



**DUPAGE
COUNTY**

Wastewater

Water

Drainage

Permitting

PUBLIC WORKS DEPARTMENT

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North Regional Water Facility Nordic Park IEPA Facility # 0435850 **Annual Drinking Water Quality Report**

This report is on the quality of ground water delivered January 1 to December 31, 2018 by the North Regional Water Facility (NRWF). Your tap water meets all USEPA and State drinking water health requirements. We are able to report that DuPage County North Regional Water Facility had no violation in the previous year. This report summarizes the quality of water that was provided last year, including details about where your water comes from and how past contaminant test results compare to standards set by regulatory agencies. Safe water is vital to our community. Please read this report carefully and, if you have questions, call the number listed at the end of the report.

Este informe contiene información muy importante. Tradúzcalo ó hable con alguien que lo entienda bien.

Your drinking water meets or exceeds all Federal and State drinking water standards!

We encourage participation in the decisions affecting your drinking water. Public Works Committee meetings are regularly scheduled twice every month. For information about meeting schedules and agendas, you may call 630.407.6800 or review our webpage at: <http://dupage.iqm2.com/Citizens/calendar.aspx>

Source Water

The North Regional Water Facility is supplied by groundwater pumped from one well. The well water is sent to a low-pressure Nano-Filtration unit that removes 80 - 90% of the minerals in the well water using thin film composite polyamide softening membranes. Due to the corrosive nature of purified water we add Potassium Carbonate. This product adjusts the pH to provide water that is non-aggressive. The use of home water softeners may no longer be required. It is important to properly disconnect these units if you decide not to use them. Call us for further assistance at (630) 964-7503. In the event the system cannot keep up with the demand, i.e., emergencies, fire, and hot weather, we have an emergency interconnect with the Village of Itasca to supply Lake Michigan water. Please use your water conservatively during extended periods of hot weather. Copies of this and our other water system reports can be downloaded from: <https://www.dupageco.org/WaterDivision/>

Source Water Assessment Summary

Based on information obtained in a Well Site Survey published in 1988 by the Illinois EPA, several possible problem sites were identified within the survey area of NRWF's wells. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with ongoing remediation, which may be of concern.

The Illinois EPA has determined that NRWF's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeological data on the wells.

Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process; the community's wells are properly constructed with sound integrity and proper site conditions, a hydrogeological barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat.

Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics was not considered to be a significant factor in this vulnerability determination. Hence, well hydraulics was not evaluated for this groundwater supply.

Source Water Assessment Information

Further information on our community water supply's source water assessment is available on the Illinois EPA website at: <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl> or call the Groundwater Section of the Illinois EPA at (217) 785-4787.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic system, 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 storm water 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.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, person 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 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 Safe Drinking Water Hotline (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

UNREGULATED CONTAMINANTS:

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

2018 Regulated Contaminants Detected -Definition of terms-

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal 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 disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.
N/A	Not Applicable
NTU	Nephelometric Turbidity Units
pCi/L	picocuries per liter (a measure of radioactivity)
ppb	Parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.
ppm	Parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Collection Date	If a date appears in this column, the IEPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Lead MCLG	Lead Action Level (AL)	Collection Date	Lead 90th Percentile	# Sites Over Lead (AL)	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper (AL)	Violation	Likely Source of Contaminant
0	15 ppb	2018	2.4 ppb	0	1.3 ppm	1.3 ppm	0.072 ppm	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

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. DuPage County Public Works is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Across the Nation, homes built before 1986 are more likely to have lead pipes, fixtures and solder. **Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for at least 3 minutes or until its cold at a steady temperature before using the water for drinking or cooking.** Use cold water for drinking, cooking and preparing baby formula. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. 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 <http://www.epa.gov/safewater/lead>

Lead Sources:

Identify if your plumbing contains lead. New brass faucets, fittings, and valves, including those advertised as “lead free”, may contribute to lead in drinking water. As of June 19, 1986, new or replaced water service lines and new household plumbing materials could not contain more than 8% lead. Lead content was further reduced on January 4, 2014, when plumbing materials must now be certified as “lead free” to be used (weighted average of wetted surface cannot be more than 0.25% lead). Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Under the authority of the Safe Drinking Water Act, USEPA set the action level for lead in drinking water at 15ppb. This means utilities must ensure that water from the customers tap does not exceed this level in at least 90% percent of the homes sampled (90th percentile value). *The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.* If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is 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.

Distribution Testing Results:

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine	12/31/18	0.6	0.4 - 0.7	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Total Trihalomethanes (TTHM)	2018	1	0.623 - 0.623	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	7/20/2017	0.0027	0.0027 – 0.0027	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	7/20/2017	.769	0.769 – 0.769	4	4	Ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Iron	7/20/2017	0.072	0.072 – 0.072	0	1.0	Ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates Erosion of natural deposits.
Manganese	7/20/2017	1.6	1.6 – 1.6	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates Erosion of natural deposits.
NITRATE (AS NITROGEN) (ppm)	2018	0.07	0.07 – 0.07	10	10	ppm	No	Runoff from fertilizer use, leaching from septic tanks, Sewage, Erosion of natural deposits.
Sodium	7/20/2017	15	15 - 15	***	***	ppm	No	Erosion of naturally occurring deposits: Used in water softener regeneration
Zinc	7/20/2017	0.021	0.021 – 0.021	5	5	Ppm	No	This contaminant is not currently regulated by the USEPA. However, the State regulates. Naturally occurring; discharge from metal.

There is not a state of federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Combined Radium 226/228	4/7/14	0.24	0.24 – 0.24	0	5	pCi/L	No	Erosion of natural deposits

No Drinking water quality violations were recorded during 2018.

For additional information please call James Joers at (630) 964-7503 or email jim.joers@dupageco.org.
 Dupage County Public Works
 17W440 N. Frontage Rd. Darien, IL 60561

DuPage County Cross-Connection Control Program (CCCP)

As part of the DuPage County CCCP, the Illinois Environmental Protection Agency (IEPA) requires that we conduct a biannual All Drinking Water System Connection Survey. As a result, a survey has been prepared to assess risk and compile backflow prevention device data for properties serviced by DuPage County. **This program is intended to protect all drinking water customers, and your active participation is required.** The survey can be found at <https://www.dupageco.org/WaterDivision/> under the Cross Connection Control Program section. If you have any questions, or require additional information, please contact the CCCP Manager directly at (630) 407-6808.

**DUPAGE COUNTY DEPARTMENT OF PUBLIC WORKS
 WATERING RESTRICTION GUIDELINES**

The following restrictions shall be in effect from **May 15 through September 15** as follows:
 Water shall not be used on any day between the hours of 10:00 A.M. and 7:00 P.M. for the purpose of:

- Watering or sprinkling gardens, lawns, trees, shrubs and other outdoor plants, except that such restrictions shall not prohibit the watering of newly planted gardens, lawns, trees, shrubs and plants with hand held water devices.
- Filling swimming pools; and
- Washing vehicles, houses, trailers, driveways and sidewalks.

Outside watering will be allowed before 10:00 A.M. or after 7:00 P.M., as determined by street number and day of the month (odd/even sequence). Odd street addresses may water on the odd days of the month and even street addresses may water on the even days of the month.

CHICAGO –2018

SOURCE WATER QUALITY DATA

IEPA #0316000

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of Sample
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Turbidity Data

TURBIDITY (NTU Lowest Monthly % ≤ 0.3NTU) Soil runoff, lowest monthly percent meeting limit	N/A	TT (0.3NTU)	100%	100%-100%	No	
TURBIDITY (NTU) Highest Single Measurement Soil runoff,	N/A	TT (1NTUmax)	0.19	N/A	No	

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Detected Contaminants

Inorganic Contaminants

BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0214	0.0203 – 0.0214	No
NITRATE & NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use, leaching from septic tanks, Sewage, Erosion of natural deposits.	10	10	0.42	0.31 – 0.42	No

TOTAL ORGANIC CARBON

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of Sample
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Unregulated Contaminants

SULFATE (ppm) Erosion of naturally occurring deposits. A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.	N/A	N/A	27.6	26.2 – 27.6	No
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener. There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in the water.	N/A	N/A	8.89	8.14 – 8.89	No

State Regulated Contaminants

FLUORIDE (ppm) Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optional fluoride range of 0.6 mg/l to 0.8 mg/l.	4	4	0.86	0.64-0.86	No
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Radioactive Contaminants

COMBINED RADIUM (226/228) (pCi/L) <i>Decay of natural and manmade deposits.</i>	0	5	0.84	0.5 - 0.84	No	2-11-2014
GROSS ALPHA excluding radon and uranium (pCi/L) <i>Decay of natural and manmade deposits.</i>	0	15	6.6	6.1 – 6.6	No	2-11-2014

For additional information about Chicago's drinking water quality, please call 312-742-7499.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.