



City of Newport
Department of Utilities
Water Division



2021
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 contém informação importante sobre a qualidade da água na sua comunidade. Pergunta a quem saiba traduzir ou fala com alguém que compreenda o que está escrito.

Newport Water is pleased to present this water quality report for 2021 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 2021 through December 2021. Included are details about where your water comes from, what it contains, and how it compares to EPA standards. In 2021, Newport Water conducted 80,525 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 2021 the Newport System had no violations of the Safe Water Drinking Act standards. We have also included the unregulated contaminant, chlorate, in the table under Unregulated Contaminant monitoring. Newport Water System has initiated a monitoring program for chlorate in order to be prepared for any EPA regulation or health advisory in the future.

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:

Robert C. Schultz, Jr., 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/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.

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/lead.

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.

2021 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, 2021. 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.

<i>Microbiological Contaminants</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Turbidity (1)	2021	NTU	TT	n/a	0.28	n/a	Soil runoff	No
Turbidity (1)	2021	lowest monthly % of samples meeting limit	TT	n/a	100.00%	n/a	Soil runoff	No
Total Organic Carbon	2021	removal ratio	TT	n/a	1.27	0.44 - 1.58	Naturally present in environment	No
<i>Inorganic Contaminants</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Arsenic (5)	2021	ppb	10	0	0.001	ND - 0.001	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.	No
Barium (5)	2021	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)	2021	ppm	4.0	4.0	0.99	0.02 - 0.99	Water additive which promotes strong teeth	No
Nitrate (5)	2021	ppm	10	10	1.13	0.25 - 1.13	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.	No
Asbestos (9)	2020	MFL (Millions of Fibers per Liter)	7.0	7.0	<1.0	n/a	Decay of asbestos cement in water mains; erosion of natural deposits	No
<i>Inorganic Contaminants</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i># Of Sites > AL</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Copper (2)	2019	ppm	AL=1.3	1.3	0.052	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	No
Lead (2)	2019	ppb	AL=15	0	4.8	1	Corrosion of household plumbing systems; erosion of natural deposits.	No
<i>Synthetic Organic Contaminants Including Pesticides and Herbicides</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Di(2-ethylhexyl)phthalate (5)	2021	ppb	6	0	2.0	ND - 2.00	Discharge from rubber and chemical factories	No
<i>Disinfection By-products</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Total Trihalomethanes (TTHM) (4)	2021	ppb	80	n/a	61.4	29.4 - 74.7	By-product of drinking water chlorination	No
Haloacetic Acid 5	2021	ppb	60	n/a	16.8	5.2 - 21.5	By-product of drinking water chlorination	No
Chlorite	2021	ppm	1.0	0.800	0.253	<0.010 - 0.330	By-product of drinking water disinfection	No
<i>Disinfectants</i>	<i>Period</i>	<i>Unit</i>	<i>MRDL</i>	<i>MRDLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Chlorine	2021	ppm	4.0	4.0	RAA = 1.07	0.34 - 1.96	Water additive used to control microbes	No
Chlorine Dioxide	2021	ppb	800	800	650	10 - 650	Water additive used to control microbes	No
<i>Unregulated Contaminant Monitoring</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Sodium	2021	ppm	n/a	n/a	75.0	27.1 - 75.0	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)	2021	ppb	n/a	n/a	0.10	ND - 0.10	Used as an herbicide for weed control on agricultural crops	n/a
Chlorate (7)	2021	ppb	n/a	n/a	450	120 - 450	By-product of drinking water chlorination	n/a
Manganese (7)	2021	ppm	n/a	n/a	0.078	0.001 - 0.078	Erosion of natural deposits; runoff from orchards	n/a

Water Quality Table Footnotes:

- (1) 0.28 NTU was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%.
- (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.
- (8) Sampled and monitored at both the raw water supply as well as entry points to the distribution system.
- (9) Sampled within the distribution system.

Newport Water System Special Monitoring of 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 2020. 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. Below is a summary of the detected results. Please note ND = Not Detected

<u>Station 1 TPE Metals</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Barium	2021	ppm	2	0.011	0.006 - 0.011	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Nickel	2021	ppm	n/a	0.007	ND - 0.007	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	n/a
<u>Lawton Valley Clearwell Metals</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Barium	2021	ppm	2	0.008	0.002 - 0.008	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Lead	2021	ppm	Action Level= 0.015mg/L	0.014 (1)	ND - 0.014	Corrosion of household plumbing systems; erosion of natural deposits.	No
<u>Lawton Valley Tank Effluent Metals</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Barium	2021	ppm	2	0.008	0.002 - 0.008	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
<u>Station 1 TPE Synthetic Organics</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Di(2-ethylhexyl)phthalate	2021	ppb	6	1.0	ND - 1.0	Discharge from rubber and chemical factories	No
Methoxychlor	2021	ppm	0.04	0.0001	ND - 0.0001	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock	No
Metolachlor	2021	ppb	n/a	0.10	ND - 0.10	Used as an herbicide for weed control on agricultural crops	n/a
Benzo(b)fluoranthene	2021	ppb	n/a	0.10	ND - 0.10	Discharge from rubber and chemical factories	n/a
<u>Lawton Valley Clearwell Synthetic Organics</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Di(2-ethylhexyl)phthalate	2021	ppb	6	1.0	ND - 1.0	Discharge from rubber and chemical factories	No
Methoxychlor	2021	ppm	0.04	0.0001	ND - 0.0001	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock	No
<u>Lawton Valley Tank Effluent Synthetic Organics</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Methoxychlor	2021	ppm	0.04	0.0001	ND - 0.0001	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock	No

Footnote:

(1) Subsequent sampling and analysis of Lawton Valley Clearwell and Lawton Valley Tank yielded results of ND.