Warwick Water Service Area
FACTS & FIGURES

Number of Services: 26,700
Distribution Mains: 375 Miles

Valves: 5,000
Hydrants: 1,800

Transmission Mains: 18 Miles
Storage Capacity: 12,500,000 gals

Annual Customer Usage: Approx. 3 billion gallons

El informe contiene informacion importante sobre la calidad del aqua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.

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WARWICK DEPARTMENT
OF PUBLIC WORKS

DIVISION OF WATER
935 Sandy Lane
Warwick, RI 02889

CONSUMER CONFIDENCE REPORT 2010

City of Warwick
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DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER
935 Sandy Lane - Warwick - RI - 02886
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How do I read these tables? IT'S EASY! These tables show the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even on the most minute traces, are listed here along with the highest levels allowed by regulation (MCL), the ideal goals for public health, the amounts detected, the usual sources of each contamination, footnotes explaining our findings and a key to units of measurement.

Our Potowomut customers are supplied by the Kent County Water Authority. This table represents the Kent County results.

The tables list all the drinking water constituents during the calendar year of this report. The presence of those constituents found in the water at the time of testing does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in these tables are from testing done in the calendar year of the report. In some cases, the EPA and the State may require us to monitor for certain constituents less than once per year because the concentrations of these constituents do not change frequently.

Kent County Water Authority routinely monitors for constituents in your drinking water in compliance with Federal and State Laws. This table shows the detection results from the numerous monitoring tests conducted for the period January 1st to December 31st 2010. The tables "Testing Results" identify those constituents that were "detected" in both the Kent County Water Authority and Providence Water Supply sources, as authorized by the EPA, the State has implemented reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

REGULATED CONTAMINANT	PERIOD	UNIT	MCL	MCLG	DETECTED	RANGE	MAJOR SOURCES	VIOLATION
BARIUM (1) (2)	2008	ppm	2	2	0.023	0.006 - 0.023	Erosion of natural deposits.	NO
CADMIUM (2)	2008	ppb	5	5	1	0 - 1	Corrosion of galvanized pipes; Erosion of natural Deposits.	NO
CHROMIUM (2)	2008	ppb	100	100	6	2 - 6	Erosion of natural deposits.	NO
FLOURIDE (1)	2010	ppm	4	4	0.23	0.9 - 1.2	Erosion of natural deposits. Water additive, which Promotes strong teeth.	NO
NITRATE-N (1)	2010	ppm	10	10	3.25	1.1 - 3.23	Erosion from natural deposits. Leaching from septic tanks; sewage; runoff from fertilizer use.	NO
TURBIDITY (1) (4)	2010	NTU	TT	N/A	0.30 (5)	0.05 - 0.30	Soil runoff	NO
TOTAL COLIFORM BACTERIA (3)	2010	% of Positive Presence of Coliform samples/ Mo. Bacteria in >5% of the monthly samples		0%	0.5%	0 - 0.5%	Naturally present in the environment.	NO
TOTAL ORGANIC CARBON (1)	2010	N/A	TT	N/A	1.21	0.90 - 1.59	Naturally present in the environment.	NO
TOTAL TRIHALOMETHANES (TTHM)	2010	ppb	80	N/A	75.4	72.3 - 78.5	By-product of drinking water chlorination.	NO
HALOACETIC ACIDS (HAA5)	2010	ppb	60	N/A	4.9	1.9 - 7.9	By-product of drinking water chlorination.	NO
CHLORINE FREE RESIDUAL	2010	ppm	4	4	0.33	0.24 - 0.40	Water additive used to control microbes.	NO
COMBINED RADIUM 226 AND 228 (2)	2008	pCi/L	5	0	2.2	ND - 2.2	Erosion of natural deposits.	NO
XYLENES	2010	ppm	10	10	2	1.1 - 2	Discharge from petroleum factories. Discharge from chemical factories.	NO

TAP WATER SAMPLES WERE COLLECTED FOR LEAD AND COPPER ANALYSES FROM SAMPLE SITES THROUGHOUT THE SYSTEM							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90th%TILE)	SITES ABOVE AL/TOTAL SITES	EXCEEDANCE	TYPICAL SOURCE
COPPER (ppm)	2009	1.3	1.3	0	0/10	NO	Corrosion of household plumbing systems
LEAD (ppb)	2009	15	0	0	0/10	NO	Corrosion of household plumbing systems

Kent County Water Authority Table Footnotes

(1) Detection level influenced by Providence Water purchases.

(2) Reflects sampling at groundwater source before blending with purchased water from Providence Water Supply Board.

(3) This value refers to the highest monthly percentage of positive samples detected during the year. For 2010, Warwick Water collected 113 samples for *Total Coliform Rule* compliance monitoring. None were positive.

(4) 0.30 was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%. The average turbidity value for 2010 was <0.10 NTU.

Our Warwick customers are supplied by multiple connections with the Providence Water System. This table represents the Providence test results.

REGULATED SUBSTANCES (CONTAMINANT)	PERIOD	UNIT	MCL	MCGL	DETECTED	RANGE	MAJOR SOURCES	VIOLATION
BARIUM	2010	ppm	2	2	0.01	N/A	Erosion of natural deposits	NO
CHLORINE (4) (as Cl2) Free Residual	2010	ppm	MRDL = 4.0	MRDLG = 4.0	0.34	0 - 1.6	Water additive used to control microbes	NO
FLOURIDE (5)	2010	ppm	4	4	1.98	0.78 - 1.98	Erosion of natural deposits. Water additive which promotes strong teeth.	NO
HALOACETIC ACIDS (HAA5) (4)	2010	ppb	60	0	23.1	7.4 - 35.6	By-product of drinking water chlorination	NO
NITRATE as N	2010	ppm	10	10	0.06	N/A	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.	NO
TOTAL COLIFORM BACTERIA (1)	2010	% of Positive Presence of Coliform samples/Mo. Bacteria in >5% of the monthly samples		0%	0%	N/A	Naturally present in the environment	NO
TOTAL ORGANIC CARBON (TOC) (2) removal ratio	2010	N/A	TT	N/A	1.21	0.90 - 1.59	Naturally present in the environment	NO
TOTAL TRIHALOMETHANES (TTHM) (4)	2010	ppb	80	80	59.7	34.0 - 98.6	By-product of drinking water chlorination	NO
TURBIDITY (3)	2010	NTU	TT	TT	0.30	0.05 - 0.30	Soil runoff	NO
UNREGULATED SUBSTANCES	**PERIOD**	**UNIT**	**MCL**	**MCGL**	**DETECTED**	**RANGE**	**MAJOR SOURCES**	**VIOLATION**
SODIUM	2010	ppm	N/A	N/A	9.8	N/A	Erosion of natural deposits. Runoff from road deicing operations.	NO

TAP WATER SAMPLES WERE COLLECTED FOR LEAD AND COPPER ANALYSES FROM SAMPLE SITES THROUGHOUT THE SYSTEM							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90th%TILE)	SITES ABOVE AL/TOTAL SITES	EXCEEDANCE	TYPICAL SOURCE
COPPER (ppm)	2010	1.3	1.3	0	2/72	NO	Corrosion of household plumbing systems
LEAD (ppb)	2010	15	0	2.77	2/72	NO	Corrosion of household plumbing systems

Water Quality Table Footnotes;

(1) This value refers to the highest monthly percentage of positive samples detected during the year. For 2010, Warwick Water collected 1187 samples for *Total Coliform Rule* compliance monitoring. None were positive for total coliform bacteria.

(2) In order to comply with the EPA standard, the removal ratio must be greater than 1. Detected level is the lowest removal ratio per quarter. Range is the lowest and highest removal ratios per month.

(3) 0.30 NTU was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%. The average turbidity value for 2010 was <0.10 NTU.

(4) Compliance is based upon quarterly running annual average and range is based upon the lowest and highest individual measurement.

(5) The highest single fluoride measurement was 1.98 mg/l. The second highest single fluoride measurement was 1.15 mg/l. The average fluoride concentration for the year was 0.96 mg/l.

Drinking Water Definitions

Maximum Contaminant Level (MCL):
The highest level of a containment that is allowed in drinking water. MCL's are set as close to the MCGL's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG):
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.

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

Treatment Technique (TT):
A required process intended to reduce the level of a containment in drinking water.

Variances and Exceptions:
State or EPA permission not to meet an MCL or a treatment Technique under certain conditions.

Table Unit Description

AL	Action Level
MCL	Maximum Contaminant Level
MCGL	Maximum Contaminant Level Goal
ppb	Parts Per Billion, or micrograms per liter
pCi/L	Piocuries per liter (a measure of radioactivity)
TT	Treatment Technique
NTU	Nephelometric Turbidity Units
ppm	Parts Per Million
N/A	Not Applicable
ND	None Detected
MDL	Method Detection Limit
HA	Health Advisory
MRDL	Maximum Residual Disinfection Level
MRDLG	Maximum Residual Disinfection Level Goal

The data presented in this report is from the most recent testing done in accordance with regulations.

The Department of Public Works, Water Division is pleased to present our customers this Water Quality Report. This report fulfills an Environmental Protection Agency requirement to provide a "Consumer Confidence Report" to all customers receiving water from a public system. The intent of this report is to inform you about the quality and the services we provide to our customers 24 hours per day, seven days a week.

This report details the origin of your water, and how it compares to the quality standards mandated by the federal government. Our professional staff of employees are trained and committed to the provision of safe drinking water through routine sampling of tap water that exceeds Health Department requirements and the prudent use of water revenues to maintain the system.

Your water system is comprised of two service areas as required by regulation. Potowomut System & Warwick System.

With the exception of the Potowomut area, one hundred percent of the water is purchased directly from the Providence Water Supply Board that is a surface water supplier. As the report will indicate, water for the Potowomut system is purchased from Kent County Water Authority that originates from Groundwater (wells) and surface water (reservoir). Finally, Warwick wholesales water to Kent County Water Authority at their connection on Quaker Lane via a 42" line owned and maintained by the City of Warwick.

For more information, call
Warwick Water Division at 738-2000, Ext. 6600
EPA Safe Drinking Water Hotline
(800) 426-4791

Warwick Department of Public Works Water Division and its predecessor have been delivering safe, dependable water, 7 days a week, 24 hours a day for over 65 years.

ADDITIONAL INFORMATION

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, radioactive material and can pick up substances resulting from the presence of animals or human activity.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocomprimised persons such as persons 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 healthcare providers. EPA/CDCV guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from Safe Drinking Water Hotline.

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 advice from your healthcare provider.

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. Warwick Water 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 and 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.epa.gov/safewater/lead.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day, at the MCL level, for a lifetime to have a one-in-a-million chance of having the described health effect.

On our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in your billing. Rate adjustments may be necessary in order to address these improvements.

We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life and our children's future.

SOURCE WATER ASSESSMENTS

KENT COUNTY WATER

In 2003, the Rhode Island Department of Health in cooperation with the other state and federal agencies assessed the contamination threat to the Scituate Reservoir. 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.

This assessment found that the water source has a LOW RISK of contamination. This does NOT mean that the water cannot become contaminated. Protection efforts are necessary to assure continued water quality. A summary of the Source Water Assessment is available from the Providence Water Supply Board, the Rhode Island Department of Health or on their website at www.provwater.com.

PROVIDENCE WATER

The Rhode Island Department of Health completed a source water assessment of the Kent County Water Authority supplies during 2003. Susceptibility to contamination was determined to be "MODERATE" according to the assessment guidelines used by the Department of Health during the assessment. This ranking is considered to be an average ranking for the water supply. Individual ground water recharge areas may fall into the high or extreme risk of susceptibility to contamination from land use activities. Future risk is expected to increase with continued development.

The gasoline additive Methyl Tertiary Ether (MTBE) is not a regulated substance requiring testing under the Safe Drinking Water Act.. The increasing occurrence of groundwater contamination by this product has prompted an initiative for surveillance testing as an indicator of contamination potential in local aquifers. The Rhode Island Department of Health maintains the present health advisory (ha) level at 40 ppm. Testing conducted at the Kent County Water Authority's groundwater resources revealed a detection of 1.0 ppb in the Spring Lake Well, 1.2 ppb Mishnock Well and 1.0 ppb in the East Greenwich Well. The levels observed in this reporting period are below the Department of Health 40 ppm health advisory level. Currently, this level of detection is not considered at risk for public drinking water concern by the Rhode Island Department of Health, but is a strong indicator of just how vulnerable to contamination our drinking water sources can be.

Visit the EPA's drinking Water website:
www.epa.gov/safewater