





# WONDERFUL WATER



OWASA is Carrboro-Chapel Hill's not-for-profit public service agency delivering high quality water, reclaimed water, and wastewater services. On the lake, in the field, at the lab and in the office, our diverse team manages the community's water system.

Investing in water and wastewater infrastructure is investing in the community. Each year, OWASA invests about \$20 million in capital improvement projects – upgrading pipes, pumps, equipment, and more – to increase system resiliency. Nearly 50% of customer rates fund these critical projects.

Water is vital for everything: wellness, business, community services, and more. Knowing this, we are pleased to present our annual Water Quality Report Card, a snapshot of OWASA's water quality in 2018. With this report, we aim to quench your thirst for water knowledge – where does it come from, what makes it safe to drink, and how does it get to your home?

What follows is an overview of the community's water sources, what OWASA's water contains, and how it compares to regulatory standards. In other words, this is our report card to you. Our goal is to provide safe and dependable drinking water, and information you need to know. Grab a glass of water, get comfortable, and read on!

# CARRBORO-CHAPEL HILL'S COMMUNITY WATER SYSTEM



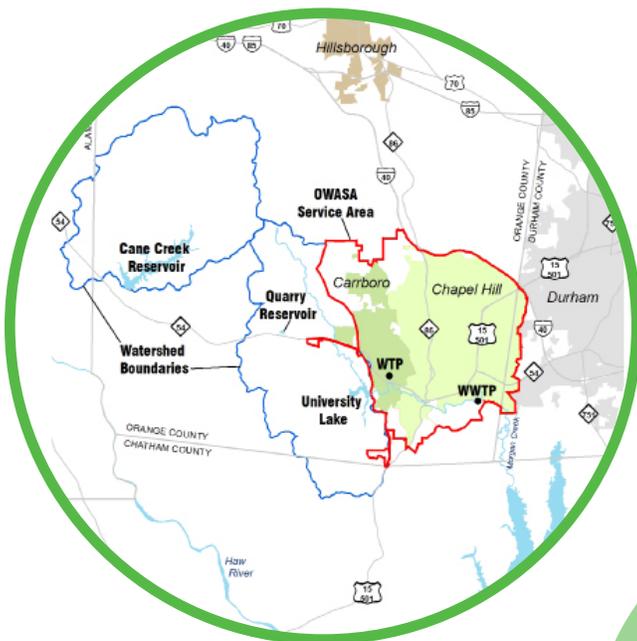
## Where does your water come from?

Tranquil University Lake at the edge of Carrboro is one of OWASA's primary water sources; the other is Cane Creek Reservoir. The collective storage capacity of these sites is 3.45 billion gallons. OWASA's engineers, operators, distribution and collections crews, scientists, administrative staff and more work behind-the-scenes to deliver safe and reliable water. Every day, they treat about 7 million gallons of water and pump it through 400 miles of pipes – from local water sources to OWASA's treatment plant – to local homes, schools, and businesses. In 2018, OWASA treated approximately 2.5 billion gallons of water serving 83,300 people in Carrboro and Chapel Hill.

While 2018 was a record year for local rainfall, Carrboro and Chapel Hill are no strangers to drought. Long-time residents vividly remember 2002 and 2008 when water was in short supply due to drought. To ensure reliable access to water for customers long into the future, OWASA has secured two additional water sources: the Quarry Reservoir, on the north side of NC Highway 54 (current capacity: 200 million gallons, by 2030: 2.2 billion). The other is Jordan Lake in Chatham County, where the NC Environmental Management Commission has allocated OWASA 5 million gallons of water per day (accessible via water transfers through neighboring utilities), in times of severe drought or emergency.

All four surface water sources (University Lake, Cane Creek Reservoir, Quarry Reservoir, and Jordan Lake) are part of the Cape Fear River watershed.

## OWASA SERVICE MAP



University Lake

# SAVE WATER, SAVE MONEY WITH AGUA VISTA

**Track your water use with Agua Vista,** your dedicated web portal where you can view your water data. Plus, get tips on how you can conserve water and set alerts for leaks and bill forecasts – savings for the planet and your pocketbook!

Throughout 2018, OWASA upgraded more than 20,000 water meters to be able to capture near real-time data on local water use. Agua Vista means “water in sight”. When we see how much water we use and save, the more we can sustain this vital resource together.

Visit [owasa.org](http://owasa.org) to access Agua Vista. Register your OWASA account number and start saving.



## SYSTEM RESILIENCY

OWASA responded to three emergencies in 2018, accelerating existing plans and new initiatives to increase system resiliency. OWASA provided continuous water and wastewater service through two hurricanes: Florence in September and Michael in October. In November, a water main break on Jones Ferry Road in Carrboro resulted in a system-wide conservation and boil water advisory. To increase system resiliency, OWASA invested nearly \$20 million in capital improvement projects in 2018 – to upgrade pipes, pumps, equipment, and more. OWASA is also in the process of establishing a dedicated valve maintenance crew, improving our pipe assessment and prioritization model, and meeting with community partners to understand unique needs for resiliency.



# INSIDE OWASA'S TREATMENT PLANT

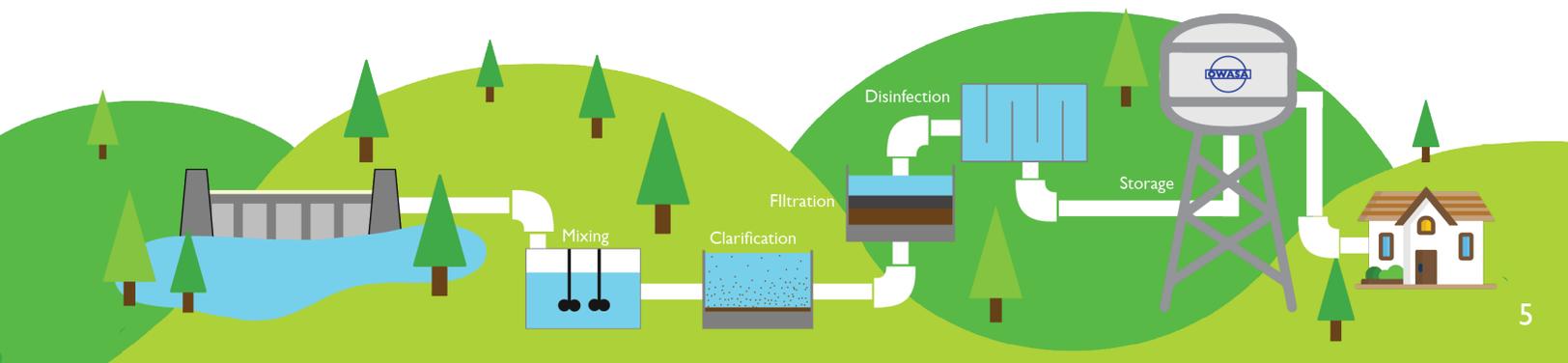


Would you dip your cup into the lake and drink it? Probably not! Before water gets to your tap, it goes through a comprehensive treatment process to ensure it's safe to drink.

After raw water is pumped through pipes from University Lake and Cane Creek Reservoir to OWASA's plant in Carrboro, it goes through a series of treatment steps – including clarification and disinfection – to remove particles such as dirt, and add substances such as chlorine to mitigate for potentially harmful bacteria.

Our work doesn't stop there. OWASA's laboratory team is in the community most days sampling water across the distribution system – at the community center, at schools, at grocery stores, and many other sites across Carrboro and Chapel Hill. We routinely monitor for over 150 contaminants in the drinking water according to Federal and State laws. OWASA is pleased to share that it met or surpassed all Federal and State standards for drinking water quality in 2018.

## OWASA TREATS AND DISTRIBUTES DRINKING WATER



# WHAT IS A CONTAMINANT?

Carrboro and Chapel Hill's primary water sources are University Lake and Cane Creek Reservoir. As water travels over the land's surface or through the ground, it dissolves naturally-occurring minerals (in some cases, radioactive material) and can pick up substances, or contaminants, from the presence of animals or human activity.

## THERE ARE FIVE TYPES OF CONTAMINANTS THAT MAY BE PRESENT IN RAW SOURCE WATER:

**1. Microbial contaminants** – such as viruses and bacteria – may come from septic systems, wastewater treatment plants, agricultural livestock operations, and wildlife.

**2. Inorganic contaminants** – such as salts and metals – can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**3. Pesticides and herbicides** may also come from urban stormwater runoff, residential uses, or agriculture.

**4. Organic chemical** contaminants include synthetic and volatile organic chemicals. They are byproducts of industrial processes and petroleum production. They can also come from gas stations, septic systems, and urban stormwater runoff.

**5. Radioactive contaminants** can occur naturally or be the result of oil and gas production and mining activities.



## REGULATORY GUIDELINES

To ensure tap water is safe to drink, the Environmental Protection Agency (EPA) has regulations limiting the amount of contaminants that can be present in water provided by public systems. Drinking water may reasonably be expected to contain small amounts of some contaminants. In other words, the presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or visiting their website at [www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information](http://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information). Bottled water is not regulated by the EPA; it is the Food and Drug Administration that establishes limits for contaminants in bottled water.

# PROTECT THE WATER



What you pour down the drain in your home (or the storm drain in the street), what you flush down the toilet, how you fertilize your lawn – these all impact water quality.

Wastewater treatment processes, regulated by the State and Federal governments, remove much of these contaminants. But traces of chemicals that get sprayed on the ground or pharmaceuticals flushed down the drain can end up in local waterways.

## **YOU CAN HELP PROTECT YOUR COMMUNITY'S WATER IN SO MANY WAYS:**

- Sweep debris that collects in your walkway or driveway (instead of washing it)
- Dispose of chemicals and pharmaceuticals responsibly (not down a drain or toilet)
- Properly fertilize your landscape – if you use too much, it can runoff into a local waterway
- Volunteer to monitor stream water quality or participate in stream clean-up work
- Direct water from downspouts to vegetated areas or a rain barrel

## **OWASA IS PASSIONATE ABOUT PROTECTING THE COMMUNITY'S WATER SOURCES. WE:**

- Support scientific research
- Support stringent zoning and land use controls in the watersheds near our water sources
- Prohibit body contact with lake water and minimize use of gasoline engines in our lakes
- Eliminate the growth of invasive species
- In partnership with local governments, limit extension of public water and sewer service in the University Lake and Cane Creek Reservoir watersheds
- Purchased and manage property, plus conservation easements, in watershed areas critical for water quality protection

# WHAT'S IN OWASA'S WATER?

OWASA routinely monitors for over 150 contaminants, or substances, in the community's drinking water, in accordance with Federal and State laws. The tables below list the contaminants detected in our most recent round of sampling for each contaminant group. To access results from all 150 substances tested, please visit [www.owasa.org/drinking-water](http://www.owasa.org/drinking-water). OWASA met or surpassed all Federal and State standards for drinking water quality in 2018.

Most of the data presented below are from tests done January 1 through December 31, 2018. There are some exceptions: the EPA and State allow water utilities to monitor some contaminants less than once per year because their concentrations are not expected to vary significantly year-to-year. Where noted, some data is more than one year old. We know the science of water can be complex so we've also included a list of drinking water definitions on page 14.

## TURBIDITY

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of our monthly samples must be less than or equal to 0.3 NTU. OWASA meets this requirement.

Substance (units)	Treatment Technique Violation Y/N	Your Water	MCLG	Treatment Technique Violation If:	Likely Source
Turbidity (NTU) - Highest single turbidity measurement	No	0.080 NTU	N/A	Turbidity > 1 NTU	Soil Runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	No	100%	N/A	Less than 95% of monthly turbidity measurements are < 0.3 NTU	Soil Runoff

## RADIOLOGICAL SUBSTANCES

Radium is a naturally occurring radioactive metal. It occurs at trace levels in virtually all rock, soil, water, plants and animals.

Substance (units)	Sample Date	MCL Violation Y/N	Your Water	Range Detected	MCLG	MCL	Likely Source
Combined radium (pCi/L)	6/14/17	No	0.33	No Range	0	5	Erosion of Natural Deposits

## TOTAL ORGANIC CARBON (DISINFECTION BYPRODUCT PRECURSOR)

Natural organic matter (usually measured as Total Organic Carbon (TOC)) and inorganic matter (bromide) are disinfection byproduct precursors. All commonly used chemical disinfectants (e.g. chlorine, chlorine dioxide, chloramines and ozone) react with organic matter and/or bromide to varying degrees to form different disinfection byproducts.

Substance (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low - High	MCLG	TT	Likely Source
Total Organic Carbon (removal ratio) - Treated Water	No	1.83	1.72 - 1.98	N/A	TT	Naturally present in the environment

Note: The compliance method used to comply with the disinfectants and disinfection byproducts treatment technique requirements is classified by the State as Step 1 and based on 45-50% removal.

## DISINFECTANTS AND DISINFECTION BYPRODUCTS

Drinking water is disinfected to reduce or eliminate illnesses potentially acquired through drinking water. Disinfection byproducts can form when disinfectants combine with naturally occurring materials found in source water. These regulations limit public exposure to such byproducts.

### Disinfectant residuals summary

Chloramine, a compound of chlorine and ammonia, is used to disinfect the water throughout the year except in the month of March when we switch to chlorine. This ensures a high level of disinfection. Chloramines and chlorine are both toxic to fish and amphibians such as frogs; if you have an aquarium, please contact a pet supply store for information on how to neutralize chloramines and chlorine. Please also use rubber materials in your plumbing that are chloramine-resistant; for example, for toilet flappers, flexible hoses, and connectors.

Substance (units)	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Detected Low - High	MRDLG	MRDL	Likely Source
Chlorine (ppm)	2018	No	1.20	0 - 2.12	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2018	No	3.0	0.2 - 3.8	4	4.0	Water additive used to control microbes

## STAGE 2 DISINFECTION BYPRODUCT COMPLIANCE (BASED UPON LOCALATIONAL RUNNING ANNUAL AVERAGE).

Substance (Units)	Sample Locations	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range Detected Low - High	MCLG	MCL	Likely Source
Total Trihalomethanes (TTHM) (PPB)	B01	2018	No	22.9	12.5 – 24.7	N/A	80	Byproduct of drinking water disinfection
	B02	2018	No		12.0 – 28.4			
	B03	2018	No		13.0 – 28.2			
	B04	2018	No		12.8 – 29.0			
	B05	2018	No		12.6 – 27.4			
	B06	2018	No		12.2 – 27.8			
	B07	2018	No		12.1 – 32.4			
	B08	2018	No		10.9 – 35.5			

Continued on next page

Substance (Units)	Sample Locations	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range Detected Low - High	MCLG	MCL	Likely Source
Total Haloacetic Acids (HAA5) (PPB)	B01	2018	No	13.7	6.8 – 17.3	N/A	60	Byproduct of drinking water disinfection
	B02	2018	No		6.3 – 17.9			
	B03	2018	No		6.5 – 13.2			
	B04	2018	No		6.3 – 19.3			
	B05	2018	No		6.2 – 17.4			
	B06	2018	No		5.7 – 16.9			
	B07	2018	No		6.0 – 16.1			
	B08	2018	No		4.9 – 14.2			

### FLUORIDE (INORGANIC SUBSTANCE)

Fluoride occurs naturally in water. It is also added to drinking water to reduce tooth decay. The fluoride level in our water in 2018 was well below the maximum amount allowed (4 parts per million). The US Public Health Service's recommended fluoride level is 0.7 parts per million.

Substance (units)	Sample Date	MCL Violation Y/N	Your Water	Range Detected Low - High	MCLG	MCL	Likely Source
Fluoride (ppm)	2/27/2018	No	0.6	No Range	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories*

\*In accordance with Federal requirements, our report card includes a statement that potential fluoride sources include discharge from fertilizer and aluminum factories; however, there are no fertilizer or aluminum factories in the watersheds of University Lake or Cane Creek Reservoir.

### SULFATE (INORGANIC SUBSTANCE)

Sulfates occur naturally and are abundant in the environment, generally originating from mineral deposits, soil, and rocks, or the combustion of sulfur-containing fuels.

Substance (units)	Sample Date	Your Water	Range Detected Low - High	SMCL	Likely Source
Sulfate (ppm)	2/27/2018	56	No Range	250	A mineral that occurs naturally in soils

### LEAD AND COPPER

Lead is not typically found in raw water sources such as lakes. However, it can enter drinking water from the corrosion of plumbing materials that contain lead. To proactively mitigate for this risk, in the 1990s, OWASA removed all goosenecks (small lead pipes) that used to exist in the water distribution system.

The Federal limit on lead in drinking water is a maximum of 15 parts per billion (ppb) in at least 90% of water samples tested (one part per billion corresponds to one penny in \$10 million).

In accordance with Federal and State standards, we test every three years for lead in tap water at 30 homes built between 1983 and 1985. In 2017, 90% of OWASA's samples tested below the detectable level of 3 ppb (29 were below the detectable level of 3 ppb and one was at 4 ppb, far below the Federal action level). In response to customer requests in 2018, we also tested tap water in 17 samples in local homes and businesses. All samples were below the detectable level of 3 ppb.

We test our water as it leaves the Water Treatment Plant too. For over 20 years, samples have tested below the detectable level of 3 ppb.

Substance (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source
Lead (ppb) (90th percentile)	Jun - Sept 2017	0	0/30	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (90th percentile)	Jun - Sept 2017	0	0/30	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits

Please note: 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. OWASA is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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 EPA's Safe Drinking Water Hotline (800-426-4791) or by visiting their website at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100% removal. OWASA tests its raw water sources; for example, in 2018, we found zero oocysts in our Quarry Reservoir (an oocyst is the thick-walled reproductive form of cryptosporidium which is dormant (non-growing) and can survive for lengthy periods in unfavorable conditions).

The raw water that is pumped from local lakes to OWASA's water treatment plant undergoes a comprehensive treatment process, including steps such as disinfection and clarification. OWASA tests 100 liters of its treated drinking water annually. Cryptosporidium has not been detected in our treated drinking water.

OWASA is also a member of the Partnership for Safe Water, a voluntary association of over 300 water utilities and drinking water organizations. Together, we foster water treatment optimization beyond regulatory requirements. This optimization includes stringent turbidity reduction throughout the treatment process, providing further protection against Cryptosporidium.

Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

## FOR PEOPLE WITH SPECIAL RISK OF INFECTION

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS (a group of compounds called per- and polyfluoroalkyl substances) can be found in everyday products such as carpet, clothing, and cookware because they increase resistance to water, grease, and stains. As these products are treated, washed, or degrade, PFAS can enter wastewater systems and then travel onward to lakes and rivers. They are also used in manufacturing processes for a variety of reasons including suppressing fires, repelling moisture, and reducing mechanical wear. Through these uses, PFAS can also enter water through industrial releases or discharges from treatment plants.

In 2018, OWASA proactively tested its raw water sources and treated drinking water for PFAS including GenX, a compound that has been found elsewhere in North Carolina. Results showed that GenX was not present in any samples. OWASA tested for 39 different PFAS compounds, seven of which were detected in the treated drinking water.

The EPA has established a lifetime health advisory level for two PFAS specifically, PFOS and PFOA, at a combined level of 70 ppt (health advisory levels are non-regulatory and do not indicate safe or unsafe levels; they are developed to be protective over a lifetime of exposure). Low levels of PFOS and PFOA, below the EPA's advisory level, were detected in OWASA's treated water samples. Studies indicate that the use of powder activated carbon (PAC) is successful in the removal of some PFAS but not all. Consistent with these studies, OWASA's use of PAC has also resulted in the removal of some PFAS but not all. We do quarterly PFAS monitoring and share updates regularly on [owasa.org](http://owasa.org).

OWASA's treated drinking water is safe and meets all Federal and State regulations and health advisory levels.

PFAS Substance (units)	Sample Date	Your Water	Range Detected	Likely Source
Perfluorobutanesulfonic acid (PFBS) (ppt)	Jan 2018	3.9	3.6 – 4.2	Man-made chemicals used in waterproof and stain proof fabrics, nonstick cookware, some food packaging materials, and some fire suppression foams
Perfluoroheptanoic acid (PFHpA) (ppt)		6.8	6.1 – 7.4	
Perfluorohexanesulfonic acid (PFHxS) (ppt)		3.1	2.7 – 3.5	
Perfluorohexanoic acid (PFHxA) (ppt)		7.4	7.0 – 7.7	
Perfluorooctane sulfonic acid (PFOS) (ppt)		2.9	2.7 – 3.1	
Perfluorooctanoic acid (PFOA) (ppt)		13	11 – 15	
Perfluoropentanoic acid (PFPeA) (ppt)		4.9	4.7 – 5.1	

## CONNECTIONS TO NEIGHBORING WATER SYSTEMS

For resiliency in times of emergency and planned maintenance work, OWASA’s drinking water system is connected to neighboring water systems. In November, during a water incident that affected treated water storage levels, OWASA received water from the City of Durham and Chatham County. We also purchased water from the Town of Hillsborough. State regulations require utilities to report on water quality data for purchased water. Therefore, we are providing below a summary of water quality results provided by the Town of Hillsborough for 2018.

Substance (units)	Sample Date	MCL or TT Violation Y/N	Your Water (average)	Range Detected Low - High	MCLG	MCL or TT	Likely Source
Total Organic Carbon Source Water (ppm)	2018	No	6.78	4.6 – 10.0	N/A	TT	Naturally present in the environment
Total Organic Carbon Treated Water (ppm)	2018	No	2.86	2.1 – 3.6	N/A	TT	Naturally present in the environment
Total Trihalomethanes (TTHM) (ppb)	2018	No	62	29 – 88	N/A	80	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA5) (ppb)	2018	No	38	10 – 55	N/A	60	Byproduct of drinking water disinfection
Fluoride (ppm)	12/21/2018	No	0.84	No range	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sulfate (ppm)	12/21/2018	N/A	23.8	No range	N/A	250 (SMCL)	A mineral that occurs naturally in soils

## SOURCE WATER ASSESSMENT PROGRAM (SWAP) RESULTS

The NC Department of Environment Quality’s Source Water Assessment Program (SWAP) conducts assessments for all drinking water sources in the State to determine their susceptibility to Potential Contaminant Sources (PCSs). SWAP assessment reports include background information and a relative susceptibility rating of Higher, Moderate or Lower.

The rating of each raw water source for OWASA (University Lake and Cane Creek Reservoir) was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (characteristics or existing conditions of the watershed and its delineated assessment area). Susceptibility ratings are not indicative of poor water quality, rather, they indicate a system’s potential to become contaminated by PCSs in the assessment area.

Source Name	Susceptibility Rating	SWAP Report Date
Cane Creek Reservoir	Moderate	Sept 2017
University Lake	Moderate	Sept 2017

The complete SWAP Assessment report for OWASA can be accessed at [www.ncwater.org/?page=600](http://www.ncwater.org/?page=600) (enter OWASA’s system ID number, 0368010, in the search function). Because SWAP reports are periodically updated, the results available online may differ from the results that were available at the time this report card was prepared. If you have questions about SWAP, please contact the SWAP team at 919-707-9098 or [swap@ncdenr.gov](mailto:swap@ncdenr.gov).

# DRINKING WATER DEFINITIONS



**Parts per million (ppm) or Milligrams per liter (mg/L)** - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter (ug/L)** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq) or Picograms per liter (picograms/L)** - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water.

**Nephelometric Turbidity Unit (NTU)** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Maximum Residual Disinfection Level (MRDL)** - 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.

**Maximum Residual Disinfection Level Goal (MRDLG)** - 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.

**Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

**Maximum Contaminant Level (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 (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.

**Running Annual Average (RAA) Removal Ratio** - A removal ratio greater than 1.00 indicates the utility has exceeded State requirements for Total Organic Carbon (TOC) removal.



# THIRSTY FOR MORE?



## **SIGN UP FOR A TOUR OF THE WATER TREATMENT PLANT!**

How does water get to your home, work, or school? What's the treatment process? What makes it safe to drink? A talented team of scientists, operators, chemists, maintenance crews, and more keep OWASA's water treatment plant running 24/7, to ensure everyone in the community has water when they need it – about 7 million gallons per day. Gather some friends, a community group, or some classmates, and contact OWASA's Plant Manager at 919-537-4232 or email [info@owasa.org](mailto:info@owasa.org) to book an educational tour of the water treatment plant in Carrboro. Tours are free and run throughout the year.

## **WATER WATCH**

Curious about how much water the community uses? Check out OWASA's Water Watch at [owasa.org](http://owasa.org). Water Watch monitors the community's daily water supply and projected demand levels.

## **WATER GOVERNANCE**

Be part of the community's important conversations on water. Everyone is invited to attend OWASA's Board of Directors meetings where we convene to discuss and decide on plans, policies, fees, standards for water quality and watershed protection, and more. The Board of Directors has work sessions at 6 pm on the second Thursday of most months in OWASA's Community Room, at 400 Jones Ferry Road in Carrboro. The Board also holds business meetings at 7 pm on the fourth Thursday of most months at Chapel Hill Town Hall, at 405 Martin Luther King Jr. Boulevard. Meetings at Town Hall are televised on channel 18 of the local cable television system and meetings in OWASA's Community Room are live streamed via Skype. Visit [owasa.org](http://owasa.org) for Board meeting schedules, agenda materials, and information on live streaming.

## **BE A WATER CHAMPION!**

Water is vital for everything – wellness, business, community services, and more. Everyone has a role to play in conserving, protecting, and sustaining this vital resource. Turn off the tap while brushing your teeth; collect rainwater to hydrate your gardens; and don't flush unused medication down the toilet (take it to the drop box at the local police station instead). Learn more about how you can be a water champion at [owasa.org](http://owasa.org).

## **FOR MORE INFORMATION ABOUT YOUR WATER**

If you have any questions or comments about our drinking water, we invite you to contact our Water Treatment Plant Laboratory Supervisor at 919-537-4227 or our Water Supply and Treatment Manager at 919-537-4232. Email us at [info@owasa.org](mailto:info@owasa.org) or send us a letter at 400 Jones Ferry Road, Carrboro, NC 27510. OWASA is your community water agency. We welcome your questions and feedback.



### GET A FREE SAVE WATER KIT

Receive a free water bottle, shower timer, leak detection tablets, and more by going to [www.surveymonkey.com/r/OWASAreportcard](http://www.surveymonkey.com/r/OWASAreportcard)



### CONTACT OWASA ANYTIME

Orange Water and Sewer Authority  
Public Water Supply No.: 0368010  
400 Jones Ferry Road, Carrboro, NC 27510  
919-968-4421  
info@owasa.org  
owasa.org  
@OWASA1

### EPA SAFE DRINKING WATER HOTLINE

Call 800-426-4791

