

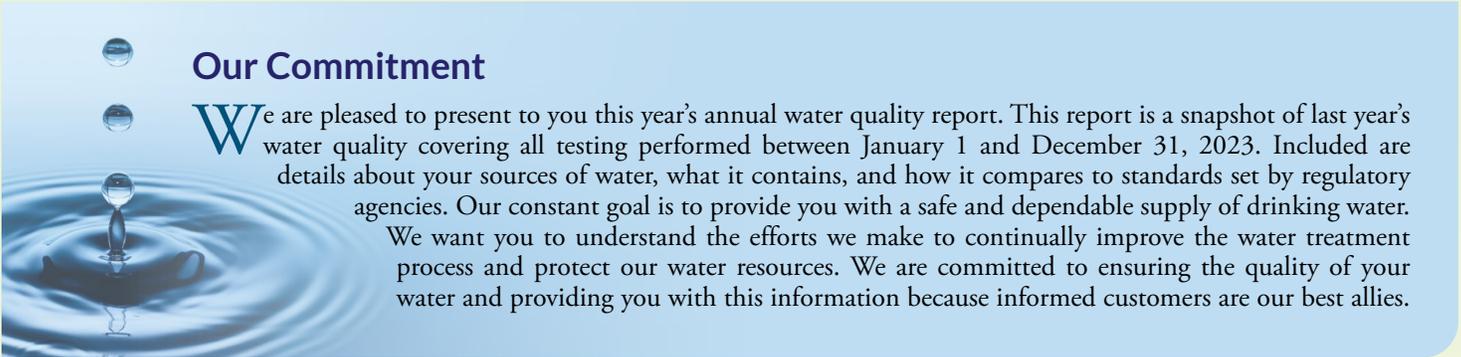
ANNUAL WATER QUALITY REPORT

Reporting Year 2023



**Presented By
City of Lynn Haven**





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.

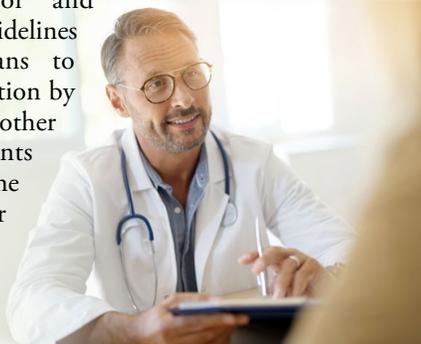


Community Participation

You can voice your concerns at our commission meetings. We meet the second Tuesday of each month at 9:00 a.m. and the fourth Tuesday of each month at 5:00 p.m.

Important Health Information

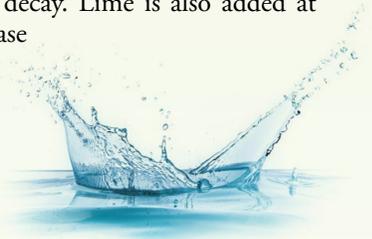
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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 (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.



Water Treatment Process

The City of Lynn Haven has five deep wells that serve the majority of Lynn Haven customers. The raw water from wells is aerated to remove excess hydrogen sulfide and stored in two central locations. One site utilizes a poly/orthophosphate blend to sequester soluble iron. The water is then chlorinated and pumped to the distribution system as needed to maintain satisfactory pressure throughout the system for daily use and fire protection.

The Bay County Water treatment plant draws from the Deer Point Reservoir. Bay County has a surface water treatment plant that supplies the remainder of Lynn Haven customers. Bay County uses a conventional treatment process of coagulation, flocculation, sedimentation, filtration, pH adjustment, disinfection, fluoridation, and corrosion control. The treatment process includes adding lime to complete the reaction of coagulation and the addition of ferric sulfate to remove particles and organics. Polymer is added to assist in the coagulation process. Sodium hypochlorite is added to maintain disinfection in the distribution system. The addition of zinc orthophosphate reduces the corrosiveness of the water. Fluoride, in the form of hydrofluorosilicic acid, is added as a supplement to prevent tooth decay. Lime is also added at the end of the process to increase the pH. These processes are needed to meet the drinking water standards set by the U.S. EPA and the Florida Department of Environmental Protection (FDEP).



Source Water Assessment

In 2023 FDEP performed a source water assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our five wells. For the City of Lynn Haven water system, nine potential sources of contamination were identified, with low to moderate susceptibility levels. In 2022 FDEP performed a source water assessment on the Bay County Water system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the Bay County surface water intakes. The surface water system is considered to be at high risk because of 10 potential sources of contamination present in the assessment area. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at dep.state.fl.us/swapp, or from Lynn Haven Utilities Department by calling (850) 265-6361, or from Bay County Utilities by calling (850) 872-4785.

Substances That Could Be in 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 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 systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or 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 can also come from gas stations, urban stormwater runoff, and septic systems.

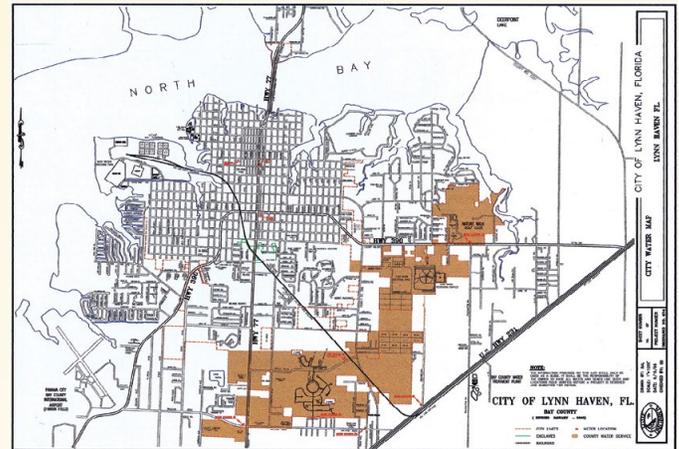
Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) 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 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Special Monitoring Violation

We failed to complete required sampling for one set of synthetic organic contaminants on time from January 1 through December 31, 2023, and therefore were in violation of monitoring and reporting requirements. Two sets of samples were required for each contaminant, and only one set was taken. Because we did not take the required number of samples, we did not know whether contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time.

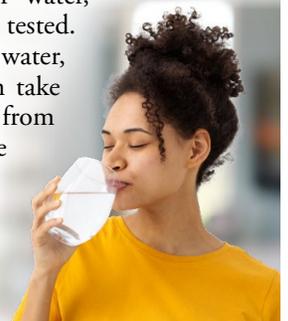


Where Does My Water Come From?

The City of Lynn Haven customers are fortunate because they enjoy an abundant water supply from two sources: groundwater from the Floridan Aquifer and surface water purchased from Bay County Utilities. The map of Lynn Haven shown here is color-coded to show the area served by the two water sources. The area of Lynn Haven that is served by Bay County Water is shaded; the area served by Lynn Haven's deep wells is the unshaded portion of the map.

Lead in Home Plumbing

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 are responsible for providing high-quality drinking water, but 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 two 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 (800) 426-4791 or epa.gov/safewater/lead.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Chris Lightfoot, Public Works Director, at (850) 265-6361.

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.

PRIMARY REGULATED CONTAMINANTS

Microbiological Contaminants

CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Lynn Haven			Bay County			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATES OF SAMPLING (MO./YR.)	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY PERCENTAGE OF SAMPLES MEETING REGULATORY LIMITS	DATES OF SAMPLING (MO./YR.)	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY PERCENTAGE OF SAMPLES MEETING REGULATORY LIMITS			
Turbidity (NTU)	No	NA	NA	NA	01/01/2023	0.48	NA	NA	TT	Soil runoff

RADIOACTIVE CONTAMINANTS

CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Lynn Haven			Bay County			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Radium 226 + 228 [combined radium] (pCi/L)	No	11/01/2020	1	0.6–1.0	04/01/2020	1.54	ND–1.54	0	5	Erosion of natural deposits

Inorganic Contaminants

CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Lynn Haven			Bay County			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Barium (ppm)	No	06/01/2023	0.033	0.028–0.033	04/01/2023	0.0069	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	No	06/01/2023	0.36	0.27–0.36	04/01/2023	1.1	NA	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead [point of entry] (ppb)	No	06/01/2023	2.8	ND–2.9	04/01/2020	ND	NA	NA	15	Residue from human-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate [as nitrogen] (ppm)	No	NA	NA	NA	04/01/2023	0.035	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	06/01/2023	40	21–40	04/01/2023	4.1	NA	NA	160	Saltwater intrusion; leaching from soil



STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

		City of Lynn Haven			Bay County					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION
Chlorine ¹ (ppm)	No	01/01/2023	1.5	1.4–1.7	01/01/2023	0.86	0.62–1.04	[4]	[4.0]	Water additive used to control microbes
		City of Lynn Haven			Bay County					
CONTAMINANT AND UNIT OF MEASUREMENT	TT VIOLATION (YES/NO)	DATES OF SAMPLING (MO./YR.)	LOWEST RUNNING ANNUAL AVERAGE, COMPUTED QUARTERLY, OF MONTHLY REMOVAL RATIOS	RANGE OF MONTHLY REMOVAL RATIOS	DATES OF SAMPLING (MO./YR.)	LOWEST RUNNING ANNUAL AVERAGE, COMPUTED QUARTERLY, OF MONTHLY REMOVAL RATIOS	RANGE OF MONTHLY REMOVAL RATIOS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Total Organic Carbon [TOC] (ppm)	No	NA	NA	NA	01/01/2023	0.86	NA	NA	TT ²	Naturally present in the environment

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

		City of Lynn Haven			Bay County					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Haloacetic Acids (five) [HAA5]–Stage 2 ³ (ppb)	No	02/01/2022	47.45	12.3–63.4	01/01/2023	34.46	9.6–82.5	NA	60	By-product of drinking water disinfection
TTHM [total trihalomethanes]–Stage 2 ⁴ (ppb)	No	02/01/2022	56.45	20.3–76.0	01/01/2023	52.23	11.6–19.1	NA	80	By-product of drinking water disinfection

Lead and Copper (Tap water samples were collected from sites throughout the community)

		City of Lynn Haven			Bay County					
CONTAMINANT AND UNIT OF MEASUREMENT	AL EXCEEDANCE (YES/NO)	DATES OF SAMPLING (MO./YR.)	90TH-PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	DATES OF SAMPLING (MO./YR.)	90TH-PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	MCLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION
Copper [tap water] (ppm)	No	09/01/2023	0.16	0	09/01/2023	0.29	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	No	09/01/2023	4.4	0	09/01/2023	0.7	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

¹ Results are from January 1 through December 31, 2023.

² The monthly TOC removal ratio is between actual TOC removal and TOC rule removal requirements.

³ Results are from February to November 2022.

⁴ Results are from 2/2022 to 1/2022.

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 which, if exceeded, triggers treatment or other requirements which a water system must follow.

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).

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