Annual Drinking Water Quality Report for 2017
United Wappinger Water District
Wappingers Falls, New York 12590
Public Water Supply ID# 1330660

INTRODUCTION

To comply with State regulations, the United Wappinger Water District is issuing an annual report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **CAMO Pollution Control, Inc. at (845) 463-7310.** We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The time and place of the regularly scheduled Town Board meetings may be obtained from **Joseph Paoloni, Town Clerk, at (845) 297-5771.**

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is two major well fields: the Atlas well field and the Hilltop well field. All water passes through filters at each of these well fields. During 2017 our system did not experience any restriction of our water source. All of our water is treated with chlorine as a disinfectant to destroy microorganisms prior to distribution. The estimated hardness of your water is between 14 and 18 grains.

SOURCE WATER ASSESSMENT

The New York State Health Department has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimated of the potential for contamination of the source water; it does not mean that the water delivered to the consumers is, or will become, contaminated. See the section "Sampling Results" for a list of the contaminants that have been detected, if any.

The source water assessments provide resource managers with additional information for protecting source waters into the future. The county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, and planning and education programs. A copy of the assessment can be obtained by contacting us, as noted.

North Wappinger Water (Atlas) Well Field SWAP Summary

The source water assessment has rated our water source as having an elevated susceptibility to microbial and nitrate contamination. These ratings are due primarily to the close proximity of the wells to a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the residential land use and related activities in the assessment area. In addition, the wells are located in an area prone to flooding. The county and state health departments will use this information to direct future water protection activities.

Hilltop Water Well Field SWAP Summary

The source water assessment has rated our water source as having an elevated susceptibility to microbials, nitrates, salts, sulfate, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of the wells to a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the residential land use and related activities in the assessment area. In addition, the wells are located in an area prone to flooding. While the source water assessment has rated our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

FACTS AND FIGURES

Our water system serves 14,000 customers through 3,498 service connections. The total water produced in 2017 was 371.4 million gallons. The daily average of water treated and pumped into the

distribution system was 999,660 gallons per day. Our highest single day was 1.4 million gallons. The estimated amount of water delivered to our customers was 323.5 million gallons. This leaves an unaccounted total of 57 million gallons. This water was used for flushing mains, fighting fires, and leaks. In 2017, water customers were billed a minimum of $66.20 for up to and including 2,500 cubic feet, with an additional charge of $1.20 per 100 cubic feet for anything over 2,500 cubic feet.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: asbestos, total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts all compounds which were detected in your drinking water. The State allows us to test 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.

It should be noted that all drinking water, including bottled drinking 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Dutchess County Health Department at (845) 486-3404.

INORGANICS													
			Hilltop Well Field			Atlas Well Field			Distribution System				
Substance (Unit of Measure)	MCL	MCLG	Sample Date	Amount Detected	Range Low-High	Sample Date	Amount Detected	Range Low-High	Sample Date	Amount Detected	Range Low-High	Violation	Typical Source
Barium (ppm)	2	2	11/17	0.00874	N/A	11/17	0.0172	N/A	N/A	N/A	N/A	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride (ppm)	250	N/A	11/17	76.7	N/A	12/17	116	N/A	N/A	N/A	N/A	No	Naturally occurring or indicative of road salt contamination
Chromium	.1	.1	11/17	0.00231	N/A	11/17	0.00248	N/A	N/A	N/A	N/A	No	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppm)	N/A	N/A	11/17	.0149	N/A	11/17	.00144	N/A	N/A	N/A	N/A	No	Discharge from steel metal factories
Nitrate (ppm)	10	10	11/17	0.41	N/A	11/17	0.50	N/A	N/A	N/A	N/A	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium[1] (ppm)	see footnote	N/A	11/17	63.1	N/A	11/17	39.8	N/A	N/A	N/A	N/A	No	Naturally occurring; road salt; water softeners; animal waste
Sulfate (ppm)	250	N/A	11/17	19.2	N/A	11/17	20.9	N/A	N/A	N/A	N/A	No	Naturally occurring
Zinc (ppm)	5	N/A	11/17	0.0273	N/A	12/17	0.0201	N/A	N/A	N/A	N/A	No	Naturally occurring; mining waste
Color (pt co)	15	N/A	11/17	10	N/A	11/17	10	N/A	N/A	N/A	N/A	No	Naturally occurring

TAP WATER SAMPLES WERE COLLECTED FOR LEAD AND COPPER ANALYSES FROM SAMPLE SITES THROUGHOUT THE COMMUNITY

Substance (Unit of Measure)	Sample Date	AL	MCLG	Amount Detected (90^{th} %tile)	Range Low-High	Sites Above AL/Total Sites	Violation	Typical Source
Copper (ppm) See footnote [2]	9/16	1.3	1.3	0.17	0.0148-0.268	0/35	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) See footnote [2]	9/16	15	0	4.7	ND-8.9	0/35	No	Corrosion of household plumbing systems; erosion of natural deposits

DISINFECTION BYPRODUCTS													
			Hilltop Well Field			Atlas Well Field			Distribution System				
Substance (Unit of Measure)	MCL	MCLG	Sample Date	Amount Detected	Range Low-High	Sample Date	Amount Detected	Range Low-High	Sample Date	Amount Detected	Range Low-High	Violation	Typical Source
Haloacetic Acids (ppb)													
Royal Ridge STP	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Quarterly	9.625 Average	*7.1-11.9*	No	By-product of drinking water disinfection needed to kill harmful organisms
Chelsea Hydrant	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Quarterly	8.525 Average	*5.3-10.9*	No	
Total Trihalomethanes (TTHMs) (ppb)													
Royal Ridge STP	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Quarterly	37.06 Average	26.9-51.3	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Chelsea Hydrant	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Quarterly	22.73 Average	17 – 25.2	No	
Total Organic Carbon (mg/l) See Footnote [3]	TT	N/A	2017	1.36	ND – 2.32	2017	1.39	ND – 2.24	N/A	N/A	N/A	No	Naturally occurring
Turbidity NTU	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Daily 5 Days Per Week	0.12 Average	.09 – .21	No	Soil runoff

Footnotes

1 – Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

2 – The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

3 – The amount detected is the average of all samples taken in 2017

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): 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.

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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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 contamination.

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

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. **CAMO Pollution Control, Inc.** 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2017, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, and check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2013, the water main extension to the Chelsea/New York City water facility was completed at no expense to the district. This extension of water main, and the agreement with New York City, has given the Town the option of using New York City water when the City's upgrades are complete. In 2014 the water mains were extended to the hamlet of Chelsea.

As noted previously, the water quality in the United Wappinger Water District meets all standards and limits set forth by the State of New York, with no violations regarding water quality. The Dutchess County Health Department formulated a schedule which required the Town to have filters installed. In the fall of 2015 the filter project was completed. Now all the water for United Wappinger Water is filtered and this will improve quality and insure that dangerous viruses cannot enter thorough our source water. Along with the filter project, two separate distribution capital projects were completed in 2015; the MacFarlane Road Loop, and the Meadowood Loop. These additional loops will help to ensure water quality and quantity throughout the system.

In 2018 the town is planning on drilling at least one new well at the Hilltop Well Field. In addition, the filtration system and monitoring system will be replaced at the Meadowood Well Field. Both of these repairs will add to the source capacity.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call **CAMO Pollution Control, Inc. at (845) 463-7310** if you have questions.

WE ASK THAT ALL OF OUR RESIDENTS BE VIGILANT AND REPORT ANY SUSPICIOUS ACTIVITY IN THE AREA OF OUR WATER TREATMENT PLANT. PLEASE CONTACT LAW ENFORCEMENT AT 911.