



City of Burnsville

Producing Water You Can Trust

2011 Drinking Water Report



The City of Burnsville is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2010. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. This report provides a snapshot of the quality of water we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

Spanish: Información importante. Si no la entiende, haga que alguien se la traduzca ahora.

Russian: Этот документ содержит важную информацию. Если вы не понимаете, то пожалуйста найдите кто-то для того чтобы помочь перевести для вас.

If you have questions about the City of Burnsville drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water, call (952) 895-4550.

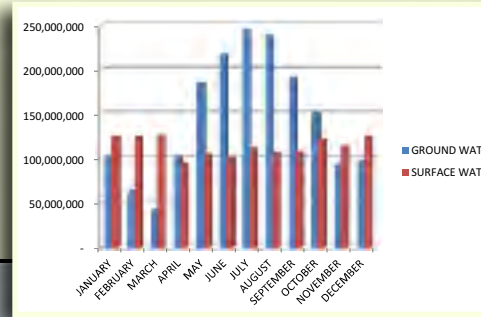
Helpful Websites:

City of Burnsville - www.burnsville.org

Minnesota Department of Health - www.health.state.mn.us

Minnesota Pollution Control Agency - www.pca.state.mn.us

Environmental Protection Agency - www.epa.gov



Utility News

In 2010 the City of Burnsville pumped 2.07 billion gallons of water from ground water and surface water sources. As can be seen from the graph above, there are several months when more surface water was pumped than ground water. Pumping less from ground water wells will speed up recharge of the ground water source.

The City of Burnsville is committed to improving drinking water quality for our customers. Several water quality improvements have occurred in the past year. A baffle wall was installed in the seven million gallon underground storage tank at the water plant. The purpose of this project is to improve mixing of filtered well water and surface water before it enters the distribution system. This mixing will create a better blended and more consistent product.

Water quality will also be improved with Unidirectional Hydrant Flushing. Unidirectional flushing is a routine process of cleaning mains of the water system. It is a systematic and controlled hydrant flushing program that removes sediment from the mains. Flushing improves the overall quality of water in the distribution system and assists in overall system maintenance. This is an ongoing project and will take several years to complete because it can only be accomplished during spring, summer, and fall.

Issues with residue and film in appliances and on dishware became an issue. The water in the City of Burnsville has always been extremely hard. That is why it has always been necessary to have a water softener in your home. The blend of well water and surface water has a different pH and adds more hardness to the water. Adding Phosphate to the water keeps the hardness (calcium carbonate) in suspension thus preventing the formation of residue and film. If you are experiencing residue please verify your softener is working properly and is set at 25 grains per gallon.

Aesthetic Water Quality

Hardness - 25 grains per gallon
 Iron - Less than .05 mg/l
 Manganese - .02 mg/l
 PH - 7.5

Why Conserve Water?

Drinking water is a valuable natural resource, and even though Minnesota is blessed with an abundance of lakes and rivers, freshwater is still a limited resource even here, as past droughts have shown. Conserving our freshwater resources is definitely something we need to be concerned about.

Our summer water use can be more than 2 1/2 times as much as our winter water use. By far the largest component of this significant increase is the watering of lawns. If we

seriously want to conserve our freshwater resources, doing things to make our irrigation water use more efficient and effective is an excellent place to start.

Lawns don't need to be watered daily. In reality, watering them daily is bad for them as the grass plants develop very shallow root systems, which means they become less drought tolerant, need more frequent watering and have access to fewer soil nutrients. By watering less frequently and more deeply, grass plants develop deeper roots, require less frequent watering and are healthier. By requiring less frequent watering we are actually helping build healthier lawns.

Watering Restrictions

The City of Burnsville has implemented the following water use restrictions from April 1 through September 30:

MIDDAY WATERING RESTRICTIONS: All watering of lawns is prohibited between 11:00 A.M. to 3:00 P.M.

ODD-EVEN SPRINKLING: The odd-even restrictions allow property owner addresses that end in an odd number (1, 3, 5, 7, 9) to water only on calendar numbered days that end in an odd number and those property owner addresses that end with an even number (0, 2, 4, 6, 8) are allowed to water only on calendar numbered days that end in an even number. In the case of multi-family residences or businesses with multiple addresses, or where a structure does not have an apparent address, the site should water on odd numbered days. On the 31st day however, watering is available to everyone.

For properties with automatic irrigation systems which cannot water their whole site during the single day, the system should set up to water approximately 1/2 of the site each day, but not water any specific area more frequently than once every other day. Residents and businesses with this situation need to notify the City and receive approval prior to implementing this watering system.

EXCEPTIONS: Exceptions to odd-even watering restrictions include lawns with new seed, new sod or new landscaping, plant materials that require daily watering such as golf greens and tees, certain athletic fields with special soils conditions, flower pots and baskets, and vegetable gardens.

The City's hope is to gain compliance with these water conservation restrictions through education; however, the City feels it necessary to establish a fee system for those who choose to not comply with these restrictions.

The following fees for non-compliance will be assessed and included on the property owner's water bill: in the first case of non-compliance within a calendar year the property owner shall be given a warning, the second a \$25.00 fee, third a \$50.00 fee, fourth a \$100.00 fee, and fifth and beyond a \$250.00 fee. A door knocker and a follow-up letter will be provided to property owners to notify them for each documented incident of non-compliance.

If you have any questions about these restrictions, please call the Burnsville Public Works Department at 952-895-4550.



No contaminants were detected at levels that violated federal drinking water standards. However, 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 contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2010. If any of these contaminants 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 MCLGs as feasible using the best available treatment technology.

TT – Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

NTU – Nephelometric Turbidity Unit: Used to measure clarity in drinking water.

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 values. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

Average/Result – This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

pCi/l – PicoCuries per liter (a measure of radioactivity).

ppm – Parts per million **ppb –** Parts per billion

nd – No Detection **N/A –** Not Applicable (does not apply)

MRDL – Maximum Residual Disinfectant Level.

MRDLG – Maximum Residual Disinfectant Level Goal.

Some contaminants do not have Maximum Contaminant Levels established for them. These unregulated contaminants 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.

Monitoring for unregulated contaminants, as required by the U.S. Environmental Protection Agency rules (40 CFR 141.40), was conducted in 2010. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at 651-201-4656.

Lead

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 Burnsville 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 www.epa.gov/safewater/lead.



Important Source Water and Health Information from the EPA

The sources of drinking water (both tap 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 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 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 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.

Drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 Environmental Protection Agency'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 about drinking water from their health care providers. 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 at 1-800-426-4791.

Burnsville 2010 Test Results

Detected Substance (units) Test Date	MCLG	MCL	Range	Average/ Result	Typical Source of Substance in Drinking Water	Meets Standards
Alpha Emitters (pCi/l)	0	15.4	3.6-11.9	11.9	Erosion of natural deposits.	✓
Barium (ppm)	2	2	N/A	0.15	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	✓
Combined Radium (pCi/l)	0	5.4	1-3.6	3	Erosion of natural deposits.	✓
Fluoride (ppm)	4	4	1-1.2	1.2	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.	✓
Haloacetic Acids (ppb)	0	60	nd-8.4	4.31	By-product of drinking water disinfection.	✓
Nitrate (as Nitrogen) (ppm)	10.4	10.4	0.14-0.71	0.71	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	✓
Total Trihalomethanes (ppb)	0	80	4.2-22.4	11.25	By-product of drinking water disinfection.	✓
Turbidity (NTU)	N/A	TT	Lowest Monthly % of Samples Meeting Limits: 100%	Highest Single Measurement: 0.9	Soil runoff.	✓
Chlorine (ppm)	MRDLG: 4	MRDL: 4	High and Low Monthly Avg.: 0.9-1.1	Highest Quarterly Avg.: 1.04	Water additive used to control microbes.	✓
Sodium (ppm)	No EPA Limit Set	No EPA Limit Set	N/A	18.5	Erosion of natural deposits.	✓
Sulfate (ppm)	No EPA Limit Set	No EPA Limit Set	N/A	35.6	Erosion of natural deposits.	✓
Copper (ppm) 06/30/2009	AL: 1.3 (90% of samples tested must be <1.3 ppm)		90% of Samples < 0.22	No Sites exceeded 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.	✓
Lead (ppb) 06/30/2009	AL: 15 (90% of samples tested must be <15 ppb)		90% of Samples < 6	No Sites exceeded 15	Corrosion of household plumbing systems; Erosion of natural deposits.	✓

Burnsville's Water Source



The City of Burnsville provides drinking water to its residents from the following groundwater and surface water sources:

- Surface water drawn from the Kraemer Quarry.
- 17 wells ranging from 265 to 1030 feet deep that draw water from the Jordan, Mt. Simon, Prairie Du Chein-Jordan, and Franconia-Mt. Simon 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 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.