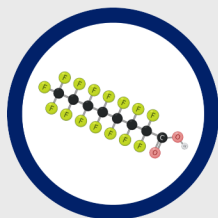
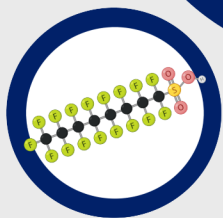
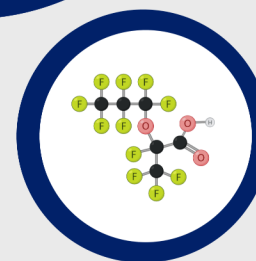
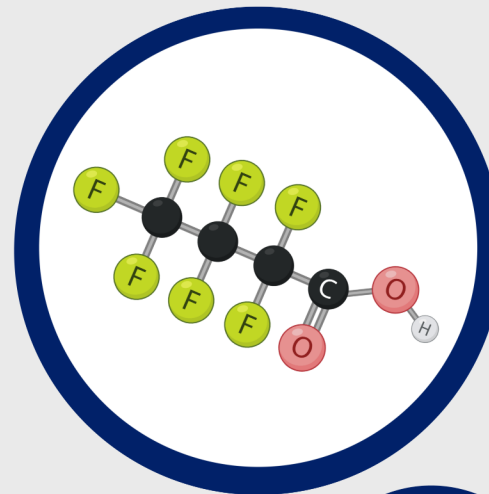


WHAT ARE PFAS?

PFAS are "per- and poly-fluoroalkyl substances" and are sometimes called "**forever chemicals**"

There are about 5,000 different PFAS chemicals

These chemicals have chains of **carbon atoms** (the 'alkyl') surrounded by many **fluorine atoms** (the 'fluoro').



WHAT PRODUCTS CONTAIN PFAS?

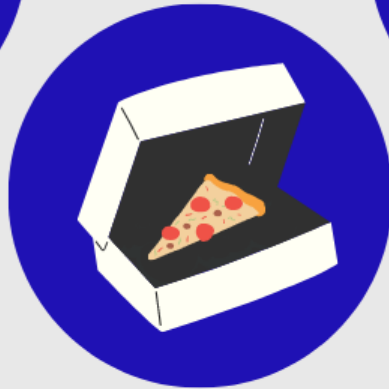
Clothing & Textiles



Carpeting & Flooring



Nonstick Cookware



Food Packaging



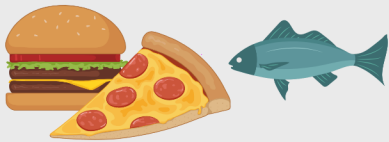
Firefighting Foams

PFAS are used in various industries and products. They are desirable to use in various common products because of their water- and grease-resistant properties that make goods nonstick or waterproof

HOW CAN I BE EXPOSED TO PFAS?



FOOD & FOOD PACKAGING



PFAS are used in grease-proof liners and packaging like take-out containers and pizza boxes. Certain food items may also contain PFAS, like fish from the contaminated rivers

DRINKING WATER



PFAS can be found in drinking water across the United States. Typical water treatment does not remove PFAS, though some home filters can

DUST EXPOSURE



PFAS can be found in house dust, which is due to PFAS migrating out of carpeting, textiles, and other consumer products in the home. Some exposure comes from inhaling and ingesting small amounts of dust

INFANT EXPOSURE



During pregnancy

PFAS can be transferred from mom to baby during pregnancy and during breastfeeding



Breastfeeding or formula feeding

UNLIKELY ROUTES OF EXPOSURE



Showering and bathing

Skin (or dermal) exposure to PFAS is not thought to be a concern

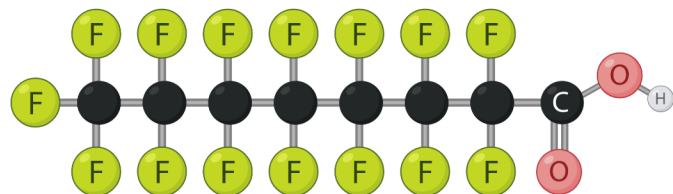


Swimming and recreation

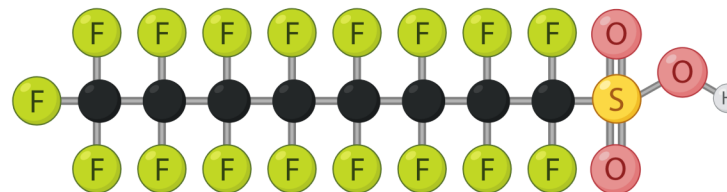
WHAT ARE PFOA & PFOS?

PFOA and PFOS are two kinds of PFAS. They have been used for many years and can be found in drinking water across the US.

The EPA has established a non-enforceable "health advisory" limit for these 2 chemicals at **70 nanograms per liter (ng/L) or 70 parts per trillion (ppt)**



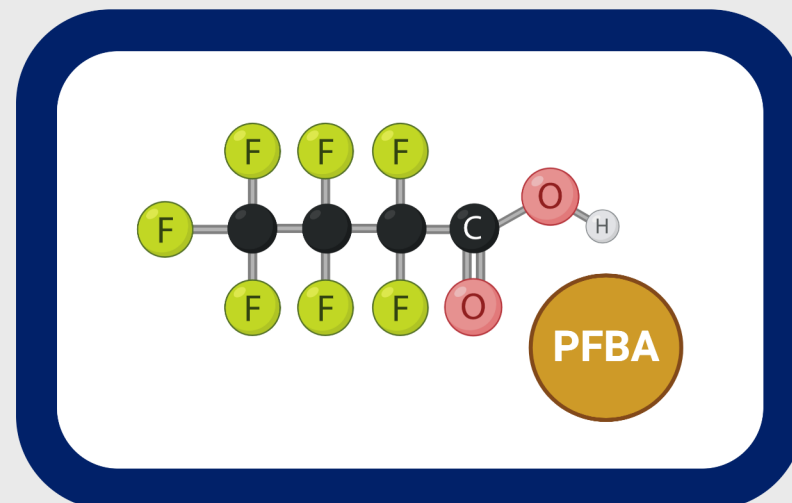
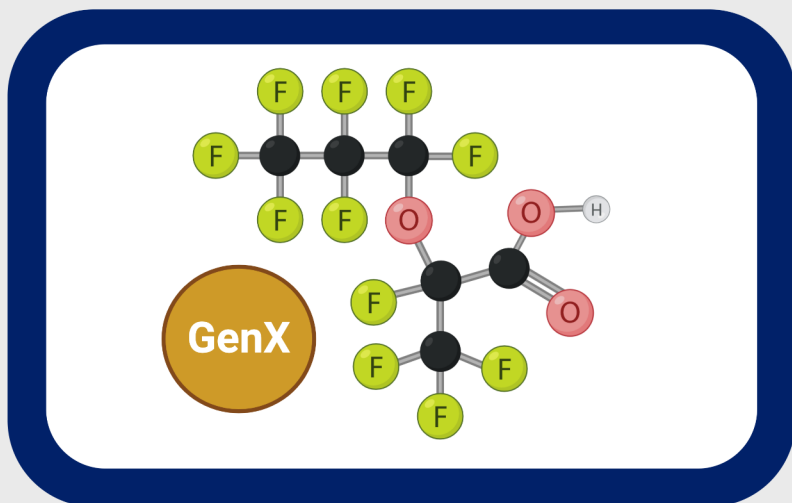
PFOA



PFOS

WHAT ABOUT GEN-X? WHAT ABOUT NEWER PFAS?

Some newer, emerging PFAS are replacing older PFAS chemicals. GenX is one of these emerging PFAS that was detected in the Cape Fear River. Other shorter-chain PFAS like PFBA are also emerging PFAS and have been found in the Haw River. We know even less about the health effects of these newer PFAS.



ARE THERE RULES ON PFAS IN WATER?

Mostly no. There are currently no enforceable federal limits for any PFAS chemical in drinking water. There are "health advisory" levels, but these are not legally-enforceable standards, only recommendations.



The US EPA has established a health advisory for PFOA and PFOS. These two chemicals, combined, should be below 70 ppt in drinking water

PFOS + PFOA < 70 ppt

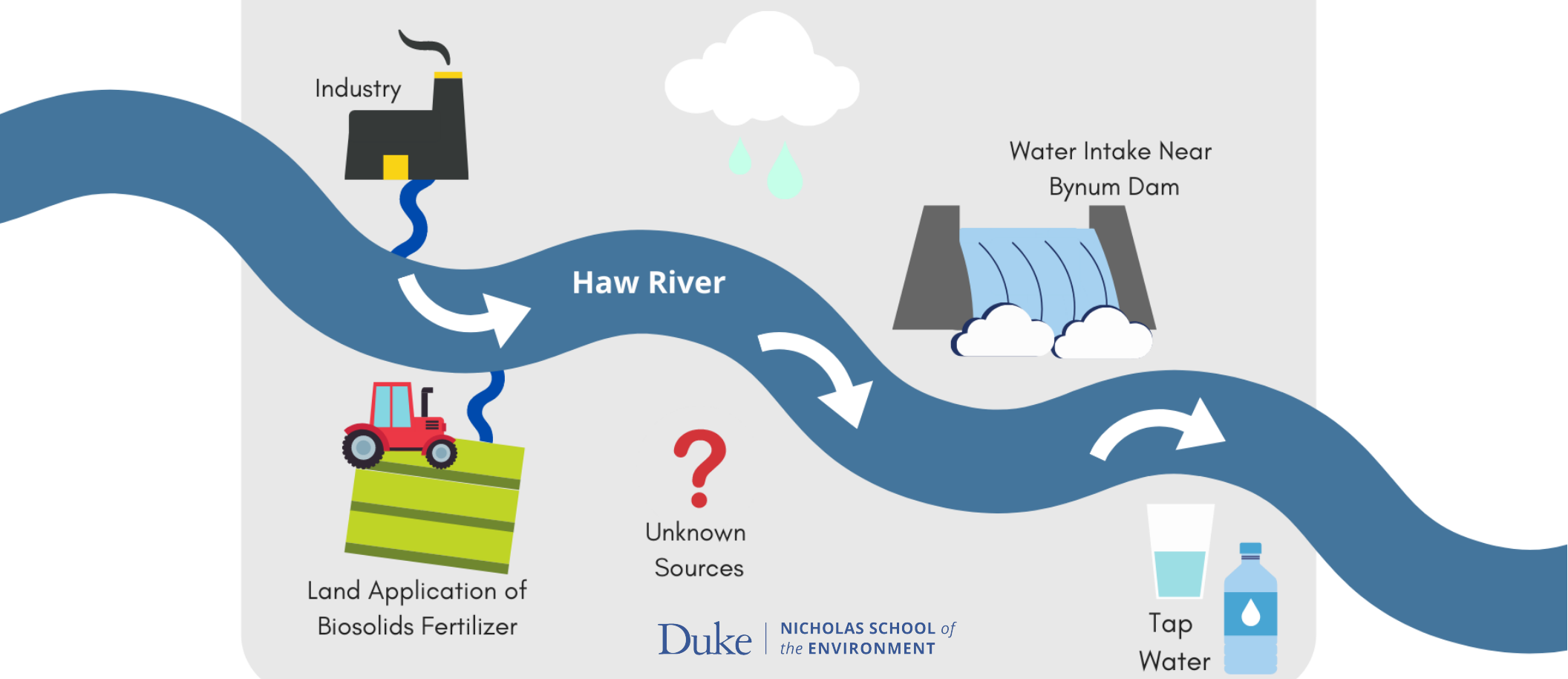


North Carolina Department of Health and Human Services has established a health goal of GenX of 140 ppt in drinking water

GenX < 140 ppt

ppt = parts per trillion and is the same as ng/L = nanograms per liter

HOW DO PFAS END UP IN PITTSBORO DRINKING WATER?



Unknown Sources

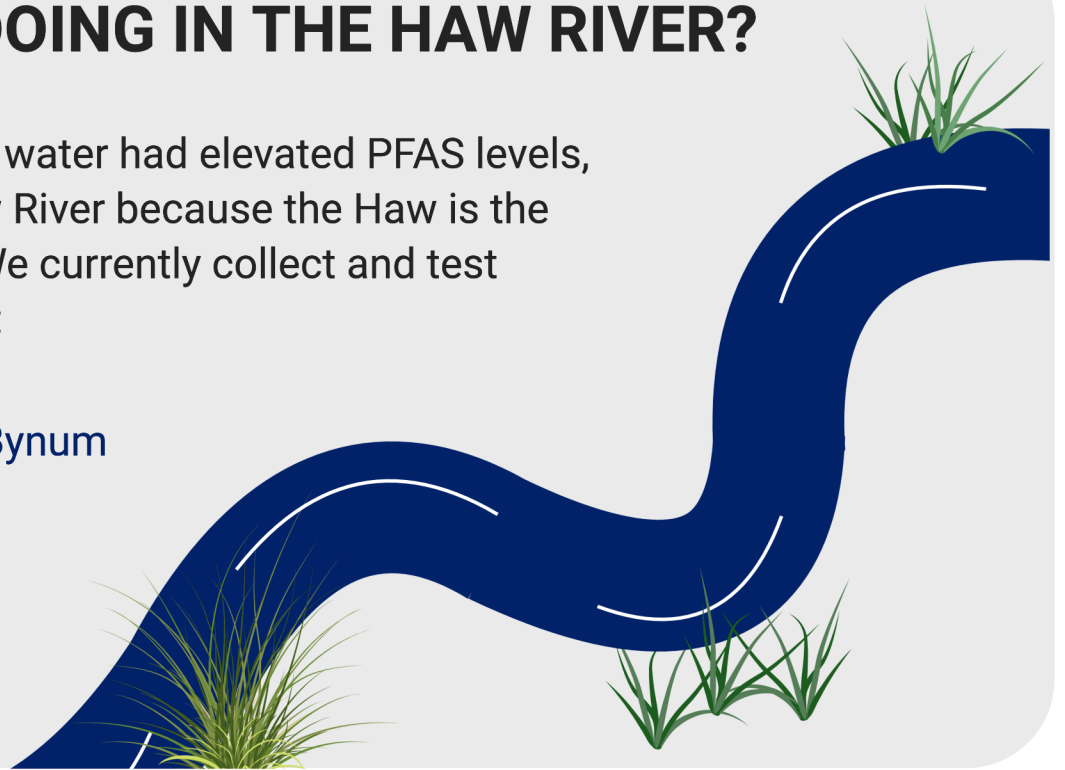
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WHAT ARE WE DOING IN THE HAW RIVER?

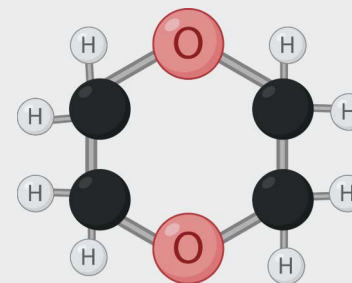
When our lab found that Pittsboro tap water had elevated PFAS levels, we started looking at PFAS in the Haw River because the Haw is the source of Pittsboro's drinking water. We currently collect and test water weekly from several sites along:

- the Haw River, from Burlington to Bynum
- downstream sites on Jordan Lake
- a tributary feeding into the Haw



WHAT ABOUT 1,4-DIOXANE IN THE WATER?

On a few occasions, another chemical called 1,4-dioxane has been found in water from the Haw River. Our lab is not currently testing water for 1,4-dioxane. We do not believe that the 1,4-dioxane found in the water is related to the PFAS we find in the Haw River. It is sometimes also called just "dioxane," but it is important not to confuse it with other similarly-named chemicals called "dioxins".



1,4-dioxane