



# City Of Burnsville

Producing Water You Can Trust

## Drinking Water Report 2011



The City of Burnsville is issuing the results of monitoring done on its drinking water for the period from Jan. 1 to Dec. 31, 2011. 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.

**Hmong:** No yog daim ntawv tseem ceeb. Yog koj tsis totaub, nrhiav neeg pab txhais rau koj kom sai sai.

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](http://www.burnsville.org)  
Minnesota Department of Health - [www.health.state.mn.us](http://www.health.state.mn.us)  
Minnesota Pollution Control Agency - [www.pca.state.mn.us](http://www.pca.state.mn.us)  
Environmental Protection Agency - [www.epa.gov](http://www.epa.gov)

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were within legal limits. The table below 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 in 2011. If any of these contaminants were detected the last time they were sampled 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.

**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 detected values. If it is an average, it may contain sampling results from the previous year.

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

**MRDL:** Maximum Residual Disinfectant Level.

**MRDLG:** Maximum Residual Disinfectant Level Goal.

**Turbidity:** Measure of the clarity of the water. Monitored because it is a good indicator of the effectiveness of the filtration system.

**ppm:** Parts per million, **ppb:** Parts per billion, **pCi/l:** PicoCuries per liter (a measure of radioactivity)

**oocysts/L:** a measurement of the number of Cryptosporidium (or Giardia) spores.

## 2011 Test Results

Detected Substance (units) <i>Test Date</i>	MCLG	MCL	Range	Average/Result	Typical Source of Substance in Drinking Water
<b>Alpha Emitters (pCi/l)</b> 11/2/2010	0	15.4	N/A	3.6	Erosion of natural deposits.
<b>Barium (ppm)</b>	2	2	N/A	0.17	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Combined Radium (pCi/l)</b> 11/2/2010	0	5.4	N/A	1	Erosion of natural deposits.
<b>Cryptosporidium (oocysts/L)</b>	N/A	N/A	nd - 0.2	N/A	Human and animal fecal waste
<b>Fluoride (ppm)</b>	4	4	.83-.98	1.07	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.
<b>Haloacetic Acids (ppb)</b>	0	60	1 - 6.5	4.89	By-product of drinking water disinfection.
<b>Nitrate (as Nitrogen) (ppm)</b>	10.4	10.4	N/A	0.64	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Total Trihalomethanes (ppb)</b>	0	80	8.5 - 24.9	13.13	By-product of drinking water disinfection.
<b>Total Coliform Bacteria</b>	0 present	>5% present	N/A	1%♥	By-product of drinking water disinfection.
<b>Turbidity (NTU)</b>	N/A	TT	Lowest monthly % of samples meeting limits= 100%	Highest single measurement= 0.3	By-product of drinking water disinfection.
<b>Chlorine (ppm)</b>	4 (MRDLG)	4 (MRDL)	Highest and lowest monthly avg.= 0.4 - 1.4	Highest quarterly avg.= 1.11	Water additive used to control microbes.
<b>Total Organic Carbon (% removed)</b>	Removal required= N/A - 15%		Removal achieved= 0 - >58.3%	Quarters out of compliance= 0	By-product of drinking water disinfection.
<b>Copper (ppm)</b> 6/30/2009	1.3	AL= 1.3	90% of samples= <0.22	0 out of 30 sites= >1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Lead (ppb)</b> 6/30/2009	0	AL= 15	90% of samples= <6	0 out of 30 sites= >15	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Sodium (ppm)</b> 7/6/2010	N/A		N/A	18.5	Erosion of natural deposits.
<b>Sulfate (ppm)</b> 7/6/2010	N/A		N/A	35.6	Erosion of natural deposits.

♥ Follow-up sampling showed no contamination present.

Some contaminants do not have Maximum Contaminant Levels established. 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.

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

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.

## 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. You can also 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)

### Aesthetic Water Quality

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

## 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.

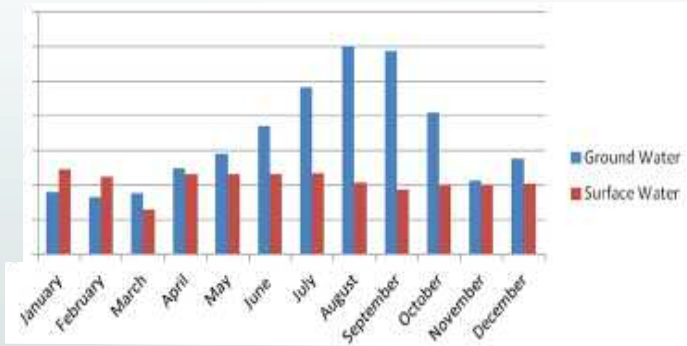
**Radioactive Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## 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. The 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 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

*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.*

## Utility News



In 2011, the City of Burnsville pumped 3.26 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 speeds up recharge of the ground water source.

Several water and sewer projects will be completed in 2012. The most visible project is the final phase of the 36-inch Nicollet Avenue watermain replacement between Civic Center Parkway and Burnsville Parkway. Construction will begin in early September and will be completed in the fall. This project has taken three years to complete. The new ductile iron watermain will replace the concrete watermain that was installed in 1970.



## 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. Conserving freshwater should be a high priority.

Burnsville's summer water use can be more than 2 1/2 times that of winter water use. The main reason for this significant increase is the watering of lawns. To conserve freshwater resources, start by doing things to make irrigation water use more efficient and effective.

Lawns don't need to be watered daily. In reality, watering them daily causes more harm, as the grass plants develop very shallow root systems. This 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 watering less, you are actually helping build a healthier lawn.

## Watering Restrictions

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

### MIDDAY WATERING RESTRICTIONS:

Lawns can not be watered between 11:00 A.M. and 3:00 P.M. any day.

### ODD-EVEN SPRINKLING:

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. 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 of any month, watering is available to everyone.

For properties with automatic irrigation systems that cannot water their full site during a single day, the system should set up to water approximately 1/2 of the site each day, but must not water any specific area more frequently than once every other day. Residents and businesses with this situation must 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 soil conditions, flower pots and baskets, and vegetable gardens.

While the hope is to gain compliance with these water conservation restrictions through education, the City has established a fee system for those who choose not to 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 fee, third a \$50 fee, fourth a \$100 fee, and fifth and beyond a \$250 fee. A door hanger 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**.

