

RESOLUTION NO. R21-47

A RESOLUTION OF THE SYRACUSE CITY COUNCIL AUTHORIZING THE ADOPTION OF THE 2021 WATER CONSERVATION PLAN FOR SYRACUSE CITY, UTAH.

WHEREAS, The State of Utah Department of Natural Resources, Division of Water Resources requires Syracuse City to submit an updated Water Conservation Plan, in compliance with the Utah Water Conservation Plan Act (UCA 73-10-32); and

WHEREAS, the purpose of the Water Conservation Plan is to reduce the per capita water use in order to support the statewide goal. The water conservation plan is a written document that contains existing and proposed water conservation measures describing what will be done by retail water providers, water conservancy districts, and the end user of water to help conserve water and limit or reduce its use in the state in terms of per capita consumption so that adequate supplies of water are available for future needs.

WHEREAS, the Water Conservation Plan addresses water supplies and consumption for both indoor and outdoor use.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF SYRACUSE CITY, STATE OF UTAH, AS FOLLOWS:

Section 1. That the City Council of Syracuse affirms that it has reviewed and accepted the 2021 Water Conservation Plan.

Section 2. This resolution shall become effective immediately upon its passage.

PASSED AND ADOPTED BY THE CITY COUNCIL OF SYRACUSE CITY, STATE OF UTAH, THIS 12th DAY OF OCTOBER, 2021.

SYRACUSE CITY

ATTEST:


Cassie Brown (Nov 15, 2021 12:28 MST)

Cassie Z. Brown, City Recorder


By: Michael Gailey (Nov 15, 2021 12:07 MST)

Mike Gailey, Mayor



SYRACUSE CITY CORPORATION

Syracuse, Utah



Water Conservation Plan

October 2021

SYRACUSE CITY CORPORATION

Syracuse, Utah

Water Conservation Plan

October 2021

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SYRACUSE CITY CORPORATION
Water Conservation Plan

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1.0 System Profile and Water Supply

1.1 Introduction

In response to the rapid growth occurring throughout the State of Utah, Syracuse City citizens and leaders are becoming concerned for the future cost and availability of water supply. A similar concern has been demonstrated by the state legislature in the Water Conservation Plan Act (House Bill 71) passed and revised in the 2004 legislative session (Section 73-10-32 Utah Code Annotated). This water conservation plan is written to address the concerns of leaders and citizens of both Syracuse City and the State of Utah.

1.2 Location and Land Use

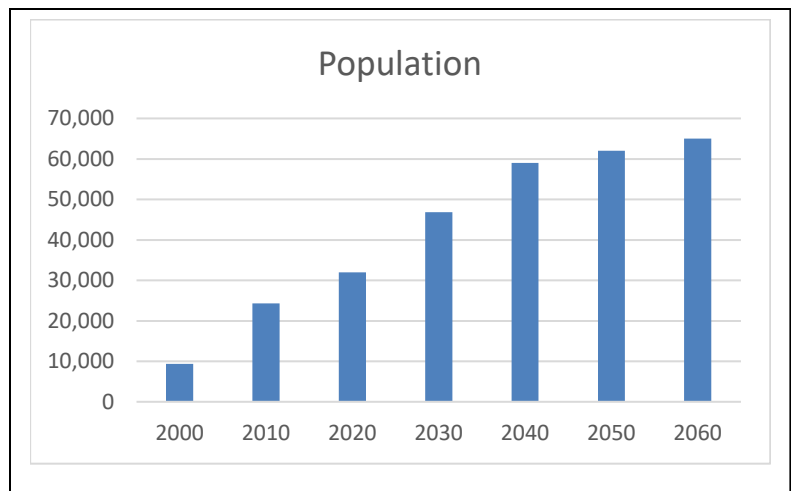
Syracuse City is in Davis County on the shore of the Great Salt Lake. Neighboring cities are Layton, Clearfield, and West Point situated along the north and east borders of Syracuse. Unincorporated county lands lie south and west of Syracuse where development is sparse or non-existent.

Land use in Syracuse is predominantly residential. There are some agriculture, commercial, and industrial uses that currently exist. As regional transportation routes continue to expand through the city in the future, residential and commercial growth is anticipated.

Current population is approximately 32,000. A table and graph showing population growth and projection is shown.

Table 1.2A: Population

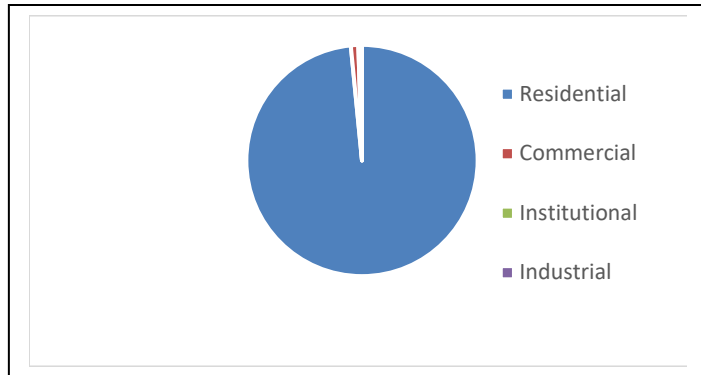
Year	Population	Change
2000	9,398	
2010	24,331	158.90%
2020	32,000	31.52%
2030	46,860	46.44%
2040	59,000	25.91%
2050	62,000	5.08%
2060	65,000	4.84%



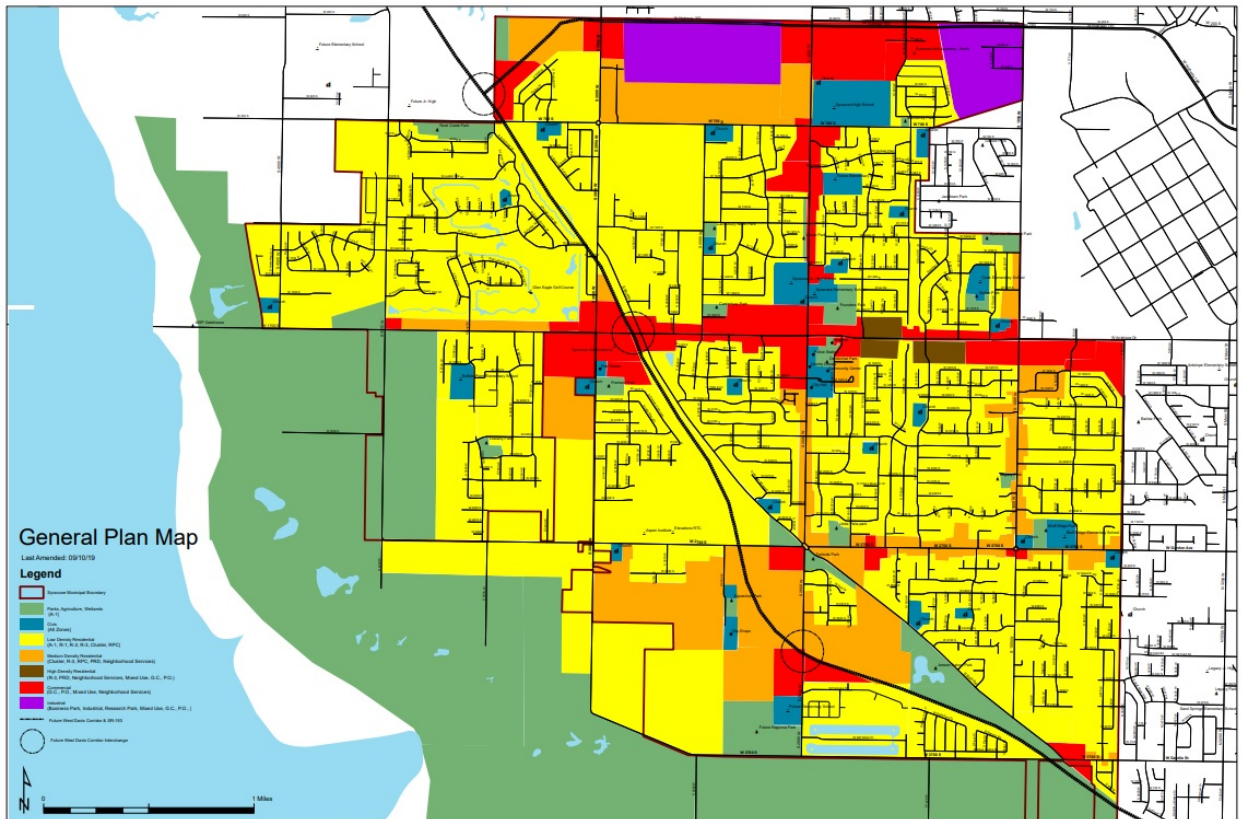
The number of current water users are predominantly residential and are categorized by type as shown.

Table 1.2B: 2020 Water Users

	Culinary	Secondary
Residential	8828	8543
Commercial	93	93
Institutional	34	34
Industrial	12	12
Total	8967	8682



A map showing the water service area includes everything inside the boundaries of the city and nearby unincorporated areas. Everything shown in color is inside the water service area.



1.3 Culinary Water Sources

Syracuse City receives culinary water from two sources: Weber Basin Water Conservancy District (WBWCD) and Well #3. This has supplied all of the water required to meet demands on the culinary system. A summary of culinary water source limits based upon current contract limits with Weber Basin and the maximum approved yield for Well 3 are shown in Table 1.3A.

Table 1.3A: Culinary Water Limit

Source	gpm	cfs	Acre-feet
Weber Basin	2,400	5.35	3,874
Well 3	1,933	4.31	3,120
Total	4,333	9.65	6,994

Under current water rights, Syracuse is entitled to withdraw 2,193 gpm from underground aquifers. The safe yield of the active well is 1,933 gpm, the pump is rated at a maximum flow rate of 1,600 gpm. Including our contracted water of 2,400 gpm from Weber Basin, the total water entitlement is 4,593 gpm. This flow converts to 7,412 acre-feet annually.

Table 1.3B: Culinary Water Rights

Well	Water Right	cfs	gpm	Acre-feet
1	31-2207	0.21	94	151.7
1	31-3203	0.35	157	253.4
2	31-0745	1.3	583	941
3	31-2768	0.5	224	361.6
3	31-3524	0.027	12	19.4
4	31-3996	2.5	1122	1,811
Subtotal		4.887	2193	3538
Weber Basin		5.348	2400	3874
Total		10.235	4593	7412

Source Summary (Displayed in Acre Feet)

Year	Status	2020	2019	2018	2017	2016
Bought from Weber Basin WCD (WS003)		1,913.41	1,756.40	1,786.71	1,718.41	1,632.10
Well 3 Replacement (WS004)		344.17	320.50	227.17	227.16	215.49
Total Per Year		2,257.58	2,076.90	2,013.88	1,945.57	1,847.59

1.4 Secondary Water Sources

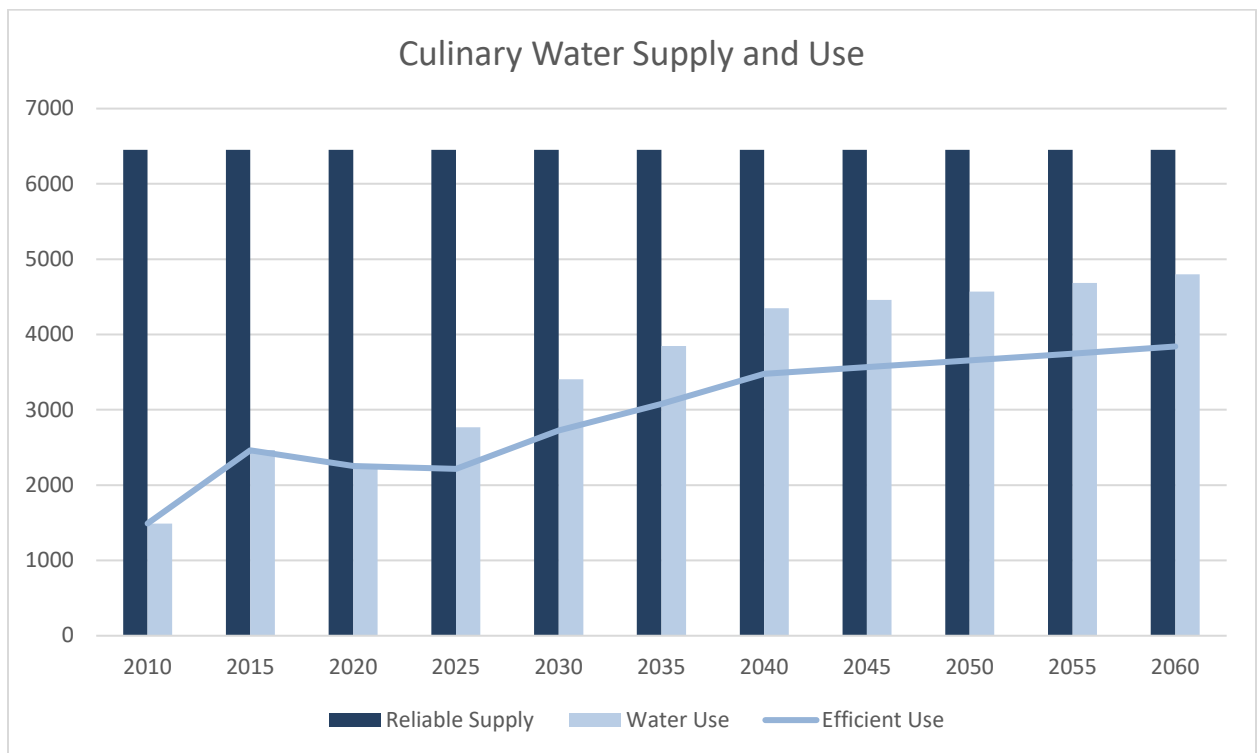
Syracuse City owns and operates a secondary water system to provide irrigation for outdoor watering. Secondary water comes from contracted water, surface water rights, and irrigation shares, as shown in Table 1.4A.

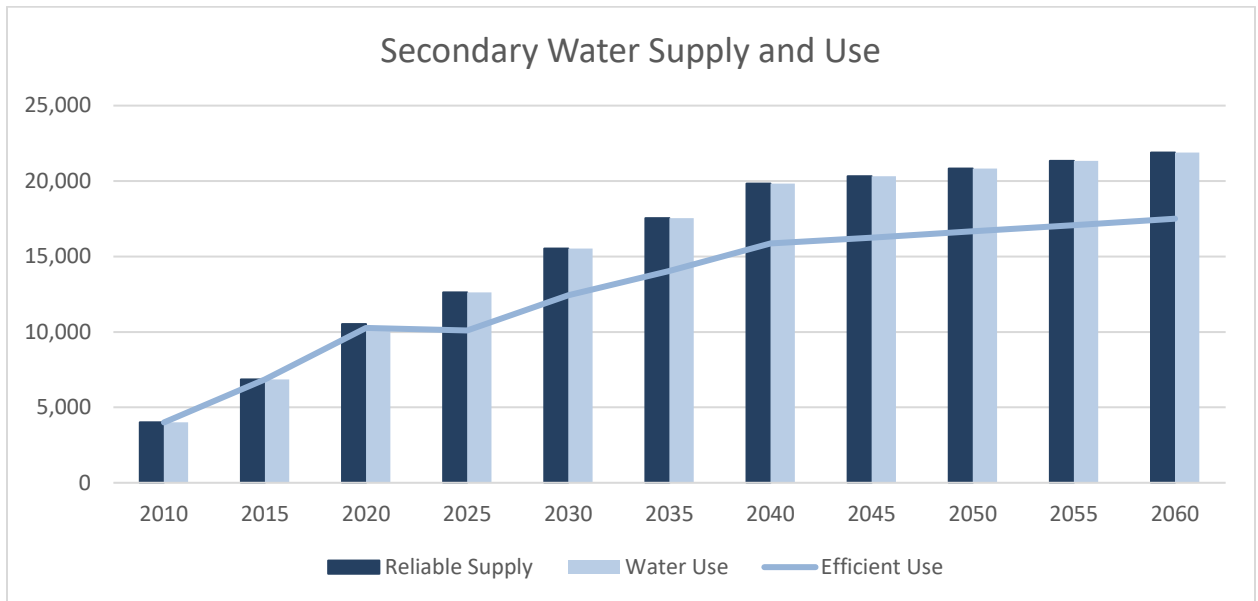
Table 1.4A: Secondary Water Limit

	Davis & Weber			Weber Basin			Water Right	Total	
	West Branch	Clearfield Irr	Hooper Irr	Layton Canal	Contract	District 3	D&W Shares	31-5207	Ac-ft
Shares	735.5	210	79.5	1742.5	1112.5	33.1	25	3620	
AF/Share	6	6	3	1	1	1	6	1	
Ac-ft	4,413.0	1,260.0	238.5	1,742.5	1,112.5	33.1	150.0	3,620.0	12,569.6

1.5 Water Supply and Use

The water supply and use for culinary and secondary systems are indicated on the following charts.





It is anticipated that the culinary source will be adequate to meet build-out conditions based upon current population projections. If population continues to rise beyond 60,000 due to city boundary expansions or density increases in the General Plan, then a reliable water supply and water use must be evaluated to offset the demand.

2.0 System Measurement and Water Loss Control

2.1 Culinary Water Measurement

There are two methods of gathering water use data throughout the water system: touch-read and radio-read. The system is converting over from touch-read to a radio-read network over a period of eight years.

Approximately 40% of the meters are now on radio-read and are read monthly year-round (3651/9046). All touch-read culinary water is metered and measured monthly April through October each year. Touch-read meters are not read during the winter months due to snow covering the meters. The city is converting approximately 1000 meters each year to

radio-read. It is estimated that the conversion will be complete by 2026. All new installations are required to install radio-read meters. All radio-read meters are being measured and reported monthly throughout the year. The battery life of the radio-read meters last 10 years, so it is estimated that replacement of the radios will occur on that same time line. Calibration of the meters occurs at installation. Calibration is also tested at any time upon request from the water user or upon request from billing personnel.

2.2 Secondary Water Measurement

Secondary water has always been measured at the source, but not at the users end. Beginning April 2019, all new installations included meters. This was a result of legislation that passed in 2019 (SB52) to mandate the metering of secondary water. Currently there is approximately 4% meters (335/8752) currently in service. These meters are read monthly by radio-read and reported to the user. Legislation passed in 2021 (SB199) requires all services to be converted to meters by December 31, 2040. At today’s costs it is estimated to amount to approximately \$13M, which is difficult to achieve due to rising costs and limited funding.

2.3 Billing Structure

Culinary water has a tiered billing structure that is established to encourage water conservation. The rates increase with greater water consumption.

Resident Rates with Use of Secondary Water System

Water Usage	Rate
First 4,000 gallons	\$20.04
4,001 to 8,000 gallons	\$1.04
8,001 to 12,000 gallons	\$3.24 per 1,000 gallons
12,001 to 16,000 gallons	\$3.40 per 1,000 gallons
16,001 to 20,000 gallons	\$3.59 per 1,000 gallons
Above 20,000 gallons	\$4.19 per 1,000 gallons

Resident Rates Without Use of Secondary Water System

Water Usage	Rate
First 4,000 gallons	\$20.04
4,001 to 8,000 gallons	\$1.04
8,001 to 12,000 gallons	\$3.56 per 1,000 gallons
12,001 to 16,000 gallons	\$3.74 per 1,000 gallons
16,001 to 20,000 gallons	\$3.95 per 1,000 gallons
Above 20,000 gallons	\$4.61 per 1,000 gallons

Non-residential rates

Water Usage	Rate
First 4,000 gallons	\$26.04
4,001 to 8,000 gallons	\$1.04
8,001 to 12,000 gallons	\$3.89 per 1,000 gallons
12,001 to 16,000 gallons	\$4.08 per 1,000 gallons
16,001 to 20,000 gallons	\$4.31 per 1,000 gallons
Above 20,000 gallons	\$5.03 per 1,000 gallons

Business Rates

Water Usage	Rate
First 10,000 gallons	\$20.04
10,001 to 30,000 gallons	\$2.00 per 1,000 gallons
30,000 to 40,000 gallons	\$2.40 per 1,000 gallons
Above 40,000 gallons	\$3.00 per 1,000 gallons

Secondary water is billed at a flat rate monthly over 12 months. When the system has over half of the users being metered, consideration of moving to a tiered rate may be desirable.

Secondary Water - 0.75-inch Line	\$16.81
Secondary Water - 1.00-inch Line	\$22.81

2.4 Leak Detection

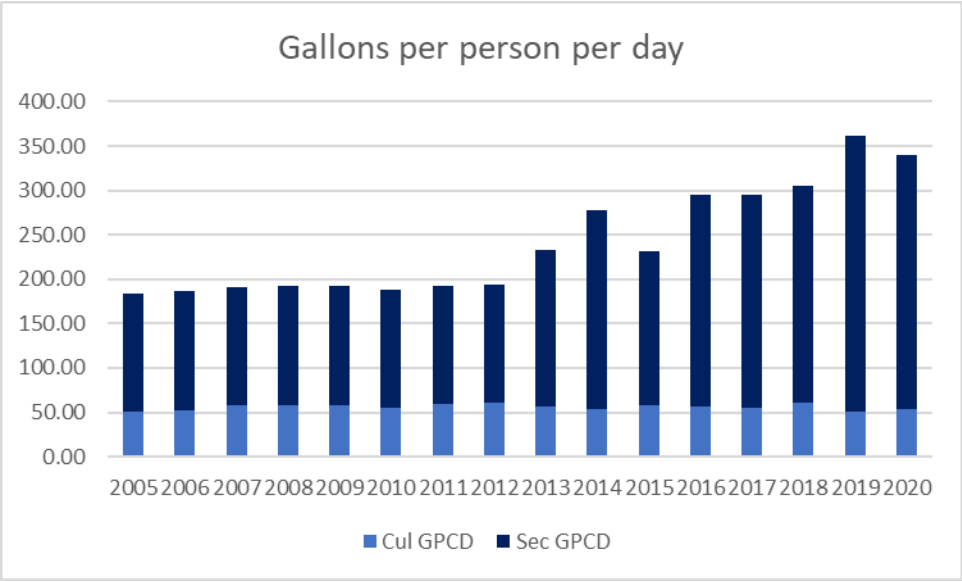
Leak detection on both culinary and secondary systems occur on a reactive basis. Employees are trained to observe unusual water conditions that appear on the ground surface either by pooling or flowing. Residents report unusual water conditions that they observe to public works. Support for water leaks is always available. An after-hours public works emergency phone number is advertised in magazine articles monthly and on the city website. The phone number is also part of a phone tree for those who call the city after hours. Response to all water leaks occur immediately and take the highest priority. Repairs on culinary system begin as quickly as a crew can be mobilized, which is no less than 24 hours. For secondary system repairs, the valve is shut off immediately to prevent any additional damage from leaks. If the repair is the resident's responsibility, then the valve remains closed until the resident calls back after the repair is done. If the repair is the city's responsibility, it will begin on the next business day.

3.0 Water Use

3.1 Indoor and Outdoor Water Evaluation

Syracuse has separate systems for indoor (culinary) and outdoor (secondary) watering. Since the secondary system has not been metered, it is not possible to categorize residential, commercial, institutional, and industrial separately. The totals for each year have been combined. The data in the chart comes from the best available data that has been reported annually.

Year	Indoor	Outdoor	Total	Population	Cul GPCD	Sec GPCD	Total GPCD
2005	1,178.83	3,150.00	4,328.83	21,000	50.11	133.90	184.01
2006	1,299.51	3,300.00	4,599.51	22,000	52.73	133.90	186.63
2007	1,447.64	3,375.00	4,822.64	22,500	57.43	133.90	191.34
2008	1,494.17	3,450.00	4,944.17	23,000	57.99	133.90	191.89
2009	1,565.17	3,600.00	5,165.17	24,000	58.22	133.90	192.12
2010	1,490.72	3,650.00	5,140.72	24,331	54.69	133.92	188.61
2011	1,618.75	3,675.00	5,293.75	24,500	58.98	133.90	192.88
2012	1,671.59	3,700.00	5,371.59	24,756	60.28	133.42	193.70
2013	1,581.63	4,952.00	6,533.63	25,118	56.21	175.99	232.20
2014	1,559.92	6,466.00	8,025.92	25,775	54.03	223.94	277.97
2015	1,710.19	5,180.00	6,890.19	26,639	57.31	173.58	230.89
2016	1,736.48	7,329.00	9,065.48	27,395	56.58	238.82	295.40
2017	1,756.47	7,641.00	9,397.47	28,407	55.20	240.12	295.31
2018	2,013.87	8,085.00	10,098.87	29,507	60.93	244.60	305.52
2019	1,735.20	10,584.48	12,319.68	30,400	50.95	310.81	361.76
2020	1,918.05	10,274.00	12,192.05	32,000	53.51	286.61	340.11



Indoor watering remains steady at approximately 50 gallons per person per day. Outdoor watering continues to increase except for 2015 which was a drought reduction year.

3.2 Water Education

Syracuse City values the practice of educating the public for water conservation and will continue to do so by using many of the methods described in the contingency plan. The city provides information available through local water suppliers as well as the State. These are shared as links on the city's website.

Some tips for outdoor water use may include:

- Water landscape only as much as required by the type of landscape, and the specific weather patterns of your area, including cutting back on watering times in the spring and fall. We encourage our customers to utilize the weekly lawn watering guide located at www.conservewater.utah.gov.
- Group plants in terms of water need, and zone sprinkler systems accordingly.
- Encourage customers to alter parking strips by allowing more water-wise plantings.
- 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.
- 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 and all other landscaped areas free of weeds to reduce overall water needs of your yard.

Some tips for indoor water use may include:

- Do not use your toilet as a wastebasket. Put all tissues, wrappers, diapers, cigarette butts, 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.
- 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 to 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 jar 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.
- Plug the sink when rinsing vegetables, dishes, or anything else; use only a sink full of water instead of continually running water down the drain.

4.0 Conservation Practices

4.1 Water Use Reduction Goal

Utah Division of Water Resources has finalized the state’s newly created water conservation goals which are established for nine regions around the state for municipal and industrial (M&I) water conservation. M&I includes residential, commercial, institutional, and industrial water use, and excludes agriculture, mining, and power generation. These goals are created for nine regions around the state and consider climate, elevation, and each region’s unique characteristics and needs. This is the first-time conservation goals have been established on a regional level and they build on the previously established statewide goal of reducing per-capita use by 25% by 2025. Syracuse is in the Weber watershed. The reduction goal is 20% less than 2015 to be achieved by 2030. The reduction goal increases over time as shown:

Table 7-1: Regional M&I 2030 Water Conservation Goals and Future Goal Projections

Region	2015 Baseline (gpcd)	2030 Goal		2040 Projection		2065 Projection	
		Goal (gpcd)	Reduction from 2015	Projection (gpcd)	Reduction from 2015	Projection (gpcd)	Reduction from 2015
Bear River	304	249	18%	232	24%	219	28%
Green River	284	234	18%	225	21%	225	21%
Lower Colorado River North	284	231	19%	216	24%	205	28%
Lower Colorado River South	305	262	14%	247	19%	237	22%
Provo River	222	179	20%	162	27%	152	32%
Salt Lake	210	187	11%	178	15%	169	19%
Sevier River	400	321	20%	301	25%	302	24%
Upper Colorado River	333	267	20%	251	25%	248	25%
Weber River	250	200	20%	184	26%	175	30%
Statewide	240	202	16%	188	22%	179	26%

Note M&I = municipal and industrial; gpcd = gallons per capita per day based on permanent population. Reported per capita use includes all residential, commercial, institutional, and industrial uses averaged over the permanent population in each region.

As indicated in “Utah’s Regional M&I Water Conservation Goals” report prepared for Utah Division of Water Resources in November 2019: “The goal setting process considered applicable water conservation practices and available water conservation potential. In the case of areas with above-average goals (by percentage), the higher goals are usually the result of above-average conservation potential. For example, consider the Weber River Region, a region with one of the higher overall goals (by percentage). This region has the highest overall percentage of unmetered secondary use. Thus, implementing secondary meters (one of the first conservation practices recommended for implementation) results in more conservation in this region than any other. The 2030 goal will be the primary focus for action over the next decade with the 2040 and 2065 projections providing guidance for planning and future expectations. While 2065 is the planning horizon for this study, M&I water conservation will need to continue thereafter.”

4.2 Water Use Reduction Goal for Syracuse

Based upon the water use data for both indoor and outdoor water since 2015, the overall use varies between 230 and 360 gallons per capita each day (gpcd). Recommendations in the “Utah’s Regional M&I Water Conservation Goals” report from November 2019 indicates the need to reduce to using 200 gpcd as a 20% reduction from the average of 250 gpcd in 2015 in the Weber Watershed.

2015 was a drought reduction year for water that was allocated at lower volumes for outdoor watering. Using a drought year for a baseline may not be prudent since it was a mandated reduction of water use. However, the average over the past five years is 320 gpcd. A 20% reduction would be 256 gpcd by the year 2030.

Syracuse will strive to achieve a reduction of 20% gpcd by 2030. This will bring Syracuse to a total water use for indoor and outdoor to 256 gpcd.

This is approximately 2.2% reduction each year. So 2026 is estimated at 285 gpcd.

4.3 Implementation Plan

A plan is in place to increase water conservation in Syracuse. It is described in detail below. It includes the Best Management Practice, a timeline for

action, an evaluation process to measure progress, and contact names of staff that assist with that effort.

BMP	2026 Goal	Timeline	Contact
Parkstrip conversion to xeriscape "Flip the strip"	43,560 sf	annually	Kathryn Lukes
Secondary water meters	300 new homes	annually	Holly Craythorn
Magazine articles on water conservation	one article published	quarterly	Kathryn Lukes
Culinary meter conversion to radio read system	1000 meters	annually	Holly Craythorn

5.0 Conservation Best Management Practices

Water conservation goals that will be implemented in the next five years are indicated here. A summary of the progress made on previous goals are also included.

5.1 Culinary Radio-read Meters

Consider a method to incorporate radio-read meters only on the culinary water system with installations on new construction. This will improve leak detection by monitoring continual water flow in the meter and if desired, can be set up to send signals to either the water purveyor or the water user to check on unusual conditions that may exist. This will also improve the ability to check for cross contamination by detecting back flow that may occur through the meter, which can also be set up to send a signal to the water purveyor. Another benefit will allow the water user the ability to track water usage upon demand, which may generate greater interest in individual conservation measures of culinary water use.

This goal is currently happening. The conversion will occur over time. This year the culinary water system is approximately 40% complete. It is anticipated to be complete by 2026.

5.2 Ordinances

Ordinances supporting the effort to conserve water by prohibiting waste are referenced in Title 4.

4.15.410 Waste prohibited. [culinary water]

All users of water service shall be required to keep their sprinklers, faucets, valves, hoses and all apparatus connected to the water system in good condition at their own expense and all waterways closed when not in use. No person, unless authorized by the City in accordance with this chapter, shall turn on or discharge water from any fire hydrant, and no water user or other person shall waste water or allow it to be wasted by imperfect stops, taps, valves, leaky joints or pipes, or to allow tanks or watering troughs to leak or overflow, or to wastefully run water from hydrants, faucets, basins, sinks, or other apparatus, or to use any water from the water system except for culinary and domestic purposes, including lawn sprinkling, unless so authorized by the City, or to use the water for purposes other than those for which he or she has paid, or use water in violation of the rules and regulations adopted by the City Council. [Ord. 12-07 § 1 (Exh. A); Code 1971 § 4-03-410.]

The ordinance for secondary water was updated Jan 10, 2017 to include enforcement of wasteful watering. It also added a requirement for owners of large properties to submit a water conservation plan to the city. In April 2021, the council approved Resolution R21-15 to enact the enforcement this year due to drought conditions. This was in response to Executive Order 2021-7 issued from Governor Spencer Cox regarding drought conditions throughout Utah in 2021. The current ordinance is shown:

4.25.130 Waste prohibited.

(A) The waste of City-provided water for any purpose, including landscape irrigation, is hereby declared to be in detriment to the public health, welfare, and safety of the community.

(B) Mandatory Water Restrictions.

(1) Upon request by the Public Works Department, the City Council, following a public meeting, may enact a resolution restricting the use of pressure-irrigation water:

- (a) During specific times of the day;
- (b) On certain days of the week, with addresses or types of uses being assigned different watering schedules;
- (c) Above a certain volume per acre; or
- (d) In any other manner necessary to preserve the integrity of the pressure-irrigation system and ensure equitable distribution among all users.

(2) Mandatory water restrictions may be appropriate due to:

- (a) Reduction in water volume delivered by water purveyors to the City, due to drought conditions;
- (b) Reduced tank or reservoir levels, or reduced pressure in the system;
- (c) Anticipated severe drought during a watering season; or
- (d) Evidence submitted by the Syracuse City Public Works Department indicating that restrictions are necessary.

(3) Notice of mandatory water restrictions shall be expeditiously sent to water users, such as through the City website, mailed notices, social media posting, electronic mail, and posting at City facilities.

(C) For purposes of this section, a person wastes water when any of the following apply to their use of City-provided water:

- (1) The person uses outdoor irrigation in violation of a mandatory water restriction imposed by the City Council;

(2) The person irrigates during the hours of 10:00 a.m. and 6:00 p.m., unless otherwise excepted as provided in subsection (E) of this section;

(3) When, due to outdoor irrigation, water pools upon neighboring properties or in streets or storm drains for a period of greater than 10 minutes;

(4) When City-provided water, as a result of overuse or overwatering by the property owner, causes damage to neighboring properties; or

(5) When a user has been notified of deficient conditions in the user's water system as provided in subsection (D) of this section, has failed to make repairs to those systems within 15 days' notice, and water has escaped the system because of that deficiency.

(D) It shall be unlawful for any pressure irrigation water user to allow water to be wasted, by imperfect stops, taps, valves, leaky joints or pipes, or to allow tanks or watering troughs to leak or overflow, or to wastefully run water from hydrants, faucets, valves, or other apparatus.

(E) This section only applies to pressure irrigation water provided by the City. It does not apply to the use, storage, or waste of water purveyed through other entities directly to the user.

(F) The following are not violations of this section:

(1) Watering necessary to establish new gardens or landscaping, such as sod or grass seed;

(2) Attended spot-watering using a hose; and

(3) Incidental use for purposes of diagnostics or maintenance of irrigation systems.

(G) Enforcement of Mandatory Water Restrictions. In years during which the City Council has, by resolution, instated mandatory water use restrictions, the following enforcement actions may be taken:

(1) A person who is found to be wasting water for the first time during a calendar year shall be issued a written warning, which warning shall provide notice of potential penalties and the eventual loss of secondary water use on the property.

(2) A person who has previously had a warning issued against their property during a calendar year, and who is found to be wasting water a second time, may be issued a civil citation requiring them to pay \$100.00.

(3) A person who has previously had a citation issued against their property during a calendar year, and who is found to be wasting water, may be issued a civil citation of \$250.00.

(4) A property for which two citations have been issued during a calendar year, and on which a person is found to be wasting water, shall have secondary water service terminated for the remainder of the calendar year. This section shall not prohibit a new owner from reconnecting service upon proof of change in ownership.

(5) Failure to pay a civil fine associated with water waste, or to make satisfactory payment arrangements with the Utility Billing Department, within 30 calendar days of service of the citation, shall result in the termination of secondary water until the fine and applicable reconnection fees are paid. Notice that services will be terminated for nonpayment of the civil fine shall be printed on each civil citation issued.

(H) Notice.

(1) Warnings may be issued by hanging notices on the front door of the residence or in another prominent location on the property.

Personal service is not required, and failure to receive the warning shall not be a defense to future civil penalties or shut-off.

(2) Citations may be served by any of the following methods:

(a) Personal service upon an adult who resides at a residence, is employed at a business, or is listed as an agent for the property owner; or

(b) By posting in a prominent place, such as upon a front door or fence.

(3) A copy of the citation shall also be mailed, return service requested. Certified mail is not required.

(4) Shut-off of pressure irrigation water shall proceed in accordance with practices established in SCC 4.25.100.

(I) Appeal.

(1) A person who has been issued a citation or shut-off notice may appeal that decision by filing a written notice of appeal, which appeal shall be heard by the City Council at its next regular meeting, provided the appeal is filed at least five calendar days prior to the Council meeting. A pending appeal stays shut-off action.

(2) Failure to file a written appeal within 14 calendar days from the date of the citation or shut-off notice shall be deemed a waiver of the right to appeal the citation or notice.

(3) A person who is the subject of a citation or shut-off notice shall be entitled to be represented by counsel or another representative, shall have the opportunity to present evidence, and shall be permitted to cross-examine any witnesses presented by the City. The

proceedings are designed to be informal in nature, and court rules do not apply.

(4) No appeal is available for warnings, and an appeal of shut-off due to nonpayment is limited only to whether the appellant tendered timely payment. [(Ord. 17-02 § 1 (Exh. A); Ord. 12-07 § 1 (Exh. A); Code 1971 § 4-05-130.]

4.25.140 Annual conservation plan for large-area property owners.

(A) For purposes of this section, “large-area properties” means:

(1) Developed properties within the City that exceed three acres in area, or

(2) Properties owned by a homeowners’ association within a subdivision which exceed a combined total area of three acres.

“Large-area properties” does not include single-family home parcels, property located within the agricultural zone, or a property that does not receive pressure irrigation services from the City.

(B) Owners of large-area properties shall be required to maintain a current contact person, telephone number, mailing address, and electronic mail address with the City’s Public Works Department.

(C) In the case of homeowners’ associations, these entities are required to register with the Utah State Department of Commerce, as provided in Utah law.

(D) Owners of large-area properties shall be required, before May 15th on an annual basis, to submit a conservation plan to the City’s Public Works Department with the following elements:

(1) The property’s programmed or planned watering schedule, indicating days of the week and hours per day at each station;

(2) Affirmation that the property owner will comply with any watering restrictions which may be made mandatory by the Council, pursuant to this chapter;

(3) A maintenance and repair plan for broken or malfunctioning systems; and

(4) Affirmation of periodic inspection and adjustment of watering heads.

(E) The owner of a large-area property is not required to file a new conservation plan, if that owner submits, within eight months prior to the due date, a written statement that, since the date of the last submitted plan, there have been no changes to the conservation plan or to contact information.

(F) Failure to comply with the provisions of this ordinance may result in the same penalties established in SCC 4.25.130. [Ord. 17-01 § 1 (Exh. A).]

5.3 Water smart clocks

The city is adding water smart clocks to all of the city parks and buildings. Weather sensors on the water smart clocks can override the set timer by temporarily turning sprinklers off. Consideration may be given to incentivize outdoor watering with water smart clocks for other users.

All city parks have smart clocks except three. It is anticipated that the remaining three will be in place by 2023. Other city owned parcels such as detention basins and roundabouts are under consideration for smart controllers based upon technology availability.

5.4 Xeriscape

Small areas of land that the city maintains yet have little value to the public have been completed by xeriscape. This practice should continue with new development or redevelopment.

Remove unusable turf area behind city hall to low water plantings and rock. New parks maintenance building will be constructed by 2022. It will have low water plantings and xeriscape.

Jensen Park removed a section of turf along the shoreline and will replace it with low water plantings.

Areas in parks can be evaluated for unusable turf areas that could be converted to low-water plantings.

A broadcast application of a wetting agent to retain moisture in turf areas can be considered for park lands

Roundabouts will have xeriscape.

The cemetery and the expansion area could consider xeriscape in areas where no burials are planned or existing.

5.5 Reclaimed Water

The city may consider the option to reclaim treated wastewater from the treatment plant. Once treated to a Type 1 level, the water may be used for secondary watering uses.

The cost for this option outweighs the benefit. Although this could be considered one day in the long-term future.

5.6 Public Education

The cost of materials is reasonably small. These include items such as printed materials, handouts, demonstration materials, and such. Over a one-year period, the cost for materials may range from \$0.10 to \$0.20 per capita.

The benefit of public education is optimizing the peak demands in the system as well as the ability to accommodate increased population. As population increases over time, the cost of water increases.

5.7 Supply and Demand Accuracy

The pump outflow that conveys water at every secondary water reservoir now has meters. This was accomplished in 2020. The benefit to increasing accuracy improves system optimization.

5.8 Secondary Metering

According to Utah Law, Syracuse must convert all unmetered secondary water to meters by Dec 31, 2040. There are currently approximately 8400 unmetered connections. Syracuse must rely upon financial assistance to accomplish this task. In today's dollars it amounts to approximately \$13M. Raising rates that exceed the culinary rates will defeat the purpose of providing low-cost untreated water to users. Syracuse desires to keep secondary water rates low to reduce the risk of cross connections to the culinary water system.

New parks and modified parks will have meters installed at the same time the project is in construction.

5.9 Secondary Water Season

The secondary water season follows the calendar dates established by water suppliers. Although it has been shortened in years when water supplies are diminished, it most typically is April 15th to October 15th each year. Most recently, the season ended on October 1st in 2013, 2015, and 2016. In 2021, Syracuse set the season May 1st to September 20th to save water for the hotter parts of the season.

5.10 Ditch bank maintenance

Vegetation such as phragmite that grow along ditch banks are high water users. Ditch banks and streambeds that deliver water to the system are kept mowed and sprayed with herbicide to prevent water losses.

5.11 High culinary consumption

Every month, the culinary water use is reviewed for unusually high consumption. Public works is sent out to check the meter for accuracy. If the meter is reading accurately, then the resident is contacted to discuss the high use to determine if it is expected or not. Swimming pools, pressure washers or leaky toilets are examples of possibilities. Doing this helps the

water user and the water supplier keep facilities properly maintained and prevents water loss.

5.12 Park strip conversion

Syracuse is encouraging the practice to convert high water use landscapes in park strips to low-water or no-water landscapes. Much of the water used in park strips overspray onto hard surfaces and end up in the storm drain. Reducing this potential waste can help to alleviate wasteful watering practices.

Syracuse has an incentive program in place as an in-kind labor to excavate grass in park strips of single-family home neighborhoods at no charge. This is a new program that is becoming successful.

5.13 Improved accounting of unmetered culinary water

There are a few instances where culinary water is unmetered, such as (1) firefighting, (2) service to city facilities, and (3) water serving the RV dump. There are also cases where it is difficult to get readings on metered water, such as (4) water used for construction.

1. Firefighting and fire flow testing does not have the capability to meter while providing the necessary service.
2. Service to city facilities could be retrofitted with meters to all city buildings and parks. This will require the ability to fund the conversion. An affordable method would be to install meters inside city buildings.
3. The RV Dump will be relocated. The new dump will have a water meter on the yard hydrant. This will account for the water that gets used there.
4. Syracuse has a plan in place to improve the accounting of water used for construction. Fees have been increased to a comparable amount to neighboring cities. These fees will pay for the installation and ongoing expenses of a year-round bulk water fill station. This will improve accuracy in accounting of the water.

6.0 Drought Resiliency

6.1 History

Utah has experienced periods of water shortages since the pioneers first settled in the Salt Lake Valley. The lengthy droughts of the 1930s and 1950s caused significant economic problems for the state. While the drought of 1976-77 was not as long, the consequences were still intense and costly. Precipitation fluctuates greatly in Utah's relatively arid climate. As the demand for water continues to increase, even temporary shortages in supply can be disruptive to the normal process in urban and rural environments. Two or more consecutive years of significant reduction in precipitation—particularly snowfall in the mountains—may have serious and far-reaching impacts. Although most years, precipitation have allowed water storage to recover, since 2013 water supplies have struggled due to low precipitation and high temperatures.

6.2 Purpose

The Drought Contingency Plan (DCP) addresses drought related vulnerabilities through consideration of drought response actions and mitigation measures. The strategies considered in this plan may provide benefits for emergency response, replacement, or alternative supplies. The DCP provides an effective and systematic means for Syracuse to manage emergency supply conditions within its service area.

The intent of this plan is to reduce risks to public health from water shortages while also minimizing impacts to agricultural, industrial, and environmental water uses. Potential risks include issues of water quality, water quantity, sanitation, economic impacts, and environmental concerns. If there is a temporary water shortage emergency as declared by the governor, the use of water for drinking, sanitation, and fire suppression has preferential right over any other water right for the duration of the temporary water shortage. A temporary water shortage emergency may not exceed in duration more than two consecutive calendar years (U.C.A. 73-3-21.1).

6.3 Vulnerability Assessment

Risks and impacts to municipal, agricultural, and environmental operations are considered on the limited water that is available during a drought. This assessment will focus on municipal impacts of a drought.

6.4 Drought Monitoring

Hydrology and water storage levels are monitored from water suppliers providing water to Syracuse City. The city receives information regularly from water suppliers regarding water storage and snow water equivalent.

6.5 Mitigation and Response Actions

Public education can be initiated through social media, website, and magazine. Messages from neighboring communities related to water conservation can be shared to Syracuse to promote a consistent message.

Secondary water metering will help to educate the public on responsible water use for outdoor watering. It has been shown that neighboring communities with meters save an average of 35% water. Rate structures could be established to reward low-water users and discourage high-water use.

6.6 Operational and Administrative Framework

At the beginning of each secondary water season, the Public Works Director will review reports received from water suppliers regarding water storage in upstream reservoirs on the Weber River. If the water suppliers determine drought conditions are expected, the Public Works Director will address the water supply in a city council business meeting to determine how Syracuse will manage the water and inform the water users. The Water Superintendent will carry out the duties determined by city council. The city ordinance describes the handling of wasteful watering.

6.7 Priority Projects for Drought Resiliency

Meters:

According to Utah Law, Syracuse must convert all unmetered secondary water to meters by Dec 31, 2040. There are currently approximately 8400 unmetered connections. Syracuse must rely upon financial assistance to accomplish this task. In today's dollars it amounts to approximately \$13M. Raising rates that exceed the culinary rates will defeat the purpose of providing low-cost untreated water to users. Syracuse desires to keep secondary water rates low to reduce the risk of cross connections to the culinary water system.

Improved metering of Culinary:

Syracuse could retrofit all culinary services to city facilities with meters to improve the accounting of all water used. This will require a need to fund the meters and installations.

Reservoir:

Syracuse is proactively master planning for additional water storage to mitigate the negative impacts of drought. An additional reservoir for secondary water that can hold approximately 37 acre-feet of water has been determined to be needed by an engineering model of the water system. In today's dollars it amounts to approximately \$10M. Syracuse will need assistance to fund this infrastructure, while keeping the users rates low.

Software:

As the secondary water system becomes metered, software will be needed to provide reports to the water users to help them understand their water allocation and usage each month. Syracuse is in the beginning stages of seeking grants for software that can fulfill this need.

SYRACUSE CITY CORPORATION
Water Conservation Plan

APPENDIX

Include meeting minutes, and notification