



*Fridley Public Works presents:*

**2014 Drinking Water Quality Report**

# 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.

## Working For You

Fridley Water Division maintains the operation of 13 wells, the TCAAP line, 4 reservoirs and 3 filter plants. In 2014, we worked to repair and upgrade water mains in some of the oldest areas of the community including the Summit Manor and Plymouth neighborhoods. In 2015, the Locke Park Water Filtration Plant will undergo a major renovation to keep the plant operating efficiently. The City has received notice that its well-sealing grant program will be funded in the fall of 2015. For more information, contact Public Works Director Jim Kosluchar at (763) 572-3550.

Other goals for this year include the rehabilitation of four wells to maximize their dependability.



## Questions? We are happy to help!

If you would like to speak to us about Fridley drinking water, or would like to request a paper copy of this report, please give us a call at (763) 572-3566.

## 2014 Water By the Numbers . . .

- 1.154 billion gallons of clean water sold
- Residential usage was 66.7 gallons per capita per day
- Nearly \$100,000 netted for Fridley residential properties from the Sewer Service Grant Program
- 100% of city sewers were cleaned
- 34 miles of water main replacement and repair throughout the city

## 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](http://www.health.state.mn.us)

City of Fridley website: [www.FridleyMN.gov](http://www.FridleyMN.gov)

Anoka County Municipal Wellhead Protection Group:

[www.knowtheflow.us](http://www.knowtheflow.us)

City of New Brighton website: [www.ci.new-brighton.mn.us](http://www.ci.new-brighton.mn.us)

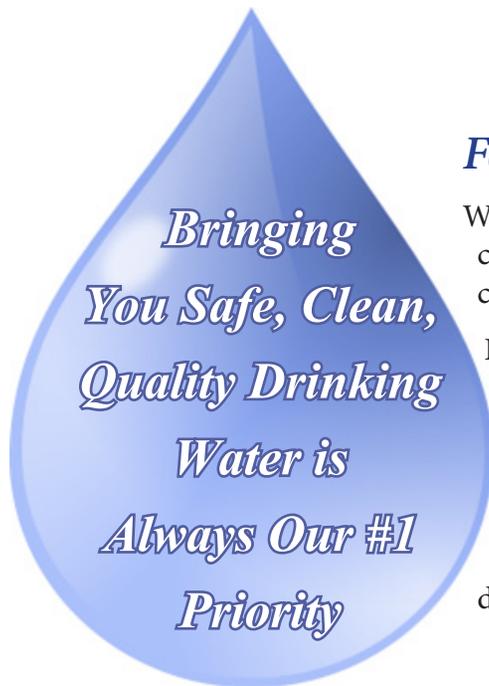
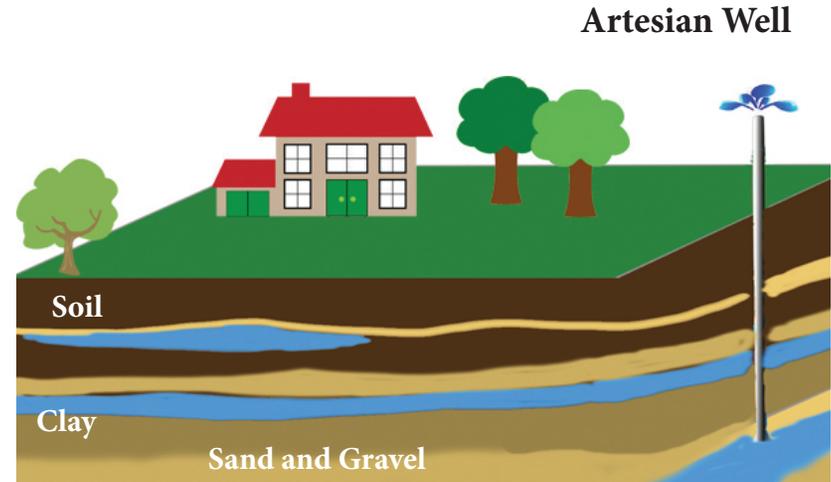
# Understanding Fridley Drinking Water:

## *Water Sources, Testing and Monitoring*

### *Source of Your Water*

All water supplied by the City of Fridley is treated groundwater. In 2014, 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, a portion of Fridley's water was supplied through an interconnection with the City of New Brighton. 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.*



### *Federal and State Standards*

We are proud of our commitment to providing you with safe, high quality drinking water, staying ahead of changing environments with the use of the newest 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 lowest existing health advisory level from the MDH.

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

# Going a Step Further:

## *Stormwater Pollution, Watershed and You!*

*Watershed: the area of land where all of the water that is under it or drains off of it goes into the same place*

In Fridley, our watershed is the Mississippi River. Some areas are connected directly to the river, others are first connected to Rice Creek or Coon Creek, but in the end we are linked by a common water course, the Mighty Mississippi.



## *You Can Make a Difference!*

Rain washes leaves, debris, even chemicals off our lawns and driveways, into the street and down the stormdrain. Every stormdrain in the city washes directly into the Mississippi River.

We can help preserve this precious natural resource by simply changing a few habits and making environmentally-sound decisions.



*Hazardous Waste = motor oil, pesticides, paints, mothballs, flea collars, weedkillers, household cleaners, medicines, and other chemicals*  
Do Not Throw in Trash, Dump or Flush Down Your Toilet!

The amount that you personally pour down your drain may seem insignificant, but try multiplying that by the 27,000 residents of Fridley, plus businesses!

**Dispose these chemicals properly at the Anoka County Hazardous Waste Facility. We have a medications dropbox in the lower level of City Hall/Fridley Police.**

## *Green Living:*

- **Look for a Natural Alternative** - some native plants can deter bugs as well as any pesticide; pull weeds instead of spraying
- **Less is More** - limit your usage of products that contain harmful chemicals
- **Pick Up the Poop** - pet waste washes into the stormdrains and pollutes our waters. Take a few extra seconds and pick up your dog waste.
- **Clean Out Your Gutter** - rake out leaves and debris that collect along your curb before the oils and chemicals that they carry can be washed down the stormdrain and into our river.
- **Use Less Water** - the best way to protect our water resources is to conserve.

Visit our website: [www.FridleyMN.gov/conservation](http://www.FridleyMN.gov/conservation) for more green living ideas.

# Fridley and New Brighton Water Testing Results

DETECTED COMPOUNDS COMPOUND NAME    UNITS    YEAR			EPA LIMITS		FRIDLEY LEVELS		NEW BRIGHTON LEVELS		TYPICAL SOURCES
			GOAL (MCLG)	MAXIMUM (MCL)	RESULT*	RANGE	RESULT*	RANGE	
Alpha Emitters	(pCi/l)	2014	0	15.4	3	nd - 5.8	6.3	nd - 6.3	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)	2014	0	5.4	1.4	nd - 4.2	4.5	nd - 4.5	Erosion of natural deposits.
Ethylbenzene	(ppb)	2014	700	700	--	--	2.6	nd - 2.6	Discharge from petroleum refineries.
Fluoride	(ppm)	2014	4	4	1.38	0.68 - 1.38	1.13	N/A	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)	2014	0	60	1.2	1.1 - 1.2	3.8	nd - 3.8	By-product of drinking water disinfection.
Nitrate (as Nitrogen)	(ppm)	2014	10.4	10.4	0.38	nd - 0.38	--	--	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomet)	(ppb)	2014	0	80	1	0.6 - 1	11	0.8 - 11	By-product of drinking water disinfection.
Xylenes	(ppm)	2014	10	10	--	--	0.02	nd - 0.02	By-product of drinking water disinfection.
Total Coliform Bacteria		2014	0 present	>1 present	2 <sup>▼</sup>	N/A			Naturally present in the environment.
			<b>GOAL (MRDLG)</b>	<b>MAXIMUM (MRDL)</b>	<b>HIGH AVG QUARTER</b>	<b>HIGH/LOW AVG MONTH</b>	<b>HIGH AVG QUARTER</b>	<b>HIGH/LOW AVG MONTH</b>	
Chlorine	(ppm)	2014	4	4	1.27	0.7-1.7	0.31	0.3 - 0.4	Water additive used to control microbes.
			<b>GOAL (MCLG)</b>	<b>MAXIMUM (AL)</b>	<b>90% LEVEL</b>	<b>SITES OVER AL</b>	<b>90% LEVEL</b>	<b>SITES OVER AL</b>	
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.

▼ Follow-up sampling showed no contamination present.

# Additional Notes and Details



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.

## 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.

# *Above and Beyond - Our Commitment to You*

## **The New Brighton Interconnect**

We are proactive in testing and in keeping you informed of any potential health risks, not matter how remote. This spring we sent out letters regarding a growing concern over a contaminant called 1,4-dioxane (not to be confused with dioxin). Although all state and federal safe water standards were still being met, we did shut off the interconnect when it was confirmed that the supplied water from New Brighton tested for low concentrations of 1,4-dioxane. Recent tests of Fridley wells showed no traces of this contaminant. We will continue to work with public agencies and other government entities to stay ahead of this potential concern.

## **Previous Concerns about Trichloroethylene (TCE) and Fridley Drinking Water**

In response to community concerns, we underwent additional testing in 2014 on all water source wells that have shown any past traces of TCE and all plant distribution water. Results show no detectable traces of TCE. In addition, we have never had any violations of standards for cancer causing agents and the MDH does not indicate drinking water in Fridley as a source of environmental concern.



## **Protecting Groundwater Resources / Wellhead Protection**

Fridley operates 11 wells. Residents and businesses located near these locations are in a unique position to help protect the source of our community's drinking water. We do this by recognizing potential sources of soils and groundwater pollution. A key element to this is sealing private unused or abandoned wells. We have partnered with the Anoka County Municipal Wellhead Protection Group to help educate residents and businesses on what you can do to protect groundwater resources, and private well assessment and closure assistance. You can help make the difference. To learn more about these efforts, visit [www.knowtheflow.us](http://www.knowtheflow.us).

## **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](http://www.epa.gov/safewater/lead).