

Annual
WATER
QUALITY
REPORT

Reporting Year 2013



Presented By
**Peoples Water Service
Company of Florida, Inc.**

PWS ID#: 1170527

There When You Need Us

Peoples Water Service Company of Florida, Inc., is once again proud to present the annual water quality report covering all testing performed between January 1 and December 31, 2013. Over the years, we have dedicated ourselves 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 you. 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 our water users.

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

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.

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.

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 send an email to CustomerService@PeoplesWaterService.Com.

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>.

Source Water Assessment

In 2013, 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 four 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, and wastewater treatment plants. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

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 810 million gallons of water, averaging about 68 million gallons per month, or 2.2 million gallons each day of clean drinking water to our customers homes or businesses.

Lead in Home Plumbing

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/safewater/lead.

Water Conservation

You can play a role in conserving water and save 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.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

How Is My Water Treated and Purified?

Peoples Water Service Company of Florida, Inc.'s 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 then 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 man-made contaminants. Third, after the water has completed the treatment process, it is then pumped into storage facilities and to your home or business.

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 marcescens*. *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.

Sampling Results

During the past year, Peoples Water Service Company of Florida, Inc., has taken hundreds of water samples in order 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.

PRIMARY REGULATED CONTAMINANTS								
Microbiological Contaminants								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	HIGHEST MONTHLY PERCENTAGE	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION		
Total Coliform Bacteria (% positive samples)	Jan-Dec 2013	No	4.3	0	Presence of coliform bacteria in 5% of monthly samples		Naturally present in the environment	
Radioactive Contaminants								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Alpha Emitters (pCi/L)	Jan 2008 and Feb 2011-Jan 2012	No	7.5	0.7–16.7	0	15	Erosion of natural deposits	
Radium 226 + 228 [Combined Radium] (pCi/L)	Jan 2008–Apr 2013	No	4.4	1.2–6.5	0	5	Erosion of natural deposits	
Uranium (ppb)	Sept 2012	No	0.7	ND–0.7	0	30	Erosion of natural deposits	
Inorganic Contaminants								
Barium (ppm)	Feb-Mar 2011	No	0.075	0.017–0.075	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Mercury [inorganic] (ppb)	Feb-Mar 2011	No	0.6	ND–0.6	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland	
Nickel (ppb)	Feb-Mar 2011	No	3	ND–3	NA	100	Pollution from mining and refining operations; natural occurrence in soil	
Nitrate [as Nitrogen] (ppm)	Jan 2013	No	1.6	ND–1.6	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Sodium (ppm)	Feb-Mar 2011	No	68	5–68	NA	160	Salt water intrusion, leaching from soil	
Volatile Organic Contaminants								
Carbon Tetrachloride ¹ (ppb)	Jan-Dec 2013	No	0.22	NA	0	3	Discharge from chemical plants and other industrial activities	
Ethylbenzene ¹ (ppb)	Jan-Dec 2013	No	0.13	NA	700	700	Discharge from petroleum refineries	
Tetrachloroethylene (ppb)	Jan-Dec 2013	No	1.75	ND–1.7	0	3	Discharge from factories and dry cleaners	
Xylenes (ppm)	Jan-Dec 2013	No	0.0005	ND–0.005	10	10	Discharge from petroleum factories; discharge from chemical factories	
Stage 1 Disinfectants and Disinfection By-Products								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION	
Chlorine (ppm)	Jan-Dec 2013	No	0.65	0.6–0.7	[4]	[4.0]	Water additive used to control microbes	
TTHM [Total trihalomethanes] (ppb)	Jul 2013	No	1.54	ND–2.3	NA	80	By-product of drinking water disinfection	
Stage 2 Disinfectants and Disinfection By-Products								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
TTHM [Total trihalomethanes]–Stage 2 DDBP ² (ppb)	Oct 2013	No	NA	ND–2.7	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)	Jun-Sep 2011	No	0.82	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	Jun-Sep 2011	No	13	2	0	15	Corrosion of household plumbing systems, erosion of natural deposits

SECONDARY CONTAMINANTS

CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	HIGHEST RESULT	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Iron ³ (ppm)	Feb-Apr 2011	No	0.61	ND–0.61	NA	0.3	Natural occurrence from soil leaching
Manganese ³ (ppm)	Feb-Apr 2011	No	0.061	0.0026–0.061	NA	0.05	Natural occurrence from soil leaching

¹ ND in all of 2013 but Running Annual Average also used data from 2012.

² Results of Level Detected are not applicable until all four quarters are sampled.

³ The Florida Department of Environmental Protection (FDEP) sets drinking water standards for secondary contaminants and has determined that iron and manganese are aesthetic concerns at certain levels of exposure. Iron and manganese, as secondary drinking water contaminants, do not pose a health risk and small amounts are essential to human health. This is not a violation because secondary contaminants' annual average is below the MCL.

Definitions

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

IDSE (Initial Distribution System Evaluation): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

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).