Lakengren Water Authority

Drinking Water Consumer Confidence Report
For 2021

PWS ID OH6800712

The Lakengren Water Authority (LWA) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This report covering 2021 results and status is required to be issued prior to July 1, 2022. We're happy to share our results with you. Please read them carefully. For more information call Justin Erbaugh, General Manager, with the Lakengren Water Authority at (937)456-4455.

The mission of the LWA is to provide you, our customer, with the high-quality water and sewer service you desire while keeping the cost at the minimum level required to ensure reliable, timely service today and in the foreseeable future. Your input, participation, and support are appreciated.

Source Water Information:

The LWA currently obtains all its drinking water from three production wells rated at 200 GPM each. Two wells are located south of the Lakengren Dam at 5306 Paint Creek Road adjacent to the Water Treatment Plant. The third well is located south of the Paint Creek Bridge at Longman Rd. We have a current unconditioned License to Operate (LTO) our water system.

What are the sources of contamination to drinking water?

The aquifer that supplies drinking water to the Lakengren Water Authority has a moderate susceptibility to contamination, due to moderate sensitivity of the aquifer in which the drinking water well(s) is located and the existence of several potential contaminant sources within the protection zone. This does not mean that this well field will become contaminated; only those conditions are such that the ground water could be impacted by potential contaminant sources. Possible contamination has been reduced by the protective measures the LWA has implemented. More information is available by contacting Justin Erbaugh at the LWA office at (937)456-4455 or the Ohio

EPA at (614)644-2752. The source water Protection report for the Lakengren Water Authority may be viewed by typing the following URL into your browser.
http://www.app.epa.ohio.gov/gis/swpa/OH6800712.pdf

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 pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) radioactive contaminants, which can 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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminates 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 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who Needs to Take Special Precautions?

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 infection. 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 (1-800-426-4791)

Table of Detected Contaminants:

Listed below is information on those contaminants that were found in Lakengren Water Authority's drinking water. The results of tests performed in 2019 or the most recent testing available are presented in the table. Terms used in the Water Quality Table and in other parts of this report are defined below.

How to read the Water Quality Data Table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water.
The table shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Radioactive Contaminants							
Radium-228 (pci/l)	0	5	1.0	NA	No	2019	Erosion of natural deposits
Radium-226	0	5	1.12	NA	No	2019	Erosion of natural deposits
Gross Alpha (pci/l)	0	15	5.17	NA	No	2019	Erosion of natural deposits
Inorganic Contaminants							
Barium (ppb)	2000	2000	999.0	NA	No	2019	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate (ppm)	10	10	0.21	NA	No	2021	Run off from fertilizer use; Leaching from septic tanks; Erosion of natural deposits
Fluoride (ppm)	4	4	0.86	NA	No	2019	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Total Chlorine (ppm)	4	4	1.25	.7 to 1.6	No	2021	Water additive used to disinfect drinking water.
Disinfection By-products							
TTHM's (ppb)		80 ppb	40.7	29.8-55.9	No	2021	By-product of drinking water chlorination
HAA5's (ppb)		60 ppb	16.3	11.6-18.4	No	2021	By-product of drinking water chlorination

Lead and Copper							
Contaminants (Units)	**Action Level (AL)**	**Individual Results over the AL**	**Range**	**90% of test levels were less than**	**Violation**	**Year Sampled**	**Typical source of contaminants**
Lead (ppb)	15ppb	NA	0.0-0.002	0.00	No	2021	Corrosion of household plumbing systems; Erosion of natural deposits.
	0 out of 10 samples were found to have Lead in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	NA	.02-0.096	0.0890	No	2021	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
	0 out 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm						

Lead Education Information:

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. The Lakengren Water Authority 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 at http://www.epa.gov/safewater/lead.

Water System Efficiency

Total gallons pumped from water plant 1-1-21 through 12-31-21	72,793,000
Total gallons metered to services 1-1-21 through 12-31-21	62,055,000
Overall system efficiency	85%

Public Participation and Contact Information:

Public participation and comments are encouraged at regular Board of Trustees meetings which are held on Wednesdays at 9:00 am at the Lakengren Water Authority office, 24 Lakengren Drive. The public is welcome. For more information about your drinking water contact Lakengren Water Authority at (937)456-4455.If you would like to request a paper copy of the 2021 Consumer Confidence Report, you can request one by calling the Lakengren Water Authority office.

Definitions of terms contained within this report:

- Total Trihalomethanes (TTHMs): the sum of the concentrations of Bromodichloromethane, Dibromochloromethane, Bromoform and Chloroform.

- Five Haloacetic Acids (HAA5): the sum of the concentrations of Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Monobromoacetic acid and Dibromoacetic acid.

- Maximum Contaminate 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 pretreatment technology.

- Maximum Contaminate 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.

- Parts per Million (ppm) or Milligrams per Liter (mg/L): The units of measure for concentration of a contaminant. One part per million corresponds to one second in a little over 11.5 days.

- Parts per Billion (ppb) or Micrograms per Liter ug/L): The units of measure for concentration of a contaminant. One part per Billion corresponds to one second in 31.7 years.

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

- Range: The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

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

- The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

- pci/l: picocuries per liter (a measure of radioactivity)

- na = not applicable/available

- nr = not regulated