2021 Annual Water Quality Report

Town of Prosper

PWS ID # 0430009

What is the Quality of My Water?

The Town of Prosper is pleased to share this water quality report with you. It describes to you, the customer, the quality of your drinking water. This report covers January 1, 2021, through December 31, 2021. The Town of Prosper's drinking water supply surpassed the strict regulations of both the State of Texas and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

All of the water for the Town of Prosper is treated water purchased from the North Texas Municipal Water District (NTMWD). NTMWD relies on surface water from Lavon Lake, Lake Texoma, and Jim Chapman Lake (Cooper Lake). Your water is treated through sedimentation, filtration, and disinfection to reduce or remove harmful contaminants that may be present in your drinking water.

A Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us later this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts on our system, please contact the Public Works Department at (972) 347-9969.

If you have any questions about this report or concerning your water utility, please contact the Town of Prosper at (972) 347-9969 or visit our website at www.prospertx.gov. We want Town of Prosper residents to be informed about their water utility. You can attend regular Town Council meetings on the 2nd and 4th Tuesday of every month, at the Prosper Municipal Chambers, 250 W. First Street, Prosper, Texas at 6:00 PM.

In the water loss audit submitted to the Texas Water Development Board for 2021, our system had a total of 1.85% unaccountable water use for 2021, which is 10.15% under our goal for the year. If you have questions about water losses, please contact the Town of Prosper at (972) 347-9969.

For the latest information on water restrictions and helpful tips on how to conserve water and lower your utility bill, visit our website at www.prospertx.gov/water-conservation.

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that the tap water is safe to drink, 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) comes from rivers, lakes, streams, ponds, reservoirs, springs, and wells. When water runs 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.

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:

<u>Inorganic Contaminants</u>—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.

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

<u>Organic Chemical Contaminants</u>—Synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, which may come from gas stations, urban storm runoff, and septic systems.

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

Radioactive Contaminants—Can be naturally occurring or be the result of oil and gas production and mining activities.

Important Health Information

Some may be more vulnerable, than the general population, to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immune compromised 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. Additionally, guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the U.S. 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 now 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.**

2021 Monitoring Results for the Town of Prosper

Results are from Town of Prosper and NTMWD

Coliform Bacteria									
Max Contaminant Level Goal	Total Coliform Max Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Max Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination			
0	1 Positive Monthly Sample	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.

Regulated Contaminants										
Contaminant	Year	Highest Level Detected	Range Detected	MCLG (MRDLG)	MCL (MRDL)	Units	Violation	Likely Sources of Contaminant		
Disinfectants and Disinfection By-products										
Chlorine Residual (Chloramines)	2021	3.23	1.7 - 3.23	(<4.0)	(4.0)	ppm	No	Disinfectant used to control microbes.		
Chlorite	2021	0.97	0 - 0.97	No Goal	(1.0)	ppm	No	Disinfectant.		
Total Haloacetic Acids	2021	32.7	12.7 - 32.7	No Goal	60	ppb	No	By-product of drinking water chlorination.		
Total Trihalomethanes	2021	42.3	25.0 - 42.3	No Goal	80	ppb	No	By-product of drinking water chlorination.		
Bromate	2021	69.2	5.27 - 69.2	5	10	ppb	No	By-product of drinking water ozonation.		
	Organic Contaminants									
Atrazine	2021	0.3	0.2 - 0.3	3	3	ppb	No	Runoff from herbicide used on row crops.		
Simazine	2021	0.12	0.08 - 0.12	4	4	ppb	No	Herbicide runoff.		
				Inorganic Co	ontaminants					
Barium	2021	0.038	0.037 - 0.038	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.		
Fluoride	2021	0.48	0.306 - 0.48	4	4	ppm	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.		
Nitrate (Measured as Nitrogen)	2021	0.802	0.110 - 0.802	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.		

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

Note: If present, elevated levels of lead can cause serious health problems, especially for pregnant woman 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 water has been sitting for several hours, minimize the potential for lead exposure by flushing the tap for 30 seconds to two 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.

Lead and Copper Rule Violation								
Violation Type	Violation Begin Violation End		Violation Explanation					
Lead Consumer Notice (LCR)	12/30/2021	01/11/2022	TCEQ did not receive the customer copies prior to the due date. Once the Town of Prosper was aware of the violation, the copies were emailed to TCEQ, and the violation was resolved, immediately.					

Note: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Unregulated Contaminants										
Contaminant	Year	Highest Level Detected	Range Detected Units		Likely Source of Contamination					
Disinfection By-products										
Chloroform	2021	20.70	7.22 - 20.70	ppb	By-product of drinking water disinfection.					
Bromoform	2021	2.86	1.19 - 2.86	ppb	By-product of drinking water disinfection.					
Bromodichloromethane	2021	14.0	8.09 - 14.0	ppb	By-product of drinking water disinfection.					
Dibromochloromethane	2021	8.26	5.99 - 8.26	ppb	By-product of drinking water disinfection.					

Note: Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane are disinfection by-products. There is no MCL for these chemicals at the entry point to distribution. 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.

Secondary Constituents									
Calcium	2021	77.5	34.5 - 77.5	ppm	Abundant naturally occurring element.				
Chloride	2021	73.5	4.78 - 73.5	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.				
Magnesium	2021	4.43	3.40 - 4.43	ppm	Abundant naturally occurring element.				
рН	2021	9.12	7.56 - 9.12	units	Measure of corrosivity of water.				
Sulfate	2021	153.0	22.4 - 153.0	units	Naturally occurring; common industrial by-product; by-product of oil field activity.				
Total Dissolved Solids	2021	444	186 - 444	ppm	Total dissolved mineral constituents in water.				
Total Hardness as CaCO3	2021	192	96 - 192	ppm	Natural occurring calcium.				

Definitions:

<u>AL (Action Level)</u>—The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

EPA—Environmental Protection Agency.

<u>Level 1 Assessment</u>— 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.

<u>Level 2 Assessment</u>— 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.

<u>MCL (Maximum Contaminant Level)</u>—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.

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.

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.

ND—Not detectable at testing limits.

NTMWD—North Texas Municipal Water District.

<u>ppb (parts per billion)</u>—One part substance per billion parts water. Micrograms per liter (ug/l).

<u>ppm (parts per million)</u>—One part substance per million parts water. Milligrams per liter (mg/l).

<u>Secondary Constituents</u>—Found in drinking water and can cause taste, color, and odor problems. The taste and odor constituents are regulated by the state of Texas, not the EPA. These constituents are not causes for health concern.

 $\underline{90th\ Percentile} \underline{-90\%}$ of samples are equal to or less than the number reported in the chart.

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (972) 346-2640 para hablar con una persona bilingüe en español.