



# PUBLIC WORKS COMMISSION

## Did You Know...?

**LBS operates its own fresh water system with its own licensed personnel. Water is pumped to the LBS water plant from its own wells, aerated, and filtered to minimize iron. The water is then treated with disinfectants, fluoridated, and conveyed to a 600,000 gallon underground storage reservoir. From the reservoir the water enters an 8300 gallon hydro-pneumatic tank to maintain consistent pressure to feed the water mains by use of two high service pumps. As a back-up, in case of need, is a separate, automatically engaged, high pressure fire pump to provide complementary water supply to fire hydrants if needed. The system supplies potable water to residents and common facilities and also provides water to Market Place and the Golf Club (for a fee). Surveys have demonstrated that the LBS system is cost competitive with municipal facilities in the area. In terms of health, the water quality at LBS meets all applicable mandated standards.**

**Lake Barrington Community  
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## Lake Barrington Shores Subdivision IL0975520 Annual Drinking Water Quality Report

*Annual Water Quality Report  
For the period of  
January 1 to December 31, 2022*

This report is intended to provide you with important information about your drinking water and the efforts made by the Lake Barrington Shores Subdivision water system to provide safe drinking water. The source of drinking water used by Lake Barrington Shores Subdivision is ground water supplied by Well 1 and Well 3.

For more information regarding this report, contact:

**Name: Brad Emrud**  
**Phone: 847-382-1660**

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. 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 the management office or call the water operator at 847-382-1660. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at [www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl](http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl)

## Source of Drinking Water

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 and, in some cases, radioactive material, and can pickup 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 systems, 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 the 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.

In order to ensure that the 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.

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. 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 at (800) 426-4791.

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. We 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 <http://www.epa.gov/safewater/lead>.

In 2021, our PWS 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. For more information about PFAS health advisories: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>

**Lake Barrington Shores water hardness  
is 29 grains per gallon.**

**Source Water Assessment**

Based on information obtained in a Well Site Survey, published in 1988 by the Illinois EPA, five potential sources or possible problem sites are located within the survey area of Lake Barrington Shores Subdivision’s wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several sights with ongoing remediations which may be of concern. The Illinois EPA has determined that the Lake Barrington Shores Subdivision’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 hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA’s proposed Ground Water Rule, the Illinois EPA has determined that the Lake Barrington Shores Subdivision Community Water Supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: The subdivision’s wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic 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 subdivision’s wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply.

**2022 Regulated Contaminants Detected**

Lake Barrington Shores Subdivision

**Water Quality Test Results**

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.  
**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** 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.

**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 Residual Disinfectant Level (MRDL):** 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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of 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

**mrem:** millirems per year (a measure of radiation absorbed by the body)

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

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

**Regulated Contaminants**

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2022	1.3	1.1 - 1.5	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	10	9.7 - 9.7	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	26	26.22 - 26.22	No goal for the total	80	ppb	No	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	04/20/2021	0.039	0.039 - 0.039	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	04/20/2021	0.955	0.955 - 0.955	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	04/20/2021	0.037	0.037 - 0.037		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	04/20/2021	15	15 - 15	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	04/20/2021	46	46 - 46			ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration.
Zinc	04/19/2018	0.0061	0.0061 - 0.0061	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	01/08/2009	1.19	1.19 - 1.19	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	01/08/2009	0.27	0.27 - 0.27	0	15	pCi/L	No	Erosion of natural deposits.

**Lead and Copper**

**Definitions:** **Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/22/2021	1.3	1.3	0.23	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/22/2021	0	15	3.4	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.