



Water Conservation Plan 2016

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 Supply Side Limitations and Future Needs.....	6
2.0 Water Demands and Historical Demand Management.....	7
2.1 Demographics.....	7
2.2 Historical Water Demands.....	10
2.3 Past and Current Demand Management.....	11
Increasing Block Rates	12
Education and Outreach	13
Building Standards	13
Water Loss Accounting	13
High Use Triggers/Customer Requested Audits	14
Data Profiling	14
2.4 Demand Forecasts.....	15
3.0 Integrated Planning and Water Efficiency Benefits/Goals.....	16
3.1 Water Efficiency and Water Supply Planning.....	16
3.2 Water Efficiency Goals.....	18
4.0 Selection of Water Efficiency Activities.....	18
4.1 Summary of Selection Process.....	18
4.2 Demand Management Activities.....	19
4.2.1 Foundational Activities.....	19
Metering	19
Demand Data Collection and Billing Systems	20
Water Efficiency Orientated Rates and Tap Fee	21
System Water Loss Management and Control	21
4.2.2 Targeted Technical Assistance and Incentives.....	21
4.2.3 Ordinances and Regulation.....	22
4.2.4 Education Activities.....	24
5.0 Implementation and Monitoring Plan.....	25
5.1 Implementation Plan.....	25
5.2 Monitoring Plan.....	26
6.0 Public Review and Formal Approval.....	26
6.1 Public Review Process.....	26
6.2 Board Approval.....	27
6.3 Periodic Review and Update.....	27

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.

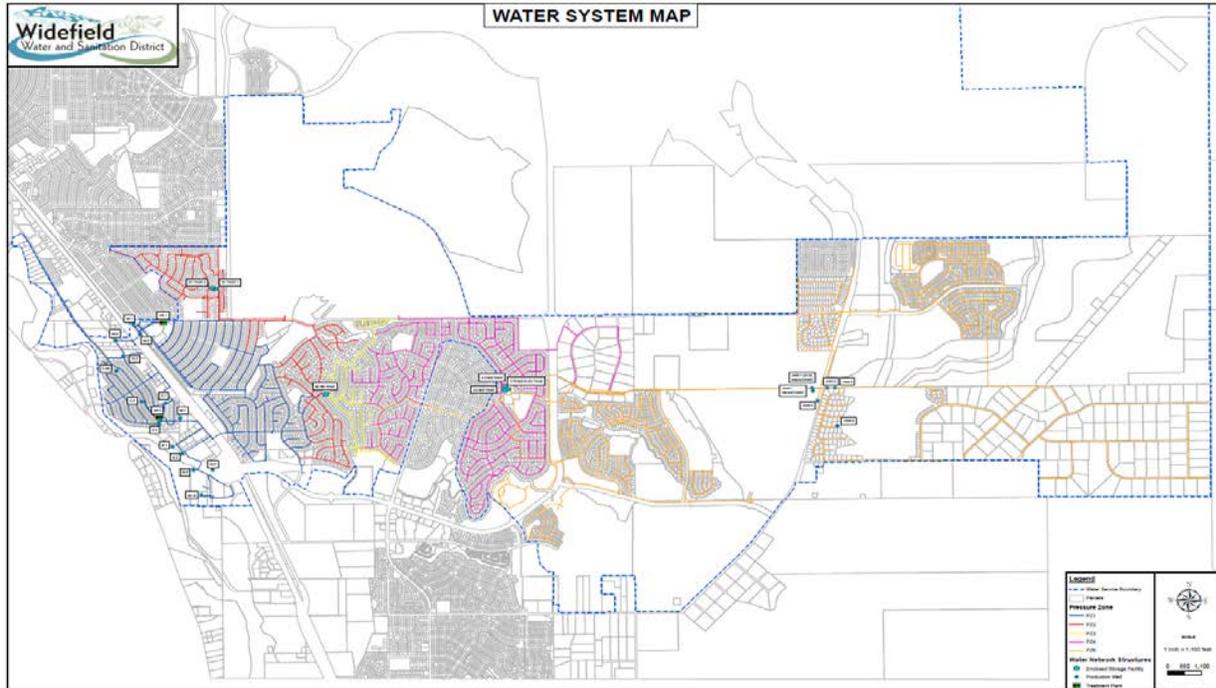
At the time of the District's creation in May 1996, the water service area consisted of approximately 2,250 acres, serving about 4,800 accounts. The wastewater service area consisted of approximately 2,400 acres, serving about 5,400 accounts.

1.1 Current Population and Demand

Water and wastewater service is 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 85% of all accounts. The remaining 15% of accounts are commercial (10%), irrigation (5%). There are no industrial accounts within the District. Occasionally, wholesale water is provided to a neighboring agency. A population of about 18,000 is served within the water boundaries. For wastewater, a population of about 23,700 is served. At the end of 2015, the District served about 7166 water accounts and about 7,749 wastewater accounts.

Widefield Water and Sanitation District operates nine (9) groundwater source wells from the Widefield Aquifer, two (2) groundwater source wells from the Jimmy Camp Aquifer, two (2) booster stations, five (5) treated water storage tanks, two (2) air-stripping plants and 104 miles of distribution system with water mains ranging from 4" to 30".



There are seven and a half (8.5) employees that operate the water system. Each Water System’s Operator is State Certified in both Distribution and Treatment. This meets AWWA’s recommendation for one employee per one-thousand (1,000) taps.

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 eleven (11) wells that the District leases water rights for, nine (9) provide water to their 18,000 customers through diversion of the Widefield Aquifer and two (2) 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 ³ (acre-feet)
Fry-Ark Project Water	1,425 ¹	0
Widefield Aquifer Wells - master lease	2,833 ²	1,048
Jimmy Camp Creek Wells - master lease, and Higby Wells	650	241
	4,908	1,289

¹ The Fry-Ark Project supply 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 a 10 percent temporary increase in the 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 primarily from the Colorado River basin.

From 2009 through 2015, the District’s highest yearly demand was in 2012 with 2763 acre-feet produced for consumption, or 56% of the Annual Yield. The average for these seven years was 2361 acre-feet of demand or 48% of the Annual Yield. The District has expanded their water accounts by 1423 since 2008 with the highest year’s growth being in 2015 at 261 new accounts. The seven-year average for new accounts is 203.

Widefield Aquifer Wells / Jimmy Camp Creek Wells - Master Lease

The perpetual master lease between the District, Water Resource Development Corporation, Widefield Land LP, Waleta Sioux Fisher, and Mary M. Trujillo was entered into by all entities on March 27, 1997. There are water rights decrees and well permits for all wells associated with the lease that gives the District complete autonomy for future use. The lease gives the District the 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 this 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. As summarized in the table below, the augmentation sources available for use by the District equals approximately 3943 acre-feet, three times the current amount required by our water supply.

Augmentation Resources	
Description	Average Annual-Yield (acre-feet)
Fountain Mutual Irrigation Company Stock 812 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)	900
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)	1021
Owen and Hall, Laughlin, and Reclamation water rights decreed for augmentation purposes by Widefield in Case No. 03CW48 ¹	1383.9
Custer County - H2O Ranch	150
Less approximately 80 acre-feet required by contract for augmentation of Windmill Gulch wells owned by Security Water District.	-80
SUBTOTAL	3943.9

¹ Under contract with Colorado Water Protective and Developmental Association for 1383.9 acre-feet/year.

1.3 Supply-Side Limitations and Future Needs

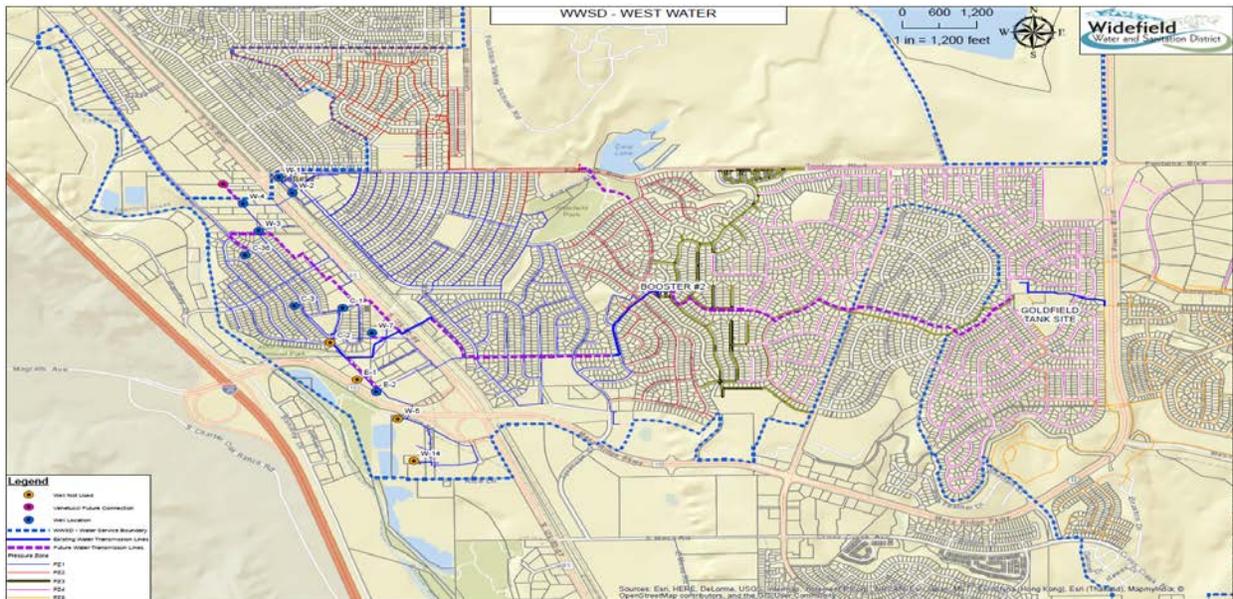
With an annual yield of 4908 acre-feet per year, Widefield Water and Sanitation District currently has enough water supply to meet demand for the next 16 years. The District's supply-side limitation is geographical in nature with 58% of its water supply located on the west-side of the service boundary and 50% of the undeveloped service area located on the east-side. To meet the east's future, peak-day demand of 865 acre-feet, the District has implemented the capital improvement project "West to East Transmission Main" (please refer to appendix A).

This CIP is a multi-phased project that began in 2006 with the construction of a transmission main, consisting of 30", 24", and 20" pipelines, from the Goldfield Tank Site to Zone 5 in the furthest eastern part of the District's service boundary. Previous to this construction, Zone 5 was supported only by a 12" transmission main. The first phase of the "West to East Transmission Main" was necessary to ensure load levels in the east would be supported as development grew. Phases 2 through 5 are expected to be completed by 2022.

Phase 2 of the "West to East" CIP was constructed in 2013 and consists of 2300' of 12", 18", and 24" water main with the capability of centralizing three of the District's production wells. Phase 4 was constructed in 2016 and consisted of 1800' of 24" water main that will eventually connect Phase 3 to the District's Booster Station # 2.

Phase 3 is budgeted to be constructed in 2018 and will connect Phase 2 to Phase 4 with 3300' of 24" water main. Phase 5 is budgeted to be constructed in phases from 2019 through 2022 and will consist of 1.3 miles of 24" water main.

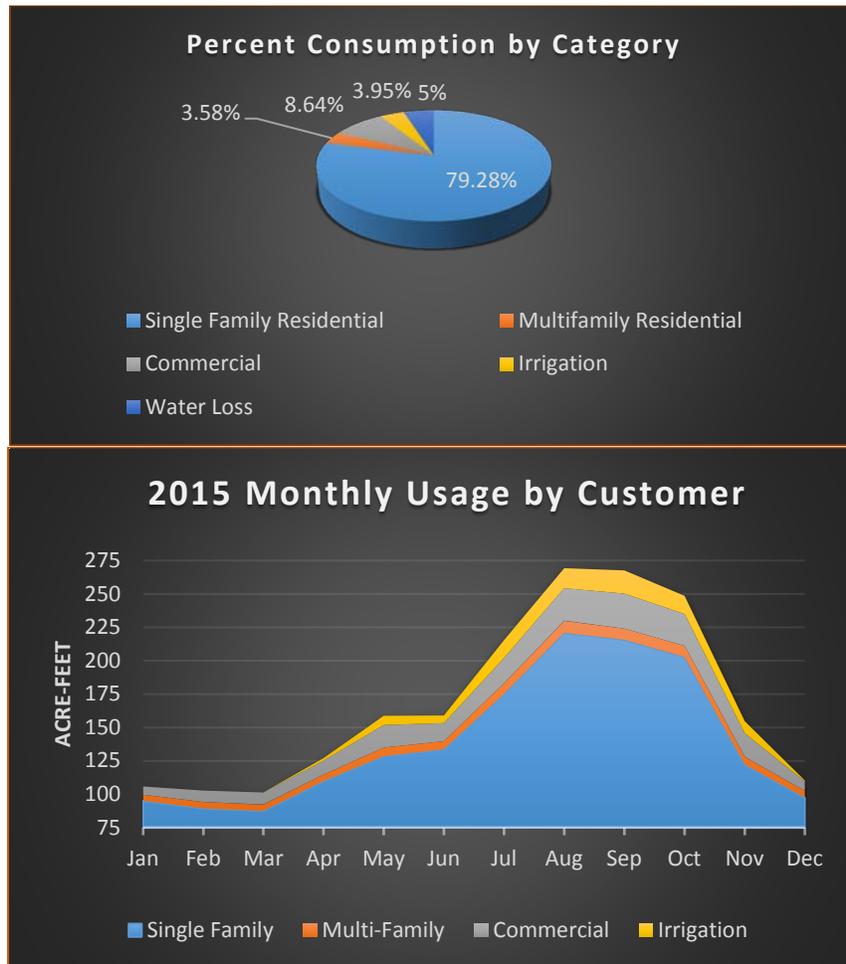
In addition, the District also has budgeted for multiple "manifolds" to connect with the "West to East Transmission Main" that will enable them to manifold 7 of their 11 wells to better control pumping capacity as well as water quality. In conjunction, the Booster Station # 2 will also be upgraded in 2020 to facilitate the east-side demand.



2.0 Water Demands and Historical Demand Management

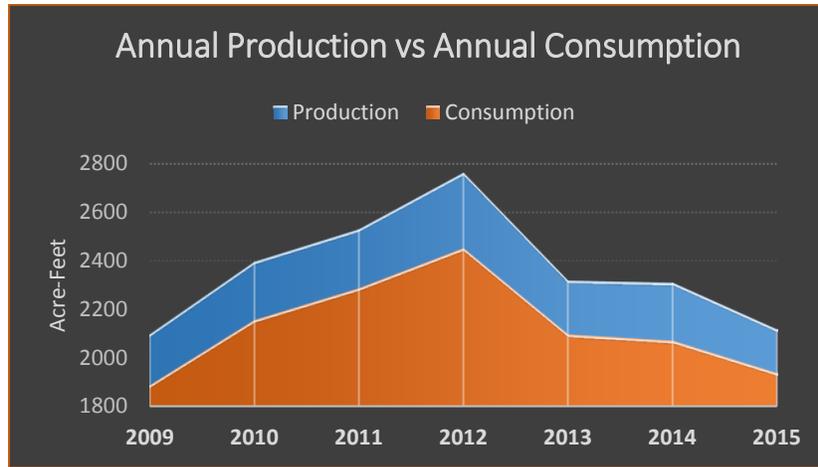
2.1-Demographics

The population served by the District includes the unincorporated area of El Paso County and area 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 2015, the District had 6913 residential and 53 multi-family accounts resulting in a population of 18,112 with commercial accounts (96) equaling only 1%-2% of the total 7062 account holders.

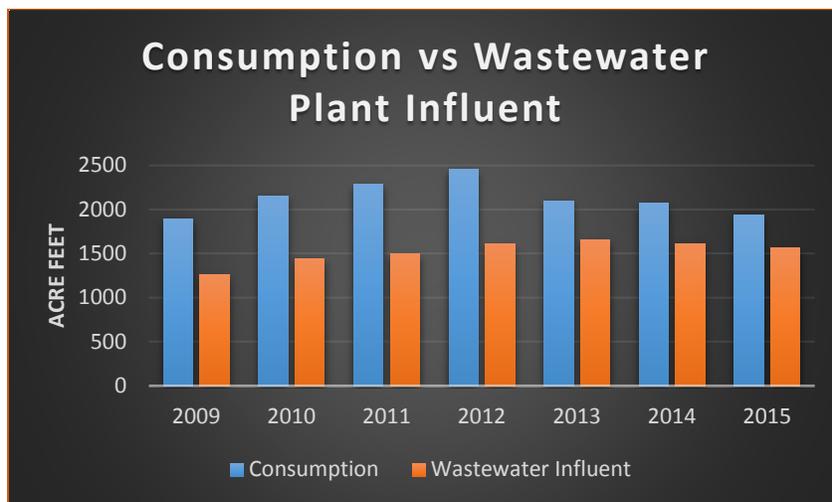


2015 Water Demand and Percentage by Customer Category		
Category	Percent of Total Annual Water Deliveries	Baseline Demands (a/f)
Single Family Residential	79.28%	1678
Multifamily Residential	3.58%	76
Commercial	8.64%	183
Irrigation	3.95%	84
Water Loss	5%	96
Total	100%	2117

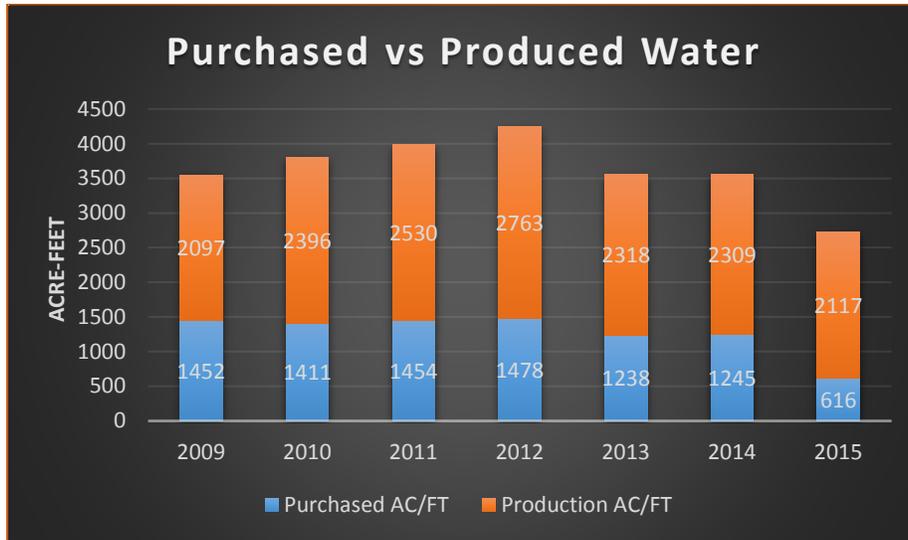
The District currently has water rights and water leases in place to meet current customer demand as well as growth during the review period of this plan. Expansion of the water system will be required and scheduled as part of the District’s long-term capital planning.



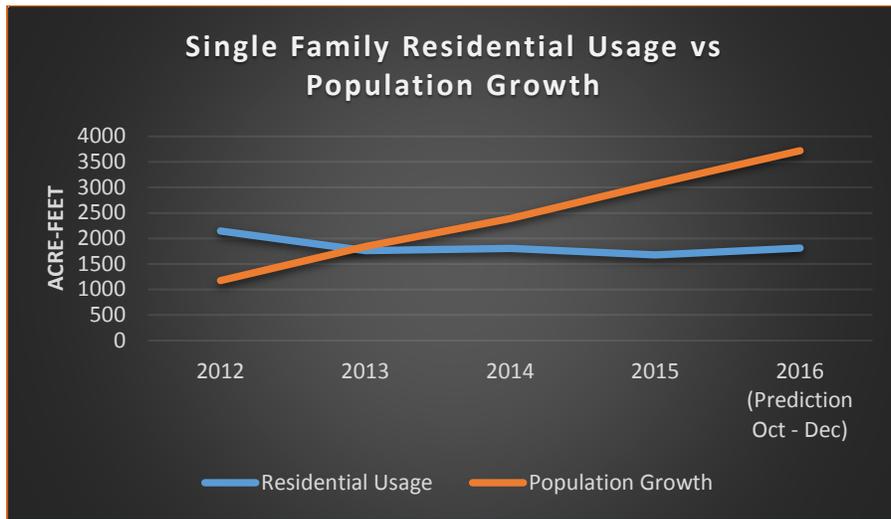
The District’s Engineer continually monitors the overall water use and updates projected needs on an annual basis. This provides a cross check for the District’s supply and demand monitoring. Additionally, the user characteristics within the District’s service area are carefully tracked to better update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



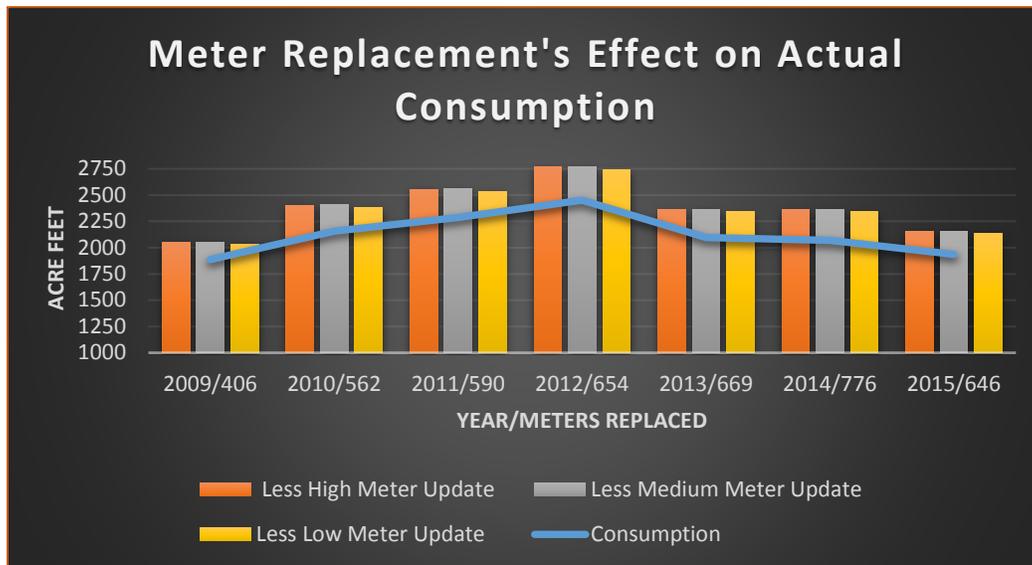
The District’s Single Family Residential population has grown 19.5% in the last seven years (based on 2.6 population per water tap accrual) while their consumption has only increased by 2.5%.

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. After the 2016 Water Conservation Plan adoption, the District will follow a schedule to update this planning tool in 2023 and every seven (7) years thereafter.

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. Appropriations of \$145,000 are provided each year for meters to be replaced. All customer meters within the District are replaced according to the manufacturer’s recommended age or due to failure. Every month the District randomly tests 8 of the replaced meters for high, medium, and low accuracies. The overall average for the 96 meters that have been tested over the last year is: High = 99.65%, Medium = 98.38%, and Low = 92.67%.



Since 2006, the District has replaced over 6000 meters and hope to have all meters installed prior to 2006 updated by 2018.

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.
- 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.

<u>Range of Consumption</u>	<u>2009</u>	<u>2015</u>
0 to 6,000 gallons	24.21%	46.33%
6,001-12,000 gallons	32.96%	32.66%
12,000 gallons +	42.82%	21.01%

Education and Outreach

The District 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 of their account that coincides with an easy to understand graph. Occasionally there will also be helpful tips/information on ways to conserve water.

Each Customer Service Technician, Meter Technician, and Water Operator are supplied with 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 7200 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. Due to changes in personnel and time constraints, the data has been gathered in the system but has not been analyzed. 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.

In 2014 the Southeastern Water Conservancy District performed a system wide audit on the District’s system. The Water Audit Data Validity Score was a 74 out of 100 with priority areas of attention being a volume from own sources, billed metered, and customer metering inaccuracies. The table below presents a summary of the performance indicators related to the system wide audit. The results indicate that current annual real losses (CARL) are less than the unavoidable annual real losses (UARL), which is technically infeasible.

Summary of Water Audit Performance Indicators					
	Millions of Gallons			In thousands of dollars	
	2012 (Jan – Dec)	2013 (Dec – Nov)		2012	2013
CARL	60.9	47.2	Non-Revenue Water Revenue Impact (based on prevailing water rates)	\$ 362	\$ 288
UARL	63.6	63.6	Estimated Cost of Losses		
ILI*	0.96	0.74	Apparent (based on prevailing water rates)		\$ 78
			Real (based on variable production cost)		\$ 82

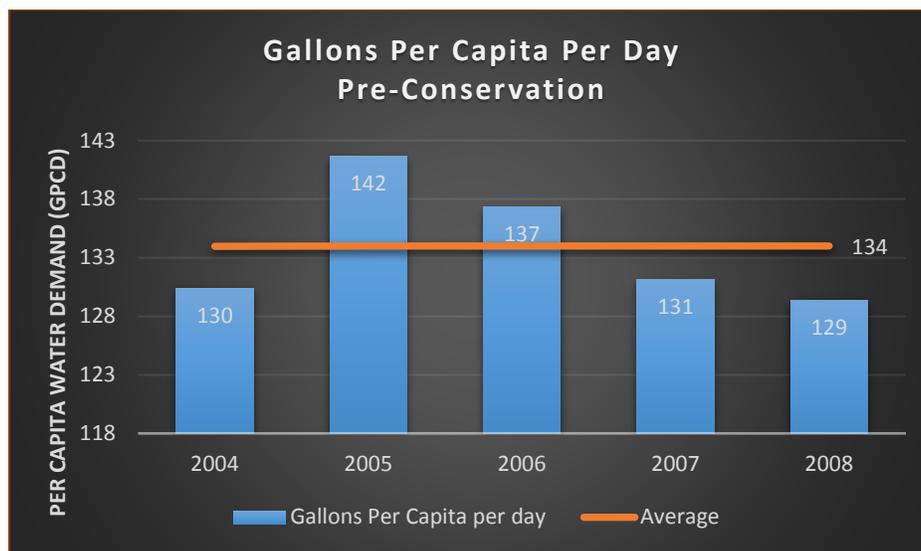
*Infrastructure leakage index which is calculated as CARL divided by UARL

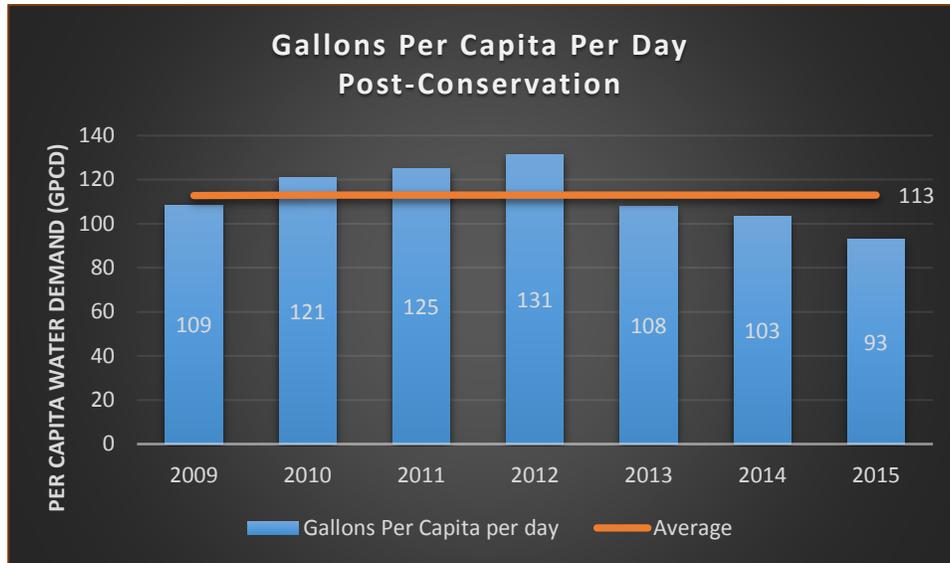
High Usage Triggers / Customer Requested Audits

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

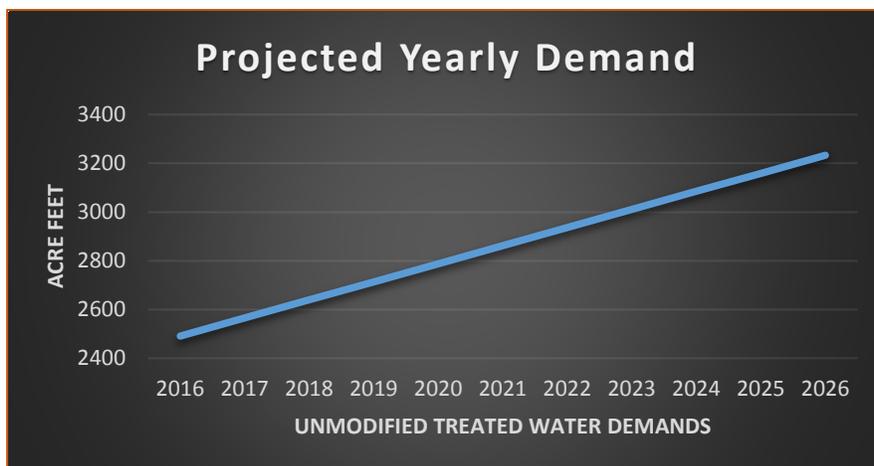
For more in depth and complicated instances of high usage, the District utilizes a data profiling feature available through their AMR water meter transponders. This function can provide detailed data on when and how much water passed through the meter over the specific period of time. This has allowed the District to identify when leaks exist, peak periods of usage, and usage not initiated by the customer.



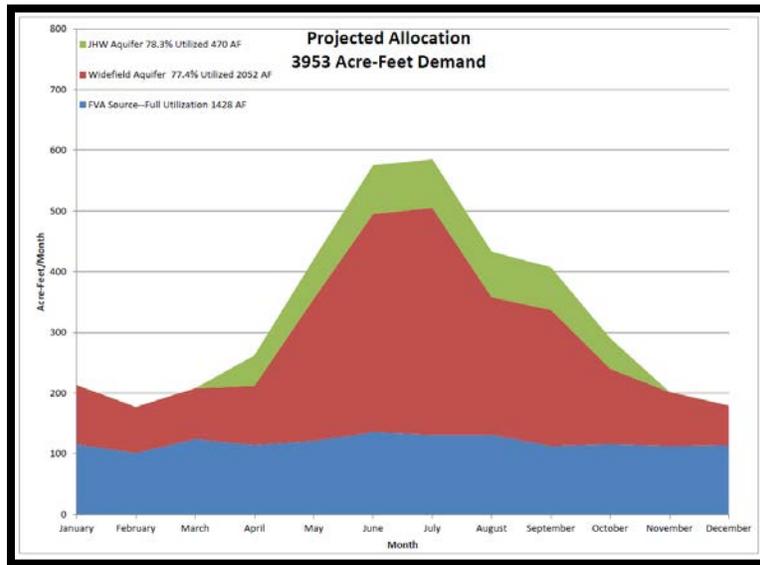


2.4 Demand Forecasts

For this conservation plan, The District has set a planning horizon of 10 years with an update every 7 years and a yearly monitoring period. By taking an average of the taps collected for the last five years along with the 7-year average of daily demand per capita, we were able to liberally project a 742 acre-foot increase in demand by 2026.



With an estimated yearly demand of 3233 acre-feet by 2026, the District will be applying its full utilization of its FVA surface water contract, 68% of its capacity in the Widefield Aquifer, and 68% of its capacity in the Jimmy Camp Aquifer.

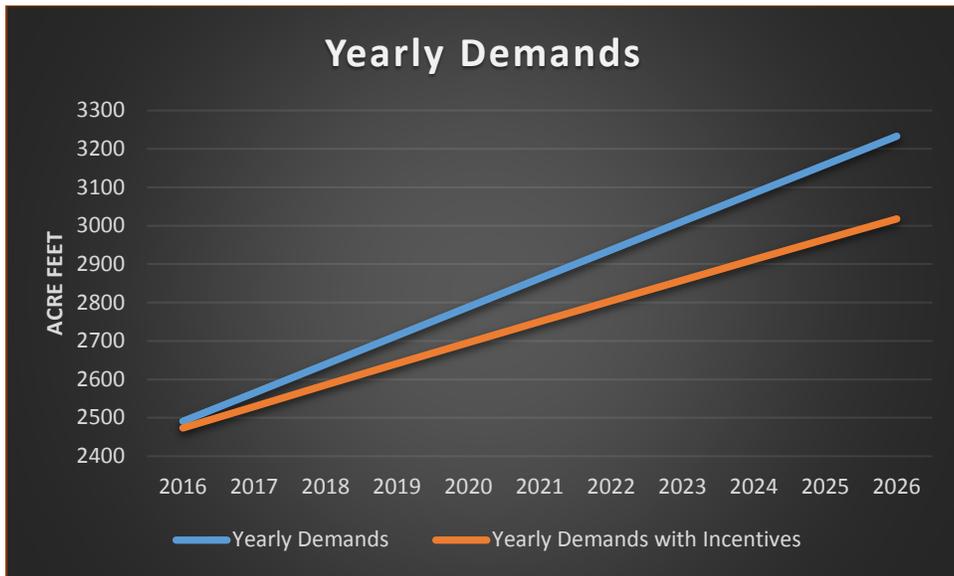


3.0 Integrated Planning and Water Efficiency Benefits / Goals

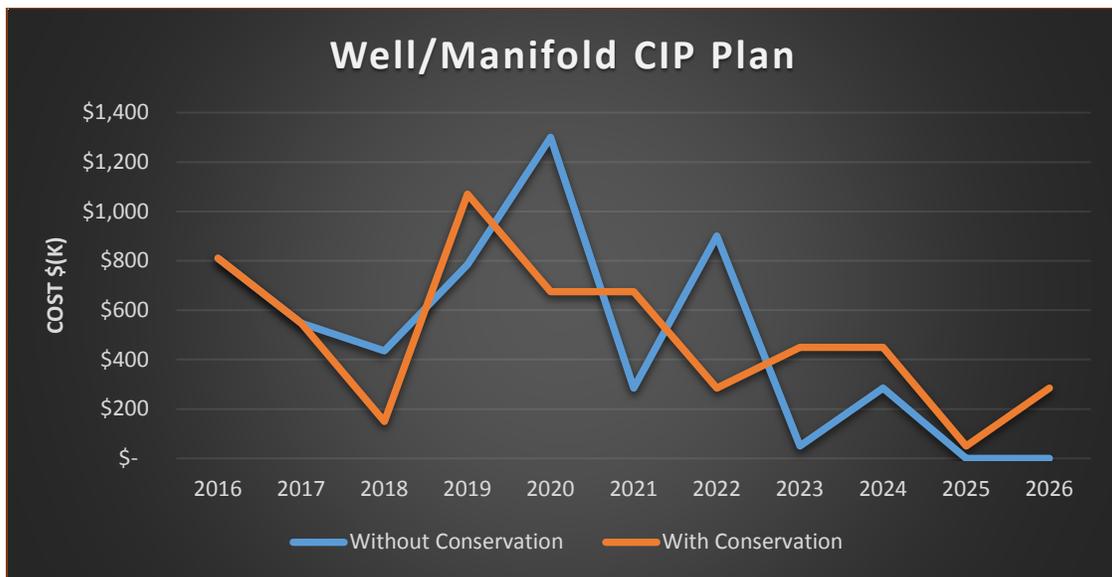
3.1 Water Efficiency and Water Supply Planning

As described, the District’s system challenges and limitations exist solely with infrastructure. 97% of the District’s future growth will occur in the extreme east portion of the service area. The infrastructure for the delivery of future demands has been developed in the eastern distributions system requiring little upgrade in the next 10 years. As purchased FVA water and JHW Aquifer sources are fully utilized, all future supply must come from western sources in the Widefield Aquifer. These wells will require substantial upgrades in the form of chlorination contact time and source manifolds to accommodate the required flow rates.

These upgrades are part of the District’s 10 Year Capital Improvement Plan which allocates \$1.2 million towards Well upgrades and \$2.6 million towards manifold construction to coincide with east side population growth and demand. Yearly capital budgets are derived from asset depreciation plus revenue from tap fees the year prior. Population growth has been determined on a five-year average and is expected to increase demand 74 acre-feet per year.



With a projected water savings of 17.37 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 17.37 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 4.5%.

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

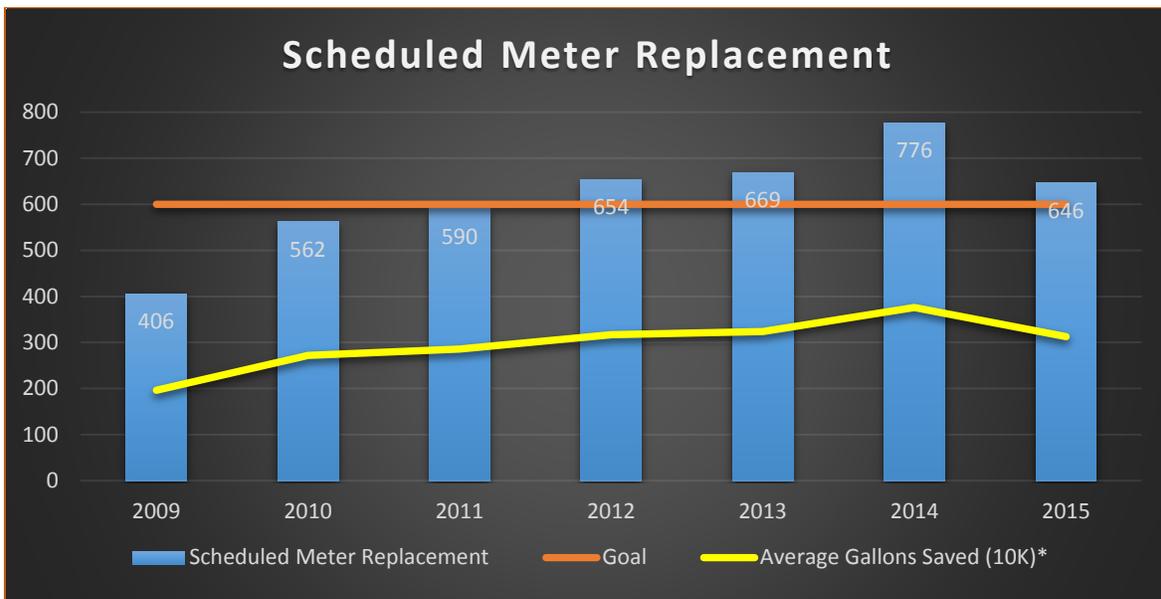
	Class Usage K / Gallons (1,000 gal)	Class Usage AF	Accounts Impacted	K Gallons per Acct	Estimated Water Savings (AF)	Estimated Water Savings (%)			
Water Rate Structure	680,582	2,088.64	6,677	101.93	64.15	3.48%	Residential accounts reduce overall usage by 4.68% from year 2010 to 2015; based on rate implication and usage factors. Financial incentives to reduce water usage provide an on-going change in usage patterns.		
Public Outreach;	680,582	2,088.64	2,337	2.00	20.89	1.00%	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.		
Quarterly Newsletter							Average water usage from 2010 through 2015 was 680,582,000 gallons while the number homes increased from 6,252 to 7,165 for the same period.		
Water Wise Landscaping							Web Page		
Messages on Invoices									
Usage Graphed on Invoices									
Web Page									
Water Audits / High Usage;	680,582	2,088.64	1,132	2.00	6.95	0.05%	Reduce 1,132 accounts by 2,000 gallons with conservation hardware and direct contact with account holders registering usage indicative of leaks.		
Water audits									
Aerators									
Shower Heads									
Conservation Kit									
Customer Contact, High Usage									
Rules & Regulations	680,582	2,088.64	6,677	153	3.13	0.15%	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 a 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 the availability is reduced.		
Responsibilities of Customers									
Water Conservation									
Regional Building Codes									
Savings of Existing Incentives		2,088.64			95.12	4.55%			

*Data from 2010-2015

Metering

The District initiated a Scheduled Meter Replacement Program in 2006. This program targeted Sensus Brand “touch-read” water meters that were 15+ years old and replaced them with new Badger Brand AMR style water meters. Once the “touch-read” meters were completely replaced, the program targeted all Sensus Brand AMR meters 10 to 15 years old. To date, the Meter division has replaced 4745 Sensus meters, leaving 731 Sensus meters yet to be replaced before the District will be entirely based on a Badger AMR system. This changeover is expected to be complete in the year 2018, at which point the Scheduled Meter Program will target the first Badger meters installed in 2006, thus replacing them within the 10-15 year manufacturer recommended life span. With current accounts a little over 7100, meters installed in 2015 are estimated to be replaced by 2027 or 12 years from installation.

The District’s scheduled meter replacement program has an annual budget of \$145,000 with a target replacement goal of 600 meters



*Based on consumption of 5,000 gallons per month.

Each month, eight (8) of the replaced meters are tested for High, Medium, and Low flow accuracies. The average percent accuracies for 2015 were: High=99.65%, Medium=98.38%, and Low=92.67%. 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 \$18.25 per month up to \$1353.20 per month depending on the meter size, ¾" up to 8", respectively. Residential customers are charged \$3.92 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 \$4.70. Commercial customers are charged a uniform rate of \$4.34 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 and plans to have a more proactive approach in assessing the data. Part of this proactive approach will involve syncing timelines between pumping data and consumption data for a more accurate portrayal of apparent and real losses.

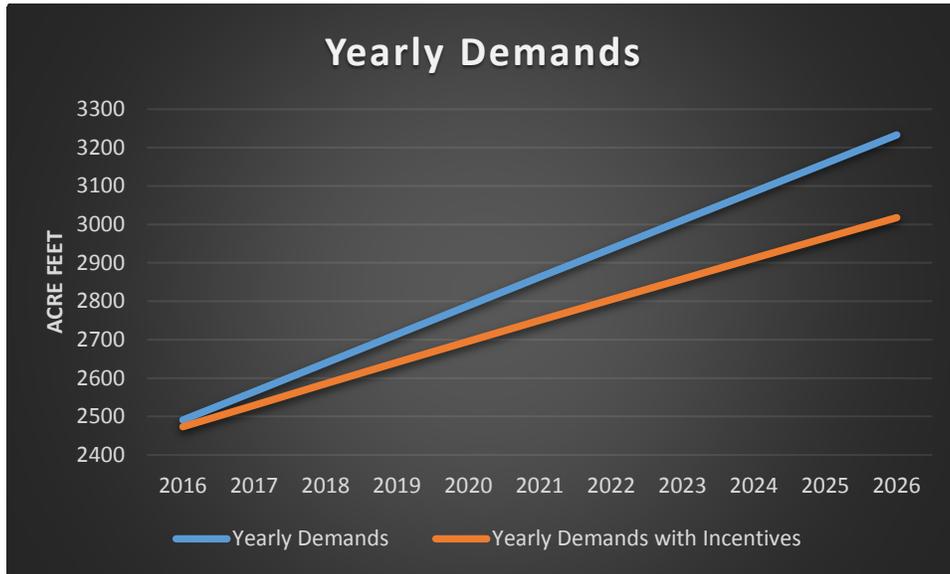
Since 2009 the District has maintained a strong meter testing, repair, and replacement effort to reduce apparent losses and improve meter accuracy. Daily and monthly water data profiles are performed on customer accounts that are either requested or are triggered by customized volumetric set points during 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 6.7% for the 2015 calendar year.

4.2.2 Targeted Technical Assistance and Incentives

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 2900 accounts with homes that pre-date 1980, when the importance of water conservation was less of priority. These accounts will be the first to be targeted for the new toilet and washing machine rebates. The District will look to provide rebates / credits of \$100 per toilet and \$250 per washer machine. It is assumed 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.

Likewise, the Commercial and Irrigation categories are expected to have a 24.2% reduction in water use after surveys, audits, and equipment efficiency improvements are complete. It is expected for this to yield in a water savings of 12 acre-feet per year.



These conservation efforts will yield an 7% water savings over 10 years!

4.2.3 Ordinances and Regulation

The District will continue implementing a heavy enforcement and understanding of its established Rules and Regulations, updated in 2012. 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 as well as the Department’s eight year adoption of International Plumbing Code.

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 shall be responsible for maintaining that portion of his water service line which extends from the customer's structure to the point at which the service

line ends at the property line. Leaks or breaks in the service lines shall be repaired by the customer within 72 hours from the time of notifications of such condition by the District. If satisfactory progress toward repairing the said leak has not been accomplished within the 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 shall use any water provided by the District other than for uses permitted by the District.
- 7.2 Determination of available water supply. The District shall, from time to time, determine the amount of available potable water supply for use and shall 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 shall determine 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 shall 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 shall 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 shall 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 they shall be in effect.
- 7.3 Required water conservation devices. Water service shall not be furnished to any customer unless the customer has fully complied with the water conservation standards set forth by the District.

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, provides building inspections in Widefield, Colorado. In 2008 the PPRBD adopted 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

Section’s 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 of 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 easy 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 second quarter of 2017. This will give the Water Department Manager, Finance Director, 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 February 1st. Customer service training for rebate billing processes will be complete by March 1st, with newsletter/billing stuffers drafted and printed for mail out by April 1st.

Commercial, Irrigation Surveys / Audits: This activity is expected for enactment by spring 2017. 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 was available for comment by the public at the District’s office, 8495 Fontaine Blvd, Colorado Springs, CO 80925 from February 1, 2017 through March 31, 2017. A copy was also available by calling the Customer Service Department at 719-390-7111. No public comments were received during the comment period.

6.2 Local Adoption

The 2016 Water Conservation Plan was adopted by the Widefield Water and Sanitation District's Board on April 18th, 2017. 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. Brandon Bernard, 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 2023.

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MEMORANDUM

April 26, 2017

VIA E-MAIL

TO: Brandon Bernard, Water Department Manager
Widefield Water and Sanitation District
FROM: Joseph W. Norris 

RE: **Board Approval of Water Conservation Plan**

Widefield Water and Sanitation District's Board of Directors held its regularly scheduled meeting on April 18, 2017. At said meeting, Brandon Bernard, Water Department Manager, presented to the Board of Directors a proposed updated Water Conservation Plan, as prepared by the District staff. After discussion and review of the updated Water Conservation Plan, and upon motion duly made, seconded, and unanimously carried, the Board of Directors approved the proposed Water Conservation Plan as presented.

If you have further questions regarding the Board of Directors' approval of Widefield Water and Sanitation District's Water Conservation Plan, please do not hesitate to contact me.