Annual Drinking Water Quality Report for 2022 Town of LaGrange – Grandview Water Johnson Road, LaGrangeville, NY Public Water Supply ID# 1302791

INTRODUCTION

To comply with State regulations, Grandview Water System is 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 tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard 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 concerning your drinking water, please contact H2o Innovations at (845) 486-1030. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled board meetings. The meetings are held every second and fourth Wednesday of each month at the town hall at 7:00 PM.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves 112 people through 48 service connections. Our water source is two groundwater wells, which are located off of Johnson Road. The water is treated with C-39, an orthophosphate added for corrosion control. The water is chlorinated prior to distribution.

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 Dutchess County Health Department at (845) 486-3400.

		Tab	ole of Detec	ted Cont	taminan	ts			
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination		
norganic Contaminants									
Barium	No	8/19	0.0064	Mg/l	2.0	2.0	Erosion of natural deposits		
Copper	No	9/17- 9/21/20 11/4/20	0.485 0.25-0.5 260 ND-260	Mg/l	1.3	AL=1.3	Corrosion of galvanized pipes; Erosion of natural deposits		
Iron	No	7/16	155	Ug/l	300	N/a	Naturally occurring		
Manganese	No	7/16	8.8	Ug/l	300	N/a	Naturally occurring		
Nickel	No	8/19	0.0015	Mg/l	0.1	0.1	Naturally occurring		
Hardness	No	5/08	170	Mg/l	N/A	N/a	Naturally occurring		
Nitrate	No	4/6/22	5.5	Mg/l	10	10	Runoff from fertilize use; leaching from septic tanks; Erosio of natural deposits		
Sodium	No	7/16	81.6	Mg/l	N/A	* See health effects noted below	Naturally occurring		
Chloride	No	7/16	148	Mg/l	N/A	250	Naturally occurring		
Lead	NO	6/14-21	1.4 (ND-1.5)	Ug/l	0	.015	Corrosion of household plumbing systems; Erosion o natural deposits		
Copper	No	6/14-21	.340 (.035- .410)	Ug/l	0	1300			
Zinc	No	4/15/21	62	Mg/l	5	N/A	Naturally occurring Mining waste.		

Organic Contaminants									
THM	No	9/18/20	23	Ug/l	N/A	80	By-product of drinking water chlorination		
НАА	No	9/18/20	29.4	Ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms		

Radioactive Contaminants							
Uranium	No	7/16	0.364	pCi/l	0	MCL=30	Erosions of natural deposits
Gross alpha	No	7/16	0.890	pCi/l	0	15	Erosion of natural deposits
Combined radium	No	7/16	0.0.775	pCi/l	0	5	Erosion of natural deposits

Synthetic Organic Contaminants: PFOA, PFOS and 1,4 Dioxane – Well 1

	Yes	2/17/22	10.09				Released into the
Perfluorooctanoic Acid	No	6/29/22	9.46	ng/l	10	10	environment from
(PFOA)	No	9/21/22	9.90				widespread
	No	12/19/22	7.87				commercial and
							industrial
							applications
	No	2/17/22	5.36				Released into the
Perfluorooctanesulfonic	No	6/29/22	6.14	ng/l	10	10	environment from
(PFOS)	No	9/21/22	7.02				widespread
	No	12/19/22	4.58				commercial and
	1.0						industrial
							applications

Table of Unregulated Contaminants							
Contaminant	Date of	Level	Unit	Likely Source of			
	sample	Detected	Measurement	Contamination			
Synthetic Organic conta	minants We	ll #1					
Perfluorobutanoic Acid	2/17/22	6.17		Released into the environment			
(PFBA), ng/L	6/29/22	3.64	ng/L	from commercial and industrial			
, , ,	9/21/22	4.43		sources and is associated with			
	12/19/22	4.78		inactive and hazardous waste sites.			
Perfluoropentanoic Acid	2/17/22	6.51		Released into the environment			
(PFPeA), ng/L	6/29/22	5.36	ng/L	from commercial and industrial			
, , ,	9/21/22	5.94		sources and is associated with			
	12/19/22	5.90		inactive and hazardous waste sites.			
Perfluorobutanesulfonic Acid	2/17/22	7.23		Released into the environment			
(PFBS), ng/L	6/29/22	5.67	ng/L	from commercial and industrial			
, ,, ,	9/21/22	5.47		sources and is associated with			
	12/19/22	6.23		inactive and hazardous waste sites.			
Perfuorohexanoic Acid	2/17/22	5.98		Released into the environment			
(PFHxA), ng/L	6/29/22	5.39	ng/L	from commercial and industrial			
,, ,	9/21/22	5.82		sources and is associated with			
	12/19/22	6.43		inactive and hazardous waste sites.			
Perfluorohexanesulfonic Acid	2/17/22	3.54		Released into the environment			
(PFHpA)	6/29/22	2.93	ng/L	from commercial and industrial			
	9/21/22	3.07		sources and is associated with			
	12/19/22	3.01		inactive and hazardous waste sites			
Perfluorohexanesulfonic Acid	2/17/22	1.13		Released into the environment			
(PFHxS), ng/L	6/29/22	1.33	ng/L	from commercial and industrial			
, , ,	9/21/22	1.32		sources and is associated with			
	12/19/22	1.28		inactive and hazardous waste sites.			
Perfluorononanole Acid	2/17/22	0.753		Released into the environment			
(PFNA), ng/L	6/29/22	N/D	ng/L	from commercial and industrial			
	9/21/22	0.838		sources and is associated with			
	12/19/22	1.12		inactive and hazardous waste sites.			

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Synthetic Organic Contaminants: PFOA, PFOS and 1,4 Dioxane – Well 2

Perfluorooctanoic Acid (PFOA)	Yes No No No	2/17/22 6/29/22 9/21/22 12/19/22	11.8 7.08 8.38 8.22	ng/l	10	10	Released into the environment from widespread commercial and industrial applications
Perfluorooctanesulfonic (PFOS)	No No No No	2/17/22 6/29/22 9/21/22 12/19/22	6.27 6.96 7.73 5.79	ng/l	10	10	Released into the environment from widespread commercial and industrial applications

Table of Unregulated Contaminants – Well 2							
Contaminant	Date of	Level	Unit	Likely Source of			
	sample	Detected	Measurement	Contamination			
Perfluorobutanoic Acid	2/17/22	6.23		Released into the environment			
(PFBA), ng/L	6/29/22	2.92	ng/L	from commercial and industrial			
· · · · -	9/21/22	3.94		sources and is associated with			
	12/19/22	3.56		inactive and hazardous waste sites.			
Perfluoropentanoic Acid	2/17/22	8.05		Released into the environment			
(PFPeA), ng/L	6/29/22	4.16	ng/L	from commercial and industrial			
	9/21/22	5.08		sources and is associated with			
	12/19/22	4.40		inactive and hazardous waste sites.			
Perfluorobutanesulfonic Acid	2/17/22	7.05		Released into the environment			
(PFBS), ng/L	6/29/22	4.74	ng/L	from commercial and industrial			
	9/21/22	5.65		sources and is associated with			
	12/19/22	6.00		inactive and hazardous waste sites.			
Perfuorohexanoic Acid	2/17/22	7.70		Released into the environment			
(PFHxA), ng/L	6/29/22	3.93	ng/L	from commercial and industrial			
	9/21/22	5.20		sources and is associated with			
	12/19/22	5.16		inactive and hazardous waste sites.			
Perfluorohexanesulfonic Acid	2/17/22	3.95		Released into the environment			
(PFHpA)	6/29/22	2.29	ng/L	from commercial and industrial			
	9/21/22	2.85		sources and is associated with			
	12/19/22	2.60		inactive and hazardous waste sites			
Perfluorohexanesulfonic Acid	2/17/22	1.08		Released into the environment			
(PFHxS), ng/L	6/29/22	1.01	ng/L	from commercial and industrial			
	9/21/22	0.97		sources and is associated with			
	12/19/22	1.09		inactive and hazardous waste sites.			
Perfluorononanole Acid	2/17/22	0.813		Released into the environment			
(PFNA), ng/L	6/29/22	0.70	ng/L	from commercial and industrial			
	9/21/22	0.895		sources and is associated with			
	12/19/22	N/D		inactive and hazardous waste sites.			

Synthetic Organic Contaminants: PFOA, PFOS and 1,4 Dioxane – EP

Perfluorooctanoic Acid (PFOA)	Yes	2/17/22	14	ng/l	10	10	Released into the environment from widespread commercial and industrial
							applications
Perfluorooctanesulfonic (PFOS)	No	2/17/22	6.22	ng/l	10	10	Released into the environment from widespread commercial and industrial applications

Table of Unregulated Co	Table of Unregulated Contaminants – EP							
Contaminant	Date of	Level	Unit	Likely Source of				
	sample	Detected	Measurement	Contamination				
Perfluorobutanoic Acid (PFBA), ng/L	2/17/22	6.26	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				
Perfluoropentanoic Acid (PFPeA), ng/L	2/17/22	10.0	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				
Perfluorobutanesulfonic Acid (PFBS), ng/L	2/17/22	7.31	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				
Perfuorohexanoic Acid (PFHxA), ng/L	2/17/22	9.42	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				
Perfluorohexanesulfonic Acid (PFHpA)	2/17/22	4.97	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites				
Perfluorohexanesulfonic Acid (PFHxS), ng/L	2/17/22	1.17	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				
Perfluorononanolc Acid (PFNA), ng/L	2/17/22	1.02	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.				

- 1 Lead did not exceed the action level in the round of water samples taken in June 2021. The town continues to sample the water for lead at a certain frequency to see that the threshold for lead meets drinking water standards.
- 2 The level presented represents the 90^{th} percentile of the 5 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 90^{th} percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 5 samples were collected at your water system and the 90^{th} percentile value was .88 mg/l. The action level for copper was not exceeded at any of the sites tested.
- 3 The level presented represents the 90th percentile of the 5 samples collected, which was .0047 mg/l. The action level for lead was not exceeded at any of the sites tested.
- *- 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.

Definitions:

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

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

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

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

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

<u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/l): Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).

<u>Picograms per liter (pg/l)</u>: Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

Lead 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. Grandview is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Grandview for formation on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2022, our system exceeded the State drinking water standard for PFOA. The Town will continue to monitor the water while they work with the Town Engineer to design a system to remove the PFOA constituent.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During 2022, we did not monitor or test for primary inorganic compounds, radiological compounds, primary organic compounds, and sodium and chloride and therefore cannot be sure of the quality of your drinking water during that time. We will be sampling these compounds this year.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

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 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 and you can save almost 6,000 gallons per year.

• Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. 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.