WATER QUALITY REPORT 2015

CITY OF PORT ST. LUCIE

UTILITY SYSTEMS DEPARTMENT

WATER QUALITY REPORT 2015

A Message from the Director

We are pleased to again provide you an opportunity to review our annual Consumer Confidence Report (CCR) which offers details about the quality of this utility's potable water. This report is published in compliance with Federal legislation and for the most part reflects results of the sampling and testing we conducted between January 1, 2015 and December 31, 2015. However, the most important message in this document is the fact that the drinking water provided by the Port St. Lucie Utility Systems Department is clean, safe, great tasting, and continues to meet all Federal and State requirements!

Our Utility Systems Department is recognized as a leader in Florida's water and wastewater utility industry because we have long practiced good environmental stewardship and diligently worked to protect the community's valuable water resources; i.e., the North Fork of the St. Lucie River and the Indian River Lagoon. We are very proud that since 1999, more than 6,870 private aging residential septic systems have been taken out of service when the homes were converted to the City's sanitary sewer system. In addition, 20,750 newly constructed homes connected to our low pressure sewer system instead of being connected to new septic systems.

Our 244 employees are dedicated to providing exceptional customer service and support to our nearly 70,000 customers in the most efficient and cost effective manner possible. In July 2015, we began accepting credit card payments by telephone and today nearly 1,500 customers pay their bills by phone each month; however, it is a manual process on the City's side and often causes backlogs in our phone system. We will be implementing a new credit card payment by phone system in 2016 that is intended to significantly reduce the longer than acceptable on hold wait times customers sometimes experience. The system will also provide customers 24/7 telephone access to hear their current balance and payment history, or make a payment by credit card or eCheck. Improvements to our website and its bill payment feature are also in the works.

A list of Important Definitions appears on page 5 to help you interpret and understand various terms and abbreviations we are required to use in the report.

If you have questions about this report or about any of our services, please feel free to contact us by calling our switchboard that is operated by Utility staff members who stand ready to assist you 24 hours a day. You can reach us at 772-873-6400 day or night because we remain as our service slogan says, "Connected to the Community!"

Jesus A. Merejo

Utility Systems Director

Where does our water come from?

The City's water supply comes from two independent sources, the shallow aquifer and the deeper Floridan aquifer. Raw water from the shallow aquifer, which is about 100 feet deep, is treated by an 8.0 million gallon per day lime softening facility. This process is a combination of pH adjustments with lime, coagulation with a polymer, multi-media filtration, and disinfection with chloramines. The deeper Floridan aquifer, which is about 1350 feet deep, is treated by an 11.15 million gallon per day and a 22.5 million gallon per day reverse osmosis facilities. Both finished waters are blended, pH adjusted, disinfected, and fluoride is added.

The sources of drinking water (both tap water and bottled water) includes 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 human activity.

How safe is our water?

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.

In addition, 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 Port St. Lucie Utility Systems 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.

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 at 1-800-426-4791.

In 2015 the Florida Department of Environmental Protection (FDEP) performed a source water assessment of the City's water supply system to identify any potential sources of contamination in the vicinity of our wells. Two potential sources of contamination that were identified for this system have a low susceptibility level. It should be noted that the potential sources of contamination identified by this assessment are just that: potential sources. All of Port St. Lucie's water supply facilities are regulated, and operate under stringent construction and maintenance standards to protect both human health and the environment. The purpose of FDEP conducting the source water assessments was to determine if any actions are needed to reduce current risks to avoid future problems. No actions were recommended. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

The City of Port St. Lucie Utility Systems Department has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in our source water include:

Microbiological 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 storm water 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 storm water 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 storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Water Conservation Tips

Conserving water not only helps you save money, but it also helps preserve our water resources for the use of generations to come. The power to conserve water continues to rest with each of us, young and old alike so please share the following tips with your family members, friends, and neighbors.

• Turn off the water while shaving, brushing your teeth, or washing your hands.

• Soak dirty pots and pans instead of letting the water run while you scrape them.

• Upgrade plumbing fixtures and toilets manufactured before 1994 with new water-efficient models. Look for the "WaterSense" label and buy products bearing that label that meet the Environmental Protection Agency's criteria for water efficiency and performance.

• Become a leak detective! Regularly check faucets, toilets, hose bibs and sprinklers for leaks and make necessary repairs. A slow drip can waste 20 or more gallons of water per day.

• Get the most for your money and only run your automatic dishwasher when it's full. Dishwashers use about 15 gallons of water during every cycle, regardless of how many dishes and glasses are loaded into it.

• Taller grass in a lawn helps shade the roots and hold moisture in the soil better than grass that is clipped short. Leaving lawn clippings on your grass will cool the ground and also help hold in moisture.

• Landscape with water-thrifty ornamental grasses, plants and trees. Group plants with the same watering needs together to avoid over water some and under watering others. Mulched landscape beds help retain moisture.

• Always follow the Water Use Restrictions imposed by South Florida Water Management District for landscape irrigation days and times.

Additional water conservation tips and information about the importance of water conservation can be found at the following sites: www.cityofpsl.com, http://my.sfwmd.gov, or http://www.epa.gov/watersense.

Cross Connection Control:
Protecting our water

There are over 69,000 connections to our water distribution system. When connections are properly installed and maintained, the risk of contamination are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality, it can also affect your health.

So, what can you do? Do not make or allow improper connections at your home. An unprotected garden hose lying in a puddle is a cross connection. The unprotected lawn sprinkler system is also a cross connection. Also, residents in neighborhoods utilizing reclaimed water for irrigation must take precautions to prevent cross connections. Reclaimed water is not suitable for potable use and must not be connected to household plumbing. When the cross connection is allowed to exist at your home it will affect you and your family first. If you'd like to learn more about helping to protect the quality of drinking water, call us at 1-772-873-6400 for further information about ways you can help.

Environmental Protection:
Preventing Urban Storm Water Runoff Pollution

- Use fertilizers sparingly and keep it off driveways, sidewalks, and roads.
- Never dump anything down the storm drains.
- Compost your yard waste.
- Avoid pesticides; learn about Integrated Pest Management. (IPM)
- Pick up after your pet

For more information of how you can minimize urban storm water runoff pollution, go to the following link. http://www.cityofpsl.com/npdes/combating-pollution.html

Important Definitions

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.

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

Initial Distribution System Evaluation (IDSE): 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 (THM) and haloacetic acids (HAA). 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.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or 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 contaminants.

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

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

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

PRINEVILLE WATER TREATMENT PLANT

Contaminant & Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected **	Range of Results	MCLG	MCL	Likely Source of Contamination
INORGANIC CONTAMINANTS							
Flouride (ppm)	4/2014	N	0.68	N/A	4	4	Erosion of natural deposits; discharge frome fertilizer and aluminium factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	4/2014	N	89.3	N/A	N/A	160	Salt water intrusion; leaching from soil.
Nitrate (ppm)	3/2015	N	0.054	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
RADIOLOGICAL CONTAMINANTS							
Radium 226 (pCi/L)	4/2008	N	0.3	N/A	0	5	Erosion of natural deposits.

JAMES E. ANDERSON WATER TREATMENT PLANT

Contaminant & Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected **	Range of Results	MCLG	MCL	Likely Source of Contamination
INORGANIC CONTAMINANTS							
Flouride (ppm)	4/2014	N	0.69	N/A	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	4/2014	N	95.8	N/A	N/A	160	Salt Water intrusion; leaching from soil
Nitrate (ppm)	3/2015	N	0.043	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

DISINFECTANTS AND DISINFECTION BY-PRODUCTS
(THESE RESULTS ARE FOR THE ENTIRE DISTRIBUTION SYSTEM)

Contaminant & 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
Chloramines (ppm)	1-12/2015	N	2.7	2.3-2.9	MRDLG =4	MRDL =4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	2,5,8,11/2015	N	17.4	1.4-33.3	N/A	MCL =60	By-product of drinking water or disinfection
TTHM Total Trihalomethanes (ppb)	2,5,8,11/2015	N	33.7	2.2-60.6	N/A	MCL =80	By-product of drinking water or disinfection

UNREGULATED CONTAMINANTS*
(THESE RESULTS ARE FOR THE ENTIRE DISTRIBUTION SYSTEM)

Contaminant & Unit of Measurement	Dates of Sampling (mo/yr)	Level Detected **	Range	Likely Source of Contamination
Chromium (ppb)	5/2015	0.43	0.41-0.46	Chromium is a naturally occuring element. The MCL of 0.1 mg/L covers the two forms primarily found in the environment: trivalent chromium (chromium-3) and hexavalent chromium (chromium-6). Chromium is used in making steel and other alloys. Chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation. Chromium-3 is an essential nutrient.
Strontium (ppb)	5/2015	1408	1220-1660	Strontium is a naturally-occuring element. Historically, the commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions, to block x-ray emissions.
Vanadium (ppb)	5/2015	0.082	0.071-0.092	Vanadium is a naturally-occuring elemental metal. It is commonly used as vanadium pentoxide which is a chemical intermediate and a catalyst.
Chromium-6 (ppb)	5/2015	0.044	0.024-0.070	Chromium-6 is the highest oxidation state of the element chromium. Although chromium-6 can be formed by the oxidation of chromium-3, the primary mode of chromium-6 occurrence in the environment is via the release of industrial chemicals containing chromium-6.

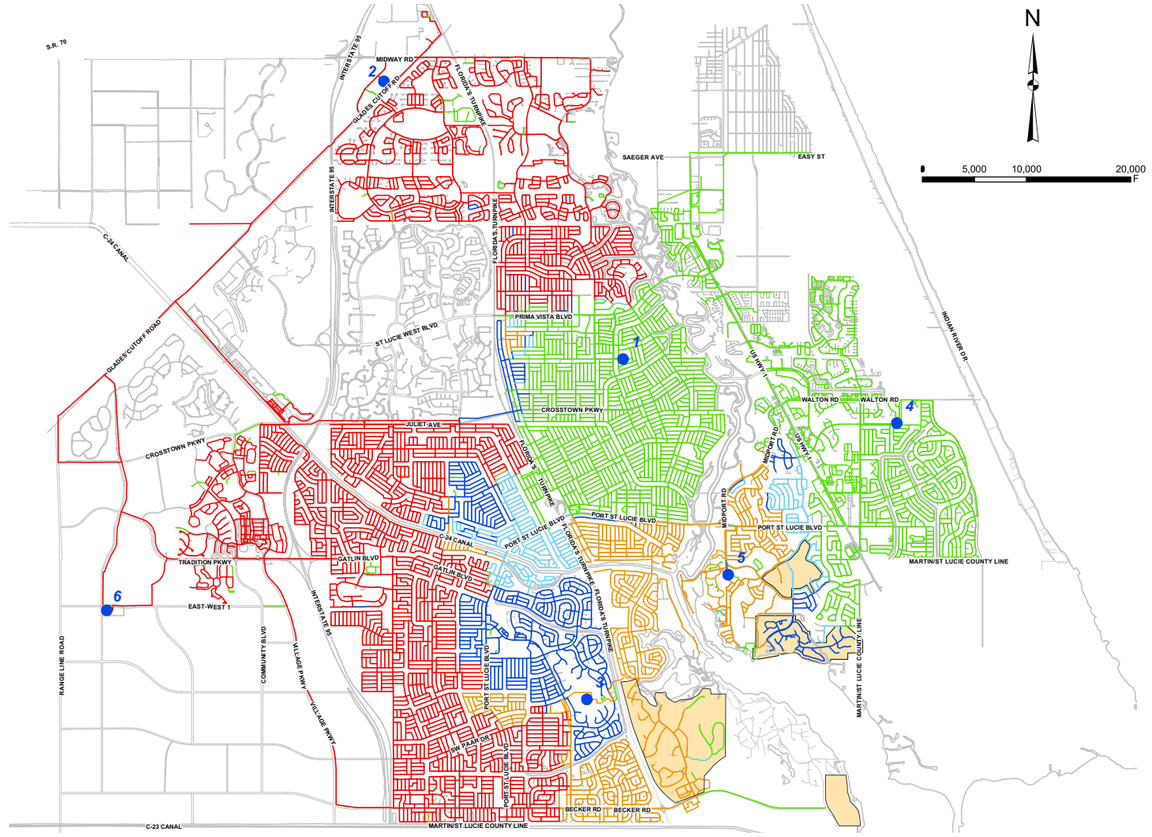
LEAD AND COPPER RESULTS
(THESE RESULTS ARE FOR THE ENTIRE DISTRIBUTION SYSTEM)

Contaminant & Unit of Measurement	Dates of Sampling (mo/yr)	AL Violation (Y/N)	90th Percentile Result	# of sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	6,7/2015	N	0.092	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6,7/2015	N	1.9	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits;

*Results for unregulated contaminants are available upon request. Please call 1-772-873-6400 for assistance.

** Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency. For THM's and HAA's, the "level detected" is the highest locational running annual average for the year.

CITY OF PORT ST. LUCIE
(UTILITIES SYSTEM WATER DISTRIBUTION MAP)



A NEARLY UNBEATABLE VALUE

The City of Port St. Lucie's Utility Systems Department supplies drinking water at a tremendous value. If you get your daily recommended eight glasses (64 ounces) of water by drinking our tap water every day for an entire year, the total cost would only be 67¢ for the entire year! Purchasing that same volume (182.5 gallons) of bottled water from a retail store or vending machine could cost $140 or more for the year. In today's economy, spending 67¢ to drink a year's worth of tap water instead of spending more than $100 for an equal amount of bottled water is certainly something to consider.

LEGEND

Water Source

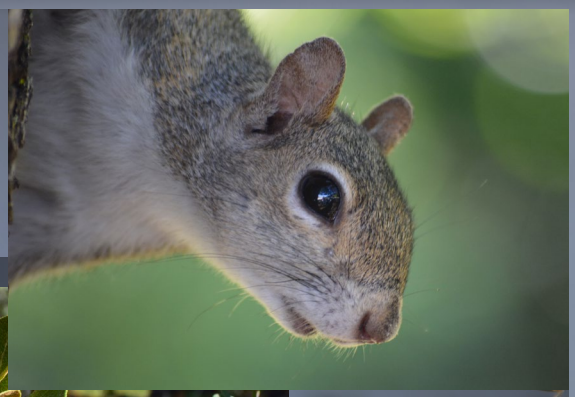
- 1 - Prineville WTP
- 2 - JEA WTP
- 3 - Westport Repump
- 4 - Midport Repump
- 5 - Southport Repump
- 6 - Rangeline Repump

% JEA Water

- 0 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- Existing Reclaimed Water Service Area

CITY OF PORT ST. LUCIE
Utility Systems Department
900 S.E. Ogden Ln
Port St. Lucie, FL 34983

Place Stamp Here



CITY OF PORT ST. LUCIE LEADERSHIP

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Vice Mayor District 1

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Councilwoman District 2

Shannon M. Martin
Councilwoman District 3

Ron Bowen
Councilman District 4

Jeff Bremer
City Manager

Jesus A. Merejo
Utility Systems Director