



Fridley Public Works presents:

**2015 Drinking Water Quality Report
January 1 - December 31, 2015**

Fridley drinking water continues to meet all State and Federal Standards.



Keeping You Informed

The City of Fridley has 3 main objectives with our Water Quality Report:

1. Help you better understand your drinking water and where it comes from
2. Heighten awareness of the need to protect precious water resources
3. Express our commitment to continue providing you safe, clean, high quality drinking water

Questions? Concerns? Want to Get Involved? We are happy to help!

If you would like to speak to us about Fridley drinking water, would like to request a paper copy of this report, or would like information about opportunities for public participation in decisions that may affect the quality of water, please give us a call at (763) 572-3554.



Working For You

Fridley Water Division maintains the operation of 13 wells, 4 reservoirs and 3 filtration plants. In 2015 and 2016, we have been working to repair and upgrade water mains in some of the oldest areas of the community including the Summit Manor and Plymouth neighborhoods. The City completed rehabilitation of 4 wells last year. This year we continue a major renovation at the Locke Park Filtration Plant. We will also be rolling out an accelerated meter replacement program, completing all residential areas by 2017.

2015 Water By the Numbers . . .

- 1.142 billion gallons of clean water sold
- 2015 residential usage = 64.6 gallons per capita per day (down 3% from '14)
- 8 residential wells sealed
- Over \$800,000 provided by the Mississippi Watershed Management Organization for storm water quality improvements
- 16 water main breaks repaired and 42 private service leaks repaired

Hmong Translation

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

Spanish Translation

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Somali Translation

Warbixintan waxaa ku jira macluumaad muhiim ah oo ku saabsan biyaha la cabbo oo aad. waxaa Translate, ama weydii qof kale oo fahmaysa.

Keeping You Informed:

An Update on 1,4-Dioxane



A Look Back: Last spring, we informed you about a new concern with Fridley drinking water called 1,4-dioxane. We addressed it and continue to test and monitor all Fridley drinking water. The source of this concern was not in Fridley wells, but from water supplemented from the City of New Brighton. In order to protect you, the supply of water from the City of New Brighton was shut off upon verifying this as the source of levels of 1,4-dioxane in excess of MDH guidance.

Today: The City of Fridley has found traces of 1,4-dioxane in some samplings of our wells, however, the concentrations are well below the MDH guidance value, meaning there is no health risk to you. We continue working with public health agencies and other government entities to eliminate even these traces. **We will not supply water to you that is unsafe.**

We will continue to frequently monitor our source water wells and take actions necessary to ensure the safety of our customers based on the best available science. Our latest tests show only traces of 1,4-dioxane in some wells at or less than one-tenth the MDH guidance value.

Looking Forward: We continue to work with the City of New Brighton and public health agencies to find a permanent solution that is protective of public health for all systems. The City of New Brighton will soon be concluding pilot testing of a treatment process for 1,4-dioxane that they intend to have operating in 2018.

We continue to work with state and local agencies to help identify the extent of the contamination and to ensure that water supplies are not impacted. Fridley is participating in technical reviews with multiple agencies to identify sources and risks of the contamination and coordinate responses with our sister cities of New Brighton and Saint Anthony.

We will continue to provide updates to you, answer your questions and keep you informed. We will post any new findings or information on our website. You can contact the City of Fridley with additional questions or concerns at (763) 572-3554, or contact the Minnesota Department of Health Drinking Water Hotline at (800) 426-4791.

Additional Resources . . .

EPA Safe Drinking Water Hotline: (800) 426-4791

EPA Ground Water and Drinking Water website: <http://water.epa.gov/drink>

MDH website: www.health.state.mn.us

City of Fridley website: www.FridleyMN.gov

Anoka County Municipal Wellhead Protection Group: www.knowtheflow.us

City of New Brighton website: www.ci.new-brighton.mn.us

SCAM ALERT: Buyer Beware!

False claims, deceptive sales pitches, and scare tactics have been used by some water treatment companies. If you are considering the purchase of a home water treatment system, do your homework. We have some MN Dept of Health recommendations on our website at FridleyMN.gov/water-update.

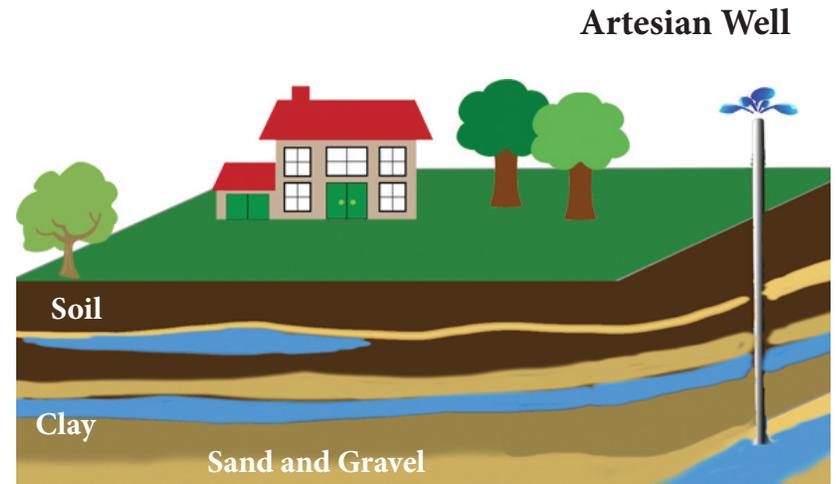
Understanding Fridley Drinking Water:

Water Sources, Testing and Monitoring

Source of Your Water

All water supplied by the City of Fridley is treated groundwater. In 2015, we operated 11 wells, ranging in depth from 199 to 870 feet, that draw water from the Quaternary Buried Artesian, Jordan-Mt. Simon, Prairie Du Chien/Jordan, and Prairie Du Chien Group aquifers (underground layers of permeable rock or sediment that contains water). In addition, we previously purchased treated water from the City of New Brighton which obtains water from wells in the Mt. Simon, Prairie Du Chien Group, Prairie Du Chien-Jordan, and Mt. Simon-Hinckley aquifers. Therefore, test results for both Fridley and New Brighton are shown in the table of the water testing report.

Our wells pull water from the earth, up to 870 feet deep. This water is contained in layers of porous rock, sand and gravel.



*Bringing
You Safe, Clean,
Quality Drinking
Water is
Always Our #1
Priority*

Federal and State Standards

We are proud of our commitment to providing you with safe, high quality drinking water; staying ahead of continuously improving health science and drinking requirements with the use of proven technologies; and keeping you informed of new changes or concerns that may arise.

In order to ensure that your tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) establishes regulations which limit the amount of certain contaminants. (The Food and Drug Administration does the same for bottled water.)

In addition, State Standards take it a step further. The Minnesota Department of Health (MDH) regularly monitors water quality in Fridley. They make additional guidelines to address how vulnerable a source of water may be to future contaminants and contaminants that are being studied as a possible new concern. We are delivering water that meets even the most stringent health advisory levels recently developed by the MDH.

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

Going a Step Further:

Saving Water, Saving Energy & Saving Money



Water Saving Rebates: Toilets, Wash Machines and Irrigation Systems

Save energy costs and get up to 50% back on your cost of a new EPA WaterSense labeled toilet, Energy Star qualified washing machine, or on irrigation systems with an audit by a WaterSense audit-certified professional and resulting replacement of a controller or sprinkler heads.



Learn More & Download a Rebate Application online at FridleyMN.gov/watergrant



Well-Sealing Grants

The City plans to renew its well-sealing grant program in the fall of 2016. If you have a well on your property, this program can fund up to 50% of the costs to seal it. If you believe you might have a well on your property, the City can help you find out. For more information, contact Beth Kondrick at (763) 572-3554.

Protecting Fridley's Watershed, the Mighty Mississippi

Rain and melting snow wash leaves, debris, even chemicals, off our lawns and streets and down the storm drain. Every storm drain in the city washes directly into the Mississippi River. Rice Creek and Coon Creek also connect to the Mississippi, and it is imperative that we all help protect this precious natural resource. Here's a few easy tips to help you *make a difference*.



Hazardous Waste = motor oil, pesticides, paints, mothballs, flea collars, weedkillers, household cleaners, medicines, and other chemicals.

DO NOT throw these in the trash, dump them down the sink or flush them in your toilet!

Dispose of these products at the Anoka County Hazardous Waste Facility.
Learn more about protecting Fridley waters at FridleyMN.gov/FridleyWaters

Fridley and New Brighton Water Testing Results

The City of Fridley produces its own water, and previously supplemented this supply with excess water produced by the City of New Brighton. Data for both systems is provided. 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.

DETECTED COMPOUNDS			EPA LIMITS		FRIDLEY LEVELS		NEW BRIGHTON LEVELS		TYPICAL SOURCES
COMPOUND NAME	UNITS	YEAR	GOAL (MCLG)	MAXIMUM (MCL)	RESULT*	RANGE	RESULT*	RANGE	
Alpha Emitters	(pCi/l)	2015	0	15.4	9.4	nd - 9.4	7.3	nd - 8.8	Erosion of natural deposits.
Arsenic	(ppb)	2011	0	10	1.1	N/A	--	--	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	(ppm)	2011	2	2	0.12	N/A	0.04	N/A	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Combined Radium	(pCi/l)	2015	0	5.4	3.3	nd - 3.3	7.5 ^{(a)(b)}	1.5 - 7.5	Erosion of natural deposits.
Fluoride	(ppm)	2015	4	4	1.15	0.77 - 1.2	0.89	0.51 - 1.1	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 (HAA5)	(ppb)	2015	0	60	1.2	nd - 1.2	2.6	1.2 - 2.6	By-product of drinking water disinfection.
TTHM (Total trihalomethanes)	(ppb)	2015	0	80	0.7	0.6 - 0.7	11.8	6.4 - 11.8	By-product of drinking water disinfection.
TCE (Trichloroethylene) ^(c)	(ppb)	2015	0	5 ^(d)	nd	nd	--	--	Discharge from metal degreasing sites and other factories.
1,4-Dioxane ^(e)	(ppb)	2015	No EPA Limit Established ^(f)		--	nd - 0.14	--	4.5 - 4.8 ^(g)	Discharge from metal degreasing sites and other factories.
			GOAL (MRDLG)	MAXIMUM (MRDL)	HIGH AVG QUARTER	HIGH/LOW AVG MONTH	HIGH AVG QUARTER	HIGH/LOW AVG MONTH	
Chlorine	(ppm)	2015	4	4	1.18	1.0 - 1.4	0.45	nd - 2.0	Water additive used to control microbes.
			GOAL (MCLG)	MAXIMUM (AL)	90% LEVEL	SITES OVER AL	90% LEVEL	SITES OVER AL	
Copper	(ppm)	2013	1.3	1.3	0.75	0 out of 30	0.23	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	(ppb)	2013	0	15	4.8	1 out of 30	2.6	1 out of 30	Corrosion of household plumbing systems; 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.

(a) These results were from samples taken after cessation of supplied water from New Brighton to Fridley. 2014 results of 4.5 pCi/l and a range of nd - 4.5 pCi/l are therefore applicable for Fridley water consumers.

(b) Four quarterly samples are required to determine an average compliance value for this contaminant. At the end of 2015, less than four samples had been collected, therefore violation criteria could not be determined.

(c) Fridley results from City of Fridley supplemental monitoring.

(d) The Minnesota Department of Health has set a Health-based Guidance Value of 0.4 ppb for TCE. See www.health.state.mn.us/divs/eh/risk/guidance/gw/tceinfosheet.pdf for further information.

(e) Fridley results from unregulated contaminant monitoring and City of Fridley supplemental monitoring.

(f) The Minnesota Department of Health has set a Health-based Guidance Value of 1.1 ppb for 1,4-Dioxane. See www.health.state.mn.us/divs/eh/risk/guidance/dwec/dioxaneinfo.pdf for further information.

(g) New Brighton results from interconnect prior to cessation of supplied water from New Brighton to Fridley.

Additional Notes and Details

Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2015. 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. Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.



Explaining Contaminants

Drinking water sources (both tap and bottled) can originate from rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and it can pick up substances resulting from the presence of animals or humans. Drinking water may be reasonably expected to contain small amounts of some contaminants, which does not necessarily indicate a potential health risk. It is our job to test, treat and continue monitoring Fridley drinking water to ensure it is safe before supplying to you.

Potential sources of contamination include:

- **Microbial Contaminants:** viruses and bacteria from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic Contaminants:** salts and metals that occur naturally or come from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and Herbicides:** from agricultural, urban storm water runoff, and residential uses.
- **Organic Chemicals (including synthetic and volatile organic chemicals):** by-products from industrial processes and petroleum production and from gas stations, urban storm water runoff, and septic systems.
- **Radioactive Contaminants:** can occur naturally or result from oil and gas production and mining activities.

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. (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 five 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)

ppm: Parts per million, which can also be expressed as milligrams per liter (mg/l)

ppb: Parts per billion, which can also be expressed as micrograms per liter (ug/l).

nd: No Detection

N/A: Not applicable.



Questions? Concerns? We are happy to help! (763) 572-3566

Above and Beyond - Our Commitment to You

Fluoride Reduction

In April 2015, the US Dept. of Health and Human Services (HHS) and Centers for Disease Control and Prevention began recommending a lower fluoride level (0.7 milligrams/liter) for community public water supplies. In Minnesota, fluoridation is mandated by State law. The Minnesota Department of Health (MDH) last year allowed a variance for a reduced level of fluoride, from the range of 0.9-1.5 ppb to the range of 0.5-0.9 ppb. The City of Fridley applied for this variance on June 8, and received approval. The City is now maintaining a reduced fluoride concentration in your drinking water of 0.7 milligrams/liter since July 2015.

Special Health Needs

Some people are more vulnerable to contaminants found in drinking water than the general population.

Immuno-compromised persons, including those with cancer undergoing chemotherapy, those who have undergone organ transplants, those 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/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

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 Fridley is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your tap 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 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 at 1-800-426-4791 or at www.epa.gov/safewater/lead.

A Closer Look at Lead in Drinking Water

Lead in drinking water has been a hot topic in the news lately. Do you have questions about lead in your water?

- Why is lead in drinking water a problem?
- How does lead get into my drinking water?
- How can I reduce lead in my drinking water?
- Will water treatment devices help?
- How can I get my water tested for lead?

Find the answers on the MN Dept. of Health website: <http://www.health.state.mn.us> and search "Get the Lead Out".



The City of Fridley is in full compliance with the Lead and Copper Rule, and will be undergoing routine sampling in 2016. We are not aware of any lead pipe services or distribution mains in the City. Until recent regulations, lead could be a component in household plumbing elements such as brass faucets and lead solder. To test your drinking water for lead, give us a call at (763) 572-3566, or contact a certified lab, found under "Laboratories-Testing" in the Yellow Pages or search engines.