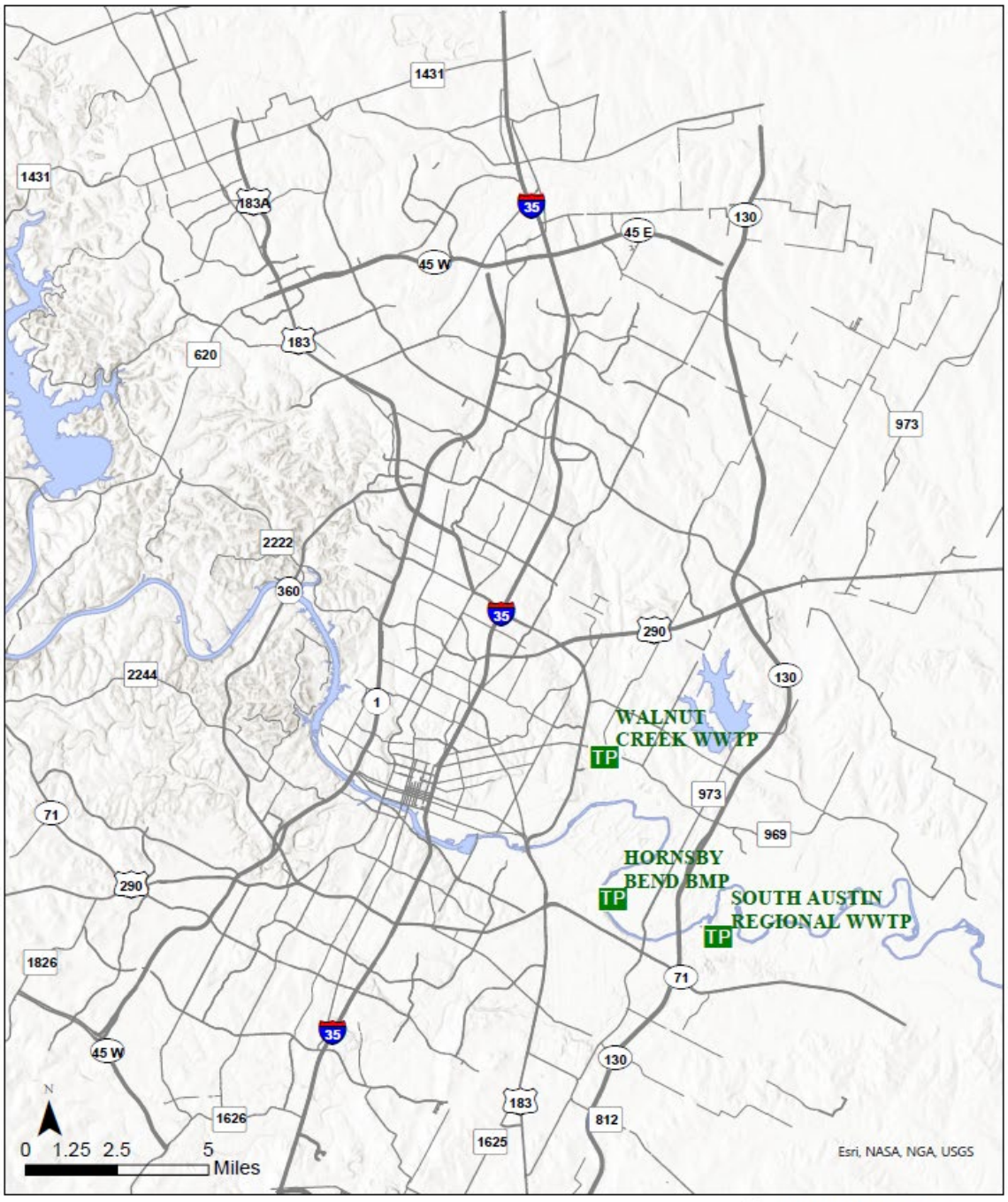
Appendix D. Wastewater Treatment Plants and Permits

Plants 1 through 8 are permitted to discharge to a stream. Plants 9 through 12 are not permitted to discharge to the waters of the state.

Permitted flows are expressed as monthly averages unless specified otherwise. Effluent quality is expressed as monthly average (unless specified otherwise) and written after the permitted average flow in the following order: 5-day Carbonaceous Biochemical Oxygen Demand (CBOD5)/Total Suspended Solids (TSS)/Ammonia-Nitrogen (NH3-N)/Total Phosphorus (TP), when applicable. For Balcones, Onion Creek, Lost Creek, River Place and Thoroughbred Farms, the effluent limit is on 5-Day Biochemical Oxygen Demand (BOD_5), and not on $CBOD_5$.

1) Walnut Creek Wastewater Treatment Plant, TPDES Permit No. WQ0010543011, EPA ID No. TX0046981, RN101607901, 75 MGD (annual average), 10/15/2 (monthly average) and 5/5/2 (annual average) to the Colorado River
2) South Austin Regional Wastewater Treatment Plant, TPDES Permit No. WQ0010543012, EPA ID No. TX0071889, RN101607794, 75 MGD (annual average), 10/15/2 (monthly average) and 5/5/2 (annual average) to the Colorado River
3) Wild Horse Ranch Wastewater Treatment Plant, TPDES Permit No. WQ0010543013, EPA ID No. TX0124800, RN103014577, 0.75 MGD, 5/5/2/1 to a tributary of Gilleland Creek
4) Taylor Lane Wastewater Treatment Plant, TPDES permit No. WQ0010543014, EPA ID No. TX0129950, RN105331755, 0.1 MGD, 5/5/2/1 to Gilleland Creek
5) Pearce Lane Wastewater Treatment Plant, TPDES Permit No. WQ0010543015, EPA ID No.TX0132934, RN106066715, 0.15 MGD, 5/5/2/1 to a tributary of Dry Creek
6) Thoroughbred Farms Wastewater Treatment Plant, TPDES Permit No. WQ0014459001, EPA ID No. TX0067466, RN101265254, 0.065 MGD, 20/20 to Dry Creek
7) Dessau Wastewater Treatment Plant, TPDES Permit No. WQ0012971001, EPA ID No. TX0097870, RN102077328, 0.5 MGD, 10/15/3 to a tributary of Harris Branch
8) Brushy Creek Regional Wastewater Treatment Plant (Co-permittee with City of Round Rock, City of Cedar Park, and Brazos River Authority), TPDES Permit No. WQ010264002, EPA ID No. TX0101940, RN10082260, 21.5 MGD (annual average), 10/15/2, to Brushy Creek
9) Balcones Water Reclamation Plant, TCEQ Permit No. WQ0011363001, RN102095114, no discharge, irrigation of golf course, 0.292 MGD/10
10) Lost Creek Water Reclamation Plant, TCEQ Permit No. WQ0011319001, RN100641653, no discharge, irrigation of golf course, 0.42 MGD, 10/15
11) River Place Water Reclamation Plant, TCEQ Permit No. WQ0011514001, RN100843283, no discharge, irrigation of golf course, 0.207 MGD, 5/5
12) Hornsby Bend Biosolids Management Plant, TCEQ Permit No. WQ0003823000, EPA ID No. TXL0050005, RN100816685, biosolids treatment plant, no discharge

Appendix E. Map of Large Wastewater Treatment Plants



Austin's Large WWTP

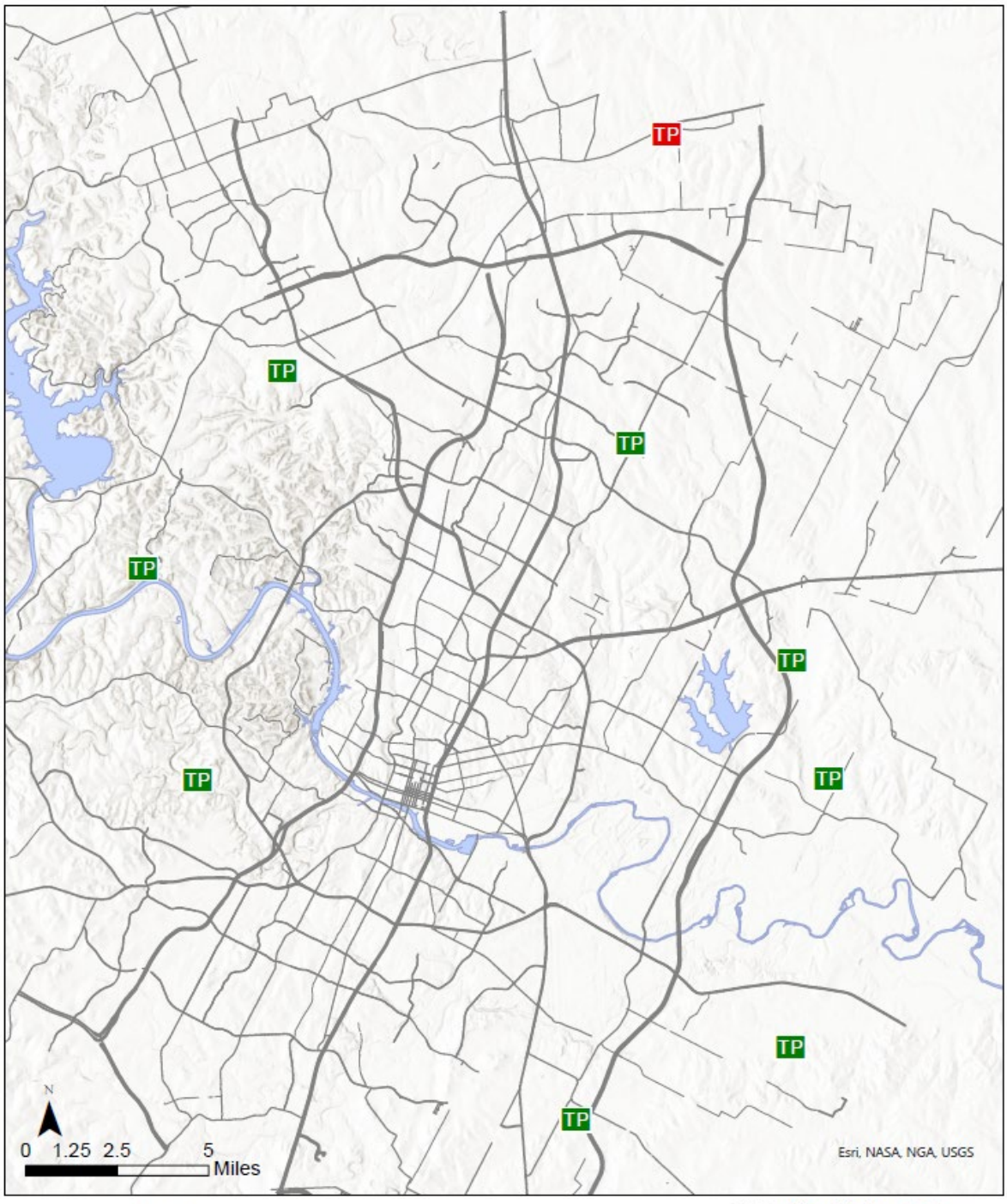
City of Austin
Austin Water

November 2023

Produced by GIS Services

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. This product has been produced by Austin Water for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

Appendix F. Map of Small Wastewater Treatment Plants



Austin's Small WWTP

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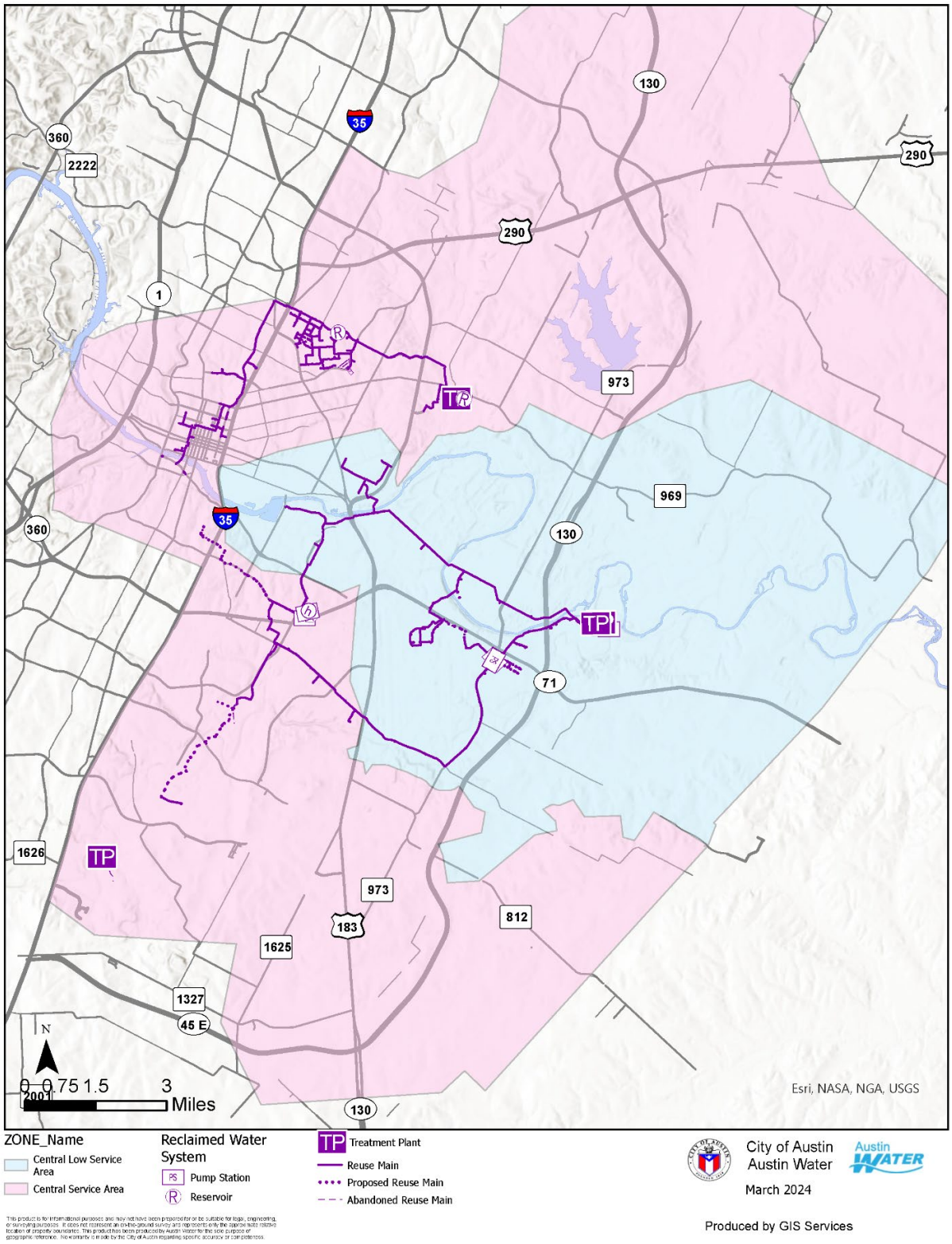
City of Austin
Austin Water

November 2023

Produced by GIS Services

Appendix G. Reclaimed Water System Map



Appendix H. Signed Resolution Showing Plan Adoption

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Appendix I. Notification of the Lower Colorado River Authority and Region K Water Planning Group

UPDATE ONCE AVAILABLE