

# BROWN DEER WATER UTILITY

# 2016 WATER QUALITY REPORT

ANNUAL CONSUMER CONFIDENCE REPORT

JUNE 2017

THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) AND WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) REQUIRE DRINKING WATER UTILITIES TO PROVIDE AN ANNUAL CONSUMER CONFIDENCE REPORT TO INFORM YOU OF THE SOURCE AND QUALITY OF YOUR DRINKING WATER, COMPLIANCE AND DETECTED CONTAMINANTS, AND RESULTS FROM TREATING AND MONITORING WATER JANUARY 1 – DECEMBER 31, 2016.

**IMPORTANT INFORMATION:** THIS REPORT CONTAINS IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER. TRANSLATE IT, OR SPEAK WITH SOMEONE WHO UNDERSTANDS IT.

**INFORMACIÓN IMPORTANTE PARA NUESTROS CLIENTES QUE HABLAN ESPAÑOL:** ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE SOBRE SU AGUA DE BEBER. TRADÚZCALO O HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.

## LUG TSEEM CEEB RUA COV SIV DLEJ KWS HAS LUG MOOB

NTAWM NUAV YOG COV LUG TSEEM CEEB QHA TXUG KEV HAUS DLEJ NYOB NROOG MILWAUKEE. YOG MEJ NYEEM TSI TAU COV LUG NUAV, THOV LWM TUG TXHAIS RUA MEJ.

**THE BROWN DEER WATER UTILITY PURCHASES ITS WATER FROM THE MILWAUKEE WATER WORKS WHICH IS RECOGNIZED AS A NATIONAL LEADER IN PROVIDING SAFE, HIGH QUALITY DRINKING WATER.**

◆ **Milwaukee water complies with all state and federal drinking water standards.** Milwaukee water is known for its extensive water quality monitoring program that reaches beyond basic requirements. The program includes organisms and contaminants, or substances, that are not yet regulated but considered of emerging concern and/or are under study for possible effects on public health.

◆ **The Water Research Foundation (WRF) awarded its 2016 Outstanding Subscriber Award for Applied Research to the Milwaukee Water Works.** Milwaukee was honored for successfully applying its own and WRF research to make notable improvements to the water treatment, delivery and management processes.

◆ **The Milwaukee Water Works was featured as WRF observed its 50<sup>th</sup> anniversary.** Read the Milwaukee Water Works and Ozone story:

<http://waterrf.org/the-foundation/Documents/Milwaukee-Water-Works-and-Ozone.pdf>

◆ **The Milwaukee Water Works Water Quality Section was published nationally** in the January 2017 issue of the *Journal AWWA* in a report of Milwaukee's 2014-2016 research findings about lead and drinking water sampling. Collaborative review of the sampling was provided by the City of Milwaukee Health Department, Wisconsin Department of Health Services, Department of Natural Resources, and the EPA.

## Item 1: Water System Information

If you have questions about this report, please call Tom Nennig at the Brown Deer Water Utility, (414-371-3080)

Participate in decisions that affect drinking water quality at meetings of the Village of Brown Deer Water Commission, which meets at the Brown Deer Village Hall, 4800 W. Green Brook Drive, Brown Deer WI 53223, and at meetings of the Brown Deer Village Board, 4800 W. Green Brook Drive, Brown Deer, WI 53223. The dates for Water Commission and Village Board meetings vary. Please contact the Brown Deer Water Utility for a schedule at (414-371-3080) or visit the Village website at <http://www.browndeerwi.org>.

**ITEM 2: SOURCE OF Water** Brown Deer Water Public Utility is a consecutive system of the Milwaukee Water Works. The Milwaukee Water Works water source is surface water from Lake Michigan.

**ITEM 3: DEFINITIONS**

<	"less than" or not detected
<b>AL</b>	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow. Action Levels are reported at the 90 <sup>th</sup> percentile for homes at greatest risk.
<b>Haloacetic Acids</b>	HAA5: Monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid, tribromoacetic acid, bromochloroacetic acid, dibromochloroacetic acid, and bromodichloroacetic acid.
<b>HA</b>	Health Advisory: An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a Health Advisory is not a legally enforceable federal standard, but serves as technical guidance to assist federal, state and local officials.
<b>Median</b>	The middle value of the entire data set for the parameter (range from high to low)
<b>µg/L</b>	Microgram per liter or parts per billion
<b>MCL</b>	Maximum Contaminant Level: The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<b>MCLG</b>	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.
<b>MRDL</b>	Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
<b>MRDLG</b>	Maximum residual disinfectant level goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
<b>mg/L</b>	Milligram per liter or parts per million
<b>NA</b>	Not Applicable
<b>ng/L</b>	Nanogram per liter
<b>NR</b>	Not Regulated
<b>NTU</b>	Nephelometric Turbidity Unit: A unit to measure turbidity.
<b>pCi/L</b>	Picocuries per Liter: A measure of radioactivity. A picocurie is 10 <sup>-12</sup> curies.
<b>RAA</b>	Running Annual Average: The average of four quarterly samples collected in one 12-month period.
<b>TT</b>	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water
<b>Trihalomethanes</b>	TTHMs: Chloroform, bromodichloromethane, dibromochloromethane, and bromoform
<b>Turbidity</b>	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. For 2015, the highest combined filter effluent value detected or Maximum Value was 0.21 NTU and < 0.3 NTU 100% of the time.

**Item 4: Detected Contaminants – Primary** The tables on the following pages show the regulated contaminants, or substances, detected in Milwaukee’s drinking water during 2016. It also includes all contaminants tested for in the most recent (2013) Unregulated Contaminant Monitoring Rule – Phase 3 (UCMR-3) mandatory monitoring program. **All contaminant levels are within applicable state and federal laws.** The tables contain the name of each contaminant, the highest level regulated (Maximum Contaminant Level, or MCL), the ideal goals for public health (Maximum Contaminant Level Goal, or MCLG), the median value detected, the usual sources of such contamination, possible health effects, and footnotes explaining the findings and units of measurement. The presence of a substance in drinking water does not necessarily indicate the water poses a health risk. Certain quantities of some substances are essential to good health, but excessive quantities can be hazardous.

Primary Contaminants							
Substance	Ideal Goals (MCGL)	Highest Level Allowed (MCL)	Median Value	Highest Level Detected	Source(s) of Contaminant	Meets Standard	Health Effects
Antimony	6 ug/L	6 ug/L	0.15 ug/L	0.16 ug/L	Natural deposits	Yes	Increase in blood cholesterol; decrease in blood sugar
Arsenic	10 ug/L	10 ug/L	0.5 ug/L	0.5 ug/L	Natural deposits	Yes	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer
Atrazine		3 ug/L	0.02 ug/L	0.02 ug/L	Herbicide	Yes	Cardiovascular system or reproductive problems
Barium	2 mg/L	2 mg/L	0.019 mg/L	0.019 mg/L	Natural deposits	Yes	Increase in blood pressure
Bromate	10 ug/L	10 ug/L RAA	3.2 ug/L	7.6 ug/L	Byproduct of drinking water disinfection	Yes	Increased risk of cancer
Chlorate	NA	NR	82 ug/L	210 ug/L	Byproduct of drinking water disinfection	NR	Affects red blood cells oxygen carrying capacity, effects on thyroid function.
Chlorine, total BD	4 mg/L	4 mg/L	.82 mg/L	1.23mg/L	Residual of drinking water disinfection	Yes	Eye/nose irritation; stomach discomfort
Chlorite	0.8 mg/L	1.0 mg/L	0.003 mg/L	0.004 mg/L	Byproduct of drinking water disinfection	Yes	Anemia; infants and young children: nervous system effects
Chromium, hexavalent	NA	NR	0.19 ug/L	0.23 ug/L	Natural deposits and manufacturing	NR	Effects on the liver, kidney, gastrointestinal and immune systems.
Chromium, total	NA	100 ug/L	0.5 ug/L	0.5 ug/L	Natural deposits and manufacturing	Yes	Chromium (III) is an essential element in humans, with a daily intake of 50 to 200 ug/d recommended for adults
Copper	1.3 mg/L	1.3mg/L	<0.002mg/L	0.016 mg/L	Corrosion of household plumbing systems	Yes	Gastrointestinal distress, Long term exposure liver or kidney damage
Fluoride	4 mg/L	4 mg/L	0.57 mg/L	0.69 mg/L	Water treatment additive Natural deposits	Yes	Bone disease (pain and tenderness of the bones); Children may get mottled teeth
Haloacetic Acids, Total		60 ug/L	3.55 ug/L	5.1 ug/L	Byproduct of drinking water disinfection	Yes	Increased risk of cancer
Individual Haloacetic Acids							
Dibromoacetic Acid			0.5 ug/L	0.78 ug/L			
Monobromoacetic Acid			0.0 ug/L	0.31 ug/L			
Monochloroacetic Acid			0.0 ug/L	0.0 ug/L			
Dichloroacetic Acid			1.75 ug/L	3.4 ug/L			
Trichloroacetic Acid			0.885 ug/L	1.5 ug/L			
Heterotrophic Plate Count	NA	TT	Met Requirement	Met Requirement	Naturally present in the environment	Yes	HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water
Nitrate, as N		10 mg/L	0.41 mg/L	.70 mg/L		Yes	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome
Nitrite, as N		1 mg/L	0.003 mg/L	0.024 mg/L		yes	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome
Perchlorate	NA	Regulation Pending	0.13 ug/L	0.14 ug/L	Byproduct of drinking water disinfection	NR	Inhibits the absorption of iodine by the thyroid gland, leading to developmental and learning disabilities in children.
Strontium Radionuclides		NR	110 ug/L	110 ug/L	Natural deposits	Yes	Effects on bone growth in children
Individual Radionuclides							
Gross Alpha Particles, excluding Ra + U		15 pCi/L	1.86 ±2.00	3.42±1.99			Increased risk of cancer
Gross Alpha Particles	NR		2.03±2.0	3.6±2.0			Increased risk of cancer
Gross Beta Particles		50 pCi/L	3.9±1.9	4.0±1.9			Increased risk of cancer
Radium 226		5pCi/L	0.16±0.16	0.20±0.18			Increased risk of cancer
Radium 228		5pCi/L	1.05± 0.58	1.4±0.7			Increased risk of cancer
Radium combined (226+228)		5pCi/L	1.20±0.60	1.51±0.71			Increased risk of cancer
Uranium		30 mg/L	<0.0010	<0.0010			Increased risk of cancer, kidney toxicity
Trihalomethanes, total	NA	80 ug/L	9.95 ug/L	12 ug/L	Byproduct of drinking water disinfection	Yes	Liver, kidney, or central nervous system problems; increased risk of cancer
Individual Trihalomethanes							
Bromodichloromethane			3.55 ug/L	3.9 ug/L			
Bromoform			<0.5 ug/L	<0.5 ug/L			
Chloroform			3.8 ug/L	5.7 ug/L			
Dibromochloromethane			1.95 ug/L	2.6 ug/L			
Turbidity	NA	<0.3 NTU 95% of time	0.05 NTU	0.33 one day maximum	Natural deposits	Yes	Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness.

#### Item 4: Detected Contaminants – Secondary

Substance	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Median Value	Highest Level Detected	Source of Contaminant	Meets Standard	Health Effects
Aluminum	0.2 mg/L	0.05-0.20 mg/L	0.051 mg/L	0.159 mg/L	Water Treatment additive: Natural deposits	NR	None in drinking water: aesthetic quality of water
Chloride	250 mg/L	250 mg/L	14.5 mg/L	23.5 mg/L	Natural deposits and road salts	NR	None in drinking water: aesthetic quality of water
Iron	300 ug/L	300 ug/L (S)	4 ug/L	25 ug/L	Natural deposits	NR	None in drinking water: aesthetic quality of water
Manganese		50 ug/L (S)	<0.5 ug/L	1.0 ug/L	Natural deposits	NR	None in drinking water: aesthetic quality of water
pH	NA	6.5-8.5 (S)	7.62	7.89	Naturally present in the environment	Yes	None in drinking water: aesthetic quality of water
Sulfate		500 mg/L (S)	28.0 mg/L	32.4 mg/L	Natural deposits	NR	None in drinking water: aesthetic quality of water
Total dissolved Solids	500 mg/L	500 mg/L	180 mg/L	207 mg/L	Aggregate of dissolved minerals	NR	None in drinking water: aesthetic quality of water
Zinc		5 mg/L (S)	<0.01 mg/L	0.06 mg/L	Natural deposits Metal plating	Yes	None in drinking water: aesthetic quality of water

#### Lead and Copper Compliance Monitoring Results 2014

Lead and Copper	Action Level	90 <sup>th</sup> Percentile	Highest Level Detected
Copper (2014)	1300 ug/L	76 ug/L	152 ug/L
Lead (2014)	15 ug/L	<1 ug/L	12 ug/L

#### UCMR-3 Assessment Monitoring (2014)

UCMR-3 Assessment Monitoring	Median Value	Highest Level Detected	Source of Contaminants	Health Effects
Hexavalent Chromium	0.16 ug/L	0.18 ug/L	Natural Deposits, Manufacturing	Effects on the liver, kidney, gastrointestinal and immune systems
Chlorate	52.5 ug/L	160 ug/L	Natural Deposits	Affects red blood cells oxygen carrying capacity, effect on thyroid function
Chromium	0.25 ug/L	0.30 ug/L	Natural Deposits, Manufacturing	Chromium (III) is an essential element in humans, with a daily intake of 50 to 200 ug/L recommended for adults
Cobalt	<1.0 ug/L	<1.0 ug/L	Natural Deposits	Possible fetal development, possible human carcinogen
Molybdenum	<1.0 ug/L	1.2 ug/L	Natural Deposits	Toxic to animals at very high concentrations
Strontium	120 ug/L	120 ug/L	Natural Deposits	Effects on bone growth in children
Vanadium	0.285 ug/L	0.33 ug/L	Natural Deposits, Manufacturing	Gastrointestinal symptoms
perfluorobutanesulfonic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
perfluoroheptanoic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
perfluorohexanesulfonic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
perfluorooctanoic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
perfluoronanoic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
perfluorooctanesulfonic acid	ND	ND	Waterproofing, textile manufacturing	Effects of blood, liver and kidneys
1,4-dioxane	ND	ND	Manufacturing of paint and solvents	Likely to be carcinogenic
Chlorodifluoromethane	ND	ND	Refrigerant	Cardiac effects
chloromethane	ND	ND	Byproduct of water disinfection, manufacturing	Central nervous system effects
1,3-butadiene	ND	ND	Plastic manufacturing	Increase cancer risk
bromochloromethane	ND	ND	Byproduct of water disinfection, Fire extinguishing agent	May be toxic to kidneys, lungs, liver, respiratory tract, skin, eyes and central nervous system
Bromomethane	ND	ND	Fumigant	Increase cancer risk
1,1 Dichloroethane	ND	ND	Plastic manufacturing	Increase cancer risk
1,2,3-trichloropropane	ND	ND	Solvents, pesticide manufacturing	Increase cancer risk

**Item 5: Information on monitoring for *Cryptosporidium*, Radon, and Other Contaminants (if detected)** *Cryptosporidium* was not detected in any of 24 source water samples during 2016. There were no detections of *Cryptosporidium* in the finished water in 2016.

The table below shows the unregulated substances detected in Milwaukee’s drinking water during 2016. Any known possible health effects for these substances are listed in the table. A complete list of over 500 substances tested for can be found at <http://city.milwaukee.gov/ImageLibrary/Groups/WaterWorks/files/UndetectedChemicalContaminants-TreatedWater.pdf>

Substance	Range of values detected	Source of Substance	Health Effects
Acesulfame-K	30 ng	Artificial sweetener	None proposed for human
Ammonia, <sup>1</sup> as N	0.02 - 0.66 mg/L	Disinfection with chloramines; wastes; fertilizers and natural processes	None proposed for human but toxic for aquatic life
Boron <sup>2</sup>	18 ug/L	Naturally occurring; borax mining and refining; boric acid manufacturing	Stomach, liver, kidney or central nervous system problems
Bromide	25 ug/L - 62 ug/L	Naturally occurring	None from drinking water
Bromochloroacetonitrile	0.6 - 1.3 ug/L	Byproduct of drinking water disinfection	Increased risk of cancer
Calcium	34 mg/L	Naturally occurring	None from drinking water
Chloropicrin	<0.5 - 1.5 ng/L	Fungicide, herbicide, insecticide and nematocide	Eye/nose irritation; stomach discomfort
DEET	15 ng/L	Insect repellent	None proposed for human, slightly toxic to birds, fish, aquatic invertebrates
Desethylatrazine	<0.1 - 0.1 ng/L	Herbicide	Endocrine disruptor
Dibromoacetonitrile	<0.5 - 1.7 ng/L	Byproduct of drinking water disinfection	Eye/nose irritation
Dichloroacetonitrile	<0.5 - 3.3 ng/L	Byproduct of drinking water disinfection	Increased risk of cancer
1,1-Dichloropropanone	<0.5 - 0.8 ng/L	Byproduct of drinking water disinfection	Increased risk of cancer
Erucylamide	3.3 ug/L	Manufacturing of paints, surfactants and lubricants.	Gastrointestinal symptoms
Gallium	<1.0 - 1.0 ug/L	Electronics manufacturing	Damage to liver and kidneys, may affect nervous system and lungs.
Lithium	2 ug/L	Naturally occurring	Affects to thyroid function
Magnesium	12 mg/L	Naturally occurring	None from drinking water
Nickel	<1.0-3.2 ug/L	Naturally occurring	None from drinking water
N-Nitrosodiethylamine (NDEA)	<2.0 - 2.3 ng/L	Rubber, leather, pesticide and dye manufacturing	None in drinking water.
Silica	1.8 - 2.0 mg/L	Naturally occurring	Effects on liver, increased cancer risk
Sucralose	32-36 ng/L	Artificial sweetener	None from drinking water
Total Organic Carbon	1.1 - 1.7 mg/L	Naturally present in the environment	None proposed for human
Total Solids	150 - 260 mg/L	Measure of solid materials in water	Total organic carbon has no health effects.
1,1,1-Trichloropropanone	<0.5 - 2.0 ug/l	Byproduct of drinking water disinfection	None from drinking water Increased risk of cancer

**Item 6: Compliance with Other Drinking Water Regulations**

The Brown Deer Water Utility had no monitoring violations in 2016. However, Brown Deer Water purchases its water from the Milwaukee Water Works and they had one monitoring violation or Notice of Non-Compliance, of the Safe Drinking Water Act in 2016. The Notice of Non-Compliance was issued by the Wisconsin Department of Natural Resources. Although MWW properly collected the 2016 3rd quarter disinfection by-product (DBP) compliance samples, the temperature of one of the six samples exceeded the acceptable temperature for analysis when the sample arrived at the analytical laboratory. MWW was not able to complete a replacement sample within the designated sampling interval. Even though the results of the other five samples were fine, DNR regulations considers that the samples were not collected. MWW was therefore found to be in violation of monitoring regulations. The results of the samples that were analyzed were much lower than the acceptable concentration limits for DBPs, as they always are for the Milwaukee water system. (DBPs are very low in MWW’s treated water due to the high quality of the Lake Michigan source water and the use of ozone as the primary disinfectant in their water treatment processes.) MWW remains committed to providing the cleanest and safest tap water that they can to all their customers.

## Item 7: Variances and Exemptions (not applicable)

## Item 8: Required Educational Information

As water flows through rivers and lakes and over land surfaces, naturally occurring substances may be dissolved in the water that reaches Lake Michigan. These substances are referred to as contaminants. Surface water sources may be highly susceptible to contaminants. Surface water is also affected by animal and human activities. Read the [DNR Source Water Assessment for Milwaukee](#). Contaminants that may be present in source water include microbial contaminants such as viruses, protozoa and bacteria; inorganic contaminants such as salts and metals, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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 the 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, (800) 426-4791. The table of contaminants detected by the Milwaukee Water Works is on pages 3-4 of this report.

### Health Precautions

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 tap water from their health care providers. EPA/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791, and the CDC at [cdc.gov/parasites/crypto](http://cdc.gov/parasites/crypto).

### *Cryptosporidium*

*Cryptosporidium* is a microscopic protozoan that when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. In collaboration with the Milwaukee Health Department, MWW considers *Cryptosporidium* detection a priority, and since 1993, they have continued to test source and treated water for *Cryptosporidium*. The organism is found in many surface water sources (lakes, rivers, streams) and comes from human and animal wastes in the watershed. The risk of *Cryptosporidium* from drinking water in Milwaukee has been reduced to extremely low levels by an effective treatment combination including ozone disinfection, coagulation, sedimentation, biologically active filtration, and chloramine disinfection.

The Milwaukee Water Works provides a brochure based on EPA and CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*. Obtain a copy from Milwaukee Water's Customer Service Center, (414) 286-2830, or at [milwaukee.gov/water](http://milwaukee.gov/water), click on Water Quality at the top, and scroll down to Resources, choose "Information for Persons with weakened immune systems."

### **Lead and Copper**

Lead is not found in Brown Deer's source water, Lake Michigan, and it is not found in our treated drinking water. Lead may enter drinking water at a house or building if it dissolves from materials and components associated with service lines and home plumbing, especially when water stands unused for several hours. To prevent lead from dissolving into the water, Milwaukee Water Works add phosphate that forms a protective coating inside pipes. This corrosion control protection has been provided by Milwaukee Water since 1996 to meet EPA standards.

Brown Deer has no lead water mains and no lead service lines. Lead may be found in home plumbing – in some solder used with older copper plumbing (before 1987) and in faucets and fittings of brass which contain some lead (prior to 2014). The Brown Deer Water Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in private plumbing components. When your water has been sitting for several hours, you can minimize the potential for possible lead exposure by flushing cold water from your tap for approximately three minutes before using it for drinking or cooking (the water should feel cooler). 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 EPA Safe Drinking Water Hotline, 1-800-426-4791, or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

**Notice to Parents of Infants Six Months of Age or Younger**

*According to the CDC, the proper amount of fluoride from infancy and at all ages throughout life helps prevent and control tooth decay (cavities). Therefore, the Milwaukee Water Works, following public health recommendations, maintains a level of fluoride in the drinking water that is both safe and effective. Per Common Council File No. 120187 adopted on July 24, 2012, we are required to include the following advisory regarding fluoride and young infants in our annual water quality reports and on our website.*

The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of a child's life, followed by continued breastfeeding as complementary foods are introduced, for optimal short- and long-term health advantages. Go to <http://pediatrics.aappublications.org/content/129/3/e827> for more information.

As of August 31, 2012, Milwaukee water is fluoridated at a level not to exceed 0.7 mg/L. Per the CDC, for infants up to six months of age, if tap water is fluoridated or has substantial natural fluoride (0.7 mg/L or higher) and is being used to dilute infant formula, a parent may consider using a low-fluoride alternative water source. Bottled water known to be low in fluoride is labeled as purified, deionized, demineralized, distilled, or prepared by reverse osmosis. Ready-to-feed (no-mix) infant formula typically has little fluoride and may be preferable, at least some of the time. If breastfeeding is not possible, parents should consult a pediatrician about an appropriate infant formula option. Parents should be aware that there may be an increased chance of mild dental fluorosis if the child is exclusively consuming infant formula reconstituted with fluoridated water. Dental fluorosis is a term that covers a range of visible changes to the enamel surface of the tooth. Go to [http://www.cdc.gov/fluoridation/safety/infant\\_formula.htm](http://www.cdc.gov/fluoridation/safety/infant_formula.htm) for more information on dental fluorosis and the use of fluoridated drinking water in infant formula.

*Your Brown Deer Water Commissioners: Tim Schilz (Pres.),  
Gerald Anderson, Zachary Beanland, Kenneth Harmon  
Brown Deer Water Superintendent: Tom Nennig  
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