# *City of Newport*

*Department of Utilities*
*Water Division*

## *2019 CONSUMER CONFIDENCE REPORT*

This report contains important information about your drinking water. We recommend all our customers review the information or, if necessary, have someone translate it for you.

*Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.*

*Este relatório contem informaçâo importante sobre e qualidade da agua na sua comunidade. Pergunta a quem saiba traduzir ou fala com alguem ques compreenda o que está escrito.*

Newport Water is pleased to present this water quality report for 2019 to our customers. In accordance with the Safe Drinking Water Act (SDWA) all water utilities are required to issue an annual Consumer Confidence Report to promote customer awareness of the quality of their drinking water. This brochure is a snapshot of the water quality from January 2019 through December 2019. Included are details about where your water comes from, what it contains, and how it compares to EPA standards. In 2019, Newport Water conducted 52,325 analyses to monitor 76 regulated drinking water contaminants and 87 unregulated drinking water contaminants. The 2019 table indicates only the contaminants that were detected, even if the detected level was below the maximum level set by the EPA. For the year 2019, our system violated the secondary standard for Fluoride on May 4, 2019. The Public Notification was provided with your June 2019 utility bill. For more information see inside this brochure.

Please know that the employees of Newport Water are committed to providing you water that meets all EPA and state drinking water standards.

***If you have any questions please contact:***

Julia A. Forgue, Director of Utilities (401) 845-5600

US EPA Hotline (800) 426-4791

RI Department of Health, Drinking Water Quality (401) 222-6867

***Also, information is available on the Internet:***

Newport Water Division
www.cityofnewport.com/departments/utilities/water

Environmental Protection Agency
www.epa.gov/safewater

***How can you be involved?***

Meetings of the Newport City Council begin at

6:30 PM on the second and fourth Wednesday of each

month in the Council Chambers, City Hall

43 Broadway, Newport, RI

***About Newport Water...***

The original water works in Newport was started in 1876. The Newport Water Works Company was incorporated in 1881, and was succeeded by the Newport Water Corporation in 1929. Since 1936, the City of Newport has owned and operated the system. The Newport Water Division is a division within the City of Newport's Utilities Department and is responsible for the operation and maintenance of the system. Newport Water operates as an enterprise fund and is independent of the overall City budget. Newport Water is licensed by the RI Department of Health as a Public Water Supplier No. 1592010. Newport Water is regulated by the Rhode Island Public Utilities Commission.

***Newport's Water Supply***

Newport Water draws its raw water supply from a system of nine surface reservoirs: North and South Easton Pond, Paradise Pond, Gardiner Pond, St. Mary's Pond, Sisson Pond, Lawton Valley Reservoir, Nonquit Pond, and Watson Reservoir. These reservoir systems are located in a basin area totaling 18.625 square miles or 11,920 acres of rural, forested and some developed lands. The reservoirs located in Newport, Middletown, Portsmouth, Tiverton, and Little Compton are interconnected through a complex network of pipelines and pumping stations. Newport Water has purchased 350 acres of conservation easements to protect raw water quality of the reservoirs.

The water is treated at either Station 1 Plant in Newport or the Lawton Valley Plant in Portsmouth. The combined design capacity of the plants is 16 million gallons of treated water per day.

***Newport's Distribution System***

Newport Water's distribution system consists of water mains of various size, material and age which carry water throughout Newport, Middletown and a portion of Portsmouth to each individual customer. In addition, Newport Water provides water wholesale to the Portsmouth Water and Fire District and the U.S. Navy for distribution within their systems. Newport Water maintains within our system approximately 14,500 services, 170 miles of water main, 3,300 valves and 1,000 hydrants.

***Source Water Assessments***

In 2003, the University of Rhode Island, in cooperation with RIDOH and other state and federal agencies, assessed the threats within the watersheds of Newport Water's water supply sources. The assessment found that our water sources on Aquidneck Island and in Little Compton and Tiverton are moderately susceptible to contamination. Monitoring and protection efforts are especially important to assure continued water quality. Newport Water updated the 2003 Assessment in 2010. The complete Source Water Assessment Report is available at our office at 70 Halsey Street.

***Cross-Connection Control Plan***

Cross-connections between public water supplies and non-potable sources of contamination can represent one of the most significant threats to health in the water supply industry. A cross connection control program protects the public water supply from the possibility of contamination or pollution through backflow or back-siphonage into the public water system from a building's internal plumbing system. The Federal Safe Drinking Water Act requires that the water supplier has the primary responsibility for preventing water from unapproved sources from entering the public potable water system. In March 2010, Newport Water adopted a Cross-Connection Control Plan which is available at www.cityofnewport.com/crossconnectcontrolprogram.

***Concerning Lead in Our 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. The Newport Water Division 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 until the water is as cold as it will get before using 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 www.cityofnewport.com/leadanddrinkingwater.

## ***Additional Health Information***

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. 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 water poses a health risk. More information about contaminants and potential health risk and 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 radioactive material and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations and wildlife.
(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff; oil and gas production, mining or farming.
(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm runoff, and residential uses.
(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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, persons who have 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).

## ***About our Fluoride Violation in May 2019***

The Newport Water Division monitors daily the fluoride levels in the drinking water leaving each water treatment plant. EPA sets the standards for the levels of fluoride in drinking water. The EPA Maximum Contaminant Level (MCL) for fluoride is 4.0mg/l. EPA has also established a Secondary Maximum Contaminant Level (SMCL) for fluoride of 2.0 mg/l. On May 4, 2019 the drinking water leaving the Station #1 Plant was recorded with a level of 2.16 mg/l for a period of 2.5 hours which is a violation of the SMCL for fluoride.

The EPA has established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. Elevated fluoride levels may cause a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

To assure compliance with Fluoride SCMLs in your drinking water, the Newport Water Division changed the alarm set-points on the Fluoride chemical feed system. Also, the Standard Operating Procedures for the application of all chemicals used in the treatment process, including Fluoride, were reviewed with all the plant operators. The staff of the Newport Water Division are committed to providing water that meets all EPA and State drinking water standards. We are also committed to improve our performance to prevent any future violations.

## ***Definitions and Key to All Tables***

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.

SMCL- Secondary Maximum Contaminant Level: A non-enforceable guideline regarding contaminants that may cause cosmetic or aesthetic effects in drinking water. EPA recommends the secondary standards but does not require water-supply systems to comply. Contaminants are not considered to present a risk to human health at the SMCL.

MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MRDL - Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of 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 contamination.

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

TT - Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

NTU = Nephelometric Turbidity Units
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ppt = parts per trillion, or nanograms per liter (ng/l)
n/a = Not applicable
ND = No Detect

The data presented in this report is from the most recent testing done in accordance with regulations. The RI Department of Health (RIDOH) allows Newport Water to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change

## ***Newport Water System Special Monitoring Metals and Synthetic Organic Compounds***

As part of Newport Water System's on going monitoring programs, we have continued testing sites for metals and synthetic organic compounds once per quarter for 2019. The sample sites include Station 1 total plant effluent, Lawton Valley Clearwell effluent, and Lawton Valley Tank effluent. This represents the water produced at the both water plants, after treatment, to the distribution system. Eleven metals and thirty-six synthetic organic compounds were analyzed and the table presents only contaminants that were detected.

| *Station 1 TPE Metals* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
|---|---|---|---|---|---|---|---|
| Barium | 2019 | ppm | 2 | 0.011 | 0.006 - 0.011 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | No |
| *Lawton Valley clearwell metals* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Barium | 2019 | ppm | 2 | 0.008 | 0.004 - 0.008 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | No |
| *Lawton Valley tank effluent metals* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Barium | 2019 | ppm | 2 | 0.009 | 0.004 - 0.009 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | No |
| *Station 1 TPE Synthetic Organics* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Di(2-ethylhexyl)phthalate | 2019 | ppb | 6 | 2.0 | ND - 2.0 | Discharge from rubber and chemical factories | No |
| *Lawton Valley clearwell Synthetic Organics* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Di(2-ethylhexyl)phthalate | 2019 | ppb | 6 | 2.0 | ND - 2.0 | Discharge from rubber and chemical factories | No |
| *Lawton Valley tank effluent Synthetic Organics* | *Period* | *Unit* | *MCL* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Di(2-ethylhexyl)phthalate | 2019 | ppb | 6 | 3.0 | ND - 3.0 | Discharge from rubber and chemical factories | No |

***2019 Detected Contaminants Table***

This table shows the results of our combined water-quality analyses for both Station 1 - Newport and Lawton Valley - Portsmouth systems from Jan. 1, through Dec. 31, 2019. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here along with the highest levels allowed by regulation (MCL), the ideal goals for public health, the amounts detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement.

| *Microbiological Contaminants* | *Period* | *Unit* | *MCL* | *SMCL* | *MCLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
|---|---|---|---|---|---|---|---|---|---|
| Turbidity (1) | 2019 | NTU | TT | | n/a | 0.57 | n/a | Soil runoff | No |
| Turbidity (1) | 2019 | lowest monthly % of samples meeting limit | TT | | n/a | 99.73% | n/a | | |
| Total Organic Carbon | 2019 | removal ratio | TT | | n/a | 1.43 | 1.36 - 1.86 | Naturally present in environment | No |
| *Inorganic Contaminants* | *Period* | *Unit* | *MCL* | | *MCLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Arsenic (5) | 2019 | ppb | 10 | | 0 | 1 | ND - 1 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. | No |
| Barium (5) | 2019 | ppm | 2.0 | | 2.0 | 0.010 | 0.006 - 0.010 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | No |
| Fluoride (3) | 2019 | ppm | 4.0 | 2.0 | 4.0 | 2.16 | 0.04 - 2.16 | Water additive which promotes strong teeth | Yes |
| Nitrate (5) | 2019 | ppm | 10 | | 10 | 1.76 | 0.26 - 1.76 | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits. | No |
| *Inorganic Contaminants* | *Period* | *Unit* | *MCL* | | *MCLG* | *Detected Level* | *# Of Sites > AL* | *Major Sources* | *SDWA Violation* |
| Copper (2) | 2019 | ppm | AL=1.3 | | 1.3 | 0.037 | 0 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. | No |
| Lead (2) | 2019 | ppb | AL=15 | | 0 | 4.8 | 2 | Corrosion of household plumbing systems; erosion of natural deposits. | No |
| *Synthetic Organic Contaminants Including Pesticides and Herbicides* | *Period* | *Unit* | *MCL* | | *MCLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Di(2-ethylhexyl)phthalate (5) | 2019 | ppb | 6 | | 0 | 2.0 | 1.0 - 2.0 | Discharge from rubber and chemical factories | No |
| *Disinfection By-products* | *Period* | *Unit* | *MCL* | | *MCLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Total Trihalomethanes (TTHM) (4) | 2019 | ppb | 80 | | n/a | 57.5 | 25.3 - 57.1 | By-product of drinking water chlorination | No |
| Haloacetic Acid 5 | 2019 | ppb | 60 | | n/a | 19.2 | 8.9 - 26.2 | By-product of drinking water chlorination | No |
| Chlorite | 2019 | ppm | 1.0 | | 0.800 | 0.197 | <0.010 - 0.330 | By-product of drinking water disinfection | No |
| *Disinfectants* | *Period* | *Unit* | *MRDL* | | *MRDLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Chlorine | 2019 | ppm | 4.0 | | 4.0 | RAA = 0.99 | 0.23 - 2.00 | Water additive used to control microbes | No |
| Chlorine Dioxide | 2019 | ppb | 800 | | 800 | 640 | 10 - 640 | Water additive used to control microbes | No |
| *Unregulated Contaminant Monitoring* | *Period* | *Unit* | *MCL* | | *MCLG* | *Detected Level* | *Range* | *Major Sources* | *SDWA Violation* |
| Sodium | 2019 | ppm | n/a | | n/a | 77.0 | 23.9 - 77.0 | Naturally occurring; road runoff; contained in water treatment chemicals; EPA regulations require us to monitor this contaminant while EPA considers setting a limit on it. | No |
| Metolachlor (5) (6) | 2019 | ppb | n/a | | n/a | 0.20 | ND - 0.20 | Used as an herbicide for weed control on agricultural crops | n/a |
| Chlorate (7) | 2019 | ppb | n/a | | n/a | 380 | 110 - 380 | By-product of drinking water chlorination | n/a |

***Water Quality Table Footnotes:***

(1) 0.57 NTU was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 99.73%.

(2) Detected level indicates the 90$^{th}$ percentile value of the 30 samples taken. The Range indicates the number of samples above the action level.

(3) Newport Water adds fluoride to its treated water as an aid in dental cavity prevention in young children.

(4) Some people who drink water containing TTHM's 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 contracting cancer. Detected level is Stage 2 DBPR highest locational running annual average.

(5) Sampled and monitored at raw water supply reservoirs prior to treatment.

(6) The EPA requires us to report this contaminant which is on the Contaminant Candidate List 4.

(7) Sampled and monitored at the entry points and distribution system.

***About PFAS and our Drinking Water***

As part of Newport Water System's and Rhode Island Department of Health's ongoing monitoring programs, we tested our effluent from the Station #1 and Lawton Valley treatment plants and the reservoirs for per- and polyfluoroalkyl substances (PFAS). The RIDOH and EPA continue to develop and implement regulations regarding PFAS. Currently the EPA has a health advisory of 70 ppt for Perfluorooctonoic Acid (PFOA) and Perfluorooctonoic Sulfonate (PFOS).

Some PFAS 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 is currently not well understood, although they remain in the blood for shorter periods of time. The Rhode Island Department of Health is in the process of developing regulations for PFAS in drinking water.

Below is a summary of the results for monitoring that conducted in 2019:

| *Station 1 Effluent* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
|---|---|---|---|---|---|
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *Lawton Valley Effluent* | *Sample* | *Unit* | *EPA Health Advi-* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | 11.6 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *St. Marys Pond* | *Sample* | *Unit* | *EPA Health Advi-* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *Nonquit Pond* | *Sample* | *Unit* | *EPA Health Advi-* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *Watson Reservoir* | *Sample* | *Unit* | *EPA Health Advi-* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |

| *Lawton Valley Reservoir* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
|---|---|---|---|---|---|
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *Gardner Pond* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *North Pond* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | 6.35 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | 13.9 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *South Pond* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | 14.8 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |
| *Sisson Pond* | *Sample Date* | *Unit* | *EPA Health Advisory* | *Detected Level* | *Major Sources* |
| Perfluorooctanoic Acid (PFOA) | 6/25/2019 | ppt | 70* | <4.0 | Found in or as flyoropolymers, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films. |
| Perfluorooctanoic Sulfonate (PFOS) | 6/25/2019 | ppt | 70* | <4.0 | Used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps. |
| Perfluorohexane Sulfonate (PFHxS) | 6/25/2019 | ppt | N/A | <4.0 | Used in products to make them stain, grease, heat and water resistant. |
| Perfluoroheptanoic Acid (PFHpA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorononanoic Acid (PFNA) | 6/25/2019 | ppt | N/A | <4.0 | |
| Perfluorodecanoic Acid (PFDA) | 6/25/2019 | ppt | N/A | <4.0 | |

*70 ppt individually or combined (PFOA + PFOS)

***Newport Water System Special Monitoring***

During months of historically high algal growth, May—November, Newport Water conducts daily monitoring of all source water reservoirs for the presence of Cyanobacteria. Cyanobacteria are known to potentially produce algal toxins (Microcystin, Cylindrospermopsin and Anatoxin-a) which can cause illness in humans and wildlife. When a concentration of Cyanobacteria is observed, Newport Water staff collect samples and analyzes for the presence of algal toxins. Testing was conducted six (6) times throughout the 2019 season and all tests were negative.

| Sample Site | Date | *Microcystin* (ppb) | *Cylindrospermopsin* (ppb) | *Anatoxin-a* (ppb) |
|---|---|---|---|---|
| Watson Reservoir | 6/20/2019 | ND | ND | ND |
| Lawton Valley Intake | 6/20/2019 | ND | ND | ND |
| Lawton Valley Reservoir | 6/28/2019 | ND | ND | ND |
| Lawton Valley Intake | 6/28/2019 | ND | ND | ND |
| Lawton Valley Intake | 7/28/2019 | ND | ND | ND |

***Newport Water System Special Monitoring BY RIDEM***

In 2019, Newport Water surface water reservoirs were monitored by RIDEM for Cyanotoxins. Observations were conducted every 2 weeks between May 2019 and December 2019.On 6/28/19 Lawton Valley Reservoir was analyzed for algal toxins. On 8/7/19 Sisson Pond was analyzed for algal toxins. On 11/6/19 Watson Reservoir, Sisson Pond, and Paradise Pond were all analyzed for algal toxins. All samples were negative.

| **Sample Site** | ***Microsystin* (ppb)** | ***Cylindrospermopsin* (ppb)** | ***Anatoxin (ppb)*** | ***Nodularin (ppb)*** |
|---|---|---|---|---|
| Lawton Valley | ND | ND | ND | ND |
| Sisson Pond | ND | ND | ND | ND |
| Watson Reservoir | ND | ND | ND | ND |
| Sisson Pond | ND | ND | ND | ND |
| Paradise Pond | ND | ND | ND | ND |

*Newport Water requests your help in protecting our drinking water supplies. Please do not litter on Water Division property. Also, please remember to pick up after dogs and dispose of in the proper receptacle.*

*Thank you!*