

# ***Annual Drinking Water Quality Report 2019***

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

## ***TOWN BOARD MEMBERS***

***Paula A. Mahan, Town Supervisor***

*Linda J. Murphy, Deputy Supervisor*

*Rick Field*

*Danielle Futia*

*David R. Green*

*Melissa Jeffers Von Dollen*

*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 over view 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, 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 member Linda J. Murphy is Latham Water's liaison 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. In addition, the Latham Water District has an emergency supply, the Stony Creek Reservoir. 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 2019 was over 3.38 billion gallons. Our water system serves approximately 82,000 people through 25,056 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 19.4% of water produced. The daily average of water treated and pumped into the distribution system is 9,255,504 gallons per day. In 2019, customers were charged \$3.55 per 1,000 gallons of water for an average annual charge, per residential user, of \$271.09.

## ***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 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 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 80 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. 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 OF SAMPLE	LEVEL DETECTED	AVG MAX/MIN RANGE	UNIT MEASUREMENT	REGULATORY LIMIT MCL, MRDL, AL or TT	MCLG	LIKELY SOURCE OF CONTAMINATION
<b>Microbiological Contaminants</b>								
Distribution System Turbidity (1)	No	Daily Testing	0.15 2.60 0.05-2.60	Avg Max Range	NTU	5.0 (MCL)	N/A	Soil Run-off.
Turbidity (1) Combined Filter Effluent high sample from 11/2/19	No	Continuous	0.07 0.04 0.25	Avg Min Max	NTU	TT=95% of Samples <= 0.3 NTU	N/A	Soil Run-off.
Total Coliform (2)	No	3-4 days per week	1 positive sample 8/21/19		N/A	Any Positive Sample	2 positive samples in any 1 month	Naturally present in the environment.

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CONTAMINANT	VIOLATION Yes/No	DATE OF SAMPLE	LEVEL DETECTED	AVG MAX/MIN RANGE	UNIT MEASUREMENT	REGULATORY LIMIT MCL, MRDL, AL or TT	MCLG	LIKELY SOURCE OF CONTAMINATION
<b>Inorganic Contaminants</b>								
Copper (3)	No	Sept 2018	0.11 0.04-0.35	Avg Range	mg/L	1.3 (AL)	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching.
Lead (4)	No	Sept 2018	<0.001 <0.001-0.006	Avg Range	mg/L	0.015 (AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching.
Sodium (5)	No	10/02/19	35.6		mg/L	See Note 5		Naturally occurring; Road salt; Water softeners; Animal waste.
Nitrate	No	10/02/19	0.7		mg/L	10.0 (MCL)	10	Runoff from fertilizer use; Erosion of natural deposits.
Color (range)	No	Daily	1-5	Range	Units	15 (MCL)	N/A	Color has no health effects. Its presences is aesthetically objectionable.
Chloride	No	Weekly	38.4 25.1-64.5	Avg Range	ppm	250.0 (MCL)	N/A	No health effects. Naturally occurring or indicative of road salt contamination.
Hardness	No	Weekly	118.8 90.4-145.8	Avg Range	ppm	No MCL	N/A	No health effects. Naturally occurring minerals.
Sulfate	No	10/02/19	57.0		mg/L	250 (MCL)	N/A	Geology.
Barium	No	10/02/19	0.026		mg/L	2.0 (MCL)	N/A	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Manganese	No	1/16/19 4/47/19	1.80 1.12-2.47	Avg Range	ug/L	No MCL	N/A	Naturally occurring; available with other elements & minerals; fertilizer. Water treatment Chemical. Essential nutrient.
<b>Radiologicals</b>								
Gross Alpha	No	Monthly on Raw Water	1.3 ND-3.3	Avg Range	pCi/L	15.0 pCi/L	0	Decay of natural deposits and man-made emissions.
Gross Beta (6)	No	Monthly on Raw Water	2.0 ND-8.5	Avg Range	pCi/L	50.0 pCi/L	0	Decay of natural deposits and man-made emissions.
Tritium	No	Monthly on Raw Water	91 ND-130	Avg Range	pCi/L	20,000 pCi/L	0	Decay of natural deposits and man-made emissions.

**TABLE OF DETECTED CONTAMINANTS**

CONTAMINANT	VIOLATION Yes/No	DATE OF SAMPLE	LEVEL DETECTED	AVG MAX/MIN RANGE	UNIT MEASUREMENT	REGULATORY LIMIT MCL, MRDL, AL or TT	MCLG	LIKELY SOURCE OF CONTAMINATION
<b>Disinfection Byproducts</b>								
Total Trihalomethanes (7)	No	Quarterly 2/6/19 5/1/19 8/7/19 11/6/19	53.2 - Highest locational running annual avg.  19.3-69.0 - Annual for all locations	Max  Range	ug/L	80 ug/L	N/A	By-products of drinking water chlorination. THHM's are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids (7)	No	Quarterly 2/6/19 5/1/19 8/7/19 11/6/19	46.8 - Highest locational running annual avg.  12.5-95.3 - Annual for all locations	Max  Range	ug/L	60 ug/L	N/A	By-products of drinking water chlorination.
Brominated Haloacetic Acids (HAA9)	No	1/16/19 4/17/19	3.47 <0.300-19.6	Avg Range	ug/L	No MCL	N/A	By-products of drinking water disinfection.
Total Organic Carbon (8)	No	Daily Testing	1.60 1.12-2.44	Avg Range	ppm	TT	N/A	Naturally present in the environment.
Free Chlorine Residual @ Entry Point	No	Continuous	1.97 1.7-2.5	Avg Range	mg/L	4.0 (MRDL)	N/A	Used in the disinfection and treatment of drinking water.
Free Chlorine Residual Distribution	No	5 days per week	1.34 0.03-2.18	Avg Range	ppm	4.0 (MRDL)	N/A	A measurable residual is required by NYSDOH.
Chlorine Dioxide Residual (range)	No	Daily Testing	0.02 <0.01-0.13	Avg Range	mg/L	0.8 (MRDL)	N/A	By-product of drinking water disinfection at treatment plants using Chlorine Dioxide.
Chlorite Entry Point	No	Daily Testing	0.39 0.04-0.76	Avg Range	mg/L	1.0 (MCL)	N/A	By-product of drinking water chlorination.
Chlorite Distribution	No	Monthly Testing	321 94-610	Avg Range	ug/L	1000 (MCL)	N/A	By-product of drinking water chlorination.
Chlorate Distribution	No	Monthly Testing	253 130-380	Avg Range	ug/L	No MCL	N/A	By-product of drinking water chlorination.

Analysis performed or reviewed by ELAP ID# 10000

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. State regulations require that 95% of the combined filter effluent turbidity samples collected have measurements below 0.30 NTU. Distribution system turbidity is collected a minimum of five times a week. A distribution system turbidity violation occurs when the monthly average of the results of all distribution samples collected in any calendar month exceeds the MCL. Our average distribution turbidity was 0.15 NTU with a single high turbidity measurement of 2.60 NTU. All levels recorded were well below the acceptable range allowed and did not constitute a treatment violation.
2. Before April 1, 2016, a violation occurs at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive. After April 1, 2016 a Level 1 assessment is triggered if 2 or more routine/repeat samples are total coliform positive in the same month.
3. The level presented represents the 90th percentile of the 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 at your water system. In this case, 31 samples were collected at your water system and the 90th percentile value was the fourth highest sample with a level of 0.15 mg/L.
4. The level presented represents the 90th percentile of the 31 samples collected. The action level for lead was not exceeded at any of the 31 sites tested.
5. 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.
6. The State considers 50 pCi/L to be the level of concern for beta particles.
7. The level presented represents the maximum locational running annual average calculated from the samples collected.
8. Total Organic Carbon itself is not regulated, but its calculated removal and compliance ratio must equal or exceed performance requirements established by USEPA. All levels recorded were well below the acceptable range allowed and did not constitute a treatment technique violation.

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 (MCL): The highest level of a contaminant

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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. MRDLG's do not reflect the benefits of the use of disinfectants for control of microbial contaminants.

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

Nephelometric Turbidity Unit (NTU): A measure of the optical 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).

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.

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

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

The results of Latham Water District's water quality testing shows 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***

In 2019, we were required to collect and analyze drinking water samples for the following unregulated contaminants and report those results to the Environmental Protection Agency (EPA). These results are not for compliance monitoring but will be used by the EPA to consider in developing future regulations. Contaminants tested for include: Brominated Haloacetic Acids (HAA9), metals, pesticides, Semi-volatile chemicals (SVOC's), alcohols, Total Organic Carbon (TOC) and Bromide. These samples were collected on January 16, 2019 and April 17, 2019. You may obtain the monitoring results by calling the Superintendent of the Division of Latham Water, John W. Frazer, Jr., P.E. at 518-782-2750.

### ***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 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 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.



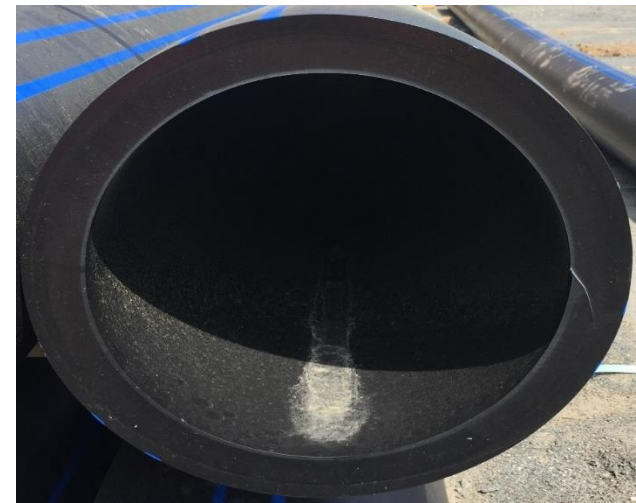
## ***2019 CAPITAL IMPROVEMENTS***

- **LOW LIFT PUMP STATION UPGRADE PROJECT**

In September of 2018, Latham Water District awarded a \$1.58 million-dollar project to Rozell Industries of Queensbury, NY to rehabilitate the Low Lift Pump Station. The Low Lift Pump Station provides raw source water from the Mohawk River to the Mohawk View Water Treatment Plant. Work included the replacement of four variable frequency drives, two pumps, a traveling screen and five flow control gates. The project was completed in November of 2019 and came in under budget.

- **640 LOUDON RD (NYS ROUTE 9) to MAXWELL ROAD WATER MAIN REPLACEMENT PROJECT**

The Latham Water District awarded a contract to ANJO Construction of Latham, NY to replace the 10-inch main along Loudon Road (NYS Route 9) from the intersection of Old Loudon Road and Loudon Road to the intersection of Loudon Road and Maxwell Road (approximately 4,000 feet). The total construction cost for this contract was \$904,500. The existing 10-inch cast iron main was installed in the early 1930s and has shown a significant increase in water main breaks. Latham Water District replaced the existing main with 12" high density polyethylene (HDPE) pipe to improve reliability and the available fire flow to these areas of the water distribution system. The HDPE pipe was installed using directional drilling to minimize surface disruption of the busy commercial area. The new 12-inch water main was placed in service in the Fall of 2019.



- **CITY OF ALBANY EMERGENCY INTERCONNECTION PROJECT**

The Town of Colonie, in partnership with the City of Albany Water Board, awarded a \$3.2 million contract to New Castle Paving of Troy, NY to install two emergency interconnections between our respective water distribution systems. The connections are at two points: the Loudonville Reservoir site and along New Karner Road (NYS Route

155). Since this project equally benefits both communities, the total project costs are being split equally between the municipalities. The Town received a Drinking Water Infrastructure Improvement Act Grant in the amount of \$960,000 towards its half of the project costs. The project includes the installation of approximately 4,000 feet of new 24” water main from the Town’s Loudonville Storage tank located on Albany Shaker Road to the City of Albany’s Loudonville Reservoirs and 3,500 feet of 16” main along New Karner Road from Rifle Range Road to an existing 20” City of Albany water main. The Loudonville interconnection, as well as a majority of the New Karner Road interconnection were constructed in 2019. New Castle Paving returned in the Spring of 2020 and completed the balance of the project.

- **RIVER ROAD CLEARWELL REPLACEMENT STUDY**

The Latham Water District, in conjunction with its consultant Ramboll Engineering, completed the River Road Clearwell Replacement Study. This study evaluated the finished water storage and water transmission mains that supply the River Road Pump Station. At the completion of the study, the engineer’s report identified the following improvements: demolish existing River Road Clearwells No. 2 and No.3, construct new 2.0 million gallon clearwell with its associated piping valves and mixers, rehabilitate existing control valves, improve high pressure interconnection between the 30” finished water pipeline to River Road and 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 engineer’s total cost estimate for this project is \$6,050,000.

### ***PLANNED CAPITAL IMPROVEMENTS FOR 2020***

Due to the magnitude of the engineer’s cost estimate for the River Road Clearwell Replacement Study, this will be the only capital improvement project that the Latham Water District will undertake in 2020. The Latham Water District will be issuing a request for proposal (RFP) to solicit engineering services to design all of the recommended improvements in the River Road Clearwell Replacement Study outlined above. It is anticipated that the RFP will be issued in June of 2020 and that an engineer will be selected in July of 2020. Design is expected to be completed in the Winter of 2020, with construction beginning in 2021.

## ***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 2019 with no water quality violations. We continually strive to improve our water quality by improving our treatment processes and by implementing capital improvement projects. 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 sent to you 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.