



@antckone
Water Ways



Message from Mayor Lori E. Lightfoot

Dear Resident:

Once again, Chicago's tap water has met or exceeded all standards set by the U.S. Environmental Protection Agency for safe, clean drinking water. This annual report details information on results above detection limits for annual certified testing of Chicago's drinking water.

The City of Chicago Department of Water Management (DWM) purifies and delivers almost one billion gallons of clean drinking water to residents of Chicago and 120 suburbs every day.

DWM works tirelessly to keep our water clean and safe by:

- Performing over 600,000 analyses per year of tap water at every step in the treatment process and adjusting treatment protocols as necessary
- Using corrosion control in our water to minimize the risk of contaminants- including lead- leaching from plumbing
- Replacing miles of water and sewer mains to increase reliability and efficiency
- Offering free water pitchers and six cartridges that are NSF-certified to remove lead and providing complete instructions for flushing water through plumbing to residents and businesses where there is water infrastructure work being done in the vicinity
- Offering free residential water testing by an independent certified laboratory.

For the first time, the City now has two programs designed to assist residents who would like to replace their lead service lines. The Equity Program provides a free replacement to residents who meet income requirements, and the Homeowner-Initiated Program waives up to \$3,100 in permit fees for those who wish to replace their lines. Moving forward, we are working to secure as much federal funding as possible to expand the City's lead line replacement efforts. More information is available at: www.LeadSafeChicago.org.

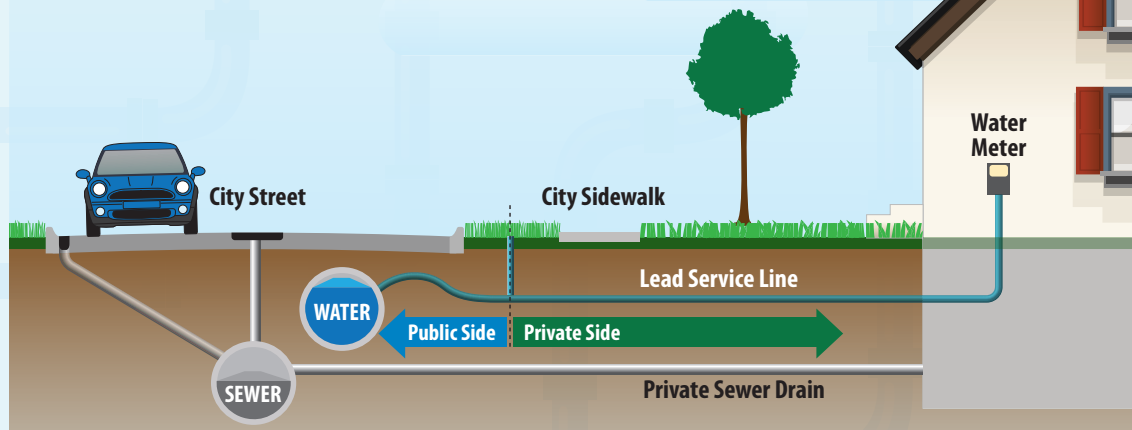
My administration will remain vigilant in protecting Chicago's most precious natural resource, Lake Michigan, from polluters and invasive species. It is my priority to maintain a reliable and efficient water system that provides safe, clean drinking water at a reasonable rate for generations of Chicagoans to come.

Mayor Lori E. Lightfoot

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



If your house or two-flat was built before 1986, there is a good chance that your service line is lead. The service line is the pipe that brings the water from the main into your home.



The City is now offering the following programs for those who wish to replace their lead service lines:

EQUITY LEAD SERVICE LINE REPLACEMENT PROGRAM

You may qualify for a FREE lead service line replacement (LSLR)

The Equity Lead Service Line Replacement Program (E-LSLR) offers residents a FREE lead service line replacement and water meter installation from the Chicago Department of Water Management (DWM).

You may qualify for a free replacement if you:

- Own and live in a single-family house or two-flat
- Are income-qualified - for example \$83,350 for a family of four*

*For other family size income limits, visit https://www.chicago.gov/city/en/depts/doh/provdrs/renters/svcs/ami_chart.html

Submit your Equity LSLR Application today!

Complete the online application at www.ChicagoWaterQuality.org/LSLREquity

OR

Call 312-742-2406 to have an application mailed to you to fill out & return to DWM.



Equity Lead Service Line Replacements are FREE! This is a \$16,000- \$30,000 value.

HOMEOWNER-INITIATED LEAD SERVICE LINE REPLACEMENT PROGRAM

Waiver for standard permit fees for LSLR up to \$3,100

The City will waive the costs of standard permit fees for homeowners replacing their lead service lines as a standalone project.

This program is open to:

- All ownership statuses (primary or secondary homes/rental properties)
- All income levels
- All drinking water lead concentrations

More Lead Service Line Replacement Programs are in development.

For more information, visit:

www.LeadSafeChicago.org

or scan here:



EDUCATIONAL STATEMENTS REGARDING COMMONLY FOUND DRINKING WATER CONTAMINANTS

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity.

Possible contaminants consist of:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which may 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 may also come from gas stations, urban storm water runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that 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.

WATER QUALITY DATA TABLE FOOTNOTES

TURBIDITY: 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.

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.

FLUORIDE: Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health has recommended an optimal fluoride level of 0.7 mg/L, with a range of 0.6 mg/L to 0.8 mg/L.

SODIUM: There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should

consult a physician about the level of sodium in the water.

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 lead service lines and home plumbing. The Department of Water Management, City of Chicago, 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 over six hours, you can minimize the potential for lead exposure by flushing your tap for a minimum of 5 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 by calling 311 or going to www.chicagowaterquality.org. 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>.

Unit of Measurement

ppm: Parts per million, or milligrams per liter (mg/L)

ppb: Parts per billion, or micrograms per liter (µg/L)

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

% ≤ 0.3 NTU: Percent samples less than or equal to 0.3 NTU

pCi/L: Picocuries per liter, used to measure radioactivity

2021 WATER QUALITY DATA DETECTED CONTAMINANTS

Contaminant (unit of measure) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
MICROBIAL CONTAMINANTS						
TOTAL COLIFORM BACTERIA (% pos/mo) Naturally present in the environment	0	5%	0.58%	N/A	N	-
FECAL COLIFORM AND E. COLI (# pos/mo) Human and animal fecal waste	0	0	3	N/A	N	-
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil runoff	N/A	TT (Limit: 95%≤0.3NTU)	100% (Lowest Monthly %)	100% - 100%	N	-
TURBIDITY (NTU/Highest Single Measurement) Soil runoff	N/A	TT (Limit: 1 NTU max)	0.20	N/A	N	-
INORGANIC CONTAMINANTS						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0203	0.0200 - 0.0203	N	-
COPPER (ppm) ** Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL = 1.3	0.13 (90 th percentile)	0 sites exceeding AL	N	6/1/2021- 9/30/2021
LEAD (ppb) ** Corrosion of household plumbing systems; Erosion of natural deposits	0	AL = 15	5.6 (90 th percentile)	1 site exceeding AL	N	6/1/2021- 9/30/2021
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.28	0.28 - 0.28	N	-
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.28	0.28 - 0.28	N	-
DISINFECTANT/DISINFECTION BY-PRODUCTS						
TTHMs [TOTAL TRIHALOMETHANES] (ppb) * By-product of drinking water disinfection	N/A	80	29.8	13.6 - 38.9	N	-
HAA5 [HALOACETIC ACIDS] (ppb) * By-product of drinking water disinfection.	N/A	60	13.1	7.2 - 19.2	N	-
CHLORINE (as Cl ₂) (ppm) Water additive used to control microbes	4.0	4.0	1	1 - 1	N	-
TOC [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 the IEPA						
UNREGULATED CONTAMINANTS						
SULFATE (ppm) Erosion of naturally occurring deposits	N/A	N/A	27.4	26.9 - 27.4	-	-
SODIUM (ppm) Erosion of naturally occurring deposits; Used in water softener	N/A	N/A	9.99	9.79 - 9.99	-	-
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm) Water additive which promotes strong teeth	4	4	0.77	0.65 - 0.77	N	-
RADIOACTIVE CONTAMINANTS						
COMBINED RADIUM (226/228) (pCi/L) ** Decay of natural and man-made deposits	0	5	0.95	0.83 - 0.95	N	2/04/2020
GROSS ALPHA excluding radon and uranium (pCi/L) ** Decay of natural and man-made deposits	0	15	3.1	2.8 - 3.1	N	2/04/2020

Unregulated Contaminant Monitoring Rule 4 (UCMR 4)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2020, Chicago participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4), during which time it completed monitoring for a range of contaminants, including pesticides, semi-volatile chemicals, metals, indicators and three brominated haloacetic acid groups. The table below lists the unregulated contaminants that were detected in our finished drinking water.

Contaminants (Units)	Sample Year	Average Level Found	Range of Detections
Haloacetic Acids (HAA9) (ppb)	2020	15.4	14.3 – 16.4
Haloacetic Acids (HAA5) (ppb)	2020	8.82	8.09– 9.59
Haloacetic Acids (HAA6Br) (ppb)	2020	7.29	6.88 – 7.94

ILLINOIS EPA's SAMPLING OF PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)

In 2020, Chicago's Public Water System was sampled as part of the State of Illinois PFAS Statewide Investigation. Eighteen PFAS compounds were sampled, and none were detected in our finished drinking water.

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.

*Data expressed as LRAA – Locational Running Annual Average (See Definition of terms for Details)

**The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years

DEFINITION OF TERMS

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Contaminant Level (MCL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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 disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2020, except where a specific date is indicated.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Date of Sample: If a date appears in this column, the Illinois EPA 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.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

ND: Not detectable at testing limits. **N/A:** Not applicable.

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAA5.

2021 VOLUNTARY MONITORING

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. No Cryptosporidium or Giardia was detected in source water samples collected in 2021. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

In 2021, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

CROSS-CONNECTION CONTROL SURVEY

The Chicago Department of Water Management is required by the Illinois EPA to routinely survey all water services connected to our public drinking water supply to help us identify and correct "cross-connections", which are unprotected or improper connections to the public drinking water system that may cause contamination or pollution to enter the system. Please fill out the survey online at www.chicagoccr.org.

2021 VIOLATION SUMMARY TABLE

The following table lists the violations incurred in 2021. The DWM had one consumer confidence report distribution violation and one lead consumer notice violation. Even though this did not impact the quality of your drinking water, as our customers, you have the right to know what happened and what we did to correct the situation.

Consumer Confidence Rule: The Consumer Confidence Rule requires community water systems to prepare and provide to their customers by July 1st annual consumer confidence reports on the quality of the water delivered by the systems.

Violation Type	Violation Begin	Violation Ends
CCR Report	07/01/2021	08/01/2021

Violation Explanation: We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

Lead and Copper Rule: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation Ends
Lead Consumer Notice (LCR)	12/30/2021	02/01/2022

Violation Explanation: We did provide the results to our customers however, we failed to provide the Lead Consumer Informational Notice Certification Form for lead tap water results to the IEPA by the deadline.



FREE WATER TESTING

CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT SOURCE WATER ASSESSMENT SUMMARY FOR THE 2021 CONSUMER CONFIDENCE REPORT (CCR)

SOURCE WATER ASSESSMENT SUMMARY

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

SOURCE WATER LOCATION

The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the South Water Purification Plant serves the southern areas of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great lake by volume with 1,180 cubic miles of water and third largest by area.

SUSCEPTIBILITY TO CONTAMINATION

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 of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on 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 thus compromising the source water quality.

Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of ground-water to the lake.

Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

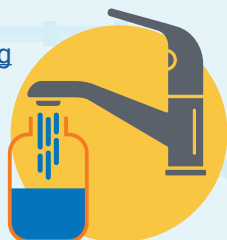
Get a free water test by the Chicago Department of Water Management (DWM)

Get your water tested for lead for FREE!

Sign up by calling 311 OR at www.ChicagoWaterQuality.org



Scan for Water Testing



PLEASE VISIT OUR WEBSITE FOR MORE INFORMATION

www.chicago.gov/water

E-MAIL: water@cityofchicago.gov

DEPARTMENT OF FINANCE WATER BILL QUESTIONS
(312) 744-4426

WATER IN THE STREET OR BASEMENT: Call 311

WATER QUALITY QUESTIONS: (312) 744-8190

IEPA'S REGIONAL OFFICES (ILLINOIS)
(847) 608-3131

EPA'S SAFE DRINKING WATER HOTLINE
(800) 426-4791

EPA'S GENERAL INFORMATION LINE
(312) 353-2000

FOR QUESTIONS, PLEASE CONTACT

City of Chicago Department of Water Management
Bureau of Water Supply
1000 East Ohio Street • Chicago, IL 60611
Attn: Andrea Holthouse Cheng, Ph.D.

<http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

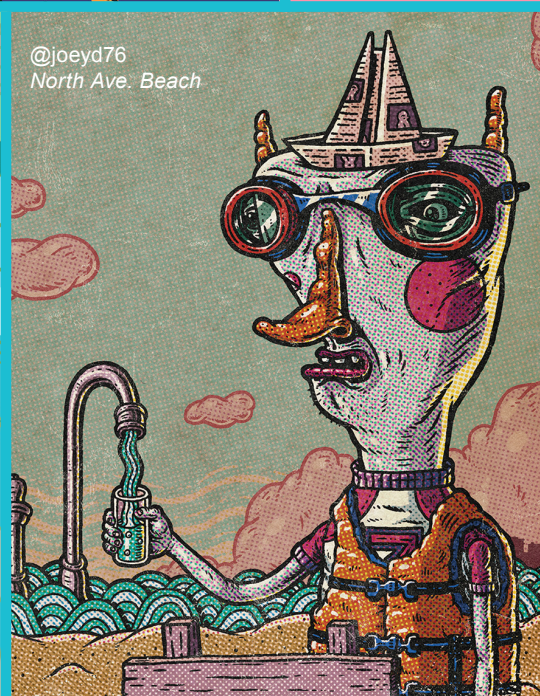
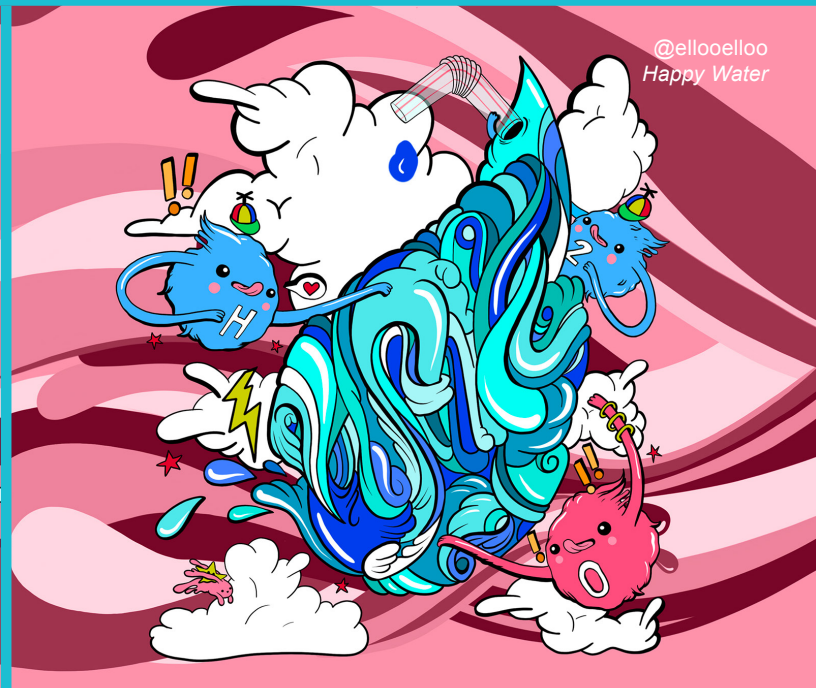
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by: The City of Chicago, Department of Water Management Water System ID# IL0316000

HIGH-QUALITY CHICAGO DRINKING WATER

THE CHICAGWA INITIATIVE

The artwork in this report is from the Chicagwa initiative www.DrinkChicagwa.com where area artists were asked to create label art depicting how living near Lake Michigan has impacted their lives. This artwork was used on a limited number of cans of Chicago drinking water to promote the high quality water the Department of Water Management produces.



For more information on the Chicagwa Initiative, visit DrinkChicagwa.com