

Annual Drinking Water Quality Report for 2021
Town of Kingsbury & Kingsbury Industrial Park
6 Michigan Street, Hudson Falls, NY 12839
Public Water Supply Identification Number NY5722361 & NY5730125

INTRODUCTION

To comply with State regulations, the Town of Kingsbury 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 sources. Last year, your drinking water met all State drinking water health standards. This report is a snapshot 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. James M. Chase Sr., Water Superintendent, Mr. Chase has retired as of 4/1/22. Please direct all questions to Shane Reynolds, 437 Vaughn Rd., Hudson Falls, NY 12839; Telephone (518) 747-6231.* 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 Town Board meetings. They are held on the 1st and 3rd Mondays of each month, 7:00 PM at the Town Hall, 6 Michigan Street, Hudson Falls, NY 12839; Telephone (518) 747-2188.

WHERE DOES OUR WATER COME FROM?

The Town of Kingsbury purchases its water from the Town of Queensbury, which is treated surface water from the Hudson River. Water is pumped from the river into a complete treatment facility. The treatment process at the Queensbury Water Treatment Plants consists of chlorination to protect against contamination from harmful bacteria and other organisms; coagulation using alum to cause small particles to stick together when the water is mixed, making larger heavier particles; sedimentation allows the newly formed larger particles to settle out naturally; filtration removes smaller particles by trapping them in sand filters; pH adjustment for corrosion control; post chlorination to prevent bacterial contamination.

At our Pumping Station where we have our inter-connect with the Queensbury water supply, we have an automatic chlorination system in the pump station to boost the chlorine residual in the water as it goes into our distribution system.

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.

SOURCE WATER ASSESSMENT

The NYS Department of Health has evaluated the Hudson River's susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this water supply. The Queensbury Water District provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

Based on documented polychlorinated biphenyl (PCBs) contamination of sediments upstream of the intake, the raw water is tested quarterly for PCBs. During 2021, PCB's were not detected in source or finished drinking water. It should also be noted that rivers in general are highly sensitive to microbial contaminants.

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.

FACTS AND FIGURES

The Town of Kingsbury provides water through 471 service connections to a population of approximately 4,999 people. Our average daily demand is 129,108 gallons. Our single highest day was 277,168 gallons. We purchased 47,124,141 gallons of water from Queensbury in 2021. We billed 47,124,141 gallons. Unaccounted water amounted to 2,838,515 gallons. The difference (6%) between the volume billed and the total volume purchased. Non billed water accounted for 2,353,724 gallons is water used firefighting, flushing of the water distribution system and water lost to leaks. The water rates are as follows: Residential \$50.00 per quarter includes 10,000 gallons; over 10,000 gallons billed at \$2.75 per 1000; Commercial \$62.50 per month includes 12,500; over 12,500 gallons billed at \$2.75 per 1000; any Commercial Accounts over 4 units pay \$7.25 per unit and are given 1,500 more gallons per unit. Those outside the district pay 25% more.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Town of Kingsbury and the Queensbury Water District 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 6 samples for coliform bacteria each 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 Glens Falls District Office at (518) 793-3893.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables pages 4 & 5 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2021, Kingsbury 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 about drinking water 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 CRYPTOSPORIDIUM AND GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and

disinfection or by disinfection. Through September 2018, as part of LT2 Enhanced Surface Water Treatment Rule monitoring, Hudson River source water samples were collected and analyzed for Giardia cysts. Of these samples, five samples were confirmed positive for Giardia with the average being 5.6. Therefore, our monitoring indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where handwashing practices are poor.

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Through September 2018, monthly samples of our Hudson River source water were collected and analyzed for Cryptosporidium oocysts. Of these samples three showed oocysts with the average being 0.3. Our testing indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection.

Unregulated Contaminant Monitoring 4 was conducted during 2019. This is a requirement of the 1996 Safe Drinking Water Act amendments. This monitoring provides a basis for future regulatory action to protect the public health. The number in parentheses refers to the number of measured for a total of 30 analytes. The breakdown of analytes is as follows: semi volatile organic chemicals (3), pesticides and pesticide manufacturing byproduct (9), metals (2), alcohols (3), cyanotoxin chemical contaminants (10), brominated haloacetic acid groups (3) and indicator compounds (2). We have listed those compounds that were detected in the table of Detected Contaminants for the Queensbury Water Department. There are no associated MCL's for these compounds at this time with the exception of Manganese.

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 Town of Kingsbury 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>

WATER CONSERVATION TIPS

The Town of Kingsbury encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- ◆ Only run the dishwasher and clothes washer when there is a full load
- ◆ 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
- ◆ Check faucets, pipes and toilets for leaks and repair all leaks promptly
- ◆ Take shorter showers

CAPITAL IMPROVEMENTS

During 2021 there were no major capital improvements made to the water system.

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 system.

TOWN OF KINGSBURY TABLE OF DETECTED CONTAMINANTS Public Water Supply Identification Number NYS722361 & NYS730125						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Stage 2 Disinfection Byproducts (Quarterly samples from 2 sites on 2/3/21, 5/5/21, 8/4/21 & 11/3/21)						
Haloacetic Acids [HAA5](LRAA) ¹ Range of values for HAA5	N	LRAA1 20.8 (16-26) LRAA2 20.2 (15-23)	ppb	N/A	60	By-product of drinking water disinfection
TTHM[Total Trihalomethanes](LRAA) ¹ Range of values for TTHM	N	LRAA1 53 (37-63) LRAA2 56.2 (41-66)	ppb	0	80	By-product of drinking water chlorination
Chlorine (average value distribution system) (range of values for 2021)	N	0.28 0.11- 0.95	ppm	MRDLG N/A	MRDL 4	Used in the treatment and disinfection of drinking water
Inorganic Contaminants						
Copper (samples from 9/13/21) Range of copper concentrations	N	0.039 ² 0.004-0.089	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (samples from 9/13/21) Range of lead concentrations	N	1.8 ³ ND-3.7	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
NOTES:						
1. MCL for HAA5 and TTHM is based on a Locational Running Annual Average. The average shown represents the highest LRAA for 2021. The highest LRAA for TTHMs and HAA5 for each sample location was in the 2 nd quarter for THM and the 1 st quarter for HAA5 of 2021 for LRAA1. LRAA1 is 3004 Route 4 and LRAA2 is 12 Devine Drive.						
2. The level presented represents the 90 th percentile of 20 test sites. The action level for copper was not exceeded at any of the 20 sites tested.						
3. The level presented represents the 90 th percentile of 20 test sites. The action level for lead was not exceeded at any of the 20 sites tested.						

TOWN OF KINGSBURY INDUSTRIAL PARK TABLE OF DETECTED CONTAMINANTS Public Water Supply Identification Number NYS730125						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Stage 2 Disinfection Byproducts (Quarterly samples from 1 site on 2/3/21, 5/5/21, 8/4/21 & 11/3/21)						
Haloacetic Acids [HAA5](LRAA) ¹ Range of values for HAA5	N	21.5 11-24	ppb	N/A	60	By-product of drinking water disinfection
TTHM[Total Trihalomethanes](LRAA) ¹ Range of values for TTHM	N	53 34-62	ppb	0	80	By-product of drinking water chlorination
NOTES:						
1. MCL for HAA5 and TTHM is based on a Locational Running Annual Average. The average shown represents the highest LRAA for 2021. The highest LRAA for the TTHMs was in the 3 rd quarter while the highest HAA5 was in the 2 nd quarter of 2021.						

TOWN OF QUEENSBURY TABLE OF DETECTED CONTAMINANTS						
Public Water Supply Identification Number NY5600114						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants (sample data from 2/6/19 unless otherwise noted)						
Barium (from 2/2/21)	N	5	ppb	2000	2000	Erosion of natural deposits
Chloride	N	9.4	ppm	N/A	250	Naturally occurring or indicative of road salt contamination
Manganese	N	5	ppb	N/A	300	Naturally occurring
Nitrate (from 2/2/21)	N	0.14	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium ¹ (from 2/2/21)	N	19.5	ppm	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	N	19.2	ppm	N/A	250	Geology
Zinc	N	2	ppb	N/A	5000	Erosion of natural deposits
Long Term 2 Enhanced Surface Water Treatment Rule						
Giardia ² (9 samples analyzed in 2018, 5 of the samples showed Giardia cysts) average	N	range 0-21 avg 5.6 cysts	Oocysts Total count	N/A	N/A	Soil runoff
Cryptosporidium (9 samples analyzed in 2018)	N	range 0-1 avg 0.3	Total count	N/A	N/A	Soil runoff
Microbiological Contaminants						
Turbidity ³ (Highest turbidity sample from 9/24/21)	N	0.12	NTU	N/A	TT=1 NTU	Soil runoff
September ² 2021	N	100%			TT=95% of samples <0.3 NTU	
Total Organic Carbon⁴ (monthly samples from 2021)						
Treated Water (average)	N	1.66	ppm	N/A	TT	Organic material both natural and manmade; Organic pollutants, decaying vegetation
Range of values		1.2-2.1				
Unregulated Contaminant Monitoring (UCMR4)⁵ sample collected quarterly 3/13/19, 6/25/19, 9/12/19 & 12/9/19						
HAA9 (range of 4 quarters)	N/A	13.9-21.1	ppb	N/A	N/A	By-product of drinking water disinfection
HAA6Br (range of 4 quarters)	N/A	<0.3-1.0	ppb	N/A	N/A	By-product of drinking water disinfection
Total Organic Carbon Raw Water	N/A	3.8-4.63	ppm	N/A	N/A	Erosion of natural deposits
NOTES-						
1. Water containing more than 20 ppm should not be consumed by persons on severely restricted sodium diets.						
2. The Long Term 2 Enhanced Surface Water Treatment Rule was implemented by USEPA to monitor drinking water sources. Specifically, Giardia and Cryptosporidium which are highly resistant to traditional water treatment practices. Our system was required to test monthly for two years, starting October 2016. The results in the table are from Jan-Sept 2018. Please note that these results are prior to any water treatment. For more information please review the USEPA website.						
3. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest-level detected. Our highest single turbidity measurement for the year occurred 9/24/21 (0.12 NTU). State regulations require that entry point turbidity must always be below 1.0NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU. We met the requirement 100% of the time in 2021.						
4. It has been determined that with respect to raw water TOC levels and raw water alkalinity, the Queensbury WTP achieved removals that were well within the acceptable range allowed on their filter effluent.						
5. The UCMR4 regulation required us to collect samples to see the occurrence of certain contaminants in water and determine if future regulation is needed. There are no maximum contaminant levels for these chemicals at this time. Microcystins bi-weekly analyses during the summer of 2019 were also non-detect.						
<i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present.						
<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.						
<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.						
<i>Parts per trillion (ppt) or Nanograms per liter (nanograms/l)</i> - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000						
<i>Picocuries per liter (pCi/L)</i> - picocuries per liter is a measure of the radioactivity in water.						
<i>Nephelometric Turbidity Unit (NTU)</i> - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.						
<i>90th Percentile Value-</i> The values reported for lead and copper represent the 90 th 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 90 th percentile is equal to or greater than 90% of the lead and copper values detected at your water system						
<i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.						
<i>Treatment Technique (TT)</i> - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.						
<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.						
<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.						
<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.						
<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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination						
<i>Running Annual Average (RAA)</i> : The RAA is calculated each quarter by taking the average of the four most recent samples collected.						
<i>Locational Running Average (LRA)</i> : The LRA is calculated by taking the average of the four most recent samples collected at each individual site.						
N/A-Not applicable						

Appendix A

New York State Sanitary Code Compliance Monitoring Requirements- Compounds Analyzed that were Below Limits of Detection
TOWN OF KINGSBURY & KINGSBURY INDUSTRIAL PARK TEST RESULTS
Public Water Supply Identification Number NYS722361 & NYS730125

CONTAMINANT		MONITORING FREQUENCY	CONTAMINANT	CONTAMINANT	MONITORING FREQUENCY
Asbestos		Every 9 years Sample from 9/22/11 NON-DETECT	POC's (Volatile Organic Compounds) Benzene Bromobenzene Bromochloromethane Bromoethane N-Butylbenzene sec-Butylbenzene Tert-Butylbenzene Carbon Tetrachloride Chlorobenzene 2-Chlorotoluene 4-Chlorotoluene Dibromethane 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 p-Isopropyltoluene Methylene Chloride 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 MTBE		
Antimony	Monitoring requirement is one sample annually Sample results from 2/2/21 NON-DETECT	Monitoring requirement is one sample annually Sample results from 12/1/21 NON-DETECT			
Arsenic					
Beryllium					
Cadmium					
Chromium					
Mercury					
Nickel					
Selenium					
Thallium					
Mercury					
Cyanide					
Fluoride					
Color					
Iron					
Silver					
	Monthly	Monitoring requirement is one sample annually Sample results from 12/1/21 NON-DETECT			
Taste	Monthly	Monitoring requirement is one sample annually Sample results from 12/1/21 NON-DETECT			
Odor					
E. coli		Total coliform & E. coli	Monitoring is 6 samples/ month NON-DETECT		
Total Coliform	NON-DETECT				
E. coli	NON-DETECT				
		Radiological Parameters			
		Gross alpha	Sample from 3/2/16	requirement is one sample every six-nine years. NON-DETECT	
		Radium 226	Sample from 4/6/17		
		Radium 228			
Synthetic Organic Chemicals					
Synthetic Organic Chemicals (Group I)			Synthetic Organic Chemicals (Group II)		
Alachlor	Aldicarb	Aldrin	Carbaryl	Monitoring requirement is every 18 months NON-DETECT Sample from 6/2/21 *State waiver does not require monitoring these compounds	
Aldicarb Sulfoxide	Aldicarb Sulfone	Butachlor	Di(2-ethylhexyl)adipate		
Atrazine	Carbofuran	Dalapon	Dicamba		
Chlordane	Dibromochloropropane	Di(2-ethylhexyl)phthalate	Dinoseb		
2,4-D	Endrin	Dieldrin	Endothall*		
Ethylene Dibromide	Heptachlor	Diquat*	Hexachlorobenzene		
Lindane	Methoxychlor	Glyphosate*	3-Hydroxycarbofuran		
PCB's	Toxaphene	Hexachlorocyclopentadiene	Metolachlor		
2,4,5-TP (Silvex)	1,4-Dioxane	Methomyl	Oxamyl vydate		
PFOA	PFOS	Metribuzin	Propachlor		
PCB (11/2/21)		Pichloram	2,3,7,8-TCDD (Dioxin)*		
		Simazine			