

Town of Exeter - DPW
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Exeter, NH 03833

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2023 Consumer Confidence Report

Exeter Water Department

NH PWS ID # 0801010

Introduction

Like any responsible public water system, our mission is to deliver the best quality drinking water and reliable service at the lowest, appropriate cost.

Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

In the past year, we have begun the replacement of water and sewer mains and drainage in the Walnut, Salem, Oak, Locust and Hale Street areas. In the coming year we intend to begin the planning to do the same in the Westside Drive area.

These investments along with on-going operation and maintenance costs are supported by the user rates and fees charged to our customers. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including 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.

How can I get involved?

You are invited to voice your concerns at any of the Water / Sewer Advisory Committee Meetings, usually held on the second Wednesday of every other month at 6:30 pm in the Nowak Room at 10 Front Street, or check the Town's web page or Channel 22 for announcements.

For more information about your drinking water, please call the Primary Operator, Paul A. Roy, PE at (603) 772 - 1346.

Definitions

Ambient Groundwater Quality Standard or ACGS: The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

Level I Assessment: A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system on multiple occasions.

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.

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.

Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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

Abbreviations

BDL: Below Detection Limit
mg/L: milligrams per Liter
NA: Not Applicable
ND: Not Detectable at testing limits
NTU: Nephelometric Turbidity Unit
pCi/L: picocurie per Liter
ppt: parts per trillion
ppb: parts per billion
ppm: parts per million
RAA: Running Annual Average
TTHM: Total Trihalomethanes
UCMR: Unregulated Contaminant Monitoring Rule
µg/L: micrograms per Liter

Drinking Water Contaminants:

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 can not 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 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://water.epa.gov/drink/info/lead/index.cfm>

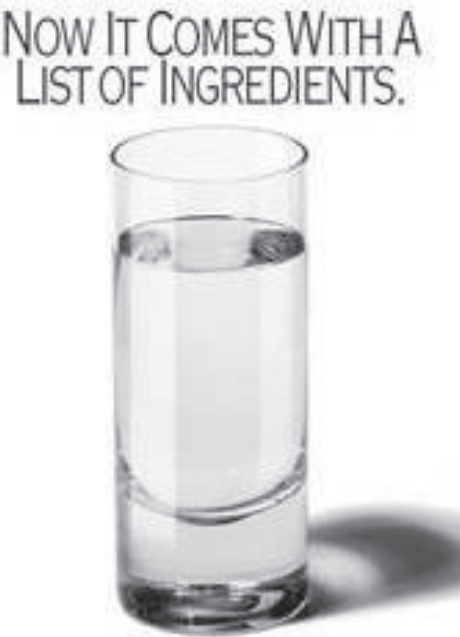
Town of Exeter

Water & Sewer Department

Water Quality Report - 2023

Water testing performed in 2022

EPA NH 0801010



What is the source of my drinking water? *The sources of drinking water for the Town of Exeter are the Exeter River and Dearborn Reservoir (both surface water supplies and treated at the Water Treatment Facility on Portsmouth Avenue), Skinner Springs (added to Clarified Water at the Treatment Plant and filtered), and the Ground Water Treatment Plant (GWTP), combining and treating water from the Stadium Well, Gilman Well and the Lary Lane Well.*

The water is treated for color, turbidity, Iron, Manganese, corrosivity, and is disinfected with Chlorine and Monochloramine.

Why are contaminants in my 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 Safe Drinking Water Hotline at 1-800-426-4791.

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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment Summary

DES 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, prepared on October 28, 2002 and updated on August 8, 2006, are noted below.

- The Exeter River, three susceptibility factors were rated high, five were rated medium, and four were rated low.
- The Dearborn Reservoir (Water Works Pond), three susceptibility factors were rated high, three were rated medium, and seven were rated low.
- The Skinner Springs, two susceptibility factors were rated high, three were rated medium, and seven were rated low.
- The Lary Lane Well, two susceptibility factors were rated high, three were rated medium, and seven were rated low.

Note: This information is over ten years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, an update of this data, are in process and a new report will be issued by NHDES sometime in 2022.

The complete Assessment Report is available for review at the Public Works Office at 13 Newfields Road. For more information, call Steve Dalton, Acting Water/Sewer Manager at (603) 772 - 6157 or visit the DES Drinking Water Source Assessment website.

System Name: EXETER WATER DEPARTMENT PWS ID: 0801010

2023 Report (2022 data)

ADDITIONAL TESTING					
Additional Tests & Secondary MCLs (SMCL)	Results	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
UCMR	Average & range				Explain federal monitoring requirement
Giardia	0.45 to 0 cysts/L	Monthly2017			Detected in Raw Surface Water – None detected in Finished Waters
Cryptosporidium	0.09 to 0 cysts/L	Monthly2017			Detected in Raw Surface Water – None detected in Finished Waters
Sodium (ppm)	43	Q3 –’22		100 - 250	We are required to regularly sample for sodium
Sulfate (ppm)	7.2	Q3-’22		250	Naturally occurring
Chloride (ppm)	77	Q3-’22		250	Wastewater, road salt, water softeners, corrosion
PFOA (ppt)	2.35 to 5.13 Next Test = Q4 / 2023	Q3 –’19 to Q2-’20		12	Some people who drink water containing PFOA or PFOS in excess of the AGQS over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increases risk of getting certain types of cancer. It may also lower a woman’s chance of getting pregnant.
PFOS (ppt)	1.97 to 4.37 Next Test = Q4 / 2023	Q3 –’19 to Q2-’20		15	See above... Next testing in Q4 2023.
PFHxS (ppt)	2.01 Next Test = Q4 / 2023	Q3 –’19 to Q2-’20		18	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, run-off/leachate from landfills and septic systems
PFNA (ppt)	ND Next Test = Q4 / 2023	Q3 –’19 to Q2-’20		11	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, run-off/leachate from landfills and septic systems
pH	7.56 - 7.72	Q3 & Q4 – 2022		6.5 – 8.5	Precipitation and geology
Cis- 1,2-Dichloroethene (ppt)	0.55	Q4 – 2022		70	Some people who drink water containing cis-1,2-Dichloroethylene in excess of the MCL over many years could experience problems with their Liver

LEAD AND COPPER							
Contaminant (Units)	Ac-tion Level	90 th percentile sample value *	Date	# of sites above AL	Viola-tion Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.23	Q2 –2022 0.035 to 0.270	0 of 30	NO	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	0	Q2 –2022 <0.001 to 0.0047	0 of 30	NO	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.

DETECTED WATER QUALITY RESULTS						
Contaminant (Units)	Level Detected*	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Microbiological Contaminants						
<u>E. coli</u> Bacteria	0 Absent	0	0	NO	Human and animal fecal waste matter	<u>E. coli</u> 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)	1.5 to 4.5 mg/l Avg. = 2.69 mg/l	TT	N/A	NO	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)	highest avg. monthly value <u>0.1839</u> highest monthly value <u>0.419</u> 99.98% meet limit	TT	N/A	NO	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 -- Next testing = Q3 & Q4 2025						
Compliance Gross Alpha (pCi/L)	0.4 to 4.5 (2016)	15	0	NO	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)	0.4 (2015)	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)	0.3 to 1.2	5	0	NO	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						
Arsenic (ppb)	1.3 to 2.0 Avg.: 1.6	5	0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	(5 ppb through 10 ppb) While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. (above 10 ppm) Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Asbestos (MFL)	None Detected (2022)	7	7	NO	Decay of asbestos cement water mains; erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	0.012	2	2	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Chloramines (ppm)	Annual Avg.; 2.230 Range Avg.; 1.22 to 2.93	MDRL = 4	MDRL = 4	NO	Water additive used to control microbes	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort.
Fluoride (ppm)	0.13 Naturally Occurring in groundwater	4	4	NO	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.
Haloacetic Acids (HAA)(ppb)	17.80 to 47.00 Running Annual Average = 28.52	60	NA	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) (ppb)	30.20 to 110.00 Running Annual Average = 56.40	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.