

The U.S. Environmental Protection Agency (EPA) requires drinking water utilities to provide an annual Consumer Confidence Report to help consumers understand where their drinking water comes from, so they can make informed decisions about their health and protection of the environment.

The Brown Deer Water Utility purchases all its water from the Milwaukee Water Works. Milwaukee water complies with all state and federal drinking water standards. The Milwaukee Water Works 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.

In this report, you will find:

- Information about the source of your drinking water
- Results of water quality testing and compliance with water quality laws and standards
- Additional educational information

Visit <http://www.browndeerwi.org/departments/water-utility/> and <http://city.milwaukee.gov/water> for more information.

Highlights

- Primary Drinking Water Standards
- Secondary Water Standards
- Unregulated Contaminants
- *Cryptosporidium*
- Lead and Copper Rule



Important Information

This report contains important information about your drinking water. Have someone translate it for you or talk to someone who understands it.

Información Importante

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Lug tseem ceeb rua cov siv dlej kws has lug Moob

Dlaim ntaavv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.

Water System Information

The Village of Brown Deer-owned public utility provides clean, safe water to all residents of the Village of Brown Deer. The population of Brown Deer is approximately 12,000, with a total land area of 4.5 square miles. To serve this customer base, the Utility manages and operates 67.6 miles of water main, 680 hydrants, and 916 distribution system valves. The Utility also owns a 2 million-gallon standpipe, which supplies water storage and pressure to the system. The average daily consumption in 2021 was approximately 1.27 million gallons per day (MGD).

For more system information, or questions about this report, please call Tom Nennig, Utility Superintendent, at the Brown Deer Water Utility, (414-371-3082).

Participate in decisions regarding your water

Participate in decisions that affect drinking water quality at meetings of the Village of Brown Deer Water Commission or the Brown Deer Village Board. These committees meet at the Brown Deer DPW Facility, 8950 N. Arbon 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/>.

Source of Water

The Brown Deer Water Public Utility is a consecutive system of the Milwaukee Water Works. All water sold by the Brown Deer Water Utility is purchased from the Milwaukee Water Works. The Milwaukee Water Works water source is surface water from Lake Michigan.

For more information on the Milwaukee Water Works source water and treatment process, visit the Milwaukee Water Works website at <https://milwaukee.gov/WaterConsumerConfidenceReport>.

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. 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 4-8 of this report.

Detected Contaminants or Substances

The tables on the following pages show the regulated contaminants, or substances, detected in Milwaukee's drinking water and Brown Deer's distribution system during 2020. It also includes all contaminants tested for in the most recent (2018) Unregulated Contaminant Monitoring Rule – Phase 4 (UCMR4) 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 average 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.

Definitions	
<	"less than" or not detected
AL	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 th percentile for homes at greatest risk.
Haloacetic Acids	HAA5: Monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid, tribromoacetic acid, bromochloroacetic acid, dibromochloroacetic acid, and bromodichloroacetic acid.
HA	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.
Median	The middle value of the entire data set for the parameter (range from high to low)
ug/L	Microgram per liter or parts per billion
MCL	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.
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
MRDL	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.
MRDLG	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
mg/L	Milligram per liter or parts per million
NA	Not Applicable
ND	Not Detected
NR	Not Regulated
NTU	Nephelometric Turbidity Unit: A unit to measure turbidity.
pCi/L	Picocuries per Liter: A measure of radioactivity.
RAA	Running Annual Average: The average of four quarterly samples collected in one 12-month period.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water
Trihalomethanes	TTHMs: Chloroform, bromodichloromethane, dibromochloromethane, and bromoform
Turbidity	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.

Information for those with compromised immune systems and/or vulnerable populations

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 systems 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791), and the CDC at cdc.gov/parasites/cypto.

Primary Drinking Water Standards

The EPA has set National Primary Drinking Water Regulations that set water quality standards for contaminants, or substances, in public drinking water. These standards are referred to as maximum contaminant levels (MCLs), which are established to protect public health, and are legally enforceable above the allowed MCL. For information on EPA ground and drinking water primary standards, visit: <http://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>.

Note: any substance marked with an asterisk (*) contains data from the Brown Deer Water Utility testing programs.

Primary Substances Detected	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Average	Range	Meets Standard	Typical Source of Substance
Antimony	6	6	0.15	0.14 - 0.15	Yes	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Atrazine	3	3	0.03	< 0.01 - 0.08	Yes	Herbicide (result from 8/12/2020, undetected in 2021)
Barium (ppm)	2	2	0.019	0.019	Yes	Drilling waste discharge; metal refineries
Bromate (ppb)	0	10 RAA	4.0	0 - 6	Yes	By-product of drinking water disinfection
Chlorine, Total (ppm)*	4	4 (MRDL)	0.81	0.12 – 1.60	Yes	Water additive used to control microbes
Chlorite (ppm)	0.8	1	0.007	0.007 - 0.008	Yes	By-product of drinking water disinfection
Chromium, Total (ppb)	100	100	0.4	0.30 – 0.50	Yes	Natural deposits and manufacturing
Cyanide (ppb)	200	200	3.5	3 – 4	Yes	Discharge from steel/metal or plastic and fertilizer factories
Fluoride (ppm)	4.0	4.0	0.62	0.57 – 0.64	Yes	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA5] (ppb)*	NA	60	3.05	0.29 – 4.57	Yes	Byproduct of drinking water disinfection
Heterotrophic plate count	NA	TT	Met	Met standard	Yes	Naturally present in the environment;
Nitrate, as N (ppm)	10	10	0.36	0.32 – 0.39	Yes	Runoff from fertilizer use; leeching from septic tanks sewage; erosion of natural deposits
Radionuclides (3/24/2020) Note: Radionuclides were last monitored in 2020 in accordance with regulations.						
Gross alpha (pCi/L) [excluding Ra and U]	0	15	0.7	0.5 - 0.7	Yes	Erosion of natural deposits
Gross alpha (pCi/L)	0	15	0.9	0.7 - 0.9	Yes	Erosion of natural deposits
Gross beta (pCi/L)	0	50	1.6	-1.7 - 1.6	Yes	Decay of natural and manmade deposits
Radium (pCi/L)	0	5	0.9	0.7 - 0.9	Yes	Erosion of natural deposits
Uranium (ppb)	0	30	0.3	0.3	Yes	Erosion of natural deposits
Total Trihalomethanes [TTHM]*	NA	80	9.30	5.4 – 11.50	Yes	Byproduct of drinking water disinfection
Turbidity (NTU)	NA	< 0.300 95% of time	0.01	0.07 1-day maximum	Yes	Soil runoff

Secondary Drinking Water Standards

The EPA has also established National Secondary Drinking Water Regulations that set non-mandatory standards for potential water-quality substances. These secondary substances are not currently considered a risk to human health, but instead, act as guidelines for drinking water aesthetics such as taste, odor, and color. For more information on EPA secondary standards, visit: <https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals>.

Secondary Substances Detected	Highest Level Allowed (MCL)	Average	Range	Meets Standard	Typical Sources of Substance
Aluminum (ppm)	0.05 - 0.20	0.086	0.052 – 0.120	Yes	Water treatment additive; natural deposits
Chloride (ppm)	250	15	15	Yes	Natural deposits and road salts
Odor	3	1	1	Yes	Naturally present in the environment
pH (-log [H ⁺])	6.5 - 8.5	7.66	7.43 – 8.04	Yes	Naturally present in the environment
Sulfate (ppm)	250	24.5	24 - 25	Yes	Natural deposits
Total Dissolved Solids (ppm)	500	210	200 - 220	Yes	Aggregate of dissolved minerals

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 our drinking water that is both safe and effective. The following is an advisory regarding fluoride and young infants:

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, Brown Deer water is fluoridated at a level not to exceed 0.7 mg/L. According to 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. For more information on dental fluorosis and the use of fluoridated drinking water in infant formula, go to <http://www.cdc.gov/fluoridation>.

Unregulated Contaminants Monitoring Rule – Phase 4

The Unregulated Contaminant Monitoring Rule (UCMR) was established by the EPA as part of the Safe Drinking Water Act of 1996. Every five years, in compliance with the EPA, Brown Deer Water Utility collects data on potential contaminants that are not yet regulated but are known, or anticipated, to occur in public water systems. These data help the EPA determine if future regulations are needed for contaminants of concern. Learn more at <http://www.epa.gov/dwucmr>.

Note: Single sample is reported as Highest Level Detected. Any substance marked with an asterisk (*) contains data from the Brown Deer Water Utility testing programs.

UCMR-4 Assessment Monitoring (2018)	Average	Highest Level Detected	Source of Contaminants
alpha-Hexachlorocyclohexane (ppt)*	< 0.0100	< 0.0100	Pesticide
1-Butanol (ppb)*	< 2.00	< 2.00	Solvent, food additive
Butylated hydroxyanisole (ppt)*	< 0.300	< 0.300	Food additive (antioxidant)
Chlorpyrifos (ppt)*	< 0.0300	< 0.0300	Organophosphate, insecticide, acaricide, miticide
Dimethipin (ppt)*	< 0.200	< 0.200	Herbicide and plant growth regulator
Ethoprop (ppt)*	< 0.030	< 0.030	Insecticide
Germanium (ppt)*	< 0.300	< 0.300	Naturally occurring element
Manganese (ppt)*	0.903	1.215	Naturally occurring element
2-Methoxyethanol (ppt)*	< 0.400	< 0.400	Synthetic cosmetics, perfumes, fragrances, hair preparations, skin lotions
o-Toluidine (ppt)*	< 7.00	< 7.00	Dyes, rubber, pharmaceuticals, pesticide
Oxyfluorfen (ppt)*	< 0.500	< 0.500	Herbicide
Permethrin cis & trans (ppt)*	< 0.040	< 0.040	Insecticide
Profenofos (ppt)*	< 0.300	< 0.300	Insecticide and acaricide
2-Propen-1-ol (ppt)*	< 0.500	< 0.500	Flavorings, perfumes
Quinoline (ppt)*	< 0.020	< 0.020	Anti-malarial pharmaceutical, flavoring agent
Tebuconazole (ppt)*	< 0.200	< 0.200	Fungicide
Tribufos (ppt)*	< 0.070	< 0.070	Insecticide, cotton defoliant

UCMR-4 Assessment Monitoring of Cyanotoxins (2018)	Average	Highest Level Detected	Source of Contaminants
Anatoxin-a (ppt)*	< 30	< 30	Source water
Cylindrospermopsin (ppt)*	< 90	< 90	Source water
Total Microcystins & Nodularins (ppb)*	< 0.300	< 0.300	Source water

UCMR-4 Assessment Monitoring of Surface Water Indicators (2018)	Average	Highest Level Detected	Source of Contaminants
Bromide (ppb)	30.3	35.3	Source water
Total Organic Carbon [TOC] (ppm)	1.840	2.040	Source water

Unregulated Contaminants Monitoring Rule – Phase 4 (continued)

UCMR-4 Assessment Monitoring of Distribution Water (2018)	Average	Highest Level Detected	Source of Contaminants
Bromochloroacetic acid [BCAA] (ug/L)*	1.374	3.20	Byproduct of drinking water disinfection
Bromodichloroacetic acid [BDCAA] (ug/L)*	0.826	1.10	Byproduct of drinking water disinfection
Chlorodibromoacetic acid [CDBAA] (ug/L)*	0.334	0.55	Byproduct of drinking water disinfection
Dibromoacetic acid [DBAA] (ug/L)*	0.391	0.53	Byproduct of drinking water disinfection
Dichloroacetic acid [DCAA] (ug/L)*	1.654	2.70	Byproduct of drinking water disinfection
Monobromoacetic acid [MBAA] (ug/L)*	0.167	0.53	Byproduct of drinking water disinfection
Monochloroacetic acid [MCAA] (ug/L)*	< 2.00	< 2.00	Byproduct of drinking water disinfection
Tribromoacetic acid [TBAA] (ug/L)*	< 2.00	< 2.00	Byproduct of drinking water disinfection
Trichloroacetic acid [TCAA] (ug/L)*	0.980	1.30	Byproduct of drinking water disinfection
HAA5 Total (ug/L)*	3.198	4.989	Byproduct of drinking water disinfection
HAA6 Br Total (ug/L)*	3.097	5.603	Byproduct of drinking water disinfection
HAA9 Total (ug/L)*	5.737	8.503	Byproduct of drinking water disinfection

Compliance with Other Drinking Water Regulations

In compliance with state and local authorities, the Brown Deer Water Utility is required to report any deficiencies that may have occurred during 2021, any adverse health effects associated with the deficiency, and the steps taken to correct the deficiency. Because the Brown Deer Water Utility is a consecutive system to the Milwaukee Water Works, the Utility is also required to report any violations by Milwaukee Water Works.

The Brown Deer Water Utility had zero reporting violations in 2021.

Milwaukee Water Works had one deficiency in 2021:

Description - Milwaukee Water Works was notified of the following deficiency on August 6, 2019, "System is not implementing a comprehensive Cross-Connection Control Program," with a scheduled correction date of March 31, 2020.

Action Taken - Milwaukee Water Works completely overhauled its Cross-Connection Control Program and developed a new Cross-Connection Control Plan to meet the March 31, 2020 deadline. The plan is described in MWW's CCR, and has achieved significant positive results, is monitored by the DNR, and brings Milwaukee Water Works into compliance with NR 810.15.

Other Monitored Substances

Milwaukee Water Works measures hundreds of substances that are not regulated by local, state, or federal regulations. When any substance is detected, it is reported. These substances have no regulatory or contaminant level guidelines. Therefore, these data are presented as a range of values detected. A complete list of all undetected contaminants or substances tested for can be found at <https://Milwaukee.gov/water/WaterQuality>.

Other Substance Detected	Range or Highest Value Detected	Typical Source of Substance
Acesulfame-K (ppb)	0.02	Artificial sweetener
Acetone (ppb)	2 – 2.3	Naturally occurring, exhaust from automobiles, tobacco smoke
Ammonia, as N (ppm)	0.13 – 0.47	Disinfection with chloramines; wastes; fertilizers and natural processes
Boron (ppb)	23 – 24	Naturally occurring; borax mining and refining; boric acid manufacturing
Bromide (ppb)	2.2	Naturally occurring
Bromochloroacetonitrile (ppb)	0.30 – 1.10	Byproduct of drinking water disinfection
Calcium (ppm)	33 – 34	Naturally occurring
Chlorate (ppm)	0.27	Byproduct of drinking water disinfection
Chloropicrin (ppb)	0.50 – 0.79	Fungicide, herbicide, insecticide and nematicide
Chromium, hexavalent (ppb)	0.30 – 0.50	Natural deposits and manufacturing
Cotinine (ppt)	1	Metabolic byproduct of tobacco smoking
Dibromoacetonitrile (ppb)	0.30 – 1.10	Byproduct of drinking water disinfection
Dichloroacetonitrile (ppb)	0.50 – 0.93	Byproduct of drinking water disinfection
1,1-Dichloro-2-propanone	0.3 – 0.7	Byproduct of drinking water disinfection
1,1-Dichloropropanone (ppb)	1.6	Byproduct of drinking water disinfection
Diclofenac (ppt)	0.5 – 1.6	Pharmaceutical
Formaldehyde (ppb)	5	Byproduct of drinking water disinfection
Gallium (ppb)	0.3	Mining activities
Gold (ppb)	0.2 – 0.3	Mining activities
Hexanal (ppb)	5	Ozone disinfection byproduct
Lithium (ppb)	2.2	Naturally occurring
Magnesium (ppm)	12	Naturally occurring
Nickel (ppb)	0.3	Natural deposits and manufacturing
Nonylphenol, isomer mix (ppb)	0.5 – 0.7	Cleaning products, personal care products, industrial processing, fabrics, paints, coatings
Osmium (ppb)	0.9	Byproduct of nickel refining
Perchlorate (ppb)	0.2	Naturally occurring and found as an impurity in hypochlorite solutions used for drinking water treatment
o-Phosphate as PO4 (ppm)	0.31 – 2.58	Byproduct of drinking water treatment
Phosphorus as P (ppm)	0.61 – 0.89	Naturally occurring
Potassium (ppm)	1.5	Naturally occurring
Rubidium (ppb)	1	Naturally occurring
Silica (ppm)	2.20 – 2.60	Naturally occurring
Sodium (ppm)	9.8	Natural deposits and road salt

Other Substance Detected (cont.)	Range or Highest Value Detected	Typical Source of Substance
Strontium (ppb)	110	Natural deposits
Sucralose (ppt)	47 – 57	Artificial sweetener
Total Organic Carbon (ppm)	0.50 – 1.64	Naturally present in the environment
Total Solids (ppm)	200 – 220	Measure of solid materials in water
Trichloroacetonitrile (ppb)	1.5	Insecticide
1,1,1-Trichloropropanone (ppb)	0.30 – 1.30	Byproduct of drinking water disinfection
Tris(chloropropyl) phosphate (ppb)	0.01	Flame retardant
Vanadium (ppb)	0.3	Naturally occurring

PFAS

Water utilities in Wisconsin are not yet required to test for per- and polyfluoroalkyl substances, collectively known as PFAS. However, Milwaukee Water Works tested for 45 PFAS compounds in 2021 voluntarily. In 2021, MWW detected 7 known PFAS compounds. See the table below for details.

In February 2022 the Wisconsin Natural Resources Board (NRB), which sets policy for the DNR, approved drinking water standards of 70 parts per trillion of PFOA and PFOS (combined or separate). The DNR and Wisconsin Department of Health Services recommended stricter standards of 20 ppt. At the time this report was finalized (March 31, 2022) the Legislature and Governor had not yet approved the NRB's standards. If the approved standards become law, any water system with PFOA or PFOS above the 70 ppt limit will be required to take action to comply with the standards.

PFAS are found in hundreds of consumer products such as fast-food wrappers, the lining of disposable coffee cups, waterproofing products, and many types of stain resistant coatings used in textile manufacturing. PFAS is also found in fire-fighting foam commonly used at airports and can find its way into ground water and surface water through an airport's stormwater drainage system that flushes water away from paved surfaces into surrounding creeks and streams which may feed into larger bodies of water.

Primary Substances Detected	Range or Highest Value Detected	Typical Source of Substance
Perfluorobutanoic acid (PFBA)	1.8 – 2.1	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluoroheptanoic acid (PFHpA)	0.9 – 1.0	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluorohexanesulfonic acid (PFHxS)	0.7	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluorohexanoic acid (PFHxA)	1.3	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluorooctanesulfonic acid (PFOS)	2.0 – 2.3	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluorooctanoic acid (PFOA)	1.8 – 2.0	Waterproofing; textile manufacturing; used in fire-fighting foams
Perfluoropentanoic acid (PFPeA)	1.3	Waterproofing; textile manufacturing; used in fire-fighting foams

Lead & Copper Rule Compliance Results for 2020

In 2020, in compliance with the US EPA and Wisconsin DNR, the Brown Deer Water Utility tested 30 tier 1 or 2 sites for lead and copper. In order to remain in compliance with EPA regulations, 90th percentile levels must be below 15 µg/L (ppb) for lead and 1300 µg/L (ppb) for copper. For more information on the EPA Lead Copper Rule, visit <http://www.epa.gov/dwreginfo/lead-and-copper-rule>.

Lead and Copper (2020)	Action Level	90th Percentile	Highest Detected	Sites Exceeding Action Level	Violation	Source(s) of Contaminant
Copper (µg/L)	1300	65	100	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits, Leaching from wood preservatives
Lead (µg/L)	15.0	0.71	2.9	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits

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). If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The Brown Deer Water Utility 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 or at www.epa.gov/safewater/lead.
