City of Newport

Department of Utilities

Water Division

2018 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 2018 to our customers. In accordance with the Safe Drinking Water Act 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 2018 through December 2018. Included are details about where your water comes from, what it contains, and how it compares to EPA standards. In 2018, Newport Water conducted 50,972 analyses to monitor 76 regulated drinking water contaminants and 87 unregulated drinking water contaminants. The following 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 2018 the Newport System had no violations of the Safe Water Drinking Act standards on the contaminant table. However, we did receive a notice of violation for each treatment plant regarding monitoring sample dates and test method for Cryptosporidium. Detailed information regarding the violation is presented in the Public Notice for the violation included in this report.

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. Newport Water adopted a Cross-Connection Control Plan in March 2010.

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).

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/departments/utilities/lead.

PUBLIC NOTICE

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for City of Newport

PWS# RI1592010 Station #1 TP010 and PWS# RI1592010 Lawton Valley TP011

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Between the dates of 12/31/17 and 1/04/2018 we did not collect water quality samples from our untreated raw water sources on time, and therefore cannot be sure of the quality of our untreated raw water during that time. Although this was not an emergency, as our customers, you have the right to know what happened and what we did to correct the situation.

What should I do?

There is nothing you need to do at this time. This was a failure to collect Matrix Spike samples according to the RIDOH approved monitoring plan.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for the contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken, if necessary.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were taken
Cryptosporidium	2 additional samples for matrix spike analysis at Lawton Valley and Station 1 Treatment Plants	0	12/31/2017 – 01/04/2018	06/05/2018 Matrix spike samples at Station 1 and Lawton Valley Treatment Plants

What is being done? The Station 1 and Lawton Valley raw water intake samples were filtered on 1/2/2018 using Envirochek HV Filters. The volume was 10 Liters. The final result for EPA Method 1623 was zero oocysts for the Station 1 and Lawton Valley raw water intakes. Matrix spike samples were taken at both plants on 6/5/2018 and a revised schedule was submitted to RIDOH. The 10-liter samples collected on 6/5/2018 both had a final result of zero oocysts. For more information please contact Julia Forgue, Director of Utilities at 401-845-5600.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

DATE: May 1, 2019

2018 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, 2018. 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*	*MCLG*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Turbidity (1)	2018	NTU	TT	n/a	0.39	n/a	Soil runoff	No
Turbidity (1)	2018	lowest monthly % of samples meeting limit	TT	n/a	99.73%	n/a		
Total Organic Carbon	2018	removal ratio	TT	n/a	1.37	1.20 - 1.86	Naturally present in environment	No
Inorganic Contaminants	*Period*	*Unit*	*MCL*	*MCLG*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Arsenic (5)	2018	ppb	10	0	2	ND - 2	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.	No
Barium (5)	2018	ppm	2.0	2.0	0.012	0.007 - 0.012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Fluoride (3)	2018	ppm	4.0	4.0	1.05	0.04 - 1.05	Water additive which promotes strong teeth	No
Nitrate (5)	2018	ppm	10	10	1.00	0.16 - 1.00	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)	2016	ppm	AL=1.3	1.3	0.05	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	No
Lead (2)	2016	ppb	AL=15	0	8.3	0	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*
Benzo(A)Pyrene (5)	2018	ppt	200	0	200	ND - 200	Coal tar and wood burning	No
Di(2-ethylhexyl)phthalate (5)	2018	ppb	6	0	2.0	ND - 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)	2018	ppb	80	n/a	71.0	17.9 - 81.4	By-product of drinking water chlorination	No
Haloacetic Acid 5	2018	ppb	60	n/a	16.6	7.8 - 20.1	By-product of drinking water chlorination	No
Chlorite	2018	ppm	1.0	0.800	0.121	<0.010 - 0.200	By-product of drinking water disinfection	No
Disinfectants	*Period*	*Unit*	*MRDL*	*MRDLG*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Chlorine	2018	ppm	4.0	4.0	RAA = 0.92	0.08 - 2.14	Water additive used to control microbes	No
Chlorine Dioxide	2018	ppb	800	800	600	10 - 600	Water additive used to control microbes	No
Unregulated Contaminant Monitoring	*Period*	*Unit*	*MCL*	*MCLG*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Sodium	2018	ppm	n/a	n/a	64.5	23.4 - 64.5	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)	2018	ppb	n/a	n/a	0.20	ND - 0.20	Used as an herbicide for weed control on agricultural crops	n/a
Chlorate (7)	2018	ppb	n/a	n/a	400	93 - 400	By-product of drinking water chlorination	n/a

Water Quality Table Footnotes:

(1) 0.39 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 90th 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.

Definitions and Key to Table

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.

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 frequently. Some of our data, though representative, are more than one year old.

2018 Newport Water System Special Monitoring

In 2018, Newport Water System monitored Station 1 and Lawton Valley Treatment Plants for three algal toxins at the raw water intake and total plant effluent. Samples were collected in June and September. Samples were collected and tested for *Microcystin* and *Cylindrospermopsin*. A new strip test, *Anatoxin-a*, was added in September 2018. All tests were negative.

Date	Sample Site	*Microcystin* (ppb)	*Cylindrospermopsin* (ppb)	*Anatoxin-a* (ppb)
6/7/2018	Station 1 Intake (South)	Not detected	Not detected	NA
6/7/2018	Station 1 TPE	Not detected	Not detected	NA
6/7/2018	Lawton Valley In-take (LV)	Not detected	Not detected	NA
6/7/2018	Lawton Valley Clear well	Not detected	Not detected	NA
9/11/2018	Station 1 Intake (North)	Not detected	Not detected	Not detected
9/11/2018	Station 1 TPE	Not detected	Not detected	Not detected

RIDEM Water Quality Monitoring of Newport's Nine Surface Water Reservoirs

In 2018, Newport Water surface water reservoirs were monitored by RIDEM. Observations were conducted every 2 weeks between June 2018 and December 2018. On 6/12/18 Sisson Pond was analyzed for algal toxins. On 9/19/18 Watson Reservoir was analyzed for algal toxins. Both samples had negative results.

Sample Site	*Microsystin* (ppb)	*Cylindrospermopsin* (ppb)	*Anatoxin (ppb)*	*Nodularin (ppb)*
SISSON POND	ND	ND	ND	ND
WATSON RESERVOIR	ND	ND	ND	ND

Long Term 2 Enhanced Surface Water Treatment Rule

The EPA adopted the Long term 2 Enhanced Surface Water Treatment Rule on January 5, 2006 to control microbial contaminants. Newport Water System is required to monitor our source raw water for 24 months, beginning in October 2016, for Cryptosporidium, Escherichia coli, and turbidity. The data presented in this report represent the source water entering into Station #1 Treatment Plant and Lawton Valley Treatment Plant. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease.

The purpose of the Long Term 2 Enhanced Surface water treatment Rule (LT2ESWTR) is to reduce illness linked to the contaminant Cryptosporidium and other pathogenic microorganisms. Cryptosporidium is a significant concern in drinking water because it contaminates most surface waters used as drinking water sources, it is resistant to chlorine and other disinfectants, and it has caused waterborne disease outbreaks in the United States. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Consuming water with Cryptosporidium may cause cryptosporidiosis, an abdominal infection with symptoms including nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease in a few weeks. However, immuno-compromised people are at a greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Date	Source	Treatment Plant	*Cryptosporidium* oocysts/10Liter	*E.coli* MPN/100 ml	Turbidity NTU
1/2/2018	NORTH	Station 1	0	1.0	2.09
1/2/2018	LAWTON VALLEY	Lawton Valley	0	5.2	2.21
2/7/2018	NORTH	Station 1	0	<1.0	1.90
2/7/2018	LAWTON VALLEY	Lawton Valley	0	6.3	4.26
3/5/2018	NORTH	Station 1	0	48.8	11.40
3/5/2018	LAWTON VALLEY	Lawton Valley	0	13.1	4.30
4/2/2018	NORTH	Station 1	0	4.1	9.11
4/2/2018	ST. MARY'S	Lawton Valley	0	1.0	4.58
5/7/2018	NORTH	Station 1	0	2.0	3.20
5/7/2018	LAWTON VALLEY	Lawton Valley	0	2.0	2.59
6/5/2018	NORTH	Station 1	0	21.3	2.30
6/5/2018	LAWTON VALLEY	Lawton Valley	0	31.8	6.52
7/2/2018	SOUTH	Station 1	0	2.0	3.92
7/2/2018	WATSON	Lawton Valley	0	<1.0	3.61
8/6/2018	SOUTH	Station 1	0	1.0	3.17
8/6/2018	WATSON	Lawton Valley	0	9.6	1.22
9/3/2018	SOUTH/ GARDINER	Station 1	0	2.0	2.59
9/3/2018	WATSON	Lawton Valley	0	6.3	2.27

Newport Water System Special Monitoring Metals and Synthetic Organic Compounds

As part of Newport Water's monitoring programs, we have continued testing sites for metals and synthetic organic compound every quarter in 2018. The samples sites are Station 1 total plant effluent, Lawton Valley Clearwell Tank effluent, and Lawton ValleyTank effluent. These sites represent treated water leaving the plant and entering the distribution system. The samples were tested for 11 metals and 36 synthetic organic compounds and the table presents only contaminants that were detected.

Station 1 TPE Metals	*Period*	*Unit*	*MCL*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Barium	2018	ppm	2	0.009	0.007 - 0.009	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Selenium	2018	ppm	0.05	0.001	ND - 0.001	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	2018	ppm	2	0.006	0.004 - 0.006	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	2018	ppm	2	0.006	0.004 - 0.006	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	2018	ppb	6	1.0	ND - 1.0	Discharge from rubber and chemical factories	No
Di-n-butylphthalate	2018	ppb	none	1.0	ND - 1.0	Unregulated. Source are man-made organic checmicals added to plastics	No
Lawton Valley clearwell Synthetic Organics	*Period*	*Unit*	*MCL*	*Detected Level*	*Range*	*Major Sources*	*SDWA Violation*
Di(2-ethylhexyl)phthalate	2018	ppb	6	3.0	ND - 3.0	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	2018	ppb	6	1.0	ND - 1.0	Discharge from rubber and chemical factories	No

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!