

# 2025 Annual Drinking Water Quality Report

## Mexico Beach Water System

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. The Mexico Beach report covers the period from January to December 2025. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. Bay County is the provider of the City's water supply. The Bay County Annual Water Quality Report is also included in this report. Once the water is received by Mexico Beach, chlorine is reintroduced for disinfectant purposes.

### Surface Water Source

Bay County Water source is drawn from Deer Point Lake. The Treatment Plant uses a conventional treatment process consisting of coagulation, flocculation, sedimentation, filtration, pH adjustment, disinfection, fluoridation and corrosion control. The treatment process includes adding lime occasionally to provide additional alkalinity to the raw water so that it can react with the primary coagulating chemical - ferric sulfate, which is added to remove particles and organics. Polymer is also 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 hydrofluosilicic 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 as set by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

### Source Water Assessment Plan and Water Quality Monitoring

In 2025 the Department of Environmental Protection performed a Source Water Assessment on Bay County's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of Bay County Surface Water intake. The surface water system is at high risk because of the many 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 [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from Bay County Utility Services by calling (850) 248-5010.

If you have any questions about this report or concerning your water utility, please contact Garrett Garland at (850) 2473001. We encourage our valued customers to be informed about their water utility. If you want to learn more about our utilities, please contact the Mexico Beach Utilities Department at (850) 648-5700 or you may attend one of our regular monthly Council meetings, held the second and fourth Tuesday of each month at 9:00 am CST in the Mexico Beach Public Works Building.

The City of Mexico Beach routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this Mexico Beach report is based on the results of our monitoring for the period of January 1<sup>st</sup>, to December 31<sup>st</sup>, 2025.

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data though representative, is more than one year old.

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (back-pressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (back-siphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer

for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Water supplies are continuously jeopardized by cross connections unless appropriate valves, known as backflow prevention devices, are installed, and maintained. The City of Mexico Beach adopted a Cross Connection Control Plan, surveyed commercial and other facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer.

In the tables below you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Maximum Contaminant Level or 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 Contaminant Level Goal or 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.

**Non-detect or "ND"** means not detected and indicates that the substance was not found by laboratory analysis.

**Non applicable (N/A).** Does not apply.

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

**Parts per million (ppm) or Milligrams per liter (mg/l)** – one part per million corresponds to one minute in two years or a single penny in \$10,000.00.

**Parts per billion (ppb) or Micrograms per liter (ug/l)** – one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.00.

**Picocurie per liter (pCi/L)** - measure of the radioactivity in water.

**Nephelometric Turbidity Unit (NTU)** – The measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**TT (Treatment technique)** – Required process intended to reduce the level of a contaminant in drinking water.

**MRDL (Maximum Residual Disinfectant Level)** – The highest level of 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.

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

## Water Quality Test Results

### 2025 MEXICO BEACH TEST RESULTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	Range of Tap Sample Results	MCL G	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>								
Copper (tap water) (ppm)	Aug & Sep 2023	N	0.14	0 of 20	ND-0.16	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Aug & Sep 2023	N	1.0	0 of 20	ND-1.04	0	15	Corrosion of household plumbing systems; erosion of natural deposits

#### STAGE 2 DISINFECTANT/DISINFECTION BY-PRODUCT (D/DBP)

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	Jan - Dec 2025	N	42.6	30.5 – 36.6	N/A	MCL=60	By-product of drinking water disinfection
Total Trihalomethane (TTHM) (ppb)	Jan - Dec 2025	N	76.1	42.7 – 51.5	N/A	MCL=80	By-product of drinking water disinfection
Chlorine (ppm)	Jan - Dec 2025	N	0.77	0.53-1.18	MRDLG =4	MRDL =4.0	Water additive used to control microbes

**Note: The result in the Level Detected column for TTHMs, HAA5s and Chlorine (Stage 2) are the highest of the four quarterly running annual averages of results from all sampling sites.**

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 City of Mexico Beach is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact The City of Mexico Beach at (850) 648-5700. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

We failed to complete required sampling for Total Trihalomethanes and Haloacetic acids on time and therefore were in violation of monitoring and reporting requirements. Because we did not take the required number of samples, we did not know whether the contaminants were present in your drinking water, and we were unable to tell you whether your health was at risk during that time. The monitoring period was April 1<sup>st</sup> through June 30<sup>th</sup>. Two samples were required and none were taken. Sampling resumed on July 3<sup>rd</sup>, 2025.

## 2025 BAY COUNTY TEST RESULTS TABLE

### Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Jan 2025 – Dec 2025	N	0.26	100	N/A	TT	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. High turbidity can hinder the effectiveness of disinfectants. The Treatment Technique standard requires that 95% of the turbidity readings be at 0.3 NTU or less.

### Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo. /yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Apr - 2025	N	0.0078	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Apr - 2025	N	0.87	N/A	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
Nitrate (ppm)	Apr – 2025	N	0.06	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (ppm)	Apr – 2025	N	4.2	N/A	N/A	160	Saltwater intrusion, leaching from soil
Nickel (ppm)	April - 2025	N	2.6	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil

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 byproducts of industrial processes and petroleum production, and may 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, EPA prescribes regulations which limit the number 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.

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 1-800-426-4791.

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

Our facility was required to submit a Lead Service Line Inventory (LSLI) no later than October 16th, 2024. The Federal Environmental Protection Agency has revised the Lead and Copper rule for all public drinking water systems. They have mandated that drinking water systems produce an inventory list of all service line material. The service line is the piping that extends from our water main to the customer's meter as well as the piping that extends from the meter to the customer's home. The City of Mexico Beach has prepared this inventory in accordance with federal regulations. Corrosion of Pipes, plumbing fittings and fixtures may cause metals, including lead and copper enter the drinking. To assess corrosion of lead and copper Mexico Beach conducts tap sampling for lead copper at selected sites every three years. The most recent set of lead and copper samples and LSLI can be viewed via request at city hall or by contacting Garrett Garland Utilities Director at (850) 247-3001.

We at the City of Mexico Beach work to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.