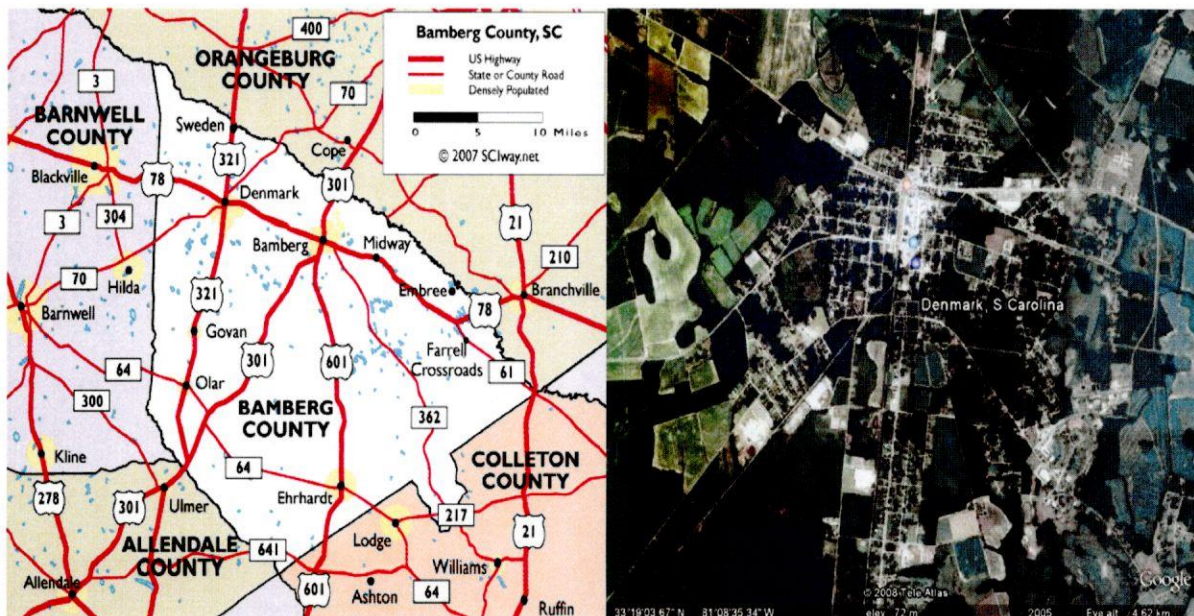


2018 Annual Drinking Water Quality Report
City of Denmark
PWS ID # 0510002



Spanish (Española)

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about from where your water comes, what it contains, and how it compares to standards set by regulatory agencies. Our constant 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 and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information, because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact City Hall at (803) 793-3734. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled city council meetings held on the third Monday of each month. These meetings are typically held at the Brooker Center, and begin at 7:00 PM. The public is encouraged to attend and participate.**

What EPA Wants You to Know

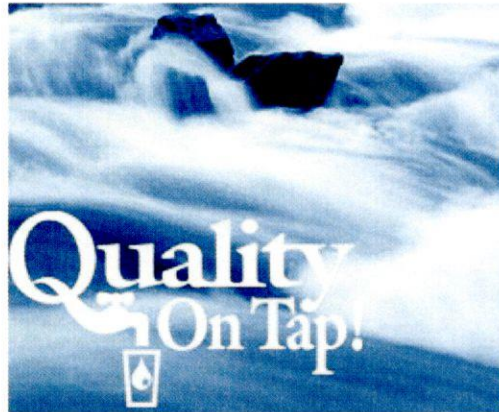
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPAs) Safe Drinking Water Hotline (800-426-4791).

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).

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 microbial 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; and 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. . A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report.



When You Turn on Your Tap, Consider the Source

During the year of 2018, the City of Denmark received its water from groundwater wells. During 2018, the City of Denmark operated four wells until August. The Cox Mill Well was taken offline in August of 2018. The Voorhees Well and the Cox Mill Well have a total of 16 hours pumping capacity of 768,000 gallons. The Acacia Street Well and the W. Voorhees Road Well have a total of 16 hours pumping capacity of 615,000 gallons.

Source Water Assessment Program (SWAP)

Our Source Water Assessment Plan is available for your review at www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/ If you do not have internet access, please contact Michael Shugart at 803-793-3734 to make arrangements to review this document.

What's in the Water?

**Monitoring Period of January 1-December 31, 2018
Regulated Contaminants Detected**

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive monthly sample	1.000		0	N	Naturally present in the environment

Bacteriological Contaminants

Contaminants	MCLG	MCL / TT	Value	Date	Violation?	Typical Source
Total Coliform	TT	1 LV1A	1 TC Positive	September 2018	No	Naturally present in the environment

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look

for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we incurred 1 total coliform positive sample during September 2018. We collected repeats as required by regulation and all repeats were absent. No further action was required.

Disinfection & Disinfection By-Products

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)

Contaminants (unit of measure)	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range	Violation (Yes or No)	Sample Date	Typical Source
Chlorine (ppm)	4	4	0 RAA	0.16 – 0.57	No	2018	Water Additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	NA	60	0	0 – 0	No	2018	By-product of drinking water chlorination.
TTHMs [Total Trihalomethanes] (ppb)	NA	80	6	0 – 5.6	No	2018	By-product of drinking water disinfection.

Chemical and Radionuclide Constituents

Contaminants (unit of measure)	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range	Violation (Yes or No)	Sample Date	Typical Source
Nitrate (ppm)	10	10	0.81	0 – 0.81	No	2018	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Sodium (ppm)	NA	NA	3	2.1 – 2.9	No	2017	Erosion of natural deposits.
Alpha emitters (pCi/L)	NA	15	1	0 – 1.14	No	2017	Erosion of natural deposits.
Combined radium (pCi/L)	NA	5	0	0 – 0.09	No	2017	Erosion of natural deposits.
Uranium (µg/L)	0	30	2	1.250 – 2.235	No	2017	Erosion of natural deposits.
Beta/photon emitters (MCL=4 mrem/yr)	NA	50 pCi/L *	5 pCi/L	0 – 5.18 pCi/L	No	2017	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Compliance with Other Drinking Water Regulations:

The Town of Denmark did not incur any health-based violations for calendar year 2018.

Definitions:

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

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.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.068	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2018	0	15	3.7	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2018	6	0-5.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2018	0.81	0 – 0.81	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	2018	3	2.1 – 2.9	NA	NA	ppm	N	Erosion of natural deposits.

Water Quality Data Table of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018.** The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year or the system is not considered vulnerable to this type of contamination. Some of the data, though representative of the water quality, is more than one year old.

As you see by the table above, our system had no violations for the year ending December 31, 2018. The City of Denmark is proud that your water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. **The EPA has determined that your water is safe at these levels.**

Important Drinking Water Definitions:

The tables contain scientific terms and measures, some of which may require explanation.

AVG – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular rule.

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.

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

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

Maximum Residual Disinfectant 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 of microbial contaminants.

Maximum Residual disinfectant 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.

MREM – Millirems per year (a measure of radiation absorbed by the body)

Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water.

Extra Note: MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 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 effect.

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 Denmark 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 the water for drinking or cooking. If you are concerned about lead in drinking 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 at: <http://www.epa.gov/safewater/lead>.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Consumer Confidence Report Certification Form

Water System Name: City of Denmark

PWS ID#: 05-10002 Report Year: 2018 Population Served: 1400

The community water system (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory.

Certified by: Name: ^{Charles} Michael August Title: Public Works Director

Signature: Charles Michael August

Phone #: 803-793-3734 Date: June 28, 2019

Check methods used and complete:

Systems serving 100,000 or more persons must post the CCR on a publicly-accessible Internet site which is www. _____

Systems serving 10,000 or more persons must distribute the CCR by mail or direct delivery. Date Delivered: _____ and specify direct delivery methods: _____

Systems serving less than 10,000 persons but more than 500 persons must either distribute the CCR by mail or direct delivery. Date Delivered: _____ and specify direct delivery method: _____

OR (mailing waiver option of the CCR itself) (Voided if using CCR for Tier III Public Notification!)

notify by "direct means" that the CCR is not being mailed, but it will be published in what newspaper(s) and when (attach copy of notice) Times & Democrat Newspaper
Date Delivered: _____ and specify "direct means" of delivery of the notice: _____

and the complete CCR was printed in the local newspaper(s)
 and a copy of the CCR was made available upon request

Systems serving 500 or fewer persons must either distribute the CCR by mail or direct delivery. Date Delivered: _____ and specify direct delivery methods: _____

OR (mailing waiver option of the CCR itself) (Voided if using CCR for Tier III Public Notification!)

notify by "direct means" that the CCR is not being mailed, but how a copy may be obtained (attach copy of notice)
Date Delivered: 7-30-19 and specify "direct means" of delivery of the notice: Printed on Water Bills
 and a copy of the CCR was made available upon request

"Good faith" efforts (in addition to the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Those extra efforts included the following methods:

- posting the CCR on the Internet at www. _____
- mailing the CCR to postal patrons within the service area
- advertising the availability of the CCR in news media (attach copy of announcement)
- publication of the CCR in local newspaper (attach copy)
- posting the CCR in public places such as: (attach list if needed) Copies are available at front counter at City Hall As of July 1, 2019
- delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers
- delivery to community organizations such as: (attach list if needed) _____

Note: For the mailing waiver option, the Direct Means allowed are a letter, a bill stuffer, a door hanger, or a postcard dedicated to the CCR. The notice may not be on the water bill itself as the only means of notification.