

# ***Annual Drinking Water Quality Report 2021***

Latham Water District • 347 Old Niskayuna Road • Latham, NY 12110  
(Public Water Supply ID # NY0100198)  
American Water Works Association member since 1952

***Peter G. Crummey, Town Supervisor***

## ***TOWN BOARD MEMBERS***

*Rick Field, Deputy Supervisor*  
*Alvin Gamble*  
*Jeff Madden*

*Danielle Futia*  
*Melissa Jeffers*  
*Jill A. Penn*

## ***INTRODUCTION***

To comply with State and Federal regulations, Latham Water District is annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your awareness of drinking water and understanding 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 exceed any maximum contaminant level or violate any other water quality standard. 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 your drinking water, please contact the Superintendent of the Division of Latham Water is John W. Frazer, Jr. P.E. at 518-783-2750. This report can also be found on our website – [www.colonie.org/departments/lathamwater](http://www.colonie.org/departments/lathamwater).

We want you to be informed about your drinking water and the public is invited to participate in the decisions that affect the Division of Latham Water. These decisions are made by the Town Board at their regularly scheduled meetings or at special public hearings. Town Board members Rick Field and Alvin Gamble are Latham Water's liaisons to the Board. Public notice of all meetings is printed in the Colonie Spotlight and



can also be found on the Town of Colonie website at [www.colonie.org/boards/townboard](http://www.colonie.org/boards/townboard). Generally, Town Board meetings are held on the 2<sup>nd</sup> and 4<sup>th</sup> Thursdays of each month.

### ***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 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 Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Latham's raw water sources are a blend of the Mohawk River and five (5) wells located on Onderdonk Avenue. The Stony Creek Reservoir continues to be utilized as an emergency raw water source. The Stony Creek Reservoir is located in the Town of Clifton Park, NY and was not used in 2021 as a raw water source. Although there has been no

recorded contamination of the Reservoir, potential sources can include highway runoff (de-icing chemicals and sand), residential lawn care runoff, agricultural runoff and accidental spills.

The wells are located on the treatment plant property and are used year-round. One of the wells is used at all times in an effort to "cycle" recharge to the groundwater table. Although there has been no recorded contamination of the wells, potential sources can include agricultural runoff, industrial discharges and accidental spills.

The quality of our sources before treatment is good and the treatment plant finishes the job by removing any solids, metals (primarily iron and manganese), color-producing compounds or other organic and inorganic compounds. At the treatment plant, we continuously monitor the clarity and disinfectant level to ensure the bacteriological safety of the water. Chemical treatment consists of oxidation, coagulation, chlorination and pH adjustment. Physical treatment consists of flocculation, settling and filtration.

## ***SOURCE WATER ASSESSMENTS***

The NYS DOH has completed a Source Water Assessment for the Mohawk River upstream of the Latham Water intake and the Stony Creek Reservoir. The assessments are summarized below. The assessments have identified potential contamination. It does not mean that the water delivered to your home is or will become unsafe to drink.

The assessment of the Mohawk River found that the amount of pasture in its watershed results in a potential for protozoa contamination. While there are many facilities present along the Mohawk that are permitted to discharge, they do not represent an important threat to source water quality.

The assessment of the Stony Creek Reservoir found that the amount of agricultural lands and the golf course in its watershed results in a potential for protozoa, phosphorus and pesticide contamination.

Latham's water treatment plant performs multi-level treatment to insure you receive safe drinking water. Additionally, as this annual report shows, your water is routinely monitored for a great number of potential contaminants.

## ***FACTS AND FIGURES***

The total water produced for 2021 was over 3.54 billion gallons. Our water system serves approximately 85,590 people through 25,370 service connections, virtually, all of this water is sold through metered connections. A small portion of the water produced by the treatment plant, however, is not billed to our customers. Unbilled water is used for treatment plant operations, water main testing, fire hydrant flushing, firefighting, water main breaks, etc. We estimate this "unbilled" amount of water to be 23.5% of water produced. The daily average of water treated and pumped into the distribution system is 9,702,486 gallons per day. In 2021, customers were charged \$3.65 per 1,000 gallons of water for an average annual charge, per residential user, of \$278.77.

## ***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 and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows 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 Albany County Health Department at 518-447-4620. Latham Water District routinely tests your drinking water for numerous contaminants. Bacteriological and Total Coliform testing is performed a minimum of 90 times per month and routine physical and chemical testing is performed every day, sometimes as often as every 4 hours.

Turbidity and chlorine residual monitoring is performed continuously, using automated on-line measuring devices. Other contaminants tested for include: turbidity, inorganic compounds, synthetic and naturally occurring organic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethane and haloacetic acids. None of the compounds we analyzed for were detected in your drinking water above the maximum contaminant level as defined by the State drinking water standards.

**TABLE OF DETECTED CONTAMINANTS**

Contaminant	Violation Yes/No	Date or Frequency of Sample	Level Detected Average or Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, MRDL, TT, or AL)	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Total Coliform <sup>1</sup>	No	Weekdays	0 positive samples	n/a	n/a	TT=See Note <sup>1</sup>	Naturally occurring

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Contaminant	Violation Yes/No	Date or Frequency of Sample	Level Detected Average or Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, MRDL, TT, or AL)	Likely Source of Contamination
Turbidity <sup>2</sup>	No	Continuous	0.29	NTU	n/a	TT= $\leq$ 1	Soil runoff
			100% <0.3			TT=95% of samples $\leq$ 0.3	
Distribution Turbidity <sup>2</sup>	No	Weekdays	0.13	NTU	n/a	MCL=5	Soil runoff
			(0.032-1.6)				
<b>Inorganic Contaminants</b>							
Copper <sup>3</sup>	No	9/2021	0.161	mg/L	1.3	AL=1.3	Corrosion of pipes
			(0.0166-0.196)				
Lead <sup>4</sup>	No	9/2021	0.0024	mg/L	0	AL=0.015	Corrosion of pipes
			(ND-0.0081)				
Sodium <sup>5</sup>	No	10/20/2021	29.0	mg/L	0	20	Naturally occurring
						270	
Nitrate, Nitrogen (as N)	No	10/20/2021	0.350	mg/L	10	MCL=10	Runoff from fertilizer
Color	No	Daily	2	Color Units	n/a	MCL=15	Naturally occurring
			(1-3)				
Chloride	No	Weekly	46.3	mg/L	n/a	MCL=250	Naturally occurring or road salt
			(33.9-90.2)				
Hardness, as CaCO <sub>3</sub>	No	Weekly	112.3	mg/L	n/a	n/a	Naturally occurring
			(69.6-155.4)				
Sulfate	No	10/20/2021	18.9	mg/L	n/a	MCL=250	Naturally occurring
Barium	No	10/20/2021	0.0301	mg/L	n/a	MCL=2	Erosion of natural deposits

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Contaminant	Violation Yes/No	Date or Frequency of Sample	Level Detected Average or Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, MRDL, TT, or AL)	Likely Source of Contamination
Manganese	No	4/17/2019	2.47	µg/L	n/a	MCL=300	Naturally occurring
			(1.12-2.47)				
Nickel	No	10/20/2021	0.0032	mg/L	n/a	MCL=0.1	Erosion of natural deposits
<b>Disinfection Byproducts</b>							
Total Trihalomethanes <sup>6</sup>	No	Quarterly	60.7	µg/L	n/a	MCL=80	By-products of drinking water chlorination
			(11.2-93.1)				
Haloacetic Acids <sup>6</sup>	No	Quarterly	48.3	µg/L	n/a	MCL=60	By-products of drinking water chlorination
			(15.1-75.8)				
Brominated Haloacetic Acids	No	10/17/2018	37.9	µg/L	n/a	n/a	By-products of drinking water chlorination
			(<0.300-37.9)				
Total Organic Carbon <sup>7</sup>	No	Monthly	1.7	Compliance Ratio	n/a	TT=Compliance Ratio ≥1	Naturally occurring
			(1.2-2.6)				
Entry Point Chlorine	No	Continuous	1.94	mg/L	4	MRDL=4	Added disinfectant
			(0.18-2.5)				
Distribution Chlorine	No	Weekdays	1.17	mg/L	4	MRDL=4	Added disinfectant
			(0.02-2.06)				
Entry Point Chlorine Dioxide	No	Daily	0.03	mg/L	0.8	MRDL=0.8	By-product of drinking water chlorination
			(<0.01-0.19)				
Entry Point Chlorite	No	Daily	0.40	mg/L	0.8	MCL=1.0	By-product of drinking water chlorination
			(0.12-0.70)				

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Contaminant	Violation Yes/No	Date or Frequency of Sample	Level Detected Average or Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, MRDL, TT, or AL)	Likely Source of Contamination
Distribution Chlorite <sup>8</sup>	No	Monthly	330	µg/L	800	MCL=1000	By-product of drinking water chlorination
			(<10-500)				
Distribution Chlorate <sup>8</sup>	No	Monthly	220	µg/L	n/a	n/a	By-product of drinking water chlorination
			(160-350)				
<b>Radionuclides</b>							
Gross Beta Particles <sup>9</sup>	No	Monthly on raw water	1.1	pCi/L	0	MCL=50	Erosion of natural deposits and man-made emissions
			<1.0-3.3				
Tritium	No	Monthly on raw water	0.6	pCi/L	0	MCL=20,000	Erosion of natural deposits and man-made emissions
			<1.2-4.0				

PWS Id No: NY0100198

Analysis performed or reviewed by NY Lab Id No: 10000

**Notes:**

<sup>1</sup> A Level 1 assessment is triggered if more than 5.0 percent of the routine/repeat samples in the same month are Total Coliform Positive or if a utility fails to take every required repeat sample after a total coliform positive event.

<sup>2</sup> 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 10/18/2021 (0.29 NTU), which was due to an instrumentation issue. A treatment technique violation occurs if more than five percent of the composite filter effluent measurements taken each month exceed 0.3 NTU. The turbidity level of representative samples of the filtered water must at no time exceed 1 NTU. We monitor distribution turbidity because high turbidity can hinder the effectiveness of disinfectants. Our highest single distribution turbidity measurement for the year occurred on 2/17/2021 (1.6 NTU), with a monthly average



of 0.15 NTU. A violation occurs when the monthly average of the results of all distribution samples collected in any calendar month exceeds the 5 NTU. All levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

<sup>3</sup> The level presented represents the 90th percentile of the 34 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 in the water system. In this case, 34 samples were collected in the water system and the 90th percentile value was the fourth highest sample (0.161 mg/L). The action level for copper was not exceeded at any of the sites tested.

<sup>4</sup> The level presented represents the 90th percentile of the 34 sites tested. The action level for lead was not exceeded at any of the sites tested.

<sup>5</sup> 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.

<sup>6</sup> The level presented represents the highest locational running annual average calculated from data collected. Total trihalomethanes and haloacetic acids are formed by the reaction of chlorine with naturally occurring organic material.

<sup>7</sup> The Interim Enhanced Surface Water Treatment Rule requires monitoring of raw and finished water for Total Organic Carbon (TOC). Depending on raw water alkalinity, water treatment should remove between 15-50% of the raw water TOC to reduce the amount of disinfection by-products produced. The removal, or compliance ratio, should be greater than or equal to 1 for each quarter. All levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

<sup>8</sup> Chlorite and chlorate are formed by the reaction of chlorine dioxide with naturally occurring organic material.

<sup>9</sup> The state considers 50 pCi/L to be a level of concern for beta particles.

### **Definitions:**

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

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 Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

Maximum Residual Disinfectant Level (MRDL): 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.

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.

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

Micrograms per liter (µg/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).



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

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

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

### **NON-DETECTED CONTAMINANTS**

**NOTE: The following contaminants were tested for but not found in the Latham Water District's finished water:**

Alachlor, Aldicarb, Aldicarb sulfoxide, Aldicarb sulfone, Atrazine, Carbofuran, Chlordane, 2,4-D, Endrin, Heptachlor, Heptachlor epoxide, Lindane, Methoxychlor, Polychlorinated biphenyls, Pentachlorophenol, Toxaphene, 2,4,5-TP (Silvex), Aldrin, Benzo(a)pyrene, Butachlor, Carbaryl, Dalapon, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dicamba, Dieldrin, Dinoseb, Hexachlorobenzene, Hexachlorocyclopentadiene, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Oxamyl (vydate), Picloram, Propachlor, and Simazine, Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4 Dioxane, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, N-Butylbenzene, Sec-Butylbenzene, Tert-Butylbenzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, Trans-1,3-Dichloropropene, ethylbenzene, hexachlorobutadiene, Isopropylbenzene, 4-Isopropyltoluene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, m-Xylene, o-Xylene, p-Xylene, Vinyl chloride, and Methyl-tertiary-butyl-ether, Total Glycol, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Selenium, Thallium, Fluoride, and gross alpha particles.

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

The results of Latham Water District's water quality testing show that we were in compliance with all applicable State and Federal drinking water quality requirements. However, we are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

### ***INFORMATION ON UNREGULATED CONTAMINANTS***

Between 2018 and 2020, Latham Water District was required to collect and analyze drinking water samples for the following unregulated contaminants and report those results to the Environmental Protection Agency (EPA) under the UCMR4 program. These results are not for compliance monitoring but will be used by the EPA to consider future regulations. Contaminants tested for include: Brominated Haloacetic Acids (HAA9), metals, pesticides, Semi-volatile chemicals (SVOC's), alcohols, Total Organic Carbon (TOC), Bromide and Cyanotoxins. Any detected UCMR4 contaminants will be listed in our Table of Detected Contaminants for five years. Non-detected contaminants will only be

listed for the year that they were analyzed. You may obtain the complete set of UCMR4 monitoring results by calling the Superintendent of the Division of Latham Water, John W. Frazer, Jr., P.E. at 518-783-2750.

### ***WHAT DOES THIS INFORMATION MEAN?***

As you can see by the table, our system had no violations of the State Sanitary Code. We have learned through our testing that some contaminants have been detected however, these contaminants were detected below New York State 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 pathogen 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).

### ***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 tower; 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 of water 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.



### ***2021 CAPITAL IMPROVEMENTS***

- No capital improvement projects were constructed in 2021 as all available funds were being reserved for our River Road Clearwell Replacement Project outlined below.

### ***PLANNED CAPITAL IMPROVEMENTS FOR 2022-2024***

- RIVER ROAD CLEARWELL REPLACEMENT ENGINEERING DESIGN

The Latham Water District awarded the engineering design contract for the River Road Clearwell Replacement Project to Ramboll Engineering. The project will include the following improvements: demolish existing River Road clearwells, construct new 2.0 million gallon clearwell with its associated piping, valves and mixer, rehabilitate existing control valves, improve high pressure interconnection between the 30” finished water pipeline to River Road Pump Station and clearwells at the Mohawk View Water Treatment Plant site, modify inlet piping at the backwash pump

station to improve chemical mixing, replace three 24” transmission main valves on the discharge of the River Road Pump Station, replace Mohawk View Water Treatment Plant filter valves/actuators and modify piping to incorporate automatic filter to waste capabilities on filters 1-6. The design was completed in 2022, and is being put out to bid in May of 2022. It is anticipated that construction will begin in the summer of 2022 and the project will be completed by the spring of 2024.

### ***ONLY TAP WATER DELIVERS***

How often do you think about your tap water? If you’re like most, probably not often. Tap water delivers so many things that no other water can deliver.



- ◆ It delivers public health.
- ◆ It delivers fire protection.
- ◆ It delivers economic development.
- ◆ It delivers quality of life.

For more information go to [www.awwa.org](http://www.awwa.org) and/or [www.drinktap.org](http://www.drinktap.org)

### ***CLOSING***

Latham Water District delivered safe water in 2021 with no water quality violations. We continually strive to improve our water quality by improving our treatment processes and by implementing capital improvement projects. In spite of the Covid-19 pandemic, the Latham Water District and its employees continue to deliver safe drinking water to the residents and businesses of the Water District. This water supply statement is being prepared for our customers in accordance with New York State Public Health Law. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. This report is being made available by the Superintendent of the Division of Latham Water, John W. Frazer, Jr., P.E. Any questions about this report (or the system in general) should be directed to him at 518-783-2750.