

Water Quality Report 2018

Beach Water is pleased to present a summary of the quality of the water provided to you during 2018. 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, 2018 to December 31, 2018

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.

Data obtained before January 1, 2018, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Si usted tiene alguna pregunta sobre este informe favor del llamar a Beach Water al 463-9914.



HOW TO READ THIS TABLE

Terms used in 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 not 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 contaminant in drinking water.

pCi/L: Picocuries Per Liter – a measure of radioactivity in water.

ppm: Parts Per Million, or Milligrams Per Liter (mg/L) – one part by weight or 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.

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 LRAA, 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.



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, Surficial, and Lower Hawthorn aquifers from the Green Meadows wellfield. This water was treated for with lime softened, filtered, and chlorinated for disinfection until May 2018. Green Meadows Water Treatment Plant is now treated with reverse osmosis and ion exchange. This water is then blended with water from the Corkscrew Water Treatment Plant.

Corkscrew Water Treatment Plant: Treats groundwater obtained from the Sandstone, Surficial, and Lower Hawthorn aquifers from the Corkscrew wellfield. This water is lime softened, chlorinated for disinfection and then fluoridated for dental purposes. This water is then blended with water from the Green Meadows Water Treatment Plant.

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 2018 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 Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Cadd Balogh, 239-694-4038 or cbalogh@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 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 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 river, 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 stormwater runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals 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 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 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 2525 Estero Blvd. Check the Town's website for times at www.fmbgov.com.

Town of Fort Myers Beach Water Quality 2018

LEAD AND COPPER (Tap Water)

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	AL Exceeded Y/N	90th Percentile	Numbering of Samples Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	7/18	N	0.013	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	7/18	N	1.8	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits.

Lead & Copper: 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 make to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

STAGE 1 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Disinfecting and Unit of Measurement	Sampling Date (mo/yr)	MRDL Violation Y/N	Level Detected	Range of Results	MRDGL	MRDL	Likely Source of Contamination
Chlorine & Chloramines (ppm) *	1/18 - 12/18	N	3.1	0.6 - 4.2	4.0	4.0	Water additive used to control microbes.

STAGE 2 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	2/18,6/18, 8/18,11/18	N	18.5	12-24	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2/18,6/18, 8/18,11/18	N	31	18-34	N/A	80	By-product of drinking water disinfection

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exist through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessments(s). One Level 1 assessments(s) were completed.

“The State has reduced monitoring 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.”

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 contaminant 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.

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

Corkscrew Water Quality Report 2018

MICROBIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL VIOLATION Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely Source of Contamination
E. coli	1/18 - 12/18	N	1	N/A	Routine and repeat samples are total coliform positive and either is E.coli positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E.coli	Human and animal fecal waste

RADIOACTIVE CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Result	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or comined radium (pCi/L)	3/17	N	0.582		0	5	Erosion of natural deposits

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	3/17	N	0.9		0	10	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes.
Barium (ppm)	3/17	N	0.0044		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	1/18 - 12/18	N	0.85	0.14-0.85	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm.
Nitrate (as N) (ppm)	10/18	N	0.016		10	10	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as N) (ppm)	10/18	N	0.010		1	1	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (ppm)	3/17	N	84.8		N/A	160	Salt water intrusion, leaching from soil.

STAGE 1 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measurement	Sampling Date (mo/yr)	MRDL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine & Chloramines (ppm)*	1/18 - 12/18	N	3.3	0.2-5.4	4.0	4.0	Water additive used to control microbes

STAGE 2 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Result	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	1/18, 4/18, 7/18, 10/18	N	19	ND-21	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	1/18, 4/18, 7/18, 10/18	N	23.75	0.77-28	N/A	80	By-product of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	AL Exceeded Y/N	90th Percentile	Number of Sample Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	6/18, 10/18	N	0.0409, 0.082	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	6/18, 10/18	N	1.2, 1.7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits.

Green Meadows Water Treatment Plant Quality Report 2018

MICROBIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely Source of Contamination
E. coli	1/18 - 12/18	N	1	0	Routine and repeat samples are total coliform positive and either is E.coli positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E.coli	Human and animal fecal waste

RADIOACTIVE CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Result	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	6/18, 7/18, & 10/18	N	3.9	ND - 3.9	0	15	Erosion of natural deposits
Radium 226 + 228 or comined radiu m (pCi/L)	6/18, 7/18, & 10/18	N	2.23	0.76 - 2.23	0	5	Erosion of natural deposits

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	6/18, 7,18 & 10/18	N	0.0032	0.00298-0.0032	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	6/18, 7/18 & 10/18	N	1.14	0.67-1.14	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	6/18, 7/18 & 10/18	N	8.500	ND - 8.5	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	6/18, 7/18 & 10/18	N	0.13	0.09 - 0.13	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Nitrate (as N) (ppm)	4/18, 6/18, 7/18, 10/18	N	0.012	ND - 0.012	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as N) (ppm)	4/18, 6/18, 7/18, 10/18	N	0.022	ND - 0.022	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	6/18, 7/18 & 10/18	N	0.549	ND - 0.549	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	6/18, 7/18 & 10/18	N	54.20	26.6 - 54.2	N/A	160	Salt water intrusion, leaching from soil.

Green Meadows Water Treatment Plant Quality Report 2018

SYNTHETIC ORGANIC CONTAMINANTS including PESTICIDES & HERBICIDES

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Di (2 - ethylhexyl) phthalate (ppb)	6/18, 7/18 & 10/18	N	0.64	ND - 0.64	0	6	Discharge from rubber and chemical factories

STAGE 1 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measurement	Sampling Date (mo/yr)	MRDL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine & Chloramines (ppm)*	1/18 - 12/18	N	3.3	0.2-5.4	4.0	4.0	Water additive used to control microbes

STAGE 2 DISINFECTANTS & DISINFECTION BY-PRODUCTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Result	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	1/18, 4/18 7/18, 10/18	N	19	ND-21	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	1/18, 4/18 7/18, 10/18	N	23.75	0.77-28	N/A	80	By-product of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	AL Exceeded Y/N	90th Percentile	Number of Sample Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	6/18, 10/18	N	0.0409, 0.082	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	6/18, 10/18	N	1.2, 1.7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits.

VOLATILE ORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Ethylbenzene (ppb)	6/18, 7/18 & 10/18	N	0.13	ND - 0.13	700	700	Discharge from petroleum refineries
Styrene (ppb)	6/18, 7/18 & 10/18	N	1.5	ND - 1.5	100	100	Discharge from rubber and plastic factories; leaching from landfills

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

