The Town of Falmouth is committed to providing its residents with drinking water of the highest quality possible and we constantly strive to improve all facets of our water system. Our goal is to ensure that we will have ample water supplies in the future that are contaminant free. Although we currently comply with federal and state standards for drinking water quality, please review this report carefully: it is intended to increase public awareness of water issues and contains important information about our water system.

Public participation and support are necessary to plan for our long-term needs. Major water issues are usually presented at regular weekly meetings of the Board of Selectmen as well as Town Meeting. We encourage you to get involved.

**OVERVIEW**

Municipal water systems face many challenges such as: meeting seasonal water demands, finding new supply sources to keep pace with growth, resource protection, water conservation, environmental protection and even more stringent regulations for improved water quality. Our sustainability, as it relates to water, is dependent upon our ability to stay abreast of these changing conditions and implement plans for the future. Unfortunately, there is no “magic wand” that will make the problems go away; sound planning is therefore crucial. Regardless of our future supply conditions, water conservation and prudent supply management will still be our number one priority to ensure the long-term availability of our water supplies.

We are committed to conserving our water supplies and complying with Massachusetts state regulatory requirements governing the operation of water systems. Despite recent rainfall, Voluntary Conservation Measures are necessary and have been implemented to achieve the two goals of regulatory compliance and water conservation. The Town is subject to substantial fines for failure to comply. The Town has therefore implemented the following Voluntary Conservation Measures:

1. **Watering of lawns and shrubs is limited to odd / even days only (based on house address) between the hours of 7:00 a.m. and 7:00 p.m.**
2. **Washing of sidewalks, patios and driveways is prohibited (excluding businesses for safety / health reasons).**
3. **Pistol-grip nozzles are required for all hoses used for washing cars and all hoses at dockside facilities.**
4. **Restaurants may only serve water when requested by patrons.**

A conscientious effort on everyone’s part is necessary for these conservative measures to have a positive effect. Your efforts are most appreciated, as we must all work together to preserve this most valuable resource for generations to come.

**WATER SOURCES**

**SOURCES WITHIN FALMOUTH**

Locally, our water comes from a “surface water” source at Long Pond (Source # 4096000-01S) and four “groundwater sources” located at Crooked Pond (Source # 4096000-05G), Mares Pond (Source # 4096000-04G), Fresh Pond (Source # 4096000-02G) and Coonamessett Well (Source # 4096000-03G). All sources are treated with either Potassium Hydroxide or Sodium Hydroxide to stabilize the pH as well as either Chlorine or Sodium Hypochlorite for disinfection. As their names imply, all sources are located adjacent to the ponds they are named after.

We constructed a highly advanced water treatment facility in 2005 that can treat 2.5 MGD of water from the Crooked Pond Well and the Coonamessett Well. The treatment methods are passive in nature and include air-stripping, activated carbon adsorption and manganese-greensand filtration followed by disinfection and pH adjustment. The resultant water is of exceptional quality and contaminant free. The facility has proven to be a valuable asset to meet the water demands of Falmouth.

**SOURCES OUTSIDE OF FALMOUTH**

Falmouth also purchases water from the Upper Cape Regional Water Supply Cooperative (UCRWSC Public Water System # 4261024). This system presently provides water to Falmouth, Bourne, Mashpee and Sandwich. The system consists of three groundwater wells #1, #2 and #3 located on the MMR northeastern boundaries near the Sandwich town line. Our connection is located on Sandwich Road near the Falmouth gate of the MMR. It is at this facility that the purchased water is disinfected and the pH adjusted to the standards of the Falmouth sources.

**EMERGENCY INTERCONNECTIONS**

Falmouth has emergency interconnections with both Mashpee and Bourne. These connections were constructed as an alternate, emergency supply in the event of a catastrophic failure in one of the connected systems. There were no interconnection events in 2009. Annually, a sanitary survey is completed for the Long Pond Watershed by the Massachusetts Department of Environmental Protection (DEP). This comprehensive inspection evaluates existing conditions and identifies deficiencies to preserve the quality of the supply. In 2003, DEP completed a report under the Source Water Assessment & Protection program (SWAP) that assesses the susceptibility of our water sources to potential contamination by microbiological pathogens and chemicals. The report commends the Town for its proactive source protection efforts to reduce risks and promote water resource education. All of our water sources are considered highly susceptible (except Mares Pond Well = medium susceptibility) to contamination from a variety of sources such as: fuel spills, fertilizer use, MMR plume migrations and septic systems. Residents can help protect sources by: supporting water source preservation initiatives, properly disposing of hazardous wastes (see collection dates & times at end of this brochure), maintaining septic systems and limiting pesticide & fertilizer use. The complete SWAP report is available on-line at www.state.ma.us/dep/brp/dws/ or at the Water Department office. For more information contact William Chapman at (508) 457-2543 or the Massachusetts Department of Environmental Protection at (508) 946-2766.

**NATIONAL PRIMARY DRINKING WATER REGULATION COMPLIANCE**

Water Quality Data for community water systems throughout the United States is available at www.waterdata.com. The Town of Falmouth Public Water System Identification Number is 4096000.

We will be happy to answer any questions about the Town of Falmouth water system and our water quality. Call William R. Chapman at (508) 457-2543.
AN EXPLANATION OF THE WATER-QUALITY DATA TABLE

The table shows the results of our year 2009 water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. In total, over 1,780 samples were taken throughout 2009. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Understanding definitions of MCL and MCLG are important. The data presented in this report is from the most recent testing done in accordance with present regulations.

DEFINITIONS

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.

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

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

Variance and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

KEY TO TABLE

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
NTU = Nephelometric Turbidity Units
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (µg/l)
pCi/l = picocuries per liter
TT = Treatment Technique

These columns show the results of tests on our finished water.

WATER-QUALITY DATA TABLE

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>UNIT</th>
<th>MCL</th>
<th>MCLG</th>
<th>HIGHEST DETECTED LEVEL</th>
<th>RANGE</th>
<th>MAJOR SOURCES</th>
<th>VIOLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radionuclides</td>
<td>pCi/l</td>
<td>15</td>
<td>0.6(±0.1)</td>
<td>0.06-0.6</td>
<td>N/A</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td><strong>Gross Alpha Activity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By-product of mining or fuel/oil production</td>
<td></td>
</tr>
<tr>
<td><strong>Radon 222</strong></td>
<td>pCi/l</td>
<td>5</td>
<td>0.2(±0.2)</td>
<td>0.02-0.2</td>
<td>N/A</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td><strong>Radon 228</strong></td>
<td>pCi/l</td>
<td>5</td>
<td>0.9(±0.7)</td>
<td>0.09-0.9</td>
<td>N/A</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td>Inorganic Contaminants</td>
<td>ppm</td>
<td>10</td>
<td>None</td>
<td>1.0</td>
<td>0.04-1.0</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
<td>No</td>
</tr>
<tr>
<td>Nitrate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td>Nickel</td>
<td>ppm</td>
<td>0.1</td>
<td>0.005</td>
<td>0.005-0.005</td>
<td>N/A</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td><strong>1/5 Lead (level shown is 90th percentile result)</strong></td>
<td>ppb</td>
<td>AL=15</td>
<td>0</td>
<td>9.1</td>
<td>N/A</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
<td>No</td>
</tr>
<tr>
<td><strong>2/5 Copper (level shown is 90th percentile result)</strong></td>
<td>ppb</td>
<td>AL=1300 AL=1300</td>
<td>270</td>
<td>N/A</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from Wood preservatives</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>None</td>
<td>None</td>
<td>29.0</td>
<td>6.4-29.0</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td>Sulfate</td>
<td>ppm</td>
<td>250</td>
<td>6.8</td>
<td>6.4-6.8</td>
<td>N/A</td>
<td>Naturally present in the environment</td>
<td>No</td>
</tr>
<tr>
<td>* Bodomin</td>
<td>ppm</td>
<td>None</td>
<td>None</td>
<td>0.99</td>
<td>0-0.99</td>
<td>Turbidity measures the cloudiness of water. High turbidity measures interference with the Disinfection process may occur.</td>
<td>No</td>
</tr>
<tr>
<td>Microbiological Contaminants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Total Coliform (percentage of monthly samples)</td>
<td>Samples%</td>
<td>5%</td>
<td>0</td>
<td>0%</td>
<td>Naturally present in the environment</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4 Turbidity (TT) (highest level recorded for year)</td>
<td>NTU</td>
<td>5</td>
<td>0</td>
<td>0.99</td>
<td>0-0.99</td>
<td>Turbidity measures the cloudiness of water. High turbidity measures interference with the Disinfection process may occur.</td>
<td>No</td>
</tr>
<tr>
<td>Volatile Organic Contaminants</td>
<td>ppb</td>
<td>80</td>
<td>28.18</td>
<td></td>
<td></td>
<td>By-product of drinking water chlorination</td>
<td>No</td>
</tr>
<tr>
<td>3 TTHMs (Total Trihalomethanes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By-product of drinking water chlorination</td>
<td>No</td>
</tr>
<tr>
<td>3 HAA5s (Haloacetic Acids)</td>
<td>ppb</td>
<td>60</td>
<td>9.75</td>
<td></td>
<td></td>
<td>Discharge from factories/drycleaners</td>
<td>No</td>
</tr>
<tr>
<td>5 Tetrachloroethylene (PCE)</td>
<td>ppb</td>
<td>5</td>
<td>2.8</td>
<td>0-2.8</td>
<td></td>
<td>And vinyl lined A.C. pipe</td>
<td>No</td>
</tr>
<tr>
<td>*Chlorodibenzoephenolene</td>
<td>ppb</td>
<td>None</td>
<td>None</td>
<td>1.6</td>
<td>0-1.6</td>
<td>By-product of drinking water chlorination</td>
<td>No</td>
</tr>
<tr>
<td>*Bromochlorohydrocarbomethane</td>
<td>ppb</td>
<td>None</td>
<td>None</td>
<td>5.7</td>
<td>0-5.7</td>
<td>By-product of drinking water chlorination</td>
<td>No</td>
</tr>
<tr>
<td>*Chloroform</td>
<td>ppb</td>
<td>None</td>
<td>None</td>
<td>13.0</td>
<td>0.55-13.0</td>
<td>By-product of drinking water chlorination</td>
<td>No</td>
</tr>
</tbody>
</table>

WATER-QUALITY TABLE FOOTNOTES

1. Thirty lead samples were taken during 2008. Two samples exceeded the AL. Note: Compliance is determined if the 90th percentile sample result does not exceed the AL. For the 2008 compliance period, the 90th percentile (or sample number 27 out of 30) result was 9.1 ppb.
2. Thirty copper samples were taken during 2008. Zero (0) samples exceeded the AL. Note: Compliance is determined if the 90th percentile sample result does not exceed the AL. For the 2008 compliance period, the 90th percentile (or sample number 27 out of 30) result was 270 ppb.
3. Compliance for TTHMs and HAA5s is determined as an "annual running average" of all samples. The detected levels shown above are the highest average of (4) quarterly average values.
4. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the water quality.
5. Lead, Copper and Tetrachloroethylene (PCE) are distribution system samples and do not represent source water quality.
* Denotes "unregulated" contaminants for which EPA has not yet established standards. Monitoring is for the purpose of assisting EPA in determining their occurrence in drinking water and whether future regulation is warranted.
** Denotes historic reporting as per DEP regulations. These contaminants have been detected within the last five calendar years, but were not included with the 2009 MassDEP sampling schedule.
In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) and the state Department of Environmental Protection (DEP) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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, 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 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 storm 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, stormwater 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.

**Special Educational Statement for Lead:** 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 system. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a laboratory. Flushing your tap for 30 seconds to 2 minutes before using can reduce lead levels. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immune-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 are available from the Safe Drinking Water Hotline (800-426-4791).

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**REQUIRED ADDITIONAL HEALTH INFORMATION**

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**CROSS CONNECTIONS**

A Cross-Connection occurs whenever a potable (drinkable) water line is directly or indirectly connected to a non-potable piece of equipment or piping. Examples of non-potable equipment may include fire protection systems, lawn irrigation systems, air conditioning or cooling systems as well as high pressure boilers. The Falmouth Water Department would like you to know that unprotected cross connections can contaminate drinking water in your home and the municipal water mains. Please call if you have any questions.

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**PUBLIC INFORMATION BULLETIN**

**HAZARDOUS HOUSEHOLD WASTE DISPOSAL**

The proper disposal of hazardous household products is important to keep our water supplies and environment contaminant free. Many items may be disposed of for FREE on the following Saturdays: Peebles Elementary School in Bourne, October 16th; Mashpee High School, August 14th; Falmouth High School, June 19th. The centers are open from 9 a.m. to 1 p.m.

Please call the Falmouth Board of Health at (508) 495-7485 or the Barnstable County Hazardous Materials Hotline at (800) 319-2783 for additional information. DO NOT call the water department.