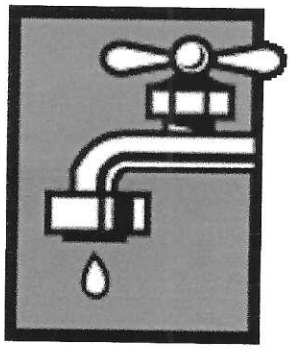
2022 Annual Drinking Water Quality Report

Town of Gosnold Water Department
Cuttyhunk Island

28 Tower Hill Road Cuttyhunk, MA 02713

PWS ID # 4109000



Prepared by:

Dale Lynch Gosnold Water Department

THE TOWN OF GOSNOLD WATER DEPARTMENT
CONSUMER CONFINDENCE REPORT CALENDER YEAR 2022

This report is a snapshot of drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

I. PUBLIC WATER SYSTEM INFORMATION

Address: *28 Tower Hill Road, Cuttyhunk, MA 02713*
Contact Person: Dale Lynch

Telephone Number: *508-990-7408*
E-Mail: *gosnoldtownclerk@yahoo.com*

Water System Improvements
Our water system is routinely inspected by the Department of Environmental Protection (DEP). The DEP inspects our system for its technical, financial and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations of our system. The Gosnold Water Department is committed to providing you with a dependable supply of drinking water. We are working with Mass Rural Water Association to provide leak detection, mapping and training all at no cost to the Town.

Opportunities for Public Participation
If you would like to participate in discussions regarding your public water supply you may attend the Board of Selectman meetings at Town Hall or contact the Dale Lynch Water Superintendent for a tour of the Public Water System.

II. YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Your water is provided by the following source listed below:

Source Name	DEP Source ID#	Source Type	Location of Source
Gosnold Wellfield	4109000-01G	Gravel Developed	West Side of the Island

The water is pumped from a collection of (5) wells located on the remote West side of the island into a collection of water mains and then up to a water storage tank located on Tower Hill Road. The water system is maintained by Dale Lynch who is a State Certified Water Operator.

Where Can I See The SWAP Report?
The complete SWAP report is available at the town hall and online at http://www.mass.gov/dep/water/drinking/sourcewa.htm#reports .

Is My Water Treated?

Yes. The source water is treated with Soda Ash (anhydrous sodium carbonate) to increase the PH levels of the source water to prevent corrosion of system piping as well as household plumbing & fixtures.

III. SUBSTANCES FOUND IN DRINKING WATER

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and 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 stormwater 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, the Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All 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 EPA's Safe Drinking Water Hotline (800-426-4791).
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 some 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 and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

IV. IMPORTANT DEFINITIONS

Maximum Contaminant Level (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 (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 (MRDL) -- The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) -- The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known of expected risk to health.
MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

ppb = parts per billion, or micrograms per liter (ug/l)

Mg/l = Milligrams/Liter or mg/l = parts per million

Level 1 Assessment – is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria has been found in our water system.

Secondary Maximum Contaminant Level (SMCL) – These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Massachusetts Office of Research and Standards Guideline (ORSG) – This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

V. WATER QUALITY TESTING RESULTS

The water quality information presented in the table is from the most recent rounds of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

1	Highest # Positive in a month	MCL	MCLG	Violation (Y/N)	Possible Source of Contamination
Total Coliform 2022 (Tested Monthly)	**13**	**0**	**0**	**N**	Naturally present in the environment
Fecal Coliform or E.coli 2022 (Tested Monthly)	**0**	**0**	**0**	**N**	Human and animal fecal waste

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Fecal coliforms and E-Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

There was a major overhaul of the Cuttyhunk Water System in 2022. A Coliform Bacteria Level 1 Assessment was completed for the Massachusetts Department of Environmental Protection on November 8, 2022 after positive detection in our monthly water sample. Possible causes sited are: The water system was under construction, the water tanks may have been affected by the construction activities, faucets used to collect the samples could have been contaminated, water turn-over, because of population demand. No violation was given to the Town of Gosnold by Mass DEP.

Regulated Contaminant	Date(s) Collected	Highest Detect	Range Detected	Highest Average	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Nitrate (ppm)	**7/11/22**	**.23**			**10**	**10**	**N**	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

Regulated Contaminant	Date(s) Collected	Highest Detect	Range Detected	Highest Average	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Perchlorate (ppb)	**8/4/22**	**ND**	**ND**		**2.0**	**1.0**	**N**	Rocket propellants, fireworks, munitions, flares, blasting agents

Regulated Contaminant	Date(s) Collected	Highest Detect	Range Detected	Highest Average	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Asbestos	**4/11/22**	**ND**	**ND**		**7**		**N**	Residual from vinyl-lined water mains.

Unregulated Contaminant	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
SODIUM	**8/27/ 2018**	**15**	**2.5**	**---**	**20**	Natural sources; runoff from use as salt on roadways; by-product of treatment process

Volatile Organic Contaminants

	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	Violation (Y/N)	Possible Source
Volatile Organic Contaminants						
VOCS	7/11/22	ND	ND	---	N	Natural sources; runoff from use as salt on roadways; by-product of treatment process

	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	Violation (Y/N)	Possible Source
Volatile Organic Contaminants						
Tetrachloroethylene (PCE) (ppb)	7/11/22	1.5	ND – 1.5	---	N	**Discharge from factories and dry cleaners; residual of vinyl-lined water mains**

ORGANIC CHEMICAL CONTAMINANTS

Organic chemical contaminants including synthetic and volatile organic chemicals which are byproducts of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. The Town of Gosnold completed water tests and there was no detection of contaminants.

DEP recommends SRIC to test these unregulated contaminates

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

LEAD AND COPPER

	Date(s) Collected	90th Percentile	00Action Level	MCLG	# of Sites Sampled	# of Sites Above Action Level		Possible Source(s) of Contamination
Lead (ppb)	9/14/21	0.015	.015	0	7	0		Corrosion of household plumbing systems. Erosion of natural deposits
Cooper (ppm)	9/14/21	1.3	1.3	1.3	7	0		Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is from materials associated with service lines and home plumbing. The Gosnold Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking 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 State Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Regulated PFAS Contaminants

	Date(s) Collected	Result or Range Detected	Range Detected	MCL	Violation (Y/N)	Possible Source
PFAS						
PFAS ppt	1/14/22 4/4/22 8/1/22	ND	ND	20ppt	N	Discharges and emissions from industrial and manufacturing sources associated with the 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 foam

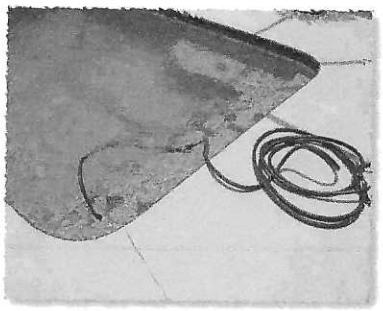
For information on the PFAS6 drinking water standard see: 310 CMR 22.00: The Massachusetts Drinking Water Regulations. For more information about the technical details behind the MMCL, see MassDEP's technical support documents at: Per- and Polyfluoroalkyl Substances (PFAS): An Updated Subgroup Approach to Groundwater and Drinking Water Values.

Water Conservation Tips

- **Limit outdoor watering to 30 minutes or less using hand held hoses.**
- **Eliminate all automatic lawn sprinklers & watering systems.**
- **All outside hose fixtures should have individual shut offs, that can be shut eas ily.**
- **Fix all leaking toilets & faucets.**
- **Washing machines and dishwashers should be run with full loads.**
- **Shut off water while brushing teeth, shaving, or cleaning vegetables.**
- **Use mulch for gardens and flower beds, which minimizes moisture lost.**

These ideas and many of your own efforts will save hundreds of gallons of water each day/week. Please contact The Gosnold Water Department Manager, Russell Wright at (508) 990-7408 with questions or additional suggestions about our water conservation effort.

What is a Cross Connection and What Can I do about it?



Swimming Pool

55 Gallon Drum of Dirty Water

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cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to fill your pool .You hook up your hose drop it in the pool and let it go. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the pool, the pool water may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow prevention device can prevent this problem.

The Gosnold Water Department recommends the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town. For additional information on cross connections and on the status of your water systems cross connection program, please contact Dale Lynch.

The Gosnold Water Department makes every effort to supply the system/users with excellent quality and sufficient quantity for domestic and firefighting purposes. We would welcome additional support from system customers if you would like to get involved in your Public Water Supply.

Gosnold Water Department