

*Annual Drinking Water Quality Report for 2017*  
*Village of Cassadaga*  
*22 Mill Street, PO Box 286*  
*Cassadaga, NY 14718*  
*Public Water Supply ID# NY 0600356*

## **INTRODUCTION**

To comply with State regulations, the Village of Cassadaga annually issues 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, 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. However, on 11/1/17 we detected the presence of Coliform bacteria in a routine water sample. Three additional samples were subsequently collected on 11/6/17. No Coliform or E coli bacteria were detected in any of those samples.

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 concerns about your drinking water, please contact Tom Fetter, Water Operator, at 716-595-3844 or the Village Offices at 716-595-3007. 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 meetings are held in the Community Room on the 1<sup>st</sup> and 3<sup>rd</sup> Wednesday of every month at 7:00 PM.

## **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 system serves approximately 635 people through 365 service connections, along with the Lily Dale Assembly and the Cassadaga Job Corps Center. Our water source consists of three groundwater wells – well #1, well #4 and well #5. Well #5, the newest wells, is treated by aeration to remove methane. Blended orthophosphate (Carus 8100) is added to the water from well #4 and #5 to reduce discoloration (brown water) caused by naturally occurring iron and manganese. Finally, chlorine is added to our water before it is pumped into the distribution system.

The NYS DOH has completed a source water assessment for Wells #1, and #4 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 estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. While some inorganic contaminants were detected in our water, 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section "Are there contaminants in our drinking water?" for a list of the

contaminants that have been detected.

The source water assessment has rated our wells 1 and 4 as having a medium susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. There has not been an assessment done on well #5. These ratings are due primarily to the close proximity of permitted discharge facilities (septic systems that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells and the associated activity in the assessment area. The wells draw from a confined aquifer. A copy of the assessment can be obtained by contacting us as noted above.

### 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, 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 Chautauqua County Department of Health and Human Services at 716-753-4481.

TABLE OF DETECTED CONTAMINANTS							
Contaminant	Violation	Date of Sample	Level Detected	Unit Measurement	Regulatory Limit MCL/AL	MCLG	Likely Source of Contamination
<b>INORGANIC CONTAMINANTS</b>							
Barium (Well #1)	No	5/5/15	0.053	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium (Well #4)	No	5/5/15	0.222	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium (Well #5)	No	12/13/16	1.05	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Iron (Well #4)	No	Quarterly 2017	Avg: 7.5; Range: ND-30.0	ug/l	300(MCL)	N/A	Naturally occurring.
Iron (Well #5)	No	Quarterly 2017	Avg: 240; Range: 230-250	ug/l	300(MCL)	N/A	Naturally occurring.
Manganese (Well #4)	No	Quarterly 2017	Avg: 10.25; Range: 20.0-21.0	ug/l	300 (MCL)	N/A	Naturally occurring. Can be indicative of landfill contamination
Manganese (Well #5)	No	Quarterly 2017	Avg: 14.75; Range: 14.0-15.0	ug/l	300(MCL)	N/A	Naturally occurring. Can be indicative of landfill contamination
Nitrate (Well #1)	No	2/8/17	0.848	mg/l	10.0(MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Nitrate (Well #4)	No	2/8/17	0.976	mg/l	10.0(MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Fluoride (Well #5)	No	12/13/16	0.3	mg/l	2.2(MCL)	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead(1)	No	6/6/17	1.9 Range= ND-19.3	ug/l	15(AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper(2)	No	6/6/17	0.355 Range= 0.0123-0.714	mg/l	1.3(AL)	1.3	Corrosion of household plumbing systems, Erosion of natural deposits;
Lead(3)	No	9/18/17	1.4; Range=	ug/l	15(AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits.

			ND-1.5				
Copper(4)	No	9/18/17	0.364; Range= 0.0149-0.439	mg/l	1.3(AL)	1.3	Corrosion of household plumbing systems, Erosion of natural deposits;

**VOLATILE ORGANIC CONTAMINANT**

1,1,1-Trichloroethane (Well #1)	No	8/23/17	0.84	ug/l	5.0(MCL)	N/A	Discharge from metal degreasing sites and other factories
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**STAGE 2 DISINFECTION BYPRODUCTS (Bard Rd)**

Haloacetic Acids	No	8/23/17	2.2	ug/l	60(MCL)	N/A	By-products of drinking water chlorination.
Total Trihalomethanes	No	8/23/17	51.7	ug/l	80(MCL)	N/A	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.

**RADIOLOGICALS**

Radium 228 Well #5	No	2/8/17 6/7/17	0.939 Range= 0.507-1.37	Pci/L	5(MCL)	N/A	Erosion of natural deposits.
Radium 226 Well #5	No	2/8/17 6/7/17	0.439 Range= 0.139-0.739	Pci/L	5(MCL)	N/A	Erosion of natural deposits.
Gross Alpha Well #5	No	2/8/17 6/7/17	1.27 Range= 1.04-1.50	Pci/L	15(MCL)	0	Erosion of natural deposits.
Gross Beta(5) Well #5	No	2/8/17 6/7/17	1.35 Range= 0.619-2.08	Pci/L	8(MCL)	0	Decay of natural deposits and man-made emissions.
Uranium	No	2/8/17 6/7/17	0.091 Range= 0.030-0.152	ug/l	30	0	Erosion of natural deposits

**DISINFECTANTS**

Chlorine Residual Entry Point #1	No	Daily (2017)	Avg.=1.67 Range= 0.99-2.11	mg/l	4(MCL)	N/A	Water additive used to control microbes
Chlorine Residual Entry Point #4	No	Daily (2017)	Avg.=1.55 Range= 0.78-1.99	mg/l	4(MCL)	N/A	Water additive used to control microbes
Chlorine Residual Entry Point #5	No	Daily (2017)	Avg.=0.73 Range= 0.25-1.09	mg/l	4(MCL)	N/A	Water additive used to control microbes

**MICROBIOLOGICAL CONTAMINANTS**

Total Coliform	No	11/1/17	1 positive sample	N/A	TT = 2 or more positive samples	N/A	Naturally present in the environment
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**Notes:**

1- The level presented represents the 90th percentile of the 20 sites tested for lead on 6/6/17. 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 values detected at your water system. In this case 20 samples were collected at your water systems and the 90th percentile value was calculated to be equal the second highest result value which was 1.9 ug/l. The action level for Lead was exceeded at one of the sites tested.

2- The level presented represents the 90th percentile of the 20 sites tested for copper on 6/6/17. Again the 90th percentile value was calculated to be equal the second highest result value for Copper which was 0.355 ug/l. The action level for Copper was not exceeded at any of the sites tested.

3- The level presented represents the 90th percentile of the 20 sites tested for lead on 9/18/17. Again the 90th percentile value was calculated to be equal the second highest result value for Lead which was 1.4 ug/l. In this second round of lead sampling, the action level was not exceeded at any of the sites tested, including the site that had first exceeded the action level in June.

4- The level presented represents the 90th percentile of the 20 sites tested for copper on 9/18/17. Again the 90th percentile value was calculated to be equal the second highest result value for Copper which was 0.364 mg/l. The action level for Copper was not exceeded at any of the sites tested

5- The NYSDOH considers 50 pCi/l to be the level of concern for beta particles.

**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.

**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).

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

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no violations. In November 2017, total coliform bacteria were detected in the routine monthly compliance sample collected at our system. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Four additional samples were subsequently collected and total coliform bacteria were not detected in 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.

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 the 10 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 Cassadaga 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).

## **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.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. Providing quality water is a challenge to assure that it is meeting the required standards at a reasonable cost. Our Superintendent of Public Works Tom Fetter retired at 25 years of dedicated service as your water operator. He will stay on as a consultant when needed to our newly hired Superintendent of Public Works Sam Alaimo. Sam will begin working on his Class C Water License.

The waterline on Mill Street has been completed this spring in hopes that the residents will have better quality water. We had awarded the contract to E&R General Contracting last fall but because of an early winter they held off until this spring. The cost of the waterline replacement was \$172,078 with payment from our Reserve for Debt Service.

We would like to replace waterlines on both North and South Main Streets when our Reserve is built back up so future borrowing is unnecessary. An approximate annual savings of \$30,000 is realized from our refinancing grant of 2017. We will continue replacing defective water meters as needed.

The rate structure will continue with a \$95.00 debt service per dwelling unit and a water rate usage of \$4.00 per thousand gallons. Partial payments will be accepted by the Village Clerk with total to be paid within 60 days; henceforth after that date a Shut Off notice will be issued. Any unpaid water bills in arrears over nine months as of April 1<sup>st</sup> shall be included in the annual tax levy. Water billings go out on June 1<sup>st</sup> and December 1<sup>st</sup>.

Another big project this spring was the Village's compost pile. You are well aware that it has been out of control for many years with illegal dumping and misuse. We had the piles and debris ground up by S. St. George at cost of \$ 9,135 and over 300 loads hauled away by Tri James who will sift the debris and reuse the rich soil as top soil. The board decided to purchase a used wood chipper at cost of \$6,000 so our DPW would be able to grind up limbs as they pick them up at curbside. All limbs must be no longer than 4 feet long or 4 inches in diameter for our DPW to pick up. The DEC states a compost pile only includes leaves, grass and wood chips. No commercial dumping will be allowed or any tree stumps, garbage, plastics, shingles, metal, concrete etc shall be dumped there. The compost pile is for village residents only and misuse will result in closing the compost pile permanently. We ask anyone who may encounter illegal dumping to notify the DPW at 595-3844.

The summer will be very busy with concerts, kayaking, walks, triathlons, car cruises and activities at beach and around the village. Enjoy the summer and stay safe and enjoy our quaint little village.

Please call our office if you have any questions at 716-595-3007 or Sam Alaimo at 716-595-3844. The following appointments for the year are: Trustees Bill Astry and Theresa Seibert have been appointed as Trustees in charge of water, Trustee Bill Astry and Cindy Flaherty in charge of streets, Trustee Theresa Seibert and Amanda Kalfas in charge of building and grounds, Trustee Amanda Kalfas and Cindy Flaherty in charge of Parks and recreation.

This institution is an equal opportunity provider, and employer