

2022

Annual Drinking Water Quality Report



PWS ID: 1160018

For More Information About Cash Special Utility District (Cash SUD)

If you have questions about this report or concerning your water utility provider, please feel free to contact:

Clay Hodges, General Manager

Phone: (903) 883-2695 Email: customers@cashwater.org

Mail: P O Box 8129, Greenville TX 75404-8129

Our public board meetings are held on the 4th Monday of each month at 172 FM 1564 East, Greenville TX 75402.

You can also visit our website, www.cashwater.org, for more information.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene pregunta o comentarios sobre éste informe en español, favor de llamar al tel. (903) 883-2695—para hablar con una persona bilingüe en español.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- ◆ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ◆ Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ◆ Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- ◆ Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- ◆ Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Where Do We Get Our Drinking Water?

We draw water from two different sources. Our treatment plant pulls surface water from Lake Tawakoni; it is treated by means of sedimentation, filtration and disinfection in order to remove possible harmful contaminants. This water supplies the Cash areas south of Interstate 30, Lone Oak, & Cumby. The second source is treated surface water purchased from North Texas Municipal Water District (NTMWD), which pulls raw water from Lake Lavon. Southeast Caddo Mills, Quinlan & Union Valley areas south of Interstate 30 are supplied by this purchased water.

All Drinking Water May Contain Contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections.

You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two (2) minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment

The TCEQ completed an assessment of your source water & results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in the Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Clay Hodges, General Manager at (903) 883-2695.

Our Drinking Water is Regulated

Cash SUD is happy to present you with this report, which is a summary of the quality of the water we provide our customers. The report covers the analysis of samples that were taken January 1 through December 31, 2022, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. Cash SUD's drinking water supply surpassed the strict regulations of both the Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA). It is our desire to help educate our customers about how we continue to produce safe drinking water every day.

In 2022, our water department distributed 872,952,000 gallons of water to our customers.

Definitions & Abbreviations: The following tables contain scientific terms & measures, some of which may require explanation.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

AVG - regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment - a Level 1 Assessment is a study of the water system to identify potential problems & determine (if possible) why total coliform bacteria have been found in our water.

Level 2 Assessment - a Level 2 Assessment is a very detailed study of the water system to identify potential problems & determine (if possible) why an E.coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs don't reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A - not applicable.

ND - not detected.

NTU - nephelometric turbidity units (measure of turbidity)

Parts Per Billion (ppb) - micrograms per liter ($\mu\text{g}/\text{l}$) or one ounce in 7,350,000 gallons of water.

Parts Per Million (ppm) - milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

pCi/L - picocuries per liter (a measure of radioactivity)

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

90th Percentile - 90% of samples are equal to or less than the number in the chart.

2022 MONITORING RESULTS

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 the Safe Drinking Water Hotline (1-800-426-4791)

INORGANIC CONTAMINANTS								
CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MCL	MCLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Arsenic (ppb)	2022	ND	N/A	ND	N/A	0.01	0	Erosion of natural deposits; runoff from orchards; runoff from glass & electronic production wastes
Barium (ppm)	2022	0.057 ¹	N/A	0.061	0.060-0.061	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Bromate (ppb)	2022	N/A	N/A	4.9	4.9-4.9	5	10	By-product of drinking water ozonation
Chromium (ppb)	2022	.0011 ¹	N/A	ND	N/A	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	2022	ND	N/A	ND	N/A	100	100	Discharge from steel/metal factories; Discharge from plastics and fertilizer factories
Fluoride (ppm)	2022	0.18 ¹	N/A	0.688	0.278-0.688	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen) (ppm)	2022	0.58	0.292-0.58	0.439	0.158-0.439	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Beta/photon emitters (pCi/L)	2022	N/A	N/A	4.7	4.7-4.7	50	0	Decay of natural & man-made deposits

ORGANIC CONTAMINANTS								
CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MCL	MCLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Atrazine (ppb)	2022	0.3 ¹	N/A	0.12	0.10-0.12	3	3	Runoff from herbicide used on row crops
Di(2-ethylhexyl) phthalate (ppb)	2022	ND ¹	N/A	ND	N/A	6	6	Discharge from rubber & chemical factories
Simazine (ppb)	2022	ND ¹	N/A	ND	N/A	4	4	Runoff from herbicide used on row crops

LEAD & COPPER					
CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		AL	SOURCE OF CONTAMINANT
		90th Percentile	Sites Above AL		
Lead (ppm)	2021	0.00204	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	2021	0.321	0	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

MAXIMUM RESIDUAL DISINFECTANT LEVEL

CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MRDL	MRDLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Chlorine Residual (ppm)	2022	4.0	0.7 – 4.0	N/A	N/A	4.0	< 4.0	Disinfectant used to control microbes
Chlorine Dioxide (ppm)	2022	ND	N/A	0.27	0.0-0.27	0.8	0.8	Disinfectant
Chlorine (ppm)	2022	ND	N/A	0.72	0.0-0.72	1.0	N/A	Disinfectant

TURBIDITY

CONTAMINANT (UNIT OF MEASURE)	YEAR	HIGHEST SINGLE MEASUREMENT		LOWEST MONTHLY % OF SAMPLES MEETING LIMIT		TURBIDITY LIMITS	SOURCE OF CONTAMINANT
		CASH SUD	NTMWD	CASH SUD	NTMWD		
Turbidity (NTU)	2022	0.25	0.4	100%	99.50%	0.3	Soil Runoff

TOTAL ORGANIC CARBON

CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MCL	MCLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Source Water	2022	6.01	4.44 - 6.01	**	N/A	N/A	N/A	Naturally present in the environment
Drinking Water	2022	3.86	2.19 - 3.86	**	N/A	N/A	N/A	
Removal Ratio*	2022	1.55	0.79 - 1.55	**	N/A	N/A	N/A	N/A

* Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. NOTE: Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Byproducts of disinfection include trihalomethanes (THM) and haloacetic acids (HAA), which are reported elsewhere in this report.

**The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

MICROBIOLOGICAL CONTAMINANTS

YEAR	CONTAMINANT (UNIT OF MEASURE)	LEVEL DETECTED	MCL	MCLG	SOURCE OF CONTAMINANT
		CASH SUD			
2022	Total Coliform Bacteria (# positive monthly samples)	0	1 POSITIVE SAMPLE/ MONTH	0	Naturally present in the environment

DISINFECTION BYPRODUCTS

CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MCL	MCLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Total Haloacetic Acids (ppb)	2022	20.9	12.5 - 20.9	N/A	N/A	60	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	2022	35.2	23.2 - 35.2	N/A	N/A	80	N/A	

INORGANIC CONTAMINANTS

CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		MCL	MCLG	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE			
Bromodichloromethane (ppb)	2022	10.9	7.64 - 10.9	N/A	N/A	N/A	N/A	Byproduct of drinking water disinfection
Bromoform (ppb)	2022	<1.00	ND - <1.00	N/A	N/A	N/A	N/A	
Chloroform (ppb)	2022	22.2	12.7 - 22.2	N/A	N/A	N/A	N/A	
Dibromochloromethane (ppb)	2022	3.81	2.54 - 3.81	N/A	N/A	N/A	N/A	

NOTE: Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection by-products. There is no MCL for these chemicals at the entry point to distribution.

INORGANIC CONTAMINANTS

CONTAMINANT (UNIT OF MEASURE)	YEAR	CASH SUD		NTMWD		SECONDARY LIMIT	SOURCE OF CONTAMINANT
		HIGHEST	RANGE	HIGHEST	RANGE		
Calcium (ppm)	2022	21.7 ¹	N/A	69.8	32.2-69.8	N/A	Abundant naturally occurring element
Chloride (ppm)	2022	45.8 ¹	N/A	107	30-107	N/A	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Magnesium (ppm)	2022	2.95 ¹	N/A	9.70	9.61-9.70	N/A	Abundant naturally occurring element.
Manganese (ppm)	2022	0.013 ¹	N/A	0.159	0.004-0.159	N/A	Abundant naturally occurring element.
Nickel (ppm)	2022	0.0033 ¹	N/A	0.0098	.0069-.0098	N/A	Erosion of natural deposits
pH (units)	2022	8.15	7.81 - 8.15	9.2	7.0-9.2	6.5 - 8.5	Measure of corrosivity of water
Potassium (ppm)	2022	4.25 ¹	N/A	N/A	N/A	N/A	Runoff/leaching from natural deposits
Sodium (ppm)	2022	30.3 ¹	N/A	95.4	26.5-95.4	N/A	Erosion of natural deposits; byproduct of oil field activity
Specific Conductance (micromhos) (µS/cm)	2020	307 ¹	N/A	N/A	N/A	1600	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2022	13.8 ¹	N/A	171	84.2-171	250	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Alkalinity as CaCO ₃ (ppm)	2022	120	52.9 - 120	139	69-139	N/A	Naturally occurring soluble mineral salts.
Total Dissolved Solids (ppm)	2022	168 ¹	N/A	492	269-492	1000	Total dissolved mineral constituents in water.
Total Hardness as CaCO ₃ (ppm)	2022	66.2 ¹	N/A	194	90-194	N/A	Naturally occurring calcium

¹ Result is a single sample

The state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

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