



## Beach Water

Ft. Myers Beach Public Works  
2801-C Estero Blvd.  
Ft. Myers Beach, FL 33931

*For more information call:*

239-463-9914



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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.*



# Water Quality Report 2012

## FORT MYERS BEACH

Contaminant (Unit of Measurement)	MCLG	MCL	Sampling Date (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding AL	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	1.3	1.3	09/10	N	0.05160	1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative
Lead (ppb)	0	15	09/10	N	8.7	1	Corrosion of household plumbing systems; erosion of natural deposits

**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>.

Contaminant (Unit of Measurement)	Dates of Sampling	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Stage 2 Disinfectants and Disinfection By-Products</b>							
Haloacetic Acids (HAAs) (ppb)	2nd, 3rd, 4th Quarter 2012	N	N/A	11 - 21	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	2nd, 3rd, 4th Quarter 2012	N	N/A	15 - 21	N/A	80	By-product of drinking water disinfection.

## GREEN MEADOWS

Contaminant (Unit of Measurement)	Date of Sampling	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Arsenic (ppb)	3/11	N	0.9	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium (ppm)	3/11	N	0.01	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	3/11	N	0.11	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level 0.7.
Nickel (ppb)	3/11	N	1.4	N/A	100 (ppb)	This organic metal occurs naturally in the ground and is often used in electroplating, stainless steel and alloy products. It mainly gets in to the water from mining and refining operations.
Selenium (ppb)	3/11	N	0.8	50 (ppb)	50 (ppb)	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Sodium (ppm)	3/11	N	39	N/A	160 (ppm)	Salt water intrusion, leaching from soil.

Contaminant (Unit of Measurement)	MRDL	MCLG	MCL	Sampling Date (mo./yr.)	MCL Violation Y/N	Level Detected**	Range of Results	Likely Source of Contamination
<b>Stage 1 Disinfectants / Disinfection By-Product (D/DBP) Parameters</b>								
HAA5 (ppb)		N/A	60	4/11, 8/11, 10/11 & 1/12	N	7.4	ND - 24.8	By-product of drinking water disinfection
TTHM (ppb)		N/A	80	4/11, 8/11, 10/11 & 1/12	N	6.9	0.7 - 40.3	By-product of drinking water disinfection
Chloramines and Chlorine (ppm)*		4.0	4.0	1/12 - 12/12	N	3.8	0.3 - 5.4	Water additive used to control microbes
<b>Stage 2 Disinfectants / Disinfection By-Product (D/DBP) Parameters</b>								
HAA5 (ppb)		N/A	60	4/12, 7/12 & 10/12	N	n/a	0.4 - 26.0	By-product of drinking water disinfection
TTHM (ppb)		N/A	80	4/12, 7/12 & 10/12	N	n/a	1.6 - 66.0	By-product of drinking water disinfection

\*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. Some of the data, though representative, is more than one year old.

\*\*Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants, including pesticides and herbicides, and volatile organic contaminants, are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

\*\*\*The result in the Level Detected column for TTHMs is the highest of the four quarterly running 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.

†Reasons for monitoring unregulated contaminants: (1) To determine appropriate MDLs for the unregulated contaminants, and (2) To evaluate which compounds should be considered regulated compounds.

‡Unregulated Contaminants - Beach Water was not required to test for Cryptosporidium or Radon, therefore these contaminants were not tested for in 2012. The U.S. Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Lee County Utilities has been monitoring for unregulated contaminants (UCs) as part of a study to help U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminate levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminates Monitoring Rule, please call the Safe Drinking Water Hotline at 1-800-426-4791.

\*LCU performed a free chlorine flush from May 1-May 29. The results shown include both chloramine and chlorine results.

## HOW TO READ THIS TABLE

Terms used in the water quality table and in other parts of this report are defined here.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**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 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.

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

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

**PC/L:** PicoCuries Per Liter - a measure of radioactivity.

**NTU:** Nephelometric Turbidity Unit - measure of clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppm:** Parts Per Million, or Milligrams Per Liter (mg/L) - one part by weight of analyte to 1 million parts by weight of the water sample.

**ppb:** Parts Per Billion, or Micrograms Per Liter (ug/L) - one part by weight of analyte to 1 billion parts by weight of the water sample.

**N/A:** Not Applicable

**ND:** Not Detected - indicates that the substance was not found by laboratory analysis.

**MFL:** Million Fibers per Liter (longer than 10 micrometers).

**Note:** For chloramines, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids and TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly. Range of results is the range of individual sample results for all monitoring locations.

**Note:** Results in the Level Detected column for radiological contaminants and inorganic contaminants are the highest detected level at any sampling point.



# Corkscrew Water Quality Report 2012



Microbiological Contaminants	Date of Sampling	MCL Violation Y/N	Highest Monthly % Level Positive Samples	MCL	Likely Source of Contamination
Total Coliform (Lee County Utilities)	1/12 - 12/12	N	1.2	For systems collecting at least 40 samples per month: presence of coliform bacteria in >5% of monthly samples.	Naturally present in the environment.

Contaminant (Unit of Measurement)	Date of Sampling	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
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Radioactive Contaminants							
Alpha (pCi/L)	1/09, 2/09 & 4/09	N	3.0	ND - 3.0	0	15	Erosion of natural deposits
Radium 226 & 228 or combined Radium (pCi/L)	1/09, 2/09 & 4/09	N	1.5	0.3 - 1.5	0	5	Erosion of natural deposits

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

Contaminant (Unit of Measurement)	Date of Sampling	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
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Stage 1 Disinfectant / Disinfection By-Product (D/DBP) Parameters							
HAA5 (ppb)	4/11, 8/11, 10/11 & 1/12	N	7.4	ND - 24.8	n/a	60	By-product of drinking water disinfection
TTHM (ppb)	4/11, 8/11, 10/11 & 1/12	N	6.9	0.7 - 40.3	n/a	80	By-product of drinking water disinfection
Chloramines and Chlorine (ppm)*	1/12 - 12/12	N	3.8	0.3 - 5.4	4	4.0	Water additive used to control microbes

Stage 2 Disinfectant / Disinfection By-Product (D/DBP) Parameters							
HAA5 (ppb)	4/12, 7/12 & 10/12	N	n/a	0.4 - 26.0	n/a	60	By-product of drinking water disinfection
TTHM (ppb)	4/12, 7/12 & 10/12	N	n/a	1.6 - 66.0	n/a	80	By-product of drinking water disinfection

Contaminant (Unit of Measurement)	Date of Sampling	MCL Violation Y/N	90 <sup>th</sup> Percentile	No. of Sampling Sites Exceeding AL	MCLG	AL
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Lead and Copper (Tap Water)						
Copper (ppm)	8/10	N	0.464	0	1.3	1.3
Lead (ppb)	8/10	N	1.3	0	0	15

\*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](http://www.dep.state.fl.us/swapp) or they can be obtained by contacting Patricia DiPiero, 239-533-8534 or [dipierpm@leegov.com](mailto: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 to 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 microbiological 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](http://www.fortmyersbeachfl.gov).

