

# 2013 Consumer Confidence Report

Conservation: Saving for our future one drop at a time!

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The City of Punta Gorda is a surface water supply plant with Shell Creek as our source of water. Water impounded by the Hendrickson Dam is known as Shell Creek Reservoir and is the fourth largest surface water system within the boundary of the Southwest Florida Water Management District. The system, including the dam, was constructed in 1964. Shell Creek Reservoir is fed by two creek systems consisting of Shell Creek from the east and Prairie Creek from the northwest. The total drainage area at Hendrickson Dam is 373 square miles creating a reservoir surface area of approximately 800 acres containing 765 million gallons of water. The treatment plant has a design rated capacity of 10 million gallons per day. Our type of treatment is conventional treatment consisting of coagulation, sedimentation, and filtration. Alum is used as the coagulant to remove large particles in the water, powdered activated carbon is added for the removal of objectionable taste and odors, a polymer is added to aid in sedimentation, and finally the pH is adjusted. A stabilizer is also added to the finished water as a corrosion control in the distribution system.

Untreated water is pumped from Shell Creek to the plant where the water is aerated by means of a cascade aerator. Following aeration, powdered activated carbon and alum are added. The water and chemicals are then "flash mixed" in insure an even mixture of the compound before exiting the aerator. The water leaves the aerator proceeding to the next stage of the treatment, the flocculation stage. Flocculation takes place in basins that contain two variable speed mixers. As this mixed water enters the Solids Contact Units – an area of the plant where most of the treatment occurs – polymer is added. In the Solids Contact Units, water flows up from the bottom of the tank through the solids mass. This mass is made up of settled solids and chemicals that act as a coagulant and liquid filter. The clear water exits these units where chlorine is added. Ammonia is introduced to the chlorinated water to form chloramines.

If chlorine alone were used, organic material contained in the water would combine to form these carcinogenic precursors. Chloramines prevent the formation of carcinogenic precursors. The final step of the treatment process involves the filtering of the treated water to remove any additional suspended solids. Prior to filtration, caustic soda is added to adjust the pH and stabilize the water. The water enters a clear well where a stabilizer is added to help prevent corrosion in the distribution system. The finished water is transferred by pumps into a 2 million gallon storage tank. From this tank, water is sent throughout the distribution system to your home.

#### SOURCE WATER ASSESMENT

In 2013 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 surface water intakes. The surface water system is considered to be at high risk because of the many potential sources of contamination present in the assessment area. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <a href="https://www.dep.state.fl.us/swapp">www.dep.state.fl.us/swapp</a> or they can be obtained from:

City of Punta Gorda Utility Department at 326 W. Marion Avenue, Punta Gorda Fl. 33950, (941) 575-3339.

#### GENERAL INFORMATION

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. Contaminant's that may is present in source water included:

- (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 storm water 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 storm water runoff, 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.

All drinking water, including bottled water, may reasonably be expected to contain 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Those with compromised immune systems, 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. The Environmental Protection Agency and or centers for Disease Control and Prevention provide guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants. These are available from the Safe Drinking Water Website:

www.epa.gov/safewater

#### **DEFINITIONS**

Action Level (AL): The concentration of a 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 a contaminant in drinking water.

Maximum residual disinfectant (MCL) 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 contaminates.

Maximum residual disinfectant level goal (MRDLG): The level of 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 contaminates.

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: one part by weight of analyte to 1 billion parts by weight of the water sample.

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

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

Detected Compounds: Listed are the compounds detected in Punta Gorda's drinking water during 2007. The SDWA requires that the highest detected value be provided. Not listed are the numerous other compounds tested for, but not detected.

*Inorganic Parameters*: The mineral type compounds, such as metals and salts, found in drinking water.

Microbial Parameters: Disease causing organisms that, at certain levels, may be harmful.

Radiochemical Parameters: Compounds found in drinking water which emit radiation.

Secondary Parameters: The compounds which affect drinking water aesthetics such as taste, odor, color and hardness.

Source: The major sources of the compounds detected in the drinking water.

Trihalomethanes (TTHM) and Haloacetic Acids (HAA5): Compounds formed during the disinfection of drinking water with chlorine.

Unregulated Organic Contaminants: There are no MCL's for unregulated compounds but they are monitored for in water samples to determine or evaluate which compounds, if any should be considered for regulation.



#### Water Quality Results

#### Inorganic Contaminants

Contaminants and			Sampling Date	MCL Violation	Level	Range of	Likely Source of
Unit of measurement	MRDLG	MRDL	MO/YR	Y/N	Detected	Results	Contamination
Barium (ppm)	2	2	6/25/2013	N	0.02	N/A	Discharge of drilling wastes; dicharge from metal refineries erosion of natural deposits
Sodium	N/A	160	6/25/2013	N	53	N/A	Salt water intrusion, leaching from soil
Nitrate (as Nitrogen) (ppm)	10	10	6/25/2013	N	0.2	N/A	Runoff from fertilizer use; leaching from septic tanks,sewage; erosion of natural deposits

#### SECONDARY CONTAMINANTS

Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Total Dissolved Solids (ppm)	N/A	500	Monthly	y *	652	228-652	Natural occurance from soil leaching * TDS EXEMPTION Allows 1000

#### STAGE 2 DISINFECTANT/DISINFECTIO BY-PRODUCTS(D/DBP) PARAMETERS

Contaminants and Unit of measurement	MRDLG	MRDL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Chloramines (ppm)	4	4	JAN-DEC 2013	N	2.8	2.5-3.3	Water additive used to control microbes
Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Haloacetic Acids (five)(HAA5)(ppm)	N/A	60	Quarterly 2013	N	32	20-58	By product of drinking water chlorination
Total Trihalomethanes TTHM (ppm)	N/A	80	Quarterly 2013	N	55	56-72	By product of drinking water chlorination
Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Total Organic Carbon	N/A	π	Monthly 2013	N	1.54	1.28-1.91	Naturally present in the environment

#### Radiological Contaminants

Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Alpha Emitters (pCi/L)	N/A	15	Quarterly	N	2.7	2.5-3.3	Erosion of natural deposits
Radium 226+228 (pCI/L)	N/A	5	Quarterly	N	0.5	0.1-0.7	Erosion of natural deposits

#### Microbiological Contaminants

Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Total Coliform Bacteria	0	2	JAN-DEC 2013	N	0	N/A	Naturally present in the environment

Contaminants and unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Highest Single Measurement	Lowest Monthly Precentage of samples meeting regulatory limits	Likely Source of Contamination
Turbidity (NTU)	N/A	π	JAN-DEC 2013	N	0.58	98.40%	Soil runoff

#### Lead and Copper (Tap Water)

Contaminants and unit of measurement	Dates of sampling M/YR	Action Level Violation Y/N	90th Percentile Results	Number of sampling sites exceeding the AL	MCLG	Action Level	Likely Source of Contamination
Copper Tap water (ppb)	6/13/2012	N	0.00011	0	1.3	1.3	Corrosion of household plumping systems, erosion of natural deposits, leaching from wood preservatives
Lead Tap water (ppb)	6/13/2012	N	1.1	0	0	15	Corrosion of household plumping systems, erosion of natural deposits, leaching from wood preservatives

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 Punta Gorda 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

#### SPECIAL NOTES

Cryptosporidium and Giardia: Cryptosporidium and Giardia are microscopic organisms, which can enter surface waters from run off containing animal wastes. If ingested they cause diarrhea, fever, and other gastro intestinal symptoms. The City has monitored for Giardia and Cryptosporidium in the past and the organisms were not detected in either the source water or the finished water. Currently the City is testing again for Cryptosporidium and Giardia over the next 24 months.

Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms, these organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Sodium: Softeners to reduce calcium hardness at home that use salt to regenerate may contribute increased levels of sodium in the drinking water. Consumers that are on reduced salt (sodium) diets should consider this in cooking and drinking.

For More Information About:

Water Quality: Call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline, (800) 426-4791.

For questions concerning this report or the water treatment process: Contact the City Water Treatment Plant at ( 941) 639-2057

Water Conservation and use restrictions: Contact the Southwest Florida Water Management District at (800) 423-1476 or the City Utility Department at (941) 575-3339 or visit the City's Website at <a href="www.ci.punta-gorda.fl.us">www.ci.punta-gorda.fl.us</a> and follow the links to the Utility Department.

The City of Punta Gorda City Council meets the first and third Wednesday of each month at 9:00 AM in City Hall located at 326 West Marion Ave, Punta Gorda, Florida.

The City of Punta Gorda City Council has also appointed a Utility Advisory Board of local citizens which meets the fourth Monday of each month at 9:00 AM in City Hall. All meetings are noticed and open to the public.

The City of Punta Gorda Utility Department works around the clock to provide the best service and water quality possible. We ask that all our customers help us to protect our water resources, which are the heart of our community, our way of life, and our children's future. THANK YOU

### **Notice of Drinking Water Exemption**

On June 22, 2011 the city received an Exemption from Total Dissolved Solids (TDS) standard from the Department of Environmental Protection due to the fact that the treated water does not meet the current MCL of 500 mg/L at times throughout the year. The exemption allows the city to exceed the current 500 mg/l standard to a level of 1,000 mg/l for a period of five years renewable for an additional 5 years provided the peak demand for water remains at a level below the maximum capacity of the existing plant (10 million gallons per day). The City is reviewing options for the correction of the situation. The next opportunity for public input will be during the renewal process in 2016.

#### ADDITIONAL INFORMATION:

For more information please contact: The City of Punta Gorda Utility Department at 326 W. Marion Avenue, Punta Gorda Fl. 33950, (941) 575-3339. Or contact The Department of Environmental Protection potable water compliance/enforcement section at (239) 344-5600.

### **Total Dissolved Solids Testing 2013**

Month	ppm	Month	ppm	
Jan	652	July	356	
Feb	596	Aug	348	
Mar	608	Sept	228	
Apr	624	Oct	244	
May	572	Nov	416	
June	640	Dec	444	

#### **EMERGENCY INTERCONNECT**

The City of Punta Gorda now has an emergency interconnect with The Peace River/Manasota Regional Water Supply Authority (PR/MRWSA). This interconnect was constructed to be able to pump water to and from The City of Punta Gorda and PR/MRWSA during emergencies. During normal operation a maintenance flow is maintained from one of the systems to keep the lines and tank fresh.

The PR/MRWSA, uses surface water from the Peace River as its source of supply. The Peace River is a large river by Florida standards, having a drainage area of 2300 square miles. The head waters originate in the Green Swamp of northern Polk County, flowing through Lake Hancock, Winter Haven chain of lakes, and Lake Hamilton. The mouth of the Peace River is located at Punta Gorda, 120 miles downstream from the headwaters, delivering needed fresh water to the Charlotte Harbor estuary.

The Florida Department of Environmental Protection has conducted Source Water Assessments for all public water systems in Florida. The assessments will identify and assess any potential sources of contamination in the vicinity of your water supply. A Source Water Assessment Report for the PR/MRWSA was completed in 2013 and is available at the DEP Source Water Assessment and Protection Program web site: <a href="http://www.dep.state.fl.us/swap">http://www.dep.state.fl.us/swap</a>

The tables below are the water quality reported to the City from PR/MRWSA.

#### Inorganic Contaminants - PR/MRWSA

Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	10	10	1/10/2013	N	0.266	N/A	Runoff from fertilizer use; leaching from septic tanks,sewage; erosion of natural deposits
Barium (ppm)	2	2	1/10/2013	N	0.011	N/A	Discharge of drilling wastes; dicharge from metal refineries erosion of natural deposits
Sodium (ppm)	N/A	160	1/10/2013	N	47	N/A	Salt water intrusiion, Leaching from soil
Fluoride	4	4	1/10/2013	N	0.203	N/A	Erosion of natural deposits; discharge from fertilizer, aluminum factories. Water additive which promotes strong teeth when at the optmum level of 0.7ppm

#### Microbiological Contaminants- PR/MRWSA

Contaminants and unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Highest Single Measurement	Lowest Monthly Precentage of samples meeting regulatory limits	Likely Source of Contamination
Turbidity (NTU)	N/A	π	JAN-DEC 2013	N	0.09	100.00%	Soil runoff
Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Total Coliform Bacteria	0	1	JAN-DEC 2013	N	0	N/A	Naturally present in the environment

#### STAGE 2 DISINFECTANT/DISINFECTIO BY-PRODUCTS(D/DBP) PARAMETERS- PR/MRWSA

Contaminants and Unit of measurement	MRDLG	MRDL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Chloramines (ppm)	4	4	JAN-DEC 2013	N	3.68	3.36-3.77	Water additive used to control microbes
Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Haloacetic Acids (five)(HAA5)(ppm)	N/A	60	Quarterly 2013	N	28	20-48	By product of drinking water chlorination
Total Trihalomethanes TTHM (ppm)	N/A	80	Quarterly 2013	N	35	29-41	By product of drinking water chlorination
Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Total Organic Carbon	N/A	π	Monthly 2013	N	1.548	1.42-1.88	Naturally present in the environment

#### Lead and Copper (Tap Water)- PR/MRWSA

Contaminants and unit of measurement	Dates of sampling M/YR	Action Level Violation Y/N	90th Percentile Results	Number of sampling sites exceeding the AL	MCLG	Action Level	Likely Source of Contamination
Copper Tap water (ppb)	7/21/2011	N	0.058	0	1.3	1.3	Corrosion of household plumping systems, erosion of natural deposits, leaching from wood preservatives
Lead Tap water (ppb)	7/21/2011	N	1	0	0	15	Corrosion of household plumping systems, erosion of natural deposits, leaching from wood preservatives

#### Radiological Contaminants- PR/MRWSA

Contaminants and Unit of measurement	MCLG	MCL	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Alpha Emitters (pCi/L)	N/A	15	Monthly	N	1.9	0.9-4.8	Erosion of natural deposits
Radium 226+228 (pCI/L)	N/A	5	Monthly	N	1.5	1-2.1	Erosion of natural deposits

### WATER RATES

The City utility budget is solely supported by the revenue generated from utility impact fees and rates. The City water rate structure is multi-faceted to meet several objectives. The costs are in two categories, fixed (costs the utility incurred regularly without regard to the volume produced), and variable (costs associated with the volumes of water produced). There is also a difference in rates based on location, inside the City and outside the City limits. This is followed by a difference in volume of water consumed or used, the higher the volume, higher the costs per thousand.

Flat rate by meter size, plus costs per ERU (Equivalent Residential Unit)

	Insi	de	Outside		
Meter Size	Flat Rate	Cost per ERU	Flat Rate	Cost per ERU	
3/4	\$7.03	\$7.15	\$8.78	\$8.93	
1"	\$10.42	\$7.15	\$13.02	\$8.93	
1.5"	\$16.88	\$7.15	\$21.10	\$8.93	
2"	\$29.80	\$7.15	\$37.25	\$8.93	
3"	\$74.34	\$7.15	\$92.92	\$8.93	
4"	\$114.79	\$7.15	\$143.48	\$8.93	
6"	\$245.50	\$7.15	\$306.87	\$8.93	
8"	\$354.65	\$7.15	\$443.31	\$8.93	

Costs per thousand gallons

Inside	Outside
\$3.30	\$4.12
\$3.80	\$4.75
\$4.28	\$5.35
\$4.77	\$5.96
\$5.28	\$6.60
	\$3.30 \$3.80 \$4.28 \$4.77

City of Punta Gorda Historical Monthly Usage Per Class in Gallons 3 year average/month 2011-2013

	o your average/
Single Family Inside	8687
Single Family Outside	3,381
Multi Family Inside	2,966
Multi Family Outside	2,095
Commercial Inside	7,629
Commercial Outside	5,506
Irrigation Inside	9159
Irrigation Outside	2828

## **IMPORTANT NUMBERS**

City of Punta Gorda Utilities 326 W. Marion Ave. Punta Gorda, Florida 33950 Phone: 941-575-3339

Fax: 941-575-5006

Website: www.cipunta-gorda.fl.us

Office hours: Monday – Friday 8:00A.M. – 4:30P.M.

Closed on Holidays

Water Treatment Plant Phone: 941-639-2057 Fax: 941-639-9491

Wastewater Treatment Plant

Phone: 941-639-1883 Fax: 941-639-9416

Billing/Collection Phone: 941-639-2528 Fax: 941-575-5042

### AFTER HOURS WATER AND SEWER EMERGENCIES

941-639-2057

\*\* If your call goes to the voicemail please leave a message and the licensed water plant employee will call back as soon as their duties allow. \*\*