

ANNUAL WATER QUALITY REPORT

Reporting Year 2021



American Water Works
Association

FloridaSection

*Best
Tasting*

DRINKING WATER



REGION XII



2022

Presented By





We've Come a Long Way

Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Source Water Assessment

In 2021 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, there are seven potential sources of contamination identified, with low to moderate susceptibility levels.

The FDEP also performed a source water assessment on the Bay County water system in 2021. 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 many potential sources of contamination present in the assessment area.

The results for both assessments are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp, or they can be obtained from the Lynn Haven Utilities Department, (850) 265-6361, or from Bay County Utility Services, (850) 872-4785.

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 at www.epa.gov/safewater/lead.



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

—Benjamin Franklin

Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Level Detected column against the value in the MCL (or AL, SMCL) column. If the Level Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

Date Sampled will show on which date the substance was detected. If multiple samples are taken over a period of time, the column will show the range of different sample dates.

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Level Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Likely Source.

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. EPA/CDC (Centers for Disease Control and Prevention) 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 <http://water.epa.gov/drink/hotline>.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Derek Rizzuto, Lead Water Operator, at (850) 265-6361.

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.

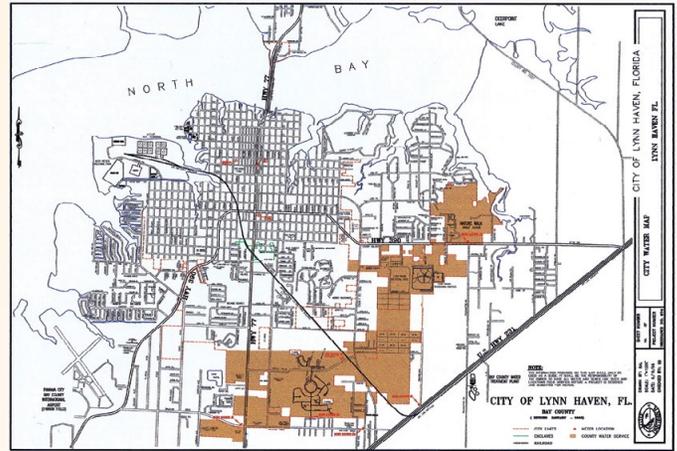
In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide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

Level 1 Assessment Update

Coliforms are bacteria that are naturally present in the environment and used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify problems and correct any problems that were found during these assessments.

During the past year, we were required to conduct one Level 1 assessment, and that Level 1 assessment was completed. In addition, we were required to take two corrective actions, and we completed both of these actions.



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 areas 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.

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 the addition of lime to complete the reaction of coagulation and 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).

Community Participation

We have commission meetings that you can attend where you can voice your concerns. We meet the second Tuesday of each month beginning at 9:00 am and the fourth Tuesday of each month beginning at 5:00 pm.

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										
City of Lynn Haven										
Bay County										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MM/YY)	THE HIGHEST SINGLE MEASUREMENT	THE LOWEST MONTHLY PERCENTAGE OF SAMPLES MEETING REGULATORY LIMITS	DATES OF SAMPLING (MM/YY)	THE HIGHEST SINGLE MEASUREMENT	THE LOWEST MONTHLY PERCENTAGE OF SAMPLES MEETING REGULATORY LIMITS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Turbidity (NTU)	No	NA	NA	NA	01/2021–12/2021	0.93	98.4	NA	TT	Soil runoff
RADIOACTIVE CONTAMINANTS										
City of Lynn Haven										
Bay County										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Radium 226 + 228 [Combined Radium] (pCi/L)	No	11/2020	1	0.6–1	04/2020	ND	ND–1.54	0	5	Erosion of natural deposits
Inorganic Contaminants										
City of Lynn Haven										
Bay County										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Barium (ppm)	No	03/2020	0.036	0.035–0.036	04/2021	0.0067	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	No	03/2020	0.49	0.47–0.49	04/2021	0.69	NA	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead [point of entry] (ppb)	No	03/2020	2.4	ND–2.4	04/2020	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	03/2021	ND	NA	04/2021	0.065	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	03/2020	47	45–47	04/2021	3.5	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 (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	MRDLG	MRDL	LIKELY SOURCE OF CONTAMINATION	
Chlorine (ppm)	No	01/2021–12/2021	1.5	1.2–1.8	01/2021–12/2021	0.975	0.7–1.2	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 (MM/YY)	LOWEST RUNNING ANNUAL AVERAGE, COMPUTED QUARTERLY, OF MONTHLY REMOVAL RATIOS	RANGE OF MONTHLY REMOVAL RATIOS	DATES OF SAMPLING (MM/YY)	LOWEST RUNNING ANNUAL AVERAGE, COMPUTED QUARTERLY, OF MONTHLY REMOVAL RATIOS	RANGE OF MONTHLY REMOVAL RATIOS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Total Organic Carbon (ppm)	No	NA	NA	NA	01/2021–12/2021	1.6	1.6–2.3	NA	TT ¹	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 (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	DATES OF SAMPLING (MM/YY)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Haloacetic Acids (five) [HAA5]–Stage 2 (ppb)	No	02/2021–11/2021	27.1	11.9–44	02/2021–11/2021	36.06	11–58.8	NA	60	By-product of drinking water disinfection	
TTHM [total trihalomethanes]–Stage 2 (ppb)	No	02/2021–11/2021	60.91	47.6–65.3	02/2021–11/2021	32.5	15.5–45.67	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 (MM/YY)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	DATES OF SAMPLING (MM/YY)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	MCLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION	
Copper [tap water] (ppm)	No	07/2020	0.13	0	08/2020	0.41	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead [tap water] (ppb)	No	07/2020	1.3	0	08/2020	1	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits	

SECONDARY CONTAMINANTS

		City of Lynn Haven			Bay County						
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATES OF SAMPLING (MM/YY)	HIGHEST RESULT	RANGE OF RESULTS	DATES OF SAMPLING (MM/YY)	HIGHEST RESULT	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Iron ² (ppb)	No	05/2020–11/2020	0.52	ND–0.52	04/2020	ND	NA	NA	300	Natural occurrence from soil leaching	

¹The monthly TOC removal ratio is the ratio between the actual TOC removal and the TOC rule removal requirements.

²There is no violation for iron because of sequestering on-site.

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.

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.

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.

