Annual Drinking Water Quality Report
For the Town of Warrenton
PWSID # 6061600

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year____2015_____ is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts taken by the Town of Warrenton to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, or if you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Edward B. Tucker, Jr., Director of Public Works/Utilities, at 347-1858
or
Glenn Coppage, Superintendent of Water Treatment, at 347-1103

The times and location of regularly scheduled Town Council meetings are the second Tuesday of each month at 7:00 p.m. at Town Hall, 18 Court Street in the Town of Warrenton.

GENERAL INFORMATION

Drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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, 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 microbiological contaminants are available from the 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, 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 source water include: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (2) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. (5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

SOURCE(S) and TREATMENT OF YOUR DRINKING WATER

The sources of your drinking water are from both surface water and groundwater as described below:

Warrenton Reservoir: Located north of town with a capacity of approximately 120 million gallons.

Airlie Reservoir: Located northwest of town with approximately 183 million gallons for town use.

Well # 5: Located northwest of town producing approximately 52,000 gallons per day.

Well # 6: Located north of town producing approximately 20,000 gallons per day.

Your drinking water supply is treated as described below:

The water from the reservoirs is treated by the Water Filtration Plant located at 7240 Blackwell Road, Warrenton, VA using coagulation, flocculation, sedimentation, and filtration. Chlorine is added to disinfect the water and a corrosion inhibitor is added. Both the reservoir water and the water from the wells are treated with fluoride to promote strong teeth.

A source water assessment of our system was conducted by the Virginia Department of Health. The Reservoirs were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. Town staff is aware of the potential contamination sources identified by the Virginia Department of Health and monitor those areas to prevent and/or limit any negative impacts to the system. The assessment report consists of maps showing the source water assessment areas, an inventory of known land use activities of concern, and documentation of any known contamination within 5 year study period. The report is available by contacting your water system representative at the phone number or address given elsewhere in this drinking water quality report.

The Town of Warrenton has an ongoing commitment to protecting its drinking water sources. Please report illegal dumping of waste motor oil and other potential contaminants immediately to us at the telephone numbers listed elsewhere in this report. Please keep the safety of your water supply in mind when applying fertilizer, herbicides and pesticides to your lawn and disposing of antifreeze, motor oil, and chemicals.

DEFINITIONS

In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

AL – Action Level – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL – Maximum Contaminant Level – 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.

MCLG – Maximum Contaminant Level Goal – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs 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 a 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ND – Non-detect - lab analysis indicates that the contaminant is not present.

NTU – Nephelometric Turbidity Unit – nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

Ppm – Parts per million - one part per million corresponds to one minute in two years or a single penny in $10,000.

Ppb – Parts per billion - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

pCi/L - Picocuries per liter - picocuries per liter is a measure of the radioactivity in water.

SMCL – Secondary Maximum Contaminant Level, or – Maximum contaminant levels may be either "primary" (PMCL), meaning based on health considerations or "secondary" (SCML) meaning based on aesthetic considerations.

TT – Treatment Technique) – a required process intended to reduce the level of a contaminant in drinking water.

WATER QUALITY RESULTS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2015. Most of the results in the table are from testing conducted in 2015. However, the state allows the Town to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though accurate, is more than one year old.

I. Microbiological Contaminants – All of the samples collected for bacteria in 2015 were negative.

II. Lead and Copper Contaminants –

Contaminant	Units of Measurement	Action level	MCLG	Results of samples for the 90th Percentile Value	Action Level Exceedance (Y/N)	Sampling Year	# of Sampling Sites Exceeding Action level	Typical Source of Contamination
Lead	ppb	15	0	<2	N	2015	2	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	0.2	N	2015	1	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. The Town of Warrenton 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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

III. Turbidity –

Contaminant	Treatment Technique Limits	Level detected	Violation (Y/N)	Sampling Year	Typical Source of Contamination
Turbidity	1 NTU maximum ≤0.3 NTU 95% of the time	highest single measurement = 0.18 NTU lowest monthly percentage = 100%	N N	2015 2015	Soil runoff

IV. Other Chemical and Radiological Contaminants –

Contaminant	Units of Measure ment	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Combined Radium	pCi/L	0	5	1.0	N	ND-1.0	2010	Erosion of natural deposits.
Beta Emitters	pCi/L	0	50	1.0	N	ND-1.0	2010	Decay of natural and man-made deposits.
Nitrate and Nitrite	mg/L	10	10	3.56	N	ND-3.56	2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride	mg/L	4	4	0.89	N	0.56-0.89	2015	Water additive which promotes strong teeth.
Barium	mg/L	2	2	0.026	N	0.011-0.026	2013 & 2015	Erosion of natural deposits

V. Disinfection By-Products, Precursors, and Residuals – Were there any detections? (X) Yes, as described below. ( ) No

Contaminant	Units of Measure ment	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Sample Year	Typical Source of Contamination
Total Trihalomethanes	ppb	N/A	80	67	N	19-110	2015	By-product of drinking water chlorination
Haloacetic Acids	ppb	N/A	60	33	N	17-50	2015	By-product of drinking water disinfection
Total Organic Carbon	mg/L	N/A	TT	N/A	N	N/A	2015	Naturally present in the environment
Chlorine	mg/L	4	4	1.05	N	0.02-1.81	2015	Water additive used to control microbes

The Town of Warrenton started special sampling in May 2014 and ending June 2015 for UCMR3 (Unregulated Contaminants Monitoring Round 3). This special sampling is required by EPA for Waterworks that serve more than10,000 customers. The results listed below only cover samples collected and analyzed in 2015. Also there were many other contaminants tested for but were not detected or below MRL (Minimum Reporting Limit).

VI. UCMR3 Inorganic Metals at entry points of distribution system

Contaminant	Units of Measure ment	Average	Violation (Y/N)	Range of Detection at Sampling Points	Sample Year	Typical Source of Contamination
Strontium	ppb	68	N	51-94	2015	Naturally present in the environment
Vanadium	ppb	1.2	N	0.22-1.9	2015	Naturally present in the environment
Chromium-6	ppb	0.15	N	0.15	2015	Naturally present in the environment

VII. UCMR3 Inorganic Metals at distribution system

Contaminant	Units of Measurement	Average	Violation (Y/N)	Range of Detection at Sampling Points	Sample Year	Typical Source of Contamination
Strontium	ppb	57	N	56-58	2015	Naturally present in the environment
Vanadium	ppb	0.35	N	0.26-0.43	2015	Naturally present in the environment
Chromium-6	ppb	0.22	N	0.22	2015	Naturally present in the environment, result of drinking

The Town constantly monitors for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

Are there other drinking water constituents we want to inform you about in this report? **(X)** Yes, as described below. ( ) No

We are pleased to report that MTBE (Methyl Tertiary Butyl Ether - a gasoline additive) has been tested for and found to be non-detectable.

The U.S. Environmental Protection Agency sets MCL's at very stringent levels. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

VIOLATION INFORMATION: Your water system did not have any violations during 2015.

The staff of the Town of Warrenton takes its responsibilities to the citizens of the community who are serviced by the water system very seriously. To ensure the safe and efficient operation of the Town's municipal water supply system and provide healthy, safe and aesthetically pleasing water to our customers is a service we are proud to perform. Should you have any questions, want additional information, or feel that a particular health effect has not been addressed, please contact Edward B. Tucker, Jr., Director of Public Works/Utilities at 347-1858 or Glenn Coppage, Superintendent of Water Treatment at 347-1103.

This Drinking Water Quality Report was prepared by: Glenn Coppage

DRINKING WATER QUALITY REPORT
FROM THE TOWN OF WARRENTON
P. O. Drawer 341, Warrenton, Virginia 201880341

PRSRT STD
U.S. POSTAGE
PAID
WARRENTON, VA
PERMIT NO. 100

********** ECRWSS
POSTAL CUSTOMER

WARRENTON, VIRGINIA 20186