2023 Consumer Confidence Report

Village District of Eastman, NH PWS 0951010

Springfield, NH

Village District of Eastman Mission Statement

The Village District of Eastman is committed to providing the community with exceptional drinking water and wastewater services. To that end, the VDE will ensure that our potable water customers are provided with quality potable water that meets or exceeds state and federal water quality regulations; ensure that our wastewater customers have a reliable collection and disposal system; provided ongoing preventive maintenance and improvements to both potable and wastewater infrastructures to ensure continuous service; continue to ensure the long-term viability of VDE's water sources, including wellfield protections and well explorations; and work in continued outreach to educate the community on the challenges public water utilities face, in order to maintain a better understanding of our practices and goals.

Aging infrastructure presents challenges for maintaining safe quality drinking water and proper wastewater disposal, and as a result continuous improvements are necessary. We continue to improve our Asset Management Plans for both the drinking water system and the wastewater system, as these plans will guide future capital improvements. A major project completed in 2023 was a complete water main replacement for Hummingbird Hill and Barn Owl Overlook. Capital improvement plans for 2024 include completing the development of additional source wells off Glenwood Road, adding a water main to connect Moose Run to Bogie Place, installing a secondary water main on Wellfield Road, and replacing the wet wells at the West Cove A and B sewer lift stations.

Capital investments along with on-going operation and maintenance costs are supported by usage charges and precinct taxes for the water system. In the case of wastewater operation, capital investments and operations and maintenance are supported by a fixed operating fee and usage charges.

What is a Consumer Confidence Report?

A Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and how to get more information on the public water system providing your water. We are pleased to present this year's CCR as required by the Safe Drinking Water Act (SDWA). This annual report documents all detected primary and secondary drinking water contaminants and their respective standards, known as Maximum Contaminant Levels (MCLs), and is a snapshot of last year's water quality.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants 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 providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The VDE blends raw water from four groundwater sources prior to treatment and distribution. Source 1 is made up of three shallow gravel-pack wells, source 5 is a deep bedrock (drilled) well, and sources 2 and 6 are deep gravel-pack wells.

Source water assessment and its availability

NHDES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment for the VDE, prepared in 2000 by NHDES, are noted below.

> Source 1: (1) high vulnerability rating, (1) medium vulnerability rating, (10) low vulnerability ratings
> Source 5: (0) high vulnerability rating, (2) medium vulnerability rating, (10) low vulnerability ratings
> Source 6: (0) high vulnerability rating, (2) medium vulnerability rating, (10) low vulnerability ratings

Note: Due to the time when the assessments were completed, some of the ratings might be different if updated to reflect current information. The complete assessment report can be found on our website, www.eastmanh2o.org. For more information, call the VDE at 603-863-6512 or visit the NHDES website.

Additional information related to the testing and sampling procedures and results can be found on the New Hampshire Department of Environmental Services website - visit OneStop under the Drinking Water category.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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 activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic, and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

For more information on water conservation and watershed protection, please visit our website, www.eastmanh2o.org, or New Hampshire Department of Environmental Services, www.des.state.nh.us. Additionally, the VDE Board of Commissioners meets monthly, normally on the third Wednesday of each month; please visit our website for meeting times and remote links.

Description of the Water Treatment Process

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.

- Shut off water while brushing your teeth, washing your hair, and shaving to save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure our future generations use water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.
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Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond (s)
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting

one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.

- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Record keeping violations

Quarterly water use reporting: Raw water pumped from our wells is reported quarterly to NHDES. Total gallons pumped to the system for quarter 2 was submitted late to NHDES.

Additional Information for 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. This water system is responsible for high-quality drinking water but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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 at 800-426-4791, or at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Lead and copper sampling results (90^{th} percentile) for 2023 were .016 mg/L and .28 mg/L respectively. The lead Action Level (AL) is .015 mg/L; this result prompted a community-wide notice on lead education per NHDES requirements, and more frequent sampling of customer sites will be in effect for 2024. Additional information on the Lead & Copper Rule, and how the results are calculated, are found after this report.

For more information on Eastman's water supply, please visit www.eastmanh2o.org, or contact the VDE office at 603-863-6512, 53 Wellfield Road, Springfield NH.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water.

All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants

would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels.

Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
MFL	MFL: million fibers per liter, used to measure asbestos concentration
NA	NA: not applicable
ND	ND: Not detected

NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	Maximum Contaminant Level Goal or 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.
MCL	Maximum Contaminant Level or MCL: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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 contaminants.
MRDL	MRDL: Maximum residual disinfectant level. 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.

Important Drinking Water Definitions	
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

System Name: Village District of Eastman PWS ID: 0951010

2024 Report (2023 Data)

BULK WATER DELIVERIES			
Bulk Water Source	**Dates of Water Delivery**	**Gallons Delivered**	**Reason for Delivery**
N/A			

If a drinking water public notice, MCL, Monitoring/Reporting, or treatment technique violation has occurred, the following table should be used to explain the violation and health effects:

VIOLATIONS					
VIOLATIONS	**Date of violation**	**Explain violation**	**Length of violation**	**Action taken to resolve**	**Health Effects (Env-Dw 804-810)**
Public notice					N/A
Monitoring and Reporting (M/R)	1	Late reporting		Reporting submitted	N/A
MCL					
E. coli MCL					***E. coli*** are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.
TT (Treatment Technique)					Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
Filtration/disinfection Processes					Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

The Revised Total Coliform Rule requires an assessment or an investigation of the water system when certain conditions occur:

ASSESSMENTS					
During the past year we were required to conduct Assessment(s)	**Number of assessments required in the reporting year**	**Number of assessments completed in the reporting year**	**Number of corrective actions required**	**Number of corrective actions completed** ***If you completed all corrective actions, you can remove the italicized statements in this table.***	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
Level I	N/A				***During the past year we failed to correct all identified defects that were found during the assessment.***
Level II	N/A				***During the past year we failed to correct all identified defects that were found during the assessment.***
Level II We were required to complete a Level II assessment because we found ***E. coli*** in our water system.	N/A				***E. coli*** are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found ***E. coli*** bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. ***We have failed to correct all sanitary defects that were identified during the assessment that was conducted.***

ASSESSMENTS NOT COMPLETED					
During the past year we were required to conduct Assessment(s)	**Number of assessments required in the reporting year**	**Number of assessments completed in the reporting year**	**Number of corrective actions required**	**Number of corrective actions completed**	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
Level I	N/A				During the past year we failed to conduct all of the required assessment(s).
Level II	N/A				During the past year we failed to conduct all of the required assessment(s).
Level II Required because ***E. coli*** was found in our	N/A				***E. coli*** are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects,

water system.					such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found ***E. coli*** bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct and problems that were found during these assessments.

SIGNIFICANT DEFICIENCY				
Significant deficiency description and date of sanitary survey	**Source of *E. coli***	**Date deficiency was addressed or corrected**	**Approved plan and timeframe for correction**	**Health Effects (Env-Dw 804)**
N/A				

*The value must be reported as whole number, see Env-Dw 811, Appendix B for conversions. PLEASE note the units listed under the Contaminant Name.

LEAD AND COPPER							
Contaminant (Units)	**Action Level (AL)**	**90th percentile sample value ***	**Date**	**# of sites above AL**	**Violation Yes/No**	**Likely Source of Contamination**	**Health Effects of Contaminant**
Copper (ppm)	1.3	.28	11/23			Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Lead (ppb)	15	**16**	**11/23**	**3**		Corrosion of household plumbing systems, erosion of natural deposits	(15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). (Above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

*If applicable report average, range, and date sampled if prior to the reporting year. Level detected must be reported as whole number, see Env-Dw 811, Appendix B for conversions. PLEASE note the units listed under the Contaminant Name.

DETECTED WATER QUALITY RESULTS

Microbiological Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
E. coli Bacteria	N/A		0	0		Human and animal fecal waste	***E. coli*** are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.
Total Organic Carbon (ppm)	N/A		TT	N/A		Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Turbidity (NTU)	N/A		TT	N/A		Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radioactive Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Compliance Gross Alpha (pCi/L)			15	0		Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (ug/L)	1.6	2018	30	0	NO	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Combined Radium 226 + 228 (pCi/L)			5	0		Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants							
Contaminant (Units)	**Level Detected***	**Date**	**MCL**	**MCLG**	**Violation YES/NO**	**Likely Source of Contamination**	**Health Effects of Contaminant**
Chlorine (ppm)	.76	2023	MRDL= 4	MRDL G= 4		Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Fluoride (ppm)	.33	2021	4.0	4.0		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Volatile Organic Contaminants							
Contaminant (Units)	**Level Detected***	**Date**	**MCL**	**MCLG**	**Violation YES/NO**	**Likely Source of Contamination**	**Health Effects of Contaminant**
Haloacetic Acids (HAA) (ppb)	56	2023	60	N/A	NO	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHM) (Bromodichloro-methane Bromoform Dibromochloro-methane Chloroform) (ppb)	60	2023	80	N/A	NO	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS							
Contaminant (Units)	**Level Detected***	**Date**	**MCL**	**MCLG**	**Violation YES/NO**	**Likely Source of Contamination**	**Health Effects of Contaminant**
Perfluorooctane sulfonic acid (PFOS) (ppt)	1.5	2023	15	0	NO	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam,	Some people who drink water containing perfluorooctane sulfonic acid (PFOS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have

						runoff/leachate from landfills and septic systems	an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.
Perfluorooctanoic acid (PFOA) (ppt)	1.3	2023	12	0	NO	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems	Some people who drink water containing perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.

SECONDARY CONTAMINANTS							
Secondary MCLs (SMCL)	**Level Detected**	**Date**	**Treatment technique (if any)**	**SMCL**	**50 % AGQS (Ambient groundwater quality standard)**	**AGQS (Ambient groundwater quality standard)**	**Specific contaminant criteria and reason for monitoring**
Chloride (ppm)	14	2021	N/A	250	N/A	N/A	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)	.33	2021	N/A	2	2	4	***See note at the end of this table.*
Iron (ppm)	.022	2021	N/A	0.3	N/A	N/A	Geological
Manganese (ppm)	.016	2021	N/A	0.05	0.15	0.3	Geological
PH (ppm)	7.4	2021	N/A	6.5-8.5 (Normal Range)	N/A	N/A	Precipitation and geology
Sodium (ppm)	23	2021	N/A	100-250	N/A	N/A	We are required to routinely sample for sodium
Sulfate (ppm)	6.3	2021	N/A	250	250	500	Naturally occurring

*Fluoride: Dental fluorosis, in its moderate or severe forms, may result in brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we are required to notify you when we discover that fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem. For more information, please call the Village District of Eastman at 603-863-6512. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP. Please share this information with all the other people who have children who drink this water.

Assessments of Public Water Supply Sources - GRANTHAM

This report is a summary of NH Department of Environmental Services' assessments of the vulnerability of each source used by the public water system(s) located in this municipality. The sources listed here are grouped first by the type of public water system and then by the system itself. Each source was ranked according to a number of criteria; a vulnerability ranking is given for each criterion that applies to the source. ***An explanation of each column in the report can be found on the last page.***

Source Number	Source Description	Source Type	Date Assessment Completed	Number of Vulnerability Rankings			Susceptibility Ranking Criteria													
				Highs	Mediums	Lows	Detects	Well/Intake	KCSs	PCSs	Highways/RRs	Pesticides	Septics	Urban Land Cover	Ag Land Cover	Animals	Lagoons	Dry discharges	Sanitary radius	Trophic status
System Type C	**C=Community; P=Non-Transient, Non-Community; N=Transient**																			
EPAID 0951010	**System Name:** VILLAGE DISTRICT OF EASTMAN																			
001	DUG	G	4/17/2000	1	1	10	L	L	L	M	L	L	H	L	L	L	L		L	
002	GPW	G	8/14/2000	0	2	10	L	L	L	M	L	L	L	L	L	L	L		M	
004	GPW	G	8/14/2000	0	2	10	L	L	L	M	L	L	L	L	L	L	L		M	
EPAID 0952020	**System Name:** GRAY LEDGES																			
001	BRW	G	4/17/2000	2	4	6	L	L	L	M	L	M	H	L	H	M	L		M	
002	BRW	G	4/17/2000	2	4	6	L	L	L	M	L	M	H	L	H	M	L		M	
System Type N	**C=Community; P=Non-Transient, Non-Community; N=Transient**																			
EPAID 0958010	**System Name:** RUM BROOK PLACE																			
001	BRW	G	8/17/2001	3	0	6	L	L	H	H	H	L	L			L	L			
EPAID 0958020	**System Name:** GRANTHAM IRVING BLUECANOE																			
001	BRW	G	8/17/2001	4	0	5	L	H	H	H	H	L	L			L	L			
EPAID 0958030	**System Name:** GRANTHAM INDOOR SOCCER																			
001	BRW	G	8/20/2001	2	3	7	L	L	M	L	H	M	H	L	L	L	L		M	
System Type P	**C=Community; P=Non-Transient, Non-Community; N=Transient**																			
EPAID 0955010	**System Name:** GRANTHAM VILLAGE SCHOOL																			

Source Number	Source Description	Source Type	Date Assessment Completed	Number of Vulnerability Rankings			Susceptibility Ranking Criteria													
				Highs	Mediums	Lows	Detects	Well/Intake	KCSs	PCSs	Highways/RRs	Pesticides	Septics	Urban Land Cover	Ag Land Cover	Animals	Lagoons	Dry discharges	Sanitary radius	Trophic status
001	BRW	G	1/11/2000	2	4	6	L	L	M	M	H	L	M	L	H	L	L		M	

EPAID 0956020 **System Name:** YANKEE BARN HOMES INC

001	BRW	G	10/10/2002	5	6	1	H	H	M	M	H	M	H	L	H	M	M		M	

Explanatory Notes

Abbreviations used in the following notes:

HAC = hydrologic area of concern for a surface water source. For small or undeveloped watersheds, the HAC includes the entire watershed. For all other surface sources, the HAC includes only a portion of the watershed close to the water system intake.

WHPA = wellhead protection area for a groundwater source. For community and non-transient systems, the WHPA is the area from which water is expected to flow to the well under extremely dry conditions. For transient systems, the WHPA is the area within 500 ft of the well.

EPAID: Each public water system is identified by a 7-digit federal ID number.

Source number: Each source is further identified by a 3-digit number.

Source description: An abbreviated description of the source from NHDES's database. (Some common abbreviations: BRW=bedrock well; GPW=gravel-pack well; GRW=gravel well; DUG=dug well; PTW=point well; SPR=spring; ART=artesian well; INF=infiltration well.)

Source type: G=groundwater (well or spring); S=surface water (lakes, reservoirs, ponds, rivers); E = water purchased from another system (*Purchased sources are not assessed per se, but the original sources used by the seller are assessed*).

Date Assessment Completed: The date NHDES completed the process of reviewing available data, collecting new data, and entered the assessment information into its database.

Number of Vulnerability Rankings: The number of High, Medium, and Low rankings for that source listed in the columns to the right. Each criterion is explained below. Some criteria do not apply to all types of sources or systems.

Detects: Confirmed detections of certain contaminants (after treatment) of suspected human origin, not including disinfection byproducts. L = none detected at or above trigger levels in the most recent round of sampling. There is no M ranking for this criterion. H = contaminants were detected at or above trigger levels.

Well/Intake: The integrity of the well (if a groundwater source) or the intake (if a surface water source). L = no unresolved deficiencies with the well or intake identified in the most recent sanitary survey. There is no M ranking for this criterion. H = there are unresolved deficiencies.

KCSs: Known contamination sources in the vicinity of the source. This includes any site known to DES where contaminants are known or very likely to have been released to the ground, and where remediation is not complete. L = none present in the WHPA (for groundwater sources) or in the HAC (for surface water sources). M (for community and non-transient systems) = one or more KCSs in the WHPA or HAC but not within 1,000 ft of the well or intake. *There is no M ranking for transient systems.* H = one or more KCSs within the WHPA or HAC within 1,000 ft of the well or intake.

PCSs: Potential contamination sources in the vicinity of the source. This includes any site known to DES where contaminants are known or very likely to be used in significant quantities, but where there are no known releases to the ground. L (for community and non-transient systems) = no PCSs within 1,000 ft of the well in the WHPA (for groundwater sources) or none present in the HAC (for surface water sources). L (for transient systems) = none present in the WHPA. M (for groundwater sources serving community and non-transient systems) = 10 or fewer PCSs within 1,000 ft of the well in the WHPA. M (for surface water sources) = one or more PCSs in the HAC but not within

1,000 ft of the intake. *There is no M ranking for transient systems.* H (for groundwater sources serving community and non-transient systems) = more than 10 PCSs within 1,000 ft of the well in the WHPA. H (for transient sources) = one or more PCSs in the WHPA. H (for surface water sources) = one or more within 1,000 ft of the intake in the HAC.

Highways/RRs: The presence of numbered state highways or active railroads in the vicinity of the source. L = none present in the WHPA or HAC. M (for community and non-transient groundwater sources) = one or more in the WHPA but not within 1,000 ft of the well. M (for surface sources) = one or more in the HAC but not within 300 ft of the source water. *There is no M ranking for transient systems.* H (for transient sources) = one or more in the WHPA. H (for community and non-transient groundwater sources) = one or more in the WHPA within 1,000 ft of the well. H (for surface sources) = one or more in the HAC within 300 ft of the source water.

Pesticides: Whether or not pesticides have been routinely applied in the vicinity of the source. This is based on the presence of land parcels owned by registered pesticide applicators. L = no application areas in WHPA or HAC. M (for community and non-transient sources) = application site(s) in WHPA or HAC but not within 500 ft of the well or within 300 ft of the intake. *There is no M ranking for transient systems.* H = application site(s) within 500 ft of the well or within 300 ft of the intake.

Septics: The presence or density of septic systems and sewer lines in the vicinity of the source. L (for community and non-transient groundwater sources) = no septic systems or sewer lines located within 500 ft of the well, and fewer than 30 septic systems in the remainder of the WHPA. L (for surface sources) = no septic systems within 500 ft of surface water. L (for transient sources) = no septic systems or sewer lines within 75 ft of the well. M (for community and non-transient groundwater sources) = fewer than 10 septic systems and no sewer line located within 500 ft of well, and fewer than 30 septic systems in remainder of the WHPA. M (for surface sources) = low density of septic systems (lots averaging 2 acres or more) within 500 ft of surface water in the HAC. *There is no M ranking for transient systems.* H (for community and non-transient groundwater sources) = 10 or more septic systems or any sewer line within 500 ft of the well and/or high density of septic systems (more than 30) in the WHPA. H (for surface sources) = densely developed shoreline (lots averaging less than 2 acres) within 500 ft of surface water in the HAC. H (for transient sources) = one or more septic systems or sewer lines within 75 ft of the well.

Urban Land Cover: The percentage of urban land cover in the vicinity of the source, based primarily on satellite images. *This criterion does not apply to sources serving transient systems.* L = less than 10% of the WHPA or HAC is urban, and less than 10% of the WHPA within 1,000 ft of the well is urban. M (for community and non-transient groundwater sources) = less than 10% of WHPA is urban but 10% or more of the WHPA within 1,000 ft of the well is urban. M (for surface sources) = between 10% and 20% of HAC is urban. H (for community and non-transient groundwater sources) = 10% or more of WHPA is urban. H (for surface sources) = 20% or more of HAC is urban.

Ag Land Cover: The percentage of agricultural land cover in the vicinity of the source (in the WHPA or within 300 ft of surface water in the HAC), based primarily on satellite images. *This criterion does not apply to sources serving transient systems.* L = no ag land. M = less than 10% ag land. H = 10% or more ag land.

Animals: The presence of concentrations of 10 or more animal units in the vicinity of the source. L = none in the WHPA or (for a surface source) within 300 ft of surface water in the watershed. M (for community and non-transient groundwater sources) = one or more such farms in the WHPA but not within 1,000 ft of the well. M (for a surface source) = none within 300 ft of surface water in the HAC, but one or more within 300 ft of surface water in the watershed. *There is no M ranking for transient systems.* H = one or more in the WHPA within 1,000 ft of the well or (for a surface source) within 300 ft of surface water in the HAC.

Lagoons: The presence of wastewater treatment lagoons or spray irrigation sites in the vicinity of the source. L = none in the WHPA or (for a surface source) in the entire watershed. M (for community and non-transient groundwater sources) = one or more in the WHPA but not within 1,000 ft of the well. M (for a surface source) = none within 300 ft of surface water in the HAC, but one or more in the watershed. *There is no M ranking for transient systems.* H = one or more in the WHPA within 1,000 ft of the well or (for a surface source) within 300 ft of surface water in the HAC.

Dry Discharge: The presence of dry-weather stormwater discharge sites in the vicinity of the source. *Only a handful of surface sources were evaluated for such discharges; no discharges were found.*

Sanitary Radius: The presence of development not associated with the well within the sanitary radius (within 75 to 400 ft of the well). *Applies only to groundwater sources serving community and non-transient systems.* Of particular concern are sewer lines, septic systems, or storage of regulated substances in this area. L = no inappropriate land uses or practices. No medium ranking. H = inappropriate land uses or practices were discovered during the most recent sanitary survey, and have not been corrected.

Trophic status: The projected trophic (nutrient) status of the source as predicted by a computer model using a future land development scenario for the watershed. *This criterion applies only to 24 lakes, ponds, and reservoirs included in the phosphorus loading study.* L = oligotrophic (relatively good clarity and water quality with low algae population). M = mesotrophic (intermediate clarity, quality, and algae population). H = eutrophic

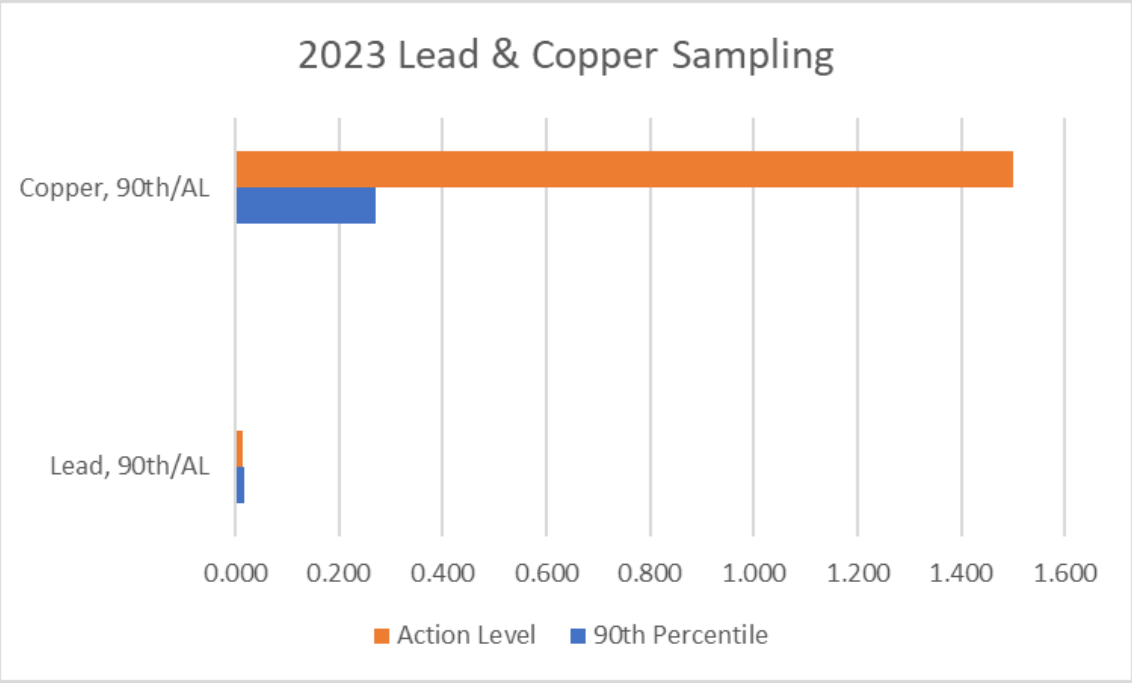
Lead, Copper, and Safe Drinking Water

While the sampling results of all routine testing are available through the OneStop feature on the New Hampshire Department of Environmental Services website, we've provided our results for the most recent lead and copper testing below.

SWDA

The Safe Water Drinking Act of 1986 established specific guidelines for the treatment and monitoring of drinking water. Under the direction of the Environmental Protection Agency, in 1991 the Lead and Copper rule went into effect, which outlined monitoring requirements and treatment techniques for lead and copper, as well as establishing Action Levels (AL) and Maximum Contaminant Level Goals (MCLGs). Action Levels determine at what point a water utility must take additional steps to control the presence of organic and inorganic materials found in the water supply. The current AL for lead is .015mg/L, and 1.3mg/L for copper.

New Hampshire DES requires public water systems (PWS) to routinely test specific consumer sites for lead and copper. The size of the PWS determines the number of sites that must be sampled. In response to changes in national standards for lead and copper in drinking water, the frequency of New Hampshire PWS sampling has increased. In 2023, the VDE was required to take samples from 20 homes identified by NHDES. We collected 23; out of those 23 samples, 3 sites were identified as having lead content greater than the AL of .015mg/L. Because of this result, the VDE was required to share a Lead Education brochure provided by NHDES, and will have a larger amount of consumer sites to sample through 2024.

Calculating Results

There are specific guidelines for obtaining a sample, including location and time of day. Water that has remained in pipes overnight, for example, has a higher probability of containing lead than water that is constantly flowing. The final result is calculated by taking the 90th percentile of the total results; out of the 23 sample results arranged in a list from lowest to highest, the 20th value is used to determine the system compliance with the Action Level. Based on that formulary, our results are shown here: