



2019

DRINKING WATER QUALITY REPORT



UNIVERSITY of
SOUTH FLORIDA

PWS ID# 6291882

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to the University of South Florida community. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process, protect our water resources, and ensure the quality of your water.

Our water is sourced from five (5) ground water wells at depths of 120 to 340 feet and the City of Tampa Water System. The water, pumped from the Floridan Aquifer, is chlorinated for disinfection purposes, treated with zinc phosphate for corrosion control, and distributed to the campus. Greek Housing and USF Health are supplied separately by the City of Tampa Water System.

The Florida Department of Environmental Protection (FDEP) conducted a statewide assessment of public drinking water systems beginning in 2004. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. A 2019 assessment indicated there are seven (7) unique potential source(s) of contamination identified for this system with a low susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp. If you have any questions concerning this report or your water utility, please contact

William Land, Director Environmental Health & Safety, Facilities Management, at (813) 974-4036. We encourage our customers to be informed about their water utility.

The University of South Florida routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated, this report is based on the monitoring results for the period of January 1 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants; however, the contaminants listed in the provided tables are the only contaminants detected in your drinking water during the referenced period. We are pleased to report that our drinking water meets all federal and state requirements.

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, most often naturally occurring and can pick up substances resulting from the presence of animals or from human activity. **Contaminants that may be present in the 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 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 the tables, you may find terms and abbreviations that are not familiar to you. To familiarize you with these, we have provided the following definitions.

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

LRAA (Locational Running Annual Average): *The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.*

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 disinfectant to control microbial contaminants.*

N/A: *Not applicable.*

ND: *Not detected and indicates that the substance was not found by laboratory analysis.*

Units:

Parts per billion (ppb) or Micrograms per liter (µg/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.*

In order to ensure that tap water is safe to drink, 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at **1-800-426-4791**.

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. USF 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 are available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Special Information Immuno-Compromised People Should Know About Drinking Water

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. Environmental Protection Agency (EPA) and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline at **1-800-426-4791**.

TEST RESULT TABLES

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
1. Antimony (ppb)	09/2017	N	0.05	0.05	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
2. Arsenic (ppb)	09/2017	N	0.29	0.29	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
3. Barium (ppm)	09/2017	N	0.019	0.019	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
4. Cadmium (ppb)	09/2017	N	0.17	0.17	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
5. Nickel (ppb)	09/2017	N	8.6	8.6	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
6. Nitrate (as Nitrogen) (ppm)	03/2019	N	1.0	1.0	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
7. Sodium (ppm)	09/2017	N	10	10	N/A	160	Salt water intrusion; leaching from soil.
8. Thallium (ppb)	09/2017	N	0.07	0.07	0.5	2	Leaching from ore processing sites; discharge from electronics, glass, and drug factories.

Radiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
9. Gross Alpha (including Uranium) (pCi/L)	09/2017	N	8.2	8.2	0	15	Erosion of natural deposits.
10. Radium 226 + 228 or Combined Radium (pCi/L)	09/2017	N	2.5	2.5	0	5	Erosion of natural deposits.
11. Uranium (µg/L)	09/2017	N	2.5	N/A	0	30	Erosion of natural deposits.

Results in the Level Detected column of 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.

Copper and Lead (Tap Water)

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90 th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
12. Copper (tap water) (ppm)	06/2017	N	1.1	2	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
13. Lead (tap water) (ppb)	06/2017	N	2.1	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits.

Stage 1 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Results	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
14. Chlorine (ppm)	Monthly 2019	N	2.59	1.01–3.98	MRDLG=4.0	MRDL=4.0	Water additive used to control microbes.

For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

Stage 2 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Results	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
15. Haloacetic Acids (five) (HAA5)(ppb)	Quarterly 2019	N	18.8	7.1–21.2	NA	MCL=60	By-product of drinking water disinfection.
16. TTHM (Total Trihalomethanes)(ppb)	Quarterly 2019	N	44.48	19.3–82.3	NA	MCL=80	By-product of drinking water disinfection.

Unregulated Contaminants*

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	Level Detected (Average)	Range	Likely Source of Contamination
17. Manganese(ppb)	12/2019	4.7	4.7	Natural occurrence from soil leaching
18. Bromide(ppb)	12/2019	5.3	5.3	Naturally present in the environment; salt water intrusion; fossil fuel extraction and utilization, coal-fired power plants, water treatment, flame retardants, biocides, agricultural herbicides, municipal waste incinerators, landfill leachate, and pharmaceuticals.
19. Total Organic Carbon(ppb)	12/2019	763	763	Naturally present in the environment.
20. Haloacetic Acids (HAA5)(ppb)	12/2019	10.5	8.3–14.4	By-product of drinking water disinfection.
21. Haloacetic Acids (HAA9)(ppb)	12/2019	21.9	18.6–28.1	By-product of drinking water disinfection.
22. Haloacetic Acids (HAA6Br)(ppb)	12/2019	13.4	12.0–16.0	By-product of drinking water disinfection.

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