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*Annual Drinking Water Quality Report for 2017*  
*Westfield Water Department*  
*42 English Street*  
*Public Water Supply ID# 0615782*

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## **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. This report provides an overview of all of last year's water quality. Last year, your tap water met all State drinking water health standards. However, once during our daily routine monitoring in 2017, we detected a high level of chlorine residual that surpassed the maximum contaminant level. Further details on the health effects and corrective actions are discussed later in this report. 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, Erin Schuster, Senior Operator, Brian Kinney, 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](http://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; Erin Schuster, Senior Operator, Brian Kinney, Operator and Lynne Vilardo Accounting assistant & Alternate Operator, with 22 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 524,815 gallons per day with a peak output of up to 1,066,400 gallons per day. The maximum total peak production design of the water treatment plant is 1,600,000 gallons per day. During 2017 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 178,446,000 gallons. Our production last year was 191,557,500 gallons. This leaves 10 million gallons used for filter washing and system maintenance, unaccounted for total of 7.5 million gallons. This water was used to flush mains, clean filters, fight fires and leakage. Of that amount, leakage alone accounts for less than 2% of the total amount produced. The basic service charge for water in the Village is \$46.80. The first 4,000 gallons (minimum bill) of water used, costs customers \$4.70 per thousand gallons, up to 60,000 gallons. Anything over 60,000 gal. costs \$3.70 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 \$30.33 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, radiological, 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 Detected	Unit Measurement	MCLG	Regulatory Limit (MCL/AL)	Likely Source of Contamination
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#### MICROBIOLOGICAL CONTAMINANTS

Turbidity <sup>1</sup>	No	7/27/17	0.02	NTU	n/a	TT=95% of samples <0.5 NTU	Soil run-off
Turbidity <sup>1</sup>	No	January (2017)	100 % <.30	NTU	n/a	TT=95% of samples <.3 NTU	Soil run-off
Distribution Turbidity <sup>1</sup>	No	12/3/17	1.42	NTU	n/a	MCL>5 NTU	Naturally present in the environment

#### RADIOLOGICAL CONTAMINANTS

Radium226	No	6/14/98	.469	pCi/l	0	1.6 (MCL)	Erosion of natural deposits
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#### INORGANIC CONTAMINANTS

Copper <sup>2</sup>	No	6/23/15 & 6/24/15	0.640 Range = 0.016-0.770	ppm	1.3	1.3 (AL)	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead <sup>3</sup>	No	6/23/15 & 6/24/15	2.0 Range = ND-3.80	ppm	n/a	15 (AL)	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium	No	9/13/17	.0392	ppm	1.0	1.0 (MCL)	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate	No	9/17/15	0.145	ppm	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Manganese	No	8/10/16	5.3	ppb	n/a	300	Naturally occurring; Indicative of landfill contamination.
Sodium	No	8/10/16	6.2	ppm	n/a	(see health effects)	Naturally occurring; Road salt; Water softeners; Animal waste. Water containing more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

Zinc	No	8/10/16	0.077	ppm	n/a	2.2(MCL)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Fluoride	No	Daily (2017)	Avg.=0.65 Range=0.55-0.80	ppm	n/a	(see health effects)	Naturally occurring; Road salt; Water softeners; Animal waste. Water containing more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

#### SYNTHETIC ORGANIC CONTAMINANTS

Hexachlorocyclopentadiene	No	12/7/16	0.077	ppb	n/a	5.0	Discharge from chemical factories.
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#### DISINFECTANT

Chlorine Residual <sup>4</sup>	Yes	8/11/17	4.74	ppm	n/a	4.0 (MCL)	Water additive used to control microbes
Chlorine Residual	Yes	Daily (2017)	Avg.=1.2 Range=0.35-4.74	ppm	n/a	4.0 (MCL)	Water additive used to control microbes

#### STAGE 2 DISINFECTION BYPRODUCTS (EDGEWATER CONDOS)

Trihalomethanes	No	Quarterly (2017)	Avg.=54.31 Range=34.52-76.4	ppb	n/a	80 (MCL)	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	Quarterly (2017)	Avg.=36.6 Range=10.4-53.6	ppb	n/a	60 (MCL)	By-product of drinking water chlorination.

#### STAGE 2 DISINFECTION BYPRODUCTS (KWIK FILL/RED APPLE)

Trihalomethanes	No	Quarterly (2017)	Avg.=44.65 Range=1.81-70.2	ppb	n/a	80 (MCL)	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	Quarterly (2017)	Avg.=31.83 Range=19.9-49.9	ppb	n/a	60 (MCL)	By-product of drinking water chlorination.

#### Notes:

1 – Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 7/27/17(0.20 NTU). State regulations require that turbidity must always be less than or equal to 1.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although January 2017 was the month when we had the highest turbidity measurements, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (1.42 NTU) occurred on 12/3/17. This value is below the State's maximum contaminant level (5 NTU).

2– The level presented represents the 90<sup>th</sup> 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<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 20 samples were collected at your water system and the 90<sup>th</sup> percentile value was calculated to be equal to the 3<sup>rd</sup> highest result which was 0.640 mg/l. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90<sup>th</sup> percentile of the 20 samples collected. The 90<sup>th</sup> percentile value at your water system was calculated to be equal to the 3<sup>rd</sup> highest result which was 2.0ug/l. The action level for lead was not exceeded at any of the sites tested.

4 – As you can see by the table, our system had one violation – the chlorine residual measured at the filter plant on 8/11/17 was 4.74 mg/l which exceeded the MCL (4.0 mg/l). This was the only time in 2017 that the chlorine was higher than the MCL and all of the chlorine measurements collected from the distribution system on that same day were acceptable (less than 4.0 mg/l).

#### 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 that is 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.

**Nephelometric Turbidity Unit (NTU)**: A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Milligrams per liter (mg/l)**: 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.

**Parts per million (ppm)**: 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?**

As you can see by the table, our system had one violation – the chlorine residual measured at the filter plant on 8/11/17 was 4.74 mg/l which exceeded the MCL (4.0 mg/l). This was the only time in 2017 that the chlorine was higher than the MCL and all of the chlorine measurements collected from the distribution system on that same day were acceptable (less than 4.0 mg/l). We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Lead and copper were detected within the system but of 20 samples collected none were found exceeding the action levels. We are however 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. The Village of Westfield 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>**.

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 2017, 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 0.7 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 2017 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 and put on the Village Facebook page.
- 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.
- If you have a water or sewer problem that is not related to billing please call 716-326-2832 between 7:00 a.m. and 3:30 p.m. We will answer questions and help resolve problems.
- The Treatment system is well maintained and in good working order.

In the upcoming year Village residents will see construction crews working throughout Westfield as the Village begins work on water system improvements.

Crews have already broke ground on Bliss Street where they will be installing a new 8” water main from our Bliss Street Booster Station, on the corner of Spring and Bliss Streets, to the Village line at Allen Road. The Booster Station will see some upgrades also. The two existing pumps will be replaced by three larger pumps as well as larger piping and new electronic controls. A new generator will be installed at this location which will allow residents on Bliss Street to maintain adequate water pressure during power outages.

The water line on West Main Street, from under the viaduct to the Village line, will be replaced with a new 12” water main. At the Water Filtration Plant, on Mount Baldy Road, contractors will be busy installing a new 12” forced water main from our pump house in the Chautauqua Gorge to the Reservoir.

The Water Filtration Plant will get some improvements also. On the exterior the roof, windows and doors are being updated, the brick will be repointed and a new generator put into service. Inside the Plant new valves will be installed, the filter media will be replaced and a new filter backwash system implemented.

The result of all this work will help the Village to better serve our residents and businesses.

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](http://www.nysawwa.org).

## **CLOSING**

The Village of Westfield has partnered with Slick Text of Jamestown to offer text notifications to residents. This service will be used to notify residents of important updates such as water leaks, street closings and power outages. To register, text DPW to 31996 or visit the Village website at [www.villageofwestfield.org](http://www.villageofwestfield.org) and use the link provided.