



# ANNUAL WATER QUALITY REPORT

# 2023

VOLUME 25 — ISSUED MAY 2024  
PWS ID# 4501124

# 2023 ANNUAL WATER QUALITY REPORT

Seacoast Utility Authority (“Seacoast”) is pleased to present its 2023 Annual Water Quality Report. The report is designed to inform you about the quality of your drinking water and the services we deliver to you every day.

We are pleased to report that Seacoast’s drinking water meets all federal, state and local standards as well as the rigorous water quality objectives established by Seacoast’s engineering and operations professionals.

## HEALTH AND SAFETY STANDARDS

The United States Environmental Protection Agency (EPA) and the State of Florida Department of Environmental Protection (FDEP) set both primary and secondary standards to ensure public water is safe to drink. Primary standards protect public health against substances that may be harmful to humans if consumed for long periods. Secondary standards control the aesthetic qualities of the water such as taste, odor, and clarity, but do not impact public health.

Our annual report meets the Federal Safe Drinking Water Act (SDWA) requirement for “Consumer Confidence Reports (CCR)” and contains information on the source and quality of our water. Our goal is to provide you with a safe and dependable supply of drinking water. We make every effort to continually improve the water treatment process and protect our water resources. Seacoast has an ongoing commitment to provide our customers with the highest quality of drinking water.

Seacoast routinely monitors for contaminants in your drinking water according to federal and state laws, rules, and regulations. Except where otherwise indicated, 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 applicable laws, rules, and regulations governing water quality. Reported results are for contaminants detected in samples collected from Seacoast’s water treatment plant, the distribution system and private homes.

If you have any questions regarding this report, please contact Pamela Olah-Brennan, Laboratory Supervisor, at 561-627-2900 ext 1685 or email: polah-brennan@sua.com.

The Annual Water Quality Report is offered electronically to all of its customers. If you would like a printed copy of this report mailed to your address, please contact our Customer Service Department at 561-627-2920.



Seacoast is a publicly owned water and sewer utility serving approximately 55,151 Northern Palm Beach County homes and businesses with an approximate population of 97,552 residents. The August 1988 Interlocal Agreement establishing Seacoast vests governing authority in its five-member board. Board Members are appointed by the respective political jurisdictions within which Seacoast provides service. Each member's voting share is as follows: Palm Beach Gardens 60%, Palm Beach County 21%, North Palm Beach, 12%, Lake Park 5%, and Juno Beach 2%. Seacoast currently distributes approximately 17 million gallons per day (MGD) of drinking water to its customers.

## SEACOAST BOARD MEMBERS

### *Ron Ferris*

Chair, City of Palm Beach Gardens

### *Robert Weisman*

Vice-Chair: Palm Beach County

### *John D'Agostino*

President Pro-Tem: Town of Lake Park

### *David Dyess*

Board Member, Town of Juno Beach

### *Karen Marcus*

Board Member: Village of North Palm Beach

## PLEASE VISIT

<https://www.sua.com/about-us/>

for Seacoast's 2023 Board Meeting Schedule

<https://facebook.com/custsvc>

to like us on Facebook

## SEACOAST AWARDS

Thanks to the diligence and professionalism of its water production and maintenance staff, Seacoast placed second in the Region VI (southeast Florida), Florida Section, American Water Works Association Water-Tasting Competition.

Seacoast is proud to have received the Certificate of Achievement for Excellence in Financial Reporting for each of the past 19 years. This certificate is the highest form of recognition for excellence and transparency in governmental accounting and financial reporting.

## OUR WATER SUPPLY AND CUSTOMER SERVICE PLAN

Seacoast's aggressive capital improvements program underscores its commitment to the highest customer service and water quality standards. Seacoast's current five-year, \$93 million capital improvement program includes:

- Expansion of electronic records and asset management systems
- Update of the CIS/billing system & customer engagement portal
- Expansion of existing technology applications, including telemetry, global positioning systems for buried infrastructure, and communication systems
- Improvements and updating of wastewater treatment processes
- Sewer pump station replacements and improvements
- Various roadway corridor piping replacement projects
- Neighborhood piping replacement projects (Garden Isles & Juno Isles)
- Develop a Western Region Operations Center to service accounts and infrastructure west of Beeline Highway
- Modernization of service fleet and heavy equipment
- Installation of water transmission main
- Hurricane and storm infrastructure hardening
- Hydrant and valve replacement
- Generator replacement
- Force main additions for future growth
- Replacement of lift station telemetry from a radio-based communication system to a more secure cell phone communication system

## OUR WATER SOURCES

Seacoast's goal is to provide you with a safe and dependable supply of drinking water. The Authority obtains its water from two separate ground water sources: (1) a shallow aquifer, 75 to 200 feet deep, known as the surficial aquifer and (2) from the 1,500 foot deep brackish Floridan aquifer. Seacoast has thirty-eight (38) surficial aquifer ground water wells and six (6) Floridan aquifer wells located in five (5) separate wellfields.

A 2023 Florida Department of Environmental Protection (FDEP) Source Water Assessment identified fourteen (15) potential sources of wellfield contamination, all representing low to moderate risk. FDEP's assessment area was based on a projected 5-year ground water travel time around each well. The 5-year ground water travel time is defined by the area from which water will flow to a well pumping at an average daily permitted rate for a five-year period. The assessment results are available on the FDEP Source Water Assessment and Protection website at <https://www.epa.gov/sourcewaterprotection/source-water-assessments>.

## SOURCES OF DRINKING 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.

## TREATING YOUR WATER

Seacoast uses two membrane treatment processes to treat its water: reverse osmosis for brackish Floridan aquifer water desalination and nanofiltration for demineralization of its fresh surficial aquifer water supply. Both the reverse osmosis and nanofiltration processes operate by forcing pressurized raw water through a semi-permeable membrane that separates contaminants from the water.

Seacoast's Hood Road Membrane Water Plant is a 30.5 MGD facility comprised of 26.0 MGD of nanofiltration (NF), 3.5 MGD of low pressure reverse osmosis, and 1.0 MGD of pretreated local surficial aquifer blend water.

Water fluoridation, the controlled addition of fluoride to drinking water for the purpose of reducing tooth decay, is not practiced by Seacoast. However, fluoride does occur naturally in our water at very low levels (<0.2 ppm).

## LEAD IN PUBLIC DRINKING WATER

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. Seacoast 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, 800-426-4791, or at <http://www.epa.gov/safewater/lead>.





## 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. The U.S. 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.

## VULNERABILITY TO CONTAMINANTS

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 people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control (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).

# WATER QUALITY TESTING RESULTS



## WATER QUALITY TESTING RESULTS

Inorganic Contaminants							
Contaminant & 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)	March 2023	N	0.13	0.13	2	4	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen) (ppm)	Oct 2023	N	0.048	0.048	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen) (ppm)	Oct 2023	N	<0.025	<0.025	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion or natural deposits.
Sodium (ppm)	March 2023	N	35.5	35.5	N/A	160	Salt water intrusion, leaching from the soil.
Barium	March 2023	N	0.0051	0.0051	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Mercury	March 2023	N	0.0002	0.0002	0.002	0.002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands

Lead and Copper (tap water)							
Contaminant & Unit of Measurement	Dates of Sampling (mo/yr)	AL Exceeded (Y/N)	AL (Action Level)	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	Likely Source of Contamination
Copper (tap water) (ppm)	May/Nov 2023	N	1.3	0.043-0.058	0	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	May/Nov 2023	N	15	2.5 – 3.3	4	0	Corrosion of household plumbing systems, erosion of natural deposits.

**Stage 2 Disinfectants and Disinfection By-Products**

For chloramines, haloacetic acids or TTHM, the level detected is the highest locational running annual average (LRAA), computed quarterly, or quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

Chloramines are a federally approved alternative to free chlorine for water disinfection. Chloramines minimize disinfection by-product formation. Another benefit of chloramines is improved taste of the water compared to free chlorine. Chloramines are also used by many Florida water systems and many other water utilities nationally. Chloramines have the same effect as chlorine for typical water uses with the exception that chloramines must be removed from water used in kidney dialysis and fish tanks or aquariums. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life.

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
Chloramines (ppm)	Monthly 2023	N	3.8	3.6 – 4.0	4	4	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	Feb, May, Aug, Nov 2023	N	3.8	2.6 – 7.5	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	Feb, May, Aug, Nov 2023	N	4.5	3.9 – 8.2	N/A	80	By-product of drinking water disinfection.

Seacoast 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 UCs in drinking water and whether or not these contaminants need to be regulated.

At present, no health standards (for example, maximum contaminant level) have been established for UCs. However, we are required to publish the analytical results for our UC monitoring in our annual water quality report. If you would like more information on the EPA’s Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

Unregulated Contaminants – Water Treatment Plants and Distribution System		
Contaminant and Measurement Unit	Level Detected	Likely Source of Contamination
Chromium, Total (ppb)	<2.5	Naturally-occurring element; used in making steel and other alloys; chromium -3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chromium -6+ (ppb)	0.097	Naturally-occurring element; used in making steel and other alloys; chromium -3 or -6 forms are used for chrome plating, dyes, and pigments, leather tanning, and wood preservation.
Molybdenum (ppb)	1.3	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.
Strontium (ppb)	370	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium (ppb)	1.1	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and catalyst.
Chlorodifluoromethane (ppb)	0.13	Chlorofluorocarbon; occurs as a gas, and used as a refrigerant, as a low-temperature solvent, and a fluorocarbon resins, especially tetrafluoroethylene polymers.
1, 4-Dioxane (ppb)	0.087	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.

## TABLE DEFINITIONS

- N/A** – Not Applicable.
- DBP** – Disinfection by Product.
- TTHM** – Total Trihalomethane.
- ppm** – Parts per million, or milligrams per liter (mg/L).
- pCi/L** – Picocurie per liter, a measure of radioactivity in water.
- ppb** – parts per billion, or micrograms per liter (µg/L).
- ND** – Not Detected and indicated that the substance was not found by laboratory analysis.
- 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. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- MCLG – Maximum Contaminant Level Goal** – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.
- MCL – Maximum Contaminant Level** – The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.
- AL – Action Level** – The concentration of a contaminant which, if exceeded, triggers treatment techniques (TT) or other requirements that a water system must follow.



