



## 2007 Quality on Tap Report

The City of Neptune Beach is pleased to present you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is drawn from 4 wells within the Floridian Aquifer. We aerate for odor removal and chlorinate for disinfection purposes to provide the quality of your water.

System and a search of the data sources indicated a moderate susceptibility level of contamination near our wells due to petroleum storage tanks. 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).

We are pleased to report that our drinking water meets all Federal and State requirements.

We want our valued customers to be informed about their water utility. Should you have any questions about this report or concerning your utility, please attend any of our scheduled meetings which are held the 1<sup>st</sup> and 3<sup>rd</sup> Monday of each month at City Hall at 6:00 pm, or you can contact Leon Smith Monday through Friday, 7:30 am - 4 pm at (904) 270-2423 and he can answer any questions you have concerning this report.

The City of Neptune Beach 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 to December 31, 2007. Data obtained before January 1, 2007, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

*Maximum Contaminant Level or 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.*

*Maximum Contaminant Level Goal or 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 residual disinfectant level or 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 residual disinfectant level goal or 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.*

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

*"ND" means not detected and indicates that the substance was not found by laboratory analysis.*

*Parts per million (ppm) or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.*

*Parts per billion (ppb) or Micrograms per liter (µg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample.*

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 stormwater 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 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, the 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 at 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 other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).*

We at the City of Neptune Beach would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.

## TEST RESULTS TABLE

Microbiological Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	Monthly 2007	N	1	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in more than 1 sample collected during a month.	Naturally present in the environment	
Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	March 2005	N	0.032	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	March 2005	N	9.00	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	March 2005	N	0.490	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.2 ppm
Nickel (ppb)	March 2005	N	2.00	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium (ppm)	March 2005	N	28.8	N/A	N/A	160	Salt water intrusion, leaching from soil
Selenium (ppb)	March 2005	N	5.0	N/A	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Monthly 2007	N	1.72	1.5-2.0	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	August 2007	N	12.5	11.53-20.0	NA	MCL = 60	Bu-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	August 2007	N	48.12	29.21-60.61	NA	MCL = 80	By-product of drinking water disinfection
For Chlorine monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages. Range of Results is the range of results (lowest to highest) at the individual sampling sites.							
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	August 2005	N	0.335	0 of 25 sites	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	August 2005	N	2.40	0 of 25 sites	0	15	Corrosion of household plumbing systems, erosion of natural deposits