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 another water system through a Consecutive Connection (CC).

Buyer Name	Seller Name
Naval Station Newport	City of Newport
Source Name	Source Water Type
Fresh water ponds and reservoirs on Aquidneck Island, Tiverton and Little Compton	Surface Water

Aquidneck Island contains seven fresh water 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 Naval Health Clinic. 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 1,100 Navy connections through a distribution system of more than 62 miles of piping.

Naval Station Newport conducts daily, weekly, monthly, quarterly and annual 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 \$250,000 was spent in 2019 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. Future work will include additional improvements to Greene Lane Housing and Coddington Point.

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 water-sheds; 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 are 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, Office of 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) included 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 sources water before we treat it include: <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

<u>Inorganic contaminants</u>, such as salts and metals, which can be naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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. 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 that were detected during the 2019 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, 2019. 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

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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. <u>Secondary Maximum Contaminant Level (SMCL)</u>: recommended level for a contaminant that is not regulated and has no MCL.

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

<u>Running Annual Average (RAA)</u>: 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
Coliform (TCR)	In the month of July, 4	Treatment Technique Trigger	0	Naturally present in the
Collform (ICR)	samples returned as positive	Treatment Technique Trigger	0	environment

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. During the past year, we were required to conduct one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we were required to take two corrective actions and we completed two of these actions. Additional information is included on the following page.

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	
No Detected Results were Found in the Calendar Year of 2019								

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	Violation	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	Building 292	2019	15	11.2 - 15	ppb	60	No	0	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA5)	Melville Community Center	2019	17	12 - 18.6	ppb	60	No	0	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	Building 292	2019	52	38.5 - 85	ppb	80	No	0	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	Melville Community Center	2019	64	43 - 88	ppb	80	No	0	Byproduct 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.

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Violation	Sites Over AL	Typical Source
Copper, Free	2019	0.09	0 - 0.368	ppm	1.3	No	0	Corrosion of household plumbing systems
Lead	2019	5	0 - 112	ppb	15	No	2	Corrosion of household plumbing systems

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. Your water system 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.

	its Violation	
Jan 1, 2019 – Dec 31, 2019 0.9500 MG/L 0.8 MG/L	No	

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	
No Detected Results were Found in the Calendar Year of 2019								

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

 Federal Compliance Period
 Analyte
 Comments

 No Violations Occurred in the Calendar Year of 2019
 Comments
 Comments

Level 1 Assessment and Corrective Actions Taken to Address Positive Coliform Results

In July 2019, Naval Station Newport collected one (1) routine sample and three (3) repeat samples that were present for Total Coliform, which triggered a Level 1 Assessment to be completed to identify and correct any potential problems in the water distribution system. This requirement applies to any public drinking water system that has two or more coliform-present routine/repeat samples in the same month. Please note that E. Coli was not detected in any samples.

As a result of the Level 1 Assessment, Naval Station Newport disinfected and flushed the distribution system to ensure the chlorine residuals were increased to at least 0.20 mg/L above normal. A temporary water line that was installed under Pier 2 was then insulated to prevent an environment for contamination during the warm summer months. We also developed a detailed disinfection procedure for the distribution system and storage tanks, and a flushing schedule and standard operating procedure to ensure sufficient water flow to keep chlorine residuals at preferred levels. These corrective actions addressed the requirements of the RI Department of Health Drinking Water Regulations.

Testing Results for: CITY OF NEWPORT

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 2019 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	Violation	MCLG	Typical Source
Arsenic	8/6/2019	City of Newport	1	0 - 1	ppb	10	No		Erosion of natural deposits
Barium	1/15/2019	City of Newport	0.01	0.006 - 0.01	ppm	2	No	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate	1/15/2019	City of Newport	1.76	0.26 -1.76	ppm	10	No	0	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits
Di(2-Ethylhexyl) Phthalate	5/7/2019	City of Newport	2	1 - 2	ppb	6	No	0	Discharge from rubber and chemical factories
Perfluoroctane- sulfonic acid (PFOS)	6/25/2019	City of Newport	14.8	0 - 14.8	NG/L	70	No		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
Perfluoroctanoic acid (PFOA)	6/25/2019	City of Newport	6.35	0 - 6.35	NG/L	70	No		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.
Simazine	8/29/2019	City of Newport	0.2	0 - 0.2	ppb	4	No	4	Herbicide runoff

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

Some PFAS compounds have been shown to cause development toxicity, immunological toxicity, and effects on cholesterol metabolism, particularly PFOA, PFOS, PFHxS, PFHpA, PFNA, and PFDA. The toxicity of other PFAS compounds is currently not well understood, although they remain in the blood for shorter periods of time. Rhode Island is in the process of developing regulations for PFAS in drinking water.

During the 2019 calendar year, the water systems 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 2019							