

Information Regarding PFAS for Calhoun Utilities

(Updated October 2024)

On June 15, 2022, EPA issued interim updated drinking water lifetime health advisories for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) that replaced the health advisories issued by the EPA in 2016. According to the updated advisory levels from the EPA, some adverse health effects may occur with concentrations of PFOA or PFOS in water that are near zero. Pursuant to these EPA health advisory levels, Calhoun Utilities is in exceedance of the advisory limits for PFOS and PFOA.

On April 10, 2024, the Environmental Protection Agency (EPA) formally announced its final National Primary Drinking Water Regulation (NPDWR) for six PFAS, including perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, also known as Gen-X), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS).

The NPDWR establishes legally enforceable limits, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. PFOA, PFOS, PFHxS, PFNA, and HFPO-DA (Gen-X) will be regulated as individual contaminants. PFHxS, PFNA, PFBS, and HFPO-DA will also be regulated as a PFAS mixture. The NPDWR also establishes health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these six PFAS.

An MCL is an enforceable water quality standard that protects public health by setting the maximum level that a contaminant may be present in drinking water delivered to users of a public water system. An MCLG, although not enforceable, is the maximum level of a contaminant in drinking water where there is no known or anticipated negative effect on an individual's health, allowing for a margin of safety.

The EPA's finalized NPDWR for PFAS will require public water systems, like Calhoun Utilities, to:

- Monitor for these PFAS;
- Notify the public of the levels of these PFAS in drinking water; and
- Reduce the levels of these PFAS in drinking water if they exceed the MCL or Hazard Index.

A timetable and summary of the EPA PFAS advisory levels and values, as well as the MCLs are seen below.

PFAS LEVEL SUMMARY

	2009 Health Advisory Levels	2016 Health Advisory Levels	2022 Health Advisory Levels	2024 Maximum Contaminant Level
PFOS	200	70	0.004	4
PFOA	400	70	0.02	4
PFNA	N/A	N/A	N/A	10
PFHxS	N/A	N/A	N/A	10
HFPO-DA	N/A	N/A	10	10
PFBS	N/A	N/A	2,000	PFBS Remains as a Health Advisory, but is part of Hazard Index
Hazard Index	N/A	N/A	N/A	1.0 (Health Index Units)**

Note: All units are Parts Per Trillion (ppt) unless otherwise noted.

** PFNA, PFHxS, PFBS, and HFPO-DA use a combined Hazard Index (HI). The HI is unitless and is based on the sum of the individual hazard quotients.

What is the EPA Doing About PFAS?

In 2005, the EPA levied its largest-ever civil administrative penalty against DuPont to settle claims that the company failed to disclose information about the risks associated with PFOA. In 2006, the 3M Company paid \$1.5 million to settle similar claims that the company had withheld information relating to PFOS and PFOA.

Based upon this new information, EPA announced the first-ever Health Advisory for PFOS and PFOA in drinking water in 2009. This Health Advisory recommended no more than 400 ppt PFOA and 200 ppt PFOS in drinking water. In 2016, after further research, the EPA announced new Lifetime Health Advisories for PFOS and PFOA, setting a recommended combined limit of 70 ppt for PFOS and PFOA. In 2022, EPA issued updated Lifetime Health Advisories for four PFAS, including PFOA and PFOS. The updated advisory levels were well below what were previously nondetectable levels.

On March 14, 2023, EPA announced the proposed NPDWR to establish legally enforceable levels for six PFAS in drinking water. On April 10, 2024, the EPA finalized its proposed NPDWR, and announced its expectation that “over many years the final rule will prevent PFAS exposure in drinking water for approximately 100 million people, prevent thousands of deaths, and reduce tens of thousands of serious PFAS-attributable illnesses.”

What Levels are in My Water?

Calhoun Utilities treats surface water and ground water for drinking water purposes. Calhoun Utilities operates two drinking water plants, the Mauldin Road Treatment Plant that withdraws water from the Coosawattee River and the Brittany Drive Treatment Plant that withdraws water from two wells and the Big Spring. The service area of the two water treatment plants is essentially divided by the interstate (I-75), with the Brittany Dr WTP serving the eastern side with some overlap into the western side and Mauldin Rd WTP serving strictly the western side (SEE ATTACHED MAP). This map will help customers identify which WTP serves them. It is possible that a few roads may not be portrayed correctly, but the map should be approximately 99% correct. Schools served by the Mauldin Rd WTP include Tolbert Elementary, Swain Elementary, Calhoun Early Learning Academy, Middle, & High School, and the Georgia Cumberland Academy. The remainder of the schools, along with Advent Health Gordon Hospital are served by the Brittany Dr WTP.

The current test results from PFAS samples for the PFAS referenced in the EPA's National Primary Drinking Water Regulation are as follows:

Calhoun Utilities Detected Levels by Water Treatment Plant After Treatment

Mauldin Rd WTP PFAS Levels Detected

Compound	Jan-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
PFOS	14 ppt	8.7 ppt	8.2 ppt	7.2 ppt	6.9 ppt	5.7 ppt	5.6 ppt
PFOA	21 ppt	18 ppt	14 ppt	21 ppt	26 ppt	15 ppt	28.6 ppt
PFHxS	3.1 ppt	2.2 ppt	Less Than MRL*	2.3 ppt	2.1 ppt	ND	2 ppt
PFNA	ND	ND	ND	ND	ND	ND	ND
HFPO-DA	ND	ND	ND	ND	ND	ND	ND
Hazard Index	0.5294	0.325	0.075	0.331	0.305	0.065	0.3155

Brittany Dr WTP PFAS Levels Detected

Compound	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
PFOS	13 ppt	ND	ND	2.6 ppt	3.3 ppt	4.9 ppt	4.8 ppt
PFOA	13 ppt	Less Than MRL*	2.1 ppt	3.7 ppt	6.1 ppt	9.6 ppt	8.2 ppt
PFHxS	2.9 ppt	ND	ND	Less Than MRL*	ND	ND	ND
PFNA	ND	ND	ND	ND	ND	ND	ND
HFPO-DA	ND	ND	ND	ND	ND	ND	ND
Hazard Index	0.3357	0.0033	0.0042	0.0065	0.0275	0.012	0.0125

* The level is less than the minimum reporting level (MRL)

These samples were analyzed using EPA approved testing method 537.1

ND – Levels were not detected

With the addition of Granular Activated Carbon (GAC) as part of emergency temporary filtration improvements in April 2024, the **Brittany Dr WTP** (Water Treatment Plant) was able to provide water that has PFAS concentration near nondetectable levels. Removal efficiency is dependent on the flow rate through the GAC media and the frequency of GAC media replacement. During periods of increased demand (fire flow and peak summertime usage) and as the GAC media ages, the levels of PFAS may elevate due to a decrease in contact time through the GAC filters. However, PFAS levels will be lower with the installation of the temporary GAC media.

The **Mauldin Rd WTP** is implementing similar emergency, temporary GAC filtration with the addition of GAC media into existing filter beds and PFAS levels will be evaluated. Once it has been determined it is hydraulically acceptable, like the Brittany Drive WTP, we anticipate that with the addition of GAC PFAS levels should be reduced in the water produced as well.

For residence that do not have access to water produced by the Brittany Dr WTP, **FREE** accessible water will be provided at the entrance to the Brittany Dr WTP. Please be courteous to the residents who live on this street, and please do not block their driveways. This spigot will be identified with a sign that reads “Potable Water,” and is located at 306 Brittney Rd SE Calhoun, GA 30701.

What is Calhoun Utilities Doing About PFAS?

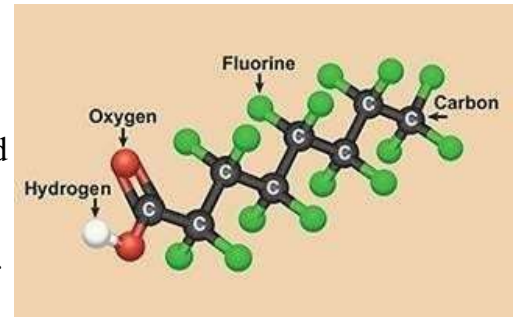
Although the EPA’s new regulation provides a window of up to five years for public water systems to reach full compliance (2029), we have already taken action in order to evaluate and ultimately remove these contaminants from your water. Calhoun Utilities has been monitoring for PFAS, notifying the public and Georgia EPD of the levels of these PFAS, and undertaking efforts to evaluate how best to reduce the levels of these PFAS in drinking water. Due to the unique chemical properties of PFAS, conventional water treatment plants are not able to remove PFAS from drinking water using conventional treatment methods.

As a result, Calhoun Utilities is evaluating state-of-the-art permanent water filtration systems to reduce PFAS to non-detectable levels. We are in the process of scheduling and completing a pilot program study of various PFAS treatment technologies and will work with our engineers to select the best method of removing PFAS from our water supply. In the interim, we have installed Granular Activated Carbon (GAC) in existing filter beds at our Brittany Drive Plant and we have also installed Granular Activated Carbon (GAC) in four of the existing filters at our Mauldin Road Treatment Plant as a temporary and emergency measure to reduce PFAS from the drinking water supply while permanent and long-term PFAS filtration improvements are pilot tested. Once it has been determined that the GAC in Mauldin Rd’s filter beds is hydraulically acceptable, we will begin the installation of GAC into the remaining filters at this plant.

Calhoun Utilities does not believe that the past, present and future capital costs and increased operational expenses associated with removing PFAS from our water supply should be the responsibility of our ratepayers. For that reason, we engaged and retained outside legal counsel with extensive experience in PFAS litigation to evaluate and litigate claims against those responsible for the PFAS chemicals in our water supply. It remains our goal to hold those that contaminated our water supply with PFAS responsible for all past, present, and future costs associated with removing their PFAS contamination from our drinking water.

What is PFAS

PFAs is an umbrella term used to describe highly resistant fluorocarbon compounds. The unique chemical bond between fluorine and carbon provides useful properties like oil, grease, and water resistance. Nicknamed “Forever Chemicals,” PFAS do not break down naturally and tend to bioaccumulate (build up in plants, animals, and humans over time). Due to its long history of production and pathways into the environment, low-level background concentrations of PFAS compounds have been found worldwide. These background concentrations vary depending on the local environment and oftentimes the proximity to industries that used PFAS in their manufacturing operations. For example, concentrations tend to increase near urban or industrial areas and decrease in rural areas. PFAS is typically released into water through manufacturing, treatment, or other industrial means.



Northwest Georgia has been especially impacted by PFAS. Surface water samples in Northwest Georgia testing positive for PFAS include the Coosawattee, Conasauga, Oostanaula, Coosa Rivers, as well as the ground water found within our region. Studies have linked elevated levels of PFAS in the region to carpet and textile manufacturers.

Calhoun Utilities is providing this information to update our customers on our ongoing efforts and so that our customers can make informed choices regarding the health and safety for themselves and their families. Customers that have concerns about the current levels of PFOA & PFOS found in their drinking water should consider actions that may further reduce exposure. More information regarding steps you can take to reduce your risk can be found on the EPA website at:

<https://www.epa.gov/pfas/meaningful-and-achievable-steps-you-can-take-reduce-your-risk>

Additional information regarding PFOA & PFOS is available at the following links:

Questions & Answers: PFAS National Primary Drinking Water Regulation

www.epa.gov/system/files/documents/2024-04/pfas-npdwr_qa_general_4.9.24v1.pdf

Per- and Polyfluoroalkyl Substances (PFAS) - Final PFAS National Primary Drinking Water Regulation

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas#Summary>

EPA's Drinking Water Health Advisories

<https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos>

EPA's Health Advisories Q&A

<https://www.epa.gov/sdwa/questions-and-answers-drinking-water-health-advisories-pfoa-pfos-genx-chemicals-and-pfbs>

Ga EPD PFOA & PFOS Story Map with Recorded Levels by Location

<https://gaepd.maps.arcgis.com/apps/MapSeries/index.html?appid=e8f2c6a51c1c41088002350f1eabe598>