



## THE CITY OF PANAMA CITY PROUDLY PRESENTS THE 2023 ANNUAL DRINKING WATER QUALITY REPORT

### We are pleased to report that our drinking water meets all federal and state requirements.

This year's Annual Drinking Water Quality Report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts made to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our surface water source is water drawn from Deer Point Reservoir. The City of Panama City purchases water from Bay County Utility Services.

The Bay County Water 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 that 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 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 as set by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

If you have any questions about this report or concerning your water utility, please contact Anna Wright, City of Panama City Laboratory Superintendent at 850-872-3194. We encourage our valued customers to be informed about their water utility. If you would like to learn more, The City of Panama City Commission holds regularly scheduled meetings on the second and fourth Tuesdays at 8:00 am.

The City of Panama City Utilities Department and Bay County Utility Services routinely monitor constituents in your drinking water according to Federal and State laws. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2022. Data obtained before January 1, 2022, and presented in this report are from the most recent testing done in accordance with laws, rules and regulations. All monitoring contaminants in the table were provided by the Bay County Utility Services except for copper, lead, chlorine, and Stage 2 Disinfectants and Disinfection By-Products, which are provided by the City of Panama City Environmental Laboratory.

## 2023 CONTAMINANTS TABLE

### TERMS AND ABBREVIATIONS

**Maximum Contaminant Level (MCL)** - The "Maximum Contaminant Level" is 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 (MCLG)** - The "Goal" is 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 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.

**N/A - Not applicable**

**ND -not detected** and the substance was not found by laboratory analysis.

**NTU - Nephelometric turbidity unit** is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Parts per Million (ppm) or Milligrams per liter (mg/l)** - One part per million corresponds to one part by weight of analyte to one million parts by weight of the water sample.

**Parts per Billion (ppb) or Micrograms per liter(µg/l)** - One part per billion corresponds to one part by weight of analyte to one billion parts by weight of the water sample.

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

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

### Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL/ TT Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity	Jan — Dec 2022	N	0.38	99.5	N/A	TT	Soil Runoff

Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants. The Treatment Technique (TT) standard requires that 95% of the turbidity readings must be at 0.3 NTU or less.

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.

### Radioactive 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
Radium 226+228 or combined Radium (pCi/l)	March 2017 & April 2020	N	1.54	ND- 1.54	0	5	Erosion of Natural Deposits

### 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
Fluoride (ppm)	April 2022	N	0.72	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Nitrate (ppm)	April 2022	N	0.093	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	April 2022	N	3.2	N/A	N/A	160	Salt water intrusion, leaching from soil.

### Stage 2 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL or MRDL Violation	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
*Chlorine (ppm) (Stage 1)	Jan - Dec 2022	N	0.96	0.7- 1.2	MRDLG= 4	MRDL= 4.0	Water additive used to control microbes
*Haloacetic Acids (five) (HAA5) (ppb)	Feb- Aug 2022	N	25.9	7.1- 34.5	N/A	MCL = 60	By-product of drinking water disinfection
*Total Trihalomethanes (TTHM) (ppb)	Feb- Aug 2022	N	45.8	10.0- 76.3	N/A	MCL = 80	By-product of drinking water disinfection

\*\*Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

### Total Organic Carbon

Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	TT Violation Y/N	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)	Jan - Dec 2022	N	2.3	1.8- 2.3	N/A	TT	Naturally present in the environment

### Lead and Copper (Tap Water)

Contaminant and Unit	Dates of Sampling (Mo./Yr.)	Exceeded Y/N	90th percentile	Number of sampling sites AL	MCLG	AL	Likely Source of Contamination
*Copper (ppm)	July- Dec 2021	N	0.41	0 of 66	1.3	1.3	Corrosion of household plumbing systems, erosion of natural deposits, preservatives
*Lead (tap water) (ppb)	July- Dec 2021	N	1.6	1 of 66	0	15	Corrosion of household plumbing systems, erosion of natural deposits.

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 plumbing. The City of Panama City is responsible for providing high quality drinking water but cannot control what you buy or use in your home. When you buy or use your tap water for 30 seconds or longer, it is important to flush your tap for several hours. If you are concerned about lead in your water, you may wish to have your water tested. Information on how to drink your water for testing or flushing can be obtained by calling the Safe Drinking Water Hotline at 1-800-426-4791.

These contaminants were sampled by the City of Panama City. All other results were provided by Bay County Utility Services.

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, could be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate treatment means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available at EPA/CDC's guidelines on appropriate treatment means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available at EPA/CDC's guidelines on appropriate treatment means to lessen the risk of infection by Cryptosporidium and other microbiological

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