The Water We Drink
2006 Annual Water Quality Report
Of the City of Springfield

Prepared by:
Donna Finch,
Administrative Public Works Assistant
City of Springfield
3529 E. 3rd Street
Springfield, Fl. 32401

The City of Springfield is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of 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.

Although our water is purchased from Bay County Utility Services, our initial water source is surface water drawn from the Deer Point Reservoir. This reservoir was created in 1961 to provide a freshwater source for Bay County. The water is pumped several miles to the Bay County Water Treatment Plant. The Plant uses a conventional treatment process consisting of coagulation, flocculation, sedimentation, filtration, pH adjustment, disinfection, fluoridation, and corrosion control. The treatment process includes adding lime occasionally to provide additional alkalinity to the water so that it can react with the ferric sulfate, a primary coagulating chemical, which is added to remove particles and color. Polymer is also added to assist in the coagulation process. Chlorine is added to maintain disinfection in the distribution system. The addition of zinc orthophosphate reduces the corrosiveness of the water. Fluoride, in the form of hydrofluosilicic acid, is added as a supplement to prevent tooth decay. Lime is also added at the end of the process to increase the pH. These processes are needed to meet the drinking water standards as set by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

Source Water Assessment

In July 2005 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 Bay County Surface Water intake. There are 10 potential sources of contamination identified for this system with a high susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Lisa Shaw at (850)747-5417.

Water Quality or Content Information

The City of Springfield holds regularly scheduled City Commission Meetings at 6:30 p.m. on the first Monday of each month at Springfield City Hall, located at 3529 E. 3rd Street Springfield, Florida to hear citizens concerns. Public notices of the meeting are announced regularly, publicizing the date, time, and location.

However, if you have questions about this report or concerning your water utility, please contact Donna Finch, Public Works Assistant, (850)872-7570 or feel free to contact any of the numbers listed in this report.

Also, For Your Information

The City of Springfield (++) routinely monitors for lead and copper levels, and bacteriological. The Bay County Water Treatment Plant (+) monitors for all other 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, 2006. Data obtained before January 1, 2006 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

The EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the Water Quality Test Results table are the only ones detected in your drinking water.

2006 ANNUAL WATER QUALITY REPORT

In the following tables, you may find terms and abbreviations. To help you better understand these terms, we have provided the following definitions:

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set close to the MCLGs as feasible using best available technology.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

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

Maximum Residual Disinfectant Level (MRDL): The highest level of 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 (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 or disinfectants to control microbial contaminants.

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 (ug/l): One part by weight of analyte to 1 billion parts by weight of the water sample.

Picocurie per liter (pCi/L): Measure of the radioactivity in the water.

Nephelometric Turbidity Unity (NTU): Measure of the clarity of the water. Turbidity in excess of 5 NTU is just barely noticeable to the average person.

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

2006 WATER QUALITY TEST RESULTS

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU) +	Jan-Dec 06	N	0.26	100%	N/A	TT *	Soil runoff

Turbidity is a measure of cloudiness of the water. Monitoring turbidity is an indication of the effectiveness of the filtration system. Turbidity can interfere with disinfection and provide a medium for microbial growth. The result in the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operating Report meeting the required turbidity limits. *The Treatment Technique standard is 95% of the turbidity readings must be at 0.3 NTU or less.

** 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	Dates of sampling (mo./yr.)	MCL Violation Y/N	**Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radiological Contaminants + Monitored by Bay County							
Alpha emitters (pCi/L)	Apr-02	N	0.2	N/A	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Apr-02	N	1.6	N/A	0	5	Erosion of natural deposits
Inorganic Contaminants + Monitored by Bay County							
Barium (ppm)	May-06	N	0.007	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	May-06	N	0.93	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
Sodium (ppm)	May-06	N	12	N/A	N/A	160	Salt water intrusion, leaching from soil

TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Contaminants + Monitored by Bay County

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

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)	Jan-Dec 06	N	RAA= 1.02	0.7-1.2	MRDL G = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Jan-Dec 06	N	RAA= 30.5	3.3-42.27	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	Jan-Dec 06	N	RAA= 38.4	12.99-52.87	NA	MCL = 80	By-product of drinking water disinfection

2006 WATER QUALITY TEST RESULT

The monthly Total Organic Carbon (TOC) removal ratio is the ratio between the actual TOC removal and the TOC rule removal requirements. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Lowest Annual Average Monthly Removal Ratio	Range of Monthly Removal Ratios	MCLG	Required Ratio	MCL	Likely Source of Contamination
Total organic carbon (ppm) +	Jan-06	N	1.16	ND-2.18	N/A	At Least 1.0	TT	Naturally present in the environment

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
Lead and Copper (Tap Water) ++ Monitored by the City of Springfield							
Copper (tap water) (ppm)	Jul-05	N	0.38	0 of 20	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jul-05	N	2	0 of 20	0	15	Corrosion of household plumbing systems, erosion of natural deposits

SECONDARY CONTAMINANTS TABLE + Monitored by Bay County

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Aluminum (ppm)	Apr-05 Jul-05	Y	0.39	0.046-0.39	N/A	0.2	Natural occurrence from soil leaching
During April 2005, the aluminum test result was 0.39 ppm however, Bay County Utilities believes the higher than usual level was the result of the Water Treatment Plant testing the use of Alum in place of Ferric Sulfate as a coagulant. After Bay County Utilities discontinued the use of Alum, a retest for aluminum was done in July 2005 with results of 0.046 ppm, well below the MCL. Aluminum is a Secondary Contaminant and as such is not a health concern at low levels.							

Year 2006 Boil Water Notices

The City of Springfield issued three (3) precautionary Boil Water Notices during the 2006 calendar year. These were isolated incidents caused by water main breaks. The precautionary Boil Water Notices were rescinded after satisfactory test results were received and verified.

Questions If you have any questions about this report or concerning your water utility, please contact Donna Finch, Public Works Assistant at 850-872-7570. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Commission Meetings. The Commission Meetings are scheduled on the first Monday of every month at 6:30 p.m. at Springfield City Hall, 3529 E. 3rd Street Springfield, Fl. 32401. Public notices of the meetings are announced regularly publicizing the date, time, and location.

Drinking Water Regulation 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.

Drinking Water and Your Health

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 (1-800-426-4791).

We at the Bay County Water Division and the City of Springfield work around the clock to provide top quality water to every tap. 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.