

Chanhassen's New WaterWise Program

Water is essential to life on earth and it's in limited supply. But here in Chanhassen, is it really an issue? We have lots of lakes, wetlands and streams. It seems like water is everywhere. But Chanhassen's drinking water doesn't come from the surface. These types of water bodies make up the surface water area of Chanhassen. The water that comes out of your tap at home comes from ground water held below the surface in aquifers.

Water is constantly being cleaned and recycled through earth's natural processes, but conservation is necessary because we use groundwater faster than it can be naturally replenished. Chanhassen's WaterWise program offers education and incentives to encourage water conservation by residents and businesses. The program offers information on how you can use your water efficiently and effectively. When you take steps to use only the amount of water you need, you help the city meet the demand in the most cost-effective and environmentally sound way.

Why should you conserve water?

• When you use water wisely, you save energy. You save the energy that the city uses to treat and move water to you, and the energy your home uses to heat vour water.

• When you use water wisely, you save money. You pay for the water you use. If you use less water, you'll have more money left to spend on other things. • When you use water wisely, you help the environment. You help preserve drinking water supplies. And you ease the burden on wastewater treatment plants - the less water you send down the drain, the less work these plants have to do to make water clean again.

(from Jacksonville Energy Authority)

Tips on how you can be WaterWise

• Avoid watering between 9 am and 7 pm and never water on a windy day. Watering during the warmest part of the day, when the sun is the strongest, is the worst time to water due to the high rate of evaporation.

•Don't over-water. Only give your grass and plants the amount of moisture they need. Most lawns only need 1 inch of water or rain a week. Use a rain sensor on your irrigation system to avoid watering when it's raining.

• Raise your lawn mower up an inch or two. Allowing your grass to grow to 2-3 inches requires less watering and also encourages a deeper root system. •Install a rain barrel. Rain barrels collect stormwater off of roofs and store it for

future use, such as watering your garden and lawn.

• Check your toilets and fixtures for leaks. A slow drip wastes up to 20 gallons a day, while a leaky toilet can waste hundreds of gallons.

• Turn the faucet off while brushing your teeth or shaving.

•Keep daily showers to 5 minutes or less. A typical shower uses 5 gallons of water a minute.

For more information on the WaterWise program and how to sign up, visit the City of Chanhassen's website at www.ci.chanhassen.mn.us.



City of Chanhassen 7700 Market Boulevard P.O. Box 147 Chanhassen, MN 55317

Drinking Water Questions

City Hotline For up-to-date information on water outages or watermain repairs, call the Utility Hotline at 952-227-1317 For water quality questions please email Craig at ccarlson@ci.chanhassen.mn.us or call 952-227-1701

This annual report outlines how Chanhassen drinking water compared to regulations set by the **Environmental Protection Agency** (EPA). The regulations are enforced by the Minnesota Department of Health. This report is part of the city's obligation to provide residents with timely and accurate information about the city's drinking water and water system. In this report, you will find information about Chanhassen's water system, drinking water information from the EPA, and lab test results for the city's drinking water during 2008.

Chanhassen **Drinking Water** 2008 **Annual Report**

Source of Chanhassen's Water

The City of Chanhassen is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2008. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. The City of Chanhassen provides drinking water to its residents from a groundwater source: 10 wells ranging from 210 to 500 feet deep, that draw water from the Prairie Du Chien-Jordan, Quaternary Buried Unconfined and Multiple aquifers.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or call 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it online at

www.health.state.mn.us/divs/eh/water/swp/swa.

How to Read the Water Ouality Table No contaminants were detected at levels that violated federal drinking water standards.

The results contained in the following table indicate that some contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminant's are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2008. If any of these contaminant's were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

Key to Abbreviations:

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.

MRDL - Maximum Residual Disinfectant Level. MRDLG - Maximum Residual Disinfectant Level Goal.

AL - Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

90th Percentile Level: This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels.

Some contaminant's do not have MCLs established for them. These unregulated contaminant's are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated contaminant are found, the response is the same as if an MCL has been exceeded; the water system must inform its customers and take other corrective actions.

Key to Abbreviations

pCi/l - PicoCuries per liter ppb - parts per billion ppm - parts per million nd - No Detection N/A - Not applicable

Drinking Water Quality

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams 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 stormwater 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 stormwater runoff, and residential uses. Organic Chemical contaminant's, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminant's, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminant's in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminant's in bottled water which must provide the same protection for public health.

A Word About Radon in Drinking Water

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, an Alternative Maximum Contaminant Level (AMCL) of 4,000 picoCuries per liter may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools and communities to reduce the radon threat from indoor air. For states without such a program, the Maximum Contaminant Level (MCL) of 300 pCi/l may apply. Minnesota plan to adopt an Indoor Air Program once the Radon Rule is finalized.

A Word About Lead in 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. City of Chanhassen 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 the 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 www.epa.gov/safewater/lead.

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 at 1-800-426-4791.

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-comprised 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 are available from the Safe Drinking Water Hotline at 1-800-426-4791.

2008 Water Testing Results

Contaminant (units)	MCLG	MCL	Range	Result	Source of Contaminant
Arsenic (ppb)	0	10	nd-1.5	1.38	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.037518	0.18	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
Combined Radium (pCi/l)	0	5.4	nd-0.18	1.8	Erosion of natural deposits.
Alpha Emitters (pCi/l)	0	15.4	3-6	6	Erosion of natural deposits.
Fluoride (ppm)	4	4	1-1.1	1.05	Additive to promote strong teeth; erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	10	10	nd-0.06	0.06	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Haloacetic Acids (ppb)	0	60	N/A	2.4	By-product of drinking water disinfection.
Total Trihalomethanes (ppb)	0	80	N/A	2.5	By-product of drinking water disinfection.
Mercury (inorganic) (ppb)	2	2	nd-0.01	0.01	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and croplands.
Radon (pCi/l)	N/A	N/A	221-244	237	Erosion of natural deposits.
Chlorine (ppm)	4	4	nd-0.2	0.12	Water additive used to control microbes.
Copper (ppm)	N/A	90% of samples must be <1.3	90% of samples <1.33	6 out of 60 >1.3	Corrosion of household plumbing systems; erosion of natural deposits.
Lead (ppb)	N/A	90% of samples must be <15	90% of samples nd	0 out of 60 >15	Corrosion of household plumbing systems; erosion of natural deposits.
Sodium (ppm)	N/A	N/A	6.8-10	10	Erosion of natural deposits.
Sulfate (ppm)	N/A	N/A	1.72-92.7	92.7	Erosion of natural deposits.





