

Annual Drinking Water Quality Report for 2019
Village of Delhi
1 Depot Street, Delhi, NY 13753
(Public Water Supply Identification Number NY1200257)

INTRODUCTION

To comply with State regulations, the Village of Delhi, 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. Last year, your drinking water met all State drinking water health standards. This report is 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 New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Jerome Decker, Water Superintendent, PO Box 328, Delhi, NY 13753; Telephone (607) 746-2257.* We want our valued customers to be informed about their water service. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. They are held on the 3rd Monday of each month, 6:30 PM at the *Village Hall, Court Street, Telephone (607) 746-2258.*

WHERE DOES OUR WATER COME FROM?

The Village of Delhi draws its water from "groundwater" sources. Groundwater or well water is stored below the surface of the earth in deep, porous rocks called "aquifers." Groundwater is purified naturally as it filters through layers of soil, clay, rock and sand. This process, known as "percolation" takes years to complete. As a result, groundwater requires less treatment than surface water. The Village of Delhi water source consists of two wells located near the intersection of Depot Street and Main Street within the Village limits and one well located at 5 County Route 18 (Delaware Avenue). Well #1 and consists of a shallow drilled well, 55-feet deep. Well #1 was developed and first utilized by the Village in 1976. Pumping capacity for Well #1 is 350 gallons per minute. Well #2 was developed in 1976 and consists of a drilled well 55 feet deep with a 6-inch casing. Pumping capacity for Well #2 is 350 gallons per minute. Well #3 consists of a drilled well seventy feet deep with a twelve inch casing and seventeen foot of screen. The well has a capacity of 415 gallons per minute and an operating rate of 350 gallons per minute. This well was developed in 2013 and put into service in 2019. Treatment of the raw water produced by the wells consists of chlorination with sodium hypochlorite, which is used for disinfection to protect against contamination from harmful bacteria and other organisms. We add sodium hydroxide (caustic soda) for corrosion control to help reduce lead and copper leaching from residential plumbing. Fluoride is added to the water to help reduce dental carries and improve dental health. After treatment, water is pumped to two 500,000-gallon storage tanks to meet consumer demand and to provide adequate fire protection and into our distribution system to our customers.

The source water assessment performed by the New York State Health Department has rated our source water as having an elevated susceptibility to microbial contamination. It should be noted that the SWAP looks at the untreated water only. Our water is treated to minimize the potential sources of contamination. The SWAP summary for our water supply is attached to this report.

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 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.

FACTS AND FIGURES

The Village of Delhi provides water through 707 service connections to a population of approximately 3,800 people served year round. There are 3,075 SUNY Delhi students when the school is in session. The Village has no customers outside the Village limits. In 2019 the Village pumped 113,946,600 gallons of water. Our average daily demand is 312,182 gallons of water. Our highest single day was 564,100 gallons. During the winter months we experience our peak demand for water when SUNY Delhi College is in session. The charge for water in 2019 is based on a sliding scale from \$5.00 to \$8.96 per thousand gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Village of Delhi routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test (4) samples for coliform

bacteria once a month. The table presented below depicts which contaminants were detected in your drinking water. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted.

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 pose 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 New York State Department of Health, Oneonta District Office at (607) 432-3911.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We would like to note that our water is tested for sodium. Although there is no MCL for sodium there are several dietary warnings which are on page 4, footnote #3.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2019, 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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Delhi 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 or at <http://www.epa.gov/safewater/lead>

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 the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, the Village of Delhi monitors fluoride levels on a daily basis to make sure fluoride is maintained at the recommended level. In late May of 2015, the Village received notice from NYSDOH that the recommended optimal concentration was lowered to 0.7 mg/l. No operating range was suggested. The monthly average of Fluoride was within 0.1 mg/L of the 0.7 mg/L target, with a maximum daily high of 0.9 mg/L and a minimum of 0.6 mg/L. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/L MCL for fluoride

WATER CONSERVATION TIPS

There are a lot of things you can do to conserve water in your own home. The following tips may alert you to serious water wasting habits many of us have fallen into.

- ◆ Only run the dishwasher and clothes washer when there is a full load.
- ◆ Use water saving showerheads.
- ◆ Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute.
- ◆ Water gardens and lawn for only a couple of hours after sunset.
- ◆ Keep a bottle of drinking water in the refrigerator.

- ◆ Check faucets, pipes and toilets for leaks and repair all leaks promptly.
- ◆ Take shorter showers.

By applying the above water saving methods, water demand may be decreased by 25% or more for the average customer. By reducing or controlling water usage, a reduction in treatment and pumping costs incurred by the Village will be possible, and the operation of your home septic system may also be improved.

CAPITAL IMPROVEMENTS

In 2019 the following capital improvements were made to the water system:

- ◆ Approximately 2,900 feet of 8 inch water main and 190 feet of 30 inch water main was installed

CLOSING

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. 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.

**Delhi Village Water System
NY1200257
Source Water Assessment Summary**

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water sources 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 nitrates (and other 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. The nitrate levels in our sources are not, considered high in comparison with other sources in this area. See Section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected.

As mentioned before, our water is derived from two drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials. This rating is due primarily to the close proximity of low intensity residential activities within the assessment area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. While the source water assessment rates 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.

A copy of the full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.

VILLAGE OF DELHI TABLE OF DETECTED CONTAMINANTS							
Public Water Supply Identification Number NY1200257							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of Contamination
Inorganic Contaminants							
Barium	N	9/17/19 3/7/19	Well 1&2 = 65.8 Well 3 = 45.5	ppb	2000	2000	Erosion of natural deposits
Chloride	N	9/17/19 3/7/19	Well 1&2 = 57.6 Well 3 = 38.1	ppm	N/A	250	Naturally occurring or indicative of road salt contamination.
Color	N	9/17/19	Well 1&2 = 2	units	N/A	15	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant byproducts such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.
Copper Range of values	N	8/6/18- 9/5/18	0.064 ¹ 0.07-1.12	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching of wood preservatives
Fluoride	N	9/17/19	Well 1&2 = 555	ppb	N/A	2200	Erosion of natural deposits; water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	N	9/17/19 3/7/19	Well 1&2 = 12.5 Well 3 = 57.2	ppb	N/A	300	Naturally occurring.
Lead Range of values	N	8/6/18- 9/5/18	10 ² ND-22	ppb	15	AL=15	Corrosion of household plumbing systems; erosion of natural deposits;
Nitrate	N	9/17/19 3/7/19	Well 1&2 = 1.84 Well 3 = 1.7	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Odor	N	9/17/19	Well 1&2 = 1	Units	N/A	3	Organic or inorganic pollutants originating from municipal and industrial waste discharges; natural sources.
pH	N	9/17/19	Well 1&2 = 7.81	units	N/A	6.5-8.5	
Sodium ³	N	9/17/19 3/7/19	Well 1&2 = 44.1 Well 3 = 13.9	ppm	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate	N	9/17/19 3/7/19	Well 1&2 = 8.0 Well 3 = 7.36	ppm	N/A	250	Naturally Occurring
Zinc	N	9/17/19 3/7/19	Well 1&2 = 7.9	ppb	N/A	5000	Naturally occurring; Mining waste.
Nickel	N	3/7/19	Well 3 = 0.6	ppb	N/A	N/A	
Combined radium – 226 and 228	N	3/7/19	Well 3 = 1.58	pCi/l	0	5	Erosion of natural deposits.
m&p-xylene	N	3/7/19	Well 3 = 0.6	ppb	N/A	5	Leaks from gasoline tanks; Discharge from petroleum factories. Leaching of

							solvent from lining of potable water tanks.
Disinfection Byproducts							
TTHM [Total Trihalomethanes]	N	9/17/19	24.8	ppb	0	80	By-product of drinking water disinfection used to kill harmful organisms.
HAA5 [Haloacetic Acids]	N	9/17/19	4.44	ppb	0	60	By-product of drinking water chlorination needed to kill harmful organisms.
Chlorine Residual (average) range	N	Daily	0.8 0.40-1.5	ppm	MRDL	MRDL	Water additive used to control microbes
					G		
					N/A	4	
FOOTNOTES-							
<p>1. The level presented represents the 90th percentile of 20 test sites. 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, 20 samples were collected at your water system and the 90th percentile value was the 18th sample with the third highest value (level detected 0.95 mg/l). The action level for copper was not exceeded at any of the sites tested.</p> <p>2. The level presented represents the 90th percentile of 20 test sites. 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 system and the 90th percentile value was the 18th sample with the third highest value (level detected 10 µg/l). The action level for lead was exceeded at 2 of the sites tested.</p> <p>3. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets. Water containing more than 270 mg/l should not be used for drinking by persons on moderately restricted sodium diets.</p> <p>4. MCL's for TTHM and HAA5 are based on a Locational Running Annual Average (LRAA).</p> <p>5. Results based on daily chlorine residual testing.</p> <p><i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present.</p> <p><i>Parts per million (ppm) or Milligrams per liter (mg/l)</i> - one part per million corresponds to one minute in two years or a single penny in \$10,000.</p> <p><i>Parts per billion (ppb) or Micrograms per liter</i> - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.</p> <p><i>Picocuries per liter (pCi/L):</i> Picocuries per liter is a measure of the radioactivity in water.</p> <p><i>90th Percentile Value-</i> The values reported for lead and copper represent the 90th percentile. 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</p> <p><i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.</p> <p><i>Maximum Contaminant Level</i> - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.</p> <p><i>Maximum Contaminant Level Goal</i> The "Goal" (MCLG) is 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.</p> <p><i>Maximum Residual Disinfectant Level (MRDL):</i> 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.</p> <p><i>Maximum Residual Disinfectant Level Goal (MRDLG):</i> The level of a drinking water disinfectant below which there is no known or expected risk to health.</p> <p><i>Locational Running Average (LRAA)</i> - The LRAA is calculated by taking the average of the four most recent samples collected at each individual site.</p> <p><i>N/A-Not applicable</i></p>							