ORDINANCE NO. 25-34

AN ORDINANCE RELATED TO LAND USE; AMENDS THE GENERAL PLAN TO ADOPT AND ADD THE MURRAY CITY WATER USE AND PRESERVATION ELEMENT.

BACKGROUND

Chapter 3 of the 2017 Murray General Plan (the "General Plan") presents a "framework for the future" of Murray City (the "City") and indicates that the primary goal of the General Plan is to "guide growth to promote prosperity and sustain a high quality of life for those who live, work, shop, and recreate in Murray."

In 2022, the Utah State Legislature passed Senate Bill 110 which amended certain provisions of Part 4 of Title 10, Chapter 9a of the Utah Code, the Municipal Land Use, Development, and Management Act ("LUDMA"). The 2022 amendments to LUDMA require most municipalities to develop a water use and preservation element to be integrated into a city's General Plan to provide direction to cities across the state to better manage water resources and ensure access to safe and clean water supplies.

The Murray City Water Use and Preservation Element (the "Water Use Element") was prepared in coordination with City staff from the Community and Economic Development Department and the Water Division of the Public Works Department to address current and future water supply, demand, and conservation practices and to ensure reliable and sustainable service for residents and businesses throughout the City.

The proposed Water Use Element helps to provide clear and objective goals for the City to move forward in implementing the General Plan and furthering growth, prosperity, and a high quality of life for individuals who live, work, shop, and recreate in the City. The proposed Water Use Element is in harmony with the goals and initiatives of the General Plan.

After hearing the matter and citizen comments, the Planning Commission forwarded a recommendation of approval to the City Council for the proposed Water Use Element addition to the General Plan.

NOW, THEREFORE, be it enacted by the Municipal Council of Murray City as follows:

Section 1. Purpose. The purpose of this ordinance is to adopt amendments to the General Plan.

Section 2. Amendment. The attached amendment to the General Plan, specifically the Murray City Water Use and Preservation Element, is hereby adopted as part of the Murray City General Plan.

Section 3. Effective date. This Ordinance shall take effect upon first publication and filing of copy thereof in the office of the City Recorder of Murray City, Utah.

PASSED, APPROVED AND ADOPTED by the Murray City Municipal Council on this 25th day of November 2025.

MURRAY CITY MUNICIPAL COUNCIL

Pam Cotter, Council Chair

ATTEST:

Brooke Smith, City Recorder

Transmitted to the Office of the Mayor of Murray City on this 9th day of December, 2025.

MAYOR'S ACTION: Approved

DATED this 9th day of December 2025

Brett A. Hales, Mayor

ATTEST:

Brooke Smith, City Recorder

CERTIFICATE OF PUBLICATION

I hereby certify that this Ordinance was published according to law on the 9TH day of December, 2025.

Brooke Smith, City Recorder

Murray City Water Element – General Plan

INTRODUCTION

Murray City's Water Element addresses current and future water supply, demand, and conservation practices to ensure reliable and sustainable service for residents, businesses, and institutions. This element is coordinated with the Murray City Water Division, the 2024 Water Conservation Plan, and the City's capital and financial planning documents.

Attitudes toward water supplies are changing. Water is no longer seen as a boundless resource, but as a valuable commodity that needs to be managed carefully. With this shift in attitude, conservation is becoming a larger part of water suppliers' plans to meet future water needs. Many water suppliers throughout the country have adopted conservation programs. Benefits of these programs include:

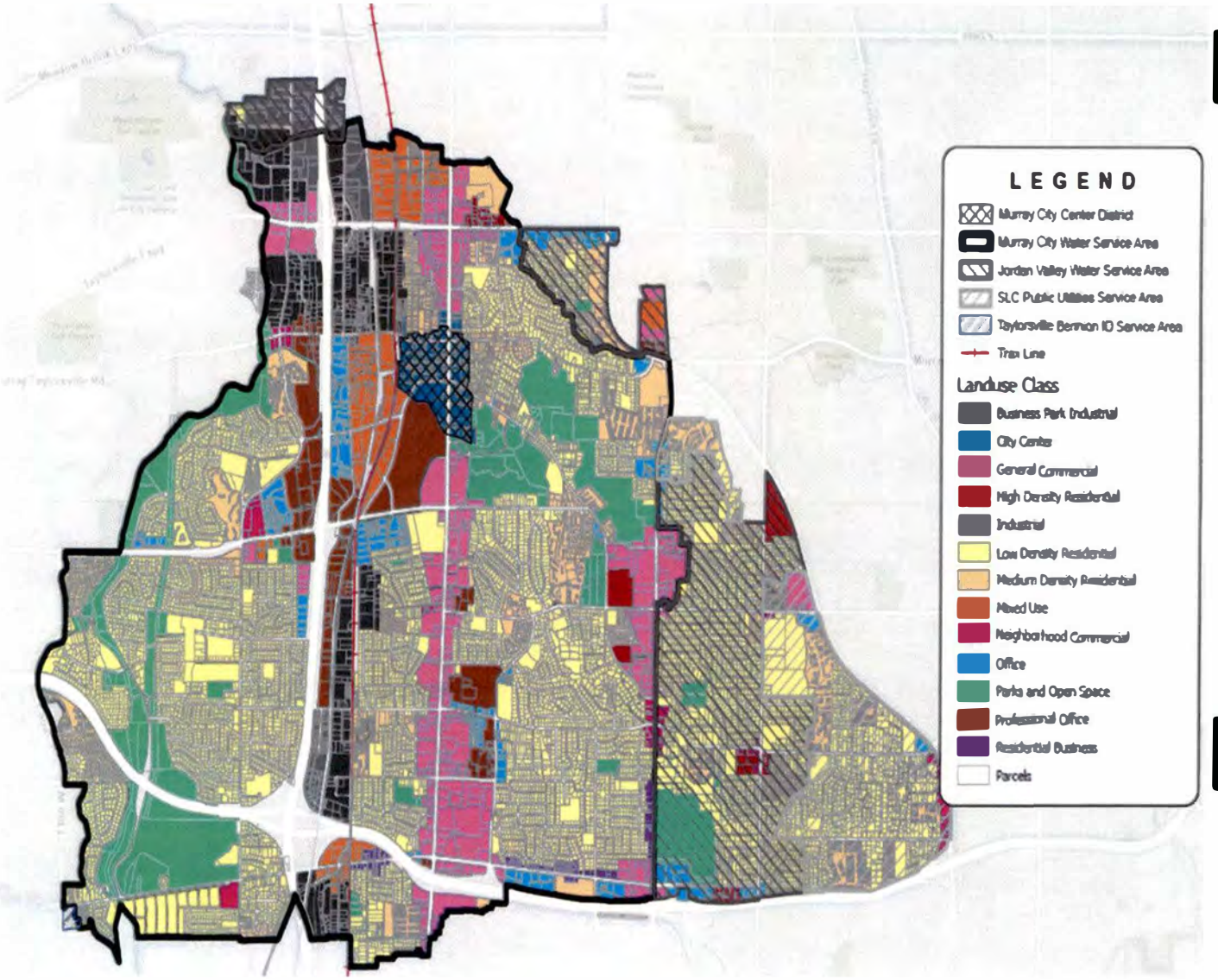
- Using existing water supplies more efficiently.
- Maximization of existing water conveyance, treatment, and distribution facilities.
- Delaying or deferring the expense of construction or capital improvement projects.
- Reducing the need for additional water supplies.

Murray City recognizes the benefits of conservation programs. The City recognizes that per capita use will be at higher levels without emphasis on and a clear plan for conservation. It also recognizes that there are still many benefits of further conservation efforts.

SYSTEM PROFILE

Murray City Water System Service Area

Murray is located within Salt Lake County and has a population of 50,637 residents based on the 2020 Decennial Census. Murray City's corporate boundaries include an area larger than the City's water system service area. As a result, projecting water demands requires identifying the service area's population and population growth. The Murray City water system service area serves approximately 80 percent of the City area. The Jordan Valley Water Conservancy District (JVWCD) supplies approximately 13 percent of the City area while Salt Lake City Public Utilities (SLCPU) supplies the remaining 7 percent. Taylorsville Bennion Improvement District serves an area less than 0.5 percent of the total Murray City area at the southwest portion of the City (near Winchester Street and 1300 West).



SUPPLY INFORMATION

Water for the water system in Murray City's service area is supplied by 8 springs and 19 wells. These sources currently have adequate capacity to meet the projected future demands assuming that all sources are operating. However, in planning for needed system water source capacity, it is important to consider the potential of mechanical failure, equipment maintenance, source contamination, as well as the potential for unforeseen future land use changes that could include new large water users. To account for these possibilities, it is Murray City's goal to meet projected peak day water demand with a 20 percent water source reserve. Based on this planning criterion, Murray City has sufficient source capacity through current project development opportunities. Per capita water demand in Murray City has historically declined because of proactive conservation efforts and high-density redevelopment. Continued conservation and redevelopment trends are expected to further reduce per capita demands.

Existing and future needs will be met by leveraging both current capacity and future capital improvements. Maintaining Murray City's level of service requires sustained investment. Impact fees, water rates, and capital projects identified in the Water Master Plan & Water Impact Fee Facilities Plan will provide the financial mechanism to expand and replace infrastructure as growth occurs. The City will periodically update its Impact Fee Analysis and Rate Study to ensure fairness, legal compliance, and financial sufficiency.

Water demand forecasts are based on Equivalent Residential Units (ERUs) and peak day demand projections prepared in the City's Water Impact Fee Facilities Plan. In addition to water demand forecasts, Murray recognizes the importance of addressing water equity (ensuring affordable access for all households), ecosystem water needs (such as groundwater-dependent habitats), and hazard mitigation (drought resilience, seismic risks to infrastructure, and climate-related vulnerabilities). These considerations will guide long-range planning and investment priorities.

Water Demand for Future Conditions

	Unit	2023 (Existing)	2065
Total Water Use (Residential + Non-Residential)	*million gallons*	3,175	4,120
Residential Population		42,002	67,622
Average Day Demand (ADD)	*million gallons per day*	8.7	11.3
	gallon per minute	6,040	7,839
	gallons per capita per day	207	167
Peak Day Demand (PDD)	*million gallons per day*	22.0	26.2
	gallon per minute	15,244	18,197
	gallons per capita per day	523	387
Peak Hour Demand (PHD)	*million gallons per day*	31.0	36.95
	gallon per minute	21,495	25,657
	gallons per capita per day	737	546

Annual Supply

Murray's annual source supply is summarized below for both dry and average water years.

Table 1 Estimated Production – Murray City Dry and Average Water Years

Supply Category	Estimated Production – Dry Year (acre-feet)[1]	Estimated Production – Average Year (acre-feet)[2]
Wells	9,910	7,974
McGhie Springs	1,315	1,788
Total	**11,225**	**9,762**

Source Name	Max Historic Production (acre-ft)	Appropriated		Estimated Reliable Annual Well Yield (acre-ft)	Equipment Capacity (GPM)	Average Running (GPM)
		cfs	mgd			
Wells						
Powerhouse	518.87	5.00	3.23	415	1750	1152
600 West	340.77	2.49	1.61	273	850	721
500 East	265.71	3.02	1.95	213	800	863
Howe	560.64	1.50	0.97	449	1050	863
300 West	401.04	3.51	2.27	321	700	569
Grant	1811.99	3.00	1.94	1450	2500	2452
Vine Street	979.75	2.39	1.54	784	1000	700
700 West	528.08	2.50	1.62	422	1000	800
900 East	695.77	2.02	1.30	557	850	656
Reservoir	359.60	4.60	2.97	288	1400	1272
Whitmore West	1695.52	5.00	3.23	1356	2200	1584
Whitmore East	1489.07	2.00	1.29	1191	1600	1524
McGhie	1015.21	3.75	2.42	812	650	462
360 West	130.29	3.01	1.95	104	750	603
Millrace	140.66	2.64	1.70	113	1150	848
Park	418.20	1.89	1.22	335	1500	1183
4500 South	238.40	1.25	0.81	191	1200	872
Monroc	807.33	3.90	2.52	646	1550	1502
Hi-Land	260.52	1.25	0.81	208	750	556
Other Sources						
McGhie Springs	1509.32	5.56	3.59	1315	1503	775
SLC Exchange	0.00	1.25	0.81			
Totals	***14946.85***	***62.07***	***39.79***	***11443***	***24753***	
Irrigation						
Germania Well	764.64	1.50	0.03	612	900	545

Peak Day Source Capacity

Peak day source capacity was evaluated in addition to annual supply capacity. Table -2 compares projected peak day demand (based on an estimated peaking factor) to Murray City's existing source pumping capacity. Based on Table-2 Murray City has adequate equipment capacity to accommodate peak day demands through build out if each source is operating at full capacity.

Based on the previously stated City goal to maintain a 20 percent water source reserve capacity for (projected) peak day demands, Murray City has just enough source redundancy to meet estimated peak day demands as shown in Table -2.

Table -2 Peak Day Supply and Demand Summary

Year	Peak Day Demand (mgd)	80% of Total Equipment Capacity[1] (mgd)	Redundancy Excess (+) / Shortage (-) (mgd)
2023	22.0	26.3	+4.4
2065 (Buildout)	26.2	26.3	+0.1

Peak Hour Transmission/Boosting Capacity

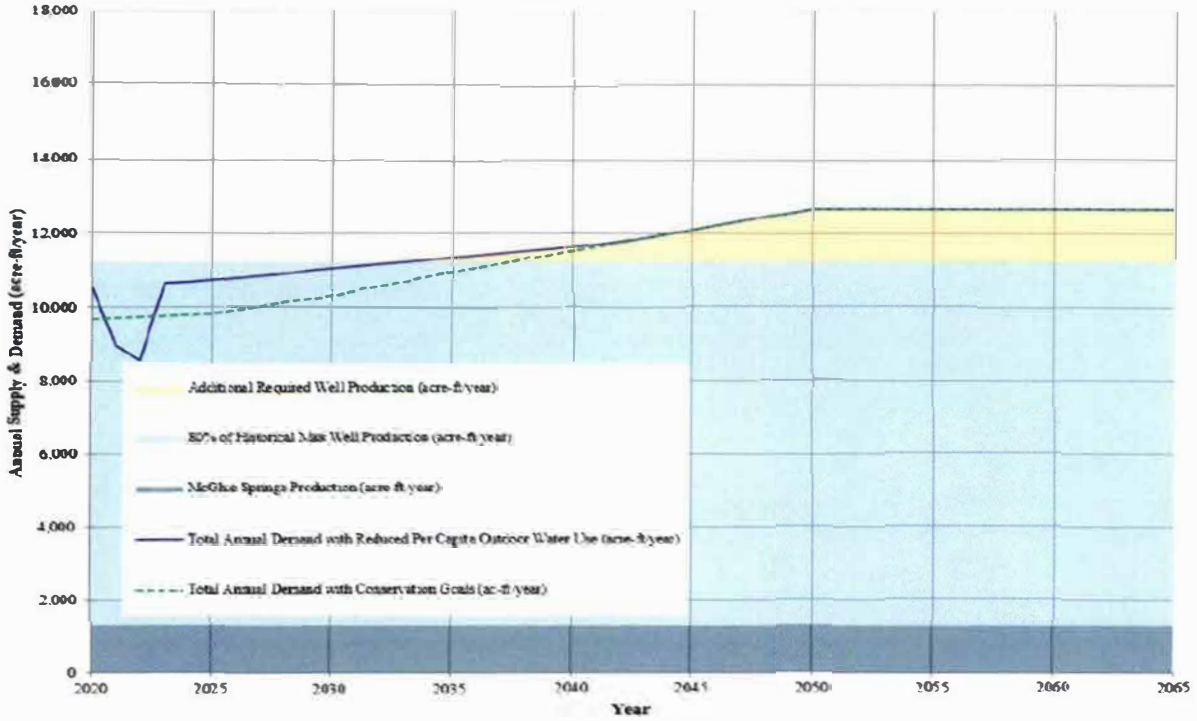
Table -3 compares projected peak hour demands to the combined transmission capacity out of the Upper System and the pumping capacities of Murray City's remaining wells. In 1997, observed peak hour water demand in Murray was approximately 26,000 gpm. Because of significant conservation of water in the City, peak hour demands in 2065 are anticipated to be less than 25,000 gpm. Based on Table 4-3, Murray City should have adequate transmission/pumping capacity to satisfy peak hour demands through buildout.

Table – 3 Transmission/Pumping Capacity vs. Projected Peak Hour Demand

Year	Peak Hour Demand (gpm)	70% of Transmission/Boosting Capacity[1] (gpm)	Redundancy Excess (+) / Shortage (-) (gpm)
2023	21,495	27,000	+5,505
2065 (Buildout)	25,657	27,000	+1,343

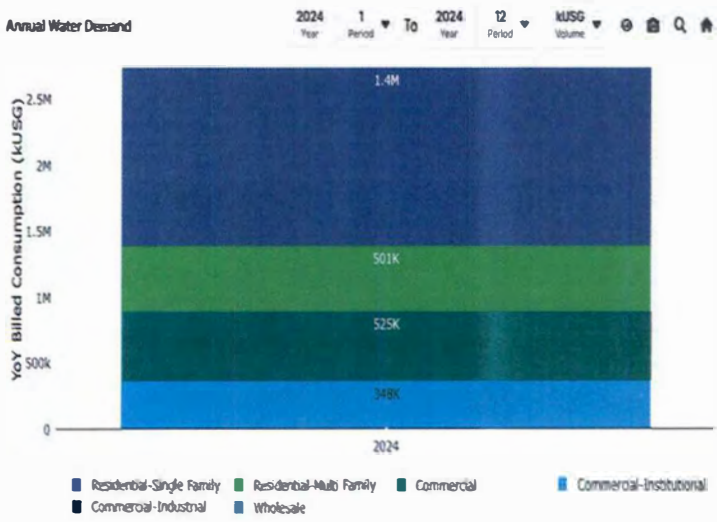
Figure-1 compares dry-year water production to projected annual water demands. For planning purposes, outdoor demand projections are based on dry/warm climate conditions like those experienced in year 2020 (one of Murray City's highest water production years). Figure-1 also projects annual demands at existing per capita demands. The table indicates projected demands will exceed annual water supply as early as 2034 without conservation, and as late as 2037 with conservation. However, because the historical maximum production from wells does not reflect their full potential capacity, the projected deficit can be addressed by boosting current well production. This is shown as the additional required well production in Figure-1.

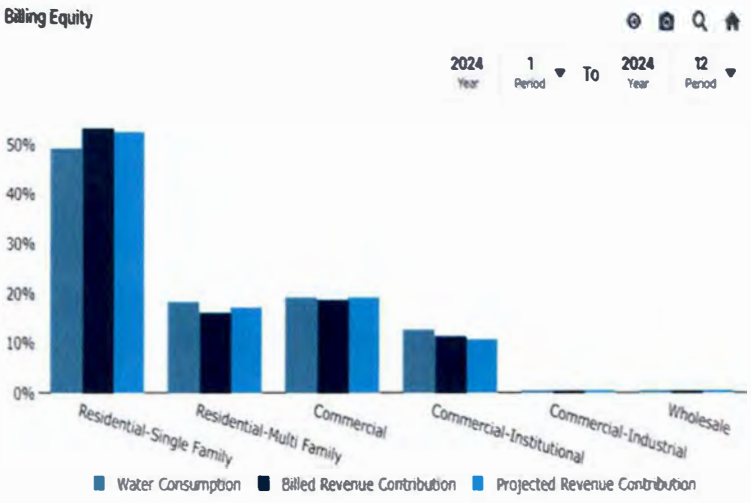
Figure -1 Estimated Murray Annual Dry Year Water Supply Capacity



WATER USAGE & SYSTEM CONNECTIONS

The Murray City water system includes residential, commercial, industrial, and institutional connections. Murray City has minimal secondary water usage with only one well, Germania Well, used to irrigate City parks along the Jordan River Parkway, Willow Pond & Murray City Golf Course. Roughly 88 percent of the meters in Murray City are residential connections, accounting for 62 percent of the total water use. Hence, residential water use represents the largest single area for potential conservation. However, Murray also has a significant number of commercial and industrial connections. While comprising only about 10 percent of the total number of meters, commercial and industrial customers accounted for roughly 20 percent of Murray City water use. Institutional water use is not far behind commercial and industrial water use accounting for about 18 percent of the water use with only 2 percent of the total connections. Thus, non-residential accounts should not be overlooked as potential contributors to future conservation efforts.



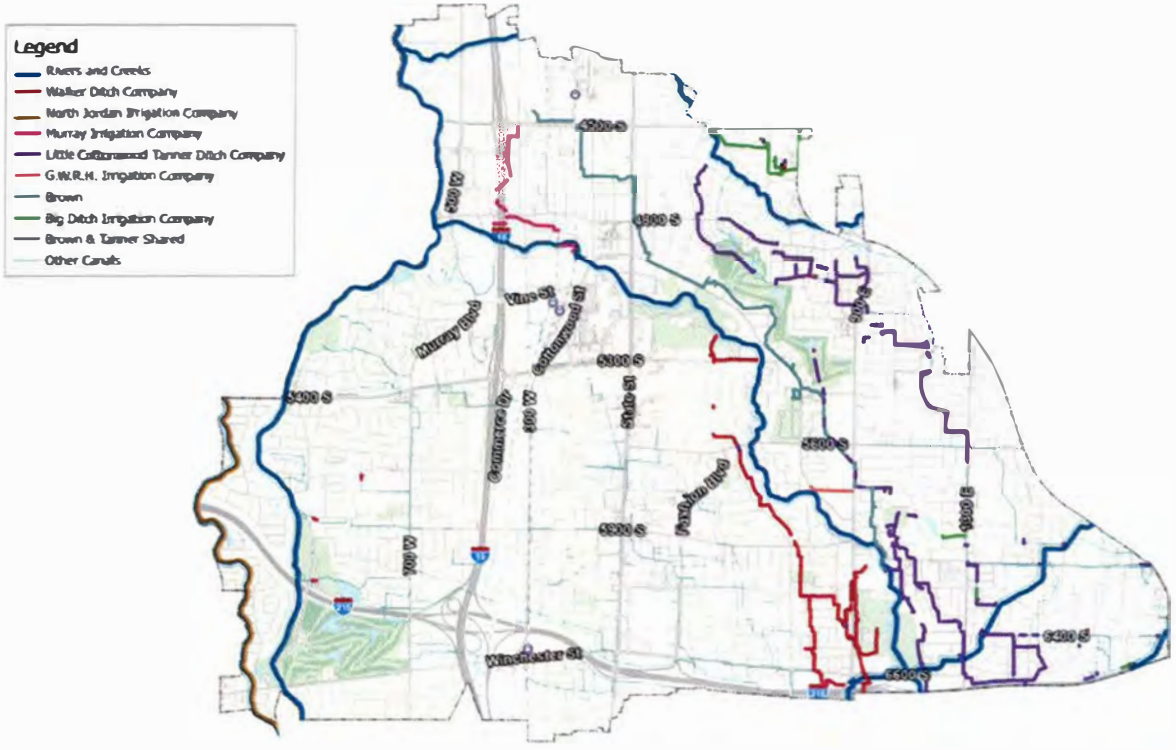


Gallons per capita per day (GPCD) is a measurement used to represent water use for an area and is the standard practice among water professionals. GPCD includes all the uses mentioned; it is calculated by totaling all water use and dividing by the residential population.

Irrigation & Canal Companies

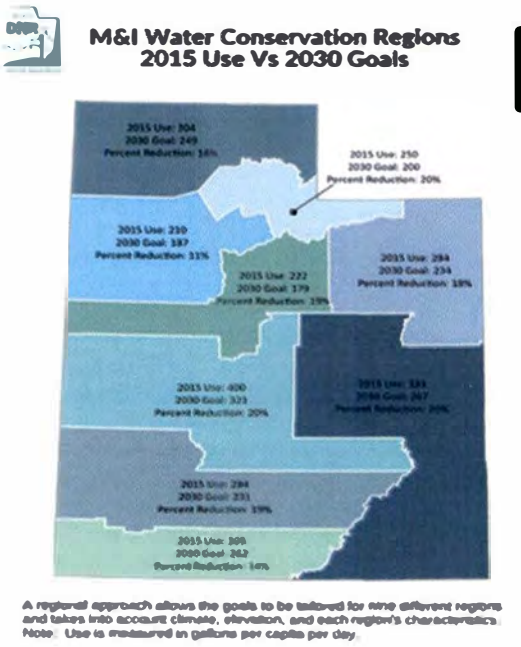
Murray City is crossed by several legacy irrigation systems that pre-date the modern municipal water grid, including canals and ditches historically tied to agricultural parcels. Today, these systems have only a small number of remaining users, and the number continues to decline as properties convert to municipal culinary service or development eliminates the need for surface delivery. That trend was underscored during the State's water-rights adjudication process, where many long-unused irrigation rights were either abandoned, disallowed, or corrected, making it evident just how few active irrigation users remain within city limits.

Irrigation Company	Contact Name	Phone Number
Tanner Ditch	Art Quail	801-867-1247
	Max Reese	801-261-1922
Big Ditch	Kyle Buxton	801-910-3399
GWR&H	Alan De Mann	801-707-1012
	Scott Finlinson	801-386-3290
Brown Ditch	Keith Shelly	801-558-2562
	Karl Moody	801-597-8309
	Dave Mcbride	801-580-4777
Walker Ditch	Dave Cline	801-558-1353
	Dave Winburn	801-231-3839
Salt Lake Canal	David Maiorano	801-558-9973
	Salt Lake Water Dispatch	801-483-6700
North Jordan Canal	Jordan Timothy	801-631-8054
	Jason Fitzgerald	801-631-6634
Murray Ditch	Jay Hansen	801-288-0604
	Robert Wood	801-262-3690



SALT LAKE REGION WATER CONSERVATION GOALS

The *Utah Regional Municipal and Industrial (M&I) Water Conservation Goals Report* presents a suite of regional goals and practices for residential, commercial, institutional, and industrial water use. The purpose of the report is not to provide a detailed water conservation plan for all regions in the state, but to guide the state's water industry in planning future infrastructure, policies, and programs consistent with Utah's semiarid climate and growing demand for water. As illustrated below, the report breaks the State of Utah into nine water regions and proposes that the Salt Lake region, where Murray is located, embraces a goal of decreasing water use by 11 percent by 2030. Local water suppliers, local communities such as Murray, and businesses are encouraged to adopt this target as they implement water conservation efforts and pursue regional water use goals.



A regional approach allows the goals to be tailored for nine different regions and takes into account climate, elevation, and each region's characteristics. Note: Use is measured in gallons per capita per day.

Proposed 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.

MURRAY CITY WATER CONSERVATION GOALS

The current *Murray City Water Conservation Plan* was updated and adopted in 2024 and outlines the goals below. The purpose of a water conservation plan is to provide information regarding existing and proposed water conservation measures that will help conserve water in the state so that adequate supplies of water are available for future needs. Water conservation plans include water-use reduction goals as well as implementation strategies.

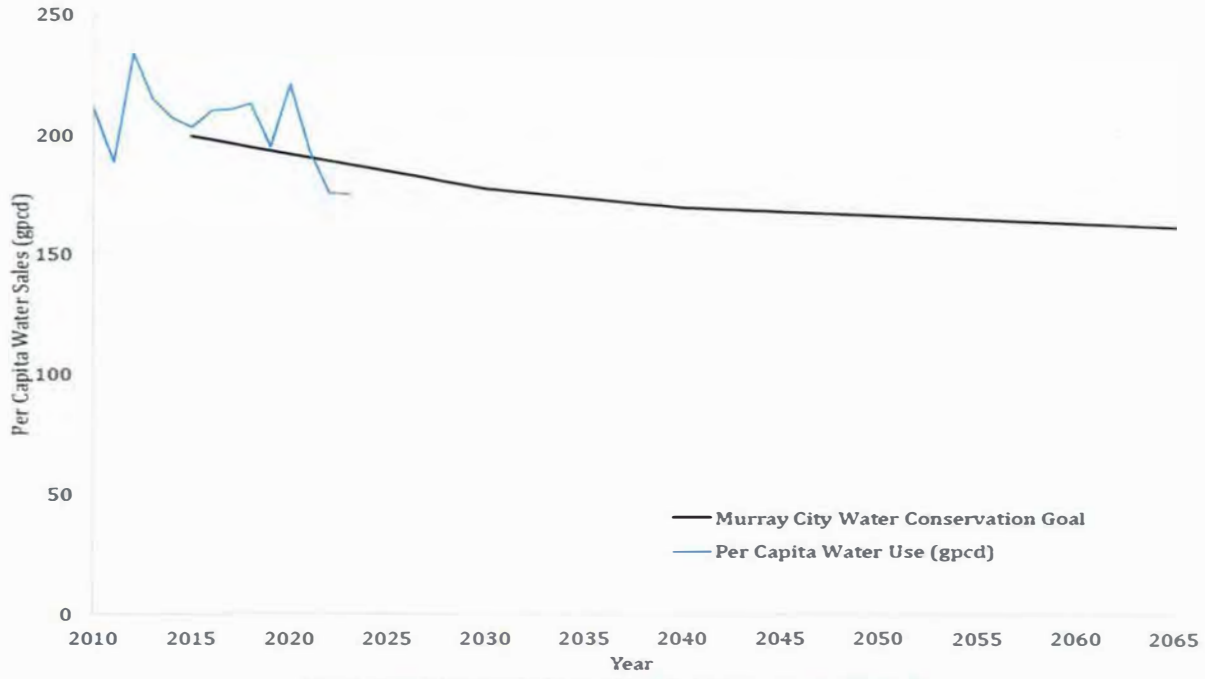


Figure 7: Historic & Future Conservation Goal Per Capita Water Use

WATER CONSERVATION PRACTICES

The following sections document both existing and proposed water conservation practices in the City. To organize the information, each section groups conservation practices by the following major conservation categories:

- Conservation Public Awareness Practices
- Education and Training Practices
- Rebates, Incentives, and Rewards
- Ordinances and Standards
- Water Pricing
- Improvements to Physical System

CURRENT CONSERVATION PRACTICES

Each water conservation program that Murray City is currently implementing is discussed in detail below (organized by major conservation categories):

Conservation Public Awareness Practices:

- ***Elementary Education Program (Water Wise Kids)*** – Murray City has partnered with the National Energy Foundation (NEF) to implement a water wise education program for all 4th grade students in the Murray School District. The program includes classroom presentations to these students on water and conservation. The City provides the students with a take-home water kit that includes toilet leak detector tablets, a dual spray swivel aerator and a shower timer. The City also holds a drawing contest that coincides with the WaterSense "Fix a Leak Week" that the students participate in and awards prizes to winners from each of the schools. The winner of the contest wins a pizza party for their entire class.

Participating teachers have evaluated this program with very high reviews and responded that they would conduct this program again and recommend it to their colleagues.

- ***Public Outreach Booths*** – The City's water department is actively involved in providing public outreach booths at various community events including the Farmers' Market, youth soccer games or sporting events, 4th of July activities and other local activities. The City uses these opportunities to distribute water conserving materials and educate the community members about conservation and the City's water system.
- ***Earth Day*** – Each year, to help celebrate Earth Day, the City holds an event for 4th grade students and teaches the kids ways they can help conserve water around their home. After a short presentation, the students receive water bottles and backpacks with the City's conservation logo on them.
- ***WaterSense Program Partner*** – WaterSense is a voluntary partnership program created by the United States Environmental Protection Agency (EPA) with the goal of protecting the nation's water supply by promoting and enhancing the market for water-efficient products and services and consistently spreading the message of water efficiency. Murray City has utilized many of the tools provided by WaterSense. The City also participates in many of the events including Fix A Leak Week and Shower Better Week.
- ***Consumer Confidence Report*** – Each year, water conservation information is included in the consumer confidence report. This report is sent to all Murray City customers and is posted on the City's web site. The report also includes information on the City's water sources, water quality information, and conservation tips.
- ***Online/Social Media***-The City's website provides information about conservation as well as links to other conservation-oriented websites. Conservation messaging is also posted on and distributed through social media.
- ***Water Wise Landscaping*** – Many of the City's landscapes have been converted to water wise landscaping. The increased use of water wise landscaping and the installation of rain sensors has helped the City conserve water and demonstrate outdoor water conserving practices.
- ***Water-Waster Notification Program*** – The City maintains a water-waster notification program where citizens can call in and report an observed water-waster. As water wasters are identified, an employee of Murray Water Department contacts the customer and provides tips on indoor and outdoor water conservation to help the customers reduce their usage.
- **High Consumption Notices** – The City sends "high consumption/possible leak" notices to customers when their monthly consumption is higher than normal.

Rebates, Incentives & Rewards:

- ***Utah Rivers Council's RainHarvest Program*** – The City has partnered with Utah Rivers Council RainHarvest program to reduce the cost of the rain barrels for residents. This program encourages community members to collect rainwater, reduce culinary water use and improve water quality of rivers, streams, and lakes.
- ***Turf Trade*** – The City started its participation in this program in 2024. Murray City provides Turfgrass Water Conservation Alliance (TWCA) seed to our residents at cost. This grass seed

requires thirty percent less water than typical Kentucky Bluegrass. Residents can purchase this from Murray City Water every Friday from the first Friday in April through the last Friday in September. In 2024, 211 residents participated and 620 five lb bags of seed were distributed, enough to replace over 7 acres of typical Kentucky Bluegrass.

- ***Landscape Incentive Program*** – Residential & Commercial Landscape Incentive Programe offers up to $3 per square foot of lawn you replace with water-efficient landscaping.e Landscaping project options include park strip, side yard, and full yard conversions.e
- ***Toilet Replacement*** – Residents can receive up to $150 by replacing an old toilete (manufactured before 1994) with a WaterSense labeled toilet.e
- ***Smart Controller*** – Residential & Commercial Smart Controller Program offers cashe incentives to replace your irrigation controller with a smart, water-efficient one. Residentse can earn a rebate of up to $100 when they purchase an eligible WaterSense-labeled smarte controller for your yard.e
- ***Showerhead*** – Residents can receive rebates of up to $25 per showerhead when replacinge a showerhead with a new EPA WaterSense labeled version. The use of WaterSense labelede showerheads conserves water at the use point.e
- ***Strategic Water Management Pilot Program*** – Residents are eligible for a water usee assessment to determine eligible incentives or management practices to conserve watere through facility and fixture upgrades or to enhance water use management practices.e Strategic Water Management offers customizable incentives for many project types thate may conserve water. Rebates are calculated at a rate of $50 per 1,000 gallons of watere projected to be saved.e
- ***Commercial Toilet Replacement*** - Commercial, multi-family, industrial, and institutionale properties within district boundaries can receive incentives to replace low-efficiency toiletse with high-efficiency toilets. Toilets and urinals must be EPA WaterSense approved. Rebatee amounts: Tank style toilets: up to $150 per fixture – Tankless style toilets: up to $250 pere fixture – Urinals: up to $250 per fixture.e
- ***Ice Machine Replacement*** - Incentives are avaiallbe to install ENERGY STAR approved icee machines. Water cooled ice machines can use up to 100 gallons of water per 100 lbs of ice.e Converting to an ENERGY STAR air cooled ice machine will reduce the water demande significantly for the same amount of ice. Rebate amount is fifty percent of the ice machinee cost up to $1,000.e
- ***Showerhead Replacement*** – Residents may apply to receive incentives to install EPAe WaterSense approved showerheads in commercial, multi-family, industrial or institutionale facilities that must be less than 1.75 gallons per minute at 80 PSI. Rebate amount is fiftye percent of real product costs up to $50 per fixture.e
- ***Lavatory Faucet Replacement*** – Residents and businesses may receive incentives toe install EPA WaterSense approved lavatory faucets. Upgrade your manually operatede lavatory faucets to EPA WaterSense approved sensor operated Faucets. The sensor must bee tuned to turn the water off immediately if the sensor is not activated. Rebate amount is upe to fifty percent of the real product costs up to $100 per faucet.e

Ordinances & Standards:

Murray City has some existing ordinances intended to encourage water conservation:

- ***Ordinance 13.08.140: Executive Orders of Mayor Limiting Use of Water*** – This ordinance states that in the event of scarcity of water, the Mayor has the power to place restrictions on water use and provide penalties for those not in compliance.
- ***Ordinance 13.08.120: Wasting Water Prohibited*** – This ordinance prohibits the pressurized irrigation of landscape between the hours of ten o'clock (10:00) A.M. and six o' clock (6:00) P.M. any violation of this ordinance results in a penalty for those not in compliance.

Water Pricing:

- **Tiered Water Pricing Schedule** – In 2025 the City established a new tiered rate structure to encourage water conservation (full rate schedule is in Figure 3). All water connections are charged a monthly base rate based on the meter size with no monthly water allowance included in the base rate. Each tier in the structure charges a higher rate based on the quantity of water being used.

Improvements to Physical System:

- ***Mainline Replacement Program***: Murray City has repaired and replaced 1 percent of Murray City's distribution pipe network on an annual basis.
- ***Upgraded SCADA Control System***: There are continuous improvements to the SCADA system to increase the overall water system operating and reporting efficiency. The City is currently transitioning their Automated Meter Reading (AMR) system to an Advanced Metering Infrastructure (AMI) system. This project is anticipated to be completed by 2025. AMI systems automate collection of meter data around the City and can actively measure use, identify leaks, and educate customers on use. Generally, AMI technology can help encourage water conservation more for each customer by helping customers proactively monitor water use. The customer portal provides 24-hour leak detection notifications to customers.

NEW CONSERVATION PRACTICES PLANNED FOR IMPLEMENTATION

There are several new conservation practices that the City has either recently started to implement or will implement in the next five years. Murray City plans to continue all of the current conservation practices and implement the recommendations that were approved durring the adoption of the Water Conservation Plan (see below).

Water Pricing:

- **Update Tiered Water Rate Pricing to Further Incentivize Conservation** – Murray City currently has a tiered water rate structure that encourages conservation. This water rate has been updated in 2025, and it is structured to ensure that pricing of the water system is self-sustaining for water utilities.

AMI:

- **Equipment -** Murray City is installing Advanced Metering Infrastructure (AMI) across its water system, with full completion planned for 2026. AMI provides real-time water-use data, helping the City quickly detect leaks, improve efficiency, and reduce costs. Customers benefit from more accurate billing, detailed usage information, and early leak alerts, while the utility gains better tools for conservation and future planning.
- **CUWCD & Yoppify Public Outreach Platform -** Provides Murray Water modern, data-driven conservation tools. Automated leak detection, irrigation-use monitoring, and targeted turf conversion outreach all tie directly into personalized conservation messaging—residents aren't just told to "save water," they receive timely, tailored alerts and step-by-step guidance specific to their household. This targeted communication, backed by CUWCD's conservation priorities, improves awareness and drives behavior change more effectively than broad campaigns. By automating leak notices, irrigation reminders, and even rebate invitations, Murray can cut wasted water, reduce strain on its system, and engage residents in stewardship.

Improvements to Physical System:

- **Well Sustainability Study –** Murray City plans to conduct a well sustainability study specifically to determine a reliable aquifer yield to ensure no serious aquifer depletion is occurring. Wells are the main source of water supply in Murray City and as such ensuring sustainable use of aquifer is paramount to water supply for future growth.
- **Investigate Leak Detection Technologies –** Murray City will meet with advanced leak detection equipment vendors to explore options to identify leaks via new technologies. A budget or plan will be created if research shows merit for available options.

WATER USE & PRESERVATION: GOALS, POLICIES & IMPLEMENTATION MEASURES

- Ensure reliable and sustainable water supply for existing and future residents.
- Integrate water planning with land use regulations and development review processes.
- Maintain financial sufficiency through periodic updates to impact fees and water rates.
- Promote water equity and hazard resilience in long-term planning.
- Align General Plan objectives with the City's 2024 Water Conservation Plan.

Implementation

Murray will continue coordinating with the Water Division, Planning Department, and regional water providers to ensure that supply, infrastructure, and conservation goals are met. The City will evaluate policies, ordinances, and capital funding strategies on a regular basis to ensure that water planning and land use decisions remain fully integrated.

WATER ELEMENT OVERALL GOAL

Ensure policies, ordinances, and capital funding strategies are in place that will provide the resources for supply, infrastructure, and conservation goals to be met.

Objective 1: Ensure reliable and sustainable water supply for existing and future residents

Strategy: Install Advanced Metering Infrastructure (AMI) across the Murray City water system by December 31, 2026.

Strategy: Conduct a well sustainability study by December 31, 2028, specifically to determine a reliable aquifer yield to ensure no serious aquifer depletion is occurring.

Strategy: Reduce institutional water use by evaluating landscaping on public property and determining ways to reduce water usage. Complete this evaluation by December 31, 2027.

Objective 2: Integrate water planning with land use regulations and development review processes.

Strategy: The Water Division will coordinate with the Planning Department and regional water providers to ensure that supply, infrastructure, and conservation goals are met.

Strategy: By December 31, 2025; amend landscaping standards for both residential and commercial uses to reduce the amount of turf grass in park strips and non-active areas.

Objective 3: Maintain financial sufficiency through periodic updates to impact fees and water rates.

Strategy: Conduct water rate pricing adjustments **annually/biennially** to ensure that the pricing of the water system is self-sustaining for the water utilities.

Objective 4: Promote water equity and hazard resilience in long-term planning.

Strategy: By automating leak notices, irrigation reminders, and even rebate invitations, Murray can cut wasted water, reduce strain on its system, and engage residents in stewardship. Cooperating with CUWCD & Yoppify to digitally communicate these objectives by December 31, 2026. Coincides with the completion of the AMI Implementation.

Strategy: In conjunction with Community and Economic Development fund and create a green infrastructure plan to increase resiliency across the city by December 31, 2030.

Objective 5: Align General Plan objectives with the City's 2024 Water Conservation Plan.

Strategy: Implementing this section of the General Plan will allow the 2024 Water Conservation Plan to have a larger impact around the city.