

2023 Annual Drinking Water Quality Report NAS Pensacola Saufley Field

We're very pleased to provide you with this year's Annual Water Quality Report. 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 you a safe and dependable supply of drinking water.

Where Does My Water Come From?

In 2023, ECUA sourced water from 27 active wells distributed through its service area that pump water from the Sand-and-Gravel Aquifer. In general, ECUA customers receive water from the wells (two to five) located closest to their residence. 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.

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. It also can pick up substances resulting from the presence of animals or from human activity.

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.

There are Granular Activated Carbon (GAC) filters installed on thirteen (14) 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.

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.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which 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 2023, 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 43 potential sources of contamination identified for this system, with a low to moderate susceptibility level. ECUA's Wellhead Protection Program helps to protect the integrity of the ECUA water system. 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 Production Regulatory Compliance Coordinator 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, 2023. Data obtained before January 1, 2023, 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 ECUA's Water Production Regulatory Compliance Coordinator at (850) 969-6689. 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 2024 will be published by July 1, 2025.

What are the Precautionary Boil Water Notices and Why do We Issue Them?

Occasionally, drinking water distribution systems experience disruptions caused by main breaks, planned maintenance, or loss of pressure, which requires the issuing of a Precautionary Boil Water Notice, (PBWN). The PBWN does not mean that contamination is present, but is merely a

precautionary measure until bacteriological test results confirm that no contamination exists. ECUA and the Naval Air Station Pensacola make every effort possible to keep our customers informed as to the quality of our water.

The Lead and Copper samples collected and analyzed in 2023 indicate that the Saufley Water System is in compliance with the Lead and Copper Rule.

ECUA and the Naval Air Station Pensacola have been in contact with the Florida Department of Environmental 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 our adopted CCC plan to improve backflow testing rates, some backflow prevention assemblies still need testing.

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, 2023. 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.

ECUA has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence of drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA’s Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800) 426-4791. Additional information related to PFAS is available on our website at <https://ecua.fl.gov/live-green/our-water-supply>.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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.

2023 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 23	No	0.50	0.38 -0.74	4.0 MRDLG	4.0 MRDL	Water additive used to control microbes
*Contaminant data marked with an asterisk are obtained from NAS Saufley Field only, all other contaminant data is from ECUA wells.							

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)*	Jul – Dec 23	No	0.28	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)*	Jul – Dec 23	No	7.7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

*Contaminant data marked with an asterisk are obtained from NAS Saufley 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)	Apr 17- Aug 23	No	6.3	ND – 6.3	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	Apr 17- Aug 23	No	4.83	ND – 4.83	0	5	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
Antimony (ppb)	May-Nov 22	No	0.08	ND-0.08	6	6	Discharge from petroleum refineries, fire retardants; ceramics, electronics, solder.
Barium (ppm)	May-Nov 23	No	0.057	0.010-0.057	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	May-Nov 23	No	0.25	ND-0.25	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical,
Chromium (ppb)	May-Nov 23	No	0.96	ND-0.96	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	May-Nov 23	No	0.99	ND-0.99	4	4	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)	May-Nov 23	No	0.35	ND-0.35	0	15	Residue from man-made pollution such as auto emissions & paint; lead pipe; casing & solder
Mercury (ppb)	May-Nov 23	No	0.097	ND - 0.097	2	2	Erosion from natural deposits: discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	May-Nov 23	No	1.1	ND-1.1	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	May-Nov 23	No	3.9	0.22-3.9	10	10	Runoff from fertilizer use: leaching from septic tanks, sewage: erosion of natural deposits
Sodium (ppm)	May-Nov 23	No	9.3	2.7-9.3	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 – Nov 23	No	1.88 avg	ND-2.7	0	3	Discharge from factories and dry cleaners

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UNREGULATED CONTAMINANTS					
Contaminant and Measurement	Unit of	Sampling Dates (mo/yr)	Level Detected	Range of Results	Likely source of contamination
PFBA (perfluorobutanoic acid) (ppb)		Apr 23 - Dec 23	0.0008	ND-0.0407	Unavailable
PFBS (perfluorobutanesulfonic acid) (ppb)		Apr 23 - Dec 23	0.0019	ND-0.0160	Unavailable
PFHpA (perfluoroheptanoic acid) (ppb)		Apr 23 - Dec 23	0.0020	ND-0.0378	Unavailable
4:2FTS (1H, 1H, 2H, 2H-perfluorohexane sulfonic acid) (ppb)		Apr 23 - Dec 23	0.0002	ND-0.0076	Unavailable
PFHxS (perfluorohexanesulfonic acid) (ppb)		Apr 23 - Dec 23	0.0047	ND-0.0553	Unavailable
PFHxA (perfluorohexanoic acid) (ppb)		Apr 23 - Dec 23	0.0047	ND-0.1110	Unavailable
PFNA (perfluorohexanoic acid) (ppb)		Apr 23 - Dec 23	0.0006	ND-0.0162	Unavailable
6:2FTS (1H, 1H, 2H, 2H-perfluorooctane sulfonic acid) (ppb)		Apr 23 - Dec 23	0.0055	ND-0.2201	Unavailable
PFOS (perfluorooctanesulfonic acid) (ppb)		Apr 23 - Dec 23	0.0060	ND-0.0357	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
PFOA (perfluorooctanesulfonic acid) (ppb)		Apr 23 - Dec 23	0.0049	ND-0.0258	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
PFPeA (perfluoropentanoic acid) (ppb)		Apr 23 - Dec 23	0.0057	ND-0.1389	Unavailable
PFPeS (perfluoropentanesulfonic acid) (ppb)		Apr 23 - Dec 23	0.0003	ND-0.0110	Unavailable

Additional information related to PFAS is available on our website at <https://ecua.fl.gov/live-green/our-water-supply>.

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.