Presented By Peoples Water Service Company of Florida, Inc.

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#### Meeting the Challenge

Once again Peoples Water Service Company of Florida, Inc., is proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have been dedicated to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

#### Information on the Internet

The U.S. EPA (www.epa.gov/Your-Drinking-Water) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Florida Department of Environmental Protection has a Web site (www.dep. state.fl.us/water/drinkingwater/info.htm#general) that provides complete and current information on water issues in Florida, including valuable information about our watershed.

#### Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

#### Substances That Could Be in Water

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:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**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.

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**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.

**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 U.S. 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 (800) 426-4791.

#### Where Does My Water Come From?

Peoples Water Service Company of Florida, Inc., currently has five water treatment plants, which pump/withdraw water from the Sand and Gravel Aquifer. This aquifer is estimated to be 6,500 square miles and is used by many water utility companies in Southern Alabama and along the Florida Panhandle. During the year, our treatment facilities provided a total of 803 million gallons of water, averaging about 67 million gallons per month, or 2.2 million gallons each day of clean drinking water to our customers' homes or businesses.

## How Is My Water Treated and Purified?

Peoples Water Service Company of Florida, Inc. methods of treating your water conform to the Florida Department of Environmental Protection, Chapter 62-550 Drinking Water Standards, Monitoring, and Reporting. Our treatment processes consist of a series of steps. First, the raw water is withdrawn from our water source (Sand and Gravel Aquifer) and sent to the treatment facilities. Second, the water goes to a contact area where specific chemicals are added to meet state and federal requirements. Hydrated lime is added for pH adjustment, chlorine (gas) is added for disinfection, and a corrosion inhibitor is added to assist in protecting the distribution system pipes. In addition, we have incorporated two sets of granular activated carbon filter systems to assist in the removal of manmade contaminants. Third, after the water has completed the treatment process, it is then pumped into storage facilities and to your home or business.

#### Missed Monitoring

A monitoring violation occurred during the month of August 2015. Due to an oversight, the raw (before treatment) water samples from the four active wells were not tested for total coliform bacteria. Coliform bacteria are a generally non-harmful naturally occurring organism used to indicate a possible presence of harmful bacteria. The 80 routine distribution (treated) water samples for the months of August and September had no indication of total coliform bacteria. Monthly checklists and automatic reminders have been incorporated into the computer workstations to avoid this from recurring.

#### Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

**Potent Germicide Reduction** in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

**Taste and Odor Reduction** of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.

**Biological Growth Elimination** of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

**Chemical Removal** of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.



### **QUESTIONS?**

For more information about this report, or for any questions relating to your drinking water, please contact Mark Cross, General Manager, at (850) 455-8552 or email CustomerService@ PeoplesWaterService.Com.

## What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders and on pets' water bowls is caused by the growth of the bacterium *Serratia marcesens*. Serratia is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

Serratia will not survive in chlorinated drinking water.

#### Lead in Home Plumbing

Peoples Water Service Company of Florida lead results are well within the established federal limits. However, 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. We are 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 www.epa.gov/lead.

#### Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

#### Source Water Assessment

In 2015, 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 five potential sources of contamination identified for our system with low to moderate susceptibility levels. Potential sources of contamination identified include underground petroleum storage tanks, dry cleaning facilities, wastewater treatment plants and a state funded cleanup site. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at www.dep.state.fl.us/swapp.

#### Sampling Results

TTHM [Total trihalomethanes]-Stage 2 (ppb)

June 2015

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

PRIMARY REGULATED CONTAMINANTS												
Microbiological Contaminants												
CONTAMINANT AND UNIT OF MEASUREMENT		DATI	e of Sampling (Mo./yr.)	MCL VIOLATION (YES/NO)	HIGHEST MONTHL PERCENTA	ſ	G	MCL LIKELY SOURCE OF CONTAMINATION				
Total Coliform Bacteria (% positive samples)		January-December 2015		No	4.3	0	Р	resen	ice of coliform b	acteria in f	5% of monthly samples	Naturally present in the environment
Radioactive Contaminants												
CONTAMINANT AND UNIT OF DATE OF SAMPLING MEASUREMENT (MO./YR.)			MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLO	i MC	NCL LIKELY SOURCE OF		LIKELY SOURCE OF COM	ITAMINATION	
Alpha Emitters (pCi/L)	January 2008 January-Februar		No	3.2	ND-3.2	0	1	5 I	Erosion of natural deposits			
Radium 226 + 228 [Combined Radium] (pCi/L)	January-February 2014		No	3.0	0.2–3.0	0	5	5 1	Erosion of natural deposits			
Uranium (ppb)	Septembe 2011-Septembe		No	0.32	ND-1.1	0	31	0 1	Erosion of natural deposits			
Inorganic Contaminants												
Barium (ppm)	January-February 2014		No	0.036	0.022– 0.036	2	2	2 I	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Cyanide (ppb)	January-Februar	y 2014	No	23	ND-23	200	20	1 00	Discharge from steel/metal factories; discharge from plastic and fertilizer factories			
Lead [point of entry] (ppb)	January-Februar	y 2014	No	2.0	ND-2.0	NA	1		Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, solder			issions and paint; lead pipe, casing, and
Nickel (ppb)	January-February 2014		No	2.2	ND-2.2	NA	10	00 1	Pollution from mining and refining operations; natural occurrence in soil			
Nitrate [as Nitrogen] (ppm)	January 2015		No	2.51	ND-2.51	10	1	0 1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Sodium (ppm)	January-February 2014		No	35	ND-35	NA	16	50 5	Salt water intrusion, leaching from soil			
Volatile Organic Contaminants												
<b>Tetrachloroethylene</b> (ppb)	January-December 2015		No	1.55	ND-2.7	0	3	3 I	Discharge from factories and dry cleaners			
Xylenes (ppm)	<b>Explenes</b> (ppm) January-December 2015		No	0.18	ND-2.2	10	1	0 1	Discharge from petroleum factories; discharge from chemical factories			
Stage 2 TTHMs and Disinfectant/Disinfection By-Product (D/DBP) Parameters												
CONTAMINANT AND UNIT OF MEASUREMENT		D/	ATE OF SAMPLING MCL VI (MO./YR.) (YES			LEVEL		ige oi Sults		MCL OR [MRDL]	LIKELY S	OURCE OF CONTAMINATION
Chlorine (ppm)		Janua	ary-December 201	.5 N	0	0.7	0.64	4–0.7	78 [4]	[4.0]	Water additive used to	o control microbes
	10 0 1		1 2015			1.0	3.77		2 374	0.0	D 1 C1.1.	1

1.3

No

ND-1.3

NA

80

By-product of drinking water disinfection

Lead and Copper (Tap water samples were collected from sites throughout the community)													
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	AL EXCEEDANCE (YES/NO)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	MCLG	AL (ACTION LEVEL)		LIKELY SOURCE OF CONTAMINATION					
Copper [tap water] (ppm)	June 2014	No	0.5	0	1.3	1.3	Corros	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives					
Lead [tap water] (ppb)	June 2014	No	3.5	1	0	15	Corros	Corrosion of household plumbing systems, erosion of natural deposits					
UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3)													
CONTAMINANT AND UN	DATE OF SAMPLING (MO./YR.)					AVERAGE RESULT	RANGE OF RESULTS						
1,4-Dioxane (ppb)			January and July 2015					0.094	ND-0.15				
Chromium (ppb)	January and July 2015					0.140	ND-1.1						
Chromium-6 (ppb)	January and July 2015					0.0875	ND-0.22						
<b>Strontium</b> (ppb)	January and July 2015					31.583	16–92						
Vanadium (ppb)			January and July 2015					0.317	0.2–0.4				

#### Definitions

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

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).