

KINGSTON WATER DISTRICT

Consumer Confidence Report – 2020

Covering Calendar Year – 2019



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 a safe and reliable supply of water.

If you would like to learn more, please contact Henry Meyer at (401) 783-5494 or write c/o the Kingston Water District, PO Box 216, West Kingston, RI, 02892. The District's office at 14 Frank Avenue (near Amtrak) is open from 8:00 a.m. to 4:00 p.m. Monday through Friday. The Board meets on the first Tuesday of each month at 5:00 p.m. at the district office and welcomes the public. The Budget Hearing and the Annual Meeting are held on the first Tuesday of November and December respectively.

Your water comes from:

Source Name	Source Water Type	Location
WELL #1A	Ground Water	Chipuxet Aquifer
WELL #2	Ground Water	Chipuxet Aquifer
WELL #3	Ground Water	Genesee Aquifer

We own two water towers, about 25 miles of mains, and are interconnected with the University of Rhode Island for times of mutual need.

The RI Department of Health and the University of Rhode Island, in cooperation with other state and federal agencies, have assessed the threats to the District's water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, how easily contaminants may move through the soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to assure that the water delivered to your home is safe and wholesome. However, the assessment found that the water source is at MEDIUM risk of contamination. This means that one day the water could become contaminated. Protection efforts are necessary to assure continued water quality. The complete Source Water Assessment Report is available at the office upon request

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:

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

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

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

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

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

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. 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 4 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 which 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. **The bottom line is that the water that is provided to you is safe.**

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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

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

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

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.

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.

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

Well Testing Results

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	2017 & 2018	0.017	0.01-0.017	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
NITRATE	2019	6.86	1.79-6.86	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alpha	2015 & 2017	.443	0.10-0.443	pCi/L	15	0	Erosion of natural deposits
Combined Radium 226/228	2015 & 2017	1.28	0.19-1.28	pCi/L	5	0	Erosion of natural deposits

Distribution System Testing

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER,	2015 - 2017	0.0109	0.0034 - 0.0191	ppm	1.3	0	Corrosion of household plumbing systems
Lead	2015 - 2017	<1	<1	ppb	15	0	Corrosion of household plumbing systems

Health Effects

Lead: 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 District 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>.

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/6/2019	22.7	7.07-22.7	MG/L	100
SULFATE	1/29/2018	11.1	11.1	MG/L	250

Special Notices:

Nitrates: As a precaution, we will notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply. *Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.*

Well #2: Because of elevated nitrate levels, the District had limited the use of this well to emergencies such as firefighting. Over the past year, the nitrate level has dropped from 6.86 to 1.79 ppm. Currently, the well has been returned to limited duty and is operated only three times a week for brief periods of time while we continue nitrate monitoring.

Treatment: Even though the District abandoned the last remaining lead water service in 1979, we take corrosion control very seriously. We add lime to neutralize the acidity of our well water and to minimize the corrosion of metal piping, especially the copper pipes found in most dwellings. We flush all water mains semi-annually to maximize water quality and freshness. And, we have standardized on the use of non-leaded brass service fittings.

Capital Projects: Last year, the Town and URI had initiated plans to upgrade the sewer lines on Rt. 138 during the summer of 2020. Though the plans were shelved for a future date, the district did install extra valves, such as the one shown below, on Lower and Upper College Roads at the intersections with Rt. 138 so that future work could go on with minimum risk of system shutdowns.

