



Town of Mangonia Park

2014 Water Quality Report

We are pleased to present to 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 raw water source is groundwater from three wells that draw water from the surficial aquifer. To treat the water before delivering it to your home, our water treatment plant utilizes filtration for solids removal, chloramination for the distribution system disinfectant residual and polyphosphate for corrosion control.

In 2014 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 11 potential sources 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.

This report shows our water quality results and what they mean. If you have any questions about this report or concerning your water utility, or want to obtain a copy of this report, please contact the Town of Mangonia Park Utility Department at (561) 848-1235. 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 Council Meetings. They are held on the first and/or third Tuesday of every month at 6:00 p.m., in the Town Hall located at 1755 East Tiffany Drive, Mangonia Park, Florida 33407.

The Town of Mangonia Park 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, 2014. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

Table Notes and Definitions in Table Below

1. Maximum detected level in any one sample.
2. Range of levels detected from lowest to highest. "N/A" single sample taken.
3. Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of use of disinfectants to control microbial contaminants.
4. Maximum Residual Disinfectant Level (MRDL) is 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.
5. For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids of 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.

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

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

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

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.

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

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).

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. Mangonia Park Utility Department 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.

Violations from 2014:

The Town had a violation and exceeded the non-acute MCL for total coliform in January and February.

“Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.”

1. Failure to collect the required five (5) routine samples for January, 2014.
2. Failure to issue Public Notice for the January, 2014, MCL Violation.

To correct the violation, we temporarily changed the disinfectant process from total chlorine to free chlorine to the water system.

Inorganic Contaminant

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 (p.p.m.)	10/12	N	0.0040	N/A	2	2	Discharge of drilling waters; discharge from metal refineries; erosion of material deposits
Chromium (p.p.b.)	10/12	N	5.8	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (p.p.m.)	10/12	N	0.16	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 – 1.3 p.p.m.
Nickel (p.p.b.)	10/12	N	0.99	N/A	N/A	100	Pollution from mining and refining operation. Natural occurrence in soil
Nitrate (as Nitrogen) (p.p.m.)	12/14	N	0.29	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (p.p.m.)	12/14	N	0.040	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (p.p.b.)	10/12	N	1.2	N/A	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (p.p.m.)	10/12	N	17	N/A	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (m/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (p.p.m.)	01/14 to 12/14	N	1.955	0.49-3.30	4	4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (p.p.b.)	06/14	N	37.85	N/A	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (p.p.b.)	06/14	N	42.7	N/A	N/A	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCL G	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (p.p.m)	02/14	N	1.2	1 of 20	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	05/14	N	1.2	1 of 20	1.3	1.3	
	11/14	Y	1.8	7 of 20	1.3	1.3	
Lead (tap water) (p.p.b)	02/14	N	2.8	0 of 20	0	15	Corrosion of household plumbing systems, erosion of natural deposits
	05/14	N	2.6	0 of 20	0	15	
	11/14	N	3.6	1 of 20	0	15	

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage/Number	MCLG	MCL	Likely Source of Contamination
Total coliform Bacteria (Positive Samples)	1/14-12/14	Y	1	0	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