

# MANDATORY INFORMATION FROM THE EPA

Drinking water, including bottled water, may contain 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 (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

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 (not common to this part of Florida), 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 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.
- 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.

**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 from their health care providers**

**about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.**

## LEAD

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 Utilities Commission 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 to 60 seconds 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>.

Thank you for taking the time to read this report. Please call the UCNSB Water Quality Hotline (386-424-3184) for any other questions you may have regarding your drinking water quality. We are here for you! You can also visit our website at [www.ucnsb.org](http://www.ucnsb.org) to learn more about our organization and services.

As a closing thought, always remember to water your lawn and landscaping wisely – that will help conserve this vital resource for generations to come. In a state that is blessed with an average of 55 inches of rainfall each year, we really only need to use additional irrigation when plants start to show signs of wilting. Otherwise, we may be over-watering, and the yellowing signs you see in your grass could actually be from too much water! We are pleased to showcase Florida-friendly plants in our water-wise garden, located at the main office building at 200 Canal Street. Visit our gardens to learn how beautiful your landscaping can look with minimal watering—and work! We here at the Utilities Commission look forward to another great year of serving your family's drinking water needs.

**Look for our announcements of upcoming water conservation classes with UF/IFAS starting July 2018. You will learn valuable tips from the experts to save water and money. You can also receive a free water audit anytime by contacting Customer Service at 386-427-1361.**



# 2017 Water Quality Report

Drinking water is life's vital resource, so our water supply must be reliable and of the highest quality possible. Read more about this important topic in the following report prepared by your New Smyrna Beach Utilities Commission.

## LIFE'S VITAL RESOURCE

Without water, life would cease to exist; and without a reliable, safe, potable water supply, our community could not thrive. UCNSB is proud to have retained continuity of high quality service throughout 2017.

This annual Consumer Confidence Report, known as the Water Quality Report, for 2017 is prepared by the UCNSB Water Resources management team, working in conjunction with our Public Information staff. It is compiled for the purpose of informing and updating our customers with relevant data and explanations of annual test results.

This report contains a breakdown of how to read and interpret the content of material herein, and tabulated analytical results from the distribution system and Water Treatment Plant. The Water Quality test results are grouped in accordance with regulation as follows: Inorganic Contaminants, Disinfection and Disinfection By-Products, and Lead and Copper. **No MCL violations or exceedances have been reported during 2017.**

In spite of Hurricane IRMA in September, our utility was able to maintain continual, uninterrupted service to our customers. Our Class A, (highest FDEP classification) water

treatment plant is managed 24 hours a day/7 days a week by experienced, licensed operators. They oversee the operation of the plant on Paige Avenue and several pumping stations. The plant and pump stations are all equipped with redundant pumps and required equipment powered by direct grid connection and onsite generators. This enables UCNSB to successfully service the community in a safe, reliable, non-disruptive manner during any unplanned event, including hurricanes. All in all, through Best Management Practices (BMP) in conjunction with implementation of Best Available Control Technologies (BACT), UCNSB will confidently provide reliable service to our customers for many years to come.

As responsible stewards of our environment, UCNSB continually strives to provide our community with a safe, reliable supply of potable water while keeping costs contained. During 2017, some of our neighbors around the Central Florida community have experienced significant rises in service rates, while UCNSB has maintained some of the lowest rates in Volusia County.

The opportunity to provide service comes

with growing challenges as our community has experienced rapid growth and an influx of visitors. In order to properly manage this service demand, our team of dedicated professionals has implemented extensive planning, communication, and continual training programs.

UCNSB owns and operates four wellfields that were developed and managed to ensure no effective drawdown of water levels from one wellfield to the others will occur when placed in service.

Successful operations of our well fields have been accomplished by our knowledgeable, experienced management team ensuring ideal rotation or usage times which in turn provides sufficient water quantity with the highest quality. This implementation of BMP will manifest effectively into the future as UCNSB practices have become more efficient over time. The wellfields were developed to produce optimal quantity of supply source under the most adverse conditions while providing end users confidence in service should one or even two of our wellfields experience temporary or long term disruptions.

**How to Read This Report:**

The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. The data tables on the next page contain only contaminants that were within detectable levels. For each contaminant detected, you will find:

- The detected substance’s name;
- The date of sampling;

We welcome all our customers, and any member of the public, to join us at our regular Commission meetings, on the 4th Monday of each month at 200 Canal Street. These meetings are also streamed live on Facebook and through our website. [www.ucnsb.org](http://www.ucnsb.org). You can also call 386-424-3184 with questions.

- The range of measurements detected;
- The level detected;
- The Maximum Containment Level (MCL), as prescribed by federal and state regulation, and whether or not we are in violation of the contaminant’s MCL;
- The Maximum Containment Level Goal (MCLG); and,
- The likely source(s) of contamination



**SOURCE WATER ASSESSMENT**

The Florida Department of Environmental Protection updates the Source Water Assessment on potable water supply systems every year. The 2017 assessment followed their annual inspection and provides information about any potential sources of contamination in the vicinity of our four wellfields. There are three (3) unique, potential sources of contamination with a low susceptibility level. The sources of contamination are double-walled, fuel tanks necessary for operation of emergency generators when line power fails, which are all regularly inspected as required. Results are available on the FDEP Source Water Assessment and Protection Program website at [www.fldep.dep.state.fl.us/swapp](http://www.fldep.dep.state.fl.us/swapp).

**Definitions to help better understand the regulatory terms:**

AL: Action Level. The concentration that, if exceeded, triggers treatment of the water system or other requirements as needed.

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 the 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 health risk. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A: Not applicable.

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

ppm\*: Parts per million. One part by weight of analyte to 1 million parts by weight of the water sample.

ppb\*: Parts per billion. One part by weight of analyte to 1 billion parts by weight of the water sample.

\* Both if these units of measurement reflect very dilute levels of the substances in our water.

**UCNSB has twenty-three (23) deep wells in three separate well fields, ranging in depth from 185 to 360 feet.**



In 2017, UCNSB served a monthly average 26,242 water connections within a service area of 41.3 square miles and delivered over 1.92 billion gallons of drinking water to our ratepayers. Our average consumption per ratepayer connection was only 200 gal/account/day due largely to the conservation efforts of our well-informed ratepayers (note: we have approx. 2.3 people/connection as defined by DHRS). The “health” of the upper Floridan Aquifer, the source of our potable ground water supply, has been maintained over the years thanks to conservation, stewardship, and alternative water supplies (see information below) for uses such as irrigation. The operational sustainability of the wells is determined by water levels and the amount of salt content (chlorides).

The main component of our 1.239 MG/y alternative water supply strategy is called public access reuse. We served 3.40 MGD (million gallons/day) of reuse water (recycled treated domestic wastewater) for irrigation needs within our service territory last year. This practice significantly reduces the demand on our potable water supply wells, and enables sustainability of this precious natural resource, and has allowed us no need to discharge in the Indian River for more than eight years—100% reuse utilization.

**Water Quality Test Results:** Except where indicated otherwise, results below are based on monitoring for the period of 1/1/17 to 12/31/17. Data obtained before 1/1/17 and presented in this report is from the most recent testing done in accordance with regulations.

**>> INORGANIC CONTAMINANTS**

Contaminant and Unit of Measurement	Date of Sampling	MCL Violation	Level Detected	Range Detected	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	9/21/2017	No	0.0056	N/A	2	2	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Monthly 2017	No	0.71	0.43-0.71	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive that promotes strong teeth when at optimum levels of 0.7
Nitrate, as Nitrogen (ppm)	8/2017 and 9/21/2017	No	0.043	0.038-0.043	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	9/21/2017	No	29.3	N/A	N/A	160	Salt water intrusion; leaching from soil
Arsenic (ppb)	9/21/2017	No	0.52	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass/electronics production wastes

**>> DISINFECTANT AND DISINFECTION BY-PRODUCTS**

Disinfectant or Contaminant and Unit of Measurement	Date of Sampling	MCL Violation	Level Detected (1)	Range Detected (2)	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines and Chlorine (ppm)	Monthly 2017	No	2.8	0.6-4.8	MRDLG=4	MRDL=4	Water additive used to control microbes
Haloacetic acids (five) HAA5 (ppb)	Quarterly 2017	No	32 (highest LRAA at 413 Smith St and 303 Airport Rd.)	21-42	N/A	MCL=60	By-product of drinking water disinfection
TTHM (ppb) Total trihalomethanes	Quarterly 2017	No	61 (highest LRAA at 303 Airport Rd.)	45-66	N/A	MCL=80	By-product of drinking water disinfection

*For these contaminants monitored under Stage 2 D/DBP regulations, the “range detected” is the range (lowest to highest) at the individual sampling sites.*

**>> SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES**

Contaminant and Unit of Measurement	Date of Sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Dalapon (ppb)	9/2017	No	1.2	N/A	200	200	Runoff from products used on rights of way

**>> LEAD AND COPPER (TAP WATER)**

Contaminant and Unit of Measurement	Date of Sampling	AL Exceeded	90th Percentile Result	No. of sampling sites exceeding the AL	AL	MCLG	Likely Source of Contamination
<b>Copper</b> (tap water) (ppm)	8/2017	No	0.22	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead</b> (tap water) (ppb)	8/2017	No	4.5	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

- (1) The level detected is reported as the highest Locational Running Annual Average (LRAA) from an individual sampling site and was calculated using 3 previous quarters of sampling results.
- (2) For these contaminants monitored under Stage 2 DBP regulations, the "range detected" is the range (lowest to highest) at the individual sampling sites.

**Note:** We flush fire hydrants to maintain water quality for the level of disinfectant available.