



# NAVAL STATION NEWPORT RI1000016

## Consumer Confidence Report – 2023

### Covering Calendar Year – 2022



This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to learn more about our decision-making processes that affect drinking water quality, please call PAMELA CRUMP at 401-841-6376.

Our drinking water is supplied from the City of Newport's Public Water System through a Consecutive Connection (CC).

Source Name	Source Water Type
Fresh water ponds and reservoirs on Aquidneck Island, Tiverton and Little Compton	Surface Water

Buyer Name	Seller Name
Naval Station Newport	City of Newport

Aquidneck Island contains seven freshwater ponds that serve as drinking water resources. These include Easton North Pond, Easton South Pond, Lawton Valley Reservoir, Gardiner Pond, Saint Mary's Pond, Paradise Pond and Sisson Pond. There are also two additional drinking water resources located off of Aquidneck Island: Nonquit Pond in Tiverton and Watson Reservoir in Little Compton. These ponds and reservoirs are interconnected through a complex network of pipelines and pumping stations. They are located in a basin area totaling 18.625 square miles or 11,920 acres of rural, forested and some developed land.

The Navy purchases tap water from the City of Newport. The water is treated at either of Newport's two treatment plants before being distributed to Naval Station Newport. A majority of the base receives water from the City of Newport's Lawton Valley Treatment Plant. The Lawton Valley Treatment Plant, located in Portsmouth, began operation in September 2014. The remaining portion of the water comes from the Station 1 Treatment Plant in Newport. This plant is the primary supplier for Coasters Harbor Island, Cloyne Court, and the Navy Medicine Readiness and Training Command. Station 1 was built in 1991 and upgraded in 2013-2014. The treatment plants have a combined capacity of 16 million gallons per day and service over 900 Navy connections through a distribution system of more than 62 miles of piping.

Naval Station Newport conducts regularly scheduled testing to ensure you receive safe, high quality drinking water. The Utilities Branch of Public Works is responsible for operating our water system. Operation and maintenance of the water distribution system includes routine flushing of the water lines and the management of over 1600 distribution valves, 800 fire hydrants, and 5 pump houses. In total, more than \$2,500,000 was spent in 2022 on maintenance and water quality testing to ensure the safe and effective operation of the water system. The Navy developed a comprehensive rehabilitation plan consisting of capital improvements to our water distribution system with construction beginning in 2015. Completed phases consist of replacement of water lines at Defense Highway, Melville, Coddington Cove, Naval Undersea Warfare Center (NUWC), Coasters Harbor Island, Coddington Point, Greene Lane and Fort Adams. Ongoing or future phases of the plan include additional improvements to Greene Lane Housing.

To find out more about our drinking water sources and additional chemical sampling results, please contact our office at 401-841-6376.

### Source Water Assessment

The University of Rhode Island (URI), in cooperation with the Rhode Island Department of Health (RIDOH) and other state and federal agencies, has assessed the threats to water supply sources. The assessment considered the intensity of development; the presence of businesses that use, store, or generate potential contaminants; how easily contaminants may move through the watersheds; and the sampling history of the water. The assessment results are being used to plan source protection efforts in the future.

The assessment found the water sources on Aquidneck Island, Little Compton and Tiverton are moderately susceptible to contamination. The average ranking for the entire system is based on land use and existing water quality. Because most land in source water areas is privately owned, the focus of the assessments has been on identifying threats from land use so local governments, residents and water suppliers can take action to protect valuable drinking water supplies. This means monitoring and protection efforts are especially important to assure continued water quality. The complete Source Water Assessment Report is available from the Newport Water Division or by calling the Rhode Island Department of Health, Center for Drinking Water Quality at (401) 222-6867.

### Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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.

Contaminants that may be present in the source water before it is treated include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water run-off, 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 storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system is required to test a minimum of 9 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. We collect 28 samples per month as a conservative measure to ensure water safety. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2022 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1 – December 31, 2022. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **Our water system makes every effort to provide you with safe drinking water.**

### Terms & Abbreviations

**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 human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the “Maximum Allowed” MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l).

**Parts per Billion (ppb)** or micrograms per liter (µg/l).

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame; common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

## Testing Results for NAVAL STATION NEWPORT

Microbiological	Result	MCL	MCLG	Typical Source	Violation
No detected results were found in the calendar year of 2022.					No

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	Violation
No detected results were found in the past five years.								No

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source	Violation
Total Haloacetic Acids (HAA5)	Distribution System	2022	22	14 - 27	ppb	60	0	Byproduct of drinking water disinfection	No
Total Trihalomethanes (TTHM)	Distribution System	2022	58	26 - 74	ppb	80	0	Byproduct of drinking water disinfection	No

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 system, and may have an increased risk of getting cancer.

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
Copper, Free	2022	0.11	0.014 - 9.69	ppm	1.3	1	Corrosion of household plumbing systems
Lead	2022	4	0 - 168	ppb	15	1	Corrosion of household plumbing systems

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants and young children, who are typically more vulnerable to lead in drinking water than the general population. Lead in drinking water is primarily from materials and components associated with service lines and plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. It is possible that lead levels at your home or building may be higher than at other homes or buildings in the community as a result of materials used in your plumbing. 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>.

Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units	Violation
Jan 1, 2022 – Dec 31, 2022	1.0400	MG/L	0.8	MG/L	No

During the 2022 calendar year, we had the below noted violation of drinking water regulations.

Federal Compliance Period	Analyte	Comments
8/11/2022 - 8/18/2022	Revised Total Coliform Rule (RTCR)	State reporting violation: Positive coliform test results were not reported to the RI Department of Health within 24 hours.

On August 9, 2022, a contractor working on the water main replacement project in the Greene Lane area collected samples for total coliform and sent these samples to be analyzed at a non-contract laboratory. These samples were not collected by one of our certified drinking water operators or according to our routine coliform sampling plan. Two of these samples were reported as positive for total coliform; however, e.coli and fecal coliform were not detected. Naval Station Newport environmental and utilities staff were made aware that these samples were collected and reported positive for coliform on August 11, 2023. As soon as this was communicated to us, the results were immediately reported to the RI Department of Health (RIDOH). We received the lab report with the positive coliform results on August 18, 2022 and provided this to RIDOH, which returned us to compliance with the violation. To prevent this from happening in the future, all drinking water sampling shall be coordinated with our certified drinking water operators using the proper procedures, and all samples must be analyzed at our contract laboratory and reported to the appropriate staff in a timely manner.

During the past year we were required to conduct one Level 1 assessment and one Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed this action.

Due to the positive coliform detections in August 2022 discussed above, Naval Station Newport was required by the RI Department of Health to complete a Level 1 Assessment. A Level 1 Assessment is a self-assessment required to be conducted by a public water system to try to identify potential pathways of bacterial contamination and correct them. This included proper disinfection of the distribution system and water storage tanks by increasing the chlorine level to a minimum of 0.2 ppm higher than normal residuals for at least 8 hours. Additional sampling and an extensive review of all aspects of the public water system was conducted. Naval Station Newport determined that the positive coliform results most likely occurred from incorrect sampling procedures as all of the samples collected in the area by our licensed drinking water operators were absent for total coliform. Due to the extreme heat wave in August 2022, the contractor was required to ensure that the drinking water temperature in the temporary above ground water mains remained within 10 degrees of the normal water main temperature. All requirements of the Level 1 Assessment were met.

### Testing Results for the CITY OF NEWPORT (Water Supplier)

All of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2022 calendar year from the water system that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	Violation
Arsenic	9/30/2022	City of Newport	1	0 - 1	ppb	10	0	Erosion of natural deposits	No
Barium	3/28/2022	City of Newport	0.011	0.003 - 0.011	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	No

Benzo(a)pyrene	2/7/2022	City of Newport	200	0 - 200	ppt	200	0	Leaching from linings of water storage tanks and distribution lines	No
Nitrate	2/7/2022	City of Newport	1.39	0.28 - 1.39	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
Nitrate-Nitrite	3/28/2022	City of Newport	0.66	0.12 - 0.66	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
Per Fluorooctane Sulfonic Acid (PFOS)	6/25/2019	City of Newport	14.8	0 - 14.8	ppt	20*	* See PFAS info below	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	No
Per Fluorooctanoic Acid (PFOA)	6/25/2019	City of Newport	6.35	0 - 6.35	ppt	20*	* See PFAS info below	Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films	No

**Please Note: Because of sampling schedules, results may be older than 1 year.**

\*PFAS refers to Per- and Polyfluorinated Substances. PFAS are a group of thousands of man-made chemicals. PFAS have been used in a variety of industrial and consumer products around the globe, including in the U.S., for decades. Due to their widespread use and environmental persistence, most people in the United States have been exposed to certain PFAS. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires. During calendar years 2017 and 2019, many public water systems in Rhode Island collected samples for PFAS as part of a statewide investigation into the occurrence of PFAS in drinking water. In June of 2022, Rhode Island passed a state law regulating PFAS in drinking water. The data above show PFAS detected for the past 5 years. Prior to June 2022, there were no State or federal Maximum Contaminant Levels for PFAS. During the sampling years of 2017 and 2019, there was an established lifetime health advisory level for PFOS (perfluorooctane sulfonate) and PFOA (perfluorooctanoic acid) of 70 parts per trillion. A health advisory considers the level of a contaminant in drinking water below which adverse health effects are not expected to occur. Health advisories are not regulations and they are not Maximum Contaminant Levels. In June 2022, EPA changed the 70 ppt health advisory for PFOA and PFOS to 0.004 ppt. This was updated based on new data, including human health studies in populations exposed to these chemicals. Currently, there is still no final federal Maximum Contaminant Level for PFAS. In the above table, the Maximum Contaminant Level for PFAS is listed as 20 ppt. This is only a state law at this time. Since the law to regulate PFAS was passed in 2022, public water systems have been working diligently to be in compliance. For compliance with the newly enacted state PFAS law, public water systems must sample on or before July 1, 2023 and comply with the INTERIM MAXIMUM CONTAMINANT LEVEL of 20 ppt for 6 PFAS compounds on or before July 1, 2023. The data shown above that was collected prior to 2022 was collected at a time when there was no state Maximum Contaminant Level or updated health advisory.

During the 2022 calendar year, the water system that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
No violations occurred in the Calendar Year of 2022 for the City of Newport.				

