

**2022 Annual Drinking Water Quality Report
NAS Pensacola Saufley Field**

We're very pleased to provide you with this year's Annual Water Quality Report and to report that our water meets all Federal and State Requirements. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

Where Does My Water Come From?

The sources of drinking water both tap water and bottled water throughout our country 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. It also 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 byproducts 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.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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 1-800-426-4791.

In 2022, ECUA sourced water from 28 active wells distributed through its service area that pumps water from the Sand-and-Gravel Aquifer. In general, Saufley Field Water System customers receive a blend of water from the ECUA wells (two to five) located closest to our system. ECUA wells are operated as separate treatment plants to allow for adjustment of water quality parameters for maximum operational efficiencies and compliance with regulatory standards.

There are Granular Activated Carbon (GAC) filters installed on thirteen (13) wells for iron or organic contamination removal. Basic treatment includes calcium hydroxide (lime) for pH adjustment; phosphoric acid for corrosion control in the distribution system and home plumbing; and chlorine for disinfection. Fluoride is added at select wells to help prevent tooth decay.

The Sand-and Gravel Aquifer is a prolific, high-quality source of water for our community. Because it does not have a confining layer above it, virtually everything that falls on the ground has the potential to affect the quality of our water supply. ECUA is well aware of this threat to groundwater and over the years has worked with Escambia County and the city of Pensacola in strengthening their Wellhead Protection Ordinances.

In 2022, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on ECUA's water. Assessments are conducted to provide information about any potential sources of contamination in the vicinity of their wells. There are 42 potential sources of contamination identified for this system, with a low to high susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program (SWAPP) website at www.dep.state.fl.us/swapp or they can be obtained from ECUA's Water Quality Division at 850-969-6629.

Emerald Coast Utility Authority and the Naval Air Station Pensacola routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. 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 the laws, rules, and regulations.

If you have any questions about this report, please contact Joelle O'Daniel-Lopez (850) 452-2269.

If you have any questions concerning the water that ECUA provides, please contact the ECUA Laboratory Manager at 969-6629. ECUA encourages their valued customers to be informed about their water utility. ECUA Board and Committee meetings are held in the boardroom of the ECUA Administration Building, 9255 Sturdevant St., Pensacola, FL 32514. For a complete schedule of meetings, please contact the Executive Assistant, Ms. Amanda Miller, at (850) 969-3302, or visit on-line at www.ecua.fl.gov. The ECUA Water Quality Report for 2023 will be published by July 1, 2024.

Statement about Cross-Connection

ECUA has been in contact with the Department of Environment Protection to correct inadequacies identified with our Cross-Connection Control (CCC) Program. A "cross-connection" is any potential or actual connection between the public water supply and a potential source of contamination or pollution. A Cross Connection Control Program is an organized, legally implemented and structured program developed to help

eliminate hazards to the municipal potable water supply. Though we are continuing to implement our adopted CCC plan to improve backflow testing rates, some backflow prevention assemblies still need testing.

We've provided the following definitions to help you better understand certain terms and abbreviations with which you might not be familiar.

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

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.

Maximum residual disinfectant level or 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 or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Not Detected (ND): means not detected and indicates that the substance was not found by laboratory analysis.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample. One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample. One part per billion corresponds to one minute in 2,000 years, or a single penny in 10,000,000.

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water, a quadrillionth of a curie per liter.

2022 Drinking Water Quality Table Report Description

The System-Wide Test Results table included in this report presents the results of compliance monitoring for the period of January 1 through December 31, 2022. 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, are more than one year old.

2022 CONTAMINANTS TABLE

Stage 2 Disinfectants and Disinfection By-Products*							
Contaminant and Unit of Measurement	Dates of sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm) - Stage 1*	Jan-Dec 22	No	0.72	0.58-0.88	4.0 MRDLG	4.0 MRDL	Water additive used to control microbes
Lead and Copper (Tap Water)*							
Contaminant and Unit of Measurement	Dates of sampling	AL Exceeded	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)*	Jun & Dec 2022	No	0.088 & 0.23	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppm)*	Jun & Dec 2022	No	3.7 & 8.1	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

*Contaminant data marked with an asterisk are obtained from NAS Sauflay Field only, all other contaminant data is from ECUA wells.

Radioactive Contaminants							
Contaminant and Unit of Measurement	Dates of sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha (pCi/L)	July 14-July 20	No	6.3	ND – 6.3	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	2017, 2020, & 2021	No	4.83	ND – 4.83	0	5	Erosion of natural deposits
Uranium (ug/L)	Oct 20	No	2.2	2.2-2.2	0	30	Erosion of natural deposits

Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	Apr-Oct 20 & Jun 21	No	0.1	ND-0.1	0	10	Orchards; runoff from glass and electronics production wastes
Barium (ppm)	Apr-Oct 20 & Jun 21	No	0.064	0.0011-0.064	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	Apr-Oct 2020 & Jun 21	No	0.40	ND-0.40	4	4	Discharge from electrical, aerospace and defense industries
Cadmium (ppb)	Apr-Oct 2020 & Jun 21	No	0.10	ND-0.10	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries & paints
Chromium (ppb)	Apr-Oct 2020 & Jun 21	No	0.70	ND-0.70	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	Apr-Oct 2020 & Jun 21	No	17	ND-17	200	200	Discharge from steel/metal factories; discharge from plastic & fertilizer deposits
Fluoride (ppm)	Apr-Nov 2020	No	0.74	ND - 0.74	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 (ppb)	Apr-Oct 2020 & Jun 21	No	0.16	ND-0.16	0	15	Residue from man-made pollution such as auto emissions & paint; lead pipe; casing & solder
Mercury (ppb)	Apr-Oct 2020 & Jun 21	No	0.25	ND – 0.25	2	2	Erosion from natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	Apr-Oct 2020 & Jun 21	No	1.4	0.38 - 1.4	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	May-Jul 2021	No	4.0	0.15– 4.0	10	10	Runoff from fertilizer use: leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppm)	Apr-Oct 2020 & Jun 21	No	0.48	ND-0.48	1	1	Discharge from petroleum & metal refineries; erosion of natural deposits
Sodium (ppm)	Apr-Oct 2020 & Jun 21	No	9.2	2.6 – 9.2	N/A	160	Saltwater intrusion, leaching from soil

Volatile Organic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Tetrachloroethylene (ppb)	Jan-Oct 22	No	2.14	ND – 2.55	0	3	Discharge from factories and dry cleaners

ECUA has been monitoring for Unregulated Contaminants (UIC) as required by the Florida Department of Environmental Protection (FDEP). At present, no maximum contaminant levels have been established for UCs. We have included the analytical results of our UC monitoring in this annual water quality report.

UNREGULATED CONTAMINANTS*				
Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	Level Detected	Range of Results	Likely source of contamination
PFOA (ppb)	Jan - Oct 22	0.0003 avg.	ND - 0.0011	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally
PFOS (ppb)	Jan - Oct 22	0.0016 avg.	ND - 0.0055	Used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films

**Data reflective of quarterly sampling from a single source after treatment*

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. Saufley Field 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 or at <http://www.epa.gov/safewater/lead>.

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 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 at 1-800-426-4791.