

PRUDENCE ISLAND WATER DISTRICT

Consumer Confidence Report – 2019

Covering Calendar Year – 2018



This brochure is a snapshot of the quality of the water that Prudence Island Water District (PIWD) 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 401-683-0011 or email info@pih2o.org or attend a Water District Board meeting.

Your water comes from:

Source Name	Source Water Type
ARMY WELL	Ground Water
BRISTOL COLONY WELL	Ground Water
INDIAN SPRING WELL #1	Ground Water
INDIAN SPRING WELL #4	Ground Water

In 2018, PIWD only used two of these wells, Indian Spring Well #4 and the Army Well. The RI Department of Health, in cooperation with other state and federal agencies, has 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.

The assessment found that the water source is at LOW RISK of contamination. This does NOT mean that the water cannot become contaminated. Protection efforts are necessary to ensure continued water quality. The complete Source Water Assessment Report is available from the Prudence Island Water District or the Department of Health at (401) 222-6867.

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 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 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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The PIWD water system is required to test a minimum of 1 sample 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 2018 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, 2018. The state requires PIWD 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.

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.

Maximum Residual Disinfectant Level (MRDL): 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.

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.

Nephelometric Turbidity Unit (NTU): 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.

Running Annual Average (RAA): 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: PRUDENCE ISLAND WATER DISTRICT

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of October, 11 sample(s) returned as positive	Treatment Technique Trigger	0	Naturally present in the environment
E. COLI	In the month of September, 1 sample(s) returned as positive	MCL: A Routine Sample and a Repeat Sample are Total Coliform Positive, and One is also Fecal Positive/E. Coli Positive	0	Human and animal fecal waste

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/12/2018	2	2	ppb	10		Erosion of natural deposits
BARIUM	3/12/2018	0.002	0.001 - 0.002	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
NITRATE-NITRITE	3/20/2017	0.4	0.1 - 0.4	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	3/12/2018	1	1	ppb	50	50	Erosion of natural deposits

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2016 - 2018	0.104	0.0153 - 0.17	ppm	1.3	0	Corrosion of household plumbing systems
LEAD	2016 - 2018	1.2	1.2 - 2	ppb	15	0	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>.

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/12/2018	11.2	6.48 - 11.2	MG/L	1000

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

During the 2018 calendar year, we had the below noted violation(s) of drinking water regulations.

Federal Compliance Period	Analyte	Comments
7/1/2017 - 3/15/2018	CONSUMER CONFIDENCE RULE	Failed to deliver Consumer Confidence Report to the state on time
9/1/2018 - 9/30/2018	E. COLI	Exceeded MCL for E. coli
1/9/2018 - 1/18/2018	PUBLIC NOTICE	Failed to provide a copy of the notice and certification to the state
7/1/2018 - 7/31/2018	COLIFORM (TCR)	State level violation
10/1/2018 - 10/31/2018	COLIFORM (TCR)	State level violation

Additional Required Health Effects Language:

The 2016 CCR was mailed to customers on June 28, 2017. The Consumer Confidence Report Certification Form was delivered to RI Department of Health on March 15, 2018.
 A copy of the December 20, 2017 public notice and certification form were resubmitted to RI Department of Health on January 18, 2018.
 Please refer to enclosed Repeat Boil Water Notice.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Additional Required Health Effects Violation Notices:

PIWD had a total coliform-positive repeat sample following an E. coli-positive routine sample.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, 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. We were required to complete a Level 2 assessment because we found E. coli in our water system. In addition, we were required to take thirteen corrective actions and we completed twelve of these actions.

During the past year four Level 2 assessments were required to be completed for PIWD's water system. Four Level 2 assessments were completed. In addition, we were required to take thirteen corrective actions and we completed twelve of these actions.