

City of West Palm Beach

**Annual
Water
Quality
Report**



Dear Customers,

We are happy to inform you that your public drinking water meets or exceeds all federal and local drinking water standards. This Water Quality Report provides you, the consumer, with summerized 2001 analytical data, water resource information and water supply history as it applies to the public drinking water.

Our mission at the City of West Palm Beach Public Utilities is to:

- *develop a long-range strategic plan to meet future infrastructure and utility service needs for community growth, development and expansions;*
- *enhance and educate public awareness of environmental surroundings;*
- *provide responsive, courteous and quality service in order to achieve customer satisfaction and improve the quality of life for the citizens of West Palm Beach*



City of West Palm Beach Leadership

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Director of Public Utilities

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How safe is our water?

This diagram is provided to inform our customers about substances that may be found in City tap water. Environmental Protection Agency (EPA) has established levels for these contaminants and requires that we communicate this information to you on an annual basis. The chart on the next page also shows the levels regulated by EPA, local levels, and highest levels found in our water.



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).

Is this all that the City tests?

To assure the safety of our drinking water we also monitor the source water (Clear Lake) for microscopic protozoans. Microorganisms such as Giardia and Cryptosporidium are sometimes present in lakes and canals. We are proud to report that these microorganisms have not been detected in our drinking water during the entire year. Out of all the contaminants that were monitored, 91% were NOT detected. They include organic chemicals, natural or synthetic chemical compounds, volatiles, unregulated contaminants and microbiological organisms. These results are not included in the chart because their level was below detection.

How can we get involved?

The City of West Palm Beach welcomes your questions and ideas. If you would like to find out more about your Water Treatment Plant, contact us at (561-837-4061).

Este informe contiene informacion muy importante. Traduzcalo o hable con un amigo quien lo entienda bien.



We conduct more than
50,000 lab tests each year
to assure the quality of
your tap water.

How do contaminants get into our water?

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoir, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminant**, 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.
- **Pesticides and herbicides**, which may come from a variety of sources such as agricultural, urban stormwater runoff and residential uses.
- **Organic chemicals**, which are by-products from industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and rainfall.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (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.



Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders. Some elderly and infants can also 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



TEST RESULTS TABLE

CONTAMINANTS AND UNIT OF MEASUREMENT	VIOLATION YES / NO	LEVEL DETECTED	RANGE	MCLG	MCL	SOURCE OF CONTAMINATION
PRIMARY INORGANICS						
LEAD (07/01) (ppb)	N	ND (90%)	1 sample exceeded AL out of 30 samples	0	15	Corrosion of household plumbing systems
COPPER (ppm)	N	0.138 (90%)	All below MCL	1.3	1.3	Corrosion of household plumbing systems
SODIUM (ppm)	N	15	NA	160	160	Salt water intrusion, leeching from soil
FLUORIDE (ppm)	N	0.86	0.73 - 0.94	4.0	4.0	Erosion of natural deposits; water additive which promotes strong health
ORGANIC CONTAMINANTS						
TRICHALOMETHANES (ppb)	N	18.8	9.2 - 23	0	100	Bi-product of drinking water chlorination
RADIOACTIVE CONTAMINANTS						
GROSS ALPHA pCi/l	N	0.70	0 - 0.70	0	15	Erosion of natural deposits

TABLE DEFINITIONS

AL - Action Level: Concentration of a contaminant that requires treatment.
MCL - Maximum Contaminant Level: 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.
PPM - Parts Per Million
PPB - Parts Per Billion

MCLG - Maximum Contaminant Level Goal - 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.
NTU - Nephelometric Turbidity Units
ND - Not Detected

How does the Water Treatment Plant treat our drinking water?

The City of West Palm Beach Public Utilities Department operates one water treatment facility. This facility is staffed 24 hours a day, seven days a week by State licensed Water Plant Operators. The Water Treatment Plant, physically and chemically, treats raw intake water to produce a potable water which meets standards of the Safe Drinking Water Act. The water treatment process includes lime softening, flocculation, clarification, filtration, fluoridation and disinfection by chloramination. The Public Utilities Department is continually upgrading its facility to utilize the most effective and up-to-date technologies in water treatment.

Samples are analyzed by Certified Operators, Laboratory Technicians and certified independent laboratories. Test results are forwarded to the Palm Beach County Health Department (PBCHD). More than 50,000 analyses are conducted in our Water Plant and water system to assure the safety and reliability of the drinking water.

This report reflects the effort and dedication of the City of West Palm Beach Water Utilities personnel to communicate the results of all the testing conducted in our Water Treatment Plant and water system. Our goal is to continue to provide a safe and dependable water supply to you, our customers.



If you have any questions or comments, please contact Maria Ortiz at (561) 837-4061.

What is the history of our water system?

The original water system was developed by Henry Flagler in 1894 to serve the historic Royal Poinciana Hotel. The first water treatment plant was constructed in 1921. The City of West Palm Beach purchased the plant in 1955 and has continued to expand and operate the plant.

The water supply lakes, Lake Mangonia and Clear Lake, were the original source of our water supply in the 1920's and continue to provide water today.

In 1955, the City constructed approximately 4.5 miles of canals and berms that impounded approximately 13,000 acres of wetlands (Water Catchment Area) that connects with the supply lakes and supplemented the City water supply.

Where does our water come from?

Raw water is collected from a number of sources. These include a 19.4 square mile marshy catchment area west of town, included within the City limits, which is approximately 3 miles wide and 6 to 7.5 miles long. Raw water is pumped to the catchment area from Lake Okeechobee via L-8 Canal and the M-Canal. The M-Canal runs across the catchment area. The catchment area contributes water to the M-Canal, which flows east to Lake Mangonia and Clear Lake. The Water Treatment Plant, which is on the northeast shore, takes its water from Clear Lake. Ten deep wells were constructed and are maintained as a standby water supply. These wells withdraw ground water from the surficial aquifer. These only operate when water in Clear Lake declines below a point predetermined by our permit.