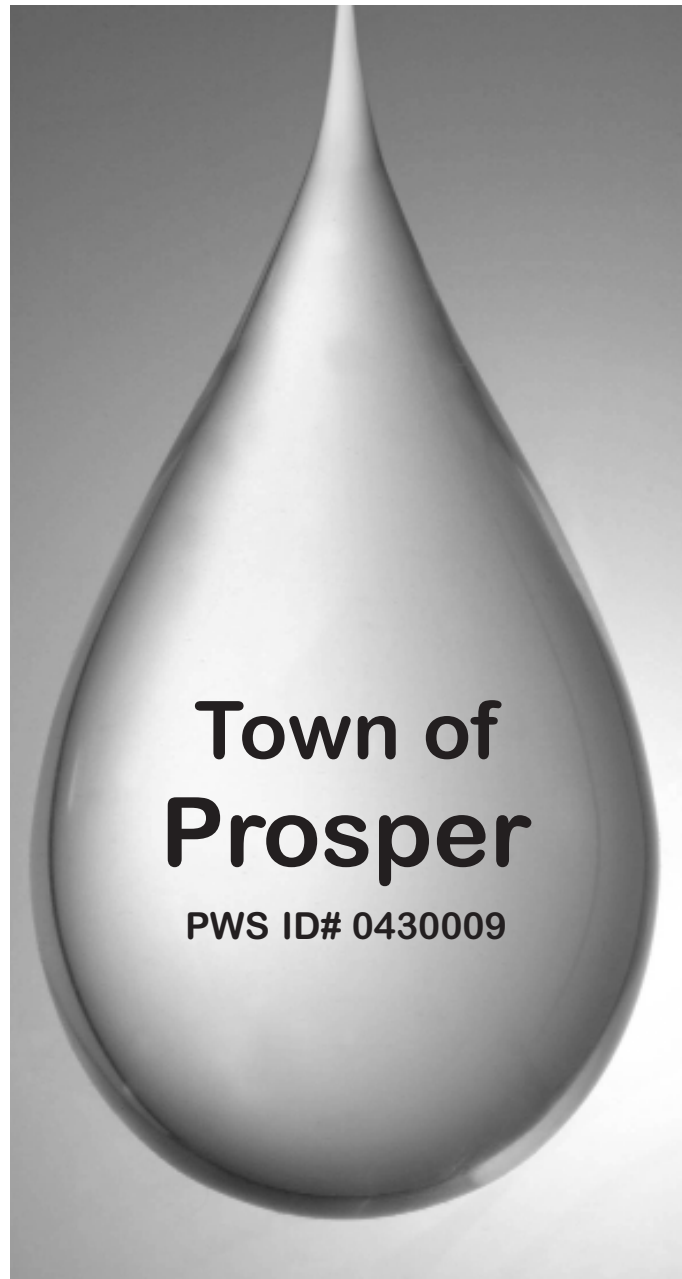


Town of Prosper  
P.O. Box 307  
121 W. Broadway Street  
Prosper, TX 75078



TOWN OF  
PROSPER



Town of  
Prosper

PWS ID# 0430009

## 2010 Annual Water Quality Report

### Town of Prosper

972-347-9969

PWS ID # 0430009

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

#### What's 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 through December 31, 2010. 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.

Most of the water for the Town of Prosper is treated water purchased from the North Texas Municipal Water District. NTMWD relies on surface water from Lavon Lake, Lake Texoma and Jim Chapman Lake (Cooper Lake). We also blend that water with water from our own wells, which draw ground water from the Paluxy and Woodbine aquifers. Your water is treated through sedimentation, filtration and disinfection to reduce or remove harmful contaminants that may be present in your drinking water.

A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water 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 at our system, please contact us.

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](http://www.prospertx.gov). We want our valued customers to be informed about their water utility. You can attend regular City Council meetings on the 2nd and 4th Tuesday of each month, at 6:00 PM, at the Prosper Middle School, located at 605 East 7th Street.

**For the latest information on water use restrictions and helpful tips on how to conserve water (and lower your utility bill), visit our website at [www.prospertx.gov](http://www.prospertx.gov).**

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

In order to ensure that 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.

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).

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.

2010 Monitoring Results for the Town of Prosper							
<p>You may be more vulnerable than the general population to certain microbial contaminants, such as <i>Cryptosporidium</i>, in drinking water. Infants, some elderly, or immuno-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. Additional guidelines on appropriate means to lessen the risk of infection by <i>Cryptosporidium</i> are available from the Safe Drinking Water Hotline (1-800-426-4791).</p>							
Combined Results from Town of Prosper and NTMWD							
Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Highest Level & (Range)	Violation (Yes / No)	Year 1 Sampled	Potential Source of Contamination
<b>Microbiological Contaminants</b>							
Total Organic Carbon	ppm	NA	TT	4.34 average (source water) 3.06 - 9.32	NO	2010	Naturally present in the environment.
Turbidity <sup>2</sup>	NTU	NA	Never > 1 NTU < 0.3 NTU in 95% of samples	1.14 Highest Sample 99.86% met 1 NTU limit	NO	2010	Soil runoff.
<b>Radioactive Contaminants</b>							
Beta/Photon emitters	pCi/L	0	50 <sup>4</sup>	4.8 (ND - 4.48)	NO	2009 - 2010	Decay of natural and man-made deposits.
Gross alpha	pCi/L	0	15	2.1 (ND - 2.1)	NO	2009	Erosion of natural deposits.
<b>Inorganic Contaminants</b>							
Antimony	ppb	6	6	0.623 (ND - 0.623)	NO	2010	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder.
Arsenic	ppb	0	10	0.565 (ND - 0.565)	NO	2010	Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production wastes.
Barium	ppm	2	2	0.08 (0.01 - 0.08)	NO	2010	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Chlorite	ppm	0.8	1	0.33 average (0.01 - 0.75)	NO	2010	Byproduct of drinking water disinfection.
Chromium	ppb	100	100	0.435 (0.315 - 0.435)	NO	2010	Discharge from steel and pulp mills. Erosion of natural deposits.
Copper	ppm	1.3	1.3 = AL	0.296 (90th percentile) All sites below action level	NO	2009	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
Fluoride <sup>3</sup>	ppm	4	4	4.1 0.41 - 4.1	NO	2009 - 2010	Erosion of natural deposits. Water additive to promote strong teeth. Discharge from fertilizer and aluminum factories.
Lead	ppb	0	15 = AL	2.2 (90th percentile) All sites below action level	NO	2009	Corrosion of household plumbing systems. Erosion of natural deposits.
Nitrate	ppm	10	10	0.51 (0.17 - 0.51)	NO	2010	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Selenium	ppb	50	50	1.04 ND - 1.04	NO	2010	Discharge from petroleum and metal refineries. Erosion of natural deposits. Discharge from mines.
Thallium	ppb	0.5	2	1.49 (ND - 1.49)	NO	2010	Leaching from ore-processing sites. Discharge from electronics, glass and drug factories.
<b>Synthetic Organic Contaminants</b>							
Atrazine	ppb	3	3	0.24 (ND - 0.24)	NO	2010	Runoff from herbicide used on row crops.
Simazine	ppb	4	4	0.08 (ND - 0.08)	NO	2010	Herbicide runoff.
<b>Organic Contaminants, Disinfectants and Disinfection Byproducts</b>							
Chlorine Residual, Total	ppm	MRDLG = 4	MRDL = 4	1.93 (0.88 - 2.2)	NO	2010	Disinfectant used to control microbes.
Total Haloacetic Acids (HAA5)	ppb	NA	60	21.1 (20.7 - 21.4)	NO	2010	Byproduct of drinking water chlorination.
Total Trihalomethanes (TTHM)	ppb	0	80	28.5 (26.4 - 30.7)	NO	2010	Byproduct of drinking water chlorination.

**Notes:**

<sup>1</sup>The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

<sup>2</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, diarrhea and associated headaches.

<sup>3</sup>Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

<sup>4</sup>The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

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.

Substance	Unit	Level Detected	Range	Year <sup>1</sup> Sampled	Potential Source of Contamination
Bromodichloromethane	ppb	10.8	10.1 - 11.6	2010	Byproduct of drinking water chlorination.
Dibromochloromethane	ppb	5.7	5.5 - 5.9	2010	
N-nitrosodimethylamine	ppb	0.0023	ND - 0.0023	2009	
Chloroform	ppb	12	10.8 - 13.2	2010	

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 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 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>.

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

The NTMWD continues to diligently analyze both source water and treated water for the presence of *Cryptosporidium*. *Cryptosporidium* has not been detected in any of the samples tested. *Cryptosporidium* is a protozoan that is so small it can only be seen through a microscope. It affects the digestive tracts of both humans and animals. At this time, drug therapy has not proven to be effective in treating cryptosporidiosis, but those with healthy immune systems usually recover within two weeks.

**Definitions**

**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 Goal (MRDLG):** 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.

**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.

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

**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.

**NTU (Nephelometric Turbidity Units):** A measure of clarity.

**NA:** Not applicable.

**ND:** Not detectable at testing limits.

**PPB (parts per billion):** micrograms per liter (ug/l).

**PPM (parts per million):** milligrams per liter (mg/l).

**CDC:** Centers for Disease Control.

**EPA:** Environmental Protection Agency.

**TCEQ:** Texas Commission on Environmental Quality.

**NTMWD:** North Texas Municipal Water District.

**MREM (millirems):** a measure of radiation absorbed by the body.

**pCi/L (picocuries per liter):** a measure of radioactivity.