Town of Culpeper

Phone: 540-825-8671

Annual Water Quality Report



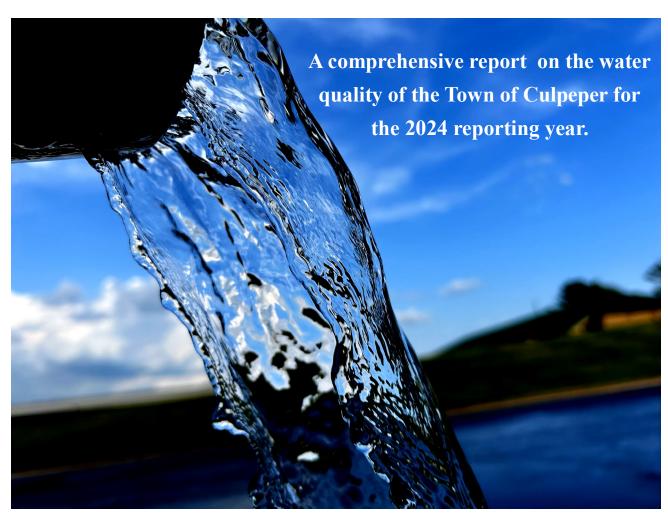


Photo by Anthony Schoch, Town of Culpeper Operations Manager, August 30, 2024.

Presented by: Department of Environmental Services

Town of Culpeper Operations Center 15038 Service Lane Culpeper, VA 22701 Town of Culpeper Water Treatment Plant 816 Woodview Road Culpeper, VA 22701



The Town of Culpeper is pleased to present to you the 2024 Annual Water Quality Report. This report is a requirement of the U.S. Environmental Protection Agency (EPA) and is designed to inform you about water services we deliver to you every day. Our constant goal is to provide you with a safe, high quality and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect the water resources.

If you have questions about this report, please contact Melanie Lee Bayne, Environmental Compliance Manager at 540-825-8671. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of the regularly scheduled Light & Power/ Environmental Services Committee meetings. They are normally held on the last Wednesday of every month at 9:30 a.m. at the Culpeper Economic Development Center, located at 803 South Main Street.

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

Water Sources & Source Water Information

The Town has both surface water and groundwater sources. The Town's surface water source is a 254-acre reservoir known as Lake Culpeper located in Culpeper County. The Town has six groundwater wells that also provide water for the community.

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 waters include:

- 1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2. 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.
- 3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 4. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- 5. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Virginia Department of Health conducted a source water assessment of the Town system in 2002. Lake Culpeper was determined to be of high—susceptibility to contamination using the criteria developed by the State in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern and documentation of any known contamination in the last 5 year study period. A copy of this report is available at the Virginia Department of Health (VDH), Office of Drinking Water (ODW), Culpeper Field Office (CFO), located at 400 South Main Street. Three wells were placed on-line in January 2015 with three additional wells being placed into service in 2018. The Source Water Assessment Program will evaluate these wells in the near future.

Awards

In 2020, the Town of Culpeper Water Treatment Plant received several awards. The first was from the American Waterworks Association (AWWA) for 75 Years of Service! We also received an award from the Virginia Department of Health, the Association of State & Territorial Dental Directors & the Centers of Disease Control & Prevention for 50 Years of Fluoridation! In 2022, the Town received an award through the Partnership for Safe Water! We are also proud to announce that in 2022, VRWA awarded Robert Hester, Water Operator Specialist of the Year and Kacie-Jo Bradford, Lab Technician of the Year! In 2023, the Town received the Phase III 10 Year Directors Award for Water Treatment! In 2024, the Town received the Platinum level award for Environmental Excellence with the Virginia Water Environment Association. Also in 2024, The Town received the Silver level award for Water Treatment Plant Performance from the Virginia Department of Health!

Congratulations Town of Culpeper!

Conclusions

We are proud that your drinking water meets or exceeds the Federal and State requirements. We have learned through extensive monitoring and testing that some constituents, as expected, have been detected. This is normal and the EPA and VDH-ODW-CFO have determined that the water is safe!





Operations Center 15038 Service Lane



Water Treatment Plant 816 Woodview Road

Contact Information:

Account setup and payments can be made Monday thru Friday 8:00 A.M. to 5:00 P.M. at the Town Municipal Building, located at 400 South Main Street Culpeper, Virginia 22701.

The Department of Public Services and Department of Environmental Services are located 15038 Service Lane in the Operations Center Building. The Director of Public Services, the Assistant Director of Environmental Services and the Environmental Compliance Manager have offices at the Operations Center Building and can be reached at 540-825-8671.

Please visit our website

https://www.culpeperva.gov

We at the Town of Culpeper work continuously to provide top quality water to every tap.

We ask that all customers help us protect and conserve water sources!



Understanding Water Quality

The Town of Culpeper routinely monitors for many contaminants that could be found in drinking water according to Federal and State Standards. As a Town of Culpeper customer, the water you drink consistently surpasses all Federal and State standards. We have tested for over 170 regulated and non-regulated contaminants. These contaminants are tested for a variety of reasons such as public health needs, maintaining aesthetic quality, and optimizing corrosion control. We are required to report detections. The table below shows the regulated contaminants detected for the period ending December 31, 2024. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

We are also pleased to report to you that there was only one detection of total coliforms and no *E. coli*, out of 240 monthly samples collected during calendar year 2024.

Contaminant	Units of Measure- ment	Violation (Yes/No)	Level Detected	Range	Date Sampled	MCLG or MRDLG	MCL, TT, or MRDL	Likely Source(s) of Contamination
Barium	ppm	No	0.088	0.016 - 0.088	2024	2	2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
Chlorine	ppm	No	1.59	0.25-3.3	2024	MRDLG= 4	MRDL= 4	Water additive used to control microbes
Fluoride	ppm	No	1.03	ND-1.03	2024	4	4	Erosion of natural deposits; Water additives which promotes strong teeth
Alpha Emitters	pCi/L	No	0.4	ND-0.4	2023	0	15	Erosion of natural deposits.
Beta/photon Emitters	pCi/L	No	2.1	ND-2.1	2023	0	4	Decay of natural and man-made deposits
Combined Radium	pCi/L	No	0.4	0.2-0.4	2023	0	5	Erosion of natural deposits.
Nitrate/Nitrite	ppm	No	0.91	0.07-0.91	2024	10	10	Runoff from fertilizer use, leeching from septic tanks; sewage; erosion of natural deposits.
НАА5	ppb	No	55	1-76	2024	N/A	60	Byproduct of drinking water chlorination
TTHM	ppb	No	70	4.8-125	2024	N/A	80	Byproduct of drinking water chlorination
TOC	N/A	No	2.11	1.39-1.46	2024	N/A	TT	Naturally present in the environment
Turbidity	NTU	No	0.3 (95% of the time)	0.01-1	2024	N/A	1 NTU max; ≤ 0.3 NTU 100% of the time	Soil Runoff, Turbidity is a measure of the cloudiness of the water. Monitoring is conducted because it is a good indicator of the effectiveness of the filtration system.
Tetrachloroethylene	ppb	No	1.3	ND-1.3	2024	0	5	Discharge from factories and dry cleaners.



Lead and Copper Results for 2023

The Town of Culpeper conducted the required lead and copper tap monitoring program in 2023. The 90th percentile lead concentration for the Town's waterworks was less than 2 ppb. The 90th percentile copper concentration for the Town's waterworks was 0.0742 ppm. 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 Town of Culpeper is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Town at 540-825-8671. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead. Our next required sampling for lead and copper will occur in 2026.

Contaminant	Units of Measurement	Action Level Exceedence (Yes/No)	Level Detected		# of Sites Exceeding Action Level	Date Sampled	MCLG	Action Level	Likely Source(s) of Contamination
Lead	ppb	No	<2	ND-4.66	0	2023	0	15	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	ppm	No	0.0742	ND-0.139	0	2023	1.3	1.3	Corrosion of household plumbing systems; ero- sion of natural deposits





Additional Water Quality Information

In addition, EPA required all users of surface waters for drinking water, including the Town of Culpeper, to screen for a microorganism called *Cryptosporidium*. *Cryptosporidium* is a microbial pathogen found in surface water throughout the US. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Cryptosporidium was not detected in our source water or finished water previously. If the *Cryptosporidium* pathogen were present in the source water, ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. 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. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

The Town of Culpeper conducted a *Cryptosporidium* analysis in 2008/2009. No organisms were detected. This test series was conducted again beginning in 2016 and continuing through 2018, as mandated by EPA. *No Cryptosporidium have been found in the source water screening during 2016*, 2017 or 2018.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants and their health effects are available from the Safe Water Drinking Hotline (800-426-4791).

Definitions

In the previous tables, you will find many terms and abbreviations you might not be familiar with that are used in this report. To help you better understand these terms we've provided the following definitions:

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

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 (ng/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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.

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

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 MCLG is 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 (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.

Minimum Reporting Limit (MRL) - the lowest concentration that a laboratory can confidently state is present in a sample.

Non Detects (ND) - laboratory analysis indicates that the contaminant is not present.



Water Sources & The Water Treatment Process

The Town of Culpeper Water Treatment Plant is a 4 million gallon per day surface water plant built in 1992. The Chandler Street Complex groundwater well system was brought into service in 2015. In early 2018, three additional wells, the Rockwater Park and Nalles Mill Complex, were placed into service. These facilities provide water for over 20,000 residents and are operated and maintained by the Department of Environmental Services.

Lake Culpeper is a 254 acre reservoir. Mountain Run Lake flows into Lake Culpeper and is a water reserve for the Town. Both lakes are located in Culpeper County. The raw water from the reservoir is pumped to the treatment plant where it goes through multiple processes so as to provide customers with safe drinking water that complies with EPA Safe Drinking Water Standards. The raw groundwater at the well facilities is disinfected and treated with a corrosion inhibitor, before being pumped to the distribution system or stored in the water storage tanks. The treated groundwater is also EPA compliant.



Lake Culpeper



Water Treatment Plant



Mountain Run Lake



Well System Treatment Building



Well System Water Quality Lab

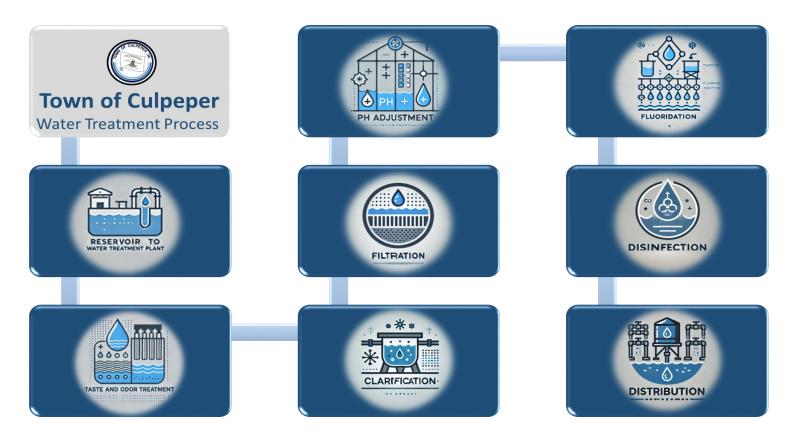


Well System Treatment Room

With the addition of these groundwater sources, the Town of Culpeper will now have the ability to produce almost 5 million gallons of water a day. This enables the Town to sustain the ever growing demand and ensure water source resiliency. When new water sources are placed into service, many tests are required by EPA and VDH to ensure that the water is safe to drink. These results are available by request through the Town of Culpeper Department of Public Services or the Virginia Department of Health, Office of Drinking Water, Culpeper Field Office (VDH-ODW-CFO).



Water Sources & The Water Treatment Process

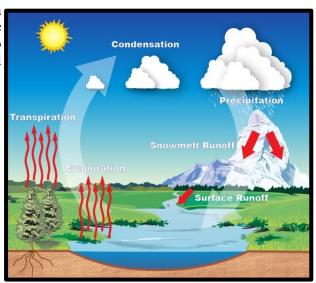


Protecting Water Sources

The water cycle, also known as the H2O cycle or hydrological cycle, describes the continuous movement of water on, above and below the surface of the Earth. The mass of water on Earth remains fairly constant over time but the partitioning of the water into the major reservoirs of ice, fresh water, saline water and atmospheric water is ever changing depending on a wide range of climatic variables.

This begins with protecting the watershed. A watershed is an area of land that drains to a particular point along a stream or river. The best way to protect the Chesapeake Bay from contamination is to help protect the watershed. You can help protect our watershed and drinking water supply in several ways:

- 1. Prevent trash and debris from entering storm drains and catch basins. To report a clogged drain or basin, call the Department of Public Services at (540) 825-8671.
- 2. Dispose of household waste, grease and motor oil properly. Do not dump it down the drain!
- 3. Report spills that could potentially enter the waterways by calling the Department of Public Services at (540) 825-8671.
- 4. Do not flush pharmaceuticals down the toilet or drain. Find a drug take-back location or properly dispose of medications in another approved fashion.





Reservoir Dam Rehabilitation and Improvements

The dam at Mountain Run Lake was constructed in 1959 and the dam at Lake Culpeper was constructed in 1972. Beginning in 2017 and completed in 2019, we rehabilitated and improved the two dams, to include the construction of reinforced concrete labyrinth weir emergency spillways. Impounding structures and dams are regulated by the Virginia Department of Conservation and Recreation, Division of Dam Safety and Floodplain Management.



Mountain Run Lake Dam



Lake Culpeper Dam

Water Storage

The Town has four water storage tanks; two ground standpipes, one elevated tank and a pedesphere tank. These four tanks provide the Town with 2.4 million gallons of water storage. These tanks also provide the water distribution system with the needed water pressure. Also, at the water treatment plant, there are two clearwell tanks, capable of holding an additional 500,000 gallons of water.



Standpipe



West Ground Storage Tank



Elevated Storage Tank



Pedesphere Storage Tank



Clearwell Tanks



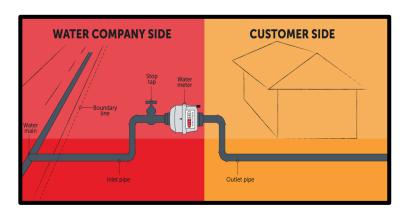
Drinking Water Quality is a Shared Responsibility

Water is drawn from the reservoir, Lake Culpeper, and is pumped to the Town's water treatment plant. The Town's water treatment plant is responsible for taking the raw water and producing your drinking water. The Town also has the 3 well systems that have their own treatment facilities and contribute to the water supply. The Town is also responsible for maintaining water quality throughout the distribution system. You, the customer are responsible for ensuring water quality is maintained on your property.

The Town is always trying to improve services that we provide to you. We have a multi-probe device that we can take to the reservoir to measure various parameters of the raw water quality. What this does is enable us to better understand the raw water quality before it comes to the water treatment facility so that we can more effectively treat the source water.

Additionally, we have implemented procedures for evaluating water quality throughout the distribution system. We are now continually collecting additional water samples from numerous points in the distribution system. We bring these samples back to the laboratory, and analyze them for various constituents, such as iron and manganese. Iron and manganese are considered secondary contaminants by EPA. Secondary Contaminants may cause cosmetic, aesthetic or technical effects, such as taste, odor and color issues, in drinking water. For additional information on secondary contaminants, please go to; https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals.

As drinking water can undergo dramatic changes in the distribution system, we have implemented a more rigorous unidirectional distribution system flushing program. What this will do is help keep the distribution piping as clean as possible. This flushing will remove accumulated sediments, manganese, scale and biofilm conglomerates (SBCs) that occur in distribution systems over time. When we are flushing, expect to see some discoloration of your water. (We suggest that you refrain from washing light colored clothing while flushing is being conducted.) This discoloration will clear up after flushing has been completed. Signage will be posted around Town when flushing occurs.









Backflow Prevention and Cross-connection

Cross-connections are defined as actual or potential connections between the potable (drinking water) and non-potable water supply or any source of contamination. Cross-connections constitute a serious public health hazard. Control of cross-connections is possible. This can be best accomplished through knowledge and a watchful eye! The Town has a Cross-Connection/Backflow Prevention Program. Through this program we protect the drinking water supply. But, we need to work together for this program to be effective.

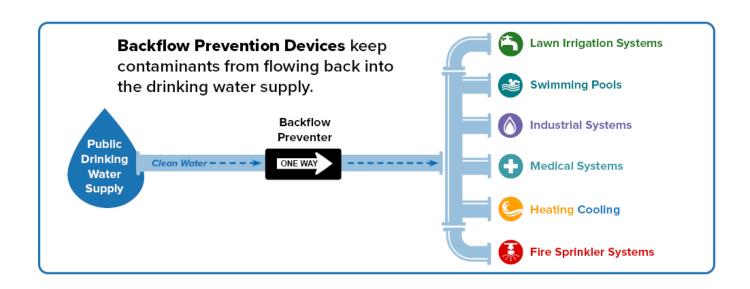
The Town is experiencing significant growth. Many new homes are having automatic sprinkler and irrigation systems installed. An automatic sprinkler and irrigation system can be the most efficient method of watering a landscape if it is correctly designed, maintained, and programmed according to plant needs and weather conditions. Lawn irrigation can account for over 50% of a homeowner's water usage. Many homeowners irrigate too often and for too short a period to meet lawn and especially landscaping --tree and shrub-- needs. Others tend to leave the water running too long, resulting in wasted water. All owners should be aware of the system's operations and be alert to signs of trouble with equipment. It is also important to adapt the system to maturing landscapes and to consider improvements that can increase efficiency.

The Virginia Department of Health Waterworks Regulations (VDH) requires the Environmental Services Department to maintain and enforce a Cross Connection Control Program (CCCP).

As a part of the Program, in-ground lawn sprinkler and irrigation systems are required to have an approved Backflow Prevention Device installed between the potable water supply and the first sprinkler head. Irrigation systems are classified by VDH as "high hazard." The Reduced Pressure Zone Device (RP/RPZ) is the only approved device for high hazard protection, including backpressure and backsiphonage. All irrigation systems installed in the Town of Culpeper MUST have an RPZ installed to ensure proper compliance.

Consumers are responsible for the installation, testing, and maintenance of required backflow prevention devices. **Backflow Prevention Devices are required to be tested annually** by a Certified Backflow Prevention Device Tester, licensed by the Department of Professional and Occupational Regulation (DPOR) and a copy of a completed Town of Culpeper Backflow Prevention Device Test Form must be submitted to the Department of Environmental Services, Environmental Compliance Manager to verify compliance.

How can we all work together for effective cross-connection control? Understanding responsibilities. The Town shall ensure that effective backflow prevention devices and other measures are being taken to provide continuous protection of the drinking water supply in the distribution system. Customers are responsible for preventing contamination of the plumbing under their control, meaning from the service connection to your home or business. For additional information on the Cross Connection Program, please visit our website https://www.culpeperva.gov/





Conserving Water Sources

There is a worsening trend, Water Stress, in water supply nationwide. Taking measures at home to conserve water not only saves you money, it also is of benefit to the greater community. Here are a few tips to reduce the amount of water used in your home, save some money and conserve water:

1. Check faucets and pipes for leaks

A small drip from a worn faucet washer can waste 20 gallons of water per day. Larger leaks can waste hundreds of gallons.

2. Check your toilets for leaks

Put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired immediately. Most replacement parts are inexpensive and easy to install.

3. Take shorter showers

One way to cut down on water use is to turn off the shower after soaping up, then turn it back on to rinse. A four-minute shower uses approximately 20 to 40 gallons of water.

4. Turn off the water after you wet your toothbrush

There is no need to keep the water running while brushing your teeth. Just wet your brush and fill a glass for mouth rinsing.

5. Rinse your razor in the sink

Fill the sink with a few inches of warm water. This will rinse your razor just as well as running water, with far less waste of water.

6. Use your dishwasher and clothes washer only for full loads

Automatic dishwashers and clothes washers should be fully loaded for optimum water conservation. Most makers of dishwashing soap recommend not pre-rinsing dishes which is a big water savings.

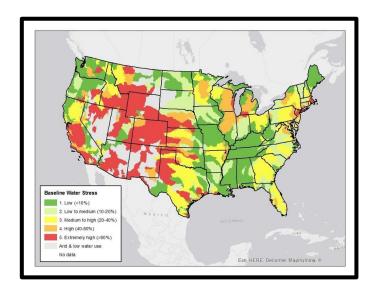
With clothes washers, avoid the permanent press cycle, which uses an added 20 liters (5 gallons) for the extra rinse. For partial loads, adjust water levels to match the size of the load. Replace old clothes washers. New Energy Star rated washers use 35 - 50% less water and 50% less energy per load. If you're in the market for a new clothes washer, consider buying a water-saving front loading washer.

7. Put a layer of mulch around trees and plants

Mulch will slow evaporation of moisture while discouraging weed growth. Adding 2 - 4 inches of organic material such as compost or bark mulch will increase the ability of the soil to retain moisture. Press the mulch down around the dripline of each plant to form a slight depression which will prevent or minimize water runoff.

8. Water during the early parts of the day; avoid watering when it's windy

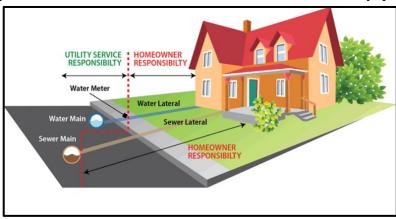
Early morning is generally better than dusk since it helps prevent the growth of fungus. Early watering, and late watering, also reduce water loss to evaporation. Watering early in the day is also the best defense against slugs and other garden pests. Try not to water when it's windy - wind can blow sprinklers off target and speed evaporation.





How the New Lead and Copper Rule Reduces Lead in the Community

EPA's new Lead and Copper Rule requires water systems to remove more lead service lines, (if they are still present) — a root source of lead in drinking water—than the previous rule dictated. The Town of Culpeper's water distribution system does not contain lead pipe. However, depending on when it was constructed, your home's plumbing could contain lead pipe, lead solder or fixtures that contain a higher percentage of lead. Also, your portion of the service line, this carries water from the water distribution main to your home, may be lead, galvanized steel, copper or plastic. We conducted the required detailed inventory of all water system distribution main materials and components. This was completed in 2024. If you would like additional information about this inventory, please contact us.



How Can You Reduce Exposure to Lead in Your Home?

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Culpeper is responsible for providing high-quality drinking water but cannot control the materials used in plumbing components in home construction.

The following tips can help minimize the potential to lead exposure:

- ⇒ Boiling water will not reduce lead!
- ⇒ Use only fresh, cold water for cooking and making baby formula.
- ⇒ When the water has been sitting in pipes for several hours, flush the tap for 30 seconds to 2 minutes until the water becomes colder or until it reaches a steady temperature before using the water for drinking or cooking.
- ⇒ Regularly clean the faucet aerator. This removes particles from household plumbing that could possibly contain lead.
- ⇒ If you choose to install a water filter, choose a water filter designed for the specific filtration desired; Make sure it is NSF International (nsf.org) approved and maintain it according to the manufacturers recommendations.
- ⇒ Consider buying low-lead fixtures. Look for fixtures with the lowest lead content. Visit nsf.org to learn more.

Where Can I Learn More?

To learn more about Lead and Copper, please follow the link below; Lead and Copper Rule | US EPA



The Town is committed to protecting public health through the reduction of exposure to lead in drinking water.



PFAS—What You Need to Know

In March 2023, EPA proposed a National Primary Drinking Water Regulation for six PFAS, including PFOA and PFOS as individual contaminants, and PFHxS, PFBS, PFNA, and GenX Chemicals as a mixture of contaminants. EPA has now finalized a National Primary Drinking Water Regulation (NPDWR) establishing legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as contaminants with individual MCLs, and PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS using a Hazard Index MCL to account for the combined and co-occurring levels of these PFAS in drinking water. EPA also finalized health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these PFAS.

Compound	Final MCLG	Final MCL (enforceable levels)	
PFOA	0	4.0 ppt	
PFOS	0	4.0 ppt	
PFHxS	10 ppt	10 ppt	
PFNA	10 ppt	10 ppt	
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt	
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index	

What are PFAS Chemicals?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS and GenX chemicals. Since the 1940s, PFAS have been manufactured and used in a variety of industries around the globe, including in the United States. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both are very persistent in the environment and in the human body. Exposure to certain PFAS can lead to adverse human health effects.

How Are We Exposed to PFAS Chemicals?

PFAS include a large number of important chemicals that can be used in some food packaging and can make things grease- and stain-resistant. They are also used in firefighting foams and in a wide range of manufacturing practices. Unfortunately, some of these substances don't break down over time. That means they build up in the environment and in our bodies.

Drinking water can be a source of exposure in communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where PFAS were produced or used to manufacture other products, or locations where firefighting foam was used such as oil refineries, airfields or other training facilities for firefighters.

Where Can I Learn More?

To learn more about PFAS, please follow the link below;

https://www.epa.gov/pfas

