



# GREATER PINE ISLAND WATER ASSOCIATION, INC.

## 2012 ANNUAL CONSUMER REPORT ON THE QUALITY OF TAP WATER

Dear Members:

We at the Greater Pine Island Water Association Inc. (GPIWA) are very pleased to provide you with this year's Annual Report. The GPIWA wants to keep you informed about the excellent water and services we have delivered to you this past year. Our goal is and has always been, to provide you a safe and dependable supply of drinking water. The Greater Pine Island Water Association Inc. routinely monitors for contaminants in your drinking water according to Federal, State, and County laws, rules and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1, 2012 to December 31, 2012. We believe informed consumers are our best allies in maintaining a safe and reliable drinking water system.

*“ As authorized and approved by EPA, the State has reduced monitoring 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.”*

Safe water is vital to our community. We test our water daily ensuring we meet the highest standard possible using sophisticated equipment and advanced procedures. We are happy to show you how we have surpassed water quality standards. Please read this report carefully and if you have any questions, please call the main business office at 239-283-1071 Monday-Friday between 8AM and 5PM or visit our web site at [www.pineislandwater.com](http://www.pineislandwater.com). Landlords, businesses, and condominium associations are encouraged to share this report with non-billed water users. Additional copies are available at the Pine Island Center Office.

We encourage public interest and participation in our Association's decisions affecting drinking water. Board meetings are held on the fourth Tuesday of the month, usually on a quarterly basis, at the Pine Island Center office, 5281 Pine Island Road, at 3:00 P.M. All members are welcome. Please check our website for the next scheduled Board meeting

**We are proud to report that the water provided by the Greater Pine Island Water Association, Inc. meets or exceeds established water quality standards.**

### **OVERVIEW**

In 1965 the Greater Pine Island Water Association, Inc. was formed. Since that time the Association has seen many changes and upgrades to its once small system. The largest change came in 1993, when the Greater Pine Island Water Association, Inc. began operation of its new 1.5 MGD Reverse Osmosis Water treatment facility. The water treated by the new plant was withdrawn from 3 deep wells. The next change came in 2002 when a plant upgrade allowed us to produce an additional 750,000 gallons of water per day. Also included in this expansion was the drilling of an additional well. With both of these projects completed the plant was then able to produce a total of 2.25 million gallons of water per day and store 5 million in its two storage tanks. In 2005 the Association completed the building of a pumping station in Matlacha with the storage capacity of 750,000 gallons of water that will provide better fire protection and meet the needs of our growing membership. In 2009 a fifth deep well was added. The Association continues to make improvements to provide an adequate supply of potable water to our growing membership.

## **W**ATER SOURCE

Our system pumps groundwater from an aquifer known as the Lower Hawthorne by five production wells that are approximately 750 feet deep.

Reverse Osmosis (RO) is the method by which the impurities that occur naturally in our waters are removed. The two major impurities that we deal with are chlorides and total dissolved solids (TDS). In 1998, Boyle Engineering, Inc completed a water quality study for the Greater Pine Island Water Association, Inc. The conclusion of the report was that Greater Pine Island Water Association, Inc. has superior potable (drinking water) water quality. For disinfection purposes the addition of liquid chlorine is added to the water before it is stored for delivery, this ensures its quality when it reaches your faucet.

The Greater Pine Island Water Association, Inc., as required by regulatory agencies, has undertaken lead and copper testing of individual member's tap water at various locations throughout our service area, in the years 1994, 1995, 1998, 2001, 2004, 2007, and 2010. The next required sampling will be in the year 2013. We are happy and proud to report that in each of the sampling years there were no samples exceeding the maximum contaminant level for either lead or copper. To further protect our members from contaminants such as lead and copper from leaching into your water from piping and fixtures in your house we add a corrosion inhibitor. This product also helps protect copper piping and metal fixtures in your house.

In 2011, the Florida 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 eleven (11) potential sources of contamination identified for this system with a low to 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) or they can be obtained by calling Bill Thacher at 239-283-1071 between 8AM and 5PM Monday thru Friday.

### **ADDITIONAL HEALTH INFORMATION**

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 & 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 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 (1-800-426-4791). 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, agriculture livestock operations, and wildlife;
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm 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, storm water 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 storm water runoff and septic systems;
- (E) **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than is 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. Although Cryptosporidium is not a problem associated with groundwater supply. 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) or visit their web site at [sdwa@epamail.epa.gov](mailto:sdwa@epamail.epa.gov)

## **DID YOU KNOW?**

In 2012, approximately 416 million gallons of water was distributed to our customers. We continue to upgrade distribution lines, plant flow capacities and better methods of providing our members service. The Board of Directors of your Association continue to place fire hydrants on all newly upgraded lines as a community service.

### **How to Read The Test Result Table:**

The table shows the results of our finished water quality analyses. Although we ran many more tests than shown, only the listed substances were found in our water. All are below the MCL required. For a list of all regulated contaminants we test for and the results, please contact Bill Thacher at 239-283-1071 between 8AM and 5PM Monday thru Friday. A complete listing can also be viewed on the FDEP homepage ([www.dep.state.fl.us](http://www.dep.state.fl.us)). The table contains the name of each substance, the highest level allowed by regulation (MCL), and the amount detected along with a description of the contaminants major source.

### **Water Quality Data Table Terms and Abbreviations**

**AL=Action Level** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**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 the 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.

**pCi/L=picocuries per liter** - a measure of the radioactivity in water

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

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

**TT=Treatment technique**

**Lead** - 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. GPIWA 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 at 1-800-426-4791 or <http://www.epa.gov/safewater/lead>.

### **Explanation of Violations:**

No violations occurred in the Greater Pine Island Water Association, Inc. water supply during 2011.

### **Water Quality Table footnotes:**

GPIWA does not test for Cryptosporidium. This is not a problem associated with groundwater.

GPIWA does not test for radon. DEP has not set regulations for testing.

GPIWA does not add fluoride to the water supply. Any detected level present is naturally occurring trace amounts.

### **National Primary Drinking Water Regulation Compliance**

More information on Water Quality Data for community water systems throughout the United States is available at [www.waterdata.com](http://www.waterdata.com). This report was prepared using "CCRbuilder" and technical assistance provided by the American Water Works Association.

**Si usted quiere recibir este folleto en español, por favor llame al telefono 239-283-1071.**

<b>Microbiological Contaminants</b>							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination	
1. Total Coliform Bacteria	1/12 thru 12/12	No	1	0	1	Naturally present in the environment	
2. Fecal coliform and E.coli (total number of positive samples for the year)	1/12 thru 12/12	No	1	0	0	Human and animal fecal waste	
<b>Radioactive Contaminants</b>							
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
5. Alpha emitters (pCi/L)	2/22/2011	No	6.29	6.29	0	15	Erosion of natural deposits
6. Radium 226 + 228 or combined radium (pCi/L)	2/22/2011	No	1.4	1.4	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
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
9. Antimony (ppb)	2-22-2011	No	4.9	4.9	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
10. Arsenic (ppb)	2-22-2011	No	1	1	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
13. Beryllium (ppb)	2-22-2011	No	.8	.8	4	4	Discharge from steel and pulp mills; erosion of natural deposits
15. Chromium (ppb)	2-22-2011	No	1.4	1.4	100	100	Discharge from steel and pulp mills; erosion of natural deposits
16. Fluoride (ppm)	2-22-2011	No	.15	.15	4	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
21. Nitrate (as Nitrogen) (ppm)	11-7-2012	No	.02	.02	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
23. Sodium (ppm)	2-22-2011	No	79	79	N/A	160	Salt water intrusion, leaching from soil
23. Selenium (ppb)	2-22-2011	No	7	7	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>TTHMs and Stage 1 Disinfectant/BP Parameters Disinfection By-Product (D/D)</b>							
<ul style="list-style-type: none"> <li>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. <b>OR</b></li> <li>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.</li> </ul>							
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)	01/2012 – 12/2012	no	1.78	.67-2.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	Quarterly	no	2.33	2.06-2.6	NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total trihalomethanes] (ppb)	Quarterly	no	11.0	8-14	NA	MCL = 80	By-product of drinking water disinfection
<b>Lead and Copper (Tap Water)</b> (next testing date is 2013)							
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
84. Copper (tap water) (ppm)	06-8-2010	No	.019	No sites exceeded the AL	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
85. Lead (tap water) (ppb)	06-8-2010	No	0.94	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives