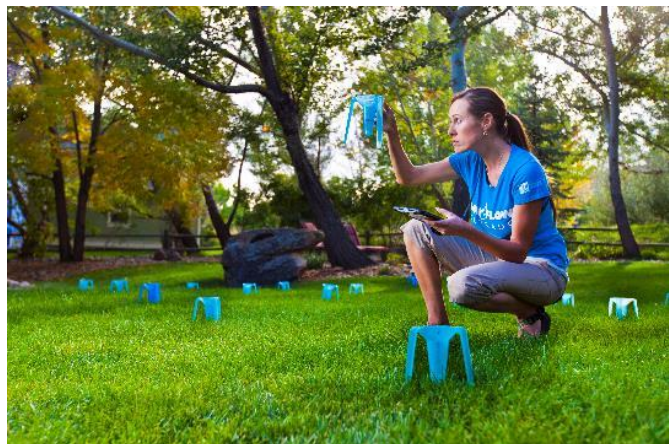




WESTMINSTER
COLORADO

2020 WATER CONSERVATION & EFFICIENCY PLAN



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EXECUTIVE SUMMARY

This state-required Water Conservation and Efficiency Plan is designed to promote efficient water use by all City of Westminster water customers. The City has invested significant resources to develop and maintain an infrastructure system that provides clean, safe, and reliable water and sewer service whenever it is needed. Customers are at the heart of this system, and it is incumbent upon the City to support them in our collective efforts to ensure long-term water supply security for the community. After all, water is a scarce resource in Colorado.

The City of Westminster is a full-service municipality and provides drinking water to approximately 130,000 people. Westminster's water supply starts as snowpack high in the Rocky Mountains, flows down Clear Creek, is diverted by irrigation ditches, and transported to Standley Lake, the main storage reservoir for Westminster. Beginning at Standley Lake, \$4 billion worth of infrastructure cleans the water, delivers it into people's homes and businesses, collects the wastewater, treats it, and returns the water to local streams.

Westminster provides drinking water to over 130,000 residents and hundreds of businesses through approximately 33,000 individual accounts. The overwhelming majority (93%) of Westminster's accounts are single family residential, however, those residential accounts only use about half of the City's drinking water. A small number of irrigation, commercial, and wholesale accounts use proportionally much larger amounts of water and make up about 40% of total water demands.

Westminster's water demands are lowest during the winter and grow to double or triple in the summer, which is very typical for Colorado Front Range communities. About half of the City's treated drinking water is used outdoors to irrigate landscapes. The summer irrigation "peak" drives the size of pipes, pumps, tanks, and treatment plants. Reducing the peak through efficiency programs targeted at outdoor use, such as the City's long-standing Garden in a Box discounts and Slow the Flow irrigation consultations, as well as newer turf replacement programs including Lawn Removal Service, can create significant cost savings for the utility and its customers.

Over the past two decades, Westminster's water service population increased by nearly 13,000 residents and the City added almost 130 new commercial accounts, yet total water demands actually declined by more than 2,000 acre feet (Figure ES-1). An acre-foot is the amount of water needed to cover an acre of land one foot deep in water, or 325,851 gallons. An average family of four in Westminster will use about 1/3 acre-foot of water over the course of a year.

The overall declining trend in water use is principally the result of reductions in water use from the single family residential sector, and gradual decreases in indoor use in particular. These consistent reductions in water use, as each existing home in Westminster becomes more efficient, have more than offset the increase in water demand from new residents and businesses over the past two decades.

On-going efficient use of water returns major benefits to the City and its customers. Reducing water demand improves drought resilience by decreasing the frequency of drought restrictions, and most importantly, can reduce, defer, and potentially altogether avoid the high costs of new infrastructure. Without the efficiency efforts of Westminster water customers since 1980, rates could have been nearly double what they are today.

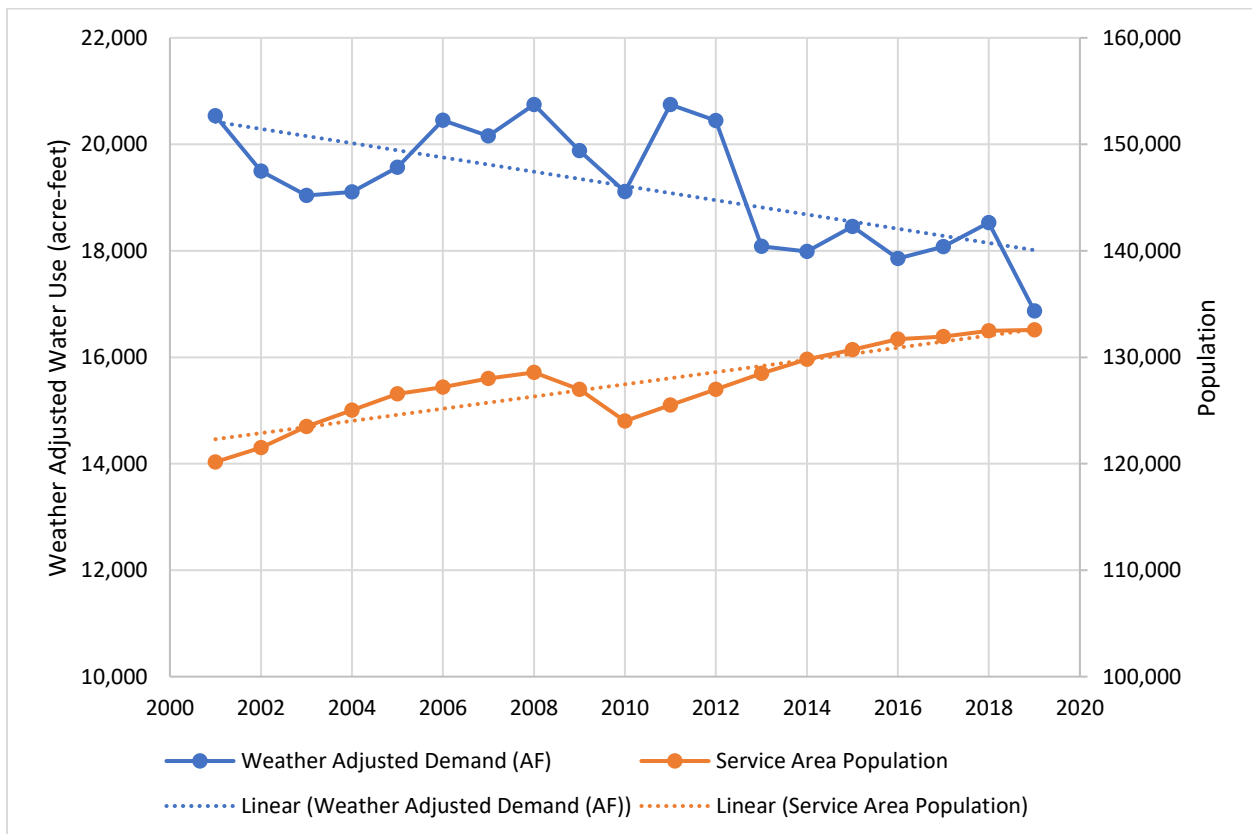
Westminster is pursuing a comprehensive suite of activities designed to ensure the City and its customers are using water efficiently. This plan describes those existing programs and identifies several new ones to be implemented over the coming years, as detailed in Section 4 – [Water Efficiency Activities](#). The City’s water efficiency goals are to:

- 1) Reduce system-wide water use from 126 gallons per capita per day (gpcd) to 110 gpcd or lower by 2030, a 12.5% reduction over 10 years.
- 2) Offer efficiency programs for all customer types by expanding programs to homeowners associations, commercial customers, multi-family units, and irrigation accounts.
- 3) Communicate the benefits and importance of water efficiency to all customers through relevant and timely outreach materials.

Being efficient with our scarce water resources is the most impactful way to ensure the City maintains a long-term secure water supply for current and future generations.

This plan was developed through an iterative process of public input. An initial customer survey set the stage for planning priorities, which were further refined through a formal public comment process before City Council adoption.

Figure ES-1. Total water demand in Westminster is decreasing in spite of population and business growth.



1 WATER SYSTEM PROFILE

1.1 OVERVIEW

The City of Westminster (Westminster) is located in the Denver Metro Area on the Front Range of the Rocky Mountains, partially in Jefferson County and partially in Adams County, Colorado. Westminster is a full-service municipality and provides drinking water to approximately 130,000 people. Westminster is primarily an urban area, with most of the City already developed. The current population is expected to increase because Westminster is an attractive location for families and business.

Westminster's water supply starts as snowpack high in the Rocky Mountains, generally around the I-70 corridor from the Eisenhower Tunnel to Idaho Springs. Water flowing down Clear Creek is diverted by three irrigation ditches near Golden, CO and transported to Standley Lake, the City's sole water storage reservoir (Figure 1). A small portion of additional raw water supply is provided by contracts from Denver Water. Westminster also treats some of its wastewater to a higher degree and uses this reclaimed water for outdoor irrigation at golf courses, parks, and other large turf areas throughout the City (Figure 2).

Westminster's Public Works and Utilities (PWU) Department provides water service to all properties within the City's municipal boundaries. The City also provides water service to several Jefferson County enclave properties, the unincorporated community of Shaw Heights, and is the primary drinking water provider through a wholesale contract for Federal Heights, CO (Figure 3).

The City has invested significant resources to develop and maintain an infrastructure system that provides clean, safe, and reliable water and sewer service to its customers. This infrastructure system is valued at over \$4 billion, and on the water side, includes assets such as:

- 2 water treatment plants;
- 18 pump stations;
- 530 miles of water mains;
- 10 water storage tanks;
- 5,007 fire hydrants; and
- 1 reclaimed water plant.

Figure 1. Standley Lake is Westminster's water supply reservoir and a regional park with recreation opportunities.



Figure 2. Westminster's water supply system, simply.

WHERE DOES YOUR WATER WANDER?

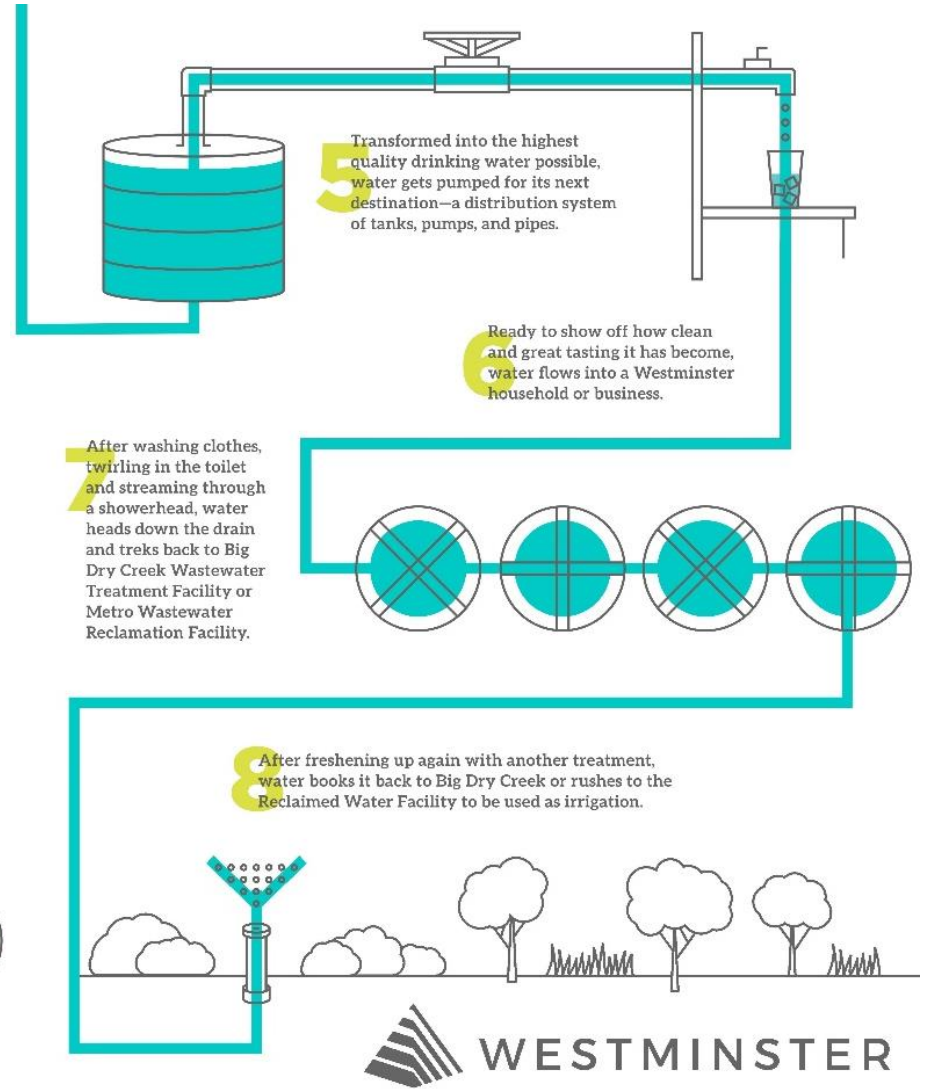
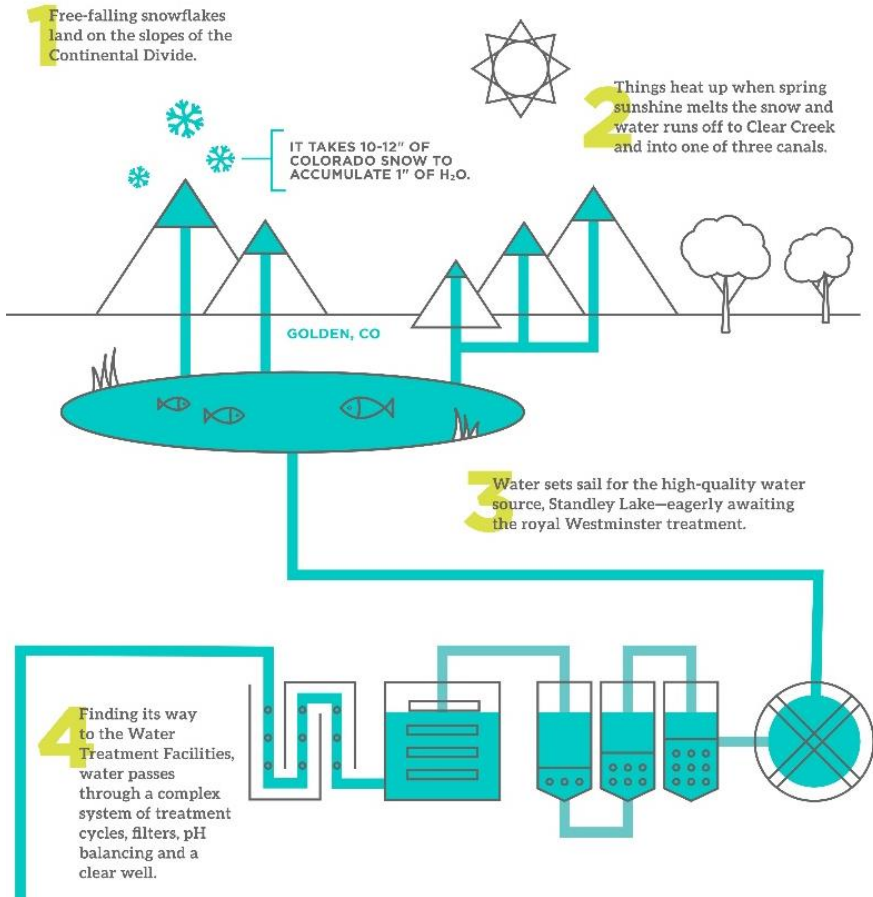
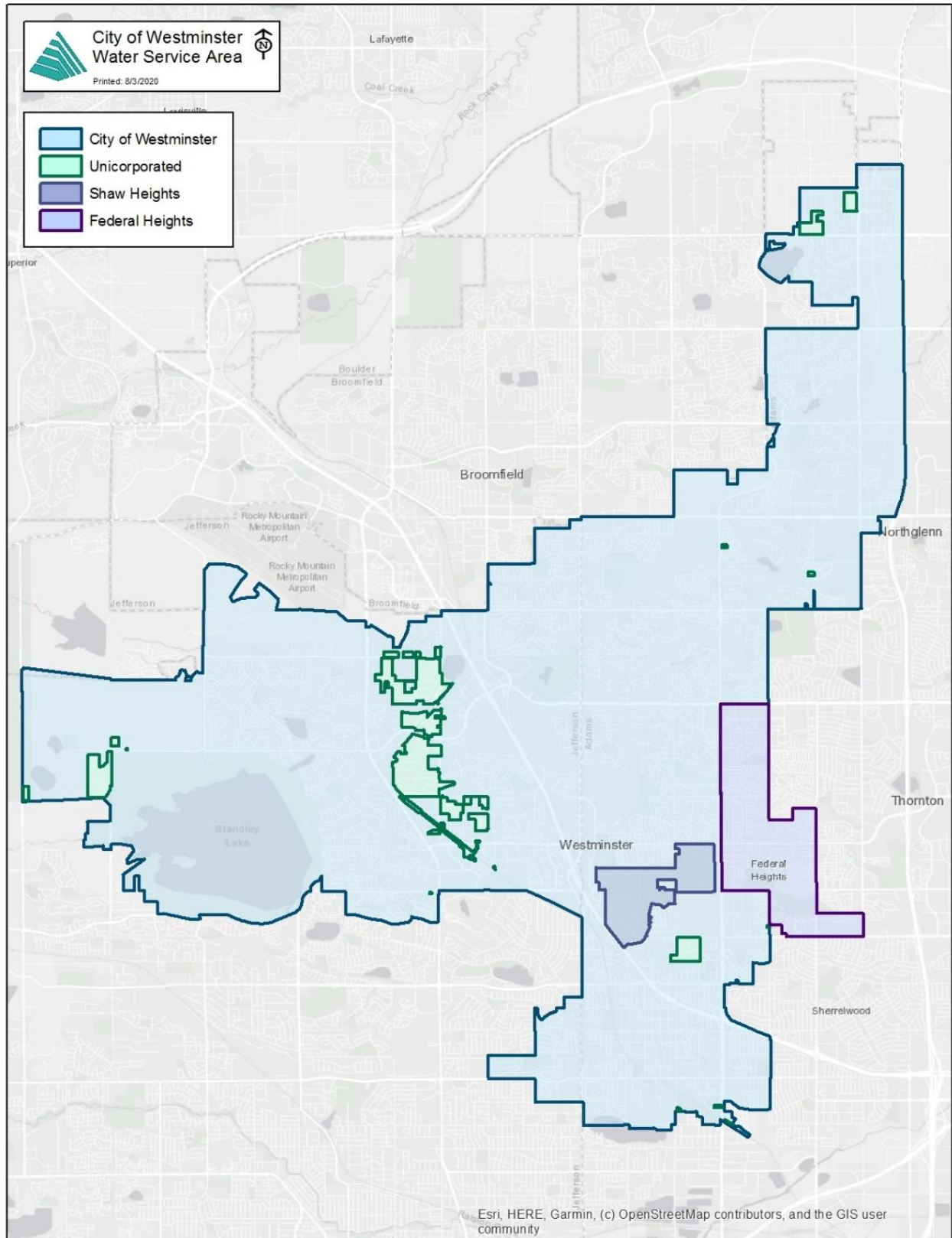


Figure 3. Westminster provides water service to in-city and out-of-city customers.



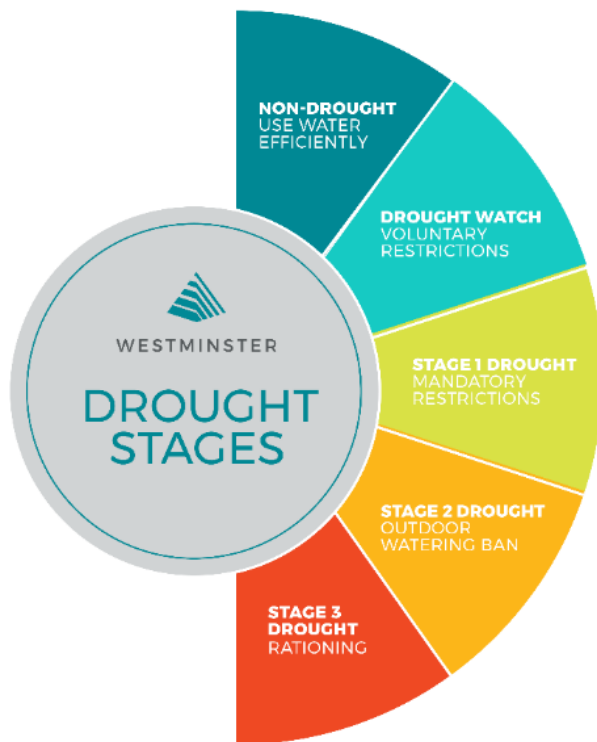
1.2 WATER SUPPLY RELIABILITY

Westminster’s current water supply system is designed to dependably meet the present and future needs of our current customers. Presently, Staff is upgrading the City’s water supply and demand model to determine future water supply reliability under multiple scenarios. Model improvements allow for analyses of water supply vulnerability to different climate change, customer demand, and land use/development alternatives. Water system capabilities are modeled using Clear Creek streamflow estimates back to the year 1566 that are derived from tree ring records. Climate change will impact the City’s water supply, and these changes are being considered and incorporated into water planning.

Water supply reliability for Westminster’s customers ultimately depends on projected future water use in the City, which is discussed further in Section 2.4 Demand Forecast. Results from the upgraded model show that Westminster has a reliable water supply for today’s customers. Results also point to the importance of supporting water conservation and efficiency efforts across the City to limit the need for expensive capital improvement projects and ensure water supply resilience to climate change. Efficiency may play a more impactful role in the City’s future water supply reliability than development trends, and has the potential to reduce, but not eliminate, the City’s need to secure more water supplies to meet future demand.

To help ensure water supply reliability in periodic times of shortage, Westminster City Council approved an updated Drought Management Plan in April 2019. The Drought Plan assesses the impact of historical drought on the City’s water supplies, performs a future drought vulnerability assessment, and details multiple ‘Drought Stages’ and the response strategies Westminster will use to manage water supply and water use during emergency situations (Figure 4).

Figure 4. Westminster’s Drought Stages are easy to understand for affected residents and businesses.



In the context of the State of Colorado’s water planning process, called the Statewide Water Supply Initiative, Westminster is located within the South Platte River Basin and is part of the smaller Metro Basin Roundtable. Previous statewide analysis projected a 150,000 acre-foot shortfall in water supply for the Metro Basin as a whole under the “realistic IPP portfolio” scenario. An acre-foot is the amount of water needed to cover an acre of land, one foot deep in water, or 325,851 gallons. A family of four in Westminster will use about 1/3 acre-foot of water over the course of a year. For perspective, Standley Lake can hold approximately 42,000 acre-feet of water.

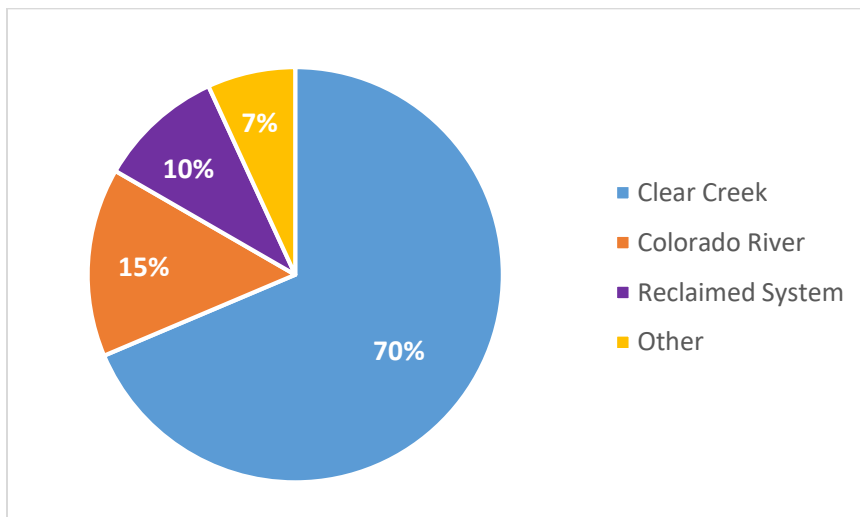
In order to continue providing long-term reliable water service to the community, PWU has to operate within this water scarce reality. Competition for new water supplies is increasingly intense, the cost of new water rights are rapidly rising, and the availability of additional water supplies that easily fit into the City’s infrastructure system is dwindling.

1.3 SUPPLY-SIDE LIMITATIONS AND FUTURE NEEDS

A large portion of Westminster’s water infrastructure was built in the late 1970s and early ‘80s during a period of widespread growth in the City. All of this infrastructure is now close to 50 years old and the City is working to replace it in a timely manner to protect public health and maintain reliable service. This aging infrastructure, plus the need for approximately \$1 billion of additional infrastructure to meet build out conditions of the City under the 2013 Comprehensive Plan, is driving the need for water rate increases. Rate increases in any utility can be challenging, and a comprehensive water efficiency program is one tool that Westminster can use to moderate bill impacts for our customers.

Westminster’s current projected water supply portfolio at build out is entirely from surface water sources (Figure 5). Clear Creek is the City’s primary water source, with Colorado River water provided through a contract from Denver Water, reclaimed irrigation water substituting for potable irrigation on large turf areas, and “Other” including South Platte gravel pit water exchanges. Staff is currently updating the Water Supply Plan that looks out to 2040. Early modeling confirms that water efficiency is one of the most important strategies affecting future water demand, and has the potential to reduce, but not eliminate, the City’s need to develop additional supplies. This Water Efficiency Plan will be continually updated and modified to support strategies and goals identified in the Water Supply Plan.

Figure 5. Westminster’s drinking water supply at build out will come from a mix of sources.



2 HISTORIC WATER DEMAND AND EFFICIENCY ACTIVITIES

2.1 CUSTOMER ACCOUNTS

Westminster provides clean, safe, and reliable drinking water to over 130,000 residents and hundreds of businesses through approximately 33,000 individual accounts. Accounts are categorized into seven main types:

- Single Family Residential: single family detached homes or attached townhomes with their own water meter;
- Multi Family Residential: residential apartment and condo buildings with one water meter for the whole building;
- Commercial: restaurants, office buildings, retail centers, entertainment, car washes, day care facilities, auto service, grocery store, hospitals, hotels, and other service industry uses;
- Municipal: City Hall, recreation centers, greenhouse, and other City facilities, not including parks or golf courses);
- Potable Irrigation: irrigation of landscapes with drinking water, including some parks;
- Reclaimed Irrigation: irrigation of landscapes with recycled water not suitable for drinking, including many large parks and both City golf courses; and
- Wholesale: drinking water sold under contract to the City of Federal Heights, CO

Accounts are separated into these groups because they each place different demands on the utility infrastructure system. For example, single family homes use a small amount of water indoors consistently throughout the year, and then have higher summer time use because of outdoor irrigation. Commercial accounts tend to use a moderate amount of water consistently throughout the year. And irrigation accounts use large amounts of water, but only during the plant growing season. Because of these different use profiles, the City charges different water rates to fairly account for their impacts on the utility.

The overwhelming majority (93%) of Westminster's accounts are single family residential (Figure 6), however, single family accounts only make up about half of the City's water demand (Figure 7). Accounts used for outdoor watering, both potable irrigation and reclaimed irrigation, make up only 2% of the accounts but nearly 20% of demand. Westminster's three wholesale accounts all provide water to the City of Federal Heights, CO.

Figure 6. The vast majority of Westminster’s water accounts are single family residential (2019).

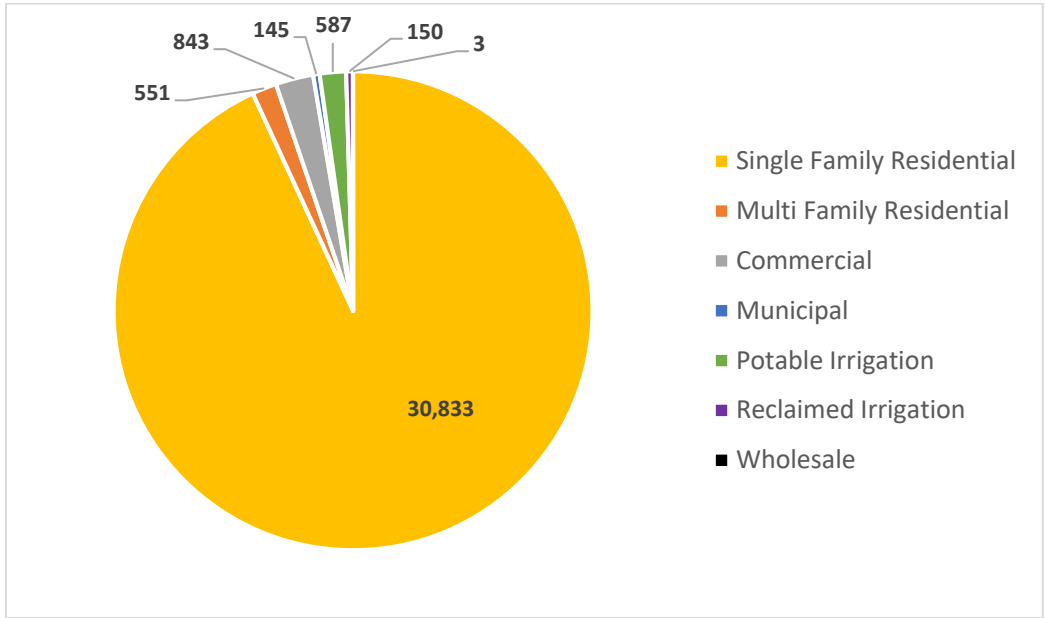
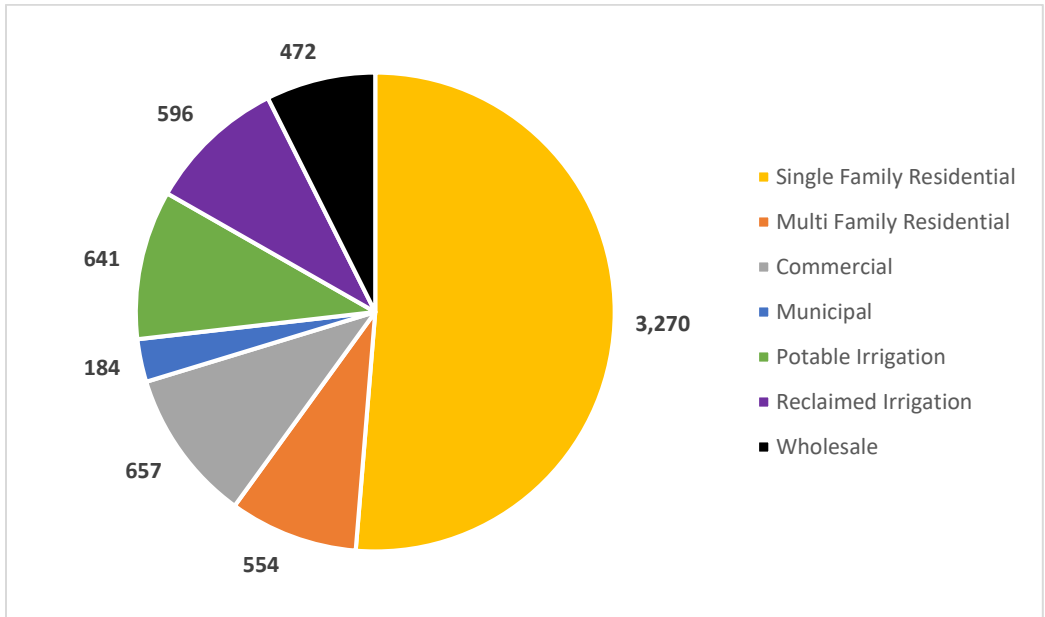


Figure 7. Water demand is distributed across many sectors, with more than half used by residential properties (2018, million gallons).



2.2 HISTORIC WATER DEMANDS

Westminster compiles and maintains monthly water use data for every account from 1985 to present. This rich data set allows Staff to perform detailed analysis of historical water demands. While the raw, total water use data by each sector can be important (Table 1), the following sections describing water use throughout the year, and over time in the context of weather, population growth, and conservation trends is much more useful for utility planning.

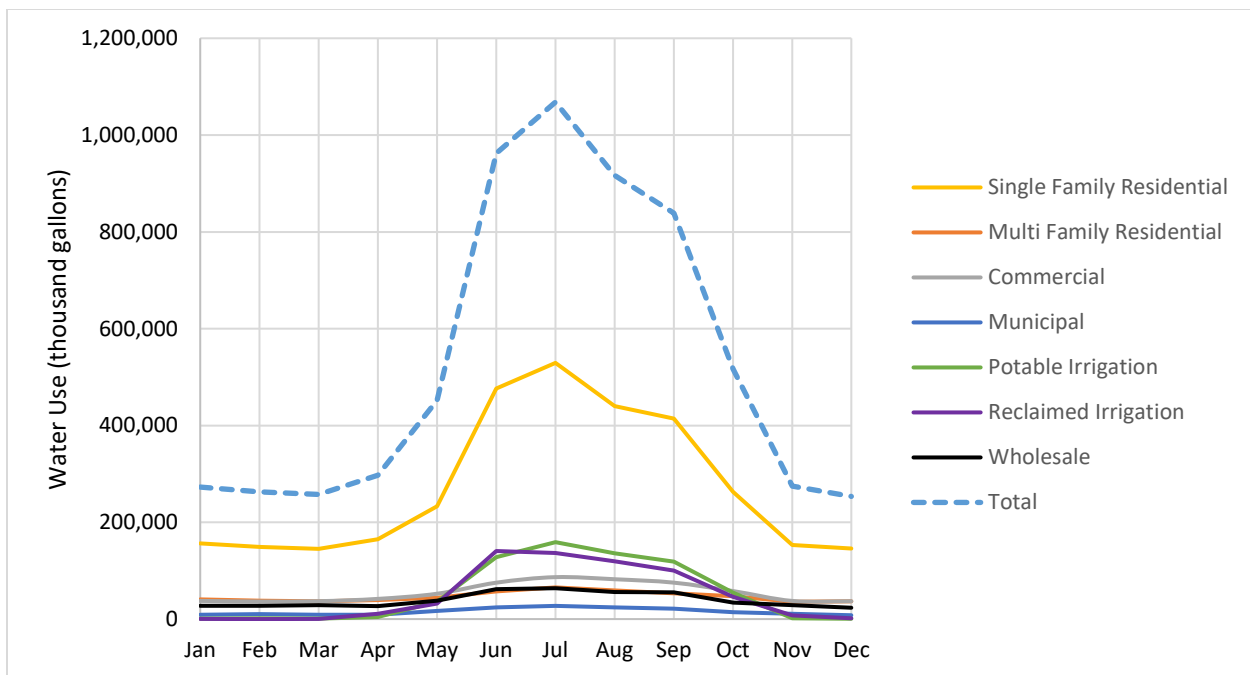
Table 1. Water use by account type for the past five years, thousand gallons.

Category	2015	2016	2017	2018	2019
Residential (SF + MF)	3,594,546	3,804,424	3,672,838	3,823,369	3,456,144
Commercial	620,807	626,612	630,105	656,594	624,458
Municipal	153,652	161,214	159,683	184,176	158,071
Potable Irrigation	533,136	604,059	547,416	641,209	528,384
Reclaimed Irrigation	501,350	593,172	524,797	596,128	496,244
Wholesale	481,576	455,274	467,103	471,687	466,770
Total	5,885,067	6,244,755	6,001,942	6,381,163	5,730,071

2.2.1 Seasonal, Total, and Per Capita Demands

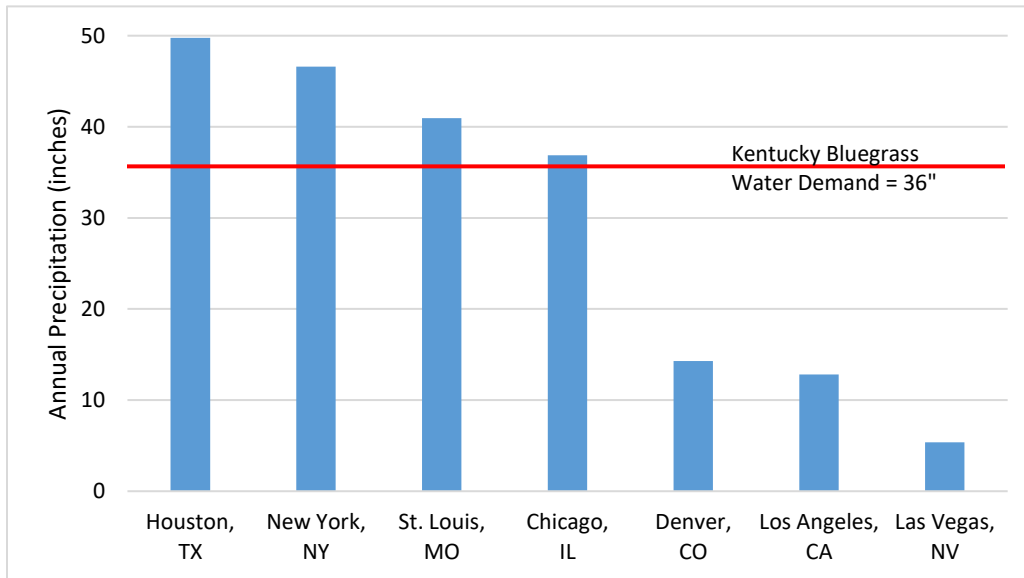
Water demand in Westminster over the course of a year follows a pattern typical to many suburban communities along Colorado’s Front Range – water use is lowest during the winter months, grows to double or triple in the summer months, and has gradual transitions between those during the spring and fall (Figure 8). About half of the City’s treated drinking water for the year is used outdoors to irrigate landscapes. Westminster’s entire water utility infrastructure system is designed to meet customer demands on the one day (generally in late July) when it’s been hot for a week and everyone is watering their yard. This summer peak drives the size of pipes, pumps, tanks, and treatment plants. Reducing the summer peak through efficiency programs targeted at outdoor use, such as the long-standing Garden in a Box discounts and Slow the Flow irrigation consultations, as well as newer turf replacement programs, can create significant cost savings for the utility and its customers.

Figure 8. Westminster’s water demands peak in the summer and are lowest in the winter (2018 use).



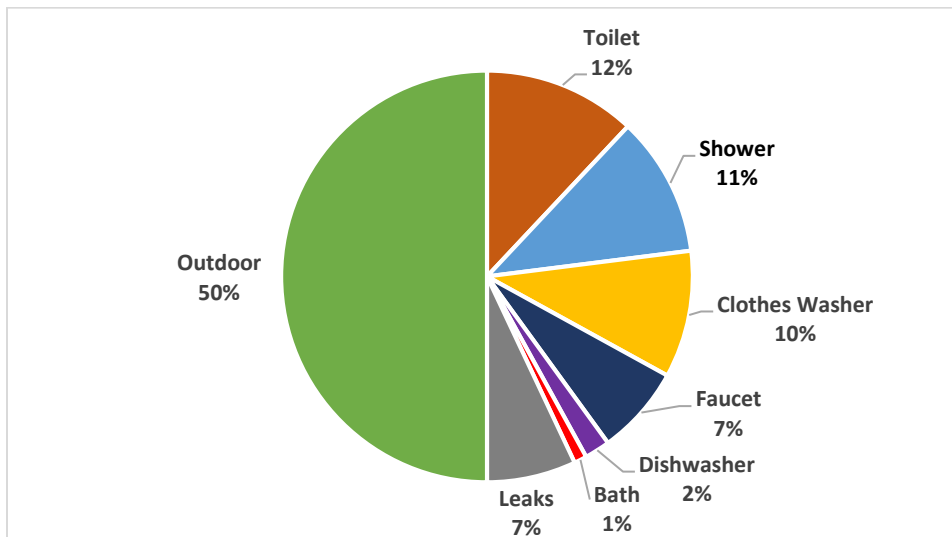
A primary reason for the summer time peak is that most of Westminster’s existing landscapes use a plant palette better suited to the climate of the East Coast. Kentucky bluegrass is not native to Colorado, and requires a significant amount of extra water to stay healthy than what is provided naturally by rainfall along the arid Front Range (Figure 9). Yet, bluegrass is found in most resident’s front and back yards, alongside roads, and in large buffers surrounding office buildings. Kentucky bluegrass certainly has its place for athletic fields, but there are other turf-forming grass varieties that use much less water that should be considered for suitable alternatives.

Figure 9. Kentucky bluegrass needs nearly 2 feet of extra water to survive in Colorado’s arid Front Range.



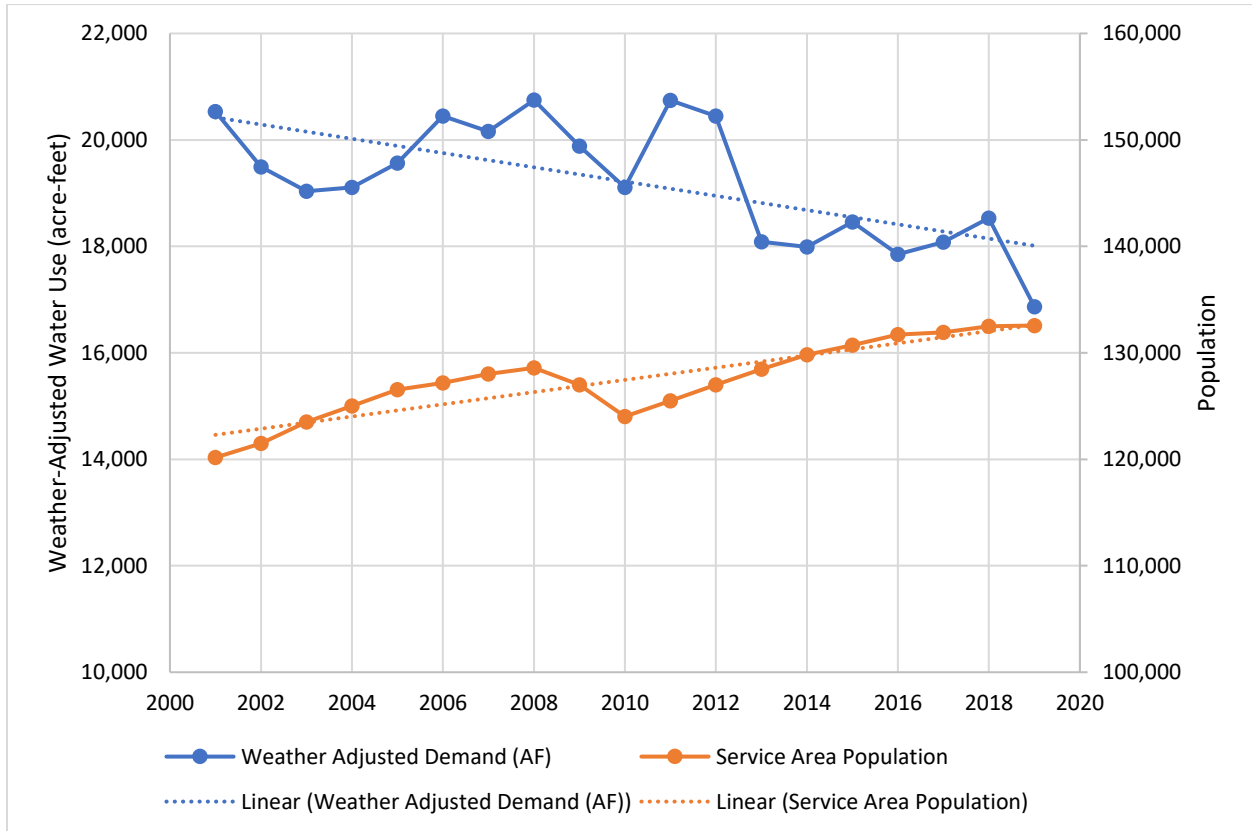
Residential water users see significant increases in water use, and water bills, during the summer irrigation season when it is not uncommon for homes to use 5 times more water per month during July than in January. Indoors, the highest water use is normally the toilet, followed by showers and clothes washers (Figure 10). Replacing an old showerhead with a WaterSense® labeled one is an easy, effective, and inexpensive water efficiency action, plus it will also reduce the energy bill too.

Figure 10. Top household water uses include the yard, followed distantly by toilets, showers, and clothes washers.



Over the past two decades, Westminster’s water service population increased by nearly 13,000 residents and the City added almost 130 new commercial accounts, yet total water demands have actually declined by more than 2,000 acre feet (Figure 11). This analysis controls for the impacts of weather, as all else equal, hot/dry summers will make demand seem higher and cold/wet summers will make demand lower than what should be considered representative.

Figure 11. Total water demand in Westminster is decreasing in spite of population and business growth.



The overall declining trend in water use is principally the result of reductions in water use from the single family residential sector, and their indoor use in particular. Residents have gradually replaced old toilets, shower heads, and clothes washers over time with newer models that use less water (Figure 12). These small, gradual declines in water use at each existing home in Westminster have more than offset the increase in demand from new residents and businesses over the past two decades. Westminster’s system-wide per capita use has decreased from around 150 gallons per capita per day (gpcd) in 2000, to about 120 gpcd in 2019, an 18% reduction (Figure 13).

Figure 12. Household residential water use is consistently declining in Westminster.

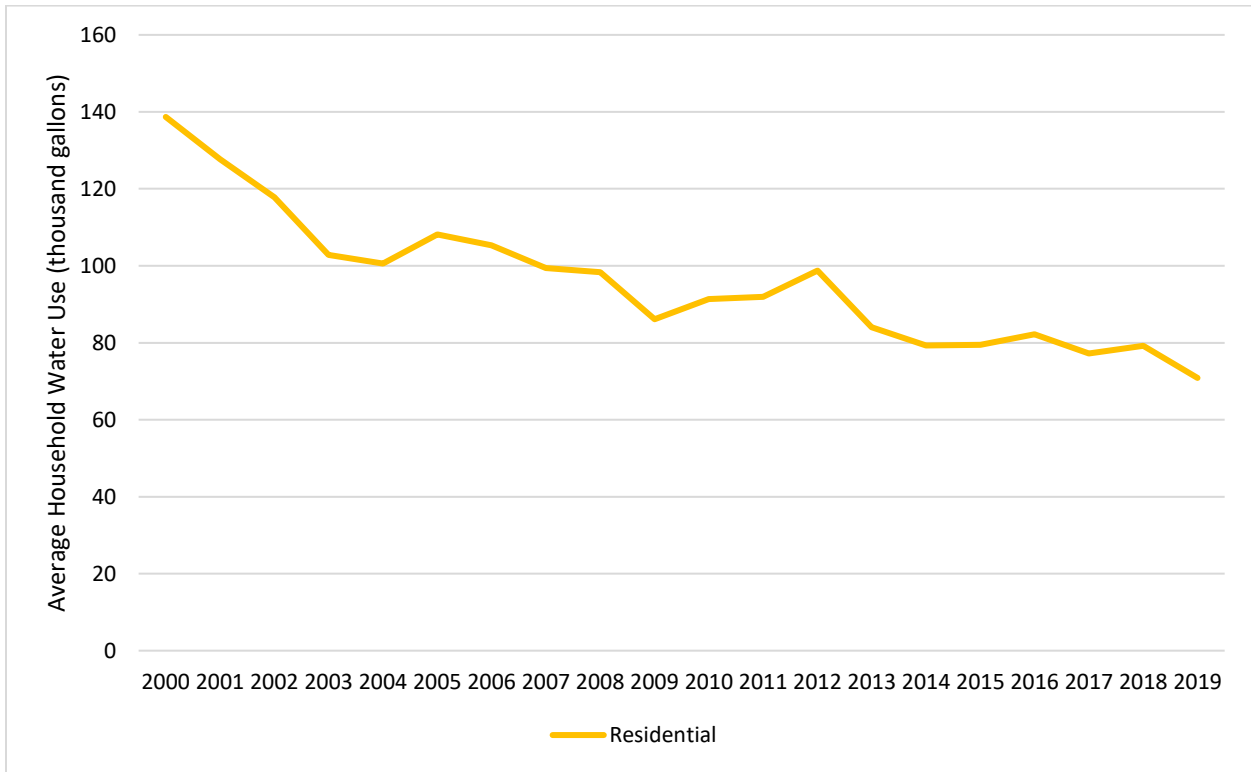
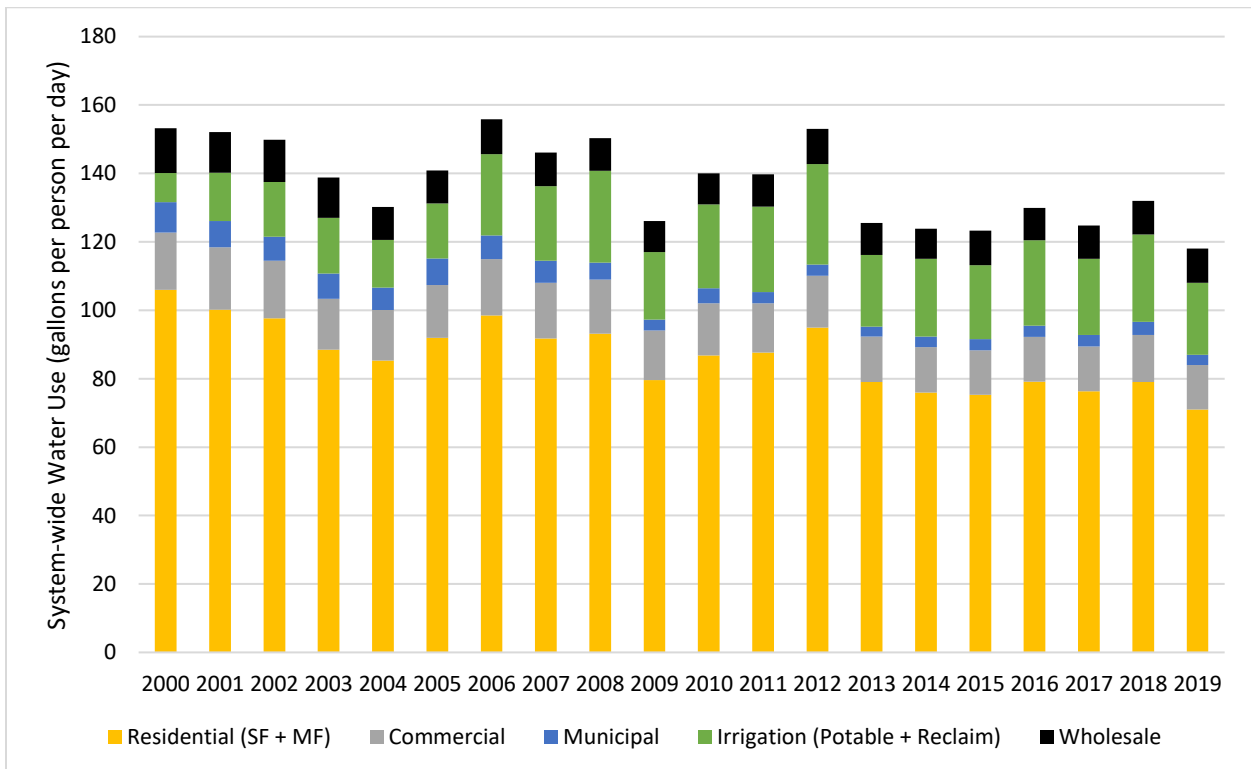
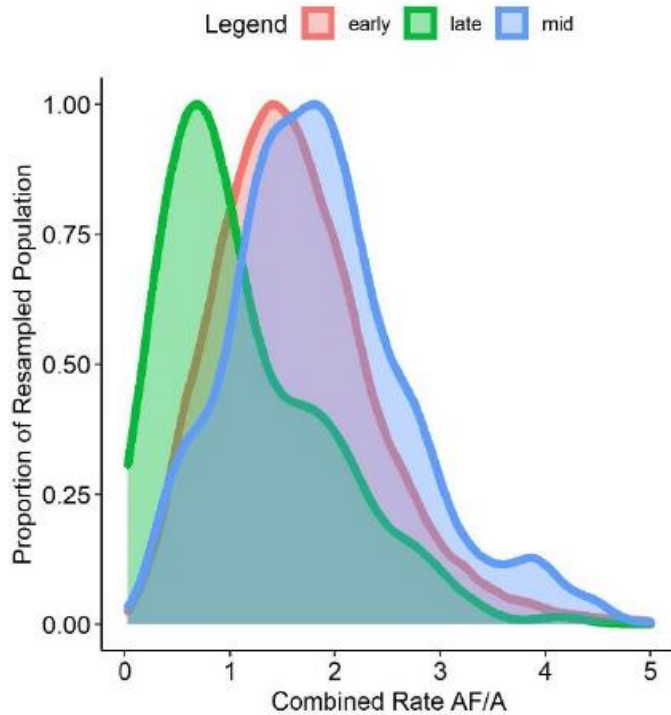


Figure 13. Declines in residential per capita water use are driving overall reductions in city wide water use.



A more in-depth analysis of residential customers reveals that recent development (2016-present) uses much less water than development that happened earlier in the City’s history (Figure 14). New development’s low water use is the result of state legislation requiring high-efficiency indoor fixtures, and outdoor landscaping that is more Colorado-friendly, including much smaller yards of Kentucky bluegrass. Interestingly, “early” development (pre-2002) uses less water than “mid” development because the oldest properties are presumed to have been remodeled since being built with new fixtures that use less water.

Figure 14. Water use from Westminster’s medium-density residential properties (R-5) shows that new development uses much less water. early = pre-2002, mid = 2003-2015, late = 2016-present.



2.2.2 Water Loss

Westminster has conducted an annual water loss audit using the AWWA M36 methodology since 2011, and participated in the Colorado Water Conservation Board’s (CWCB) 2019/2020 training program to produce a certified water loss audit. Results from the past three years of audits show a consistent level of non-revenue water around 6% (Table 2), meaning the utility does not get paid for about 6% of the water it treats. Large changes to the apparent loss and real loss metrics between 2017 and 2018 are due to data improvements learned through the CWCB training.

Table 2. Water loss metrics are mostly stable as loss reduction efforts and auditing data quality improve.

Year	Non-Revenue Water	Apparent Loss (gal/connection/day)	Real Loss (gal/connection/day)
2019	6.1%	16.07	6.11
2018	5.8 %	17.74	5.18
2017	5.9 %	2.15	18.30

2.3 DEMAND MANAGEMENT ACTIVITIES

The City of Westminster has a long-standing commitment to water efficiency and is consistently looked to as a leader in the field. Westminster was one of the first municipalities to implement an increasing block water rate for residential users in 1976. The City meters and charges all water users including City parks and construction sites. The City has also modified the Building Code to require efficient plumbing fixtures in all new development. Many of the measures implemented over the past 40 years are still part of the City’s efficiency program today.

2.3.1 Historical Programs

Westminster’s past programs spanned a wide range of activities and purposes. Completed programs that are no longer being actively improved or pursued, because of modifications to state law and changing priorities, include:

- Single family fixture rebate program run from 2003 to 2011 that saved approximately 120 acre-feet of water, including:
 - 2,584 rebates for ultra-low-flow and high-efficiency toilets, and
 - 1,345 rebates for water-efficient clothes washers;
- Multifamily high-efficiency toilet program run in 2012 that replaced 289 toilets in 7 complexes;
- Installation of weather stations to collect evapotranspiration data for more precise irrigation at municipally managed spaces, like City Park and Legacy Ridge Golf Course;
- No-cost xeriscape seminars offered through the Department of Parks, Recreation, and Libraries;
- Awarding a limited number of building permits each year based on many factors, one of which was water efficiency actions; and
- City facility efficiency audits conducted by Siemens.

2.3.2 Reclaimed System

The City operates a reclaimed water system for outdoor irrigation that significantly reduces drinking water demand. Staff take highly-treated effluent from the Big Dry Creek Wastewater Treatment Facility and further clean the water before distributing it in purple-colored pipes to nearly 150 sites. These customers use reclaimed water to irrigate large turf areas such as parks, schools, landscaping, and golf courses. Serving large irrigation customers with reclaimed water means Westminster does not have to supply them with high-quality drinking water, saving that precious resource for the health and safety of residents and businesses.

The City’s reclaimed water program has operated since 2000 and currently distributes about 1,800 acre-feet of water, which is nearly 10% of total City water demand. At buildout, plans are for reclaimed water to irrigate about 25% of all irrigated areas. The City will be updating its Reclaimed Water Master Plan in the near future which may change these goals.

2.3.3 Current and New Programs

Section 4 – [Water Efficiency Activities](#) provides a complete description of all ongoing and new programs, they are summarized in [Table 3](#).

Table 3. Westminster’s current water efficiency programs are comprehensive.

Foundational	Regulations
Monthly Meter Reading & AMI Upgrade	Waste of Water Prohibition
Meter Testing and Replacement	Submetering Requirements
Tracking of Water Use	Organic Soil Amendment
Billing of Water Use	Landscape Regulations
Tap Fees Based on Water Use	Irrigation Equipment Requirements
Annual Water Loss Audit	Post-Install Landscape Water Audits
Proactive Leak Detection and Repair	Commercial Car Wash Reuse Regulations
Water Conservation Coordinator	Directing Growth to ‘Focus Areas’
Regular Contact, Meetings, and Data Sharing	NEW Time of Day Irrigation Rules
PWU Staff is Part of Development Review Process	Education and Outreach
Integration of Water Supply and Comprehensive Land Use Plans – Westminster Forward	Regular Bill Stuffers and On-Bill Messaging
NEW Customer Water Use Data Portal	Targeted Letters
Incentives and Assistance	City Newspaper Articles
City-Facility Irrigation Improvements	Direct Mailings
City-Facility Turf Removal	Social Media Engagement
Low-Income Toilet Installations	5 th Grade Water Festival
Low-Income Leak Repairs	Customer Surveys
Small Business Capital Improvement Grants	Plant Demonstration Gardens
“Slow the Flow” Irrigation System Efficiency Consultation	Community Outreach
ET-Based Irrigation Controller Discounts	Standley Lake Source Water
“Garden in a Box” Water-Wise Garden Discounts	NEW Video Production
Neighborhood Landscape Enhancement Grants	NEW Water-Wise Landscapes and HOA Regulations
NEW Public Parks Tiered Watering Program	
NEW Grass to Garden	
NEW Lawn Removal Service	
NEW Multi-Family Fixture Retrofit	
NEW Rain Barrels	
NEW HOA ‘Investment-Grade’ Irrigation Consultations	

2.3.4 Estimate of Savings

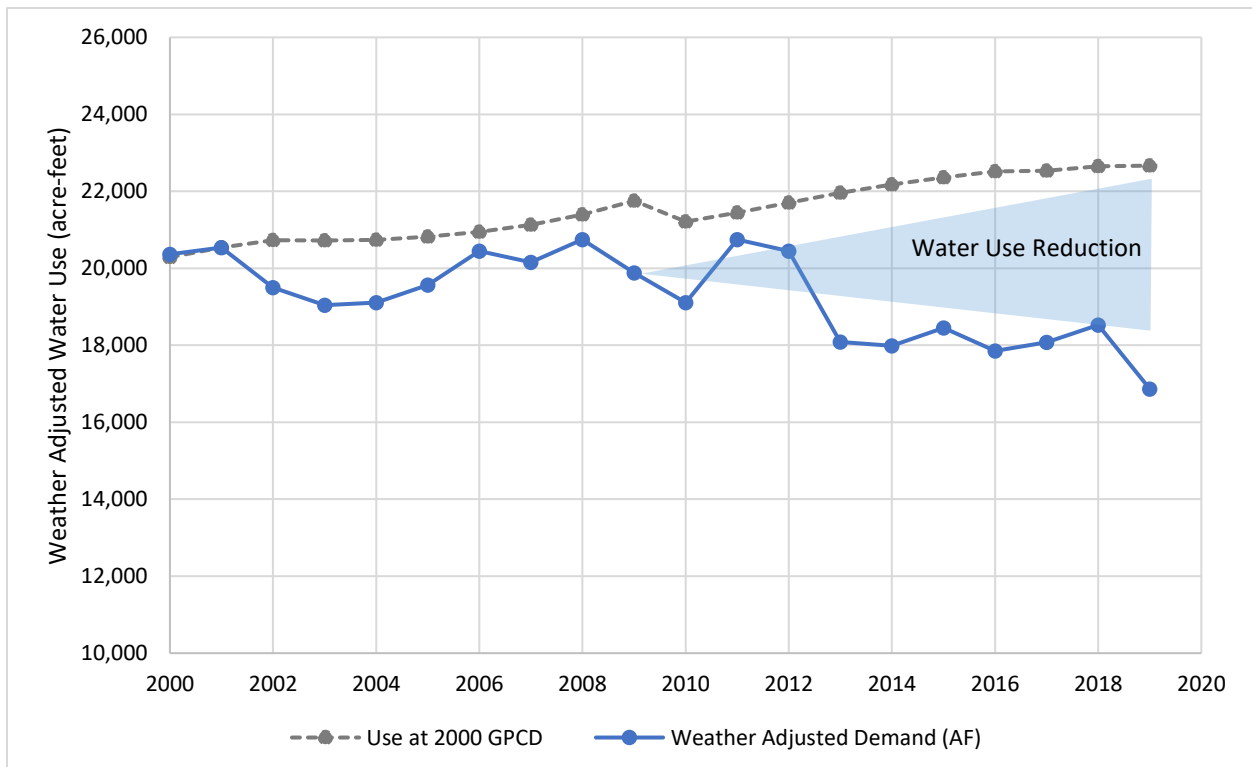
Total water use in the City of Westminster has declined over the past two decades in spite of increasing residential population and commercial business growth. This reduction is due to a host of factors, including but not limited to:

- The impact of historical and on-going efficiency programs;
- State legislation on water-efficient fixtures;
- Use of the City’s reclaimed system;
- The increasing price of water; and
- Changing norms on ‘appropriate’ water use in an arid state like Colorado.

Detangling the individual effect of any one of these factors would be quite complicated, and in many ways is unnecessary, as long as water planners are fully aware of the declining trend and accounting for it in future management. The City does monitor and account for these factors in long-term water supply planning efforts.

If per capita water use rates remained at 2000 levels and did not decrease due to conservation and efficiency improvements, water demands in 2019 would have been about 5,000 acre-feet higher than they actually are today (Figure 15). This represents an average rate of decline of over 250 acre-feet per year, which significantly exceeds the City’s 2013 Water Conservation Plan goal to achieve 2,200 acre-feet of water savings by 2040, at an average rate of 79 acre-feet per year. Whether or not the current rate of reduction can be maintained in the future is an open question, and will be affected by a host of choices made by residents, Staff, and City Council.

Figure 15. Water use in the City of Westminster is about 5,000 acre-feet lower today than it would have been without efficiency improvements.



2.4 DEMAND FORECAST

The City of Westminster has long integrated its water demand planning with land use planning. Future build out demand of the City is based upon examining the water use of different types of land use, and then projecting those same water use patterns over a similar category of undeveloped land. For example, the water use of the residential R-5 land use category is about 1.5 acre-feet per acre. If there are 10 additional acres of R-5 to develop within the city, Staff projects those acres will use 15 acre-feet of water.

Staff is currently updating the City's Water Supply Plan that has a planning horizon of 2040 to match the Comprehensive Plan. Updates include evaluating future water demand using data from most of the City's 33,000 water accounts along with their land use type (e.g., R-5 Residential, Commercial Mixed-Use, etc), rather than just a sample of accounts, and using multiple land use maps that are being considered in the Comprehensive Plan update process. The land use maps, representing varying levels of economic growth and density, are being combined with varying levels of efficiency, multiple climate change scenarios, and fluctuating development characteristics to model potential future demand scenarios. This multi-scenario evaluation will allow the City to better understand how development, water use, and efficiency may impact the City's water demands in the future.

Preliminary results of the modeling effort show a broad range of "gap" between future supply and demand, with a gap indicating the need for additional water rights purchases and large infrastructure investments. For example, in a "Hot Growth" scenario with high levels of economic growth and density, lower levels of efficiency, and large climate change impacts, demands increase dramatically and the gap is large. Other future scenarios with high levels of water efficiency show a much smaller gap. The past successes of the City's conservation and efficiency efforts, as well as future efforts in this area, play a strong role in determining the size of the water supply gap for Westminster.

Early modeling confirms that water efficiency is one of the most important strategies affecting future demand for Westminster, and has the potential to reduce, but not eliminate the need to develop additional water supplies. To maintain flexibility and take advantage of new opportunities, this Water Efficiency Plan will be continually updated and modified to support strategies and goals identified in the Water Supply Plan.

3 INTEGRATED WATER PLANNING

The City of Westminster has long integrated its water supply planning with land use planning. This integration is demonstrated by PWU’s regular meetings and data sharing with other departments, consistent engagement in the development review process, linking future water demands to the Comprehensive Plan, and in several other ways. This integration has ultimately created a better-quality of development in the City and resulted in improved City services.

3.1 WATER EFFICIENCY AND WATER SUPPLY PLANNING

On-going efficient use of water has major drought, environmental, and economic benefits. Reducing water demand improves drought resilience by decreasing the frequency and severity of drought restrictions. Reduced demand may allow for more frequent higher lake levels which are good for water quality and wildlife. Perhaps most importantly, decreased water demand can reduce, defer, and potentially altogether avoid the high costs of new infrastructure and/or some of the more costly additional water supply options.

Without the efficiency efforts of Westminster water customers since 1980, **rates could have been nearly double** what they are today – see the full report “*Conservation Efforts Limit Rate Increases for Colorado Utility*” on the City’s website at: www.cityofwestminster.us/conservation.

Staff is aware of the declining water use trend in Westminster and is planning for the impacts that has on water supply, infrastructure, and financial aspects of the utility. The City’s new drinking water treatment plant (“Water 2025”) that will replace the aging Semper Water Treatment Facility, is going to be developed in phases in order to right-size additional treatment trains and avoid over spending. Similarly, decreasing sewer flows have resulted in cost savings by reducing the number of sewer pipe segments that need to be replaced, and by replacing old pipes with new ones of the same size, rather than larger ones that cost more. Conversely, the higher ratio of solids to liquids in sewer flow is requiring accelerated investment at the Big Dry Creek Wastewater Treatment plant.

Early modeling confirms that water efficiency is one of the most important strategies affecting future demand for Westminster, and has the potential to reduce, but not eliminate the need to develop additional water supplies. To maintain flexibility and take advantage of new opportunities, this Water Efficiency Plan will be continually updated and modified to support strategies and goals identified in the Water Supply Plan.

3.2 WATER EFFICIENCY GOALS

Westminster’s water efficiency goals for this Plan were developed through the City’s inter-departmental Water Conservation Taskforce and public input provided by a customer survey (see Section 7.1 [Customer Survey](#)), they are:

- 1) Reduce system-wide water use from 126 gallons per capita per day (gpcd) to 110 gpcd or lower by 2030, a 12.5% reduction over 10 years.
- 2) Offer efficiency programs for all customer types by expanding programs to homeowners associations, commercial customers, multi-family units, and irrigation accounts.

- 3) Communicate the benefits and importance of water efficiency to all customers through relevant and timely outreach materials.

These goals are more specific than the City’s previous goal from the 2013 Water Conservation Plan to achieve 2,200 acre-feet of water savings by 2040.

3.3 SUMMARY OF LAND USE ACTIVITIES

The City of Westminster takes pride in the PWU Department’s long-standing integration with the Community Development Department. This integration has resulted in important City Council-level discussions about the balance between water availability and growth aspirations, improved land use development and water resource planning by the City as a whole, superior customer service for development applicants, and ultimately a better-quality of development in the City. This integration is not a given, and requires constant vigilance and effort to maintain.

Section 4 – [Water Efficiency Activities](#) provides a complete description of all ongoing water efficiency programs and ones specific to land use integration are listed in [Table 4](#).

Table 4. Westminster currently integrates water and land use planning through many programs and activities.

Foundational	Regulations
Tap Fees Based on Water Use	Soil Amendment
Regular Contact, Meetings, and Data Sharing	Landscape Regulations
Integration of Water Supply and Comprehensive Land Use Plans – Westminster Forward	Directing In-Fill Growth to ‘Focus Areas’
PWU Staff is Part of Development Review Process	
Incentives and Assistance	Education and Outreach
“Garden in a Box” Water-Wise Garden Discounts	Community Outreach

4 WATER EFFICIENCY ACTIVITIES

4.1 SUMMARY OF SELECTION PROCESS

Westminster reviewed all of its current demand management activities and considered a wide variety of new programs to create the list described in this Plan. Activities were prioritized based on impact to residential customers (the largest customer class), outdoor water use (the most discretionary type of water demand), municipal water uses (to make sure the City has its own house in order), and under-resourced communities (for social justice efforts). Activities were then evaluated based upon their contribution in meeting the goals defined in Section 3.2 [Water Efficiency Goals](#).

4.2 DEMAND MANAGEMENT ACTIVITIES

The following sub-sections provide a brief description of each water efficiency activity Westminster will pursue under this Plan. Programs beginning in 2020 or later are prefaced with “NEW.” The City estimates these efficiency programs, in combination with passive conservation, water prices, and changing social norms has the potential to significantly reduce future water use. Detangling the individual effect of any one of these factors from another would be quite complicated, and in many ways is unnecessary, as long as water planners are fully aware of this trend and accounting for it in future management. The City does monitor and account for these factors in long-term water supply planning efforts.

4.2.1 Foundational

Monthly Meter Reading & AMI Upgrade: Every connection to Westminster’s water utility infrastructure is metered. Each customer’s meter is read every month either by radio-frequency via a truck driving down the street, or through Advanced Metering Infrastructure (AMI) that can provide hourly water use data electronically to Staff at their desktops. The City is just completing a \$14 million project to replace all 30,000 small (≤ 1 ”) meters with electronic meters that don’t have moving parts and can be read remotely from the office.



Credit: Bob Krugmire

Meter Testing and Replacement: Meter Shop Staff annually test all large meters and a statistically-relevant sample of small meters according to American Water Works Association (AWWA) standards using a state-of-the-art test bench. Meters that test outside of acceptable limits are replaced.

Tracking of Water Use: Westminster maintains monthly water use data on every account from 1985 through the present, and uses this data for rate setting, tap fee calculations, long-term demand projections, targeting efficiency programs, and a whole host of other purposes. Westminster's water use data is robust and one of the City's greatest assets.

Billing of Water Use: Each customer is billed monthly according to their individual volumetric use under different rate structures that ensure fairness among different customer groups. For example, residential customers are billed under a 3-tier increasing block structure, while commercial customers are billed under an individualized annual water budget. Westminster completed a cost-of-service rate study in 2018 and is using those results to recommend rate changes for the next 5-7 years. See the City's website for current water and sewer rates: www.cityofwestminster.us/Residents/Water/Rates.

Tap Fees Based on Water Use: Westminster charges custom tap fees for each new development in the City under a structure that incentivizes water efficiency. Residential tap fees scale based on the number of bathrooms or bedrooms in the home, with increasing numbers resulting in increasing fees. Commercial tap fees are based on the business type, and are charged appropriately to the amount of water they use. Irrigation tap fees are based on the type of landscaping, with high water use turf costing nearly four times more than 'Colorado-friendly' perennials.

Annual Water Loss Audit: Staff has conducted an annual water loss audit using the AWWA M36 methodology since 2011, and recently completed a state-sponsored training program to produce a certified water loss audit. Results from the past three years of audits show a stable level of non-revenue water (see Section [2.2.2 Water Loss](#)).

Proactive Leak Detection and Repair: The City utilizes acoustic leak detection equipment to find water main breaks before they surface on the street, and responds to emergency water main break repairs within 1 hour of notification. A large portion of the utility's Capital Improvement Program is targeted at replacing old water mains before they break.

Water Conservation Coordinator: Water efficiency activities are led by multiple Staff across the City, from City-facility turf reductions by the Parks, Recreation, and Libraries Department, to water-efficient landscape plan review by the Community Development Department, to customer-focused rebate and education programs by the PWU Department. PWU has 0.25 FTE dedicated to leading water efficiency projects.

Regular Contact, Meetings, and Data Sharing: PWU Staff participate in a standing weekly meeting with Community Development to review specific future development applications, and is in regular contact with planners on other development issues as well. Department heads also separately meet on a weekly basis to discuss cross-cutting land use, water, and economic development issues in the City.

PWU Staff is Part of Development Review Process: PWU Staff participates in all pre-application meetings with developers seeking a building permit from Westminster. In these meetings, PWU describes the cost of tap fees, utility infrastructure requirements, and is available to answer questions directly from the

developer. After the initial pre-application meeting, PWU Staff is also involved in the Official Development Plan approval and subsequent Building Permit review processes.

Integration of Water Supply and Comprehensive Land Use Plans – Westminster Forward: PWU is extensively involved in Westminster’s long-range land use planning processes and plays an important role in the regular update of the City’s Comprehensive Plan. PWU Staff have developed water use estimates per land use type that enables analysis of land use changes on future water demand. Multiple city-wide plans are currently being coordinated across departments under the title “Westminster Forward”, including the Comprehensive Plan, Parks, Recreation & Libraries Plan, Sustainability Plan, Water Supply Plan, and others.

NEW Customer Water Use Data Portal: The City is currently contracting for an online portal that will allow customers to check their hourly water use data in real-time. This portal will be made available after installation of the new residential, remotely-read AMI meters is complete. The portal will send out automatic leak notices to customers, show water use comparisons over time, and provide educational materials in order to improve customer service. Expected go-live date in spring 2021.

4.2.2 Incentives and Assistance

The City of Westminster is the water utility’s largest single customer. Nearly 8% of total annual water production serves City government buildings, irrigation at public parks, five recreation centers, and many other public facilities.

City-Facility Irrigation System Improvements: Several million dollars will be spent over the coming years to improve the City’s irrigation systems and controls to enable more precise irrigation at each park and facility.

City-Facility Turf Replacement: Westminster removed 21 acres of turf from City parks and around City facilities in 2019, with a goal to remove another 20 acres in 2020. Non-functional turf, that which only provides aesthetic value, is being replaced with more interesting, biodiverse, and lower water use landscaping.

Low-Income Toilet Installations (“Flush for the Future”): Westminster installs up to two high-efficiency toilets, free of charge, for income-qualified home owners as part of the City’s Water Bill Assistance Program. Toilet installation is always preceded by an indoor water audit that also retrofits showerheads and faucet aerators with high-efficiency models. Around 50 toilets are replaced under this program each year.

Low-Income Leak Repairs: Customers with a water leak on their account cannot participate in any water efficiency programs, so Westminster provides a leak repair service free of charge to income-qualified residents. About 15 homes with leaks are fixed through this program each year.

Small Business Capital Improvement Grants: This program provides financial assistance of 10% up to \$5,000 for capital improvements, including water or energy saving equipment, to encourage the growth and retention of existing Westminster businesses. More information is available at: www.westminstereconomicdevelopment.org.

“Slow the Flow” Irrigation System Efficiency Consultations: All single family residential customers can receive a free consultation that provides a report detailing proper irrigation scheduling for their

individual landscape as well as any major maintenance issues to address. In 2019 and 2020, Staff sent targeted letters to the City’s largest water users and greatest over-irrigators to inform them of this free program. This service is regularly offered to several Homeowners Associations (HOA) each year as budget allows. Around 350 consultations are performed each year.



Credit: Resource Central

ET-Based Irrigation Controller Discounts: Large discounts are provided on Rachio smart, web-enabled, irrigation controllers, but only to customers who are over-irrigating their landscapes as determined through an irrigation consultation. Customers spend \$100 to receive nearly \$400 of technology and installation services.

“Garden in a Box” Water-Wise Garden Discounts: Offers a simple approach to an eye-catching, water-wise landscape. Each garden kit includes: starter plants, a plant and care guide, and professionally designed plant by number maps – making it easy for all gardening levels. Westminster provides around 200, \$25 discounts to customers each year.

Neighborhood Landscape Enhancement Grants: This program makes funding available for landscaping projects that improve the appearance and quality of life of individual neighborhoods and areas within Westminster. The City encourages citizen participation in projects of this nature by providing matching funds to qualified applicants. More information is available at: www.cityofwestminster.us/neighborhoodgrants.



Vista Ridge HOA
Credit: John Vann

NEW Public Parks Tiered Watering Program: Parks Staff has ranked all park areas according to purpose, such as high-use athletic facilities, low use areas without programmed activities, and greenbelts/right of ways. Beginning in 2020 and over several years, irrigation will be reduced at the lower priority areas and native landscaping will be planted to reduce water use. The north lawn at City Hall is planned to be used to demonstrate the different tiers of water use for public education.

NEW Grass to Garden: This program motivates residents to remove 200 square feet or more of maintained grass and replace it with water-wise landscaping. To qualify for free plant materials and educational support for a landscape remodel, participants must: complete a webinar, quiz, and the full landscape transformation. Program began in 2020.

NEW Lawn Removal Service: For \$1 per square foot, residents can have a contractor physically remove and compost a section of the lawn. Lawn removal projects must be at least 200 square feet to qualify. Program began in 2020.



Credit: Resource Central

NEW Multi-Family Fixture Retrofit: In partnership with Foothills Regional Housing and Maiker Housing Partners, Westminster will retrofit at least 200 multi-family units with high-efficiency toilets, showerheads, and faucet aerators. This program benefits lower-income residents in the community and will build the business case for a larger multi-family retrofit program. Program began in 2020.

NEW Rain Barrels: To reduce stormwater runoff and build water-literacy of residents throughout Westminster, the City began developing a rain barrel discount program in March 2020 and has an expected go-live date for spring 2021.

NEW HOA 'Investment-Grade' Irrigation Consultations: Many HOAs in Westminster maintain large landscape areas that are predominantly Kentucky bluegrass and use a lot of water. These legacy landscapes are expensive to maintain and costly to retrofit, leaving HOAs with few options to easily reduce water use. As a first step to support HOAs, the City will pay for the majority of a thorough irrigation system audit and evaluation. The audit will include financial cost and ROI calculations for each line item, allowing HOAs to strategically invest in only the repairs and upgrades that make the most financial sense. Expected go-live date in 2021.

4.2.3 Regulations

Waste of Water Prohibition: [City Code 8-7-25](#) prohibits the waste of water, provides various waste examples, and allows the City to levy fines against, and ultimately shut off the water at, customers that do not stop wasting water.

Submetering Requirements: Since 2006, the City has required all new commercial and multi-family buildings to submeter each unit. Submetering places the responsibility and the ability to track water use with the individual water user in a multi-tenant building. Studies have shown that water users who pay for their individual water use are more likely to use less water.

Organic Soil Amendment: All landscaped areas in the City are required to amend the soil in order to reduce runoff, reduce irrigation needs, and promote healthier plant growth. A minimum of 5 cubic yards of organic amendment per 1,000 square feet of landscape area is required to be tilled 8 inches in depth into the soil.

Landscape Regulations: The City has landscape regulations that cover landscape design, irrigation system design, and a list of plants appropriate for Westminster. These regulations are being updated as a part of *Westminster Forward* to increase biodiversity, help pollinator species, and reduce water use by comparison to Kentucky bluegrass lawns that are common throughout the City.

Irrigation Equipment Requirements: The City's landscape regulations require a master shut-off valve and an evapotranspiration- or soil moisture-based irrigation controller with rain sensor to prevent leaks and ensure efficient water use. In addition, no single zone can mix irrigation head types.

Post-Install Landscape Water Audits: To ensure irrigation systems were properly installed and can efficiently irrigate the landscape, the system must pass an audit performed by an Irrigation Association Certified Irrigation Auditor.

Commercial Car Wash Reuse: All car washes built in Westminster since 1996 have been required to install recycling systems so that at least 50% of the annual wash water can be reused.

Directing Growth to 'Focus Areas': Westminster's Comprehensive Plan shifts traditional lateral growth to focus on strategic growth targeted in five geographic areas. These focus areas will help ensure future growth has access to amenities, shopping, employment, a variety of housing options, and multi-modal transportation options. Concentrating new development reduces water and sewer infrastructure costs and results in lower per person water demands.

NEW *Time of Day Irrigation Rules:* Staff is considering new rules for outdoor water use, limiting irrigation to before 10:00A or after 6:00P, three times a week, from May 1 to October 15. These restrictions would promote efficient water use, better prepare the community for drought, and are common in neighboring Front Range communities. A change in code to establish irrigation rules will require separate City Council action.

4.2.4 Education and Outreach

Regular Bill Stuffers and On-Bill Messaging: Customers receive on-going education about available efficiency programs, water bill assistance opportunities, water rate changes, utility project updates, and other relevant information in the message center directly on their water bill and through full page bill stuffers included with every bill.

Targeted Letters: Staff identifies individual high water users and over-irrigators for targeted outreach. These groups are mailed letters informing residents of their water use and making them aware of available programs to become more water efficient.

City Newspaper Articles: The “City Edition” bi-monthly newspaper is distributed to every household and business in the City and regularly includes articles about utility programs, projects, and information.

Direct Mailings: To stand out from the regular water bill and capture increased attention, the City mails occasional stand-alone postcards and brochures directly to customers on important topics.

Social Media Engagement: Social media engagement via Facebook and Next Door has increased significantly in the past years and will continue becoming a greater focus of communication and education in the years ahead. Videos of City engineers describing their water infrastructure projects in plain English, and examples of efficiency program participant’s yards have garnered excellent positive reactions to date.

5th Grade Water Festival: Thornton, Northglenn, and Westminster have partnered to host an annual 5th grade water festival since 2003. The festival reaches about 1,000 students each year, at no cost to their teacher, and engages them on topics such as water efficiency, the history of Colorado water law, water chemistry, the water cycle, local water systems, weather, and aquatic wildlife.

Customer Surveys: In spring 2019, the Utility surveyed ~10% of the City's water customers to gather information about their perceptions of the water/sewer services they receive in order to improve future communication content and methods. In early 2020, results from a separate customer survey helped define the goals and programs in this Water Efficiency Plan.

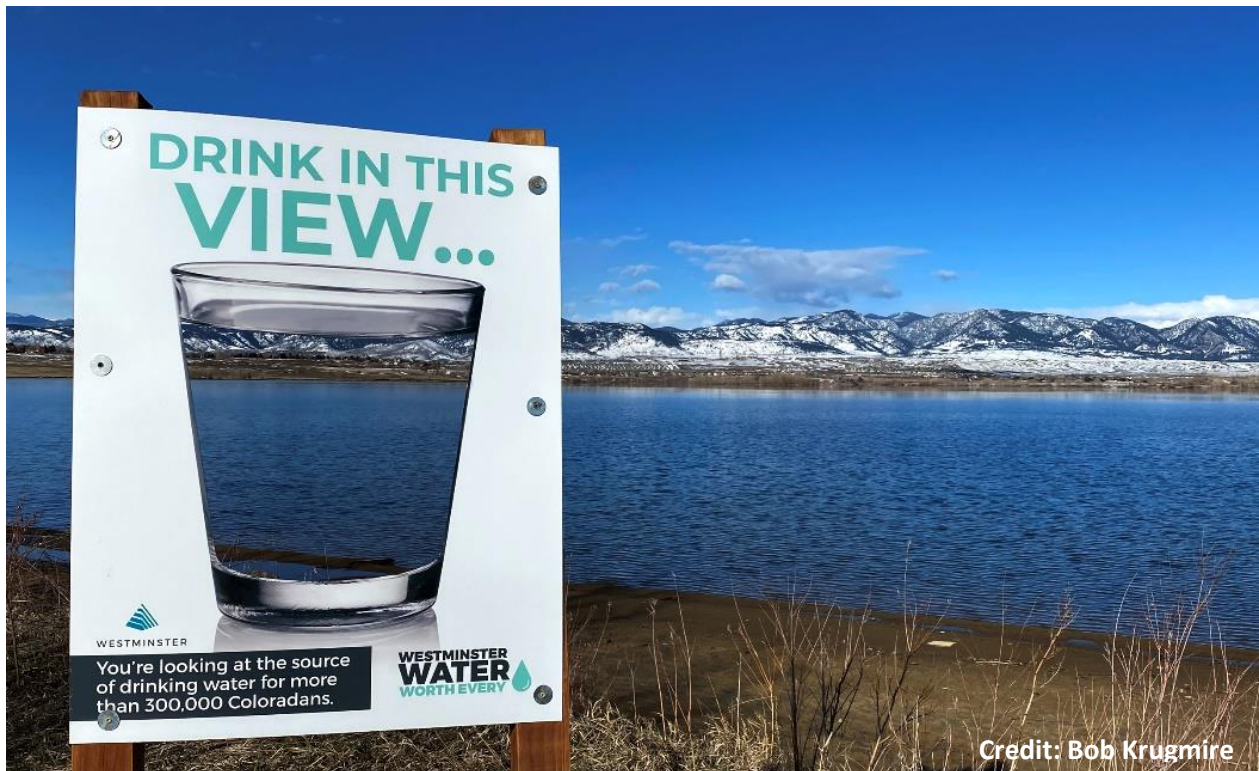
Plant Demonstration Gardens: A physical example of water-wise plants that make up a ‘Colorado-friendly’ landscape can be very helpful for residents to understand the natural beauty and easy maintenance of these water-thrifty plants. The City has been at the forefront of demonstration, with gardens at City Hall, the Public Safety Center, City Park Grand Staircase, and Recreation Centers with quite a few of these plants originally grown at the City greenhouse. Staff also created four short informational videos highlighting plant selection and care for home gardeners who want to learn more. Staff partners with Colorado State University, Butterfly Pavilion, Urban Prairie Project, Denver Botanic Gardens, Plant Select, Monarch Watch, Habitat Hero, and Audubon of the Rockies in selecting the right plants for Colorado’s arid climate and rocky soils.



Credit: Shalene Hiller

Community Outreach: PWU partnered with several other departments in the *Westminster Forward* process, a coordination of long-term plans/projects to create the framework for the future of Westminster. Staff tabled together at several community events and surveyed customers online and in-person to gain their perspectives about future land use, water supply issues, new public park locations, and many other topics.

Standley Lake Source Water: Standley Lake is the sole water storage reservoir for Westminster and several other neighboring communities, and it is also a regional park with multiple recreation opportunities. Recent work by the Parks, Recreation, and Libraries Department seeks to make this connection more clear.



NEW Video Production: The City as a whole is investing in increased video production capabilities in order to communicate with residents about water infrastructure, water efficiency techniques, turf reduction, and irrigation practices, and is rolling out new videos on a more continuous basis.

NEW Water-Wise Landscapes and HOA Regulations: In 2013, Colorado passed a statewide law that any HOA Covenants, Conditions, and Restrictions that limit low-water-use plantings or require any amount of turf grass are “contrary to public policy” and unenforceable. SB13-183 further states that homeowners may not be subject to an HOA enforcement action for letting their landscape die or go dormant if the homeowner is following their local water provider’s drought watering restrictions. HOAs can still adopt and enforce design and aesthetic guidelines for low-water-use landscapes. Many residents do not know about their rights under state law and the City will educate our customers on this important landscape issue.

5 IMPLEMENTATION AND MONITORING

5.1 IMPLEMENTATION PLAN

PWU is chiefly responsible for implementation of this Plan, and will work in collaboration with other departments on their water efficiency actions. See [Table 3](#) for a list of all programs to be implemented over the next seven years. Most new programs began in 2020, and all programs are planned to be active by 2022 (see specific program descriptions in Section [4.2 Demand Management Activities](#)).

Water efficiency is a growing area of interest for Westminster’s City Council and City management, so it is certain this Plan will grow and adapt in the coming years. Approximately \$100,000 of operating funds were budgeted for customer water efficiency programs in 2019, with the 2020 budget increasing to nearly \$160,000, and the 2021 budget increasing to around \$330,000. Areas of focus for future funding will include using capital improvement project dollars for demand management activities, and exploring debt issuance to finance distributed infrastructure improvements. Both of these avenues have the potential to enable much larger scale programs to increase efficiency and reduce water use.

A seminal study conducted by Westminster in 2014 concluded that without the water efficiency efforts of customers since 1980, **rates could have been nearly double** what they are today. The full report “*Conservation Efforts Limit Rate Increases for Colorado Utility*” is available at: www.cityofwestminster.us/conservation. The City is financially planning for the impacts of reduced per customer water use, and is wholly committed to continuing its long-term investments in water efficiency.

5.2 MONITORING PLAN

The City of Westminster monitors water demands and efficiency program participation on a monthly basis. Necessary adjustments are made regularly to increase outreach for underperforming programs, and increase budget for popular programs. On an annual basis, Staff evaluates the overall performance and participation numbers of existing programs, provides recommendations to City Council for budget adjustments, and researches new programs that may be available and appropriate for customers.

Categories of data that are tracked and monitored by the City on an annual basis include all of the following, most of which have a complete record from 2000 through present:

- Monthly water use by account;
- Indoor and outdoor use by account;
- Irrigation efficiency of residential accounts (in gallons per square foot);
- Summaries of water use by:
 - Structure type (e.g., Residential SF Detached, Apartments, Business Commercial, Industrial, Wholesale, City Account, Irrigation, School/Church/Public, Reclaimed, Commercial Irrigation, Hydrant Meters);
 - Sewer collection basin (Big Dry Creek, Little Dry Creek, and Crestview);
 - Bill code (e.g., residential inside city, residential Shaw Heights); and
 - Meter code (e.g., 5/8” commercial inside city, 1” residential meter outside city, 1.5” reclaimed);

- Efficiency program participation;
- Assistance program participation;
- Water loss metrics;
- HB1051 data reporting metrics;
- Trends in water demand over time (in per person water use and acre-feet); and
- Weather data.

6 PUBLIC REVIEW, ADOPTION, AND APPROVAL

6.1 PUBLIC REVIEW PROCESS

Public input on this Water Efficiency Plan was achieved through a customer survey, a water rate increase-related community open house, an official public comment period, social media feedback, an online community meeting, and public presentations to City Council.

The customer survey and responses are further described in Appendix [7.1 Customer Survey](#). The survey was open from February 3 through March 23, 2020 and publicized through a bill stuffer, an on-bill message, social media, the City’s website, and the City’s weekly digital newsletter. 1,142 total responses were received from the survey.

A summary of the survey results indicate that Westminster water customers: 1) feel the City is doing well on efficiency, but many don’t know enough about what efforts are being taken; 2) are interested in learning more about how to be efficient; and 3) would consider replacing some of their front lawn given a financial incentive. This direction from customers increased the focus Staff placed on education and landscape transformation programs in the first draft of the Plan.

One public open house about the 2021/2022 rate increase proposal was held on February 26, 2020 at the City Park Recreation Center. The City’s water efficiency programs were a “station” at the open house. Input on the City’s programs was requested and attendees were encouraged to fill out the customer survey. No direct comments on the City’s water efficiency programs were received as part of the open house outreach.

A complete draft of the Plan, was posted on the City’s website on August 6, 2020. A notice for public comment was placed in the Westminster Window, publicized through a bill stuffer and social media channels, and by direct outreach to HOAs (see Appendix [7.2 Public Notifications](#)). A community meeting about the Water Efficiency Plan was hosted by Staff during the public comment period on August 26, 2020. Because of COVID-19 related precautions an in-person event was not possible. The webinar was attended by approximately 15 members of the public.

Each comment received throughout the drafting of the Water Efficiency Plan is provided in Appendix [7.3 Public Comments](#). A majority of the public comments received, principally those from social media, had little to do with the Plan itself. Rather comments reflect residents’ opinions on broader water topics, such as water rates and city management. Reading between the lines, there is a general concern about outdoor water use, landscapes, and the cost required to maintain turf yards. This led to changes in the Plan to include more discussion about the amount of water Kentucky Bluegrass requires in Colorado to stay healthy (see [Figure 9](#)), and a greater focus on outdoor incentive programs for individual residents and HOAs.

Following incorporation of public feedback, a 2nd draft of the Plan was presented to City Council on November 2, 2020. City council indicated general support for the Plan, encouraged PWU to maintain the good work to date on conservation and efficiency programs, and increase coordination between City departments on collective actions.

6.2 EFFICIENCY PLAN ADOPTION AND APPROVAL

6.2.1 CWCB Approval

The CWCB received an initial draft of Westminster’s Water Efficiency Plan on April 21, 2020. Comments on the Plan were addressed, and a draft Plan was made available for public comment on August 6, 2020. Following incorporation of public comment, a 2nd draft of the Plan was discussed with City Council on November 2, 2020, refined even further based upon Council comments, and finally adopted by resolution on December 14, 2020. The Plan was then resubmitted for final CWCB approval.

6.2.2 Local Adoption

Westminster City Council adopted its 2020 Water Efficiency Plan on December 14, 2020 (see Appendix [7.4 Plan Adoption by City Council](#)).

6.3 WATER EFFICIENCY PLAN REVIEW AND UPDATE

The City of Westminster anticipates updating this Water Efficiency Plan by 2027, however annual adjustments will be made to ensure the City continues offering the right programs to the right customers to help everyone make better decisions about water and how to manage this scarce resource. This is described in Section [5 – Implementation and Monitoring](#).

7 APPENDICES

7.1 CUSTOMER SURVEY

7.1.1 Survey Results Summary

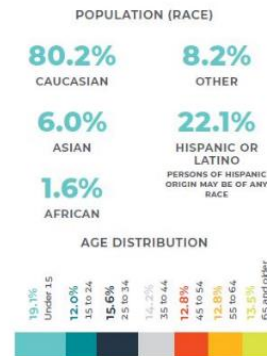
To briefly summarize, 1,142 respondents to the survey said:

- The City should conserve because water is scarce and ensures long-term water supply security (Q2);
- The City is doing well on efficiency, but many don't know enough about what efforts are being taken (Q3);
- Nearly 85% are interested in learning more about how to be efficient (Q5);
 - Reducing the water bill and just "to conserve" are the primary motivators for customers' efficiency improvements (Q7); and
 - 40% of customers are unaware of several, existing conservation programs and are either interested in participating or would like to learn more (Q17);
- 95% of customers have a grass lawn (Q8);
 - Over 55% like their lawn, but are open to alternatives for all/some of it (Q10); and
 - >70% would consider replacing some of their front lawn given a financial incentive, with cost as the greatest barrier to landscape change and HOA restrictions/control as a regularly cited problem in the open comment section (Q14-16); and
- There is broad interest in a variety of new programs, with a rain barrel discount garnering the most interest (Q18).
- The survey polled ~4% of customers (1,142/33,000 accounts). Respondents skewed older, more white, and affluent than the demographics of the full customer base (Q20-25).

Community Statistics

- POPULATION - 117,832
- HOUSEHOLDS - 46,137
- MEDIAN AGE - 37.2
- EDUCATIONAL ATTAINMENT (AGE 25+):
 - BACHELOR'S DEGREE OR HIGHER - 24.9%
 - MASTER'S, PROFESSIONAL OR DOCTORATE - 13.9%
- AVERAGE DISPOSABLE INCOME- \$73,017

Characteristics of the Population



7.1.2 Customer Survey Instrument and Detailed Results

The following text prefaced the customer survey, and detailed results to each question are provided in the next pages.

Water conservation and water efficiency mean the same thing in today's survey, as both result in lower water use. The City of Westminster is updating its Water Efficiency Plan to ensure we continue offering the right programs to the right customers that help everyone make smarter decisions about how to use this scarce resource. To do that successfully, we need your input. **Water customers are eligible to**

receive one \$5 rebate per household for completing the full survey – a copy of your water bill has all the information you need to request a rebate.

Westminster's Long-Term Water Efficiency Investments Have Resulted in Significant Financial Savings for Our Customers

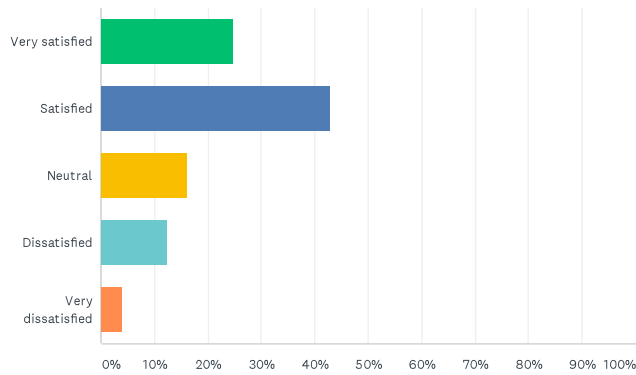
Using our water efficiently returns major benefits to the City's water utility and its customers. Over the past two decades, Westminster's population increased by nearly 13,000 residents and the City added almost 130 new business customer accounts, yet total water demands have actually dropped. This is because per person water use has declined by 15% since 2000. Without the conservation efforts of Westminster water customers since 1980, rates could have been nearly double what they are today.

Thank you so much for your participation!

Visit www.cityofwestminster.us/Residents/Water/Conservation to learn more about water efficiency tips and programs for Westminster customers.

Q1 How satisfied are you with the value of the water and sewer services provided by the City of Westminster?

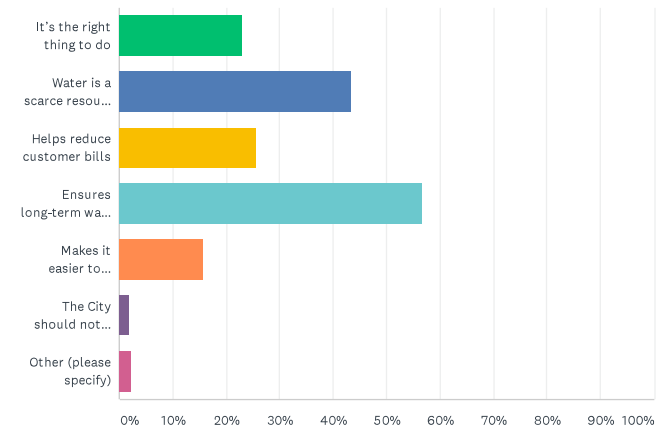
Answered: 1,142 Skipped: 0



ANSWER CHOICES	RESPONSES	Count
Very satisfied	24.69%	282
Satisfied	42.91%	490
Neutral	16.20%	185
Dissatisfied	12.26%	140
Very dissatisfied	3.94%	45
TOTAL		1,142

Q2 Please complete the following: The City of Westminster should promote water efficiency because... (select top 1 or 2)

Answered: 1,108 Skipped: 34



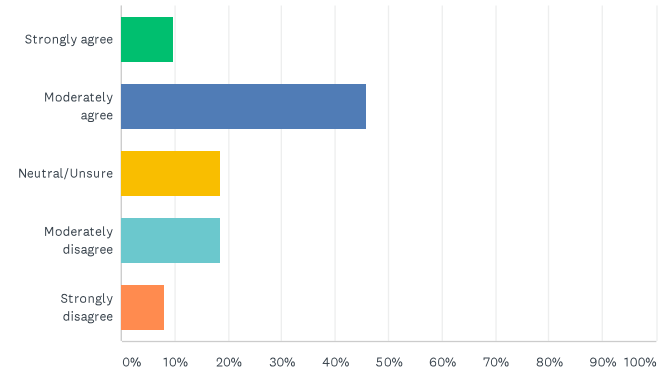
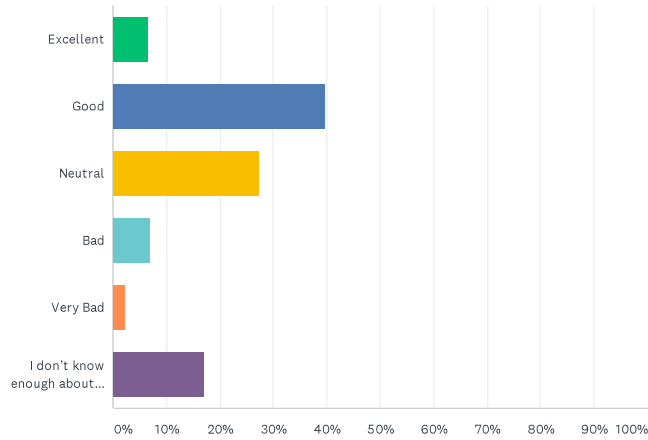
ANSWER CHOICES	RESPONSES	Count
It's the right thing to do	23.10%	256
Water is a scarce resource in Colorado	43.23%	479
Helps reduce customer bills	25.54%	283
Ensures long-term water supply security	56.68%	628
Makes it easier to manage drought	15.61%	173
The City should not promote water saving activities	1.81%	20
Other (please specify)	2.17%	24
Total Respondents: 1,108		

Q3 How well is the City doing currently to promote water efficiency?

Q4 I could be more efficient with water at my home or business.

Answered: 1,108 Skipped: 34

Answered: 1,091 Skipped: 51

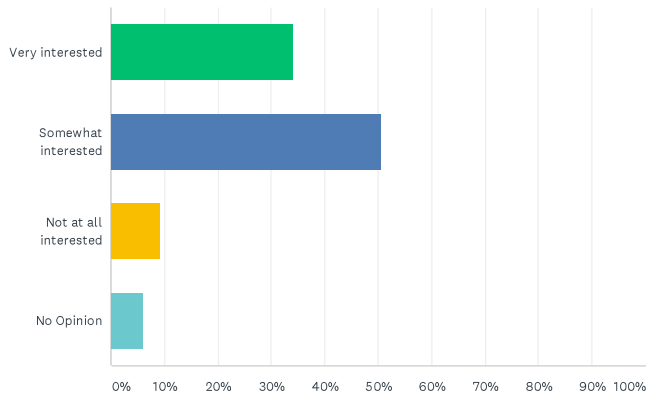


ANSWER CHOICES	PERCENTAGE	COUNT
Excellent	6.68%	74
Good	39.71%	440
Neutral	27.35%	303
Bad	6.86%	76
Very Bad	2.35%	26
I don't know enough about what the City is doing	17.06%	189
TOTAL		1,108

ANSWER CHOICES	PERCENTAGE	COUNT
Strongly agree	9.53%	104
Moderately agree	45.74%	499
Neutral/Unsure	18.42%	201
Moderately disagree	18.33%	200
Strongly disagree	7.97%	87
TOTAL		1,091

Q5 How interested are you in learning more about using water efficiently?

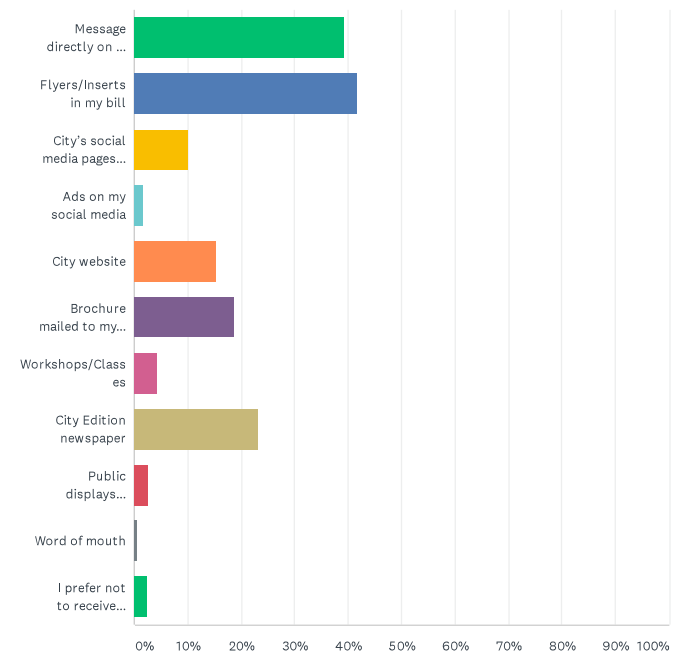
Answered: 1,091 Skipped: 51



ANSWER CHOICES	RESPONSES	Count
Very interested	34.01%	371
Somewhat interested	50.69%	553
Not at all interested	9.17%	100
No Opinion	6.14%	67
TOTAL		1,091

Q6 How do you prefer to get information about being water efficient from the City of Westminster? (select top 1 or 2)

Answered: 1,091 Skipped: 51



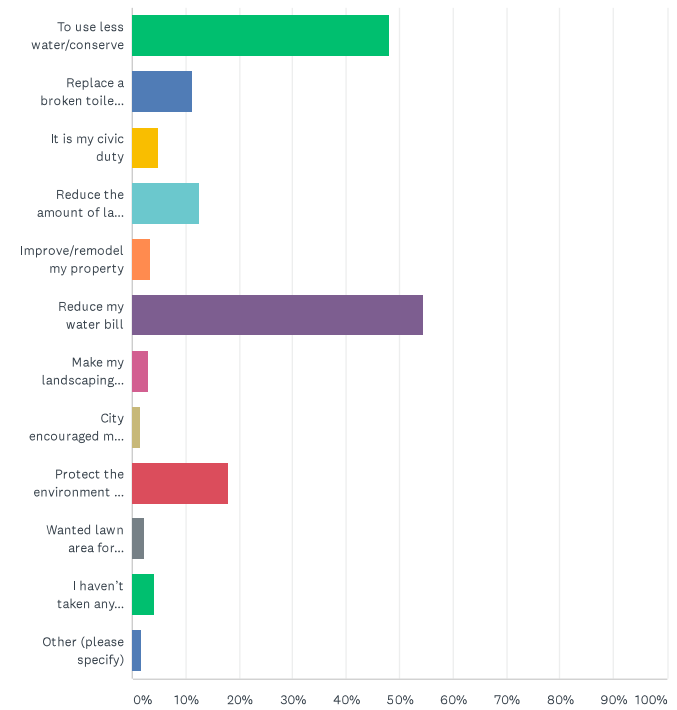
2020 Water Efficiency Plan Survey

ANSWER CHOICES	RESPONSES	
Message directly on my bill	39.32%	429
Flyers/Inserts in my bill	41.61%	454
City's social media pages (Facebook, Twitter, Instagram, Nextdoor)	9.99%	109
Ads on my social media	1.74%	19
City website	15.31%	167
Brochure mailed to my home (not included in my bill)	18.52%	202
Workshops/Classes	4.22%	46
City Edition newspaper	23.19%	253
Public displays (billboards/ads)	2.47%	27
Word of mouth	0.37%	4
I prefer not to receive information about saving water	2.20%	24
Total Respondents: 1,091		

2020 Water Efficiency Plan Survey

Q7 If you have taken actions to become more water efficient in the past 5 years, what was your primary motivation? (select top 1 or 2)

Answered: 1,091 Skipped: 51



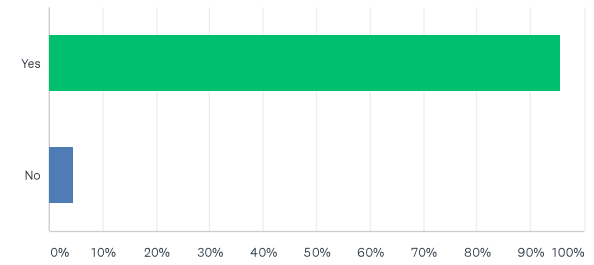
2020 Water Efficiency Plan Survey

ANSWER CHOICES	RESPONSES	
To use less water/conserve	48.03%	524
Replace a broken toilet or appliance	11.09%	121
It is my civic duty	4.77%	52
Reduce the amount of lawn or garden maintenance	12.47%	136
Improve/remodel my property	3.30%	36
Reduce my water bill	54.45%	594
Make my landscaping more attractive	2.84%	31
City encouraged me to save water	1.56%	17
Protect the environment for future generations	17.69%	193
Wanted lawn area for something else (like garden or patio)	2.02%	22
I haven't taken any actions to reduce water use	4.03%	44
Other (please specify)	1.74%	19
Total Respondents: 1,091		

2020 Water Efficiency Plan Survey

Q8 Do you have a grass lawn at your home/complex/business?

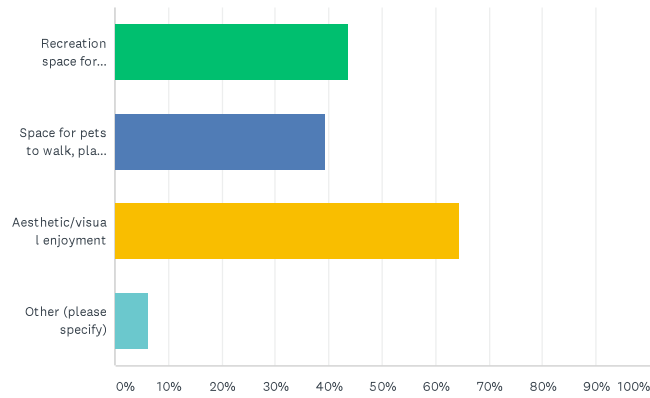
Answered: 1,091 Skipped: 51



ANSWER CHOICES	RESPONSES	
Yes	95.51%	1,042
No	4.49%	49
TOTAL		1,091

Q9 How do you use the lawn on your property?

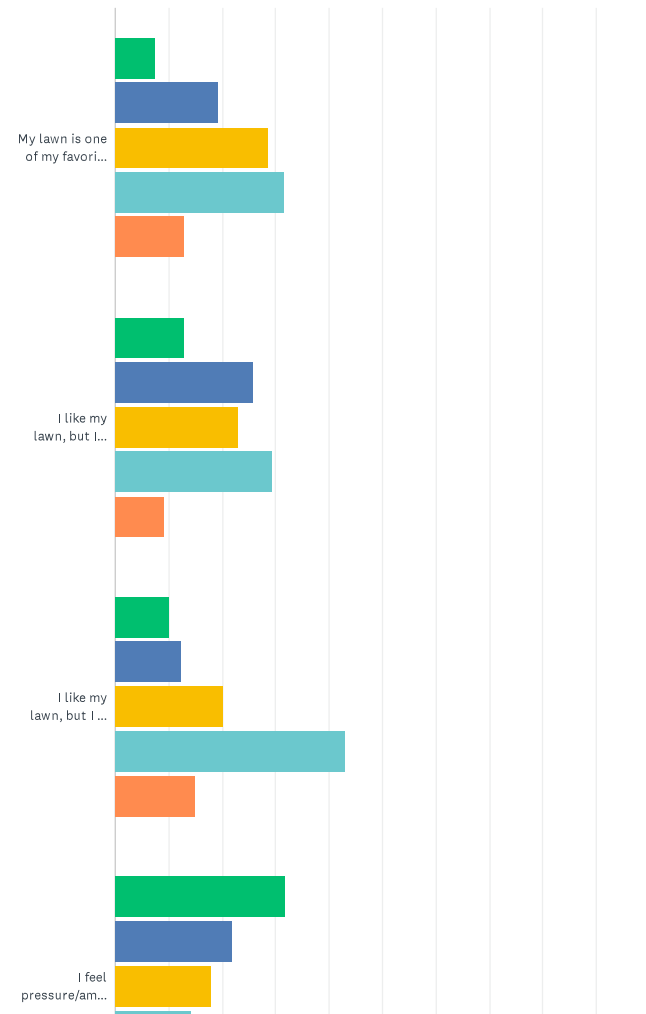
Answered: 1,013 Skipped: 129



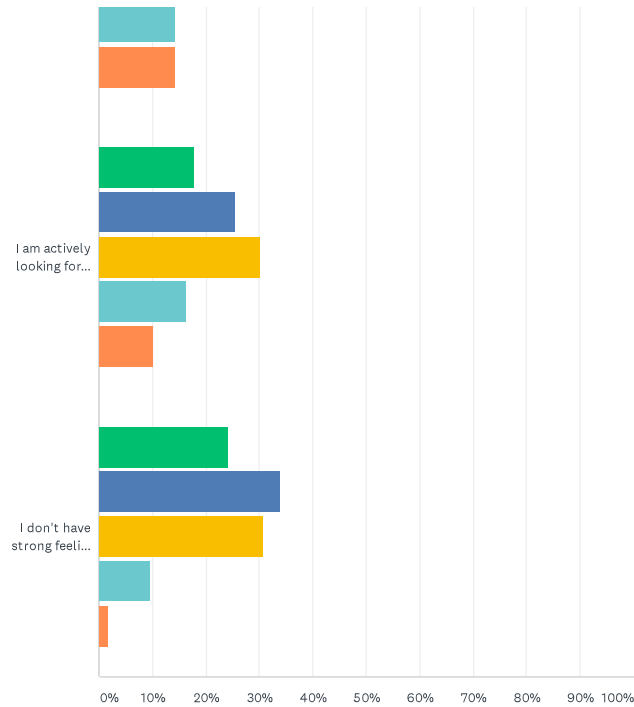
ANSWER CHOICES	RESPONSES
Recreation space for household members	43.63% 442
Space for pets to walk, play, or do their business	39.39% 399
Aesthetic/visual enjoyment	64.46% 653
Other (please specify)	6.22% 63
Total Respondents: 1,013	

Q10 How much do you agree/disagree with the following statements about your lawn?

Answered: 1,013 Skipped: 129



2020 Water Efficiency Plan Survey



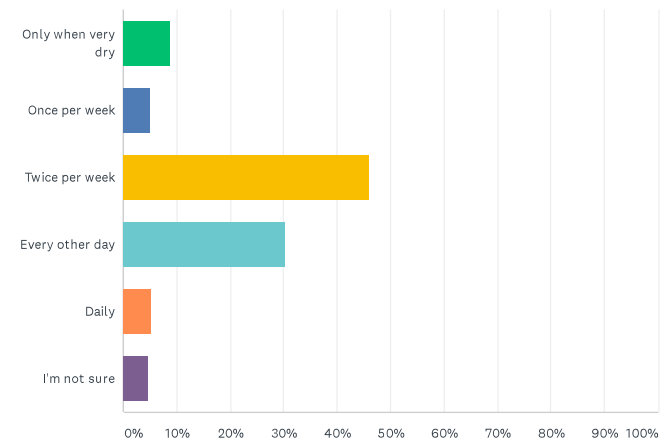
Strongly Disagree Disagree Neutral Agree Strongly Agree

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL
My lawn is one of my favorite features of my landscape and I don't desire to change it	7.60% 77	19.35% 196	28.73% 291	31.59% 320	12.73% 129	1,013
I like my lawn, but I wish I had a little less	12.73% 129	25.77% 261	23.00% 233	29.22% 296	9.28% 94	1,013
I like my lawn, but I am open to alternatives for all/some of it	9.97% 101	12.24% 124	20.04% 203	42.84% 434	14.91% 151	1,013
I feel pressure/am required to have a lawn from my neighborhood or HOA	31.89% 323	21.72% 220	17.87% 181	14.31% 145	14.22% 144	1,013
I am actively looking for ways or taking steps to reduce my lawn size	17.77% 180	25.57% 259	30.11% 305	16.29% 165	10.27% 104	1,013
I don't have strong feelings about my lawn one way or the other	24.19% 245	33.96% 344	30.70% 311	9.58% 97	1.58% 16	1,013

2020 Water Efficiency Plan Survey

Q11 How often do you water your lawn during the summer months?

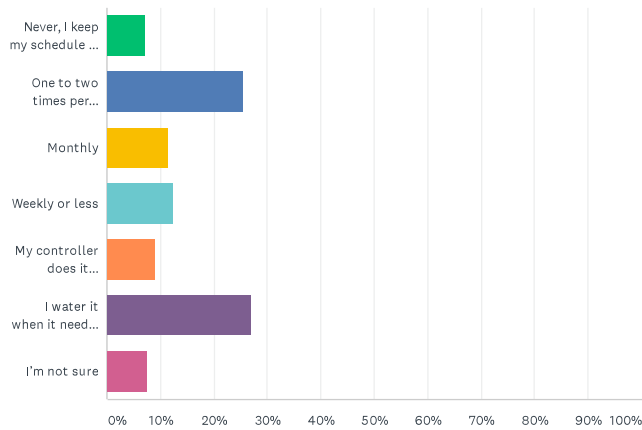
Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES
Only when very dry	8.69% 88
Once per week	5.03% 51
Twice per week	46.10% 467
Every other day	30.40% 308
Daily	5.23% 53
I'm not sure	4.54% 46
TOTAL	1,013

Q12 How often do you adjust your irrigation schedule during the watering season?

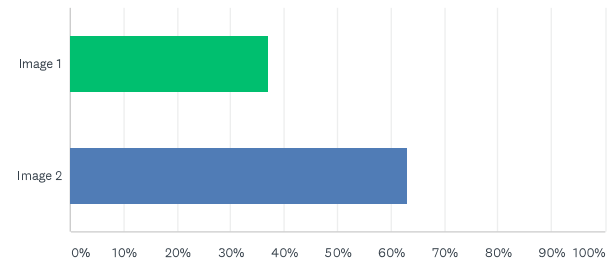
Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES	
Never, I keep my schedule the same	7.01%	71
One to two times per season	25.57%	259
Monthly	11.55%	117
Weekly or less	12.24%	124
My controller does it automatically based on the weather	9.08%	92
I water it when it needs it	26.95%	273
I'm not sure	7.60%	77
TOTAL		1,013

Q13 Here are two pictures of water-wise landscaping in Colorado. Which one do you like better?

Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES	
Image 1	37.12%	376
Image 2	62.88%	637
TOTAL		1,013

Image 1

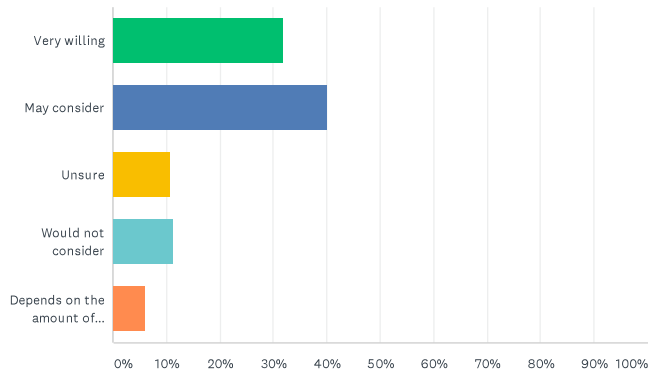


Image 2



Q14 If the city were to provide a financial incentive for adopting a water-wise landscape, how willing would you be to remove some or all of the lawn from your front yard?

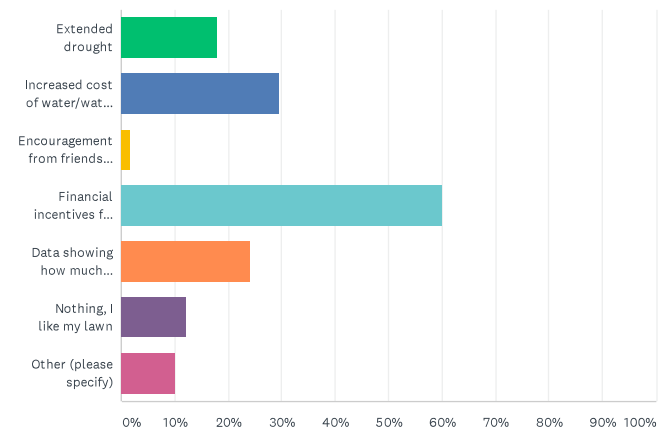
Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES	
Very willing	31.79%	322
May consider	40.08%	406
Unsure	10.76%	109
Would not consider	11.35%	115
Depends on the amount of incentive	6.02%	61
TOTAL		1,013

Q15 Which of the following might cause you to reduce the amount of lawn on your property? (select top 1 or 2)

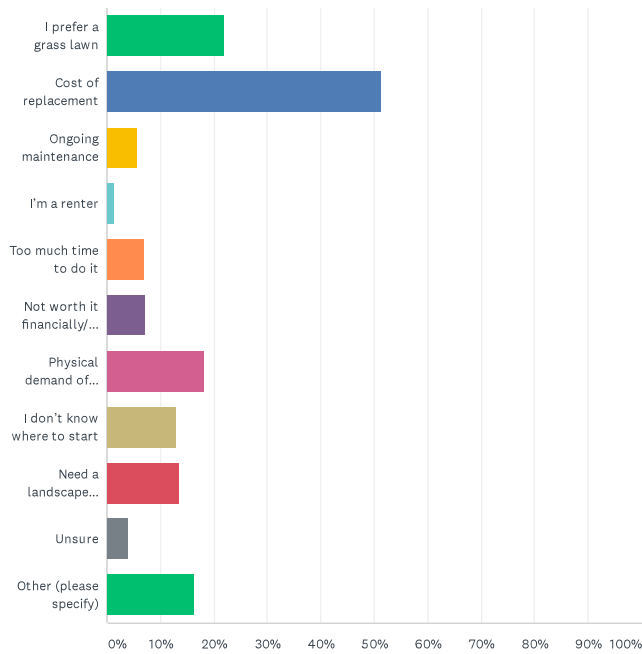
Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES	
Extended drought	17.87%	181
Increased cost of water/water rates	29.52%	299
Encouragement from friends, family, or neighbors	1.58%	16
Financial incentives from the city	60.02%	608
Data showing how much particular actions could reduce my bill	23.99%	243
Nothing, I like my lawn	12.14%	123
Other (please specify)	9.97%	101
Total Respondents: 1,013		

Q16 What barriers are keeping you from replacing some or all of your lawn with water-wise landscaping? (select top 1 or 2)

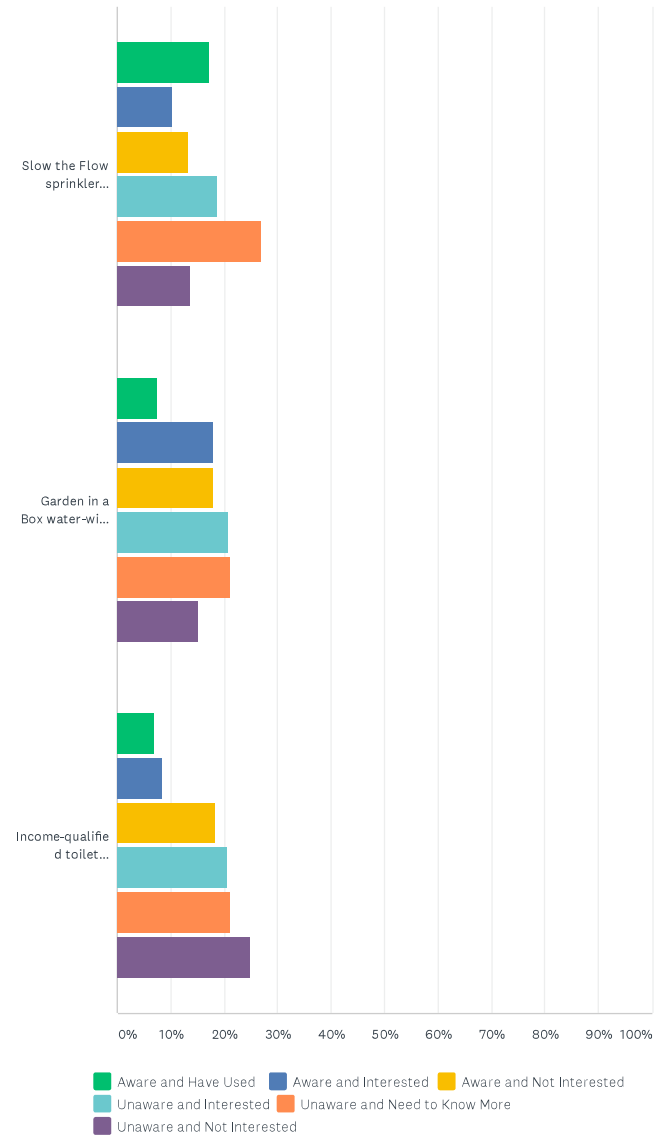
Answered: 1,013 Skipped: 129



ANSWER CHOICES	RESPONSES	
I prefer a grass lawn	22.01%	223
Cost of replacement	51.33%	520
Ongoing maintenance	5.73%	58
I'm a renter	1.38%	14
Too much time to do it	6.81%	69
Not worth it financially/my bill is not that high	7.21%	73
Physical demand of project	18.16%	184
I don't know where to start	12.93%	131
Need a landscape designer's recommendation	13.62%	138
Unsure	4.05%	41
Other (please specify)	16.39%	166
Total Respondents: 1,013		

Q17 What is your position on the following water saving programs the City currently offers?

Answered: 1,043 Skipped: 99



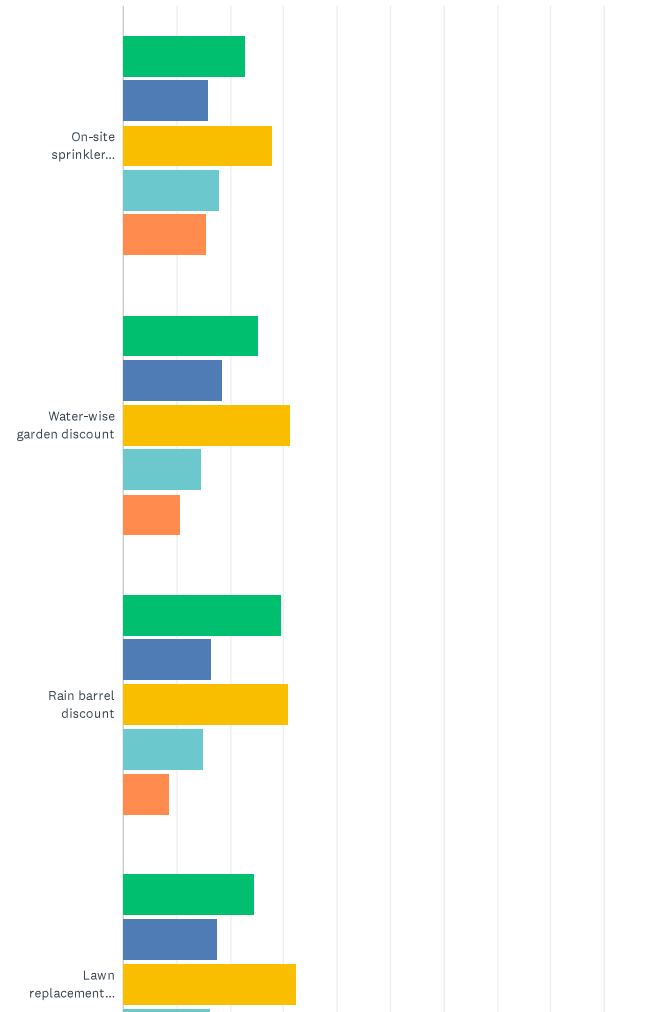
2020 Water Efficiency Plan Survey

	AWARE AND HAVE USED	AWARE AND INTERESTED	AWARE AND NOT INTERESTED	UNAWARE AND INTERESTED	UNAWARE AND NEED TO KNOW MORE	UNAWARE AND NOT INTERESTED	TOTAL
Slow the Flow sprinkler system consultation	17.26% 180	10.26% 107	13.23% 138	18.70% 195	26.94% 281	13.61% 142	1,043
Garden in a Box water-wise garden discount	7.48% 78	17.74% 185	17.83% 186	20.71% 216	21.19% 221	15.05% 157	1,043
Income-qualified toilet replacement	6.81% 71	8.44% 88	18.12% 189	20.52% 214	21.19% 221	24.93% 260	1,043

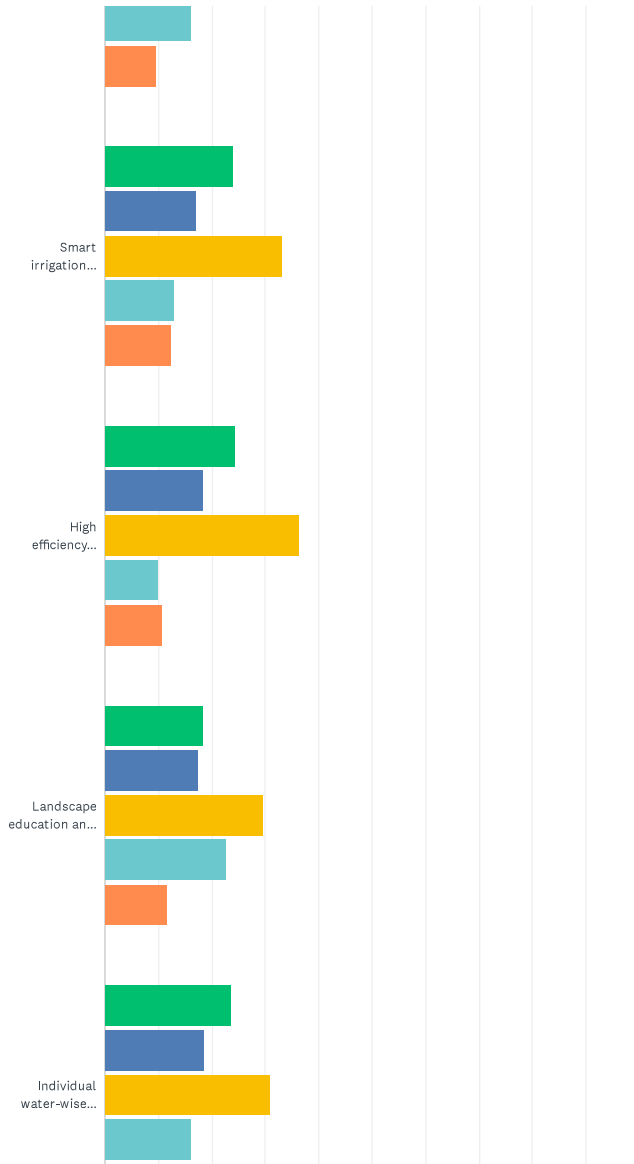
2020 Water Efficiency Plan Survey

Q18 Rate your potential willingness to participate in the following water efficiency programs?

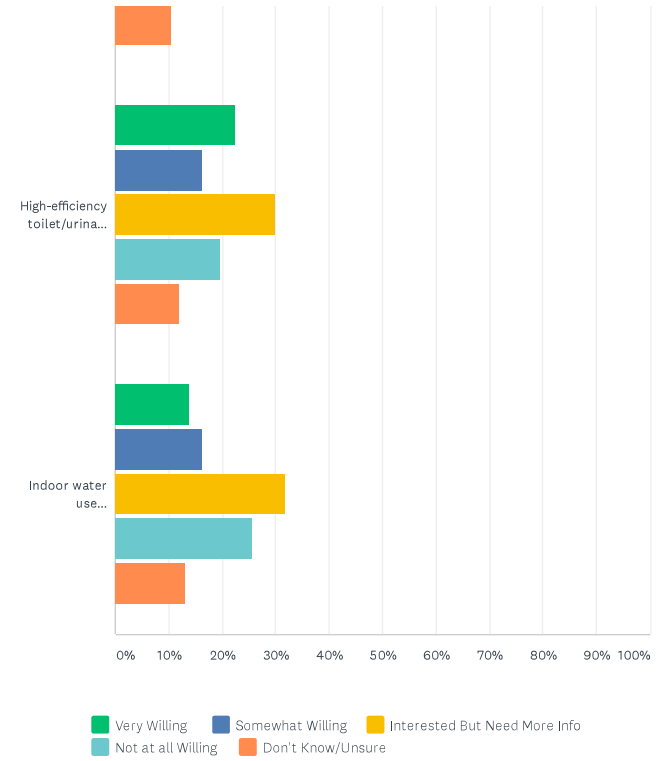
Answered: 1,043 Skipped: 99



2020 Water Efficiency Plan Survey



2020 Water Efficiency Plan Survey

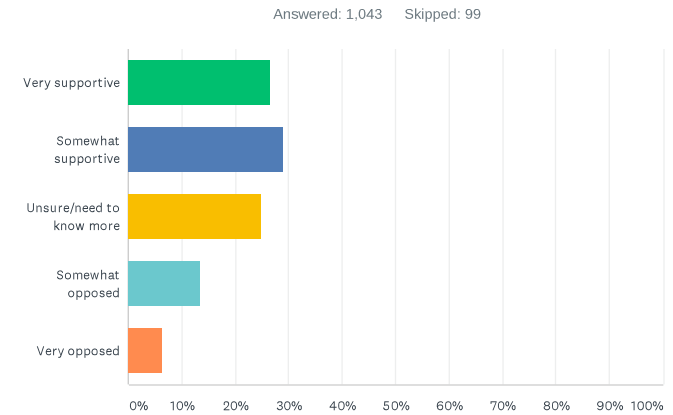


2020 Water Efficiency Plan Survey

	VERY WILLING	SOMEWHAT WILLING	INTERESTED BUT NEED MORE INFO	NOT AT ALL WILLING	DON'T KNOW/UNSURE	TOTAL
On-site sprinkler consultation	22.82% 238	15.82% 165	27.90% 291	18.02% 188	15.44% 161	1,043
Water-wise garden discount	25.12% 262	18.50% 193	31.16% 325	14.48% 151	10.74% 112	1,043
Rain barrel discount	29.53% 308	16.30% 170	30.68% 320	14.96% 156	8.53% 89	1,043
Lawn replacement incentive program	24.45% 255	17.55% 183	32.31% 337	16.01% 167	9.68% 101	1,043
Smart irrigation controller discount	24.16% 252	17.16% 179	33.27% 347	13.04% 136	12.37% 129	1,043
High efficiency irrigation nozzle discount	24.54% 256	18.31% 191	36.34% 379	10.07% 105	10.74% 112	1,043
Landscape education and design group workshop	18.31% 191	17.45% 182	29.72% 310	22.82% 238	11.70% 122	1,043
Individual water-wise landscape consultation	23.59% 246	18.70% 195	31.06% 324	16.20% 169	10.45% 109	1,043
High-efficiency toilet/urinal upgrade	22.44% 234	16.11% 168	29.91% 312	19.65% 205	11.89% 124	1,043
Indoor water use consultation	13.71% 143	16.01% 167	31.74% 331	25.60% 267	12.94% 135	1,043

2020 Water Efficiency Plan Survey

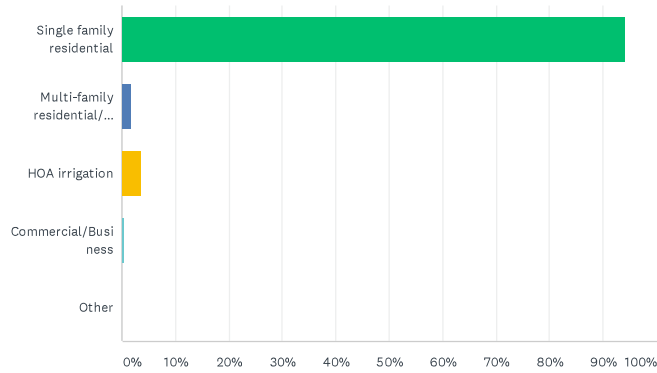
Q19 To support the city's ongoing efforts to be responsible stewards of a scarce resource and use water efficiently, we are changing irrigation practices to better align with the amount of active use an area receives. For example, high-use athletic fields will receive the highest amount of water while neighborhood parks, medians, and greenbelts will each get respectively less water. How supportive are you of this initiative?



ANSWER CHOICES	RESPONSES
Very supportive	26.56% 277
Somewhat supportive	28.95% 302
Unsure/need to know more	24.83% 259
Somewhat opposed	13.33% 139
Very opposed	6.33% 66
TOTAL	1,043

Q20 What type of water customer are you?

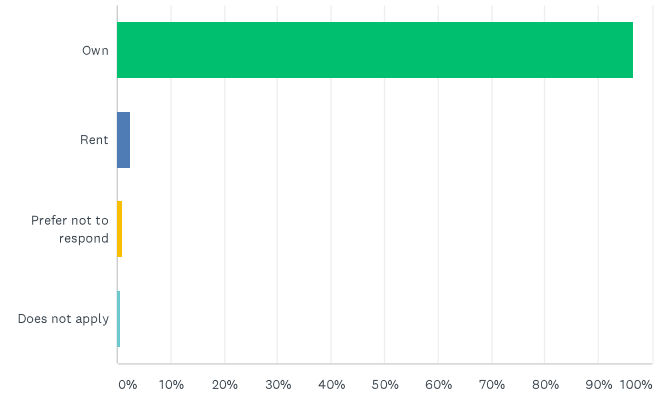
Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES
Single family residential	94.15% 981
Multi-family residential/apartment/condo	1.63% 17
HOA irrigation	3.65% 38
Commercial/Business	0.38% 4
Other	0.19% 2
TOTAL	1,042

Q21 Do you own or rent your home?

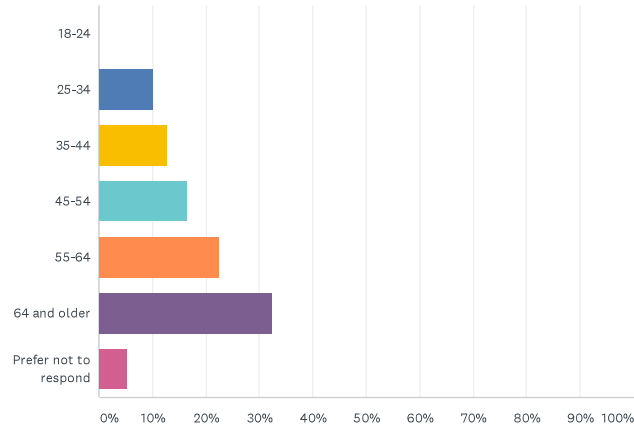
Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES
Own	96.45% 1,005
Rent	2.30% 24
Prefer not to respond	0.77% 8
Does not apply	0.48% 5
TOTAL	1,042

Q22 In which of the following age groups do you belong?

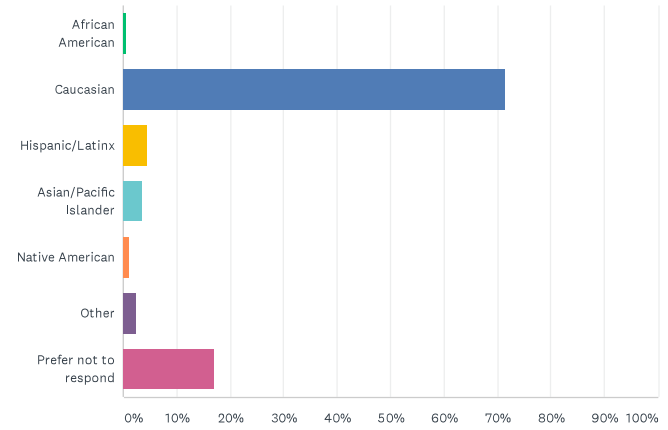
Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES	
18-24	0.19%	2
25-34	10.27%	107
35-44	12.86%	134
45-54	16.51%	172
55-64	22.65%	236
64 and older	32.34%	337
Prefer not to respond	5.18%	54
TOTAL		1,042

Q23 What is your ethnic background?

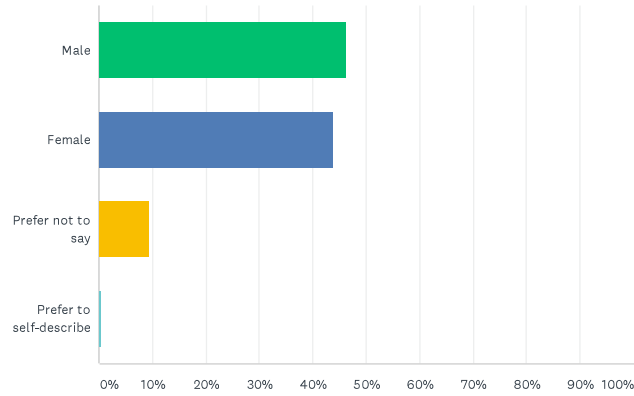
Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES	
African American	0.48%	5
Caucasian	71.40%	744
Hispanic/Latinx	4.32%	45
Asian/Pacific Islander	3.45%	36
Native American	1.06%	11
Other	2.30%	24
Prefer not to respond	16.99%	177
TOTAL		1,042

Q24 What best describes your gender?

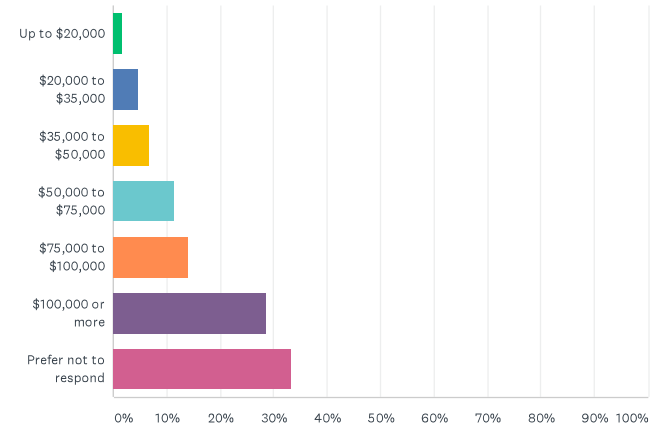
Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES	
Male	46.16%	481
Female	43.95%	458
Prefer not to say	9.40%	98
Prefer to self-describe	0.48%	5
TOTAL		1,042

Q25 What is your total annual household income?

Answered: 1,042 Skipped: 100



ANSWER CHOICES	RESPONSES	
Up to \$20,000	1.73%	18
\$20,000 to \$35,000	4.51%	47
\$35,000 to \$50,000	6.72%	70
\$50,000 to \$75,000	11.32%	118
\$75,000 to \$100,000	13.92%	145
\$100,000 or more	28.60%	298
Prefer not to respond	33.21%	346
TOTAL		1,042

Q26 Please complete the following if you would like a \$5 rebate on your water bill for completing the survey:

Answered: 974 Skipped: 168

ANSWER CHOICES	RESPONSES	
First Name	100.00%	974
Last Name	100.00%	974
Address	100.00%	974
Zipcode	100.00%	974
Account Number (0 0 _____ ..found on bill)	100.00%	974
Customer Number (0 1 _____ ..found on bill)	100.00%	974
Email	100.00%	974
Phone Number	100.00%	974

7.2 PUBLIC NOTIFICATIONS

Facebook February 11, 2020

City of Westminster, Colorado - Government

February 11 at 4:03 PM

Westminster is updating its Water Conservation and Efficiency Plan.

This vital roadmap helps the city plan for saving water, lists the programs we will undertake over the next five years and documents past successes.

We need your input to design the best water conservation/efficiency programs for residents and businesses! All water customers are eligible to receive one \$5 credit on their utility bill per household for completing the survey.

<https://www.cityofwestminster.us/watersurvey>



Facebook March 3, 2020

City of Westminster, Colorado - Government

March 3 at 8:30 AM

Help the City of Westminster promote water conservation/efficiency by telling us what kind of programs will be most helpful for you.

And earn a \$5 water bill credit for sharing your thoughts!

<https://www.cityofwestminster.us/watersurvey>



Westminster Window August 2020

LEGAL NOTICE

OF PUBLIC COMMENT City of Westminster

A sixty (60) day Public Comment Period will open for the City of Westminster's updated Water Efficiency Plan on Thursday, August 6, 2020, and run through Monday, October 5, 2020. The City updated its current water conservation and efficiency plan pursuant to State Law and is seeking customer input. The plan is designed to promote efficient water use by all customers and ensure a long-term, secure water supply. The plan contains information on the City's historic water use, water infrastructure systems, and lists all current and future water saving programs. The plan is available and comments may be submitted on the City's website:
<https://www.cityofwestminster.us/Residents/Water/Conservation/WaterEfficiencyPlan>.

**All comments must be received by
Monday, October 5, 2020.**

Legal Notice No. 705593
First Publication: August 6, 2020
Last Publication: August 13, 2020
Publisher: Westminster Window

Facebook August 20, 2020

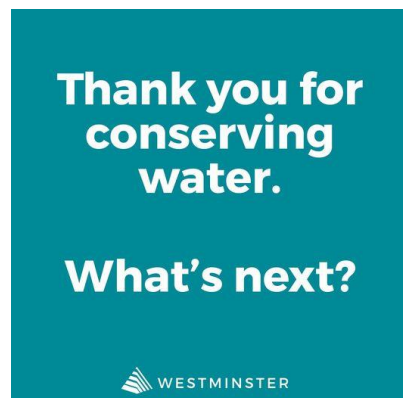
City of Westminster, Colorado - Government

August 20 at 12:23 PM

Thanks to water-wise residents like you, overall water use in Westminster has declined over the last 20 years. Still, water is a scarce resource in Colorado and continued water conservation / efficiency is needed to be drought resilient and avoid the high cost of expanding infrastructure.

Help shape the future of Westminster's water conservation / efficiency programs by reviewing and commenting on a draft Water Efficiency Plan available at <https://bit.ly/31b2p1B>.

This state-mandated plan will be open for comment through October 1. A virtual meeting will be held on August 26 to present the plan and answer questions. <https://bit.ly/3gdWnlh>.





PLEASE WEAR A FACE COVERING. FOR ME.

WESTMINSTER For guidance on wearing masks, visit: covid19.colorado.gov/mask-guidance
Essential workers and at-risk individuals thank you! 

Thank you for conserving water. What's next?

Thanks to water-wise residents like you, overall water use in Westminster has declined over the last 20 years. Still, water is a scarce resource in Colorado and continued water conservation / efficiency is needed to be drought resilient and avoid the high cost of expanding infrastructure.

Help shape the future of Westminster's water conservation / efficiency programs by reviewing and commenting on a draft Water Efficiency Plan available at:

 www.cityofwestminster.us/efficiencyplan

This state-mandated plan will be open for comment through October 5. Call 303-658-2386 to request a hard copy.

TIPS TO INVESTIGATE HIGH WATER USAGE

With hotter than average temperatures and more people at home due to COVID-19, residents used 20% more water in July than the previous year. Here are some tips to investigate and resolve high water usage.

1. Review historic usage. Check to see if your consumption is similar to

\$50 ONE TIME GRANTS APPLIED TO WATER BILL FOR RESIDENTS FINANCIALLY IMPACTED BY COVID-19

The city is offering \$50 one-time grants to residents financially

7.3 PUBLIC COMMENTS

7.3.1 Social Media

Replies to Feb 11 Survey FaceBook Post, as of Feb 20, 2020

Alli Widder I'm so onboard with any lawn replacement incentive! I'm over seeding my lawn with clover this spring, have already xeriscaped the back with the Garden in a Box program and hope to slowly transition the front from lawn to garden. Thanks Westy!

Tom Schneider Isn't that special the church lady would say!!! For seniors struggling to pay bills and keep their homes don't have this option!!!! You must be the "Goody Two Shoes" generation!!!

Danyelle Claire wow you are doing something nice and a troll has to come in and spew a bunch of garbage that has nothing to do with it. Don't bother responding to them. It is literally never worth your time. Great job on your lawn!

Ricki Simon Sorry, this isn't an issue about trolls. Those of you debasing negative reactions are not retired seniors on a fixed income who cannot afford all these progressive investments. And before you reply with "OK Boomer", you will be in our shoes one day.

Tom Schneider you sure have thin skin Danyelle. You must be from the Goody Two Shoes generation as well. I don't consider myself a troll or spewing garbage!! I am an intelligent 78 year old woman. Trying to make ends meet and living a good life.

Joe Reigle I'm so pissed right now! Your telling me, you people raised our bills and told us it's going up again next year. And now you need OUR opinions AND your going to PAY us for them? All you over paid, pampered butt, 4 day a week working suckers can't come up with a good plan to save water!? And you think the public has any idea or education on the subject? That's exactly what we are paying you people to do! You come up with the plan! And do it yesterday! Holy crap! If I don't use any water and just let the grass die, you pigs will come give me a ticket for dead grass!? Our tax's has to pay someone to sit on their butt and make this stupid advertising, I know exactly where we can save some money and it starts inside the Westminster city building! We don't need people that can't work 5 days a week, or can't figure out our water plan, or spending our money on geothermal????

Martin Anderson Large lawn irrigation systems employed at perimeters around athletic fields, public buildings and shopping centers such as the one at Wads and 100th, need to set up so that watering does not take place amidst rainy days. When it rains at my house I go out and turn the system off manually. Does this technology exist?

Richard Esala I do not live in Westminster but have to use their water as they bought out the small water district . I have no say and have to pay what ever they want. I will be forced to put in gravel where my lawn was. The water is so bad it would cost me a fortune to water it and it would still turn brown. Stuck between a rock and a hard place!

Linda Nelson Stop building high rises and using the water we have had the privilege of using all these years! Way too much growth, traffic, etc here now!

Linda Nelson I also do not want a yard that looks like it should be in Arizona!!!!

Jill Asb please plan to speak out at the telephone townhall on Feb 27.

Grant Arnold How about you stop with the high density multi family housing that is straining our water and sewer pipes?

Elizabeth Rowland-Riddell Oh Jesus Christ here we go again. Here's \$5 and we'll more than triple your water costs again this year. Bend over and take it. I wish we had never bought a house here in Westminster.

Tami Masero How about charge the new building projects more for water instead of making all of us pay for it! People who have lived here for years don't want all this building and the problems that come with it. Keep your 5 dollars(or should I say my 5 dollars from my higher water bill!?)

Jill Asb please plan to speak out at the telephone townhall on Feb 27

Tamara Loggan How about The City of Westminster not allowing every developer to build in our city!

Jill Asb please plan to speak out at the telephone townhall on Feb 27.

Tamara Loggan I tried to vote out the previous council but it didn't work. In my book, they have no planning aptitude!

Joe Caputa I have lived in my house for the last 30 years. I have seen my water bill at this time of the year in the last 12 years go from less than \$10 a month to now \$90 a month. Don't let them kid you.

Jill Asb please plan to speak out at the telephone townhall on February 27.

Joe Caputa 🗣️

Jaroslav F. Pardubicky I was surprised by bill for one month last year. Why? We have installed new high efficiency showers, dual flush toilets a top of it we where on vacation for 11 days (no one in the house) and did not use irrigation system at all. Yet city charge as even for overuse. Residents have no any possibility/chance to access the reading, so they charge what ever they can. That is wrong.

Jill Asb speak out at the telephone townhall Feb. 27

Jeanne Fries Hopefully they don't reduce out water pressure as well, like California did! My niece just moved from there! Couldn't even rinse the soap out of her hair!

Joan Jones They constrict the water at the meter. Even though you are supposed to receive 3/4 flow, the output valve is only 3/8

Jeanne Fries here or in San Diego? So when replaced will it stay the same water pressure?

Linda Crump One way the city could conserve water is the most obvious. Stop overbuilding.

Jill Asb Linda Crump please choose to speak out at the telephone townhall meeting on Feb 27.

Roger Schrecongost Continued growth is only going to put more strain on water resources. Enough?

Jill Lewis I appreciate the city's continuing effort to reduce water use. I would prefer to have the ability to make my comments to the city by email. As far as I can tell, my options are 1) to respond by phone. A phone call is inefficient for lengthy comment - or 2) use Access "leaderboard" or FB - I am not interested in social media. I am not publishing my opinion for the world, I just want to communicate with the Water Department. Anyway, I took the city survey on water conservation. I had three concerns with the survey itself. 1) Re. water conservation programs. I could only select from a range of "interested" or "not interested", when in fact I "already did this". 2) Even though I can go without the \$5 rebate, I had to give my account info in order to submit the survey. (BTW, Is this because the answers will be correlated with the demographics & water use of the respondent)? 3) Some of my concerns about water wise landscaping were not covered by the survey. The "other" answer option did not seem applicable and there was no space for additional comments at the end. My concerns are 1) Switching additional parts of my yard to a water wise one will require me digging up and replacing my current irrigation system. Costly and time consuming (this was partly addressed) 2) I believe that water wise landscaping will take more time to maintain than grass. 3) I have been told that replacing the landscaping on my HOA perimeter requires a change to the development's master plan, a legal document approved by the city, which, approved or not, takes many months. (The survey did acknowledge HOA rules preventing homeowners from replacing grass lawns). 4) Sports fields/Golf courses. It was stated that sports fields would be watered more than parks/open space due to high traffic. a) has the city already replaced turf on sports fields & parks with lower maintenance, lower water needs turf? b) what about golf courses? I imagine they use a lot of water and a lot of (environmentally damaging) fertilizer. I recognize that public courses provide fees to the city. I recognize that developments built around golf courses attract buyers which benefits the city. I recognize that golf courses may be considered a benefit/quality of life issue. They do preserve a nice looking, though unnatural, open space which often preserves great views, (which are inaccessible to most). What is the cost in water and to our environment? Thank you.

Sam Gill It is getting to the point where it will soon be cheaper to buy water in plastic bottles by the case.

Joe Caputa I know they just almost doubled my water bill from here on out.

Joe Caputa I hate to see what my bill is going to be when I start watering this coming summer.

Joan Jones Don't build Uplands!!!

Celesta Manspeaker How about the City of Westminster leave the farm land alone along 84 & Lowell and not let the greedy developers trash that land with small over priced apts

Carol DeNileon Just keep raising the water Bill's. Should cut out watering anything!

Ricki Simon Unfortunately the last attempt to raise rates based on usage (which resulted in many not using as much) didn't work so now they want to raise based on a flat rate. Shameful.

Replies to Mar 3 Survey FaceBook Post, as of Mar 5, 2020

Nancy McNally I just took the survey.....the city only wants the answers they are looking for.....you can't add anything under other and a space to add different ideas. You may already have in place what they are asking about for conserving and there isn't a place to say so. And, if they add money for all the things they suggest in the survey.....we must have a money well none of us know about! You have to pic one of two pictures in the survey and if you don't you can't complete the survey. I guess that is one way to get the answers one wants and pretend you are listening.

Alana Weaver Yes, that's what I'm talking about with these useless surveys - they're always framed in such a way that they arrive at the answers the city is looking for - just like the town halls.

Dori Webb it says Westminster has added 13,000 residents but the per person water usage is down 15-20%. I feel like this is making statistics show what they want them to show. I suspect the reason "per person" water usage is down is because most of those 13,000 new residents are in apartments that don't have lawns. I suspect Westminster's water usage is actually up overall by a lot with all the new residents.

Susie Gardner Jones The link wouldn't even let me take the survey. In the past when the city has asked the residents to conserve water, we have done that. Westminster needs to wake up and slow, or stop the high density building. You need to look at the quality of our life here when you do nothing but HIGH DENSITY BUILDING. STOP! Or at least slow it down drastically.
PLEASE LISTEN!

Margarete Schmidt I'm with you. We don't need all this Low Cost Housing protects they want to build. Lowell Boulevard is having more and more traffic. We have lived in Westminster since 1964 and if we were younger, we would move out of here. We end up with nothing but dried up lawns.

Linda Crump If anyone at the city of Westminster actually reads these comments I hope the reply to some of these statements. Otherwise we know this is just another wasted post.

Nancy McNally Quit density in Westminster. We only have so much water and asking people to use less to bring in more people is unsustainable. This city has taken conservation seriously, has a great reclaimed system to keep parks for use and HOA's to keep some green. You can have standards in ODP's of businesses that they can xeriscape the area around their sites and not have to have green grass on a 45 degree slope.

Linda Crump How about not overbuilding the city? Maybe if you don't spread the water supply so dangerously thin to begin with, we might still have water available to residents 5 to 10 years down the road.

Nushin Farjadi Do presentations to area HOAs and residents on why water conservation is important for community health and how to encourage home owners to switch out front lawns with beautiful adapted or native replacements that don't need much water and the deadly Roundup!

Alana Weaver Here's what would be helpful: 1) Stop wasting much-needed funds on nanny programs & surveys such as this, and layoff anyone whose job it is to come up with them; 2) initiate an immediate hiring & salary freeze until the infrastructure problem has been resolved; 3) go back to the drawing board and figure out how you will pay for new infrastructure out of your existing budget - not ours; 4) just recognize that we hired you to take care of our basic services - not manage every aspect of our lives. -- I think that would be helpful!

Eric Wycoff I will pay the increase, but when it comes time to vote for a Metro or Annex taxes it better be a big NO!

Anj Is Artsy Done!

Replies to Aug 20 Public Comment FaceBook Post, as of Aug 27, 2020

Alana Weaver After seeing my water bills and dead/dying landscape and yard because I can't afford those bills - I'm scared to see what you have planned for us next. Water use has declined and yet most people's bills are astronomical! Shame on you Westminster for implementing such an unfair, out of the norm, punitive & outrageous water rate hike/tier structure.

Gary Bland your so right.. My area has more dead plants and trees along with a great deal of weed growth due to none watered grass areas. Living here for over 40 years now and have to say that I never been so disappointed.

Zach Weir Another rate hike ofcourse. Westminster has the most expensive water on the frontrange. Zero planning was done on infrastructure so now we all pay.

Siva Rieley Spitler ugh... no kidding in the last few years we have several elderly family members move in with us for health reasons. Taking us from a household of 4 to a household of 6. The 2 more people pushed us into the next water payment bracket. We ar...

James Duvall Water rate price gouging during a pandemic, Shame on you Westminster

Claire Standard So true. My bill has more than doubled. I'm a widow, water only three times per week. It's ridiculous.

Gary Bland.. next like one of the neighbors parking now on the rocks in the front yard..Get this.. not a code violation..

Siva Rieley Spitler yikes. That will keep property values high.....not

Elizabeth Hale Lived at my property with a small to medium yard for the last 18 years. My bill was literally the same until 2 years ago. Now my bill has nearly tripled and I receive reprimands from the city telling me to watch my water usage!!!!!! I water 3 times ...

Jill Asb So, slow down on the new taps. It punishes the rest of us and it does not conserve water. We have purposefully replaced plants and grass in our yard with species that need little to no water. More than happy to do my part, but I don't appreciate the city ignoring their part by allowing excessive development which necessitates unreasonable amounts of new taps. It doesn't have to be that way.

Tim Hoffman To bad people can't realize how desperate our water supply is here and allow reservoir expansion.

Debbie Teter Moratorium on Dense Housing? If we are running out of water it seems to make sense.

Mike Maher Why is my water bill so high. Same usage as last year and bill in at least 25% higher!

Ricki Simon Yes and we have brown grass.

JanineandBarry Leisure Im 78,and a recent widow. My water bill is excessive. I use shower or wash up water to flush toilets, I getone shower 2times a week. There are 6 living here and ifmy home wasnt paid for I would have that also. Only use the dishwasher when is full, water 2 times a week and cannot water the vegs garder we were urged to have to cut costa, only use 2 fans to cool the house and still get a 371 water bill! Are they going to do this again next year? Or are they still trying to get us to pay for closing Stanley Lake to boating?

Sheryl Elaine Martinson Great thought. I think they calibrated the new meters to show more water than used. I do think the city is trying to make up for that lost revenue.

Joe Reigle Where are you over paid princesses? You can't even answer the dam phone and take my money?! I just had to try to use this dam "automated" bullshit! Because you tit suckers are to dam lazy to answer the phone? Wtf

are we paying you for? All you do is provide us with higher taxes every time you get a chance! And then knock down the level of services you provide to the community? Wtf! I hope I get to talk to you people some day! God dam I can't wait!

Jill Asb With water such a concern it hardly seems wise to promote the massive high density development you have in mind for the Pillar of Fire Farm. And its not fair to long term residents (since 1975) such as myself to raise our rates so you can accommodate...

Rick Pigg Hmmm... "COW" seems a fitting acronym for the city council and mayor of Westminster! 🤔 I love it!! 😊 As their "water conservation" concerns are a put on and a load of cr@p! Otherwise, they wouldn't be building all of these housing developments that a...

Matthew Talich All that conservation so the city can turn around & build more condos, apartments, strip malls, and golf courses.

Claire Standard Water use may have declined but the cost has risen considerably. My bill has increased over 100% from last year and \$100 over the last month. You should be ashamed.

Debbie Teter Could it be the high density housing? Could it be the breaks to developers? 400 toilets vs 16 on an acre of land uses a lot more water.

Patrick Esser Is anyone really conserving water or did all manufacturing leave from the increase in labor costs? AT&T alone probably used 25% of the city's water. How about we bring manufacturing back?

Larry Hoy Whats next? You'll think of some way to take money from the citizens to build your kingdom. I'm certain COVID has, or will, deplete your reserves.

Siva Rieley Spitler And yet we are permitting 7000+ new people to move in to new builds on what should be open space. I guess they are not people who use water?

Clara Dostal I am so excited to be moving out of Westminster! The city officials do NOT listen to the wants or needs of the citizens.

Tessa Triolo Next is getting an HOA violation about my brown lawn. 😊

Jim Ridge I am still curious if the COW has any incentives for artificial grass?

Dino Valente Well of course it has. Nobody can afford to water a lawn in Westminster

Juana Brown Limit the schools they run 24/7.

Gary Bland Looking at the response from others.. I see the same thing building more homes and not really understanding the water usage for all of them.. I guess we will just say stupid is what stupid does..

Jim Verbrugge Thank you for conserving water. What's next? A drastic increase in your water bill

Eric Trujillo Lower our water rates!!!!!!🤔

Doug Freese <https://www.thedenverchannel.com/.../westminster...>

Chrystal Leyva Seriously? How do you expect water conservation to be a thing when you keep allowing high density building, old Westminster mall, the hopefully unapproved area around 84th and Lowell. If you really want to conserve, start planning for things that help...

JoAnn Price Way to try to "spin it"...can't believe the City posted this! No one can afford to live here with these prices! Our "BEAUTIFUL CITY" is long gone already!!!

Pat Warman You want our city to look beautiful and be proud, but with your water rates, more and more yards are dying because we can't afford to water our grass, trees and plants. Are you people even aware of the trees that are dying? Shame on you. Just about ev...

Jon Rinkenberger I am confused. Here you say we are conserving water. On the city's website there is page titled "Water usage 24 percent higher than 12 months ago" posted on Wednesday, June 24, 2020

7.3.2 Online Community Meeting

The City hosted a webinar on August 26, 2020 to present the draft Water Efficiency Plan and answer questions. The webinar was publicized through social media channels (see above) and 25 people registered for the event. 15 members of the public the webinar. A recording of the webinar was posted to the city’s website and received 48 views by the close of the public comment period. Questions were answered throughout the presentation, and all outstanding questions received an individual response via email within three business days.

7.3.3 Website Form & Email

The following 21 comments were received during the official public comment period from August 6, 2020 through October 5, 2020. Each comment received a personal response from Staff within one business day.

Chris	Johnston	<p>The rates are outrageous. The money spent to replace sidewalks was unnecessary. They replaced sections that weren’t damaged in many places. There shouldn’t be a single new property built allowed to put in non native grass lawns (buffalo grass is the only native lawn grass and uses 1/5 the water of bluegrass and grass used in cheap sod). The city schools need to undergo a water audit and EVERY city owned campus, including city hall, schools and fitness/community centers should be xeriscaped. The acre of grass on 92nd is an embarrassment, as are the lawns surrounding the courthouse that are never walked on. What are they being watered and mowed for?. No new development should be allowed to install watered lawn landscaping. Citizens should be incentivized to install rainwater collection for irrigation, and the city should highly incentivize the xeriscaping of lawns. And should require it if any new developments.</p> <p>But the CITY ITSELF needs to set a strong example. Kill the GRASS! We don’t live in Georgia, why is it landscaped like we do?</p>
Linda	Vigil	<p>One way to save water is to not have grass, especially grasses that require large amounts of water to survive, There are species that require much less and look just as nice and function just as well as a blue grass species. There are other ways to conserve our water, desert landscaping in the front and back yards, having a small amount of grass, enough for pets and children to play on., even artificial turf. There are brands of this type of turf that look and feel like the real thing, unless you look closely your really couldn't tell the difference from grass and a high quality artificial turf. My brother who lives in Nevada, has dealt with this issue and what is being done there, just might help us here in Westminster. They were given an incentive to remove the turf (grass) from their front yards and plant a more water friendly landscape. Desert plants etc. (New grass is prohibited in residential front yards and restricted to 50 percent of side and back yards. A maximum of 5,000 square feet of turf is allowed. Multifamily homes (apartments, condos): Turf is prohibited in common areas of residential neighborhoods.) They can us artificial turf in their back yards as long as the HOA's allow it, many do not.</p>
Mike	Melvin	<p>Save the farm, save the water. We don't need more Westminster "urbanization".</p>

Margaret	Hinman	<p>page 23--HOA outreach</p> <p>Regarding the HOA part of the plan—</p> <p>I am a member of the Board of Directors of the NorthPark East Homeowners Association. We are actively researching how to improve our irrigation water consumption.</p> <p>We applaud the City’s interest in helping homeowners’ associations in improving our landscaping and irrigation system to reduce water consumption and ultimately costs for water. This issue is one of high priority for our community. However, our homeowners’ association would be reluctant to and/or unable to participate in the program unless any grants, subsidies or cost sharing plans were:</p> <ol style="list-style-type: none"> 1. Affordable to the individual homeowners. At this time, our homeowners are reluctant to even approve a cost-of-care-and-maintenance-of-the-community yearly assessment increase, let alone approve a special assessment. For example, “Affordable” for our community to take on a project of the size and scope of what is needed to reduce water consumption would at most be an increase of \$10-\$15 a month per townhome owner. 2. Multidimensional in the remediation. To appropriately address the issue in our community: <ul style="list-style-type: none"> • Our community has to reduce the bluegrass areas by repurposing some areas of our landscaping into drip-fed native grass areas, and replacing bluegrass with rock beds and shrub beds, again with drip irrigation. • Our sprinkler system needs to be replaced and upgraded as it is 25-40 years old. All of the controllers are failing and in need of replacement. The appropriate fix is to reconfigure the system taking advantage of the current high-tech systems available. Some zones need to be reconfigured to more efficiently water too wet and too dry areas that are currently on the same zone. • There are at least 3 meters that service both townhomes and the irrigation system that need to be reconfigured. • More efficient sprinkler heads are needed throughout the community. • Our irrigation system is estimated to operate at about 40% efficiency. A wild estimate to address these issues would be somewhere around \$500,000 for a community of 459 townhomes and 52 single family homes. 3. Available over a span of years. Our needs cannot be met and affordable in a one-time grant unless the grant or subsidy or cost sharing plan spanned several years. 4. Our ODP and current standards would need to be reconciled to reflect current requirements for landscape ratios.
Amy	Johnson	<p>HOAs have a difficult time affording costly landscape replacements. We need education, design, and funding assistance with even the least costly types of water conservation changes.</p>
John	Eisenach	<p>I'm sorry I joined tonight's webinar late. I sent a proposal to Dave Downing and Amy Johnson to replace my front grass with artificial turf.</p> <p>I just sent the proposal to Dave Beckwith. Please send an email to john.eisenach@yahoo.com and I will share my proposal with you. I live in Lexington on 140th and Huron, and something must be done to reduce</p>

		<p>residential water use. Our HOA says no artificial turf allowed that is visible from the street, based on City of Westminster rules.</p> <p>Thank you, John</p>
Jon	Rinkenberger	<p>The city needs to stop the development of high-density housing. This new urban concrete jungle design model may reduce the amount of irrigated landscape, but it crowds people on top of people. People use water, not limited amount of open space land left in the city. The more people, the more water usage.</p>
Siva	spitler	<p>Westminster needs to STOP with the over crowding of our city. The over building leading to a huge influx of people into our city is and will continue to put a strain on our water. Westminster does not have the infrastructure to support the current and proposed rate of new high density builds. Charging more for water for current long time residents to pay for these unsustainable builds is irresponsible and harmful to our city. My neighborhood looks awful due to yards filled with dead grass and ugly weeds. This does nothing to attract people to our city and tanks property values. Charging residents astronomical prices for a resource they cannot live with out is not the solution. Punishing larger families including people who take in elderly family members (which raises the number of people in homes which raises water use which raises the water bracket the household is in) is no equitable nor sustainable. I shouldn't be punished for taking my elderly parents or in laws into my home. We should encourage this behavior no punish for it. The first step to sustainable and equitable water is the first address, and STOP, our unsustainable high density builds.</p>
Bob	Howey	<p>I reviewed most of the new City of Westminster Water Efficiency Plan. I found the Plan to be very informative and useful to understanding the City's Water Resources and Efficiency Plans.</p> <p>Since my area of focus is Water Conservation, I found section 4, the Water Efficiency Activities to be of most interest. The Irrigation Efficiency Consultations especially targeted towards larger users and over-irrigators is exactly what I recommend/encourage. I/we do think that larger Irrigation Only, commercial and HOA/Metrodistricts, and/or non-single family users should be targeted and budgeted for as they look to make up a large amount of the annual water use as I read and interpret the Plan's usage data. The single family irrigation is important too, but the larger users represent a significant savings opportunity and target to meet your conservation goals.</p> <p>ET Based Irrigation Controller Discounts, the Neighborhood Landscape Enhancement Grants, Lawn Removal Service are good programs to see/offer. Would like to see some CET Controller Rebates and possible spray nozzle rebates offered for larger users.</p> <p>The Ordinances and Regulations 4.2.3 also also make good sense....the 5 yards per 1000 sq.ft. for Organic Soil Amendment is pretty high, 3 yards is more typical. It would be great if the Landscape Regulations limited the amount of cool season grasses for lawns too.</p> <p>The Customer Survey in the Appendices was quite informative and has great information on the water use mindset and behaviors of the City's customers. If it could be formatted to fewer pages, that would make it easier to read/digest</p>

		<p>and save paper for anyone that printed out the Plan.</p> <p>I hope this feedback is/was helpful and I/we would be pleased to further discuss and assist Westminster with some of these suggestions for larger users.</p> <p>Congrats on the great work and strong, Water Efficiency Plan!</p>
Steve	Anderson	<p>Section 2.2.1 – What efforts has the city put in place to “Peak Shave” that one hot day in July? It seems that communicating with your customers is a low cost option that could help us save a rate hike.</p> <p>Figure 10 on page 10 – This chart details the publics commitment to water conservation, yet our bills continue to climb. What commitments has the City made to reduce spending & expenses? I see numerous full size pickup trucks driving around with no passengers and no construction materials or equipment. Why doesn’t the city buy less expensive smaller cars, have the staff car pool, and use the large trucks for construction?</p> <p>Section 2.2.2 – What projects are the City prioritizing to address the 6% water loss across the roughly 6.3 billion gallon annual through put? At \$5/1000 gallons this is a loss of about \$1.9 million/annually and potentially eliminates the need for rate hikes. Please detail the Scope, Budget, and Schedule for such projects.</p> <p>Section 4.2.2. – Please have someone contact me about your “Slow the Flow” program. Our HOA would like to replace irrigated turf in our detention pond with Xeriscape, but are unsure how to navigate the permitting, and water quality issues.</p>
Sheila	Huisman	<p>On your Tips to Investigate high water usage, the suggestion is to Review historic usage to see if your consumption is similar to last year's. However, recently I have noticed that you no longer show the same month's usage for the previous year in the month being billed. For example, this month's bill is mostly for August, the usages shown for 2019 is only SEP, OCT, NOV, & DEC.</p> <p>So you are not showing similar months, to compare if there is similar usage. My interpretation of that is you don't want to show apples to apples, because then we could see just how much our bill has increased due to the infrastructure upgrades. Even though we have been paying Infrastructure Fee and Storm Water Management Fee every month. It seems there has been a poor job of planning for these costs increases, and using these fees to pay for Infrastructure upgrades.</p>
Curt	Steinbecker	<p>Hello,</p> <p>As a concerned Westminster resident and a life-long restaurateur, I know the wasting water in restaurants is a huge issue. To defrost product, restaurants put their frozen "chicken" in their sink and let the water run over it for hours; everyday this happens. I work with a company called Boss Defrost that solves this huge water waste problem. We have third party verification and this appliance is a game changer. So, to defrost 5 pounds of frozen meet... the traditional running water method uses (wastes) 368 gallon over 145 minutes, but with the Boss Defrost, we use only 5 gallons. Imagine the water and \$ that can be saved in a year.</p>

		<p>Boss Defrost is an innovative new kitchen appliance that mimics the USDA's running water method for thawing food but uses 98.5% less water. It's NSF-certified, portable and affordable. Check out the 1 minute Youtube video to see how it works!</p> <p>https://www.youtube.com/watch?v=NL-_ULGWnnM</p> <p>Please reach out to learn more.</p> <p>Thanks, Curt Steinbecker</p>
Stephen	Maio	<p>How about as a water efficiency program Westminster City council stop approving every building permit that comes along. I didn't want to live in Denver or Boulder or California. I wanted the small town I have lived in for 30 years. You raise my rates to one of if not the highest in the state and you keep on building more and more. Stop building and you won't need new equipment for water delivery. You have become the perfect example of whats wrong with liberal government.</p>
S	Asnicar	<p>You state multiple times that you have extensive water use history for every account in Westminster. Yet on my bill I can only see the current 12 months, not even a current month year over year comparison is shown. So unless I pull my old bills I have no idea how my use the current month compared with same month a year ago. Take a tip from Xcel Energy and at least provide monthly usage, by month for at least prior two years, more if you can. It then becomes a useful tool for a residential customer to understand if their usage has changed, and take action if necessary.</p>
Dan	Wolfe	<p>I am an Adams County Master Gardener, retired meteorologist, volunteer CoCoRaSH precipitation network volunteer, and an HOA board member. On the HOA side we share islands along Legacy Ridge Parkway with the City. The City controls the water and we the landscaping. Currently the City is working on the sprinkler systems in these islands that continually leak and or under repair. Does the City have landscape plans where the HOA could reduce the sod in these areas and go to a more xeric landscape? This collaboration should be done before changes to the watering system are made. You mentioned possible water audits for HOAs. Our sprinkler system is 20 yrs old. Can we get an audit?</p> <p>As a homeowner and Master Gardener I see neighbors wasting water. Runoff due to over watering or poor sprinkler design. They also water during the middle of the hot day. I have approached some personally offering to check their sprinklers and offering suggestions such as cycle and soak to eliminate runoff. I also put fliers in mailboxes with the same info. It has been marginally successful. You would think reducing water use, especially dropping out of the 3rd tier, would be an incentive! Does the city have anyone who goes around neighborhoods looking for waste? Maybe a reminder or suggestions from the City would go further than my efforts.</p> <p>https://www.csu.org/csudocuments/cyclesoak.pdf</p> <p>I found the onlme seminar very informative and anyone who cares about the environment shoudl watch it.</p>
Kendra	Lyons	<p>I really like the idea of incentives to change out the lawn.</p>
Lynne	Lapin	<p>I already suggested this, but I will add it in this format as well. I have lived in several states/cities and even without droughts we were only allowed to water</p>

		lawns once every other day. Odd street numbers were signed one day; even the next. Allowances were made for newly planted sod/grass and for beds. I suggest we adopt such a practice.
Lynne	Lapin	I suggest more pressure be put on condo and townhome developments. I was previously on a board of an HOA where the cost of landscape watering was unreasonably high because of overwatering. I even hired the conservation group to do a study and the board did not follow through. The problem with such HOAs is that -- when water is part of the monthly HOA fee -- people do not conserve as they would if they were seeing their usage/bill individually.
Lynne	Lapin	I was one of the few people I knew who was not opposed to the rate increase because I thought it would encourage water conservation. It has not, and it is putting an undue burden on families. The city needs to come up with a different plan and reverse the increase.
Lynne	Lapin	Development needs to stop. We are over-extending our resources.
Sam	Stapp	As I read the plan it seems that existing customers will be assed a new fee called Tap Fee which is based on property particulars. Isn't all the fees we are already charged enough? The fees on my bill add up to more than the water charge. If there isn't enough water to go around why keep issuing building permits for new homes and businesses? Very disappointed Sam

7.3.4 Public Presentation to City Council

Staff presented a 2nd draft of this Water Efficiency Plan to City Council on November 2, 2020. The slides from that presentation are provided below.



WESTMINSTER
COLORADO

2020 Water Conservation & Efficiency Plan Update

Drew Beckwith, PWU
303-658-2386
dbeckwith@cityofwestminster.us

1

Plan for Water Conservation/Efficiency Because

- Decreases frequency and severity of drought restrictions
- Reduces utility costs and customer rates
- Improves wildlife habitat at Standley Lake
- Water is a scarce natural resource
- State-required Water Efficiency Plan every 7 years

- Growth addressed in *Westminster Forward* and Water Supply Plan
- Rates conversation ongoing

Update Under Development (and Revision) for ~ 1 Year

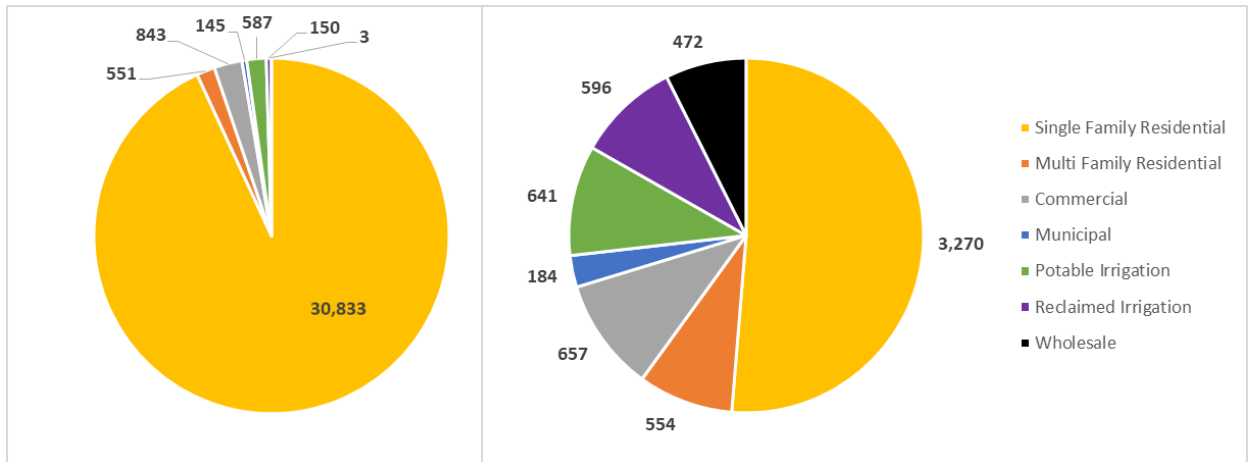
- Staff Taskforce (Dec '19 – mid '20)
 - Customer Survey, n = 1,142 (Feb '20)
 - Draft submittal to CWCB (Apr)
 - Public Comment (Aug 6 - Oct 5)
 - Public Presentation (Aug 26)
 - Council Presentation (tonight)
- Next Steps
- Revise plan based on comments
 - City Council Adoption (Dec)
- Increased education/outreach efforts in 2020, and more focus on lawn remodel incentives
- General outdoor water use concern led to turf water use explanation, defined HOA program, more focus on residential lawn remodel

Historic Water Use in Westminster

“Distributed Infrastructure” is Part of Our System, Too



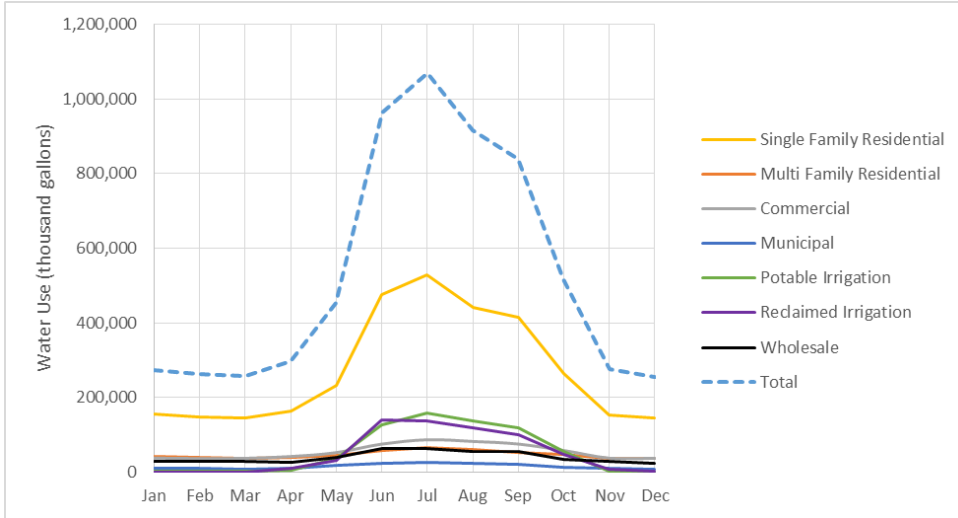
A Small Number of Accounts Use a Lot of Water



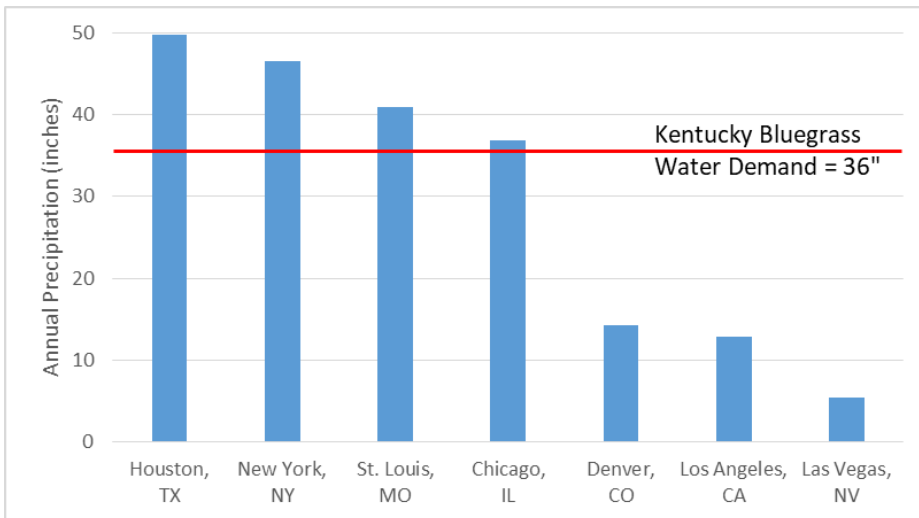
Number of Accounts

Million Gallons of Water Use

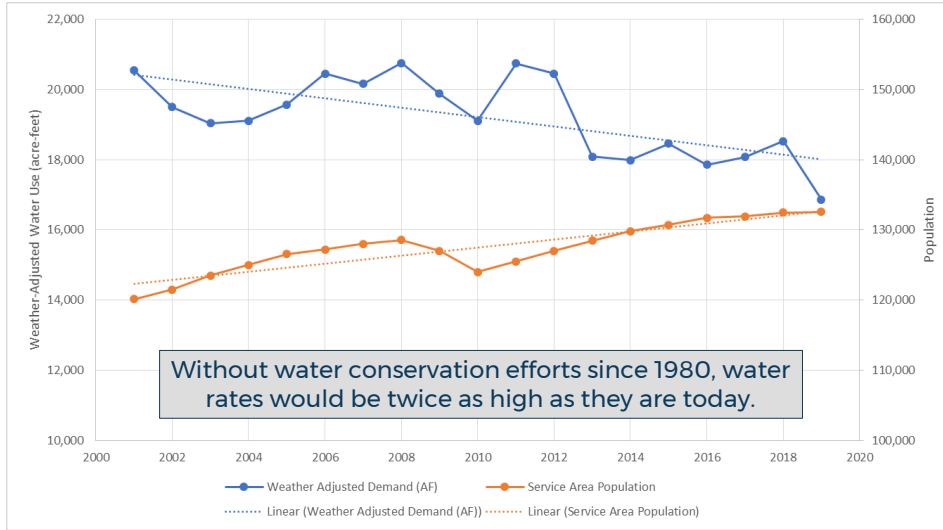
Summer Time Peak Because of Irrigation



Kentucky Bluegrass Needs a Lot of Water in CO



Demand is Declining Even with Growth



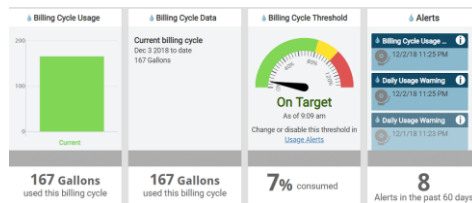
Water Efficiency Plan Components

Plan Goals

- 1) Reduce system-wide water use from 126 gallons per capita per day (gpcd) to 110 gpcd or lower by 2030, a 12.5% reduction over 10 years.
- 2) Offer efficiency programs for all customer types by expanding programs to home owners associations, commercial customers, multi-family units, and irrigation accounts.
- 3) Communicate the benefits and importance of water efficiency to all customers through relevant and timely outreach materials.

Foundational

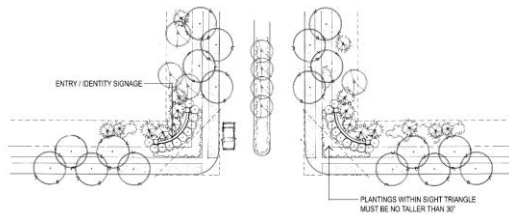
- AMI Upgrade & Customer Data Portal
 - Access to hourly water use
 - Automatic leak alerts



Foundational Practices
Monthly Meter Reading & AMI Upgrade
Meter Testing and Replacement
Tracking of Water Use
Billing of Water Use
Tap Fees Based on Water Use
Annual Water Loss Audit
Proactive Leak Detection and Repair
Water Conservation Coordinator
Regular Contact, Meetings, and Data Sharing
PWU Staff is Part of Development Review Process
Integration of Water Supply and Comprehensive Land Use Plans – Westminster Forward
NEW Customer Water Use Data Portal

Regulations

- Landscape code update (mid-2021)
- Time of Day Irrigation Rules
 - Spring – Fall
 - Water before 1000A or after 800P
 - Like: Denver Water, Aurora, Arvada, Thornton, and more



Ordinances and Regulations
Waste of Water Prohibition
Submetering Requirements
Organic Soil Amendment
Landscape Regulations
Irrigation Equipment Requirements
Post-Install Landscape Water Audits
Commercial Car Wash Reuse Regulations
Directing Growth to 'Focus Areas'
NEW Time of Day Irrigation Rules

Incentives and Assistance



Slow the Flow Irrigation Consult



Lawn Removal



Income-Qualified Fixture Replacement

Incentives and Assistance
City-Facility Irrigation Improvements
City-Facility Turf Removal
Low-Income Toilet Installations
Low-Income Leak Repairs
Small Business Capital Improvement Grants
"Slow the Flow" Irrigation System Efficiency Consultation
ET-Based Irrigation Controller Discounts
"Garden in a Box" Water-Wise Garden Discounts
Neighborhood Landscape Enhancement Grants
NEW Public Parks Tiered Watering Program
NEW Grass to Garden
NEW Lawn Removal Service
NEW Multi-Family Fixture Retrofit
NEW Rain Barrels
NEW HOA 'Investment-Grade' Irrigation Consultations

Education and Outreach

WESTMINSTER WATER QUALITY REPORT AVAILABLE JULY 1

The City of Westminister is proud to report no violations of Safe Drinking Water Act requirements in 2019. The Water Quality Report summarizes the quality of the drinking water during the previous year, and includes additional information about our distribution system, source water, and recommendations for conserving water.

The Water Quality Report will be available by July 1 online at www.cityofwestminster.us/waterreport

The City promotes conservation of all our natural resources, therefore, printed copies of the report will be mailed only upon request. Customers may request a printed copy of the report by calling Quality staff at 303-999-2400 or by emailing a request to water@cityofwestminster.us

KEEP YOUR LAWN GREEN AND SAVE WATER
FREE IRRIGATION CONSULTS
www.resourcecentral.org/sprinklers
303-999-3824

Take the guesswork out of watering your lawn with a free sprinkler consultation from Westminister and Resource Central. Register now to schedule your appointment.

INVESTING IN SAFE SEWERS
BIG DRY CREEK SEWER PROJECT
www.cityofwestminster.us

The city is investing \$32 million in the construction of large sewer pipe the portion of Westminister begins.

Water efficiency services

Although mostly out of sight, protecting public health and the environment. 24 hours a day, seven days a week.

Approximately half of this project will involve lining existing pipes using cured-in-place pipe at various locations throughout Westminister starting later this summer. In the fall, the other half of this project will begin construction to install new sections of pipe and replace sections of existing pipe.

More information, including a map, is available in the link above.

WANT TO KNOW WHAT IS HAPPENING IN YOUR COMMUNITY?

IT IS HARD WORK BUT IT IS WORTH IT.
Learn more about your water service by visiting www.cityofwestminster.us

FREE Irrigation Consultation

Slow the flow

Education Activities
Regular Bill Stuffers and On-Bill Messaging
Targeted Letters
City Newspaper Articles
Direct Mailings
Social Media Engagement
5 th Grade Water Festival
Customer Surveys
Plant Demonstration Gardens
Community Outreach
Standley Lake Source Water
NEW Video Production

City Actions to Reduce Water Use

- Major irrigation improvements
- Turf reduction program
- Water-wise demonstration sites
- Parks 'tiered watering' program



Discussion/ Comments/ Questions

17

Conservation Program Participation

Year	STF Sprinkler Consult	GIAB Gardens	Smart Controller	Grass to Garden	Lawn Removal	HOA Sprinkler Consult
2016	211	125				
2017	201	147				
2018	254	325				
2019	247	214	20			
2020	343	182	14	40	27	
<i>2021 plan</i>	<i>350</i>	<i>250</i>	<i>20</i>	<i>50</i>	<i>100</i>	<i>8</i>

2020 v 2021 Conservation Spending

Program	2020 EOY Projection	2021 Proposed Budget	2021 Costing Notes
FFTF + STF Indoor	\$ 24,046	\$ 62,442	138 toilets @ \$385/ + 96 indoor audits @ \$97/
GIAB Gardens	\$ 11,648	\$ 16,250	250 gardens, spring only @ \$65/
STF Sprinkler Consult	\$ 44,000	\$ 42,700	350 outdoor consultations @ \$122/
HOA Sprinkler Consult	\$ -	\$ 24,000	8 HOAs @ \$3K/
Waterwise Webinars	\$ -	\$ -	1st @ \$2K, all add'l @ \$1.7K
Smart Controllers	\$ 3,145	\$ 4,340	20 controllers @ \$142/ + 1500 prg fee
Lawn Removal	\$ -	\$ 75,000	150 yards @ \$500/
Grass to Garden	\$ 13,600	\$ -	@ \$260/ + 4000 prg fee
Leak Resolution	\$ -	\$ 18,750	250 appointments @ \$75/
Low Income Direct Install (CIP-funded)	\$ 75,000	\$ 100,000	1 bldg ea. for Maiker and Foothills
Total	\$ 171,439	\$ 343,482	

7.4 PLAN ADOPTION BY CITY COUNCIL

City Council adopted this Water Conservation & Efficiency Plan via Resolution 51 on December 14, 2020. The resolution is included on the following page.

RESOLUTION

RESOLUTION NO. **51**

INTRODUCED BY COUNCILLORS

SERIES OF 2020

Voelz, DeMott

A RESOLUTION ADOPTING THE 2020 WATER CONSERVATION & EFFICIENCY PLAN

WHEREAS, the City Council finds that it is important to have a Water Conservation & Efficiency Plan to guide water demand management actions; and

WHEREAS, ongoing water conservation and efficiency efforts improve drought resilience, decrease utility costs, lower customer bills, and support wildlife habitat; and

WHEREAS, the 2020 Water Conservation & Efficiency Plan sought and incorporated public input throughout its development; and

WHEREAS, a State-approved plan will qualify the City for grants and low-interest rate funding opportunities from the State of Colorado; and

WHEREAS, it is City Council’s intent to adopt this 2020 Water Conservation & Efficiency Plan and submit it to the Colorado Water Conservation Board for approval.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WESTMINSTER:


1. The attached 2020 Water Conservation & Efficiency Plan is hereby adopted and approved.

PASSED AND ADOPTED this 14th day of December, 2020.

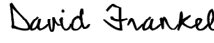
ATTEST:

DocuSigned by:

 Michelle Parker
 City Clerk

DocuSigned by:

 Mayor

APPROVED AS TO LEGAL FORM:

DocuSigned by:

 David Frankel
 City Attorney's Office