Annual Drinking Water Quality Report for 2013 Westfield Water Department 42 English Street Public Water Supply ID# 0615782

Introduction

To comply with State regulations, the Westfield Water Department is 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 50 contaminants. We did detect some of those contaminants but almost all of them were below either the Action Levels or Maximum Contaminant Levels. We did however have one contaminant detected above the Maximum Contaminant Level. On 10/17/13 we detected a presence of Coliform bacteria. Five additional samples were subsequently collected after the date the bacteria was detected, Coliform bacteria was **NOT** detected in any of the samples. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected. The probable source of the Coliform bacteria on 10/17/13 probably came from a contaminated faucet tap and/or sample bottle. This report provides an overview of all 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 Wayne Cardy, Senior Operator, Erin Schuster, or Lynne Vilardo at 326-2832. We are here to serve the public and it is our goal that you are well informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the third Mondays of every month at 7PM in the North room at Eason Hall, 23 Elm Street or check us out on the web at www.villageofwestfield.org.

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 treatment system is owned by the Village of Westfield and maintained by the Village of Westfield Water Department, the office is located at 42 English Street, Westfield, NY. 326-2832. We have three New York State class IIA licensed water treatment operators; Wayne Cardy, Senior Operator, Erin Schuster, Operator and Accounting assistant & Alternate Operator Lynne Vilardo, with 52 years of combined water treatment experience. There is an operator on duty 7 days a week, 365 days a year and are responsible for all aspects of providing safe quality drinking water.

The treatment system includes three, U.S. Filter, upflow adsorption clarifiers and multi-media filter assemblies. Following filtration, the water is disinfected with enough chlorine to maintain a safe residual in the distribution system, and fluoridated. The Village of Westfield was one of the first in the state to fluoridate their drinking water, starting in 1950.

Our water comes from two surface sources, the Minton Reservoir and Chautauqua Creek. The Village of Westfield's watershed is approximately 27 square miles. The reservoir, which is a 55 million gallon impoundment, is supplemented from May until December with water from the creek. This helps to ensure a satisfactory supply of water.

Our water supply serves nearly 4000 residents of the village and portions of the Town of Westfield. Facilities served include three grape processing plants, a hospital, school, commercial bakery and health care center. Average daily production was 512,846 gallons per day with a peak output of up to 1,418,000 gallons per day. The maximum total peak production design of the water treatment plant is 3,000,000 gallons per day. During 2013 our system did not experience any restriction of our water source. The reservoir clarity this year is very good and we anticipate another year of quality product for the consumer.

The NYS DOH has evaluated this PWS's (Public Water Supply's) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

For Minton Reservoir and Chautauqua Creek this assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a high potential for protozoa contamination. No permitted discharges are found in the assessment area. There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination.

FACTS AND FIGURES

The amount of water delivered to customers (metered sales) was 142,826,000 gallons. Our production last year was 187,188,900 gallons. This leaves an 20.1 million gallons for filter washing and hydrant flushing and 24.2 million gallons unaccounted for. This water was used to run bleeders, fight fires and leakage. Of that amount, leakage alone accounts for less than 13% of the total amount produced. The basic service charge for water in the Village is \$39.00. The first 4,000 gallons (minimum bill) of water used, costs customers \$3.50 per thousand gallons, up to 60,000 gallons. Anything over 60,000 gal. costs \$2.50 per thousand. The water rates for outside the village are one and one-half times the village rates. Water is sold by bulk at the rate of \$4.00 per thousand gallons plus \$29.17 per hour labor.

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, turbidity, inorganic compounds, nitrate, nitrite, lead, copper, volatile organic compounds, total haloacetic acids, total trihalomethanes, and synthetic organic compounds. The table presented 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 Chautauqua County Health Department 753-4481.

VILLAGE OF WESTFIELD TEST RESULTS (DETECTS)

Contaminant	Violation	Date Of Sample	Level Dectected	Unit Measurment	MCLG	Regulatory Limit (MCL/AL)	Likely Source Of Contamination					
MICROBIOLOGICAL CONTAMINANTS												
Turbidity ¹	No	9/15/13	0.3	NTU	n/a	TT=95% of samples <0.5 NTU	Soil run-off					
Turbidity ¹	No	October 2013	100 % <.3	NTU	n/a	TT=95% of samples <.3 NTU	Soil run-off					
Total Coliform	Yes	10/17/13	1 positive sample	N/A	MCL=1 or more positive samples in 1 month	0	Naturally present in the environment					
RADIOLOGICAL CONTAMINANTS												
Radium226	No	6/14/98	.469	pCi/l	0	1.6	Erosion of natural deposits					
INORGANIC CON	TAMINATS				•	•						
Copper ²	No	6/26/12	0.710 Range = 0.016-1.1	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems: Erosion of natural deposits; leaching from wood preservatives.					
Fluoride	No	Daily (2013)	0.87 Range = 0.53-1.28	ppm	n/a	2.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.					
Lead ²	No	6/26/12	3.7 Range = ND-6.1	ppb	0	AL = 15	Corrosion of household plumbing systems: Erosion of natural deposits; leaching from wood preservatives.					

Barium	No	10/31/13	0.0415	ppm	1.0	1.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Sulfate	No	6/09/11	15.1	ppm	n/a	250	Natural deposits or salts; byproducts of coal mining; industrial wastes and sewage; streams draining coal or metal – sulfide mines.
Arsenic	No	10/31/13	0.6	ppb	10	N/A	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
DISINFECTION BY	YPRODUCT	S					
Chlorine Residual	No	Daily 2012	0.92 Range = 0.13 -1.91	ppm	n/a	4.0	Water additive used to control microbes
Trihalomethanes	No	Quarterly 1 st , 2 nd , 3 rd (2013)	50.16 Range 23.1-76.4	ppb	n/a	80	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	Quarterly 1 st , 2 nd , 3 rd (2013)	44.2 Range 27.0-56.2	ppb	n/a	60	By-product of drinking water chlorination.
STAGE 2 DISINFE	CTION BYP	RODUCTS (EI	DGEWATER (CONDOS)			
Trihalomethanes	No	November (2013)	74.4	ppb	n/a	80	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	November (2013)	46.7	ppb	n/a	60	By-product of drinking water chlorination.
STAGE 2 DISINFE	CTION BYP	RODUCTS (K	WIK FILL/REI	D APPLE)	•	•	
Trihalomethanes	No	November (2013)	55.0	ppb	n/a	80	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	November (2013)	52.2	ppb	n/a	60	By-product of drinking water chlorination.

Notes:

- 1– Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year was 0.30 NTU, which occurred on 9/15/13 at the point of entry. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although in the month of October we recorded our highest combined turbidity readings at no time in calendar 2013 did we exceed the 0.3 NTU turbidity limit, all readings recorded were in the acceptable range and within the legal limit.
- 2- The level presented represents the 90^{th} percentile of the 20 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 90^{th} percentile is equal to or greater than 90% of the copper values detected at your water system. The action level for copper was not exceeded at any of the sites tested.
- 2 The level presented represents the 90th percentile of the 20 samples collected. The action level for lead was not exceeded at any of the sites tested.

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 that is 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>Nephelometric Turbidity Unit (NTU)</u>: A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

<u>Milligrams per liter (mg/l)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm). **Picocuries per liter** (pCi/L): A measure of the radioactivity in water.

<u>Parts per million (ppm):</u> Or milligrams per liter (mg/l): One part per million corresponds to one minute in two years or a single penny in ten thousand dollars.

Parts per billion (ppb): Or micrograms per liter (ug/l): One part per billion corresponds to one minute in two thousand years or a single penny in ten million dollars.

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system uncovered a problem this year. The table shows that we had a MCL violation for Total Coliform bacteria. We detected the presence of the bacteria on 10/17/13. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliform bacteria were found in more samples than allowed and this was a warning of potential problems. Five additional samples were subsequently collected after the date the bacteria were detected; Total Coliform was **NOT** detected in any of those samples. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected. The probable source of Total Coliform on this occasion probably came from a contaminated faucet tap and/or a sample bottle. We will continue to improve our water treatment facilities so as to provide the highest of quality drinking water possible.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2013, our system was in compliance with all 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).

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l(parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2013 monitoring showed fluoride levels in your water were in the optimal range 95% of the time.

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 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 up 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, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

- A reminder to all of our consumers, the water department flushes hydrants a minimum of twice per year, once in the spring and once in the fall. There are notifications printed in the newspapers.
- ➤ Water meters are sealed with a Village of Westfield seal. **Meter seals should not be removed**. If the seal needs to be removed for repairs, pre-authorization is required; please contact the Village Offices Monday through Friday, 8 a.m. to 4:30 p.m. at 326-4961.
- ➤ The Treatment system is well maintained and in good working order.

Did you know that more than 25% of bottled water comes from a public source? The water is treated, purified and sold to us, often at thousand fold increase in price. Bottled water is regulated for safety, but it's a trick thing. The EPA regulates tap water, while the FDA oversees bottled. The FDA oversight doesn't apply to water packaged and sold within the same state, leaving some 60 to 70 percent of bottled water, including the contents of water cooler jugs free of FDA regulation, according to the NRDC's report.

Our water bills pay to keep our community tap water safe, reliable and there for us -24/7 without fail. For more information about what your tap water delivers you, visit www.nysawwa.org.

CLOSING

Ed LeBarron is the Public Works Superintendent in charge of the distribution system. The Department of Public works Advisory board meets as needed typically on the fourth Thursday of each month. Thank you for allowing us to continue to provide your family with quality drinking water this year. Boil orders will be occurring anytime water is shut off due to breaks or repairs. All residents will be notified when this occurs by a notice being hand delivered to each home. Please call our office if you have any questions.