

# 2015 Water Quality Annual Report

**Ensuring the highest quality water for over 125 years**

City of Tallahassee  
Your Own Utilities™



# Who We Are

**City of Tallahassee**  
Your Own Utilities® 

Underground Utilities is part of the City of Tallahassee Utilities and provides water, wastewater, stormwater and natural gas services throughout the Tallahassee area.

Our goal is to provide customers with the best service possible and to set the standard for excellence in all that we do.



Water Main Repair

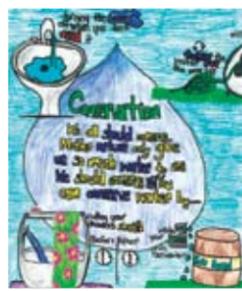


Water Quality Testing



Volunteers

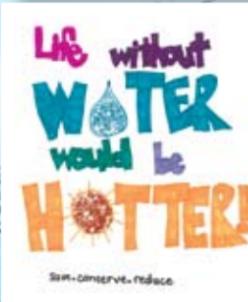
## 2015 Water Quality Poster Contest Winners



First Place



First Place



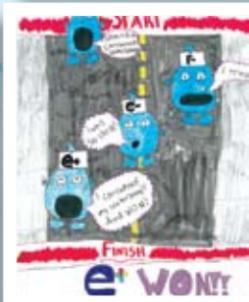
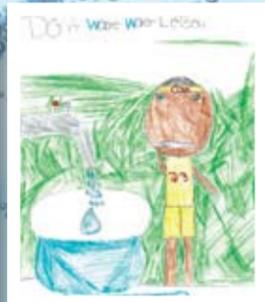
Second Place



Third Place



Honorable Mention



## Providing Tallahassee With Clean, Safe and Reliable Drinking Water

I am pleased to provide you with the City of Tallahassee Annual Consumer Confidence Report for our drinking water system. We pride ourselves on the service that we provide and the passion that our employees have for ensuring the highest quality of life for our community. This dedication to excellence has helped the City garner the 2015 title of *Best Tasting Drinking Water* from the Florida Section of the American Water Works Association. We've also been honored with receiving the *2015 Florida Governor's Sterling Award*. This coveted award is Florida's highest honor that an organization can receive for organizational performance and management excellence.

While that's an impressive accomplishment, the most important aspect of our job is you—the customer. For more than 125 years, we've been providing Tallahassee residents with clean, safe and reliable drinking water. It all began in 1890 when Tallahassee got a centralized water system and, thus, its first public utility. This ensured greater fire protection and a dependable source of water for our area.

Today we have more than 360 dedicated employees representing four business sectors: water, wastewater, natural gas and stormwater. Together we are fulfilling our mission -- to strive to enrich what is essential to the human quality of life and to do it at a level that leads the way in innovation, employee engagement and cost effectiveness. Our residents can rest assured that our drinking water meets or exceeds all guidelines set forth by the Florida Department of Environmental Protection (FDEP), the U.S. Environmental Protection Agency (EPA) and the Florida Department of Health (FDOH).

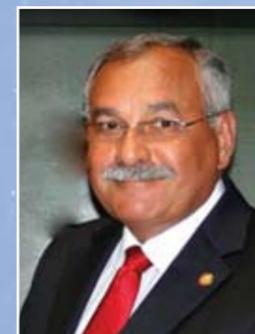
Other ongoing commitments include replacing aging infrastructure and investing in water system upgrades to provide the highest level of service to customers. This includes developing a new well in the northeast area and replacing water lines to enhance reliability and meet demand of a growing population. Helping customers save water and money remains paramount in all of our endeavors.

Through education and outreach to encourage water conservation, along with individual efforts of citizens, Tallahassee has decreased its water consumption by roughly 17% in recent years. This is testament to our community's strong dedication to protect the environment and preserve water resources.

We remain committed to you, the customer, and keeping the lines of communication open.

Forward-leaning technological solutions that provide best in class approaches driven by customers' desires for seamless interaction with the Utilities has been another primary focus to provide faster, better and smarter service for our customers and meet all regulatory compliance. Voicemail, text and email notifications have been used extensively to notify customers of any water repairs, outages or system improvement projects in their areas. While the program started small with only a few messages transmitted, it continued to grow and in 2014, Your Own Utilities sent over 1.6 million notifications to customers. If you would like to receive notifications, please update your contact information by calling 891.4YOU (4968) or by submitting your information at [Talgov.com/YOU](http://Talgov.com/YOU).

Thank you and we look forward to hearing from you.



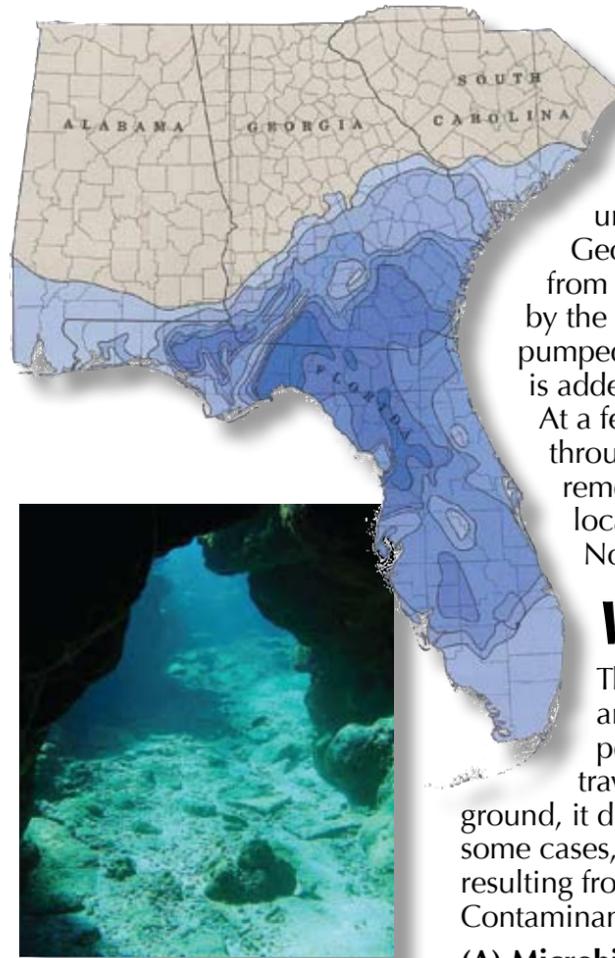
Sincerely,

Mike Tadros  
General Manager, Underground Utilities  
City of Tallahassee Utilities



Old City Waterworks

# Water Resources



## The Floridan Aquifer

Tallahassee is situated over one of the largest and cleanest sources of ground water in the world – the Floridan Aquifer. The Floridan Aquifer underlies all of Florida and parts of Alabama, Georgia and South Carolina. Our water supply comes from 27 deep wells drilled into the aquifer and operated by the City's Underground Utilities. As the water is pumped from the wells to the distribution system, chlorine is added for disinfection and fluoride for dental health. At a few central Tallahassee wells, water is passed through granulated activated carbon filter units to remove certain chemicals found in the aquifer in those locations. Green sand filtration is also used at one North West area well to remove iron and manganese.

## Water Quality

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, agricultural livestock operations, and wildlife.

**(B) Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from our urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

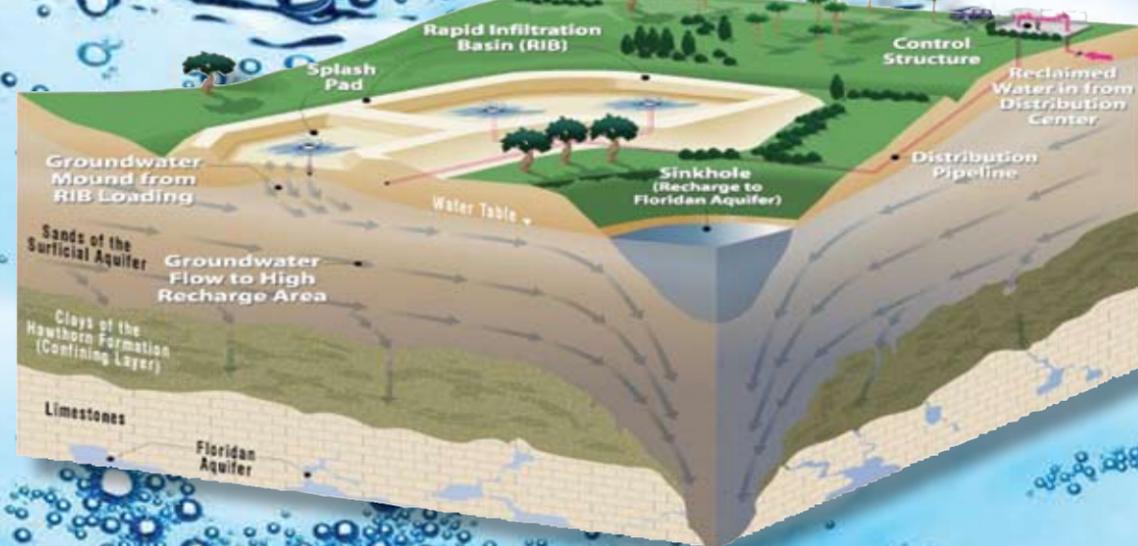
**(C) Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**(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 stormwater runoff, and septic systems.

**(E) 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 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.



# Protecting Our Water Starts With You



of Tallahassee's fertilizer ordinance. Using the required spreader deflector shield near bodies of water and impervious surfaces (such as compacted soil, sidewalks and asphalt) and not fertilizing during the prohibited application periods



(tropical weather watches and warnings) can help save millions of dollars on cleanup efforts.

Two of the main ingredients in fertilizer, nitrogen and phosphorus, are the primary nutrients that cause pea-green algae blooms in your local lakes and streams. Nitrogen helps make plants green and grow. Phosphorus helps plants flower and fruit. Typically, you don't need phosphorus in lawn fertilizer because Leon County soils already contain an adequate amount for lawns. We recommend that you choose lawn fertilizer with a ZERO in the middle of the three-number sequence (no phosphorus). Call 891.4YOU (4968) or visit the Think About Personal Pollution (TAPP) website at [TAPPwater.org](http://TAPPwater.org) to get the Water Friendly Yard Guide and other helpful information for maintaining your yard and protecting your local waters.



## Preventing Pollution

Clean water is essential to the public health and economic prosperity of a community. One of Tallahassee's assets is an abundant supply of fresh water. We are fortunate to live above one of the largest and cleanest sources of ground water in the world. However, even the cleanest water supply can become degraded, and we need your help to preserve its high quality. Pollution prevention is the most effective and least costly way to protect our drinking water.



A process called percolation allows Florida's abundant rainfall to seep in the soil and replenish the large volumes of water that flow in the aquifer and out of local springs. The water eventually saturates the underlying limestone in much the same way water fills the tiny holes of a sponge.

Anything you put on the ground can impact our water resources, so your efforts make a huge difference. The more you minimize erosion and keep the dirt on your property,

the less we will need to clean it out of storm drains, ditches and ponds. If you have stormwater or drainage issues around your home, call 891.4YOU (4968) or visit [Talgov.com/YOU](http://Talgov.com/YOU) to see if the Onsite Stormwater Mitigation Loan Program can help you.

## Businesses Leading by Example

Businesses that keep their properties clean are doing their part in the community to minimize the exposure of contaminants and chemicals to the environment. The City oversees two regulatory programs, the National Pollutant Discharge Elimination System (NPDES) and the Leon County Aquifer Protection Program to ensure that businesses are following best management practices, including reporting spills properly and adhering to regulations that help protect local lakes, streams, springs and the Floridan Aquifer.

Construction project managers are leading by example and implementing the proper sediment and erosion control practices that prevent sediment and muddy water from flowing into the stormwater system and to our water resources.



Construction projects must follow state and local growth management regulations that protect water resources.

## Water Protection



As mentioned before our drinking water supply comes from the Floridan Aquifer, and the water soaking into the ground on your property naturally replenishes it. Keeping rainwater in your yard by using rain barrels and rain gardens reduces the amount of stormwater runoff and pollutants that are carried through your streets to our lakes and streams. Reducing stormwater runoff means reducing pollution.

## Proper Fertilizer Use

Continue to protect your water supply by choosing to fertilize your lawns sparingly and following the practices outlined in the City



# Proper Waste Disposal

Illegal waste disposal can have a tremendous impact on the quality of our City's water.

Fortunately, the City of Tallahassee receives only a few reports of illegal discharges, dumping or connections each year. However, these activities, whether intentional or accidental, can introduce pollutants to the City's stormwater system and pose a greater than normal risk to your water resources. Please report any illicit activities you may see by calling 891.4YOU.

When you dispose of solid and hazardous waste properly and refrain from pouring fats, oils and grease down the drain, you help avoid costly repair and cleanup costs. Improper disposal of hazardous waste allows materials to enter the

environment untreated and are potentially harmful to people, water quality and wildlife. Sewer pipes can become clogged from Fats, Roots, Oils and Grease (F.R.O.G.)

and then overflow, releasing untreated sewage on and into the ground. Please help minimize these environmental and public health hazards

by following the Do's and Don'ts provided in the hazardous waste and F.R.O.G. sections on Talgov.com/YOU.



## Visit The Links Below To Learn More

**About Personal Pollution** – [tappwater.org](http://tappwater.org)

**Fertilizer Ordinance** – [Talgov.com/Uploads/Public/Documents/you/learn/library/documents/fertilizerordinance.pdf](http://Talgov.com/Uploads/Public/Documents/you/learn/library/documents/fertilizerordinance.pdf)

**Onsite Stormwater Mitigation Loan Program** –

[Talgov.com/Uploads/Public/Documents/you/learn/library/documents/stormwater\\_loan\\_booklet.pdf](http://Talgov.com/Uploads/Public/Documents/you/learn/library/documents/stormwater_loan_booklet.pdf)

**Pollutant Discharge Elimination System** – [Talgov.com/Uploads/Public/Documents/you/learn/library/documents/illicit\\_discharge.pdf](http://Talgov.com/Uploads/Public/Documents/you/learn/library/documents/illicit_discharge.pdf)

**Aquifer Protection Program** – [Talgov.com/Uploads/Public/Documents/you/learn/library/documents/aquifer\\_protection\\_code\\_2007.pdf](http://Talgov.com/Uploads/Public/Documents/you/learn/library/documents/aquifer_protection_code_2007.pdf)

[Talgov.com/YOU/you-learn-utilities-water-aquifer-protection.aspx](http://Talgov.com/YOU/you-learn-utilities-water-aquifer-protection.aspx)

**F.R.O.G.** – [Talgov.com/YOU/you-learn-water-frog.aspx](http://Talgov.com/YOU/you-learn-water-frog.aspx)

**Hazardous Waste** – [Talgov.com/YOU/you-learn-solid-hazwaste.aspx#programs](http://Talgov.com/YOU/you-learn-solid-hazwaste.aspx#programs)

# Protection Programs

In 2014, 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 wells. There are 21 potential sources of contamination identified for this system with low to moderate susceptibility levels. However, the City's Underground Utilities has been at the forefront of innovative protection activities for many

years. In 1992, we were one of the first municipalities in the Southeast to institute a countywide Aquifer Protection Program. This helps ensure that potential pollutants are not discarded into the environment. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp), or they can be obtained by contacting the Water Quality Division at 850-891-1200.



## Immuno-Compromised Persons

*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 (800-426-4791).*



# An Explanation of the Water Quality Data Table



The City of Tallahassee routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2014. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

For citizen input, the City of Tallahassee Commission meets regularly on the second and fourth Wednesday of each month during the year. You can find out more about meetings by calling the Department of Communication at 850-891-8533 or visiting the City's website at Talgov.com. For specific questions and information about drinking water or for a copy of this report, please contact the Manager of the Water Quality Division at 850-891-1200. Copies of this report may also be downloaded from Talgov.com.

The data table contains the names of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, and a key to units of measurements. Maximum contaminant levels (MCL) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described health effects. Primary standards are those, which directly affect human health. Secondary standards concern the aesthetics of water (color, taste, odor).

Recent testing does not indicate a problem with lead in our water. 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 Tallahassee 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>.

Recent testing does not indicate a problem with lead in our water. If present, elevated



# Definitions & Abbreviations



**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.

**ND - Not Detected:** Indicates that the substance was not found by laboratory analysis.

**ppm - 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.

**ppb - 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.

**pCi/L - Picocurie per liter:** measure of the radioactivity in water.

## Water Quality Table

### Microbiological Contaminants

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL Violation (Y/N)	Highest Monthly Percentage of Positive Samples	Max. Contaminant Level Goal (MCLG)	Max. Contaminant Level (MCL)	Likely Sources of Contamination
Total Coliform Bacteria	01/14-12/14	N	3%	0	For systems collecting at least 40 samples per month; presence of coliform bacteria in more than 5% of monthly samples	Naturally present in the environment

### Inorganic Contaminants

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL Violation Y/N	Highest Level Detected	Range of Results	Max. Contaminant Level Goal (MCLG)	Max. Contaminant Level (MCL)	Likely Sources of Contamination
Arsenic (ppb)	01/14-09/14	N	2	ND - 2	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/14-09/14	N	0.0162	0.0057-0.0162	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	01/14-09/14	N	2.5	ND - 2.5	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	01/14-09/14	N	3.4	ND - 3.4	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	01/14-09/14	N	1.31	0.17 - 1.31	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels 0.7 ppm
Nitrate (as Nitrogen) (ppm)	01/14-09/14	N	0.62	0.048 - 0.62	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Sodium (ppm)	01/14-09/14	N	3.75	ND - 3.75	NA	160	Salt water intrusion; leaching from soil

# Water Quality Table

## Lead and Copper (Tap Samples)

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Site Exceeding the AL	Max. Contaminant Level Goal (MCLG)	AL (Action Level)	Likely Sources of Contamination
Copper (ppm) (Tap Sample)	06/14-09/14	N	0.53	0 out of 51	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (Tap Sample)	06/14-09/14	N	1	0 out of 51	0	15	Corrosion of household plumbing systems; erosion of natural deposits

## Radioactive Contaminants

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL Violation Y/N	Highest Level Detected	Range of Results	Max. Contaminant Level Goal (MCLG)	Max. Contaminant Level (MCL)	Likely Sources of Contamination
Alpha Emitters (pCi/L)	03/14-12/14	N	6.6	ND - 6.6	0	15	Erosion of natural deposits
Radium 226 + 228 or Combined Radium (pCi/L)	03/14-12/14	N	3.4	0.3 - 3.4	0	5	Erosion of natural deposits

## Stage 1 Disinfectants and Disinfection By-Products (D/DBP)

Disinfectant or Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Sources of Contamination
Chlorine (ppm)	01/14-12/14	N	0.82	0.68 - 0.91	MRDLG=4	MRDL=4.0	Water additive used to control microbes

## Stage 2 Disinfectants and Disinfection By-Products (D/DBP)

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Sources of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	1/14-12/14	N	6.33	ND - 8.08	NA	MCL=60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1/14-12/14	N	21.7	0.348 - 24.7	NA	MCL=80	By-product of drinking water disinfection

## Volatile Organic Contaminants

Contaminant and Unit of Measure	Dates of Sample (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	Max. Contaminant Level Goal (MCLG)	Max. Contaminant Level (MCL)	Likely Sources of Contamination
Tetrachloroethylene (ppb)	01/12-11/14	N	0.9	ND - 1.15	0	3	Discharge from factories and dry cleaners
Trichloroethylene (ppb)	01/12-11/14	N	0.25	ND - 1	0	3	Discharge from factories and dry cleaners

We monitored for Unregulated Contaminants (UCs) in 2014 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) or likely sources 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 (800) 426-4791.

## Unregulated Contaminants

Contaminant	Dates of Sample (mo/yr)	Level Detected	Range	Likely Sources of Contamination
Hcfc-22 (chlorodifluoromethane)	10/14	0.04 ug/L	ND - 0.22 ug/L	Unavailable
Vanadium	10/14, 11/14, 12/14	3.99 ug/L	0.04 - 15 ug/L	Unavailable
Molybdenum	10/14, 11/14, 12/14	0.94 ug/L	ND - 7.5 ug/L	Unavailable
Strontium	10/14, 11/14, 12/14	86.7 ug/L	61 - 130 ug/L	Unavailable
Chromium (total chromium)	10/14, 11/14, 12/14	0.86 ug/L	ND - 1.6 ug/L	Unavailable
Chromium-6	10/14	0.83 ug/L	ND - 1.4 ug/L	Unavailable
Chlorate	10/14	1.57 ug/L	ND - 22 ug/L	Unavailable

**City of Tallahassee**  
**Your Own Utilities<sup>®</sup>**



City of Tallahassee Water Utility  
4505 A Springhill Road  
Tallahassee, FL 32305

PRSR STD  
U.S. Postage  
**PAID**  
TALLAHASSEE, FL  
Permit #1