

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 C-O-MM 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

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 251.78 miles of water mains
 - ⇒ 12,068 **billed accounts** and 37,500 **customers**
 - ⇒ Provides fire protection through 1998 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 4 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 2014 the COMM Water Department delivered over **one billion** gallons of water. The dry conditions in summer/fall contributed to higher than normal usage.



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

**2015
WATER QUALITY REPORT
January 2016**

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
1138 Main Street
Osterville, MA 02655
508-428-6691 Fax 508-428-3508**

**Website : www.commwater.com
Superintendent: Craig A. Crocker**

The table lists all the substances in drinking water that we detected during calendar year 2015 (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	5.3	.1-5.3	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 (2014)	2 ppm	2 ppm	.068	0 -.068	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)	2	2 ppb	.74	0. -.74	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.
Radionuclides							
Alpha emitters (2012)	0	15 pCi/l	18.11*	-0.11 - 18.11*	NO	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known 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.
Combined Radium (2012)	0	5 pCi/l	1.3	0 - 1.3	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
Secondary Contaminants							
SMCL		AVERAGE					
Sulfate (ppm) (2014)	250	-	8.86	4.8 - 13	NO	Runoff and leaching from natural deposits; Industrial wastes	May produce a salty taste
Iron (ppm) (2014)	.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.
Chloride (ppm) (2014)	250	-	34	0-100	NO	Runoff and leaching from natural deposits; seawater influence	May produce a salty taste
Sodium (ppm) (2014)	20	-	17.38	6.1 - 37	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.
Manganese (ppm)	.05	.3	0.01	0.003 - 0.22	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
Unregulated	ORSG	MCL	Average	Range of Detection		Source to Drinking Water	
Chloroform (ppb)	70	-	0.09	0 - 0.96	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.
Chromium (ppb) (2014)	300	-	.39	0-.59	NO	Naturally occurring element	Some people who use water containing chromium will in excess of the MCL over may years could experience allergic dermatitis.
Chlorate (ppb) (2014)	300	-	6.6	0-84	NO	Agriculture defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide	EPA current reference concentration indicates that ongoing exposure to chlorate ion at levels of more than 210 parts per billion per day can lead to an enlarged thyroid
MTBE (ppb)	70	-	.09	0-.74	NO	Fuel additive: leaks & spills from gasoline storage tanks	The ORSG has adapted a guideline of 70 ug/L (ppb) as a health protective concentration for MTBE in drinking water. MTBE also has a secondary MCL of 20-40 ppb
Hexavalent Chromium (ppb) (2014)	100	-	.12	0-.56	NO	Naturally occurring element	Potential adverse dermatological effects could occur using water in excess of MCL over many years, such as allergic dermatitis (skin reactions)
1, 4 Dioxane (ppb) (2014)	50	-	.005	0-.09	NO	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos	Little scientific data is available on the long-term effects of 1,4-dioxane on human health. The greatest human threat from 1,4-dioxane has come from worker inhalation exposure at industrial sites.
Strontium (ppb) (2014)	4000	-	40	19-80	NO	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions element	Strontium is chemically similar to calcium, and tends to deposit in bone and blood-forming tissue (bone marrow). EPA cancer class: D. Not classifiable as to human carcinogenicity
Vanadium (ppb) (2014)	2	-	.03	0 - .46	NO	Naturally-occurring element metal; used as vanadium pentoxide which is a chemical intermediate with a catalyst	Associated with altered kidney function indicated by increased blood urea and mild tissue changes for som who use water in excess of MCL over many years.
Lead & Copper	Action Level(AL)	MCLG	90th Percentile	Sample sites above the AL		Possible Source of Contamination	
Lead (data from 2013)	15 ppb	15 ppb	0	0 out of 33	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 (data from 2013)	1.3 ppm	1.3 ppm	0.92	0 out of 33	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.

WATER RATE STUDY

An independent review of rates concluded that revenues were not adequate to fully support the increased cost of operations. **Please be advised rates were adjusted January 2014. Increases are estimated to be \$10 - \$58 annually, depending on your usage.**

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 C-O-MM Water Department serves a year round population of over 35,000 consumers from our groundwater wells. We currently pump from 19 sites as shown below.

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 2015.

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

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 want 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.