

## How Do We Ensure the Highest Quality of Water? *(continued from page 3)*

All 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 at 1-800-426-4791.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described health effect.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

"We at the Highland Beach Water Treatment Plant work around the clock to provide top quality water to every tap," said Jack Lee Public Works Director. "We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have any questions."

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbiological contaminants are available for the State Drinking Water Hot Line 800-426-4791.



**Town of Highland Beach**  
3614 S. Ocean Blvd.  
Highland Beach  
Florida 33487

**Water Dept. Hours**  
Monday - Friday  
8:30 a.m. to 4 p.m.

### Water Quality Questions

Contact: Jack Lee,  
Director of  
Public Works or  
Joe Sterlicchi,  
Water Plant  
Superintendent  
561/997-7234  
www.highlandbch.com

### Additional Contacts

Environmental Protection Agency's Safe Drinking Water Hotline:  
800/426-4791  
www.epa.gov

Palm Beach County  
Public Health Unit:  
561/355-3070

Florida Department of Health:  
904/791-1599

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**Town of Highland Beach**

# Water Quality Report

**2003**

## Annual Quality Water Report

We're very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water services we have delivered to you over the past year. Our goal is, and always has been to provide to you a safe and dependable supply of drinking water. Our water source is wells. Our wells draw from the Biscayne Aquifer.

We are pleased to report that our drinking water is safe and meets federal and state requirements. This past year, in compliance with Health Department mandates, the treatment process was altered to reduce Trihalomethanes (THMs).

As you can see in the Test Results Table, the THMs were reduced from 106 ppb average in 2002, to 100.2 ppb average in 2003. However, the water color has increased slightly due to this change.

If you have any questions about this report or concerning your water utility, please contact Jack Lee, Public Works Director, or Joe Sterlicchi, Water Plant Superintendent, at 561-997-7234. We want our valued customers to be informed about their water utility. If you want to learn more, please contact one of the above individuals, who will be happy to answer your questions or concerns.

### In This Report

2003 Water Quality Monitoring Results

Why are Contaminants Present in Our Water?

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How Do We Ensure the Highest Quality Water?

## Our Monitoring Process

The Town of Highland Beach Water Treatment plant routinely monitors for contaminants in your drinking water according to Federal and State Laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2003. As water travels over the land or underground it can pick up substances or

contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

**Definitions**

In this table you will find many terms and abbreviation you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Non-Detects (ND)** – laboratory analysis indicates that the constituent is not present.

**Parts per million (ppm) or Milligrams per Liter (Mg/l)** – one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter –** one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Picouries per liter (Pci/l) Action Level (Al)** –the concentration of contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL)** –(mandatory language) the “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water. MCLs are set close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** –the “Goal” is the level of a contaminant in drinking water below for which there is no known or expected risk to health. MCLGs are allow for a margin of safety.

**Not Applicable (N/A)**

**Test Results Table**

Contaminant and Unit of Measurement	Dates of Sampling	Al Exceeded Y/N	90 <sup>th</sup> Percentile Result	# of sites exceeding the AL	MCLG	AL	Likely source of Contamination
Copper (ppm)	June & July 2003	No	0.15	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb)	June & July 2003	No	8	1	15	15	Corrosion of household plumbing systems, erosion of natural deposits.

**Test Results Table**

Contaminant and Unit of Measure	Dates of Sampling	MCL Violations Y/N	Level Detected	Range of Results	MCLG	MCL	Likely source of Contamination
Nitrite (ppm)	Nov. 2003	N	0.012	0.012	1	1	Run off from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Fluoride (ppm)	May 2002	N	0.13	0.13	4	4.0	Erosion of Natural Deposits.
Sodium (ppm)	May 2002	N	16	16	N/A	160	Erosion of Natural Deposits.
Gross Alpha (pci/l)	May 2002	N	4.0	4.0	0	15	Erosion of Natural Deposits.
TTHM (ppb)	Jan, April, Sept. & Oct. 2003	Y	100.2 (Annual Avg.)	83.4-144.3	0	100	By-product of drinking water chlorination

**How is Our Water Treated?**

The Water Treatment Plant uses Hydrated Lime to remove Calcium hardness, Chlorine and Ammonia Chloramines for disinfection and color reduction, and Phosphate to sequester iron. Three Rapid Sand Filters capture particulate and oxidized solids for further improvement.

**How Do We Ensure the Highest Quality of Water?**

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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**Why are Contaminants Present in Our Water?**

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 water 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, urban storm water 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 storm water runoff, and septic systems.

(E) **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.