WHITE CITY WATER IMPROVEMENT DISTRICT

2022 Conservation Plan

INTRODUCTION

In response to the anticipated growth occurring throughout the state of Utah, the White City Water Improvement District (hereafter "WCWID"), its members and elected Board of Trustees are concerned about the future cost and availability of a steady and reliable water supply. Similar concerns have been expressed by the state legislature by passage of the Water Conservation Plan Act (hereafter the "Act."). Utah Code Ann. §73-10-32 (2020). Based upon that concern, and in conformity to the Act, WCWID has periodically adopted water conservation plans and implemented their recommendations. The Act provides that periodically water conservation plans should be reviewed to determine if modifications are called for. WCWID has undertaken such a review and hereby adopts the following revised 2022 Water Conservation Plan.

DESCRIPTION OF WCWID AND ITS SERVICE AREA

The WCWID service area encompasses roughly the area from approximately 2000 East on the east, 700 East on the west, 9400 South on the north and 10600 South on the south, in Salt Lake County. WCWID provides water service to 4,221 service connections as of 2021. Of these, 4,127 are residential connections, 58 are commercial connections, and 36 are institutional connections.

The water system was originally a privately owned company, White City Water Company, Inc. (hereafter "Company") that had been providing water to the service area since approximately 1955. Residents of the service area formed WCWID, issued bonds, and acquired the Company in 1995. As an improvement district, members of the service area elect a Board of Trustees. The Company is now wholly owned by WCWID, and the Board of Directors of the Company consists of the elected Board of Trustees of WCWID. Because of the legal relationship by and between WCWID and the Company, the two entities work cooperatively together to conserve water and to meet the needs of WCWID's members. Whenever this plan references WCWID, it should be understood the reference encompasses both WCWID and the Company to the extent applicable to meet the requirements of the Act. WCWID customers are viewed as the owners of the water system as each monthly bill includes $17.00 per month base charge toward payment of the bonds issued by WCWID. Although WCWID has the ability to impose a property tax to meet some of its expenses, the Board of Trustees have voted though the years to have no property tax, but to rely solely upon cost- based rates.

The residents of WCWID, through its elected Board of Trustees, have expressed the view that they prefer to receive all their water service from WCWID's deep underground wells. WCWID has storage capacity, in the form of water tanks, to meet all of its residents' needs and is functionally separate from any other water system. WCWID does have contracts with the Jordan Valley Water Conservancy District ("JVWCD") and Sandy City ("Sandy") to receive water in case of emergency.

Unlike many areas of the State, WCWID is not presently receiving a significant portion of the county's residential, commercial, and industrial growth. Therefore, the challenges facing WCWID are not the same as other areas. Nonetheless, WCWID is committed to conserving water wherever possible in order to maintain the underground aquifers that provide WCWID's needs. Further, because WCWID is on the forefront of efforts to ensure a viable and abundant water supply for the entire Salt Lake Valley in the case of emergency, it is desirous to take all reasonable and rational steps necessary to not waste this most precious commodity - water.

WATER SUPPLY AND SOURCES

WATER TREATMENT, STORAGE, AND DISTRIBUTION

WCWID is not presently required to treat its existing water sources and much of the water is classified as being pristine. Therefore, no water treatment equipment or additives are part of WCWID normal operations. All water distributed by WCWID is considered culinary grade.

WCWID has water storage tanks with at total water storage capacity of 5 million gallons. Water storage capacity is critical to provide water volume and pressure to water system customers. The system is divided into three pressure zones.

The distribution system for delivery of water to WCWID's members consists of water lines of various sizes having a total length of approximately 56 miles. The age of the distribution system varies from 1 year to 60 years. WCWID has adopted a Capital Facilities Plan to guide it in pursuit of a pipeline replacement program to avoid water loss and disruption of water delivery to customers due to aging infrastructure.

WATER CONNECTIONS

Through much of WCWID's history the number of water connections within the service area has remained fairly stable, with most build out taking place east of 1300 East. In 1995, when WCWID first took over the Company's service area in 1995, there were 3,870 water connections. In 2003, WCWID and Sandy City legally adjusted the boundaries of their respective water service areas, which opened up some additional land that continues being developed within WCWID, but it is not anticipated the number of water connections will dramatically increase. As of 2021, there are 4,221 connections with most build out taking place east of 1300 East.

WATER TREATMENT

WCWID is not presently required to treat its existing water sources and much of the water is classified as being pristine. WCWID believes the protection of its water sources from environmental contamination is an essential part of any conservation plan and was instrumental in getting the Utah Legislature to adopt Utah Code Ann. Section 19-4-113 requiring "source protection" ordinances to be adopted within counties of the first and second class, including Salt Lake County. In addition, WCWID was the primary agency in Salt Lake County sponsoring the following study: Utah Geological Survey for Geologic Studies to Prepare Maps and Petition to the Utah Water Quality Board to Classify Ground-water Quality in the Principal Basin-fill Aquifer in Salt Lake Valley, Salt Lake County, Utah. It is not enough to simply conserve water; WCWID is committed to ensuring those water supplies remain pristine for future generations.

PRESENT WATER USE AND FUTURE WATER NEEDS

Water use varies from year to year based on weather and changing demographics of the population served. In that regard, some areas within the WCWID service area is seeing a change in resident make up from senior citizens to younger families. In addition, WCWID has encouraged its customers to be "water wise" in their use of water in order to avoid waste and unnecessary costs. In that regard, although WCWID has the ability to impose a property tax to meet some of its expenses, the Board of Trustees have voted through the years to have no property tax, but to rely solely upon cost- based rates. This rate structure encourages water conservation as residents monthly pay the full cost of water used.

The largest water user of the system, for example, uses approximately 2.47% of total water usage for a calendar year.

When all uses of culinary grade water were compared with the number of people living in WCWID in 2000, residents used approximately 207 gallons of water per capita per day (gpcd), which was considerably less than the then statewide average of 268 gpcd for treated water and 241 gpcd nationally. When that comparison was updated to 2009, WCWID residents used 199 gpcd, 2015 they used 192 gpcd, and in 2021 they used 180 gpcd. Again, WCWID's water use is less than other water systems. See, for example, Jordan Valley Water Conservation District's overall system average of 204 gpcd.

WATER CONSERVATION MEASURES, ISSUES, AND GOALS

WATER CONSERVATION MEASURES

WCWID's original Water Conservation Plan incorporated suggestions made by residents involved in a water conservation committee. Since then, WCWID continues to work with its residents and other agencies in determining ways to conserve water without risking water rights under the Utah Code. For example, although WCWID is a functionally separate water system, as defined in the Utah Code, it remains a member of the Jordan Valley Water Conservation District ("JVWCD") and supports the "Slow the Flow" (slowtheflow.org) campaign sponsored by JVWCD. Additional water usage conservation topics are included in Attachment 1 of this document.

Based upon its experience and previous Water Conservation Plans, WCWID has identified and prioritized the following issues that address immediate conservation goals and plans:

1. WCWID relies solely upon cost-based rates. This rate structure encourages water conservation as residents pay the full cost of water used. The Board of Trustees has raised water rates where necessary to meet expenses of the District and is committed to assess no property tax.
2. WCWID's water pricing and billing system has been modified to provide additional information to its customers to allow them to judge how their water usage varies from year-to-year and month-to- month. Additionally, WCWID bills show number of gallons used, a more common unit of measure understood by customers, instead of using the industry standard units of cubic feet.
3. WCWID has replaced water meters to allow more accurate water use reads and to give alerts to leaks that not only increase customer bills but also ultimately wastewater. When a leak is detected, customers are notified of the leak and WCWID provides assistance to help the customers identify the source of the leak and encourages them to repair the leak, whether in an irrigation/sprinkler line or a leaking faucet.
4. Infrastructures within the system, such as water distribution pipes, which are old, are being replaced, as funds are available. WCWID annually compares its water production reports to use reports to determine if water is being lost through leaking pipes or other causes and is committed to keep such loses to under 10% as recommended by various water organizations, such as the AWWA. In that regard, WCWID has adopted a Capital Facilities Plan to guide it in pursuit of a pipeline replacement program to avoid water loss and disruption of water delivery to the customers.

5. An educational program is being pursued to increase water wise use of landscaping. In addition, WCWID is part of the Slow the Flow education program (slowtheflow.org). As part of this program, free landscape consultations are available for residents to identify specific areas of water conservation in the resident's landscaping.
6. WCWID publishes a monthly newsletter that accompanies the billing statement and is posted on the District website. The newsletter includes topics such as: information on conservation measures that resident can accomplish around their own property and within their own homes, status of the water supply situation, and infrastructure condition and repairs.
7. WCWID has eliminated landscape watering between 10 a.m. and 7 p.m. to minimize water usage and to "practice what we preach" in implementing conservation measures. WCWID encourages all customers to voluntarily apply this conservation measure.

WATER CONSERVATION ISSUES

Water conservation has economic, political, and social implications for both WCWID and for its customers.

Water Rates: As discussed, residents purchased the Company in 1995 and formed WCWID. Therefore, it is a not for profit organization and only charges rates appropriate to cover a budget set annually. WCWID does not assess any property taxes and relies on cost-based rates for funding.

WCWID staff evaluate the current cost of water delivery service, ongoing system characteristics, past capital and operating costs, and proposed water rate schedule to provide an annual proposed budget to the Board of Trustees. WCWID charges a base cost rate per base water volume, regardless of the amount of water used below that base volume. Water volume used over the base volume is charged an overage rate for the additional water. WCWID has adopted a tiered rate system effective 9/1/2022.

Maintaining Water Rights: WCWID and other water agencies are concerned with the relationship of water conservation and the Utah legal doctrine regarding water rights, which states that unless water rights are used, they will be forfeited ("use or lose"). WCWID will work with other agencies and the State Engineer's office to ensure that water conservation is treated as a "beneficial use" of water rights. Further, WCWID is concerned with artificial barriers restricting the ability of WCWID and other agencies to lease water to other entities that may have need of such water. Those barriers need to be modified so that any extra water, from year to year, might be put to beneficial use. The sell or lease of water saved through conservation would generate income that could, in turn, finance other conservation measures, such as repair and replacement of aging infrastructure and meters.

WATER CONSERVATION GOALS

In addition to continuing the currently implemented conservation measures, WCWID strives for continued improvement in managing its water resources. WCWID has set the following goals as part of the conservation plan:

Maintain a Financially Viable Water System

WCWID is a unique water system as it reflects a conscious decision on the part of water users to purchase their own water system from a private company. Consequently, the members are very mindful of the system and are committed to do whatever is necessary to ensure its continuing viability. In that regard, although water rates may be used to encourage water conservation, too much conservation can result in a loss of revenue needed to run the system. Consequently, any water rate system adopted by WCWID must

ensure that no revenue shortfall will occur. At the same time, WCWID and its residents are committed to not waste water and to use it wisely.

Newly Adopted Rate Structure/ Tiered Rates

WCWID staff with the help of a residential rate committee underwent an extensive rate assessment and review. It was presented to the Board of Trustees and ultimately approved and adopted to go to a fully tiered rate structure. Base Rates have increased to help cover increasing daily operational costs as well as meet the needs of replacing aging infrastructure.

Residential:	**Base Rate**	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**
Year 1	$53.00	$2.00	$2.25	$2.50	$3.25
	First 5,000 included	5,001-30,000	30,001-60,000	60,001-90,000	90,001+
Year 2	$60.00	$2.00	$2.25	$2.50	$3.25
	First 5,000 included	5,001-30,000	30,001-60,000	60,001-90,000	90,001+
Commercial:	**Base Rate**	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**
5/8 X3/4" Meter	$60.00	$2.00	$2.25	$2.50	$3.25
		1,000-30,000	30,001-60,000	60,001-90,000	90,001+
1" Meter	$118.00	$2.00	$2.25	$2.50	$3.25
		1,000-30,000	30,001-60,000	60,001-90,000	90,001+
1 1/2" Meter	$235.00	$2.00	$2.25	$2.50	$3.25
		1,000-200,000	200,001-1,250,000	1,250,001-2,000,000	2,000,001+
2" Meter	$269.00	$2.00	$2.25	$2.50	$3.25
		1,000-200,000	200,001-1,250,000	1,250,001-2,000,000	2,000,001+
3" Meter	$423.00	$2.00	$2.25	$2.50	$3.25
		1,000-200,000	200,001-1,250,000	1,250,001-2,000,000	2,000,001+
4" Meter	$522.00	$2.00	$2.25	$2.50	$3.25
		1,000-200,000	200,001-1,250,000	1,250,001-2,000,000	2,000,001+

Tier rates are cost per 1000 Gallons

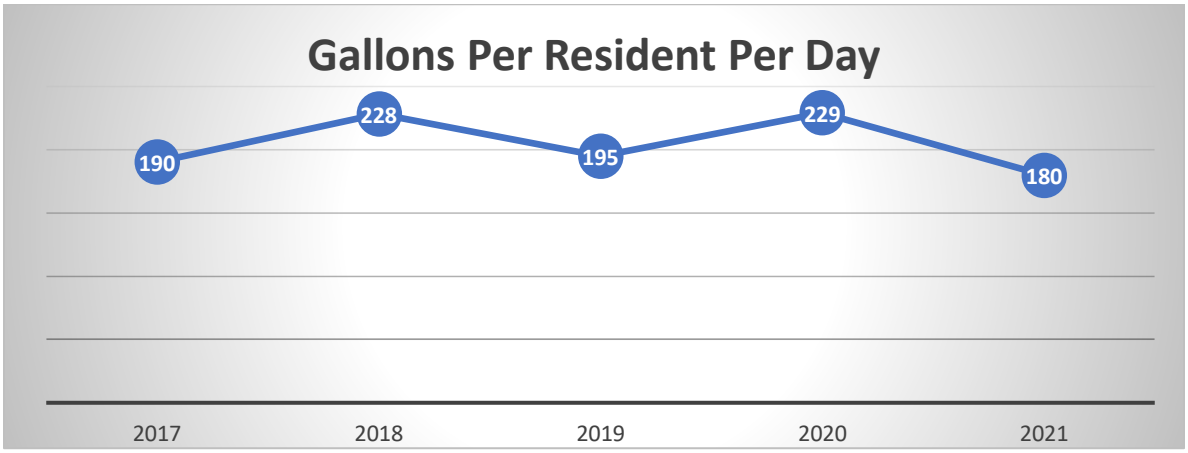
Any meter larger than a 4" will have Costs/Tier ranges defined at time of installation

Develop an Extreme Drought Water Plan for addressing water availability and usage during a drought emergency.

The geographical region where WCWID is located is experiencing extreme drought. WCWID will develop of a plan to address a drought driven water shortage. Part of the plan will address the scenario of a governing body (city, county, state, etc.) issuing mandatory water usage restrictions due to a water shortage that does not necessarily directly impact WCWIDs water supply.

Continue to Meet the regional goal

WCWID has met and exceeded the 2030 regional goal of 187 GPCD. As noted in the graph below in 2021 our Gallons Per Capita Per Day (GPCD) was below that goal with a recorded number of 180. To further help statewide conservation efforts, WCWID has set a goal of achieving an additional **10%** reduction in usage bringing our Gallons Per Capita Per Day down to **162.** WCWID believes with implementing a more aggressive tiered rate structure as well, as the additional listed tasks noted herein, this number can be achieved within the next five years. Progress will be recorded annually, and any further necessary steps will be taken to achieve our desired reduction in use.



Meter Replacement and Fixed Base Meter Reading

In 2008, WCWID underwent a systemwide meter replacement allowing for radio read meters. This involved replacing manual read meters and upgrading touch read meters to the radio read system. These newer meters have leak detection technology allowing us to alert customers of a potential leak on their water bill. WCWID has an annual budget of $75,000 for meter replacement to replace the converted meters, also ensuring all meters in the system are functioning properly.

WCWID is currently investigating the option of going to a fixed base meter reading system, this will allow residents to access real time usages and assess their own water use needs. Therefore, being more accountable for their individual water use and conservation efforts.

CONCLUSION

The WCWID Board of Trustees has determined that WCWID is presently in compliance with Utah Code, through implementation of conservation measures and ongoing goals towards increased conservation by the district and its customers. Primary conservation measure is the use of cost-based rates, no property tax and operations improvements, such as infrastructure replacement and improved metering. Secondary conservation measures include: educating customers about conservation measures and options through participation in the Slow the Flow program, the monthly newsletter, and additional water usage information and trends on customer's bills.

ATTACHMENT 1

Outdoor Water Use:

- Water landscape only as much as required by the type of landscape, and the specific weather patterns of your area. . Water audits may be obtained by calling JVWCD with whom WCWID has a contract.
- Do not water on hot, sunny, and/or windy days. . You may actually end up doing more harm than good to your landscape, as well as wasting a significant amount of water.
- A single lawn sprinkler spraying five gallons of water per minute uses 50 percent more water in just one hour than the combination of IO toilet flushes, two five-minute showers, two dishwasher loads, and one full load of laundry.
- Sweep sidewalks and driveways instead of using the hose to clean them off
- Wash your car from a bucket of soapy (biodegradable) water and rinse while parked on or near the grass or landscape so that all the water running off goes to beneficial use instead of running down the gutter to waste.
- Check for and repair leaks in all pipes, hoses, faucets, couplings, valves, etc. . Verify there are no leaks by turning everything off and checking your water meter to see if it is still running. . Some underground leaks may not be visible due to draining off into storm drains, ditches, or traveling outside your property.
- Use mulch around trees and shrubs, as well as in your garden to retain as much moisture as possible. . Areas with drip systems will use much less water, particularly during hot, dry and windy conditions.
- Keep your lawn well trimmed but longer and all other landscaped areas free of weeds to reduce overall water needs of your yard.

Indoor Water Use:

- About two-thirds of the total water used in a household is used in the bathroom. . Concentrate on reducing your bathroom use. . Following are suggestions for this specific area:

- Do not use your toilet as a wastebasket. . Put all tissues, wrappers, diapers, etc., in the trashcan.
- Check the toilet for leaks. . Is the water level too high? Put a few drops of food coloring in the tank. . If the bowl water becomes colored without flushing, there is a leak.
- If you do not have a low volume flush toilet, put a plastic bottle full of sand and water to reduce the amount of water used per flush. . However, be careful not to over conserve to the point of having to flush twice to make the toilet work. . Also, be sure the containers used do not interfere with the flushing mechanism.
- Take short showers with the water turned up only as much as necessary. . Turn the shower off while soaping up or shampooing. . Install low flow showerheads and/or other flow restriction devices.
- Do not let the water run while shaving or brushing your teeth. . Fill the sink or a glass instead.
- Opportunities to conserve water also exist in other areas of the home:
- When doing laundry, make sure you always wash a full load or adjust the water level appropriately if your machine will do that. . Most machines use 40 gallons or more for each load, whether it is two socks or a week's worth of clothes.
- Repair any leak within the household. . Even a minor slow drip can waste up to 15- 20 gallons of water a day.
- Know where your main shutoff valve is and make sure that it works. . Shutting the water off yourself when a pipe breaks or a leak occurs will not only save water, but also eliminate or minimize damage to your personal property.
- Keep a glass of water in the refrigerator for a cold drink instead of running water from the tap until it gets cold. . You are putting several glasses of water down the drain for one cold drink.
- Stopper the sink when rinsing vegetables, dishes, or anything else; use only a sink full of water instead of continually running water down the drain.