

# WIDEFIELD WATER AND SANITATION DISTRICT – CONSERVATION PLAN 2023

## Table of Contents

Executive Summary.....	2
1.0 Profile.....	2
1.1 Current Population and Demand.....	2
1.2 Water Supply Reliability.....	3
Current System Yield.....	3
Widefield Aquifer Wells / Jimmy Camp Creek Wells – Master Lease.....	4
Fry-Ark Project Water.....	4
Augmentation.....	5
1.3 Future Needs.....	6
2.0 Water Demands and Historical Demand Management.....	6
2.1 Demographics.....	6
2.2 Historical Water Demands.....	9
2.3 Past and Current Demand Management.....	10
Increasing Block Rates.....	11
Education and Outreach.....	11
Building Standards.....	12
Water Loss Accounting.....	12
High Use Triggers/Customer Requested Audits.....	12
Data Profiling.....	12
2.4 Demand Forecasts.....	12
3.0 Integrated Planning and Water Efficiency Benefits/Goals.....	14
3.1 Water Efficiency and Water Supply Planning.....	14
3.2 Water Efficiency Goals.....	15
4.0 Selection of Water Efficiency Activities.....	15
4.1 Summary of Selection Process.....	15
4.2 Demand Management Activities.....	16
4.2.1 Foundational Activities.....	16
Metering.....	17
Demand Data Collection and Billing Systems.....	17
Water Efficiency Orientated Rates and Tap Fee.....	17
System Water Loss Management and Control.....	17
4.2.2 Targeted Technical Assistance and Incentives.....	18
4.2.3 Ordinances and Regulation.....	19
4.2.4 Education Activities.....	21
5.0 Implementation and Monitoring Plan.....	22
5.1 Implementation Plan.....	22
5.2 Monitoring Plan.....	23
6.0 Public Review and Formal Approval.....	23
6.1 Public Review Process.....	23
6.2 Board Approval.....	24
6.3 Periodic Review and Update.....	24

# Executive Summary

## 1.0 Profile

The Widefield Water & Sanitation District (District) is located in El Paso County, Colorado. The District is a political subdivision of the State of Colorado and a body corporate with all the powers of a public or quasi-municipal entity.

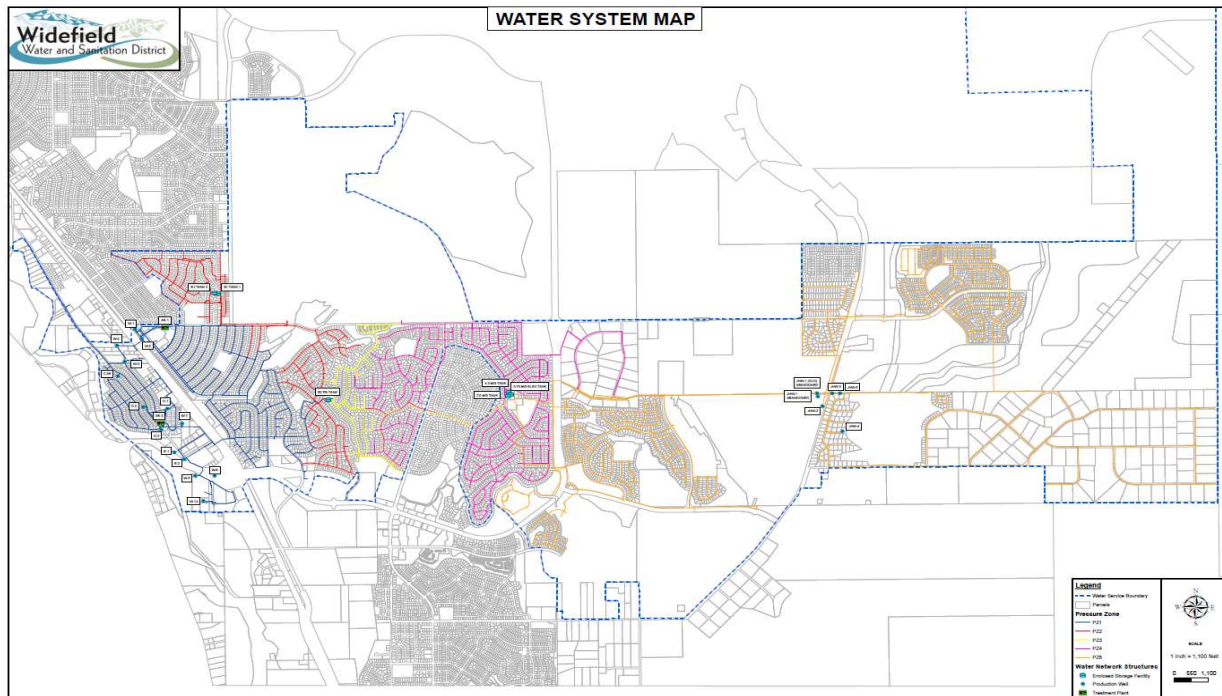
The District was formed on May 17, 1996, to provide water and wastewater service to the public within the service area. Prior to the District's formation, water and wastewater services were provided by Widefield Homes Water Company, organized as a Colorado corporation on June 14, 1979.

## 1.1 Current Population and Demand

Water and wastewater services are provided to unincorporated areas of El Paso County (Widefield and Security communities) and the City of Fountain. The District provides service to accounts with both water and wastewater, water only, and wastewater only.

The District's customer base is primarily residential, representing 98.69% of all accounts. The remaining 1.31% of accounts are commercial (1.01%), irrigation (0.30%). There are no industrial accounts within the District. Occasionally, wholesale water is provided to a neighboring agency. A population of about 26,783 is served within the water boundaries. For wastewater, a population of about 28,229 is served. At the end of 2022, the District served about 10,305 water accounts and about 10,854 wastewater accounts.

Widefield Water and Sanitation District has Eleven (11) groundwater source wells available for use from the Widefield Aquifer, Three (3) groundwater source wells from the Jimmy Camp Aquifer, three (3) booster stations, five (5) treated water storage tanks, two (2) air-stripping plants and 135 miles of distribution system with water mains ranging from 4" to 30".



There are eight and a half (8.5) employees that operate the water system. Each Water System's Operator is State Certified in either Distribution and or Treatment.

## 1.2 Water Supply Reliability

### Current Water System Yield

Widefield Water and Sanitation District is an Urban County region in the Arkansas River Basin. Of the fourteen (14) wells that the District leases water rights for, eleven (11) provide water to the District's 26,783 residents through diversion of the Widefield Aquifer and three (3) through diversion from the Jimmy Camp Aquifer. The water supply currently available to the District on a firm annual basis is presented below:

	Annual Yield (acre-feet)	Estimated Augmentation Requirement <sup>3</sup> (acre-feet)
<b>Fry-Ark Project Water</b>	<b>1,425<sup>1</sup></b>	<b>500</b>
<b>Widefield Aquifer Wells – Master lease</b>	<b>2,650<sup>2</sup></b>	<b>1,007</b>
<b>Jimmy Camp Creek Wells- Master lease</b>	<b>600</b>	<b>228</b>
<b>Venetucci Wells – additional wells in the Widefield Aquifer</b>	<b>596</b>	<b>227</b>
<b>Totals</b>	<b>5,271</b>	<b>1962</b>

1. The Fry-Ark Project is approximately 1,500 acre-feet per year, less 5 percent conveyance and treatment losses, for a new supply of 1,425 acre-feet .
2. The Widefield Aquifer supply includes 10 percent temporary increase in pumping allocation.
3. Augmentation requirements are estimated to be 37 percent of the amounts delivered to Widefield. No augmentation of Fry-Ark Project deliveries is required because this water is obtained from the Colorado River basin.

From 2016 through 2022, the District’s highest yearly demand was in 2022 with 3,364 acre-feet produced for consumption, or 64% of the Annual Yield. The average for these seven years was 2,666 acre-feet of demand or 51% of the Annual Yield. The District has expanded their water accounts by 3,150 since 2015 with the highest year’s growth being in 2021 at 658 new accounts. The seven-year average for new accounts is 450.

#### **Widefield Aquifer Wells / Jimmy Camp Creek Wells – Master Lease**

There are water rights decrees and well permits for all wells associated with the master lease that gives the District complete autonomy for future use. The lease gives the District control over re-drilling or rehabilitating any well at any time to maintain their production capacities. Because of the over-appropriated nature of water rights within the Arkansas River Basin, the junior rights associated with the wells used by the District are almost never in priority. Therefore, the District’s augmentation plan provides replacement water on a year-round basis to ensure that all depletions are restored.

#### **Fry-Ark Project Water**

The Fry-Ark Project was developed by The U.S. Bureau of Reclamations in the late 70’s. Its sole purpose is to provide supplemental water for irrigation and municipal water users in the Arkansas River Basin in Colorado. From this project, the Fountain Valley Authority was created to construct and operate the treatment and conduit mechanisms to deliver the Fry-Ark Project water to five different entities: City of Fountain Water, Stratmoor Hills Water District, Security Water District, Colorado Springs Utilities, and Widefield Water and Sanitation District. The primary water source for this project is diverted from the Colorado River head waters to the Pueblo Reservoir and considered non-native, which means it is fully consumable and does not require any augmentation.

**Augmentation**

The District has obtained many different water rights for augmentation. The purpose of these water rights is to provide replacement water to the stream system so that the District's wells or other out-of-priority diversions can be operated without causing injury to other water users. The augmentation requirement for the current water system is a maximum of 2,042 acre-feet per year. The augmentation sources currently decreed and available by the District is approximately 3,890 acre-feet per year, as summarized in the table below, indicating that the District has more than sufficient augmentation sources to support its current water system yield.

<b>Augmentation Resources</b>	
<b>Description</b>	<b>Average Annual-Yield (acre-feet)</b>
Fountain Mutual Irrigation Company Stock 822 shares. Decreed for augmentation purposes in Case No. 81CW229	569
Return flows from Frying Pan-Arkansas Project (Fountain Valley Authority) Decreed for augmentation purposes in Case No. 81CW229 (contract right to make an annual purchase of return flows)	930
City of Colorado Springs trans-mountain return flows. Decreed for augmentation purposes in Case No. 81CW229 (contract right to make an annual purchase of return flows)	1,127
Owen and Hall, Laughlin, and Reclamation water rights decreed for augmentation purposes by Widefield in Case No. 03CW48 <sup>1</sup>	1,274
Fountain Mutual Irrigation Company – 100 Shares	70
Less approximately 80 acre-feet required by contract for augmentation of Windmill Gulch wells owned by Security Water District.	(80)
<b>SUBTOTAL</b>	<b>3,890</b>

<sup>1</sup> Under contract with Arkansas Groundwater and Reservoir Association (AGRA) for 1383.9 acre-feet/year.

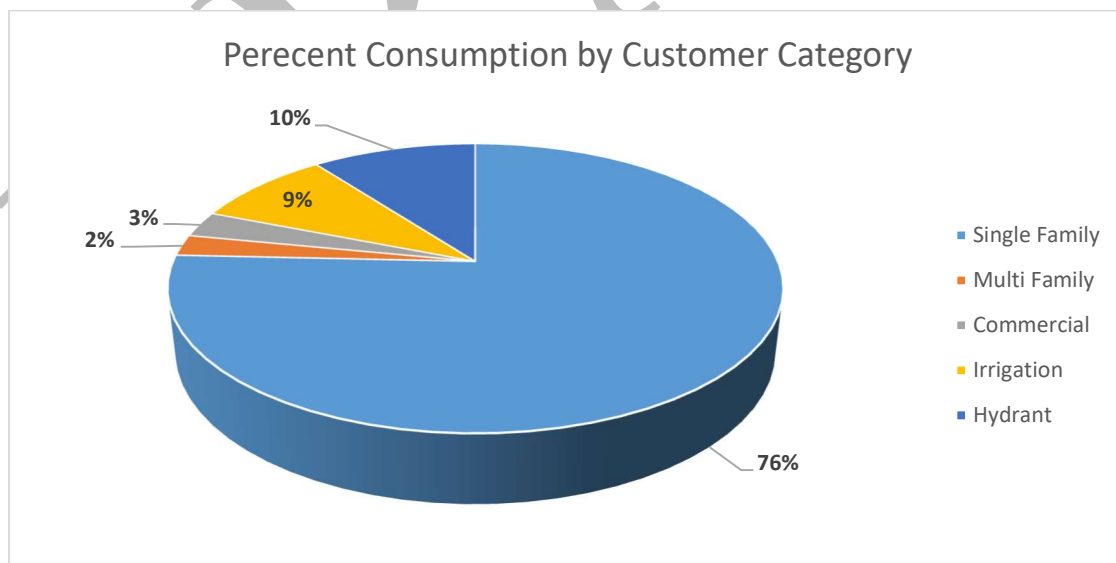
### 1.3 Future Needs

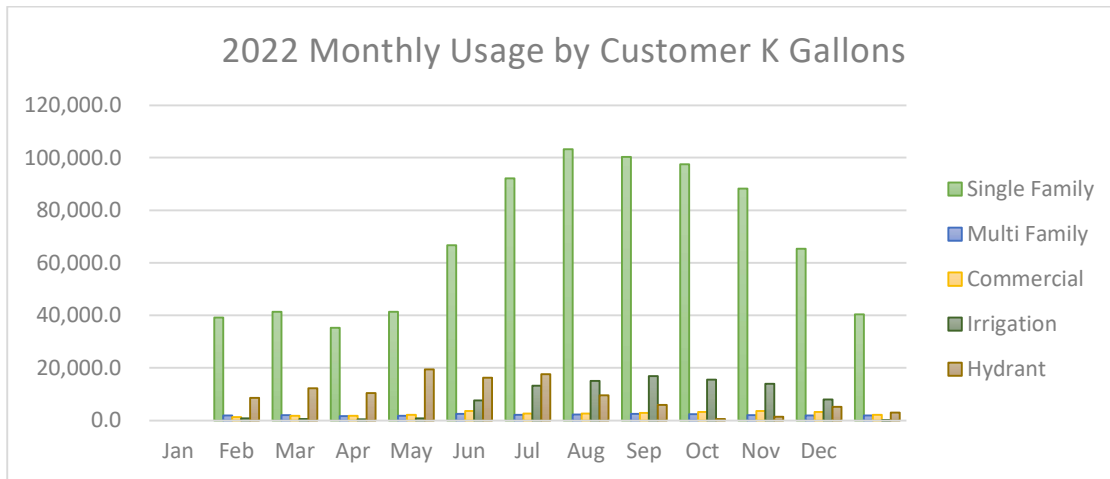
In 2021 Widefield Water and Sanitation District (District) had a Water Utility Master Plan developed to evaluate the existing condition of WWSD's water treatment facilities and municipal source water portfolio. The Plan's projected water usage shows with an annual yield of 5,271 acre-feet per year, the District currently has enough water supply to meet demand for approximately the next 16 years without developing other water rights within the District's water portfolio.

## 2.0 Water Demands and Historical Demand Management

### 2.1-Demographics

The population served by the District includes the unincorporated area of El Paso County and areas within the City of Fountain. Population estimates are established by identifying the number and size of water meters, (all accounts within the District are metered), isolating residential accounts, and calculating the Single-Family Equivalents (SFEs) of residential accounts with 2.6 residents per SFE. At the end of 2022, the District had 10,105 residential and 65 multi-family accounts resulting in a population of 26,442 with commercial accounts (135) equaling 1.31% of the total 10,305 account holders.

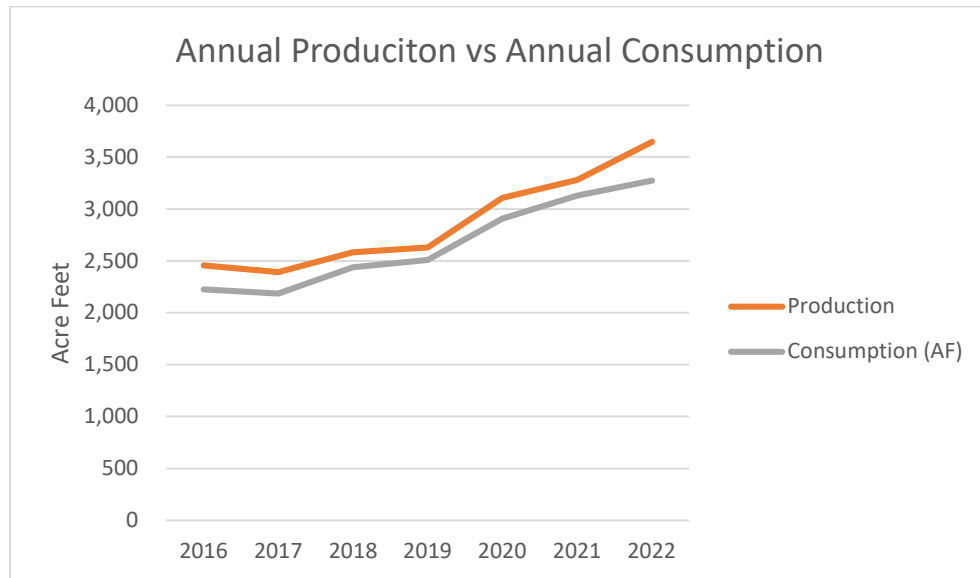




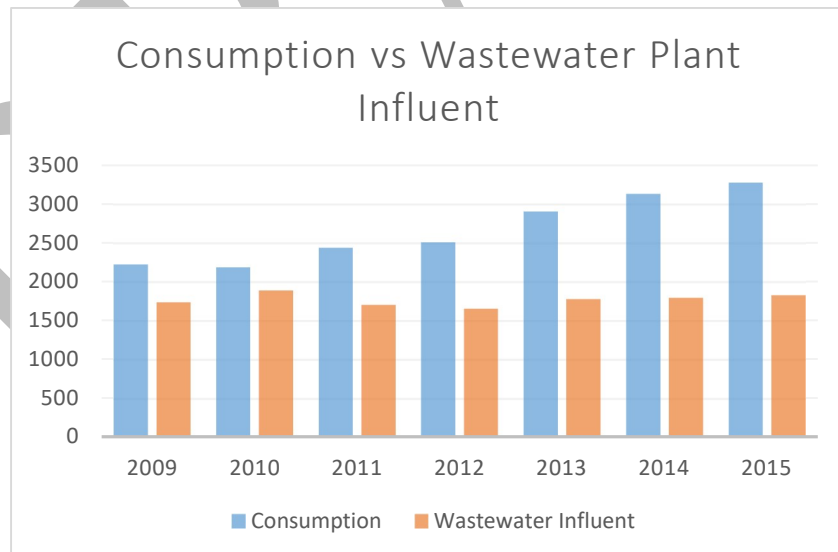
2022 Water Demand and Percentage by Customer Category		
Category	Percent of Total Annual Water Deliveries	Baseline Demands (a/f)
Single Family Residential	73.6%	2475.6
Multifamily Residential	2.3%	77.4
Commercial	2.8%	95.4
Irrigation	8.5%	286.9
Hydrant	10%	339.8
Water Loss	1.75%	58.9
Unbilled Authorized Use	1.32%	30.2
Total	100%	3364

The District currently has water rights and water leases in place to meet current customer demand as well as growth during the review period of this plan. Expansion of the water system will be required and scheduled as part of the District's long-term capital planning.

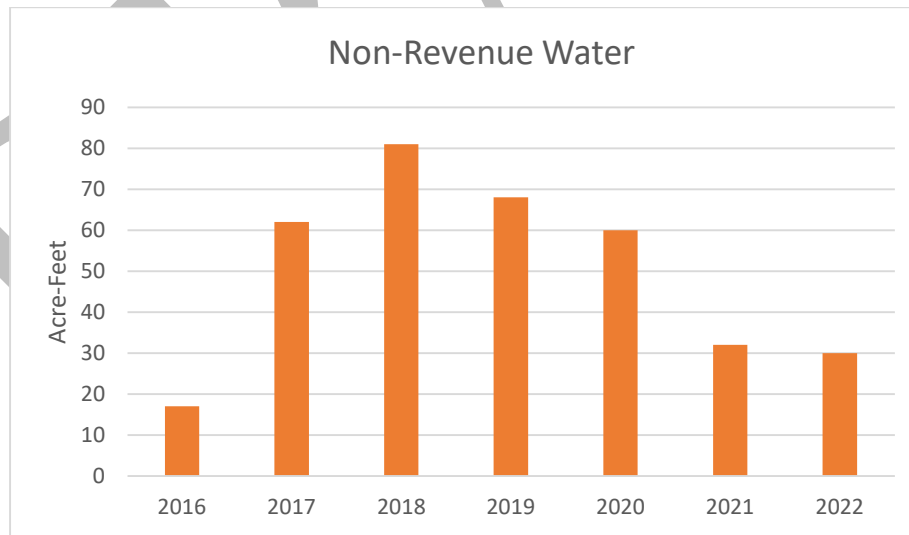
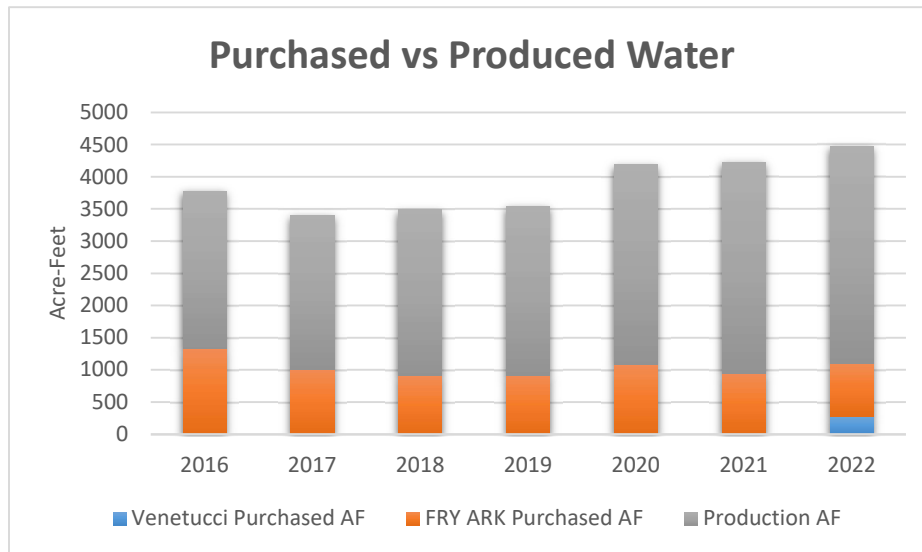




The District's Engineer continually monitors the overall water use and updates projected needs on an annual basis. This provides a cross check for the District's supply and demand monitoring. Additionally, the user characteristics within the District's service area are carefully tracked to better update projections. This also provides a measure of the effectiveness of the District's conservation efforts and the impact of these efforts on customer relations over time.

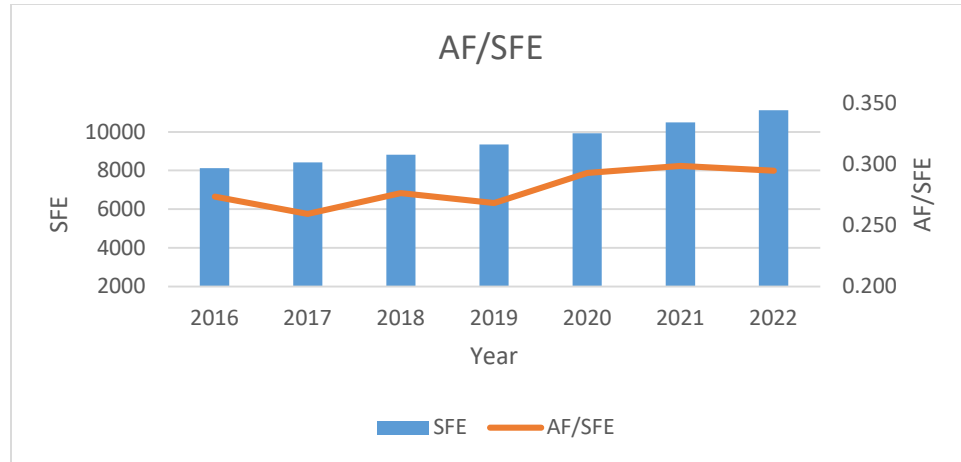


## 2.2-Historical Water Demands



The District's Non-Revenue Water is comprised of metered water utilized for wastewater treatment processes, laboratory procedures, fire hydrant flushing, sewer-main jetting, as well as

real losses associated with leak repair estimates. The District does not distribute non-potable or reclaimed water.



The following are the key takeaways from the previous figure:

- SFE's have increased by 36.7% over the period from 2016 to 2022.
- Water usage (AF/SFE) decreased by 1.55% over the time period 2016 to 2019.
- Usage increased by 9.14% in 2020 and 1.94% in 2021 due to Covid quarantining.
- Since 2022 water usage has begun to follow historical patterns and has decreased by 1.30%.

## 2.3-Past and Current Demand Management

Water and wastewater services were provided to the area by the Widefield Homes Water and Wastewater Company prior to the formation of the District in May 1996. This conservation plan shall serve as a reference document in annual updates of budgets, supply planning, and capital improvement project scheduling. Beginning with the 2009 Water Conservation Plan, the District adopted a schedule to update the planning tool every seven (7) years.

Water conservation has been a part of the District's operating culture since 2008, when the District's long-term financial plan was implemented. Key components of the District's financial model are replacing flat rate pricing with increasing block rates for water and wastewater charges according to water volume used. The District also supports their commitment to conservation by applying customer policies that identify apparent leaks, advising property owners of high usage, and responding to customer requests for auditing their usage. Operational policies that support the District's commitment to conservation include internal meter verification, source water meter verification compliance, and data-logger leak detection.

A key element of the water conservation plan is to properly maintain all meters so that accurate delivery and consumption data is recorded. Every month the District randomly tests 8 of the replaced meters for high, medium, and low accuracies. The overall average for the meters that were tested in 2022 is: High = 99.08%, and Low = 91.61%.

In 2009 the District established six (6) methods to encourage wise water use among our customer base. These include:

- Increasing block water rates.
- Education / Outreach.
- The District established plumbing and fixture codes.
- Water Loss Accounting.
- High usage triggers and customer requested audits.
- Data profiling customer usage.

### **Increasing Block Water Rates**

The use of water rates is an innovative type of escalating tiered price structure in which the consumption block sizes are based on what the District deems efficient water use given household characteristics and environmental conditions. Kenneth Baerenklau is an associate professor of environmental economics policy at the University of California, Riverside, who believes “Increasing block-rate water budgets appear to be a highly effective price-based conservation tool that does not require significantly increasing the average price paid for water.”

The mission of Western Resource Advocates (WRA), led by lawyers, scientists, and economists, is to protect the West’s land, air, and water. In WRA’s web page, WesternResources.Org, it cites, “WRA’s Smart study of regional water use found a correlation between cities with dramatically increasing block rates and those with the lowest per capita consumption levels.”

In the District’s tiered rate system, established in 2008, the customer using the smallest volume of water pays the least as the customers using the largest volume of water pays the most.

Range of Consumption	2015	2022
0 to 6,000 gallons	46.33%	41.17%
6,001-12,000 gallons	32.66%	38.62%
12,000 gallons +	21.01%	20.21%

### **Education and Outreach**

The District is dedicated to providing our customers with resources and practical tools to become more water efficient. It currently utilizes two methods of public outreach for conservation purposes. On every utility bill that is received by a customer there is historical water use information for their account that coincides with an easy-to-understand graph. The District sends out bi-monthly newsletters with helpful tips/information on ways to conserve water.

The District’s customer service office has pamphlets and media encouraging and explaining best practices for water conservation in the home as well as offering to customers who are interested, a conservation kit that includes an Earth Shower Head (2 gpm), pipe tape, bathroom faucet aerators x2 (1 gpm), dual swivel faucet (2 gpm), and die strips. Each of these employees is trained to offer these kits to any customer they may interact with during their daily tasks in the field.

**Building Standards**

All new construction within the District boundaries is required to comply with federally mandated standards adopted by the Pikes Peak Regional Building Code (PPRBC). The PPRBC regularly updates building standards to improve efficiencies in target areas, such as sink faucets, shower heads, and toilets. Low-flow toilets and water fixtures are now being installed in all new developments within the District. This will have a significant impact on per capita consumption as the District grows from 10,305 accounts to 20,000 accounts. A description of the International Plumbing Code adopted by PPRBD can be found in section 4.2.3 Ordinances and Regulations.

**Water Loss Accounting**

The District has utilized the AWWA M36 Model to establish a Water Loss Accounting System to minimize unaccounted for water. This system targets areas of billed authorized consumption, unbilled authorized consumption, apparent losses, and real losses. The tasks identified to support this program include improved coordination of water production data and financial sales records to readily monitor the results of our Water Loss Accounting System.

**High Usage Triggers / Customer Requested Audits**

The District is proactive in our efforts to identify residential and commercial accounts with excessive water use. High use accounts are identified during customer invoicing and a District employee is tasked with visiting the property to perform a leak investigation. These investigations can also be requested by concerned customers. Typical areas investigated are flows being recorded by the meter's leak indicator, leaks in the toilets and/or plumbing fixtures, and identification of water utilizing devices (i.e. water softeners, ice makers, sprinklers, heating/cooling systems).

**Data Profiling**

For more in depth and complicated instances of high usage, the District utilizes a data profiling feature available through their AMR water meter transponders. This function can provide detailed data on when and how much water passed through the meter over the specific period of time. This has allowed the District to identify when leaks exist, peak periods of usage, and usage not initiated by the customer. With the installation of new technology and rapid meter deployment the District now can report potential leaks to customers much quicker than relying on the 30-day reading cycle. Customers will also have the ability to monitor their own usage.

**2.4 Demand Forecasts**

The following values are assumed for development of water use projections:

- Average Usage per SFE: 312.5 gpd/SFE
  - This value is approximately 20% higher than values from the period of 2013 to 2020,

which provides a level of conservatism and allows for potential increases in future usage rates. However, this value is significantly below typical values from the 1998 to 2002 period.

- Maximum Day Peaking Factor: 2.2

- o This value is slightly conservative compared to 2018-2020 values. Maximum day demands are used for sizing infrastructure, so using a slightly conservative value for planning and system evaluations will help the system maintain level of service for areas that see slightly higher than average usage or peaking factors.

For reference, multiplying the 2020 SFE numbers by the assumed average usage and peaking factor results in the following values:

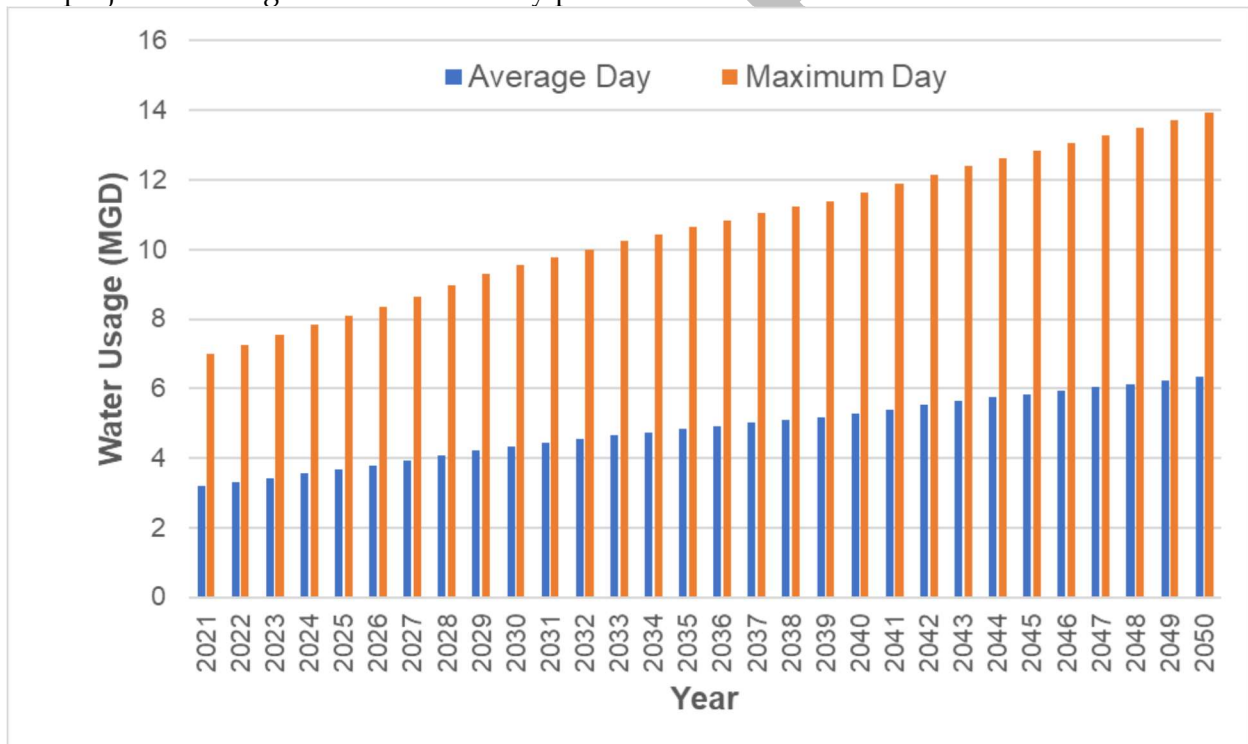
- Average Day: 3.07 MGD

- o 14% higher than the recorded average day for 2020

- Maximum Day: 6.75 MGD

- o 29% higher than the recorded maximum day for 2020 (note: this difference can primarily be attributed to the conservatism in the average day numbers)

The projected average and maximum day production values are shown in the chart below.



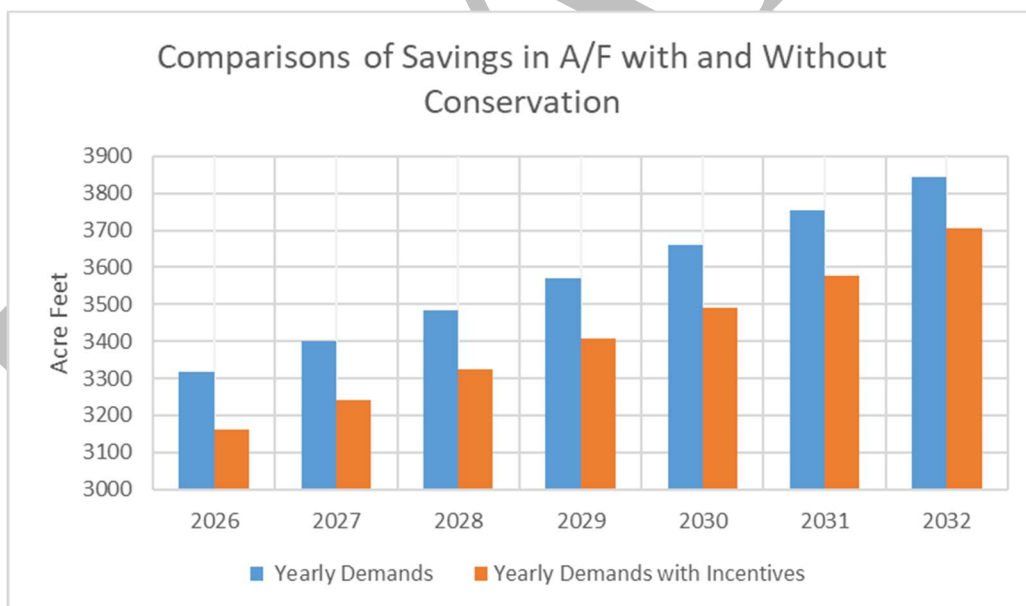
### 3.0 Integrated Planning and Water Efficiency Benefits / Goals

#### 3.1 Water Efficiency and Water Supply Planning

Water efficiency is a critical component of the District’s long-range strategy to support our community, focus on the customer, and demonstrate environmental stewardship. This includes system assessment and planning horizons coupled with a Capital Improvement Plan (CIP) that protects and makes best use of this limited resource. Using projected SFE growth, planning horizons for CIP projects were set at five- and ten-year increments to complete buildout.

As purchased FVA water and JHW Aquifer sources are fully utilized, all future supply must come from western sources in the Widefield Aquifer. As part of its proactive and comprehensive approach, the District began its Upper West to East Water Transmission Line Project in 2022 to meet the increasing service demands in the Eastern service area.

The CIP has identified key recommendations for water infrastructure and operations based on multiple field investigations, condition assessments, model evaluations. The projects will help to ensure reliable water supplies today and for future generations.



With a projected water savings of 4.63% acre-feet per year, the District is able to extend the timeline of these improvements and evenly distribute Capital Improvement funds over the course of 10 years.

### 3.2 Water Efficiency Goals

The District has set a goal of saving 152 acre-feet per year by continuing to apply the six (6) conservation methods established in 2009 as well as implementing Single Family incentive programs along with newly established water use surveys, audits, and equipment efficiency improvements for our Commercial and Irrigation accounts. It is expected that Single Family will make up 93% of the water savings with Commercial and Irrigation saving 10% and 5%, respectfully. It is the District's goal to establish a better-defined water savings analysis through established data from our system water loss control management.

## 4.0 Selection of Water Efficiency Activities

### 4.1 Summary of Selection Process

The District is pleased with the results the conservation program has produced in the last seven years. The implementation of the six conservation methods has had an immediate impact on water rates paid by customers and water sales. The District's conservation planning has sought to balance the programs that reduce water use with the financial impacts that typically cause rate hikes. This balance has provided annual water savings for the District of 4.63%.

Due to the success these foundational activities have had on Single Family accounts, the District will look toward adding incentives for this customer category, in the form of toilet and washing machine rebates, to further the water savings. In addition, the District will shift its focus to the next two largest customer consumers, Commercial and Irrigation, with specialized non-residential surveys, audits, and equipment efficiency improvements as well as irrigation efficiency evaluations and outdoor water audits.



## 4.2 Demand Management Activities

### 4.2.1 Foundational Activities

Conservation Practice	Class Usage	Class			Estimated	Estimated
	K / Gallons	Usage	Accounts	K Gallons	Water	Water
	(1,000 gal)	AF	Impacted	per Acct	Savings (AF)	Savings (%)
<b>Existing Incentives</b>						
<b>Water Rate Structure</b>	1,066,987	3,274.46	10,305	103.54	112.45	3.43%
	Water accounts reduce overall usage by 4%; based on rate model factors. Financial incentives to reduce water usage provide an on-going change in usage patterns.					
<b>Public Outreach;</b>	1,066,987	3,274.46	3,607	2.00	32.74	1.00%
Quarterly Newsletter	Anticipates 35% of account holders will be conscientious of conservation information and seek to modify usage patterns which result in an estimated 1% reduction in overall usage.					
Water Wise Landscaping						
Messages on Invoices						
Usage Graphed on Invoices						
Web Page						
Area for Conservation Material						
<b>Water Audits / High Usage;</b>	1,066,987	3,274.46	803	2.00	4.93	0.15%
Water audits	Reduce 803 accounts by 2,000 gallons with conservation hardware and direct contact with account holders registering usage indicative of leaks.					
Aerators						
Shower Heads						
Conservation Kit						
Customer Contact, High Usage						
<b>Rules &amp; Regulations</b>	1,066,987	3,274.46	10,305	51.77	1.64	0.05%
Responsibilities of Customers	Regional building codes provide updates to the efficiencies of plumbing fixtures and assure water is used efficiently. Reductions in per capita usage is anticipated as new development occurs within the District and improve the efficiency of water usage. Regulations adopted by the District will provide mechanism for expedient measures to be implemented should supply, or delivery problems be experienced within the District. Additional regulations could assure water isn't going to waste, is being used effectively, or in extreme cases when water supply availability is reduced.					
Water Conservation						
Regional Building Codes						
<b>Savings with Existing Incentives</b>		3,274.46			151.76	4.63%

Date from 2016-2022

## **Metering**

It is The District's established goal to replace all meters according to the manufacturer's recommended lifespan. The meter replacement program is a crucial part of the District's water conservation program as it ensures an accurate water accounting. In 2024, The District will initiate a two-year program to replace 4,000 meters that are at or nearing the manufacturers recommended life span. In addition to the meter replacement plan, each month, eight (8) of the replaced meters are tested for High and Low flow accuracies. The average percentage accuracies for 2022 were: High = 99.08%, and Low = 91.61%. Also, 5% of all new water meter purchases are tested and confirmed to fall within 99% to 100% accuracy.

## **Demand Data Collection and Billing Systems**

Conversion to a new billing software, BillMaster by Datawest, was completed in 2009. It gives the District the ability to improve record keeping of water sales in terms of billed authorized consumption, unbilled authorized consumption, apparent losses, and real losses.

The demand data available through Datawest's BillMaster can be accessed by customer categories, meter type, meter size, meter age, reading routes, and varying volume levels. These functions are a vital asset to the conservation program enabling the District to assess water consumption from any vantage point as well as the determination for effective meter replacement schedules.

## **Water Efficiency Orientated Rates and Tap Fees**

Residential and Commercial customers are charged a water base charge ranging from \$21.50 per month up to \$1,594.23 per month depending on the meter size,  $\frac{3}{4}$ " up to 8", respectively. Residential customers are charged \$4.71 per 1,00 gallons of volume usage for the first 5,000 gallons used. For every 1,000 gallons used above 5,000 gallons, Residential customers are charged \$5.64. Commercial customers are charged a uniform rate of \$5.20 per 1,000 gallons of usage. There is no proposed adjustments to this water rate structure at this time.

## **System Water Loss Management and Control**

The District began collecting monthly data based on AWWA's M36 water audit program in 2012. Part of this proactive approach to auditing water supply operations and controlling losses

involves syncing timelines between pumping data and consumption data for a more accurate portrayal of apparent and real losses.

Since 2009 the District has maintained a strong meter testing, repair, and replacement effort to reduce apparent losses and improve meter accuracy. Daily and monthly water data profiles are performed on customer accounts that are either requested or are triggered by customized volumetric set points during by-weekly meter reading.

The District invested in \$50,000 worth of sensory data-logging equipment to capture and repair real losses. This program's goal is to deplore 10 data loggers per month working west to east in the distribution system to respectfully reflect the aging infrastructure. Data compiled for the yearly 1051 assessment revealed a total water loss of 1.75% for the 2022 calendar year.

#### **4.2.2 Targeted Technical Assistance and Incentives**

Widefield Water and Sanitation District has identified the following technical assistance and customer incentives to meet our savings goals.

- **Water Audit Program:** The District conducts water audits free of charge when requested by any residential and commercial account holder. This includes water consumption analysis and identifies areas for water efficiency investments. The District provides free retrofits as part of the audit and customer outreach program. Low flow shower heads and aerators are provided to customers.
- The District will provide rebates for the replacement of outdated inefficient toilets and washing machines to low flow toilets and high efficiency washing machines. The District has 2,900 accounts with homes that pre-date 1980, when the importance of water conservation was less of a priority. We anticipate the participation of 145 accounts in this program from those homes built before 1980. According to Amy Vickers "Handbook of Water Use and Conservation", the District could have a potential water savings of 0.024 acre-feet per installation of a 1.6 gpf toilet as well as a water savings of 0.013 acre-feet of water savings from each High-Efficiency Washer Machine installed. The District has 2,900 accounts with homes that pre-date 1980, when the importance of water conservation was less of a priority. It is anticipated that there will be a 5% participation rate per year (145 accounts), resulting in a total water saving of 5.37 acre-feet per year. The distribution targets will be adjusted annually based on customer response to the program.

### 4.2.3 Ordinances and Regulation

The District will continue implementing heavy enforcement and understanding of its established Rules and Regulations, updated in 2023. There has also been a strong relationship between the District and Pikes Peak Regional Building Department to develop permitting approval procedures to ensure the metering of construction water.

Below are excerpts from the District's Rules and Regulations which apply to, encourage, or require the responsible and conservative use of our water supply.

#### Section 2 Use of Public Water System

##### 2.3 Responsibilities of the Customer.

2.3.1 Each Customer is responsible for maintaining that portion of the water Service Line that extends from the point at which the Service Line ends at the property line. Leaks or breaks in the Service Lines must be repaired by the Customer within 72 hours from the time of notification of such condition by the District. If satisfactory progress toward repairing the said leak has not been accomplished within said time period, the service may be shut off until the leak or break has been repaired.

#### Section 7 Water Conservation

7.1 General. The District requires the conservation of water within its Service Area. No Person will use any water provided by the District other than for uses permitted by the District. Developers or other Persons wishing to have water service to their property provided by the District and connect to the District's Water System will be subject to the District's Water Policy.

7.2 Determination of Available Water Supply. The District may, from time to time, determine the amount of available potable water supply for use within the District and may determine the expected demands for said water by all Customers of the District's water system for any given period of time. In the event the Board determines at any given time that there are insufficient potable water supplies to meet all of the present and anticipated needs, the Board may order restrictions, curtailments or prohibitions upon the use of water.

7.2.1 Any restrictions, curtailments or prohibitions contemplated will be uniformly applied to all similarly situated water Users within the District's Service Area. Nothing herein

will be construed to prevent the District from treating different categories of water Users and/or

Customers in different geographical areas of the District in a different fashion.

7.2.2 Except in cases of emergency, the Board will cause written notice by publication in a paper of general circulation within the District prior to imposing any curtailments, restrictions or prohibitions upon the use of water as herein provided. The notice will include a statement as to said restrictions, curtailments or prohibitions, together with a statement of the penalties for violation thereof and the time period for which such restriction will be in effect.

7.2.3 Any Person, Customer or User of the District violating any provision of this section is subject to penalties as may be hereafter set by the Board.

7.3 Required Water Conservation Devices. Water service will not be furnished to any Customer unless the Customer has fully complied with the water conservation standards set forth by the District.

7.4 Landscape Restrictions and Athletic Field Requirements. The District's Tap Fees and Water Resource Acquisition Fees are determined based on the assumptions of a limited amount irrigated landscape areas and to further water conservation efforts in the high arid State of Colorado and in accordance with the State Water Plan. The District will not accept service to any new residential construction with less than 90% non-irrigated or xeriscape (native non irrigated) land by area. Additionally, the District will not accept service to any school sites, parks, or athletic facilities that include irrigation of athletic fields with potable water. The District encourages such facilities to plan for and install artificial turf or other non-irrigated athletic fields

Below is an excerpt from the Pikes Peak Regional Building Department’s plumbing code, which apply to and requires responsible and conservative use of our water supply.

The Pikes Peak Regional Building Department (PPRBD), [www.pprbd.org](http://www.pprbd.org), provides building inspections in Widefield, Colorado. In 2008 the PPRBD adopted the 2003 International Plumbing Code. This code states that:

- Water closets (toilets) shall have a flow rate of not more than 1.6 gallons per flushing cycle. Blowout design water closets shall not deliver more than 3.5 gallons per flush.
- Urinals shall not have a flow rate exceeding 1.0 gallons per flushing cycle.
- Private lavatory faucets shall be designed and manufactured so that they will not exceed a water flow rate of 2.2 gallons per minute.
- Metering public lavatory faucets shall deliver no more than 0.25 gallons of water per use. Other (non-metering) public lavatory faucets shall not exceed a water flow rate of 0.5 gallons per minute.
- Sink faucets shall be designed and manufactured so that they will not exceed a water flow rate of 2.2 gallons per minute. Vegetable sprays, clinical sinks, and service sinks may exceed this rate.
- Shower heads shall be designed and manufactured so that they will not exceed a flow rate of 2.5 gallons per minute. Emergency safety showers may exceed this rate.

### **Existing Service Area**

Sections 2 and 7 of the District’s Rules and Regulations enforce our commitment to water conservation in the established service area. The most important and strongly enforced regulation is detailed in 2.3 Responsibilities of the Customer.

### **New Construction Regulations**

Section 7 of the District’s Rules and Regulations and Pikes Peak Regional Building Department’s enforcement of the national plumbing code will work to enforce our commitment to water conservation in the District’s new developments.

## **4.2.4 Education Activities**

On every utility bill that is received by a customer there is historical water use information for their account that coincides with an easy-to-understand graph. Occasionally there will also be

helpful tips/information on ways to conserve water. This area of the District’s conservation plan will be ramped up through quarterly meetings between finance, customer service, HR, and operations to establish a more in-depth approach to making the historical water use of the customer and entire District more meaningful and easier to understand.

The District will continue its successful approach to conservation by performing triggered leak investigations resulting from bi-monthly meter reading routes. The operators and meter technicians performing the leak investigations will be equipped with information and kits to further establish the customer’s understanding the importance of water conservation. Likewise, the District’s Data Profiling efforts will continue to pinpoint un-recognized water consumption.

## 5.0 Implementation and Monitoring Plan

### 5.1 Implementation Plan

As previously discussed, over the last seven years the District has implemented successful conservation methods that consist of Foundation Activities, Ordinances and Regulations, and Educational Activities. Over the next seven years, the District will continue to execute the methods with the addition of Targeted Technical Assistance and Incentives.

#### **Targeted Technical Assistance and Incentives**

Toilet Bowl / Washing Machine Rebates: This activity is expected for implementation in the third quarter of 2025. This will give the Water Department Manager and Customer Billing Supervisor time to effectively build the program and inform the public. The process for initiating rebates as well as areas of focus will have a deadline of May 1<sup>st</sup>. Customer service training for rebate billing processes will be complete by June 1<sup>st</sup>, with newsletter/billing stuffers drafted and printed for mail out by July 1<sup>st</sup>.

Commercial Irrigation Surveys / Audits: This activity is expected for enactment by spring 2023. The first quarter will be dedicated to establishing a priority list of commercial and irrigation account candidates and creating survey templates. Once complete, water operators will begin making appointments to conduct surveys and perform data profiles to assess water use through second and third quarters.



## 5.2 Monitoring Plan

Monitoring Data	HB 10-1051 Reporting Requirement [2]				Entity/Staff Responsible for Data Collection and Evaluation [4]
	Annual	Monthly	Bi-Monthly	Daily	
Total Water Use					
Total treated water produced (metered at WTP discharge)		√			Water Department Manager
Total treated water delivered (sum of customer meters)		√			Water Department Manager
Raw non-potable deliveries			N/A		
Reclaimed water produced (metered at WWTP discharge)			N/A		
Reclaimed water delivered (sum of customer meters)			N/A		
Per capita water use	√				Water Department Manager
Indoor and outdoor treated water deliveries					
Treated water peak day produced	√				Water Department Manager
Reclaimed water peak day produced			N/A		
Raw water peak day produced/delivered					
Non-revenue water		√			Water Department Manager
Water Use by Customer Type					
Treated water delivered		√			Water Department Manager
Raw non-potable deliveries					
Reclaimed water delivered			N/A		
Residential per capita water use	√				Water Department Manager
Large users	√				Customer Billing Supervisor
Other Demand Related Data					
Irrigated landscape (e.g. AF/acre or number of irrigated acres)	√				Customer Billing Supervisor
Population	√				Customer Billing Supervisor
New taps	√				Customer Billing Supervisor

## 6.0 Public Review and Formal Approval

### 6.1 Public Review Process

This water conservation plan is available for comment by the public at the District's office, 8495 Fontaine Blvd, Colorado Springs, CO 80925 from February 1, 2024 through March 31, 2024. A copy is also available by calling Customer Service at 719-390-7111. The conservation plan will be presented to the Board of Directors for comment and adoption at the April 16, 2024, Board meeting.



## **6.2 Local Adoption**

The 2023 Water Conservation Plan was adopted by the Widefield Water and Sanitation District's Board on \_\_\_\_\_. Confirmation of the Board's adoption is attached.

## **6.3 Periodic Review and Update**

The District plans to review and update this conservation plan every seven years. Travis Jones, Water Department Manager, will be responsible for compiling the appropriate data and monitoring the results of the current plan to incorporate changes for the updated plan. The next update is scheduled to be completed in 2029.