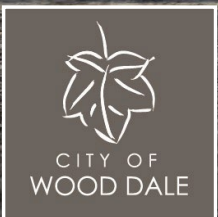


# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



*Presented By*  
**City of Wood Dale**



## Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

## Where Does My Water Come From?

Since 1992 the City of Wood Dale has purchased treated Lake Michigan water from DuPage Water Commission. Lake Michigan, by volume, is the second largest of the Great Lakes and the only one entirely located within the United States. It is 307 miles long and varies from 30 to 120 miles wide, with a maximum depth of 923 feet. It serves as a source of drinking water and recreational activities. The average daily water consumption for the City of Wood Dale is a little over one million gallons.

The City of Wood Dale's Utilities Department maintains three wells to be used in emergencies. All backup wells follow U.S. EPA protocols for contaminant testing. Well test results are available on request.

## Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791 or [water.epa.gov/drink/hotline](http://water.epa.gov/drink/hotline).



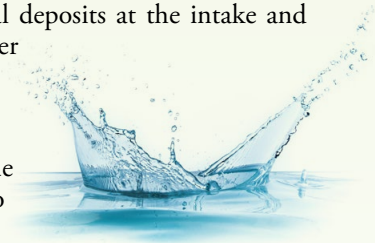
“When the well is dry, we know the worth of water.”

—Benjamin Franklin

## Source Water Assessment

The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at (630) 350-3530. To view a summary version of the completed source water assessments, including importance of source water, susceptibility to contamination determination, and documentation or recommendation of source water protection efforts, visit [epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl](http://epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl).

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance such that shoreline impacts are not usually considered a factor of water quality. At certain times of the year, however, the potential for contamination exists due to wet weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl - gulls and terns that frequent the Great Lakes area - thereby concentrating fecal deposits at the intake and compromising the source water quality. Conversely, the shore intakes are highly susceptible to stormwater runoff and marina and shoreline point sources due to the influx of groundwater to the lake.



**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Alan Lange, Public Works Director, at (630) 350-3530.



## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet typically the first and third Thursday of each month at 7:30 p.m. at City Hall, 404 North Wood Dale Road. Check the meeting schedule at [wooddale.com](http://wooddale.com) to verify meeting dates and times.



## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water and removing lead pipes, but we cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact City of Wood Dale Public Works at (630) 350-3530. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

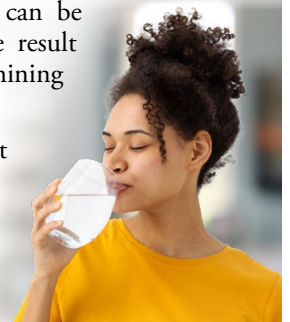
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES									
				City of Wood Dale		City of Chicago			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Arsenic</b> (ppb)	2023	10	0	3.77	0.161–3.77	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
<b>Barium</b> (ppm)	2023	2	2	0.0595	0.0169–0.0595	0.0195	0.0192–0.0195	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Chlorine</b> (ppm)	2023	[4]	[4]	1	0.8–1.1	1 <sup>1</sup>	1–1 <sup>1</sup>	No	Water additive used to control microbes
<b>Chromium</b> (ppb)	2023	100	100	4.2	0.74–4.2	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
<b>Combined Radium</b> (pCi/L)	2023	5	0	10.62 <sup>2</sup>	ND–10.65 <sup>2</sup>	0.95 <sup>1</sup>	0.83–0.95 <sup>1</sup>	No	Erosion of natural deposits
<b>Fluoride</b> (ppm)	2023	4	4	1.26	0.36–1.26	0.74 <sup>3</sup>	0.66–0.74 <sup>3</sup>	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Gross Alpha Particle Activity [excluding radon and uranium]</b> (pCi/L) <sup>2</sup>	2023	15	0	36.7	0.572–36.7	3.1 <sup>1</sup>	2.8–3.1 <sup>1</sup>	No	Erosion of natural deposits
<b>Haloacetic Acids [HAAs]–Stage 2</b> (ppb)	2023	60	NA	16	9.06–25.1	11.9 <sup>4</sup>	5.8–15.2 <sup>4</sup>	No	By-product of drinking water disinfection
<b>Iron</b> (ppb)	2023	1,000 <sup>5</sup>	NA	2,200 <sup>2</sup>	522–2,200 <sup>2</sup>	NA	NA	No	Erosion from naturally occurring deposits
<b>Manganese</b> (ppb)	2023	150 <sup>6</sup>	NA	30.6 <sup>2</sup>	11.5–30.6 <sup>2</sup>	NA	NA	No	Erosion of naturally occurring deposits
<b>Nitrate</b> (ppm)	2023	10	10	NA	NA	0.33	0.29–0.33	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Selenium</b> (ppb)	2023	50	50	0.515	0.302–0.515	NA	NA	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Sodium</b> (ppm)	2023	NA <sup>7</sup>	NA	45.2 <sup>2</sup>	32–45.2 <sup>2</sup>	8.71	8.43–8.71	No	Erosion of naturally occurring deposits; used in water softener regeneration
<b>Total Nitrate + Nitrite</b> (ppm)	2023	10	10	NA	NA	0.33	0.29–0.33	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>TTHMs [total trihalomethanes]–Stage 2</b> (ppb)	2023	80	NA	45	21.15–66.4	25.1 <sup>3</sup>	12.8–37.6 <sup>3</sup>	No	By-product of drinking water disinfection
<b>Turbidity</b> <sup>8</sup> (NTU)	2023	TT	NA	NA	NA	0.25	NA	No	Soil runoff
<b>Zinc</b> (ppb)	2023	5,000 <sup>9</sup>	NA	19.1	8.84–19.1	NA	NA	No	Naturally occurring; discharge from metal factories

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	City of Wood Dale				City of Chicago				VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL				
Copper (ppm)	2023	1.3	1.3	0.107	0/30	0.12 <sup>3</sup>	0 <sup>3</sup>	No	Corrosion of household plumbing systems; erosion of natural deposits		
Lead (ppb)	2022	15	0	ND	ND	7.7	1	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits		

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	City of Wood Dale				City of Chicago				VIOLATION	TYPICAL SOURCE
		SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH				
Sulfate (ppm)	2023	250	NA	NA	NA	27.8	25.0–27.8	No	Runoff/leaching from natural deposits; industrial wastes		

<sup>1</sup> Sampled in 2020.

<sup>2</sup> Raw water from emergency standby backup wells.

<sup>3</sup> Sampled in 2022.

<sup>4</sup> Sampled in 2021.

<sup>5</sup> Iron is not currently regulated by the U.S. EPA; however, the state has set an MCL for supplies serving a population of 1,000 or more.

<sup>6</sup> Manganese is not currently regulated by the U.S. EPA; however, the state has set an MCL for supplies serving a population of 1,000 or more.

<sup>7</sup> Sodium is not currently regulated by the U.S. EPA. The state has not set an MCL for this contaminant for supplies serving a population of 1,000 or more.

<sup>8</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

<sup>9</sup> Zinc is not currently regulated by the U.S. EPA; however, the state has set an MCL for supplies serving a population of 1,000 or more.

## Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and sent to an aeration tank, which allows for oxidation of high iron levels. The water then goes to a mixing tank where polyaluminum chloride and soda ash are added. The addition of these substances causes small particles called floc to adhere to one another, making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, soda ash (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to sanitized underground reservoirs, water towers, and your home or business.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

**AL (Action Level):** The concentration of a contaminant that triggers treatment or other required actions by the water supply.

**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.

**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.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**SMCL (Secondary Maximum Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

