

COTTONWOOD MUTUAL WATER COMPANY

2025

WATER CONSERVATION
PLAN

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Introduction

The Cottonwood Mutual Water Company's 2025 Water Conservation Plan has been prepared to comply with the Utah Water Conservation Plan Act of 1998 and amended in 2023. Section 73-10-32 of the act requires water conservancy districts and water retailers to file a water conservation plan with the Utah Board of Water Resources and ensure that it is updated every five years. This update outlines Cottonwood Mutual Water Company's current water conservation efforts and presents its current conservation goals.

Cottonwood Mutual Water Company serves a growing area in an unincorporated area of Morgan County known as Mountain Green and is acutely aware of the need to maintain a supply of water for current and future residents. The board and staff of Cottonwood Mutual Water Company are committed to decreasing the Company's per capita water use.

System Profile

Cottonwood Mutual Water Company (CMWC) is located in the northwestern area of Morgan County in a community known as Mountain Green. There are several water systems within Mountain Green with CMWC providing service to approximately 2,900 individuals. Cottonwood Mutual Water Company has made it a top priority to provide clean, safe, drinking water for its residents and businesses. The Company currently has 857 residential, 24 business, 2 industrial, and 17 institutional connections. In 2024 the company pumped 352.5 AF with a water loss of 10.79 percent. The water for the CMWC system is pumped from five wells owned by the company. The water is stored in one of six storage tanks totaling 2.3 million gallons of storage within two pressure zones.

Overlaying the company's service area is a secondary water provider that distributes secondary water to seventy-five percent of CMWC current connections. The remaining twenty-five percent of customers utilize culinary water from CMWC to meet their outdoor watering needs.

Supply

Cottonwood Mutual Water Company currently receives its water from five wells. Data showing reliable supply, future supply, and groundwater recovery can be found in the CMWC conservation plan update at the end of this report.

Water Measurement

Culinary Metering and Data Analytics

It has always been a priority of CMWC to measure and track the quantity of water pumped from its well sources. The Company has five wells which it utilizes to provide culinary water to its customers. Each well source is equipped with a flow meter that tracks the total gallons pumped. The total gallons pumped from each source are reported during each monthly billing cycle. In addition, the Company utilizes a SCADA system to help monitor well sources connected to the SCADA system.

The Company also places a high priority in accurately measuring the quantity of water used by its customers. Meters have been installed at each connection to monitor the total water used by each customer. Meters are read utilizing a drive by automatic meter reading system (AMR). Meters are read on a monthly basis.

Monthly meter reading data from the source meters and customer connections are tracked each month in an Excel spreadsheet to help the Company staff evaluate water usage and identify potential conservation areas.

Secondary Water

The Mountain Green Secondary Water Company (MGSWC) provides secondary water to approximately 75 percent of CMWC's current customers and share the same service area. MGSWC has installed secondary meters on each of its customers. CMWC does not monitor the amount of secondary water used by these customers. CMWC has established a rate structure on customers having secondary water that encourages secondary water use over utilizing culinary water for outdoor use.

Water Loss Control

Leak Repair and Mitigation

Tracking and preventing unaccounted for water loss is a priority of CMWC. The Company's staff provides daily maintenance to the distribution system and staff take leaks very seriously. When leaks are found, every effort is made to have them fixed immediately. The Company relies upon third party contractors for repairing leaks when they are found. In rare cases, minor leaks can take up to a week to repair.

The company has is considering hiring a third-party contractor to go through the distribution system monitoring for leaks. The goal would be to engage a company to perform this task within the next three years. Having a company perform this monitoring exercise will allow us to identify

and locate leaks that are not manifesting to the surface. Taking care of such leaks will help reduce overall water loss.

Unaccounted for Water Loss

The Company’s staff will make immediate efforts to better track unaccounted water in areas such as construction flushing, large leak events, hydrant flushing, and tank overfilling. By tracking these events, the Company can stay better informed with unaccounted water that is not passing through a meter. Also, the cost of lost water can be calculated into the financial numbers at the end of each year.

Billing

2022 Rate Increase

In 2022 CMWC re-evaluated their rate structure and issued a new rate plan for water usage. This rate plan kept the base amount charged at \$49.60 but reduced base rate usage from 6,000 gallons to 5,500 gallons and increased the tier 1 (5,501 to 12,000 gallons) rate from \$2.53 to \$2.56 per 1000 gallons. In addition, the conservation tier was adjusted from \$3.25 to \$4.00 per 1000 gallons. The Company continues to evaluate rates each year to ensure that revenues will meet operational requirements and capital repair and replacement funding. A rate schedule from 2022 for culinary water consumption is in the table below.

Residential Rates (with Secondary Water)			
	Lower Limit	Upper Limit	Cost per 1,000 gallons
Base Rate:	0	5,500	\$49.60
Tier 1:	5,501	12,000	\$2.46
Tier 2:	12,001	9,999,999	\$4.00
Tier 3:			
Tier 4:			

Residential Rates (No Secondary Water)			
	Lower Limit	Upper Limit	Cost per 1,000 gallons
Base Rate:	0	5,500	\$49.60
Tier 1:	5,501	12,000	\$2.46
Tier 2:	12,001	32,000	\$2.50
Tier 3:	32,001	55,000	\$2.65
Tier 4:	55,001	9,999,999	\$4.00

Church/Elem School Rates:			
	Lower Limit:	Upper Limit:	Cost per 1,000 gallons
Base Rate:	0	38,500	\$347.20
Tier 1:	38,501	84,000	\$2.46
Tier 2:	84,001	9,999,999	\$4.00
Tier 3:			
Tier 4:			

Middle School Rates:			
	Lower Limit:	Upper Limit:	Cost per 1,000 gallons
Base Rate:	0	110,000	\$992.00
Tier 1:	110,001	240,000	\$2.46
Tier 2:	240,001	9,999,999	\$4.00
Tier 3:			
Tier 4:			

Current and Future Plans

The Company's board of directors recognizes that small incremental rate increases done each year are preferred over large increases made once every several years. In addition, the board is continually studying how the existing rate structure can be modified to promote water conservation without detrimentally impacting the revenue needed for the Company to meet its financial obligations. On July 9, 2025, the Company adopted a new rate structure and these rates will go into effect with the August 1, 2025 billing.

Rate Structure 4/2022 to 7/2025				Adopted Rate Structure 7/2025			
Current Residential Rates w/ Secondary				Proposed Residential Rates w/ Secondary			
	Lower Limit	Upper Limit	Cost/1,000		Lower Limit	Upper Limit	Cost/1,000
Base Rate:	0	5500	\$ 49.60	Base Rate:	0	5500	\$ 53.80
Tier 1:	5500	12000	\$ 2.46	Tier 1:	5500	12000	\$ 2.48
Tier 2:	12000	9999999	\$ 4.00	Tier 2:	12000	9999999	\$ 6.50
Current No Secondary Water Rates				Proposed No Secondary Water Rates			
	Lower Limit	Upper Limit	Cost/1,000		Lower Limit	Upper Limit	Cost/1,000
Base Rate:	0	5500	\$ 49.60	Base Rate:	0	5500	\$ 53.80
Tier 1:	5500	12000	\$ 2.46	Tier 1:	5500	12000	\$ 2.48
Tier 2:	12000	32000	\$ 2.50	Tier 2:	12000	32000	\$ 2.56
Tier 3:	32000	55000	\$ 2.65	Tier 3:	32000	65000	\$ 2.68
Tier 4:	55000	9999999	\$ 4.00	Tier 4:	65000	9999999	\$ 6.50
Current Church/Elem School Rates:				Proposed Church/Elem School Rates:			
	Lower Limit	Upper Limit	Cost/1000		Lower Limit	Upper Limit	Cost/1000
Base Rate:	0	38500	\$ 347.20	Base Rate:	0	38500	\$ 376.60
Tier 1:	38500	84000	\$ 2.46	Tier 1:	38500	84000	\$ 2.48
Tier 2:	84000	9999999	\$ 4.00	Tier 2:	84000	9999999	\$ 6.50
Current Middle School Rates:				Proposed Middle School Rates:			
	Lower Limit	Upper Limit	Cost/1000		Lower Limit	Upper Limit	Cost/1000
Base Rate:	0	110000	\$ 992.00	Base Rate:	0	110000	\$ 1,076.00
Tier 1:	110000	240000	\$ 2.46	Tier 1:	110000	240000	\$ 2.48
Tier 2:	240000	9999999	\$ 4.00	Tier 2:	240000	9999999	\$ 6.50

Water Use

Weber River Morgan County Regional Goal

The new regional goal for Morgan County is 187 GPCD by 2030 and 179 GPCD by 2040. The CMWC water system is currently under the GPCD that the Weber River Morgan County has as regional goals for 2030 and 2040. Cottonwood Mutual Water Company is dedicated to continuing its conservation efforts and working to stay below these conservation goals now and into the future. For a detailed view of the regional goals please visit: <https://conservewater.utah.gov/regional-water-conservation-goals/>

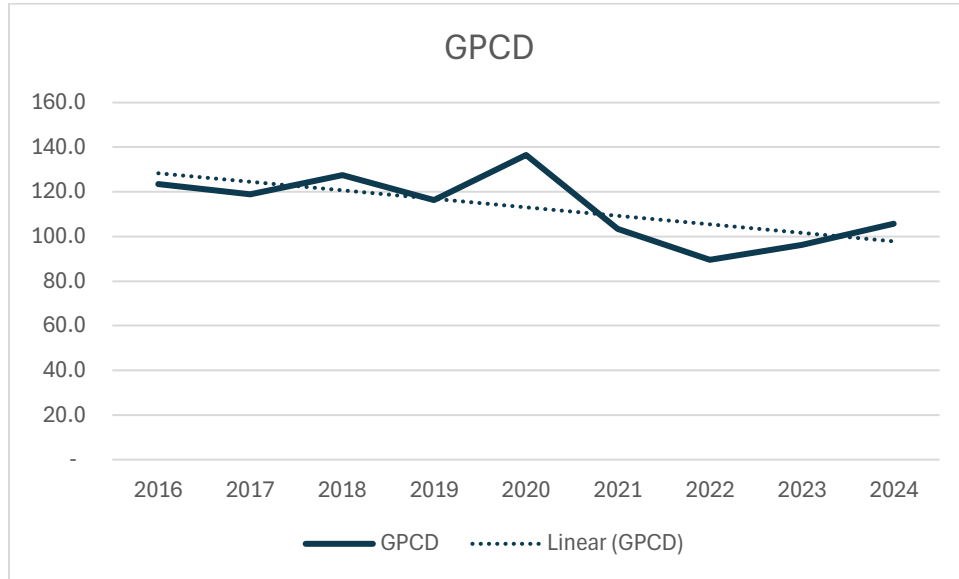
Currently, the Cottonwood Mutual Water Company has already shown water use to be 105.6 GPCD which is significantly under the 187 GPCD regional goal. As such, Cottonwood Mutual Water Company will continue to promote continued water conservation and strive to reduce overall capita per day consumption.

From the data collected we can see a continued decrease from the years 2020 through 2022 but the GPCD begin to increase in 2023 and 2024. We attribute the decline to the increased messaging from Slowtheflow.org and the media regarding water conservation during the drought years of 2021 and 2022. We noticed that after the higher-than-normal water year of 2023 that the drought messaging was not as frequent, and more emphasis was placed on the remarkable water year that Utah experienced. Similar messaging occurred in 2024 and as a result GPCD increased year over year in 2023 and 2024. We would encourage slowtheflow.org to continue the frequent messaging and the media to do the same regarding drought and the need to conserve water. It is important to note that many of our customers receive secondary water from another company for their outdoor watering needs and their secondary water consumption does not factor into our overall water GPCD. CMWC will continue working to establish water conservation messaging and rates that will further promote water conservation.

Table 1

Year	Residential Connections	People per Household	Total Population	Total AF Pumped	Total Gallons Pumped	GPCD
2016	588	3.44	2023	279.9	91,205,695	123.5
2017	646	3.44	2222	296.1	96,484,481	119.0
2018	685	3.44	2356	336.8	109,746,617	127.6
2019	714	3.49	2492	324.5	105,738,650	116.3
2020	740	3.49	2583	394.9	128,678,560	136.5
2021	798	3.49	2785	322.2	104,989,192	103.3
2022	820	3.49	2862	287.0	93,519,237	89.5
2023	832	3.49	2904	313.2	102,056,533	96.3
2024	854	3.49	2980	352.5	114,862,478	105.6

Graph 1



Current Conservation Practices

What We Are Doing

In 2020 the CMWC board of directors adopted the 2020 Water Conservation Plan. Prior to adopting the plan, the Company relied upon an emergency action plan in the event of a water shortage.

After adopting the 2020 Water Conservation Plan the Company also adopted Governor Cox's water conservation order, executive order 2021-7 and created its own resolution encouraging increased water conservation. The CMWC board also adopted an outdoor irrigation policy, resolution 2021-03.

The Company has also posted conservation tips to its website (Cottonwoodwater.com) and has provided links to the Weber Basin Conservation Garden, Slow the Flow, Utah Water Savers, and Utah Conservation Program to help residents become familiar with conservation rebate programs and to gain increased knowledge on how to better conserve water in our area.

Ordinances and Standards

Cottonwood Mutual Water Company continues to study other conservation measures in concert with the resolutions it has already adopted. The Cottonwood Mutual Water Company Water Conservation Plan is a document intended to preserve and protect public health and safety during periods of drought, dealing with temporary water shortage and/or supply interruptions. It is imperative that all customers understand the actions necessary to protect the water supply during times of shortages and drought.

Company Code Restricting Waste

The company currently does not have a formal resolution addressing water waste. Cottonwood Mutual Water Company intends to adopt a resolution addressing excessive or irresponsible water waste. The Company is of the opinion that all fixtures connected to the Company's water system shall be required to be kept in good condition under the homeowner's expense and shall remain closed when not in use. The resolution adopted should allow for service interruption if a water waste event is not in accordance with the resolution.

Water Efficient Landscaping Resolution

Because Cottonwood Mutual Water Company has a large number of Weber Basin water leases it utilizes to meet its water right requirement the company will implement resolutions and standard to be in harmony with the requirements set forth in the Weber Basin Water Conservancy District's water contract.

Future Conservation Practices and Goals

Cottonwood Mutual Water Company currently has a 105.6 GPCD water usage which is well under the regional water goal of 187 GPCD. However, this milestone does not mean our conservation efforts will cease. CMWC recognizes the importance of continued conservation efforts and will focus efforts on implementation of best practices moving forward. Areas we can focus our efforts include encouraging customers to limit and/or remove turf from park strips or areas less than eight feet wide. Promote water efficient landscaping and encourage re-landscaping of those landscapes that require higher than normal water use. In addition, CMWC can promote smart watering technologies for the landscape. In addition, CMWC can continue to promote the use of reduced flow fixtures in and throughout the home, business, or property.

Conservation Goals

Goal 1: Reduce per capita per day water use by three percent in five years. The current water use rate is 105.6 GPCD and a five percent reduction will reduce overall usage to 102 GPCD.

Goal 2: Reduce annual system water loss by five percent. The 2024 annual water loss average was 10.79 percent. A five percent reduction will reduce this annual loss to 5.79 percent.

Goal 3: Maintain a financially viable water system. The Cottonwood Mutual Water Company will continue to monitor revenues while continuing to promote water conservation.

To achieve these goals Cottonwood Mutual Water Company will reduce per capita per day consumption by continuing to encourage the use of low flow fixtures, promote overall water conservation, and enhance conservation messaging through newsletters and company website messaging.

Reducing overall annual system water loss will be achieved by contracting with a third-party leak detection service within the next three years to identify potential subterranean leaks on the distribution system, staff will track and record unaccounted for water loss occurring from known water leaks, tank overfilling, and fire hydrant flushing.

The company will continue to monitor revenues and make any necessary adjustments to rates in order to meet expense demand. The company’s staff and board of directors recognize that rates may need to be established at some point that have a base rate that does not include a volume of water and all water used will be through various tiers. This type of rate structure has the greatest potential of being resilient to the negative impacts to revenue from increased water conservation. The company may adopt such a rate structure should the need arise.

Implementation Summary

Cottonwood Mutual Water Company is proud and grateful that its GPCD is below the regional goal of 187 GPCD. The desire of the company is to remain committed to the continued reduction of per capita per day usage. The Company, board of directors, and staff will continue to provide the necessary education and outreach to ensure we continue to achieve our current GPCD of 105.6 GPCD with the goal of achieving greater conservation if the future.

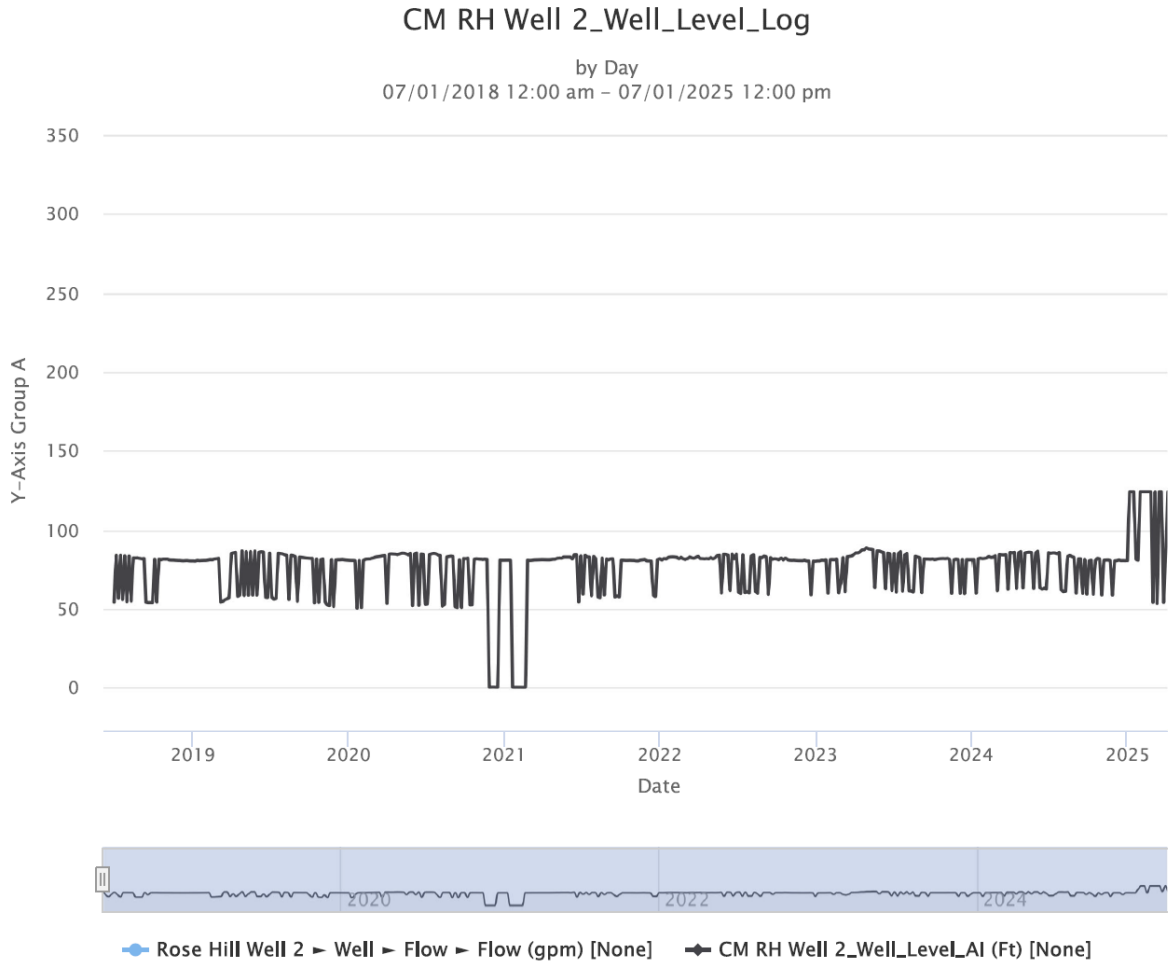
Appendix

Water Supply

Source

NAME OF SUPPLY	NORMAL YEAR YIELD (GPM)	RELIABLE DROUGHT YEAR YIELD (GPM)
Airport Well	30	21
Rose Hill #1	40	26
Rose Hill #2	340	335
Rose Hill #3	375	375
Rollins Ranch #3	77	60
TOTAL:	862	817

Rose Hill #2 Well Draw Down History



Rose Hill #3 Well Draw Down History

CM RH Well 3_Pump_Draw Down_Log

by Day
07/01/2018 12:00 am - 07/03/2025 12:00 pm

