

**Important Information From EPA..**  
**Contaminants in Bottled Water and Tap Water:** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does not necessarily indicate that water poses a health risk. More information can be obtained by calling the EPA's Safe Drinking Water Hotline, 1-800-426-4791.

**Drinking Water and People with Weakened Immune Systems:** 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 1-800- 426-4791.

**Lead In Drinking Water:** "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. COMM Water 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 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>."

**Manganese:** Drinking water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 300 ppb, nor should formula for infants be made with that water for longer than 10 days.

**U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791**

**WHAT CONTAMINANTS MAY BE PRESENT IN OUR WATER?**

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over 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.

**Microbial Contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

**Inorganic Contaminants**, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial process and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

**Radioactive Contaminants**, that 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 DEP and EPA prescribe regulations that limit the amount of certain contaminants in the water provided by public water systems. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

**For more information about  
COMM Water System contact:  
Craig A. Crocker, Superintendent  
508-428-6691**

**Board of Water Commissioners  
Monthly Meetings:**

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the first Wednesday of every month at 7:00 P.M. at the Centerville Fire Station, Route 28, Centerville, MA.

Meetings are subject to change. Changes will be posted at Town Hall, Centerville Fire Station, the Water Department Office and the website shown below.

**Board of Water Commissioners:  
Scott E. Crosby, Chairman  
Peter Hansen  
Kevin Medeiros  
Website : [www.commwater.com](http://www.commwater.com)**

**Source Water Assessment and Protection (SWAP)**

**What Is SWAP?**

The Source Water Assessment Protection (SWAP) program assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals.

**What Is My System's Ranking?**

A susceptibility ranking of high, was assigned to this system using the information collected during the assessment by the DEP. A source's susceptibility to contamination does *not* imply poor water quality. Soil conditions contributed to this ranking.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to this report.

**Common Potential Sources of Contamination Include:**

septic systems, household hazardous materials, heating oil storage, stormwater, fertilizers, pesticides and automotive fluids.

**Where Can I See The SWAP Report?**

The complete SWAP report is available at the Water Department Office and Board of Health. For more information, call Superintendent Craig Crocker 508-428-6691.

**Residents Can Help Protect Sources By:**

- practicing good septic system maintenance,
- supporting water supply protection initiatives at the next town/district meetings,
- taking hazardous household chemicals to hazardous materials collection days, and
- limiting pesticide and fertilizer use, etc.

**Facts About Your Water Delivery System**

- ⇒ Over 252 miles of water mains
- ⇒ 12,244 **billed accounts** and 38,000 **customers**
- ⇒ Provides fire protection through 2,014 hydrants
- ⇒ Can store 6.8 million gallons of water in 3 storage tanks
- ⇒ Includes 19 pumping stations, 13 treatment facilities
- ⇒ 662 Acres of watershed property
- ⇒ Discoloration caused by iron is controlled with a sequestering agent (poly phosphate) at 5 wells
- ⇒ The pH of water on Cape Cod tends to be acidic in the range of 5.0 to 6.5 (pH is the measure of acidity or alkalinity of a liquid). On the pH scale, the number 7 is neutral, less than 7 is acidic, and more than 7 is alkaline (basic). Due to the lower pH of our water, we add a harmless alkaline substance (potassium hydroxide) to our water in order to reduce corrosion in the distribution system and in your home or business.

In 2021 the COMM Water Department delivered over **one billion** gallons of water.



**Established in 1937  
Public Water Supply  
ID #4020002**

**2021  
WATER QUALITY REPORT  
July 2022**

*This is an annual report on the quality of the water delivered by the COMM Water Department.*

*This brochure contains information on the source and contents of our water and related health risks associated with any detected contaminants.*

*The COMM Water Department is committed to providing our customers with high quality, safe drinking water that exceeds every federal and state standard.*

**P.O. Box 369  
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508-428-6691 Fax 508-428-3508  
Website : [www.commwater.com](http://www.commwater.com)  
Superintendent: *Craig A. Crocker***

The table lists all the substances in drinking water that we detected during calender year 2021 (unless otherwise noted), although the presence of these substances in the water does not necessarily indicate that the water poses a health risk, we feel that it is important that you know exactly what and how much was detected.

Regulated	MCLG	MCL	Highest Level Detected	Range of Detection	Violation	Major Source in Drinking Water	Health Effects Language
Inorganic Contaminants							
Nitrate	10 ppm	10 ppm	4. 9	.1 - 4. 9	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite	10 ppm	10 ppm	.0006	0 - 0.0006	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Barium (2017)	2 ppm	2 ppm	.07	0 - .07	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
Perchlorate (ppb)	N/A	2 ppb	0	N/A	NO	Rocket propellants, fireworks, munitions, flares, blasting agents also present in bleach and some fertilizers	Perchlorate interferes with the normal function of the thyroid gland and thus has the potential to affect growth and development, causing brain damage and other adverse effects, particularly in fetuses and infants. Pregnant women, the fetus, infants, children up to the age of 12, and people with a hypothyroid condition are particularly susceptible to perchlorate toxicity.
Radioactive Containments							
Combined Radium (picoCuries per liter)	0	5pCi/l	1.453	0.0782 - 1.453	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.
Gross Alpha (pCi/L)	0	0	2.21	0 - 2.21	NO	Gross alpha radiation is a type of energy released when certain radioactive elements decay or break down	People who are exposed to relatively high levels of radionuclides in drinking water for long periods may develop serious health problems, such as cancer, anemia, osteoporosis, cataracts, bone growths, kidney disease, liver disease and impaired immune systems.
Secondary Contaminants		SMCL	AVERAGE				
Sulfate (ppm) (data 2020)	250	-	8.86	4.8 - 13	NO	Runoff and leaching from natural deposits; industrial wastes	Natural Mineral
Iron (ppm) (data 2020)	.3	-	.2	0 - .7	NO	Natural and industrial sources as well as aging and corroding distribution systems and household pipes	Use of water containing iron at concentrations above the secondary MCL may result in aesthetic issues including the staining of laundry and plumbing fixtures and water with an unpleasant metallic taste and rusty odor of natural deposits and erosion.
Chloride (ppm) (data 2020)	250	-	47	0 - 98	NO	Runoff and leaching from natural deposits; seawater influence	May produce a salty taste, natural mineral, road salt
Sodium (ppm) (data 2020)	20	-	57	7.3 - 57	NO	Erosion of natural deposits, road salt run-off	Sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels in drinking water where exposures are being carefully controlled. Erosion of natural deposits.
Manganese (ppb) (data 2020)	50	300	12	1 - 40	NO	Natural sources as well as discharges from industrial uses	Use of water containing manganese at concentrations above the secondary MCL may result in aesthetic issues including the staining of laundry and plumbing fixtures and water with an unpleasant bitter metallic taste, odor, and/or black-brown color. Naturally occurs in rock and soil.
Calcium (ppm) (data 2020)	250	-	3.5	1.3 - 9.3	NO	Erosion of natural minerals, road salts	Natural mineral and organic matter.
Magnesium (ppm) (data 2020)	-	-	3	1.8 - 4.74	NO	Erosion of natural mineral & organic matter	Natural mineral and organic matter.
Potassium (ppm) (data 2020)	-	-	26	15 - 41	NO	Erosion of natural mineral & organic matter	Natural mineral and organic matter.
Zinc (ppm) (data 2020)	5	-	.01	0 - .024	NO	Erosion of natural deposits	Mineral that naturally occurs in rock and soil.
Unregulated	ORSG	MCL	Average	Range of Detection	Source to Drinking Water		
Chloroform (ppb)	70	-	.68	0 - .68	NO	In non-chlorinated sources may be naturally occurring.	Some people who drink water containing chloroform at high concentrations for many years could experience liver and kidney problems and may have an increased risk of cancer.
PFAS (ppt) Parts per trillion	20	20	15.5	0 - 15.5	NO	Wastewater treatment plants, chemical manufacturing plants, airports, and military bases that use firefighting foams	Discharge 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 foam.
Lead & Copper	Action Level(AL)	MCLG	90th Percentile	Sample sites above the AL	Possible Source of Contamination		
Lead (data from 2019)	15 ppb	0	0.001	0 out of 30	NO	Corrosion of household plumbing; Erosion of natural deposits.	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.
Copper	1.3 ppm	0	.283	0	NO	Corrosion of household plumbing; Erosion of natural deposits.	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 contusing copper in excess of action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Microbiological Contaminants		MCL	Highest Level Detected	Violation			
Total Coliform	0	>5% monthly	3	>5% (month)	NO	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
E-Coli (data 2020)		1	4	May 2020	YES	Human & animal fecal waste.	E-Coli - confirmation samples were negative. 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.

PFAS

On October 2, 2020, the Massachusetts Department of Environmental Protection (MassDEP) promulgated a new drinking water regulation and maximum contaminant level (MCL) of 20 nanograms per liter (ng/L) or parts per trillion (ppt) for the sum of six per- and polyfluoroalkyl substances (called PFAS6). An MCL is the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. The new regulation requires our water system to begin sampling for PFAS6 in April 2021. The COMM Water Department proactively participated in MassDEP's free PFAS analysis program in advance of the April 2021 sampling deadline. Levels of PFAS in four of the fifteen entry points (wells) are above the new EPA Health Advisories.

The U.S Environmental Protection Agency (EPA) released four lifetime drinking water health advisories for per- and polyfluoroalkyl substances (PFAS). These advisories indicate the level of drinking water contamination below which adverse health effects are not expected to occur. EPA's lifetime health advisories also take into account other potential sources of exposure to these PFAS beyond drinking water (for example food, air, consumer products, etc.), which provides an additional layer of protection. Individuals concerned about levels of PFAS found in their drinking water should consider actions that may reduce exposure, including installing a home or point of use filter.

As of 8/16/2021, ongoing sampling results for PFAS6 at the Craigville wells has indicated that the new removal system is a success. Temporary treatment has been installed and sample results have indicated no presence of PFAS compounds. As a result, the wells will be brought back on line with DEP approval in time for the peak season and will allow a return to normal summer use. COMM Water Department continues to monitor all sources as required.

This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

Wells located in Centerville

Wells 5 + 9 Lumbert Mill  
Wells 7, 8, 11 Craigville

Wells located in Osterville

Wells 1,2 + 2A McShane  
Well 3 + 4 Arena  
Well 10 Davis

Wells located in Marstons Mills

Wells 12 + 13 Murray  
Wells 14, 15, 17, 18, 20, 21, 22 Hayden  
Wells 16 + 19 Harrison

WHERE DOES MY WATER COME FROM?

The COMM Water Department serves a year round population of over 38,000 consumers from our groundwater wells. We currently pump from 19 sites as shown above.

As a means of additional water supply, water interconnections exist between COMM Water, Cotuit, Sandwich, Mashpee, Barnstable Fire District and the Hyannis Water System. No water was utilized from those sources in 2021.

DEFINITIONS

**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”. UCMR data summary at: [water.epa.gov](https://www.water.epa.gov/ucmr/)  
**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 by 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 margin of safety.  
**90th Percentile:** Out of every 10 homes, 9 were at or below this level.  
**pCi/L:** (picocuries per liter): Measure of radioactivity of water. The equivalent of one second in 32 million years.  
**ppb:** parts per billion, or micrograms per liter. The equivalent of one second in 32 years.  
**ppm:** parts per million, or milligrams per liter. The equivalent of one second in 12 years.  
**Secondary Maximum Contaminant Level (SMCL):** Theses standards are developed to protect the aesthetic qualities of drinking water and are not health based.  
**AL:** action level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.  
**Massachusetts Office of Research and Standard Guidelines (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, with a margin of safety. If exceeded it serves as an indicator of the potential need for further action.