WATER QUALITY TABLE

REGULATED

Volatile Organic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Violation	Major Sources
Total Trihalomethane	8/3/22	ppb	80.0	NA	22.6	3.2 - 22.6	No	By-product of drinking water chlorination
Total Haloacetic Acid		ppb	60	NA	2.1	ND - 2.1		Drinking water chlorination

Inorganic Contaminants	Date Tested	# of Sample Sites	AL	MCLG	90th Percentile	# of sites found above the AL	Violation	Major Sources
Copper units ppm	2020	20	1.3	1.3	0.020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead units ppb	2020	20	15	0	0.001	1	No	Corrosion of household plumbing systems;

	Date Tested	Units	MCL	MCLG	Detected Level	Range	Violation	Major Sources
Perchlorate	8/9/22	ppb	2.0	NA	.25	.24 - .25	No	Blasting, fireworks, military munitions, disinfection by-product
Fluoride	7/30/18	ppm	4	4	.13	.13	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate	4/13 & 8/10/22	ppm	10	10	1.44	.64 - 1.44	No	Run-off from fertilizer use; Leaching from septic tanks, sewage;
Nitrite	6/9/20	ppm	1	1	ND	ND	No	Erosion of natural deposits
Asbestos	5/11/22	MFL	7	7	ND	ND	No	Decay of asbestos cement water mains;

	Date	# of QTR Samples	Monthly Avg. ppm	MRDL	Det. Level	Range	Violation	Major Sources
Chlorine ppm	2022	30	.331	4	.90	.05 - .90	No	Water additive used to control microbes

REGULATED PFAS6

Regulated Contaminant	Date(s) Collected	Detect Result or Range	Quarterly Average	MCL	Violation	Possible Resources
PFAS6	4/20 /22 4/26/22 7/5/22 10/19/22	ND - 2.3 ND - 2.3 ND - 2.1 ND	NA	20	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.

Health Effects – Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune sysem, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.

UNREGULATED

Volatile Organic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Violation	Major Sources
Bromodichloromethane[1]		ppb	NA	NA	6.0	0.9 - 6.0	No	By-product of drinking water chlorination
Bromoform	8/3/22	ppb	NA	NA	4.9	0.8 - 4.9	No	By-product of drinking water chlorination
Chloroform		ppb	NA	NA	2.8	ND - 2.8	No	By-product of drinking water chlorination
Dibromoacetic Acid		ppb	NA	NA	8.9	.5 - 8.9	No	By-product of drinking water chlorination
Dibromochloromethane	8/3/22	ppb	NA	NA	.5	ND - .5	No	

Inorganic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Violation	Major Sources
Sodium	6/18/20	ppm	NA	NA	53.1	32.5 - 53.1	No	Erosion of natural deposits
Sulfate	6/16/21	ppm	NA	NA	22	12 - 22	No	Erosion of natural deposits

Radioactive Contaminants	Date Tested	Units	Results	*Std. Dev. (+/–)	MCL	Range	Violation	Major Sources
Gross Alpha	9/15/21	pCi/L	<.1.42	1.02	15	—	No	Erosion of natural deposits
		pCi/L			15	—	No	Erosion of natural deposits
Radium 226		pCi/L	< .280	.467	NA	—	No	Erosion of natural deposits
		pCi/L			NA	—	No	Erosion of natural deposits
Radium 228		pCi/L	1.27	.392	NA	—	No	Erosion of natural deposits
		pCi/L			NA	—	No	Erosion of natural deposits

UNREGULATED PFAS

Unregulated Contaminant (CASRN)	Detect Date Collected	Result or Range	Average	ORSG	Possible Resources
Perfluorobutane Sulfonic Acid (PFBS) ppt	1/4, 4/30, 7.5, 10/19	ND - 1.5	NA		
Perfluorohexanoic Acid (PFHxA) ppt		ND - 1.4	**		

Water Quality Table Footnotes

[1]These are unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

*Std. Dev. = Standard Deviation Results can be +/–
**There is no ORS Guideline for this compound

Key to Table
AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
pCi/L = picocuries per liter (a measure of radioactivity)
ppm = part per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (ug/L)
NA = not applicable
ND = none detected
MRDL = Maximum Residual Disinfection Level
MRDLG = Maximum Residual Disinfection Level Goal
MFL = Million Fibers per liter
ppt = parts per trillion or Nanograms per liter

North Raynham Water District
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North Raynham Water District

Raynham, MA

PWSID # 4245002

2022 Annual Water-Quality Report

VISIT US @
WWW.NRWD.ORG

This brochure explains how drinking water provided by North Raynham Water District is of the highest quality. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. We're proud to share our results with you. Please read them carefully.

We are proud to report that the water provided by NORTH RAYNHAM WATER DISTRICT meets or exceeds established water-quality standards.

In 2003 the Department of Environmental Protection completed the Source Water Assessment and Protection (SWAP) Program Report for The North Raynham Water District.

What is SWAP?

The Source Water Assessment and Protection (SWAP) Program, established under the Federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- to assess the susceptibility of public water supplies to potential contamination from these land uses by microbiological pathogens and chemicals; and
- publicize the results to provide support for improved protection.

What is system ranking?

A susceptibility ranking of **high** was assigned to this system using the information collected during the assessment by the DEP.

Where Can I See The SWAP Report?

The complete SWAP report is available at the North Raynham Water District Office located at 80 Baker Road, The Town of Raynham Board of Health and the Board of Selectmen's offices located at 558 South Main Street, Raynham, Massachusetts. For more information, call Arthur S. Bendinelli with the North Raynham Water District at (508) 824-0520 or at http://www.mass.gov/dep/water/swapreps.htm.

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The Board of Water Commissioners meets on a monthly basis. Please call the District office at (508) 824-0520 to find out the time for the next scheduled meeting. The meeting times are also posted at the water office located at 80 Baker Road and the Raynham Town Hall located at 558 South Main Street, Raynham.

How to Read This Table

The following table lists all the drinking water contaminants that we detected during the 2022 calendar year or during the most recent sampling period within the past five years. These were the only contaminants detected in all the monitoring required by the state. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2022. The state requires the district 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.

Our system has had our monitoring requirements for synthetic organic compounds (SOCs) and Inorganic Compounds (IOCs) reduced by Mass DEP to less than once per year because the source is not at risk of contamination. The last SOC samples were collected on 7/5/2022 and the last IOC samples were collected on 7/30/19 & 6/9/20. All samples results are free of these contaminants.

Maximum Contaminant Level or MCL
The highest level of a contaminant that is allowed in drinking water. MCL's 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.

Detected Level
The highest level detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

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

Range
The range of all values for samples tested for each contaminant.

The data presented in this report is from the most recent testing done in accordance with regulations.

For more information, call Arthur S. Bendinelli with North Raynham Water District at (508) 824-0520 or abendinelli@northwater.org.

Additional Health Information

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, 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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Maximum Contaminant Level Goal or MCLG

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 North Raynham Water District is responsible for providing high quality 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations to establish limits for contaminants in bottled water which must provide the same protection for public health. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people who use water-containing chlorine well in excess of the MRDL could experience irritating effects to their eyes, nose and could experience stomach discomfort.

There are also sources of contamination that exist from physical piping connections in the water supply system between potable and non-potable sources. The District is required by the State to maintain a program to eliminate all physical piping cross-connections in municipal, industrial and commercial establishments by the use and proper maintenance of backflow prevention devices. However, the law does not address residential cross-connections of which there are many. Residents should be aware of the hazards of any cross-connections between potable and non-potable sources that provide for the non-potable source to be siphoned back into the District's water system (potable source). This occurs when the water pressure in the water supply suddenly drops due to a fire or water main break and permits a contaminated source to flow back into the water piping. Common sources of residential cross-connections are filling of swimming pools and car wash buckets filled with soap that both have the hose submerged in the water. The best protection against any cross-connections is to provide an air gap between the source and the receptor.

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 (800) 426-4791).