# Annual Drinking Water Quality Report for 2021 Town of Kent Water District #1 Lake Carmel, New York Public Water Supply ID # NY3905708

#### INTRODUCTION

To comply with State regulations, Town of Kent Water District # 1, will be annually issuing a 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, we conducted tests for over 80 contaminants. We detected fourteen of those contaminants, and only found two of those contaminants at a level higher than the State allows. As we told you at that time, our water temporarily exceeded a drinking water standard and we are in the process of rectifying the situation. 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 the Putnam County Health Department @ (845) 808 1390. We want you to be informed about your drinking water.

## 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 includes: 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.

Your water system serves over 360 people through 90 connections. Our water source is three drilled rock wells near pump stations located on Marian Road and Horsepound Road. Storage tanks and pressure booster systems are located on Will Way. The water is disinfected with sodium hypochlorite to distribution.

#### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological, water quality parameters, asbestos, and synthetic organic compounds. The table presented below depicts which compounds 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 Putnam County Health Department at (845) 808-1390.

Table of Detected Contaminants								
Level								
Contaminant	Violation Yes/No	Date of Sample	Detected (Avg/Max) (Range)	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination	
Nitrate	No	04/13/21	2.36	mg/l	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Tylerace	110		2.30	mg/1	10		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural	
Nitrite	No	04/13/21	ND	mg/l	1	MCL = 1	deposits.	
Total Haloacetic Acids (Bromochloroacetic Acid, Dibromoacetic Acid, Dichloroacetic	No	08/18/21	7.3	ug/l	NA	MCL = 60	By-product of drinking water disinfection needed to kill harmful	
Acid) Total	No	08/18/21	7.3	ug/l	NA	MCL = 60	organisms	
Trihalomethanes (TTHM) (Bromodichlorometha ne, Bromoform, Chloroform, Dibromochlorometha ne)	No	08/18/21	23.00	ug/l	NA	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter	
Copper (See footnote 1)	No	06/17/21	0.309 Range (0.067- 0.465)	mg/L	0	AL=1.3	Corrosion of household plumbing, erosion of natural deposits	
Lead (See footnote 2)	No	06/17/21	0.0053 Range (0.0020- 0.0077)	mg/L	0	AL=.015	See above	
Barium	No	08/21/19	0.074	mg/L	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
Sodium (See Footnote 3)	No	08/21/19	16.2	mg/L	N/A	(See health effects)	Naturally occurring; Road salt; Water softeners; Animal waste.	
Zinc	No	08/21/19	0.007	mg/L	N/A	MCL=5	Naturally occurring; Mining waste.	
Chloride	No	08/21/19	62.5	mg/L	N/A	MCL=250	Naturally occurring or indicative of road salt contamination.	
Sulfate	No	08/21/19	26.1	mg/L	N/A	MCL=250	Naturally occurring.	
Perfluorooctanoic acid (PFOA) (See Footnote 4)	Yes	11/30/21	14.4	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.	

Perfluorooctane sulfonic acid (PFOS) (See Footnote 4)	Yes	10/14/21	23.7	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.
1,4-Dioxane (See Footnote 4)	No	11/30/21	0.24	ug/L	N/A	MCL = 1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.

#### Foot Notes:

- 1- The level presented represents the 90th percentile of the five 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 copper values detected at your water system. In this case, five samples were collected at your water system and the 90th percentile value was 0.566 mg/l. The action level for copper was not exceeded at any of the sites tested.
- 2 The level presented represents the 90th percentile of the five samples collected. The 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, five samples were collected at your water system and the 90th percentile value was 0.010 mg/l. The action level for lead was not exceeded at any of the sites tested.
- **3.** Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.

4.

		PFOA	PFOS	1,4-Dioxane
Sample Date	Sample ID	(ng/L)	(ng/L)	(ug/L)
04/13/2021	Horsepound – Entry	8.57	6.21	0.21
04/13/2021	Marion – Entry	11.5	16.0	0.21
05/06/2021	Marion – Entry	11.7	18.1	0.23
09/17/2021	Horsepound – Entry	9.10	5.06	ND
09/17/2021	Marion – Entry	14.4	21.0	ND
10/14/2021	Marion – Entry	11.2	23.7	ND
11/30/2021	Horsepound – Entry	9.72	8.12	0.20
11/30/2021	Marion – Entry	13.0	22.5	0.24
12/28/2021	Marion – Entry	13.3	21.9	ND

#### **Definitions:**

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

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

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

<u>Level 1 Assessment:</u> A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

<u>Level 2 Assessment:</u> A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

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

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

**Nanograms per liter (ng/l)**: Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**<u>Picograms per liter (pg/l)</u>**: Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

*Picocuries per liter (pCi/L)*: A measure of the radioactivity in water.

*Millirems per year (mrem/yr)*: A measure of radiation absorbed by the body.

<u>Million Fibers per Liter (MFL)</u>: A measure of the presence of asbestos fibers that are longer than 10 micrometers.

#### NON-DETECTED CONTAMINENTS

The following is a list of contaminants which were sampled during the year 2021. The sample results indicated a "non-detect". A non-detect means that laboratory analysis indicates that the constituent is not present. The list of non-detects are as follows:

Monobromoacetic Acid, Monochloroacetic Acid, Trichloroacetic Acid, Silver, Arsenic, Beryllium, Cadmium, Chromium, Iron, Dioxane 1.4, Manganese, Fluoride, Mercury, Nickel, Antimony, Selenium, Thallium, Color, Odor, Total Cyanide, Uranium, Gross Alpha, Radium 226, Radium 228, 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloroethane, Dichloroethane, 1,1-Dichloroethene, 1,1-Dichloropropene, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Dibromochloromethane, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, m&p-Xylene, Methyl t-butyl ether (MTBE), Methylene chloride, Naphthalene, n-Butylbenzene, n-Propylbenzene, o-Xylene, p-Isopropyltoluene, sec-Butylbenzene, Styrene, tert-Butylbenzene, Tetrachloroethene, Toluene, Total 1,3Dichloropropene, Total Trihalomethanes, Total Xylenes, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichloroethene, Trichloroethene, Vinyl chloride.

#### WHAT DOES THIS INFORMATION MEAN?

The table shows that our system uncovered some problems this year. PFOS & PFOA were in exceedance. The duration of the violation is ongoing. Below are the potential adverse health effects for both PFOS & PFOA. We are working with the Putnam County Health Department and New York State Health Department to achieve compliance with this new regulation instituted in August 2021.

<u>PFOA</u> - PFOA caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.

<u>PFOS</u> - PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOS in animals.

# IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2021, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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).

#### INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

#### Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

#### 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 firefighting 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.

#### **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 our office if you have questions.