

Savage's water  
**MEETS ALL  
STANDARDS**  
2004 water quality report



**P**roviding drinking water to the community is one of the most important services by the City of Savage. It's a role the City takes very seriously. In addition to ensuring an adequate supply is always available, City staff carefully and regularly inspect the water to ensure it is of the highest quality.

Over the past five years, new treatment technologies have been implemented to ensure everyone served by the City continues to have safe drinking water.

Numerous tests were conducted in 2003 in accordance with Minnesota Department of Health and Environmental Protection Agency requirements. The City Council and staff are proud to say that, once again, Savage's water meets all state and federal standards. Test results listed on the following pages show that no contaminants were detected at levels that violated these drinking water standards.

## **INSIDE**

- Drinking water test results
- Community's water source
- Outdoor watering restrictions
- Reduce bills; limit consumption

# what is the **PURPOSE OF THIS REPORT?**

This report is being provided to you in accordance with the federal Safe Drinking Water Act. Amended by Congress in 1996, the Act includes a provision that requires all community water systems to deliver an annual water quality report to their customers. The goal of this provision, called the Consumer Confidence Report Rule, is to provide information to customers about their drinking water. Specifically, the report aims to advance consumers' understanding of drinking

water and heighten awareness of the need to protect water resources.

While smaller communities are allowed to publish the report in a local newspaper, cities that serve a population of 10,000 or greater must mail or "otherwise deliver" the report to each customer. This includes those who consume the City's water, in addition to those who regularly receive bills for water service. In addition to mailing the report with the water bill, the

City must advertise the availability of the report in the newspaper, provide additional copies for apartment buildings and large employers, and/or post it on its website.

The report must be completed and distributed to the public by July 1 of each year. Information contained in the report covers monitoring that occurred on the system from Jan. 1 to Dec. 31, 2003.

## Substances absorbed by

# WATER

Prior to being tapped for distribution, the City's drinking water moves through the ground, dissolving natural minerals and, in some cases, radioactive material that are in its path. In addition, the water may absorb substances resulting from the presence of animals or from human activity.

As a result, the following substances may be present in the water prior to treatment:

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 storm-water 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 storm-water runoff and septic systems.

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

To ensure tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain substances 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.

# REGULATED substances

Substance (units)	Ideal Maximum MCLG	Maximum Allowed MCL	Amount Detected		Typical Source of Substance	Meets Standard
			Range (2003)	Average/Result*		
Nitrate (ppm) (as Nitrogen)	10	10	nd-.58	.58	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	✓
Alpha Emitters (pCi/l) (11/25/02)	0	15.4	N/A	10.3	Erosion of natural deposits.	✓
Combined Radium (pCi/l) (11/25/02)	0	5.4	N/A	4.1	Erosion of natural deposits.	✓
Fluoride (ppm)	4	4	1.2-1.3	1.25	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.	✓
Barium (ppm)	2	2	N/A	.07	Discharge of drilling wastes and metal refineries; Erosion of natural deposits.	✓
THM (Total trihalomethanes) (ppb) (8/20/02)	N/A	100	N/A	16.4	By-product of drinking water disinfection.	✓

Substance (units)	Level Found		Typical Source of Substance	Meets Standard
	Range (2003)	Average/Result*		
Radon (pCi/l) (10/23/02)	N/A	14.0	Erosion of natural deposits	✓

\*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.

**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 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 plans to adopt an Indoor Air Program once the Radon Rule is finalized.



# TESTED at the tap

Just as it picks up substances in the ground, water can absorb lead and copper that exist in the plumbing of a home or business. These substances are regulated, and tests are conducted for their presence every three years.

Substance (units)	AL	90% Level	# sites over AL	MCLG	Typical Source of Substance	Meets Standard
Lead (ppb)	15	4	0 out of 30	N/A	Corrosion of household plumbing systems; Erosion of natural deposits.	✓
Copper (ppm)	1.3	.157	0 out of 30	N/A	Corrosion of household plumbing systems; Erosion of natural deposits.	✓

# UNREGULATED substances

Some substances do not have Maximum Contaminant Levels (MCL) 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. The table that follows shows the unregulated contaminants that were detected:

Substance (units)	Amount Detected		Typical Source of Substance	Meets Standard
	Range (2003)	Average/Result		
Sodium (ppm)	N/A	22	Erosion of natural deposits.	✓
Sulfate (ppm)	N/A	32	Erosion of natural deposits.	✓

# HEALTH considerations

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. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 800-426-4791.

# RESTRICTIONS promote wise water use

Outdoor watering restrictions are in effect throughout the year. The restrictions are intended to conserve water by encouraging use at the most effective times of the day. Watering the lawn, washing the car, and other uses of water outdoors is prohibited between noon and 5 p.m. every day of the week.

In addition, watering activities are restricted to an odd/even schedule. Property owners are to use the last digit of their addresses as a guide. Those having even-numbered addresses may water on even dates, while those with odd-numbered addresses may water on odd dates. Landscaping, including newly seeded or sodded lawns, may be watered as needed (outside the hours of noon to 5 p.m.) for the first 30 days of installation. Those with private wells, including the Prior Lake High School, are exempt from the City's outdoor watering restrictions.

Failure to abide by the City's watering restrictions has multiple consequences. In addition to a citation and discontinued water service, violators may see an increase in their monthly water bills. Fees are charged according to usage; larger water consumers pay higher unit fees after certain thresholds are exceeded. The general community could be impacted as well. Shortages can occur during the hottest times of the year if excessive outside watering occurs.

For more information on the City's watering restrictions, utility fees or conservation tips, please contact the Utility Services Department at 952-924-3440. ♦

## Abbreviation Key

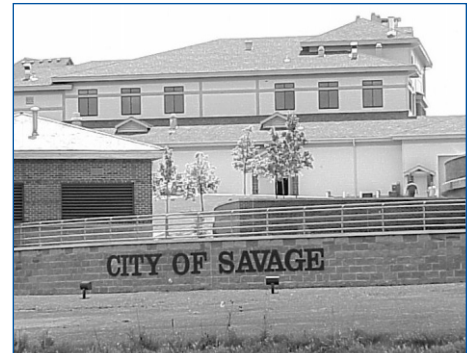
**MCLG** - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.  
**MCL** - Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.  
**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** - The value obtained after disregarding 10 percent of the samples taken that had the highest levels. (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.  
**pCi/l** - PicoCuries per liter (a measure of radioactivity).  
**ppb** - Parts per billion, which can also be expressed as micrograms per liter (ug/l).  
**ppm** - Parts per million, which can also be expressed as milligrams per liter (mg/l).  
**nd** - No detection  
**N/A** - Not applicable (does not apply).

# EXPECT small amounts

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 Environmental Protection Agency's Drinking Water Hotline at 800-426-4791. ♦

# AUTO payment deduction

The City's free AutoPay program provides water and sewer customers the option of paying bills through an automatic deduction from their bank accounts. Monthly statements detailing all charges continue to be mailed to customers enrolled in the program. AutoPay not only saves on stamps, but it also ensures payments are made on time. To enroll today, just call Utility Billing at 651-256-3304. AutoPay will take effect on the following billing cycle. ♦



# water SOURCE

Water distributed to more than 7,800 households and businesses in Savage is drawn from the ground by wells located throughout the community. The wells range from 705 to 1,029 feet in depth and access five aquifers, which are layers of rock through which water permeates. The aquifers supplying Savage with water via the wells are the Jordan, Quaternary Buried Artesian, Prairie Du Chien Group, Mt. Simon and Franconia-Ironton-Galesville aquifers.

Once drawn from the wells, the water is directed through one of the City's treatment plants for purification. It is then stored in a water tower or reservoir for future use. None of the city's wells or aquifers are susceptible to contaminants from surface land uses. The City is effectively removing all naturally occurring source water contaminants. ♦

reduce bills by

# LIMITING CONSUMPTION

Although residents and business owners may be aware that their water bills increase with consumption, they may not know that the cost per 1,000 gallons is higher for those who exceed a certain level of use.

Savage's water rates are structured to encourage conservation, providing lower rates for those who use less than 15,000 gallons of water in a month. Those using more than that pay an additional 23 cents per 1,000 gallons for anything over the 15,000 gallon mark. The cost increases by another 24 cents once 20,000 gallons has been consumed.

Reducing one's water bill is as simple as reducing consumption. In the summer,

residents are reminded to abide by the City's outdoor watering restriction. The ordinance prohibits watering between the hours of noon and 5 p.m., and requires watering to occur on an odd/even schedule based on one's house number. By following these restrictions, residents and businesses can ensure that the water is being soaked up by the lawn and not evaporating under high summer temperatures.

Additional steps residents and businesses can take to reduce water consumption include taking shorter showers, limiting the number of times a toilet is flushed, turning off the faucet while brushing teeth, cleaning the driveway with a broom instead of a

hose, and keeping a pitcher of water in the refrigerator instead of running the tap until the water gets cold enough to drink.

Taking just a few moments to think about using water wisely will not only have a positive impact on the environment, it will benefit one's pocketbook as well. ♠

## WATER FEES

Amount of water used	Cost/1,000 gallons
1,000 to 15,000 gallons	\$2.25
15,001 to 20,000 gallons	\$2.48
over 20,001 gallons	\$2.72

## want to know MORE?

If you have questions, are interested in learning more about the water quality in Savage, or would like to set up a group tour of the City's water treatment facility, please contact the Utility Services Department at 952-224-3440. If you would like to comment on the report, please call the above number, fax us at 952-224-3430, or e-mail us at [comments@ci.savage.mn.us](mailto:comments@ci.savage.mn.us). Mailed letters may be sent to 13770 Dakota Ave., Savage, Minn., 55378. For other City information and activities, visit our website at [www.cityofsavage.com](http://www.cityofsavage.com).

The Minnesota Department of Health has prepared a source water assessment for the City of Savage. If you wish to obtain the assessment, you can call 651-215-0800 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](http://www.health.state.mn.us/divs/eh/water/swp/swa).

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

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

## water system IMPROVEMENTS

Several projects were completed in 2003 to improve water and sewer services for the community. These included:

**A new well**, which was necessary to meet increasing demands on the City's water supply.

**A new water tower**, which increased the City's storage capacity and provides water to those previously served by Prior Lake.

**Two new booster stations**, to facilitate the operation of the new water tower and solve water pressure problems that existed in nearby neighborhoods, including a significant portion of the South Savage area.

**Fiber optic installation** and other communication enhancements, which enables staff to monitor, from a single location, how the different aspects of the water system are functioning together.

**Extension** of water and sewer services to the South Savage area.



Another significant improvement made last year was the outsourcing of the City's utility bill processing function. As a result of that change, customers are now required to mail their payments to the address listed on their bill. Payments are no longer accepted at City Hall or the Public Works/Utility Services Building. Payments

received at these locations must be forwarded by the City, increasing costs and delaying the date on which the payment is recorded to customers' accounts. As a result, those who continue to drop their payments at City Hall or Public Works may be charged a late fee, as the City cannot guarantee that the processing center will receive the envelope prior to the due date.

The City thanks customers for abiding by this requirement, which saves money and ensures timely receipt of all payments. ♠