

## Substances That Could Be in 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.

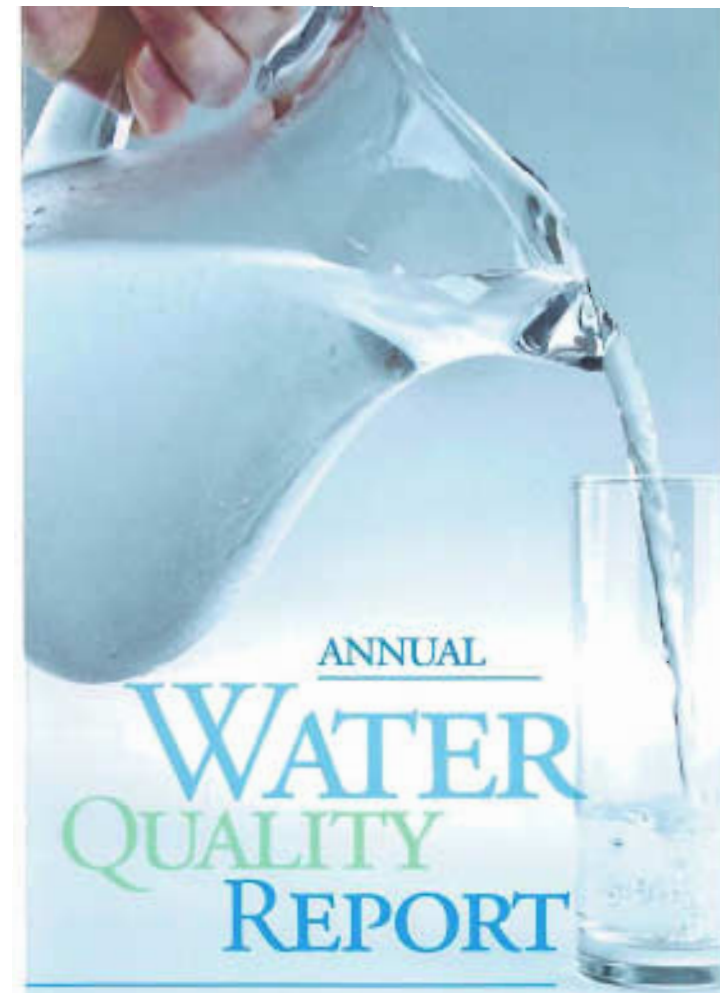
Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; 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; 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 U.S. 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 (800) 426-4791.

City of Tarpon Springs  
325 E. Pine Street  
Tarpon Springs, FL 34589

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*Water testing performed in 2010*

*Presented By* \_\_\_\_\_  
City of Tarpon Springs

PWS ID#: 6521784

## Quality First

Once again we are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2010. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us to continue providing you and your family with quality drinking water.

THOUSANDS HAVE LIVED WITHOUT LOVE, NOT ONE WITHOUT WATER.

-W.H. Auden

## Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## Where Does My Water Come From?

The City of Tarpon Springs customers are fortunate because we enjoy an abundant water supply from 3 sources. Tampa Bay Water, Pinellas County Keller Treatment Plant and the City's four production water treatment facilities. The City's water source is obtained from groundwater in the Floridan Aquifer, while Tampa Bay Water obtains its water from both ground and surface water. All water, both purchased and produced, is chloraminated for disinfection purposes. The City purchases approximately 75% of its water from Pinellas County and the City's four production water treatment facilities produces the other 25%. We want our valued customers to be informed about their water utility, if you want to learn more or if you have any questions about this report or concerns about your water utility please contact the City of Tarpon Springs Water Division at (727) 937-2557.

## Source Water Assessment

In 2009 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 3 potential sources of contamination identified for this system with a range from 25-300 susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

## Lead in Home Plumbing

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. We are 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Community Participation

If you would like to attend the City of Tarpon Springs Board of Commissioners meetings, regularly scheduled meetings are held on the 1st and 3rd Tuesday of every month at 6:30pm at the Tarpon Springs City Hall.

## Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at [www.nrdc.org/water/drinking/bw/exesum.asp](http://www.nrdc.org/water/drinking/bw/exesum.asp).

## Questions?

For more information about this report, or for any questions relating to your drinking water, please call Raymond Page, Utilities Superintendent, (727) 942-5616 or the Water Division (727) 937-2557.

## Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

PRIMARY REGULATED CONTAMINANTS										
Microbiological Contaminants										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Tarpon Springs			Pinellas County Utilities (PCU)			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	HIGHEST MONTHLY PERCENTAGE/NUMBER	DATE OF SAMPLING (MO./YR.)	HIGHEST MONTHLY PERCENTAGE/NUMBER					
Total Coliform Bacteria <sup>1</sup> (% positive samples)	No	1/10-12/10	5%*	1/10-12/10	1.8	0	Presence of coliform bacteria in more than 5% of monthly samples	Naturally present in the environment		
Radioactive Contaminants										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Tarpon Springs			Pinellas County Utilities (PCU)			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Alpha Emitters (pCi/L)	No	7/13/10	12	ND-12	NA	NA	NA	0	15	Erosion of natural deposits
Radium 226 + 228 [Combined Radium] (pCi/L)	No	7/13/10	2.7	0.3-2.7	3/08	0.9	ND-0.9	0	5	Erosion of natural deposits
Uranium (ppb)	No	7/13/10	3.9	1.2-3.9	NA	NA	NA	0	30	Erosion of natural deposits
Inorganic Contaminants										
Arsenic (ppb)	No	1/13/10	3.1	ND-3.1	2/10	0.3	0.2-0.3	NA	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	No	1/13/10	0.026	0.014-0.026	2/10	0.0161	0.0115-0.0161	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	No	1/10-12/10	1.5	ND-1.5	NA	NA	NA	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	No	NA	NA	NA	2/10	0.5	0.50 -	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	No	1/13/10	1.2	0.23-1.2	2/10	0.71	0.62-0.71	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Nickel (ppb)	No	NA	NA	NA	02/10	11	0.50-11	NA	100	Pollution from mining and refining operations; natural occurrence in soil
Nitrate [as Nitrogen] (ppm)	No	1/13/10	3.9	0.44-3.9	2/10	0.05	ND-0.05	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	No	1/13/10	3.2	ND-3.2	2/10	1	ND-1	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	No	1/13/10	91	69-91	2/10	37.8	8.11-37.8	NA	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectants and Disinfection By-Products										
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Tarpon Springs			Pinellas County Utilities (PCU)			MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Chloramines (ppm)	No	1/10-12/10	3.5	3.0-4.4	NA	NA	NA	[4]	[4.0]	Water additive used to control microbes
Chlorine (ppm)	No	NA	NA	NA	1/10-12/10	3.6	0.9-5.8	[4]	[4.0]	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	No	1/10-12/10	11.1	4.33-23.9	1/10-12/10	22.9	5.3-37.4	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	No	1/10-12/10	19	4.6-32.11	1/10-12/10	43.6	14-76.8	NA	80	By-product of drinking water disinfection
Lead and Copper (Tap water samples were collected from sites throughout the community)										
CONTAMINANT AND UNIT OF MEASUREMENT	AL EXCEEDANCE (YES/NO)	City of Tarpon Springs			Pinellas County Utilities (PCU)			MCLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	DATE OF SAMPLING (MO./YR.)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL			
Copper [tap water] (ppm)	No	8/08	0.45	0	6/08-8/08	0.604	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	No	8/08	2.3	0	6/08-8/08	1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

<sup>1</sup>Footnote for City of Tarpon Springs: \*The City's contract laboratory incorrectly reported a sample result which prevented the appropriate resample to be taken. Water Quality employees sampled that site again and all samples were satisfactory. May 2010

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.

For bromate, chloramines, or chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.

## Definitions

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

**IDSE (Initial Distribution System Evaluation):** An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**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.

**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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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

**City of Tarpon Springs**  
**Consumer Confidence Report (CCR) 2010 cont.**

Tampa Bay Water (TBW)

**Microbiological Contaminants**

Contaminants and Unit of Measurement	Date of Sample	MCL Violation Y/N	Highest Single Measurement	The lowest monthly % of samples meeting regulatory limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1/10-4/10	N	0.31	100	NA	TT	Soil runoff

Note: The result in the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operation Report meeting the required turbidity limits.

**Radioactive Contaminants**

Contaminants and Unit of Measurement	Date of Sample	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Beta/Photon Emitters (pCi/L)	7/09	N	5.1*	NA	0	Not established	Decay of natural & man-made deposits

EPA considers 50 pCi/L to be the level of concern for beta particles. Beta results reported in pCi/L. Level detected is the highest detected level at sampling point.

**Inorganic Contaminants**

Contaminant and Unit of Measurement	Date of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Lead [Point of Entry] (ppb)	3/10, 4/10, 7/10, 11/10	N	1	ND-1	NA	15	Residue from man-made pollution such as auto emissions & paint; lead pipe, casing, & solder

**TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters**

Contaminant and Unit of Measurement	Date of Sampling (mo./yr.)	Acute Violations Y/N	Non-Acute Violations Y/N	Level Detected	MRDLG	MRDL (at the entrance to the distribution system)	MCLG	Likely Source of Contamination
Chlorine Dioxide (ppb)	1/10-4/10	N	NA	706	706	800	800	Water additive used to control microbes

For chlorine dioxide, the level detected is the highest single daily sample collected at the entrance to the distribution system.

Contaminant and Unit of Measurement	Date of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Average (three sample set collected in the distribution system)	Highest Average (three sample set) following a daily MCL violation at the entrance to the distribution system	MRDLG	MCL	Likely Source of Contamination
Chlorite (ppm)	1/10-4/10	N	0.00755	NA	0.8	1	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Date of Sampling (mo./yr.)	TT Violation Y/N	Removal Ratio or Lowest Annual Average Monthly Removal Ratio	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm)	1/10-4/10	N	3.69	3.48-3.70	NA	TT	Naturally present in the environment