## City of Plymouth 2008 Water System Report

**City of Plymouth** 3400 Plymouth Boulevard Plymouth, MN 55447-1482 (763) 509-5000 TDD (763) 509-5065

Hours: M, W, Th, F, 8 a.m. - 4:30 p.m. Tues., 8 a.m. - 6 p.m. Website: www.ci.plymouth.mn.us

#### Plymouth prohibits The Restrictions

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owners with automatic water customers. Property restrictions apply to all city numbered days. The number may water on even addresses ending in an even calendar days. Those with water on odd-numbered vem 19dmun-bbo ne ni gnibn9 businesses with addresse Homeowners and

could receive a notice of violation. misaligned and water is spraying in the street, you irrigation system that is not functioning properly or is accordingly. Please keep in mind that if you have an irrigation systems must adjust their systems

#### Exceptions

New Sod/Landscaping - If you have new sod, seed or the hose has a nozzle with automatic shutoff. shrubs, flowers and trees on any day and at any time if rehicles and do hand-held hose watering of Hand-Held Watering - City water customers may

however, still abide by the midday ban from noon to the first 30 days following planting. You must, gnirub gnirətew bəbnəttenu rot enoitoirtes neve-bbo landscaping, you do not need to tollow the

the city water system. apply to people who use sources of water other than Non-City Water Customers - The restrictions do not ·w·d q

restrictions. exclusively for recreational use is also exempt from the public works director. Intermittent sprinkling that is submit a written request for an exemption to the vem seu frequent of sub sgemeb sldenosesru need to irrigate turf or playfields to prevent Other Exceptions - Businesses and organizations that

that are in effect from May 1 through Sept. 30. Plymouth has annual restrictions on outdoor water use To conserve water and address DNR requirements,



2005 Pumping Totals

#### Water Usage

the aquifer. million gallons. This spike puts significant stress on 000 tuode of eases increases to about 600 million gallons of water monthly, however during the month. The city of Plymouth pumps an average of 295 The graph above shows Plymouth's water use by

system. Construction will be completed later this year. the city is adding another well to the municipal water To meet the growing demand for water in Plymouth,

annual water restrictions. Consequently, the city of Plymouth has adopted during the peak months to meet the demand. to recharge. They cannot recharge quickly enough Our water source is not infinite. Aquifers require time

#### Why Restrictions?

permit from the DNR to construct new wells. proactively. This is especially true when a city seeks a (DNR) requires cities to address water conservation The Minnesota Department of Natural Resources

#### Outdoor Water Restrictions



Adding Quality to Life

residents and businesses. We encourage you to call us with questions or concerns about your water quality and service. For more information

about the Plymouth water system, such as test

results, customer service questions, and

Learn More about Tap Water The city of Plymouth strives to provide safe, quality drinking water and high quality service to

#### Enforcement

could receive a notice of violation. misaligned and water is spraying in the street, you system that is not functioning properly or is Please keep in mind that if you have an irrigation receive one written warning before you are penalized. restrictions is \$100 for each day of violation. You will when they see violations. The penalty for violating City employees will enforce the water restrictions

#### รอธินชนุว

media will also be notified. Restriction Information Line, 763-509-5512. Area vebsite, www.ci.plymouth.mn.us, and on the Water restrictions, they will be announced on the City If drought conditions require any changes to the

#### Help Us Conserve Water

lawn and save water by following these tips: biggest residential use of water. You can have a green threat in this region. Lawn watering is the single Over-depletion of our groundwater resources is a real

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

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

sprinkler heads are misaligned. have changed and the city will fine residents whose a fine mist. Also, please note that city ordinances ◆Use a sprinkler that delivers large drops, rather than

prevent evaporation. clippings on the ground. This shades the soil to •Mow your grass to a height of 2" to 3", and leave the

.gniwom insqr sind time spent mowing. ·Let your lawn go dormant during the hot summer



opportunities for public participation in meetings where drinking water decisions are made, call Utilities Superintendent Scott Newberger at 763-509-5999 or Utilities Senior Engineer Technician Greg Cook at 763-509-5997.

To learn more about drinking water issues, connect with the resources listed below.

#### Contact Information and Internet Resources

Environmental Protection Agency (EPA) (Safe Drinking Water Hotline) 800-426-4791 www.epa.gov/safewater Minnesota Department of Health (MDH) 651-201-5000 www.health.state.mn.us/divs/eh/water Minnesota Department of Natural Resources (DNR) 651-296-6157 www.dnr.state.mn.us/waters American Water Works Association www.awwa.org

# Postal Customer \*\*\*\*\*\*ECRWSS\*\*

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This report includes the results of monitoring done on Plymouth's drinking water from January 1 to December 31, 2008. The purpose of this report is to help consumers better understand where their drinking water comes from and how it is monitored.

#### **Results of Monitoring**

No contaminants were detected at levels that violated federal drinking water standards, however some contaminants were detected in trace amounts. The table shows the contaminants that were detected in trace amounts last year or in years prior. (Not all contaminants were sampled for in 2008).

The city of Plymouth monitors the levels of chlorine in your water once per week. It also test for the presence of coliform bacteria on a weekly basis.



#### How to Read the Water Quality Table

The Level Found can be the highest amount found in the water or the average of all samples analyzed, depending on the regulation. If it is an average, it may contain sampling results from the previous year. If multiple samples were tested in 2008, the lowest and highest detected values are listed under Range of Detections.

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.
Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other actions by the water system provider.
90th Percentile Level: This is the value obtained after disregarding 10 percent of the samples take that had the highest percentile.

Unregulated substances do not have Maximum Contaminant Levels (MCL). They are assessed by comparing the detected amount to state standards known as health risk limits. If an unacceptable amount of any substance is ever found in Plymouth's water, the city of Plymouth will notify residents immediately and take corrective action to eliminate the problem.

**pCi/l:** picoCuries per liter (a measure of radioactivity)

**ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **MRDL:** Maximum Residual Disinfectant Level **MRDLG:** Maximum Residual Disinfectant Level Goal

#### Health Information from the EPA

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. For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791. Some people may be more vulnerable to contaminants 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 from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

#### Monitored Substances

In general, sources of drinking water (both tap water and bottled water) may 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 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 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 stormwater runoff and septic systems. **Radioactive contaminants,** which can be naturally-occurring or the result of oil and gas production and mining activities.

#### How Regulations Are Established

To ensure that tap water is safe to drink, the EPA prescribes regulations, which 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, which must provide the same protection for public health.

#### Source Water Information

The city of Plymouth provides drinking water to its residents from a groundwater source. Plymouth has 14 wells ranging from 302 to 473 feet deep. They draw water from the Prairie Du Chien - Jordan and Prairie Du Chien Group aquifers.

The Minnesota Department of Health has determined that the sources used to supply your drinking water are not particularly susceptible to contamination. If you wish to obtain the entire source water assessment for your drinking water, call 651-201-4700. You can also view it online at: www.health.state.mn.us/divs/eh/water/swp/swa.

#### 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. The city of Plymouth 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.



### Results of Plymouth Water Testing

Detected Substance Units of Measurement	Test Date	MCL: Highest Amount Allowed	MCLG: No Health Risk	Level Found in Plymouth Water	Range of Detections	Typical Source of Substance in Drinking Water
<b>Fluoride</b> ppm	2008	4	4	1.1	0.99-1.1	Water additive which promotes strong teeth; erosion of natural deposits; aluminum and fertilizer factories.
Haloacetic Acids (HAA5) ppb	2008	60	—	5.1		By-product of drinking water disinfection.
<b>Total Trihalomethanes</b> ppb	2008	80	_	19.3	_	By-product of drinking water disinfection.
Total Coliform Bacteria	2008	> 5% present	0 present	1%**	_	Naturally present in the environment.
<b>Chlorine</b> <i>ppm</i>	2008	MRDL: 4	MRDLG: 4	0.32 = highest quarterly average	0.2-0.5 = highest and lowest monthly average	Water additive used to control microbes.
<b>Copper</b> ppm	2006	90% of samples must be below 1.3 ppm (AL)	_	90% < 1.23	3 out of 30 homes exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits.
Lead ppb	2006	90% of samples must be below 15 ppb (AL)	_	90% < 3.0	0 out of 30 homes exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits.
Sodium ppm	2007	No limit set	—	12.0		Erosion of natural deposits.
Sulfate ppm	2007	No limit set	_	16.2		Erosion of natural deposits.

\*\*Follow-up sampling showed no contamination present.