

# Prior Lake Drinking Water Found Safe in 2003

Before the City of Prior Lake delivers water to your home, it is thoroughly tested in certified laboratories that can detect trace amounts of contaminants. Prior Lake test results for last year are shown in the table at right. **No contaminants were detected that exceeded 2003 EPA limits in drinking water.**

EPA regulates substances that are potentially harmful to human health and have a reasonable possibility of being found in drinking water. Tests for some of these substances is frequent: weekly, quarterly, or annually. The levels of some things however, change little over time, or the chances of detecting them is low. These are monitored less than annually. Substances that have been found in previous years' testing are also listed in the table, along with the year that they were found.



## Definition of Terms in the Table

The **Level Found** can be the highest amount found or the average of all samples analyzed, depending on the regulation for the particular substance.

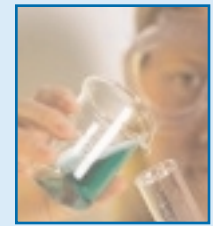
*No contaminants were detected that exceeded limits for safe drinking water*

**Regulated substances** have Maximum Contaminant Levels (MCLs) set by the EPA. This is the highest level of the substance legally allowed in drinking water. Some contaminants also have MCL goals (MCLGs). This is the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as feasible using the best available water treatment processes.

**Unregulated substances** do not have MCLs. They are assessed by state standards known as health risk limits. If an unacceptable amount of any substance is ever found in our water, the City of Prior Lake will notify residents immediately and take corrective action to eliminate the problem. Monitoring for unregulated contaminants as required by U.S. Environmental Protection Agency was conducted in 2003. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at 651-215-0767. The **Action Level (AL)** is the MCL for lead and copper. If 90% percent of all samples tested are not below the action level concentration, then the water utility is required to perform treatment processes that will help decrease pipe corrosion.

# Results of Laboratory Testing City of Prior Lake Drinking Water

January 1 to December 31, 2003



Detected Substance(units) <i>MCL (highest level allowed in water by EPA) MCLG (level where there is no known health risk)</i>	*Test Date	Results for Prior Lake Tap Water		Typical Source of Substance in Drinking Water
		Level Found	2002 Range of Detections	
Fluoride (ppm) <i>MCL: 4.0; MCLG: 4.0</i>	2003	1.16	0.88-1.1	Additive for strong teeth; erosion of natural deposits; fertilizer and aluminum factories.
Lead (ppb) <i>AL: 15 (90% of samples tested must be &lt;15 ppb)</i>	2001	90% of samples < 3.0	0 out of 30 samples tested > 15 ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm) <i>AL: 1.3 (90% of samples tested must be &lt;1.3 ppm)</i>	2001	90% of samples < 0.404	1 out of 30 samples tested > 1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Sodium (ppm) <i>No established EPA limits</i>	2003	5.5	4.0-5.5	Erosion of natural deposits.
Sulfate (ppm) <i>No established EPA limits</i>	2003	20	7.7-20	Erosion of natural deposits.
Radon (pCi/L) <i>Limit not yet established</i>	2003	10	—	Erosion of natural deposits.
Alpha Emitters (pCi/L) <i>MCL: 15; MCLG: 0</i>	2003	3.9	—	Erosion of natural deposits.
Total Trihalomethanes (ppb) <i>MCL: 100; MCLG: NA</i>	2002	4.6	—	By-product of drinking water disinfection.
Arsenic (ppb) <i>MCL: 50; MCLG: 0</i>	2003	8.11	nd-8.11	Erosion of natural deposits; Runoff from orchards glass and electronic production waste.
Barium (ppm) <i>MCL: 2.0; MCLG: 2.0</i>	2003	0.37	0.05-0.37	Discharge of drilling wastes, metal refineries and erosion of natural deposits.
Combined Radium (pCi/L) <i>MCL: 5.4; MCLG: 0</i>	2003	0.29	—	Erosion of natural deposits.
Mercury (inorganic) (ppb) <i>MCL: 2.0 MCLG: 2.0</i>	2003	0.27	nd-0.27	Erosion of natural deposits; discharge from refineries and factories; Runoff from landfills and cropland.

\*Annual monitoring is not required for all substances. For this reason, results in the table are for when the substance was last analyzed and detected, which may have been prior to 2003.

## Units of Measurement: Abbreviations

**ppm:** parts per million, or milligrams per liter **ppb:** parts per billion, or micrograms per liter  
**pCi/L:** picocuries per liter, a measure of radioactivity **ND:** Not Detected

# What You Should Know About the Prior Lake Water Supply System

## Prior Lake Water is Groundwater

All Water delivered to residents is groundwater. The City operates five wells, ranging in depth from 345 to 640 feet deep. Four of these wells draw water from the Jordan Sandstone Aquifer. The fifth well taps into the Franconia-Ironton-Galesville aquifer, another sandstone formation that can produce high-capacity wells.

The Minnesota Department of Health has determined that one or more sources of your drinking water is susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-215-0800 during normal business hours. Also, you can view it online at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa).

## Source Water Testing

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 humans. Water from the wells is thoroughly tested for contaminants like these, and lab test results for Prior Lake water are listed on the reverse side of this report.

## Water Tower Reconditioning

If you haven't noticed or heard, the City of Prior Lake has hired a consulting firm and two other contractors to recondition and paint the community's two water towers.

Other water system developments include efforts to loop the entire water system. This will eliminate hydraulic dead ends, which can result in stagnant water during periods of low water use. This should also optimize water pressure and fire protection



throughout the City  
**Meter Project**

Remember to keep the radio transmitter in your home (a gray box about 4" square, located near the water meter) accessible and free of obstructions. If the receiver is unable to detect a signal, City staff will have to visit your home and correct the problem.

*Keep your transmitter accessible and free of obstructions*



## Water Conservation



Over-depletion of our water supply resources is a real threat. Remember that the City of Prior Lake observes an odd/even sprinkling restriction, in conjunction with an 11:00 a.m. to 5:00 p.m. daily ban effective May 1 through September 1. You can save water and have a green lawn by following a few wise-use water tips:

*If your grass springs back when you step on it, it doesn't need watering.*

*If it rains an inch or more, wait at least five days to water again.*

*Use a sprinkler that delivers large drops, rather than a fine mist.*

*Mow your grass to a length of 2 to 3", and let the clippings lie on the ground. This shades the soil to prevent evaporation.*

## Sprinkler Systems

Many Prior Lake homeowners have sprinkler systems which do not have rain sensors. To encourage cooperation, the city will reimburse eligible homeowners up to \$50 for the purchase and installation of a rain sensor for their residential system. To be eligible, the homeowner must verify in writing that the sensor was purchased and installed after April 1, 2004, by a qualified lawn care company by filling out the appropriate application form and submitting a paid receipt to Craig Eldred, Street and Utility Superintendent: Prior Lake Maintenance Center; 17073 Adelman St. SE, Prior Lake, MN 55372. For more information call (952) 440-9675.

## Sod Watering Permits

New sod watering permits are available at the maintenance center at 17073 Adelman St. SE. or by contacting the maintenance center at 952-440-9675. The permits are only available if you have installed new sod, seeding or landscaping and must be inspected by maintenance personnel prior to being allowed. This permit is only good for thirty days which allows watering everyday excluding the hours of 11am to 5pm.



## Aesthetic Water Quality

Not only is the water tested for regulated contaminants, we also monitor for parameters important to water quality. Use this information when selecting and adjusting home treatment devices:

pH	7.2	
Total Hardness	330 ppm	19.3 grains/gal
Calcium	210 ppm	12.3 grains/gal
Magnesium	120 ppm	7.0 grains/gal
Iron	0.10 ppm	0.006 grains/gal
Manganese	0.074 ppm	0.004 grains/gal



## The Laboratory Tests

Your water is thoroughly tested as it is pumped from the ground and from locations throughout the city.

Contaminants that may be present in source water are divided into five basic testing categories:

**Microorganisms**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations, and wildlife.

**Inorganic contaminants**, such as salts and metals, which can occur naturally or come from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and herbicides**, which may come from agriculture, urban stormwater runoff, and residential uses.

**Organic chemicals**, including synthetic and volatile organic chemicals, which are industrial and petroleum process byproducts and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive contaminants**, which can occur naturally or result from oil and gas production and mining.



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 (800-426-4791).

## What You Need to Know about Drinking Water Regulations

In order to ensure that tap water is safe to drink, the 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.

## Contaminant Information from EPA

*Some people may be more vulnerable to contaminants found 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/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).*

### Radon

Radon is a radioactive gas which is naturally occurring in some groundwater. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, or washing dishes or clothes) and a stomach cancer risk when it is ingested. Because radon in indoor air poses a much greater health risk than radon in drinking water, EPA is assessing two limits for drinking water. One limit is an Alternative Maximum Contaminant Level (AMCL) of 4000 pCi/L. It will apply to states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools and communities to reduce the radon threat from indoor air. The second limit, which will apply to states without an indoor air program, may be set at 300 pCi/L. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.

### Arsenic

While your drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.



# Stay Informed about Drinking Water Issues

The City of Prior Lake strives to provide safe drinking water and top-notch service to residents. We also encourage you to stay abreast of drinking water issues. Informed water customers are powerful advocates for safe drinking water.

The City's web site ([www.cityofpriorlake.com](http://www.cityofpriorlake.com)) contains information about Prior Lake's Public Works department, water system, water conservation, and lawn watering restrictions. If you'd like to learn more, use sources listed below.

## Contact Information

EPA Safe Drinking Water Hotline	800-426-4791
Minnesota Department of Health	651-215-5800
Minnesota Department of Natural Resources	651-296-6157

## Internet Resources

[www.waterwiser.org](http://www.waterwiser.org)  
[www.h2ouse.net](http://www.h2ouse.net)  
[www.epa.gov/safewater](http://www.epa.gov/safewater)  
[www.dnr.state.mn.us/waters](http://www.dnr.state.mn.us/waters)  
[www.health.state.mn.us/divs/eh/water](http://www.health.state.mn.us/divs/eh/water)  
[www.epa.gov/OGWDW/kids](http://www.epa.gov/OGWDW/kids)



City of Prior Lake  
16200 Eagle Creek Ave.  
Prior Lake, MN 55372-1714

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Prior Lake, MN  
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\*\*\*ERCWSS\*\*\*  
Residential Customer Local

# City of Prior Lake Water Quality Report

June 2004

## Prior Lake Resident:

This annual Water Quality Report is your guide to the quality and safety of the tap water provided by the City of Prior Lake Utilities Department. Please review this report, and let us know about your concerns.

We encourage customers to stay informed on drinking water issues. For questions or concerns about tap water or information about opportunities for public participation in decisions that may affect the water quality, contact the Water Department at the Prior Lake Maintenance Center at 440-9675.

Informacion importante. Si no la entiende, haga que alguien se la traduzca ahora.

Noy yog ntaub tseem ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.

