

## ***2008 Annual Drinking Water Quality Report for the City of Winter Springs***

*We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and 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: ground water from wells . The wells draw from the Floridan Aquifer.*

*Our Water is obtained from ground water sources and is chlorinated for disinfection and health purposes. We are pleased to report that our drinking water meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact the water treatment facility at 407-327-8992 from 8:00 am till 5:00 pm*

*In 2004 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 was (1) potential source of contamination identified for this system with a moderate susceptibility level. 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)*

*City of Winter Springs 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, 2008. Data obtained before January 1, 2008, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.*

***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).***

*In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:*

*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.*

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

*Initial Distribution System Evaluation (IDSE): 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.*

*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.*

*Million fibers per liter (MFL) - measure of the presence of asbestos fibers that are longer than 10 micrometers.*

*Millirem per year (mrem/yr) - measure of radiation absorbed by the body.*

*Nephelometric Turbidity Unit (NTU) - measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.*

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

*Parts per billion (ppb) or Micrograms per liter ( $\mu\text{g/l}$ ) – one part by weight of analyte to 1 billion parts by weight of the water sample.*

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

*Picocurie per liter (pCi/L) - measure of the radioactivity in water.*

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

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. The City of Winter Springs 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 take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

*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.*

## 3591394 Winter Springs East

### TEST RESULT TABLE

### NON-SECONDARY CONTAMINANTS TABLE

Total coliform bacteria: Highest Monthly Percentage/Number is the highest monthly number of positive samples for systems collecting fewer than 40 samples per month. Highest Monthly Percentage/Number is the highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

#### Microbiological Contaminants

| Contaminant and Unit of Measurement | Dates of sampling (mo./yr.) | MCL Violation Y/N | Highest Monthly Percentage /Number | MCLG | MCL  | Likely Source of Contamination       |
|-------------------------------------|-----------------------------|-------------------|------------------------------------|------|--|--------------------------------------|
| 1. Total Coliform Bacteria          | 1/08-12/08                  | N                 | 0                                  | 0    | For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% of monthly samples.<br><br>For systems collecting fewer than 40 samples per month: presence of coliform bacteria in 1 sample collected during a month. | Naturally present in the environment |

#### Radiological Contaminants

\*\* 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.

| Contaminant and Unit of Measurement            | Date of sample analysis | MCL/AL Violation Y/N | Level Detected | Range   | MCLG | MCL | Likely Source of Contamination   |
|--|-------------------------|----------------------|----------------|---------|------|-----|--|
| Gross Alpha (pCi/l)                            | 11/08                   | N                    | 2.0            | N/A     | 0    | 15  | Erosion of natural deposits  |
| 6. Radium 226 + 228 or combined radium (pCi/L) | 11/08                   | N                    | 1.5            | 1.1-1.5 | 0    | 5   | Erosion of natural deposits  |
| Contaminant and Unit of Measurement            | Date of sample analysis | MCL/AL Violation Y/N | Level Detected | Range   | MCLG | MCL | Likely Source of Contamination   |
| Barium (ppm)                                   | 10/08                   | N                    | .0110          | N       | 2    | 2   | Discharge from drilling waste; Erosion of natural deposits.                                      |
| Chromium (ppb)                                 | 10/08                   | N                    | 0.007          | N       | 100  | 100 | Discharge from steel and pulp mills; Erosion of natural deposits.                                |
| Sodium (ppm)                                   | 10/08                   | N                    | 31.9           | N/A     | N/A  | 160 | Salt water intrusion, leaching from soil   |
| Nickel (ppm)                                   | 10/08                   | N                    | .001           | N/A     | N/A  | 0.1 | Corrosion of household plumbing systems, erosion of natural deposits                             |
| Selenium (ppm)                                 | 10/08                   | N                    | .005           | N/A     | 50   | 50  | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Nitrate (as Nitrogen) (ppm)                    | 10/08                   | N                    | .0798          | .0798   | 10   | 10  | Run-off from fertilizer use; Leaching from septic tanks, Sewage; erosion of natural deposits     |

## Lead and Copper Home Sampling

| Contaminant and Unit of Measurement | Date of sample analysis | MCL/AL Violation Y/N | Level Detected                        | Range                       | MCLG | MCL    | Likely Source of Contamination  |
|-------------------------------------|-------------------------|----------------------|---------------------------------------|-----------------------------|------|--------|---|
| Lead (tap water) (ppb)              | 2008                    | N                    | 4.2<br>(90 <sup>th</sup> percentile)  | 0 sampling site exceeded AL | 0    | AL=15  | Corrosion of household plumbing systems, erosion of natural deposits Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Copper (tap water) (ppm)            | 2008                    | N                    | .857<br>(90 <sup>th</sup> percentile) | 0 sampling site exceeded AL | 1.3  | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives  |

## Volatile Organic Contaminants

|                              |      |   |      |     |   |     |  |
|------------------------------|------|---|------|-----|---|-----|--|
| 1,2 Cis-Dichloroethane (ppb) | 6/08 | N | 0.86 | N/A | 0 | 5.0 | Discharge from pharmaceutical and chemical factories |
|------------------------------|------|---|------|-----|---|-----|--|

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

Choose one bulleted paragraph below according to the Section 7 instructions, depending on when monitoring began:

- For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the highest annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM (MCL 80 ppb). Range of Results is the range of results (lowest to highest) at the individual sampling sites.
- For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM (MCL 80 ppb). Range of Results is the range of results (lowest to highest) at the individual sampling sites.

| 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            |
|--|-----------------------------|-------------------|---------------------------|------------------|---------------|-------------|---|
| 78. Chlorine (ppm)                       | 2008                        | N                 | 2.29                      | 1.3-3.0          | MRDLG = 4     | MRDL = 4.0  | Water additive used to control microbes   |
| 79. Haloacetic Acids (five) (HAA5) (ppb) | 2008                        | N                 | 14.71<br>(annual average) | 2.0-25.6         | NA            | MCL = 60    | By-product of drinking water disinfection |
| 80. TTHM [Total trihalomethanes] (ppb)   | 2008                        | N                 | 69.47<br>(annual average) | 63.63-79.83      | NA            | MCL = 80    | By-product of drinking water disinfection |

## 3590879 Winter Springs West

### TEST RESULT TABLE

#### NON-SECONDARY CONTAMINANTS TABLE

Total coliform bacteria: Highest Monthly Percentage/Number is the highest monthly number of positive samples for systems collecting fewer than 40 samples per month. Highest Monthly Percentage/Number is the highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

#### Microbiological Contaminants

| Contaminant and Unit of Measurement | Dates of sampling (mo./yr.) | MCL Violation Y/N | Highest Monthly Percentage /Number | MCLG | MCL  | Likely Source of Contamination       |
|-------------------------------------|-----------------------------|-------------------|------------------------------------|------|--|--------------------------------------|
| 1. Total Coliform Bacteria          | 1/08-12/08                  | N                 | 4%                                 | 0    | For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% of monthly samples.<br><br>For systems collecting fewer than 40 samples per month: presence of coliform bacteria in 1 sample collected during a month. | Naturally present in the environment |

#### Radiological Contaminants

\*\* 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.

| Contaminant and Unit of Measurement            | Date of sample analysis | MCL/AL Violation Y/N | Level Detected | Range   | MCLG | MCL | Likely Source of Contamination |
|--|-------------------------|----------------------|----------------|---------|------|-----|--------------------------------|
| Gross Alpha (pCi/l)                            | 11/08                   | N                    | 1.3            | 1.1-1.3 | 0    | 15  | Erosion of natural deposits    |
| 6. Radium 226 + 228 or combined radium (pCi/L) | 11/08                   | N                    | 1.6            | 0.7-1.6 | 0    | 5   | Erosion of natural deposits    |

#### Inorganic Contaminants

| Contaminant and Unit of Measurement | Date of sample analysis | MCL/AL Violation Y/N | Level Detected | Range       | MCLG | MCL | Likely Source of Contamination   |
|-------------------------------------|-------------------------|----------------------|----------------|-------------|------|-----|--|
| Barium (ppm)                        | 10/08                   | N                    | .01            | .00723-.01  | 2    | 2   | Discharge from drilling waste; Erosion of natural deposits.                                      |
| Chromium (ppb)                      | 10/08                   | N                    | 6.93           | 6.25-6.93   | 100  | 100 | Discharge from steel and pulp mills; Erosion of natural deposits.                                |
| Sodium (ppm)                        | 10/08                   | N                    | 11.9           | 10.0-12.5   | N/A  | 160 | Salt water intrusion, leaching from soil   |
| Selenium (ppm)                      | 10/08                   | N                    | .0029          | .0025-.0029 | .05  | .05 | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Barium (ppm)                        | 10/08                   | N                    | .01            | .007-.01    | 2    | 2   | Discharge from drilling waste; Erosion of natural deposits.                                      |
| Nitrate (as Nitrogen) (ppm)         | 10/08                   | N                    | .053           | ND-.053     | 10   | 10  | Run-off from fertilizer use; Leaching from septic tanks, Sewage; erosion of natural deposits     |

## Volatile Organic Contaminants

| Contaminant and Unit of Measurement | Date of sample analysis | MCL/AL Violation Y/N | Level Detected | Range | MCL G | MCL | Likely Source of Contamination                       |
|-------------------------------------|-------------------------|----------------------|----------------|-------|-------|-----|--|
| 1,2 Cis-Dichloroethylene (ppb)      | 10/08                   | N                    | 1.26           | N/A   | 0     | 5.0 | Discharge from pharmaceutical and chemical factories |

## Lead and Copper Home Sampling

|                          |      |   |                                    |                              |     |         |  |
|--------------------------|------|---|------------------------------------|------------------------------|-----|---------|--|
| Lead (tap water) (ppb)   | 2008 | N | 1.0 (90 <sup>th</sup> percentile)  | 0 site exceeded AL           | 0   | AL= 15  | Corrosion of household plumbing systems, erosion of natural deposits                                   |
| Copper (tap water) (ppm) | 2008 | N | .377 (90 <sup>th</sup> percentile) | 0 sampling sites exceeded AL | 1.3 | AL= 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

## 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            |
|--|-----------------------------|-------------------|------------------------|------------------|---------------|-------------|---|
| 78. Chlorine (ppm)                       | 2008                        | N                 | 1.48                   | 0.82-2.3         | MRDLG = 4     | MRDL = 4.0  | Water additive used to control microbes   |
| 79. Haloacetic Acids (five) (HAA5) (ppb) | 2008                        | N                 | 15.84 (annual average) | 2.0-23.8         | NA            | MCL = 60    | By-product of drinking water disinfection |
| 80. TTHM [Total trihalomethanes] (ppb)   | 2008                        | N                 | 58.4 (annual average)  | 47.9-69.87       | NA            | MCL = 80    | By-product of drinking water disinfection |

## Know Your Watering Days

Mandatory lawn watering restrictions specify the days when you may water. These days depend on whether you have an odd or even numbered address, and the time of year.

| Time of year                        | Home with odd numbered or no addresses | Home with even numbered addresses | Nonresidential properties |
|-------------------------------------|--|-----------------------------------|---------------------------|
| Daylight saving time (current)      | Wednesday/Saturday                     | Thursday/Sunday                   | Tuesday/Friday            |
| Eastern Standard Time November 2009 | Saturday                               | Sunday                            | Tuesday                   |

This includes all water sources including potable water, reclaimed water, surface water and wells.

For more information on rules under the water restriction you can contact the City of Winter Springs Water Treatment facility at 407-327-8992.

### Reclaimed Water Information

#### ***What is Reclaimed Water?***

*Reclaimed Water is a service supplied by the City of Winter Springs Utility Department to limited areas within the service.*

Reclaimed Water is the result of highly treated and disinfected sanitary wastewater which is primarily used for irrigation. Irrigation of edible crops that will be peeled, skinned or thermally processed before consumption is permitted, but all other edible crops must be irrigated indirectly. *“Indirect application irrigation” and “indirect contact irrigation” mean irrigation methods, such as ridge and furrow irrigation, drip irrigation, and subsurface distribution systems, which minimize direct contact of reclaimed water with the edible crop.*

#### ***Is Reclaimed Water Safe?***

- Reclaimed Water is safe and beneficial for irrigation purposes but should not to be used for drinking, bathing or filling swimming pools. The Waste Water Treatment Facilities operational process has established safeguards and a strict Monitoring and Operating Protocol is always followed. The reclaimed water is essentially free of bacteria and viruses but the treatment process does not remove the beneficial nitrogen.
- The treatment facilities have continuous 24 hour 7 days per week on-line monitoring with automatic diversion and rejection of unacceptable quality reclaimed water.

#### ***Reclaimed water service areas are currently limited.***

The City of Winter Spring has expanded the reclaimed water system to the point that the demand at times exceeds the supply and restrictions have had to be placed on its use. Further expansion of the reclaimed water system is in the planning stages until funding (i.e. rate increases) are approved. The City is presently in the design phase to build a treatment facility to treat and use the water from Lake Jesup to augment the reclaimed water supply. Upon completion of this facility, the City will begin expanding the reclaimed distribution system. If you have questions as to when reclaimed water will be available in your neighborhood you can call Doug Taylor at 407-327-2669.