Fort Myers Beach Public Works

Water Quality Report 2012

Beach Water is pleased to present a summary of the quality of the water provided to you during 2012. The Safe Drinking Water Act (SDWA) requires that utilities issue this annual Consumer Confidence Report to customers in addition to other notices that may be required by law. This report details where our water comes from and what it contains.

Beach Water routinely monitors for contaminants in your drinking water according to Federal and State laws, rules and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of:

January 1, 2012 to December 31, 2012

Beach Water is committed to providing you with the safest and most reliable water supply possible. Informed consumers are our best allies in maintaining safe drinking water.

Si usted tiene alguna pregunta sobre este informe favor de llamar a Beach Water al 463-9914.
### Fort Myers Beach

#### Lead and Copper (Tap Water)
- **Copper (tap water) (ppm)**: 1.3 N/A
- **Lead (ppb)**: 0.15 N/A

**Lead in Copper**: Concentration of household plumbing systems; erosion of natural deposits, leading to lead poisoning. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is potentially from materials and components associated with service lines and home distribution systems. Drinking water that cannot control the availability of materials used in plumbing components. When your water has been sitting for several hours, you can reduce the potential for lead exposure by draining or running water from your tap for 30 seconds to 2 minutes before using it for drinking or cooking. If you are concerned about lead in your water, you may want to have your water sampled. Information on lead testing, water treatment methods, and steps you can take to minimize exposure is available from the U.S. EPA at http://www.epa.gov/lead.

#### Stage 2 Disinfectants and Disinfection By-Products
- **Total Trihalomethanes (THM) (ppb)**
  - **2nd, 3rd, 4th Quarter 2012**: N/A

**Greene Meadows**

#### Inorganic Contaminants
- **Arsenic (ppb)**: 0.9 N/A
- **Barium (ppb)**: 0.11 N/A
- **Fluoride (ppb)**: 0.4 N/A
- **Nickel (ppb)**: 1.4 N/A
- **Selenium (ppb)**: 0.8 N/A
- **Sodium (ppb)**: 0.9 N/A

**Stage 1 Disinfectants / Disinfection By-Product (DDBP) Parameters**
- **HAAs (ppb)**
  - **Sampling Date (mo/y):** 4/11, 7/12, 10/12
  - **MCIE Detection:** N/A
  - **MCIE Violation:** N/A
  - **Range of Results:** N/A

**Stage 2 Disinfectants / Disinfection By-Product (DDBP) Parameters**
- **HAAs (ppb)**
  - **Sampling Date (mo/y):** 4/11, 7/12, 10/12
  - **MCIE Detection:** N/A
  - **MCIE Violation:** N/A
  - **Range of Results:** N/A

**Notes:**
- The State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Of the states, therefore, in one or more of the contaminants, synthetic organic contaminants, including pesticides and herbicides, and volatile organic contaminants, are the highest average levels of the sampling points or the highest level of any sampling point, depending on the sampling frequency.
- The result in the Level Detected column for TTHMs is the highest of the four quarterly mean annual averages of results from all sampling sites. The quarterly running annual averages were calculated during the first, second, third, and fourth quarters of 2012.
- **TTHMs (Total Trihalomethanes):** Some people who drink water containing TTHMs in excess of the MCL may experience problems with their health, such as skin irritation or eye irritation, and may have an increased risk of cancer.
- **Disinfection By-Product (DDBP) Levels:**
  - **HAAs (HAAs):** N/A
  - **TTHM (TTHMs):** N/A

### How to Read This Table

**Maximum Residual Disinfectant Level Goal (MCDLG):** The level of a disinfectant desired in drinking water. Maximum Residual Disinfectant Level Goal (MCDLG) is not subject to the level of any reduction determined by the U.S. EPA in the mandatory treatment. **Maximum Residual Disinfectant Level (MCDL):** The level of a disinfectant allowed in drinking water. There is no concentration that is considered safe. A disinfectant is necessary for control of resistant bacteria.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or anticipated risk to health. MCLG is not enforceable. **Maximum Contaminant Level (MCL):** The level of a contaminant in drinking water, above which the water utility must notify the public. **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

**Treatment Techniques (T Techniques):** A required process intended to reduce the level of a contaminant in drinking water. **pH/Cl/Fluoride (pH/Cl/Fluoride):** Measures the level of fluoride in drinking water. **NTU:** Nephelometric Turbidity Unit - measures the clarity of water. **ppm:** Parts Per Million, milligrams per liter (mg/L) - one part by weight of sample to one million parts by weight of water sample. **ppb:** Parts Per Billion, micrograms per liter (µg/L) - one part by weight of sample to one billion parts by weight of water sample. **N/A:** Not Applicable. **ND:** Not Detected - indicates that the substance was not found by laboratory analysis.
# Water Quality Report 2012

## Microbiological Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>Highest Monthly % Level Positive Samples</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform (Lee County Utilities)</td>
<td>1/12 - 12/12</td>
<td>N</td>
<td>1.2</td>
<td></td>
<td>For systems collecting at least 40 samples per month; presence of coliform bacteria in 5% of monthly samples. Naturally present in the environment.</td>
</tr>
</tbody>
</table>

## Radioactive Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha (pCi/L)</td>
<td>1/09, 2/09 &amp; 4/09</td>
<td>N</td>
<td>3.0</td>
<td>ND - 3.0</td>
<td>0</td>
<td>15</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Radium 226 &amp; 228 or combined Radium (pCi/L)</td>
<td>1/09, 2/09 &amp; 4/09</td>
<td>N</td>
<td>1.5</td>
<td>0.3 - 1.5</td>
<td>0</td>
<td>5</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

## Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (ppb)</td>
<td>1/12, 8/12, 10/12 &amp; 12/12</td>
<td>N</td>
<td>1.12</td>
<td>ND - 1.12</td>
<td>0</td>
<td>10</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.</td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>3/11</td>
<td>N</td>
<td>0.005</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.</td>
</tr>
<tr>
<td>Chromium (ppb)</td>
<td>3/11</td>
<td>N</td>
<td>0.6</td>
<td>100 (ppb)</td>
<td>100 (ppb)</td>
<td></td>
<td>Discharge from steel and pulp mills; erosion of natural deposits.</td>
</tr>
<tr>
<td>Cyanide (ppb)</td>
<td>3/11</td>
<td>N</td>
<td>10</td>
<td>200 (ppb)</td>
<td>200 (ppb)</td>
<td></td>
<td>Discharge from steel and pulp mills; discharge from plastic and fertilizer factories.</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>1/12 &amp; 12/12</td>
<td>N</td>
<td>0.87</td>
<td>0.23 - 0.87</td>
<td>4</td>
<td>4</td>
<td>Discharge from steel and pulp mills; discharge from plastic and fertilizer factories.</td>
</tr>
<tr>
<td>Nitrate (as N) (ppm)</td>
<td>10/12</td>
<td>N</td>
<td>0.007</td>
<td></td>
<td>1</td>
<td>1</td>
<td>Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level 0.7.</td>
</tr>
<tr>
<td>Selenium (ppb)</td>
<td>3/11</td>
<td>N</td>
<td>1.4</td>
<td>50 (ppb)</td>
<td>50 (ppb)</td>
<td></td>
<td>Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.</td>
</tr>
<tr>
<td>Sodium (ppm)</td>
<td>3/11</td>
<td>N</td>
<td>99.7</td>
<td></td>
<td>N/A</td>
<td>160 (ppm)</td>
<td>Salt water intrusion, leaching from soil.</td>
</tr>
</tbody>
</table>

## Stage 1 Disinfectant / Disinfection By-Product (D/DBP) Parameters

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAAS (ppb)</td>
<td>4/11, 8/11, 10/11 &amp; 12/12</td>
<td>N</td>
<td>7.4</td>
<td>ND - 24.8</td>
<td>n/a</td>
<td>60</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM (ppb)</td>
<td>4/11, 8/11, 10/11 &amp; 12/12</td>
<td>N</td>
<td>6.9</td>
<td>0.7 - 40.3</td>
<td>n/a</td>
<td>80</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Chloramines and Chlorine (ppm)*</td>
<td>1/12 - 12/12</td>
<td>N</td>
<td>3.8</td>
<td>0.3 - 5.4</td>
<td>4</td>
<td>4.0</td>
<td>Water additive used to control microbes</td>
</tr>
</tbody>
</table>

## Stage 2 Disinfectant / Disinfection By-Product (D/DBP) Parameters

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAAS (ppb)</td>
<td>4/12, 7/12 &amp; 10/12</td>
<td>N/a</td>
<td>n/a</td>
<td>0.4 - 26.0</td>
<td>n/a</td>
<td>60</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM (ppb)</td>
<td>4/12, 7/12 &amp; 10/12</td>
<td>N/a</td>
<td>n/a</td>
<td>1.6 - 66.0</td>
<td>n/a</td>
<td>80</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

## Lead and Copper (Tap Water)

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Date of Sampling</th>
<th>MCL Violation Y/N</th>
<th>90th Percentile</th>
<th>No. of Sampling Sites Exceeding AL</th>
<th>MCLG</th>
<th>AL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppm)</td>
<td>8/10</td>
<td>N</td>
<td>0.464</td>
<td>0</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Lead (ppm)</td>
<td>8/10</td>
<td>N</td>
<td>1.3</td>
<td>0</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

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*LCU performed a free chlorine flush from May 1st to May 29th. The results shown include both chloramine and chlorine results.

**Lead & Copper:** 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 young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Beach 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.
WATER SOURCE
Beach Water Service Area is supplied by groundwater from the Green Meadows and Corkscrew Water Treatment Plants.
- **Green Meadows Water Treatment Plant:** Treats groundwater obtained from the Sandstone and Surficial aquifers from the Green Meadows wellfield. This water is treated for color removal, lime softened, chlorinated for disinfection purposes and filtered.
- **Corkscrew Water Treatment Plant:** Treats water obtained from groundwater obtained from the Sandstone and Surficial aquifers from the Corkscrew wellfield. This water is lime softened, chlorinated for disinfection purposes and fluoridated for dental purposes.

WATER QUALITY TESTING
Beach Water collects water samples and conducts water quality tests using certified laboratories to assure that the public water supply is safe for human consumption.

WATER SOURCE QUALITY - Source Water Assessments for Consecutive Systems
In 2012, The Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment for Lee County Utilities. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained by contacting Patricia DiPiero, 239-533-8534 or dipierpm@leegov.com.

WATER CONSERVATION
As the population of Lee County keeps growing, the demand for water keeps increasing. Even though Lee County receives a large amount of rainfall, it arrives mostly during the rainy season when demands are low. Our highest demand for water comes during our dry season when our population increases due to our winter and spring visitors. Approximately 60% of potable water is used for irrigation. Beach Water and the South Florida Water Management District (SFWMD) urge everyone to keep irrigation at a minimum and recommend irrigating between the hours of 5:00PM and 9:00AM, not more than 2 times a week. Beach Water encourages all of our customers to practice water conservation efforts throughout the year. Saving water will not only help the environment, but will help lower the cost of your monthly bill.

BOIL WATER NOTICES
Precautionary Boil Water Notices are placed into effect when pressure to a water main drops below 20 psi. This usually occurs during a water main break or a scheduled utility repair. While such repairs are being conducted, open pipes could be exposed to dirt or debris. Once repairs or services are completed, the pipes are flushed with chlorine to kill any bacteria that may be present. After flushing, the pipes are put back into service and water is restored to homes and businesses. To ensure safety precautions, the Florida Department of Health requires utilities to issue a Boil Water Notice until bacteriological tests confirm that the water is safe to drink. During this period of confirmation, boiling water for use in cooking or consumption is an effective way to kill any bacteria potentially present. Bottled water may be used as an alternative. If you are placed under a Boil Water Notice you may call our office at 239-463-9914 for more information.

Required Additional Health Information
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 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 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 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) 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 the 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 1-800-426-4791.

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 systems 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 microorganism contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

Beach Water encourages our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. Town Council meetings are normally held on the first and third Mondays of the month at 2523 Estero Blvd. Check the town’s website for times at www.fortmyersbeachfl.gov.