



**MURRAY CITY WATER**



**2023 WATER QUALITY REPORT**

Dear Murray City Water Customer:

Murray City is pleased to distribute it's annual Water Quality Report for calendar year 2023. The report contains information about Murray City's water quality and provides a way for the City to share ideas with our customers, such as the importance of water conservation. The City continues to evaluate new and efficient ways to help conserve water and protect our most precious natural resource, and asks for your continued support of these efforts.

Murray City's water supplies remain safe, with the water department taking 40 investigative water samples every month at various locations throughout the water system, looking for any possible signs of contamination. Regular sampling is required by the Division of Drinking Water, and Murray City will continue with careful monitoring in the future.

As in prior years, you will notice as you review the report that we have included some remarkable pictures from the Murray School District's 4th grade classes. The featured drawings are from a recent art contest sponsored by the Murray City Water Division in conjunction with the National Energy Foundation. We invite you to take a few minutes to read through this report, admire the artwork, and hopefully, learn something new and interesting about our water quality and ways you can conserve. We also encourage you to visit the [murray.utah.gov](https://murray.utah.gov) website, where you will find information about our rebate programs and the current Water Conservation Plan.

Sincerely,

Murray City Water Department

**Mayor**  
**Brett A. Hales**

**Council Members**  
**Paul Pickett Acevedo**  
**Pam Cotter**  
**Rosalba Dominguez**  
**Diane Turner**  
**Adam Hock**

City council meetings are Scheduled for the  
first and third Tuesday of each month

**Murray City Public Works is Social!**  
**Follow us on Social Media.**



**[instagram.com/MurrayCityPublicWorks](https://www.instagram.com/MurrayCityPublicWorks)**

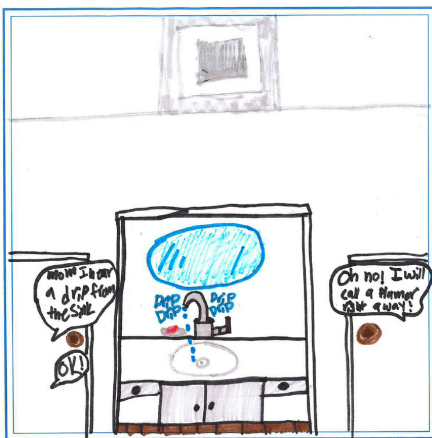
**[facebook.com/MurrayCityPublicWorks](https://www.facebook.com/MurrayCityPublicWorks)**

**<https://www.murray.utah.gov>**

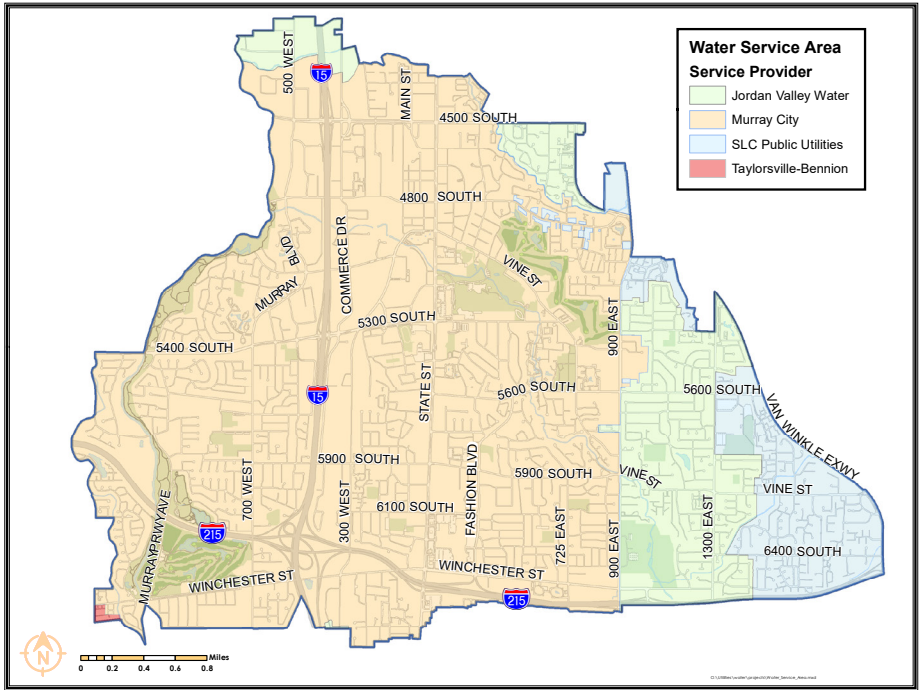
**Murray City Water Department**

# Murray City Water System Interesting Facts

Murray Water service area population	39,502
Water Department employees	20
Water service connections	10,250
Employees per thousand connections	1.95
Number of water sources	Total 27
	Deep wells 19
	Springs 8
Total miles of waterline	197
Water storage capacity (gallons)	12,000,000
Fire hydrants	City owned 1,423
	Privately owned 573
	Water system total 1,996
Total gallons pumped in 2023	2,753,507,000
Total gallons delivered in 2023	2,496,574,924
Average hardness of water supply	194 mg/L
	11.4 grains/gallon



# Murray City Water District Map



## Important Phone Numbers

Murray City Public Works	
Water, Wastewater, Streets, Storm Water, Engineering	801-270-2440
After Hours/ Emergency	801-264-9669

Other Water Districts in Murray	
Jordan Valley Water	801-565-4300
Salt Lake City Public Utilities	801-483-6700
Talorsville-Bennion	801-968-9081

**Murray City Water Department**



# Water Conservation

Watering of lawns between the hours of 10:00 am to 6:00 pm is against city **Ordinance 13.08.120**. This was put in place in 2018 to be in line with state water management guidelines to help conserve water.

Utah weekly watering guide available at:  
<https://conservewater.utah.gov/guide.html>



# Water Conservation

## Sprinkler Spruce-Up!

The onset of warmer weather can lead to an increase in landscape irrigation. Before you ramp up your watering, be sure to spruce up your irrigation system. System maintenance can help save you a lot of money and water! Cracks in pipes can lead to costly leaks, and broken sprinkler heads can waste water and money. You could be losing up to 25,000 gallons of water and \$280 over a six-month irrigation season!

- **Inspect.** Check your system for clogged, broken or missing sprinkler heads. Better yet, go with a pro—find an irrigation professional certified by a WaterSense labeled program to do the work for you.
- **Connect.** Examine points where the sprinkler heads connect to pipes/hoses. If water pools in your landscape or you have large soggy areas, you could have a leak in your system. A leak about as small as the tip of a ballpoint pen (or 1/32nd of an inch) can waste about 6,300 gallons of water per month.
- **Direct.** Are you watering the driveway, house, or sidewalk instead of your yard? Redirect sprinklers to apply water only to the landscape.
- **Select.** An improperly scheduled irrigation controller can waste a lot of water and money. Update your system's schedule with the seasons, or select a WaterSense labeled controller to take the guesswork out of scheduling.

For more water saving tips, please visit:

<https://www.epa.gov/watersense/outdoors>

<https://slowtheflow.org>



Murray City Water Department

# WaterSense® Rebate Programs

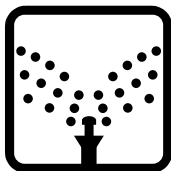
## Toilets



Toilets are by far the main source of water use in the home, accounting for nearly 30 percent of an average home's indoor water consumption. By replacing old, inefficient toilets (1.6 gallons per flush or more) with WaterSense labeled models (1.28 gallons or less), the average family can reduce water used for toilets by 20 to 60 percent—

that's nearly 13,000 gallons of water savings for your home every year!

## Smart Controllers



A clock-timer-controlled irrigation system that isn't properly programmed or maintained can waste as much as 25,000 gallons of water annually.

Smart irrigation controllers can help save water by automatically adjusting watering schedules based on local weather and landscape needs.

For information on WaterSense toilet and smart controller rebates visit

<https://utahwatersavers.com/>



## Utah Water Savers

## Showerheads



Inefficient showerheads not only waste water, they waste energy used to heat that water. But every time you take a shower with a WaterSense labeled showerhead, you can save energy—equal to the amount of electricity it takes to light a 60-watt light bulb for 8 hours.

For information on WaterSense showerhead rebates visit

<https://www.murray.utah.gov/234/Water>



Products that have earned the WaterSense label have been independently certified to use at least 20 percent less water and perform as well or better than standard models



# Does Water Ever Flow Backwards?

## What is Backflow?

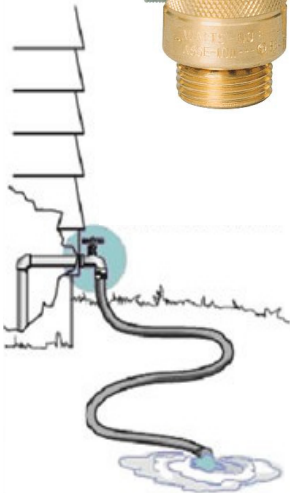
Water distribution systems are designed with the intention of the water flowing to the point of use, or from the City's main to the customer. However, hydraulic conditions within the system may deviate from "normal" conditions, causing water to flow in the opposite direction. This undesirable flow reversal of water is called backflow. Backflow can cause the drinking water system to become polluted or contaminated.

## Hose Bib (Hose Attached) Vacuum Breakers (HAVB)

Water users commonly use garden hoses for a variety of purposes, including:



- Watering lawns, flower beds and gardens.
- Washing cars and other items.
- Filling pools and hot tubs.
- Washing workshops, garages, food prep areas, etc.
- Applying liquid fertilizers and pesticides.



Any of these may involve attaching a chemical reservoir to the end of the hose (If at all possible avoid this practice!). In each of these cases, there is the potential to contaminate the water supply. Hose Bib Vacuum Breakers are simple, low-cost devices that should be used to help prevent backflow of water when engaging in the use of water hoses. They are easy to install and available at many plumbing supply stores.



Information provided by the  
American Backflow Prevention Association  
<https://www.abpa.org/>

# Water Testing

Murray Water Department takes more than 100 samples each month to make sure that your drinking water is safe. We monitor to make sure levels of chlorine and disinfectant bi-products are at safe levels and to check for other dangerous bacteria and viruses. We also monitor many natural contaminants including lead and copper.

## Fluoridation

On October 1st 2003, Murray City began adding fluoride to the drinking water supply. This came about because of the passage of a ballot initiative in 2000. Murray voters passed the initiative by a 53% margin.

Fluoride is a naturally occurring mineral and, with a few exceptions, almost all water has some fluoride in it.

Murray City's water system has a natural fluoride level average of .2 ppm (parts per million). In accordance with Salt Lake Valley Health Department regulations, Murray Water Department adds enough fluoride to the water to bring the combined level between the mandated range of .6 to .9 ppm.

## Non-fluoridated Water

Murray City offers two non-fluoridated water sources to those who would like to fill containers for drinking water. One site is located at 8 East 6100 South, the other is located at 630 East 5400 South.



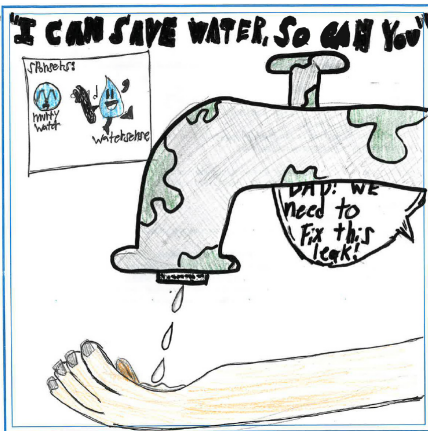
# Lead in Drinking Water

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has many beneficial uses, it is known to be harmful to human health if inhaled or ingested in large amounts, especially in young children and pregnant women.

Lead exposure can come from all parts of our environment - air, soil and dust, food, and water. Although Murray City water is well below the acceptable limits, lead can enter drinking water through the corrosion of plumbing materials inside the home.

The longer the water has been sitting in your home's pipes, the more potential lead has to leach from plumbing fixtures. You can minimize the potential for lead exposure by flushing your cold water tap until the water becomes cold before using water for drinking or cooking.

You can find more information on lead in drinking water at [www.epa.gov/lead/learn-about-lead](http://www.epa.gov/lead/learn-about-lead) or from the Safe Drinking Water Hotline 1-800-426-4791



# Consumer Confidence Report

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from:

Safe Drinking Water Hotline 1-800-426-4791.

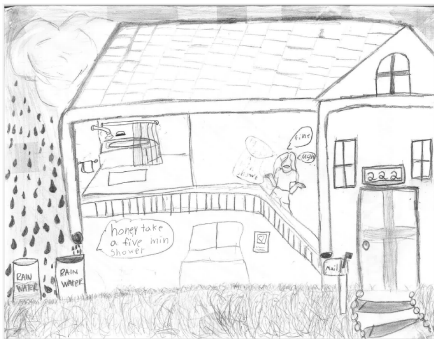


# Consumer Confidence Report

We are pleased to present Murray City's 2023 Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. We are committed to continually making improvements to our water system to ensure that the quality of your water is safe, dependable and properly protected.

Murray City obtains its water from springs near Big Cottonwood Canyon along with underground water wells located throughout the Salt Lake Valley..

Murray City routinely monitors for contaminants in our drinking water in accordance with the Federal and State Drinking Water Rules. The following table shows the results of our monitoring for the calendar year of 2023, beginning January 1, 2023 through December 31, 2023.





# Consumer Confidence Report

This chart lists the most recent test results for Murray City facilities and indicates the most likely source of contamination. The data is a range for all wells and springs with the lowest and highest levels.

Maximum Contamination Level (MCL) is the highest level of contaminant that is allowed in drinking water. Using the best available technology, MCL's are set as close to the goal as feasible. Maximum Contaminant Levels Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety. In addition to the parameters listed in this report, Murray City monitors for many unregulated contaminants. The results are available at the Public Services office.

Substance	Units	MCL	MCLG	Highest Detected	Lowest Detected	Average	Most Likely Source of Contamination
<b>PRIMARY INORGANICS</b>							
Arsenic	mg/L	0.01	0	0.0039	ND	0.0017	Erosions of natural deposits
Barium	mg/L	2	2	0.226	ND	0.086	Erosions of natural deposits
Copper	mg/L	1.3	1.3	0.007	ND	0.0008	Erosions of natural deposits
Cyanide	mg/L	0.2	0.2	0.006	ND	0.001	Erosions of natural deposits
Fluoride	mg/L	4	4	0.3	ND	0.19	Erosions of natural deposits
Lead	mg/L	0.015	0	0.0005	ND	0.00004	Erosions of natural deposits
Nickel	mg/L	0.1	NE	0.006	ND	0.0003	Erosions of natural deposits
Nitrate (as N)	mg/L	10	10	3.18	ND	1.29	Erosions of natural deposits, run off from Fertilizer
Selenium	mg/L	0.05	0.05	0.0028	ND	.001	Erosions of natural deposits
Sodium	mg/L	NE	NE	133	9.7	36.8	Erosions of natural deposits
Sulfate	mg/L	250	NE	104	18	49.5	Erosions of natural deposits
TDS	mg/L	1000	NE	868	124	362	Erosions of natural deposits
Turbidity	NTU	5	NE	1.6	ND	.32	Suspended material from soil runoff
<b>SECONDARY INORGANICS-aesthetic standards</b>							
Aluminum	mg/L	.2	NE	0.1	ND	0.01	Erosions of natural deposits
Chloride	mg/L	250	NE	247	11	84.25	Erosions of natural deposits
Color	CU	15	NE	10	ND	1.2	Decaying, naturally-occurring organic material and suspended particles
Iron	mg/L	0.3	NE	0.75	ND	0.06	Erosions of natural deposits
Manganese	mg/L	0.05	NE	0.124	ND	0.007	Erosions of natural deposits
Surfactants	mg/L	0.5	NE	0.25	ND	0.07	Naturally occurring
pH	pH Units	6.5 to 8.5	NE	8	7	7.7	Naturally occurring
Zinc	mg/L	5	NE	0.013	ND	0.0007	Erosions of natural deposits
<b>PESTICIDES</b>							
None Detected							

# Consumer Confidence Report

Substance	Units	MCL	MCLG	Highest Detected	Lowest Detected	Average	Most Likely Source of Contamination
<b>UNREGULATED PARAMETERS- monitoring not required</b>							
Alkalinity, Total	mg/L	UR	NE	313	78.8	138.7	Naturally occurring
Ammonia	mg/L	UR	NE	0.2	ND	0.04	Runoff from fertilizer, naturally occurring
Calcium	mg/L	UR	NE	121	21.3	53.8	Erosion of naturally occurring deposits
Hardness, total	mg/L	UR	NE	463	81	194.5	Erosion of naturally occurring deposits
Hardness, grains	Grains per Gallon	UR	NE	27.1	4.7	11.4	Erosion of naturally occurring deposits
Magnesium	mg/L	UR	NE	48.5	8.4	19.9	Erosion of naturally occurring deposits
Phosphate	mg/L	UR	NE	0.26	ND	0.016	Erosion of naturally occurring deposits
Potassium	mg/L	UR	NE	7.1	1.2	2.48	Erosion of naturally occurring deposits
Silica	mg/L	UR	NE	21.5	ND	8.64	Erosion of naturally occurring deposits
<b>RADIOLOGICAL</b>							
Gross- Alpha	pCi/L	15	NE	13	-1	2.92	Decay of natural and man made deposits
Gross-Beta	pCi/L	50	NE	13	0.6	3.98	Decay of natural and man made deposits
Combined Radium	pCi/L	5	NE	0.74	-0.19	0.29	Decay of natural and man made deposits
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Bromodichloromethane	ug/L	UR	NE	0.6	ND	0.03	By-product of drinking water disinfection
Chloroform	ug/L	UR	NE	3.6	ND	0.445	By-product of drinking water disinfection
Tetrachloroethene	ug/L	5	0	0.8	ND	0.04	
<b>MICROBIOLOGICAL</b>							
Total Coliform	% positive each month	<5%	0%	2.2%	0%	NA	Human and animal fecal waste, naturally-occurring in the environment. MCL is for monthly compliance. Repeat samples were negative; no violations were issued
<b>DISTRIBUTION SYSTEM CONTAMINANTS</b>							
Chlorine Residual	mg/L	4	NE	.41	0.01	0.07	Drinking water disinfectant
TTHM	ug/L	80	NE	2.83	0.65	1.72	By-product of drinking water disinfection
HAA5s	ug/L	60	NE	ND	ND	ND	By-product of drinking water disinfection
Fluoride	mg/L	4	4	1.05	0.16	0.7	Water additive that promotes strong teeth
<b>LEAD &amp; COPPER- tested every 3 years at consumer's residence</b>							
Copper	mg/L	1.3	NE	0.45	0.0179	0.105	Corrosion of household plumbing systems
Lead	mg/L	0.015	NE	0.0033	ND	0.0008	Corrosion of household plumbing systems
90th Percentile Compliance Numbers from 2019				Copper = 0.2242    Lead = 0.0022			

## Key to Table

**MCL:** Maximum Contaminant Level

**MCLG:** Maximum Contaminant Level Goal

**ND/Low High:** Lowest to highest levels detected from all sources

**mg/L:** milligrams per liter (parts per million, one penny in \$10,000)

**ug/L:** micrograms per liter (parts per billion, one penny in \$10,000,000)

**pCi/L:** picocuries per liter (a measure of the radioactivity in water)

**NTU:** Nephelometric Turbidity Unit (a measurement of the clarity of water, cloudiness)

**CU:** Color Unit

**ND:** Non-detected (less than the laboratory method can see)

**NE:** Not established

**UR:** unregulated (no EPA standard set)

**Murray City Water Department**



**MURRAY**  
CITY WATER

Murray City Corporation  
5025 South State Street  
Murray, Utah  
84107

