



2023

**WATER
QUALITY
REPORT**



The US Environmental Protection Agency wants you to know:

In order to ensure that tap water is safe to drink, the US Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. The sources of our 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 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 Town of Prosper Public Works Department at (972) 347-9969. 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Contaminants that may be present in source water include:

Microbial Contaminants - Viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic Contaminants - Salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining, or farming.

Pesticides and Herbicides - May come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic Chemical Contaminants - 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 - Can be naturally occurring or the result of oil and gas production and mining activities.

Important Health Information

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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

The simple fact is, bacteria and other microorganisms inhabit our world. Some are harmful to us, and some are not. Coliform bacteria are common in the environment but are generally not harmful. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we have tested water samples for coliform bacteria, and in that time, none of the samples came back positive for the bacteria. Federal regulation requires that public water that tests positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. **Our tests indicate no fecal coliform is present in our water.**

**Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al teléfono (972) 346-2640
para hablar con una persona bilingüe en español.**

2023 MONITORING RESULTS FOR THE TOWN OF PROSPER

Results are from the Town of Prosper and NTMWD

COLIFORM BACTERIA

Max Contaminant Level Goal	Total Coliform Level 1 Assessment Trigger	Highest % of Positive Monthly Total Coliform Samples	Fecal Coliform or E. coli Max Contaminant Level	Total # of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	>5% of monthly samples are positive	0%	0	0	NO	Naturally present in the environment

Note: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

DISINFECTANTS

Contaminant	Year	Highest Average Level Detected	Range Detected	MRDLG	MRDL	Units	Violation	Likely Source of Contamination
Chlorine Residual (Chloramines)	2023	2.63	0.86 - 3.42	4.0	4.0	ppm	NO	Disinfectant used to control microbes
Chlorine Dioxide	2023	.01	0 - 0.59	0.80	0.80	ppm	NO	Disinfectant
Chlorite	2023	.16	0 - 0.88	No Goal	1.00	ppm	NO	Disinfectant

NOTE: Water providers are required to maintain a minimum chlorine disinfection residual level of 0.5 parts per million (ppm) for systems disinfecting with chloramines and an annual average chlorine disinfection residual level of between 0.5 ppm and 4 ppm.

DISINFECTION BY-PRODUCTS

Contaminant	Year	Highest Average Level Detected	Range Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids	2023	19.4	16.1 - 23.8	No Goal	60	ppb	NO	By-product of drinking water disinfection
Total Trihalomethanes	2023	34.8	22.2 - 49.5	No Goal	80	ppb	NO	By-product of drinking water disinfection

INORGANIC CONTAMINANTS

Contaminant	Year	Highest Level Detected	Range Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2023	0.048	0.041 - 0.048	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide	2023	199	28 - 199	0	200	ppb	NO	Discharge from steel/metal factories; discharge from plastics and fertilizer factories
Fluoride	2023	0.968	0.537 - 0.968	4	4	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as N)	2023	0.790	0.067 - 0.790	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

ORGANIC CONTAMINANTS

Contaminant	Year	Highest Average Level Detected	Range Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2023	0.2	0.1 - 0.2	3	3	ppb	NO	Runoff from herbicide used on row crops
Simazine	2023	0.12	0.06 - 0.12	4	4	ppb	NO	Herbicide runoff

2023 MONITORING RESULTS (continued)

Results are from the Town of Prosper and NTMWD

RADIOACTIVE CONTAMINANTS

Contaminant	Year	Highest Level Detected	Range Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon Emitters	2022	4.7	4.7 - 4.7	0	50	pCi/L	NO	Decay of natural and man-made deposits

Note: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta/photon emitters. Results are from the most recent sampling event.

LEAD AND COPPER

Contaminant	Year	MCLG	AL	90th Percentile	Units	# of sites over AL	Violation	Likely Source of Contamination
Copper	2021	1.3	1.3	0.11	ppm	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2021	0	15	1.6	ppb	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits

Note: The Town of Prosper is required to take lead and copper samples every three (3) years. The data in this table are from the most recent testing done in accordance with regulations. 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. The Town of Prosper is responsible for providing high quality drinking water, but the Town 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 the tap for thirty (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>.

UNREGULATED CONTAMINANTS

Contaminant	Year	Highest Average Level Detected	Range Detected	Units	Likely Source of Contamination
Chloroform	2023	10.43	4.99 - 16.60	ppb	By-product of drinking water disinfection
Bromoform	2023	2.12	1.47 - 2.89	ppb	By-product of drinking water disinfection
Bromodichloromethane	2023	12.72	7.92 - 18.20	ppb	By-product of drinking water disinfection
Dibromochloromethane	2023	9.48	7.27 - 12.40	ppb	By-product of drinking water disinfection
PFBA	2023	7.3	6.6 - 8.4	ppt	Stain-resistant fabrics, paper food packaging, carpets, photographic film
PFBS	2023	4.2	3.0 - 5.4	ppt	Paints, cleaning agents, water- and stain-repellent products and coatings
PFHxA	2023	6.5	5.6 - 7.7	ppt	Stain-resistant fabrics for clothing, carpets, and furniture; nonstick cookware; ski wax; certain leather products; and personal care products
PFHxS	2023	1.7	0 - 5.2	ppt	Stain-resistant fabrics, fire-fighting foams, food packaging, and as a surfactant in industrial processes
PFOS	2023	1.6	0 - 4.7	ppt	Stain resistance of textiles, paper, metals, pesticides; firefighting foams
PFPeA	2023	6.4	5.3 - 7.8	ppt	Stain- and grease-proof coatings on food packaging, couches, and carpets

Note: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane are disinfection by-products. There is no MCL for these chemicals at the entry point to distribution system. These four (4) contaminants are included in the Total Trihalomethanes compliance data in the Disinfection By-Products table.

2023 MONITORING RESULTS (continued)

Results are from the Town of Prosper and NTMWD

SECONDARY AND OTHER CONSTITUENTS

Contaminant	Year	Highest Level Detected	Range Detected	Units	Likely Source of Contamination
Calcium	2023	69.8	26.5 - 69.8	ppm	Abundant naturally occurring element
Chloride	2023	107	30 - 107	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity
Iron	2023	0.516	0.061 - 0.516	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
Magnesium	2023	9.77	4.90 - 9.77	ppm	Abundant naturally occurring element
Manganese	2023	0.158	0.0068 - 0.158	ppm	Abundant naturally occurring element
Nickel	2023	0.0048	0.0047 - 0.0048	ppm	Erosion of natural deposits
pH	2023	9.17	6.39 - 9.17	units	Measure of corrosivity of water
Sodium	2023	95.4	26.5 - 95.4	ppm	Erosion of natural deposits; by-product of oil field activity
Sulfate	2023	171	76.8 - 171	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity
Total Alkalinity as CaCO ₃	2023	139	51 - 139	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2023	492	263 - 492	ppm	Total dissolved mineral constituents in water
Total Hardness as CaCO ₃	2023	312	82 - 312	ppm	Naturally occurring calcium

DEFINITIONS

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

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

EPA - The US Environmental Protection Agency, the Federal agency regulating Public Water Systems.

Level 1 Assessment - A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria were found.

Level 2 Assessment - A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *Escherichia coli* (*E.coli*) maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

MCLG (Maximum Contaminant Level Goal) - 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.

MCL (Maximum Contaminant Level) - 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.

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

MRDL (Maximum Residual Disinfectant Level) - 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.

mrem/yr (millirems per year) - A measure of radiation absorbed by the body.

NTMWD - North Texas Municipal Water District.

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

ppb (parts per billion) - One part substance per billion parts water, or micrograms per liter (µg/L).

ppm (parts per million) - One part substance per million parts water, or milligrams per liter (mg/L).

ppt (parts per trillion) - One part substance per trillion parts water, or nanograms per liter (ng/L).

Secondary Constituents - Found in drinking water and can cause taste, color, and odor problems. The taste and odor constituents are regulated by the TCEQ, not the EPA. These constituents are not causes for health concern.

TCEQ - The Texas Commission on Environmental Quality, the State agency regulating Public Water Systems.

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

Special Notice for Availability of Unregulated Contaminant Monitoring Data

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants for the Town of Prosper

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact James Schaftenaar at 972-569-1076 or jschaftenaar@prospertx.gov

This notice is being sent to you by the Town of Prosper. State Water System ID#: TX0430009

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