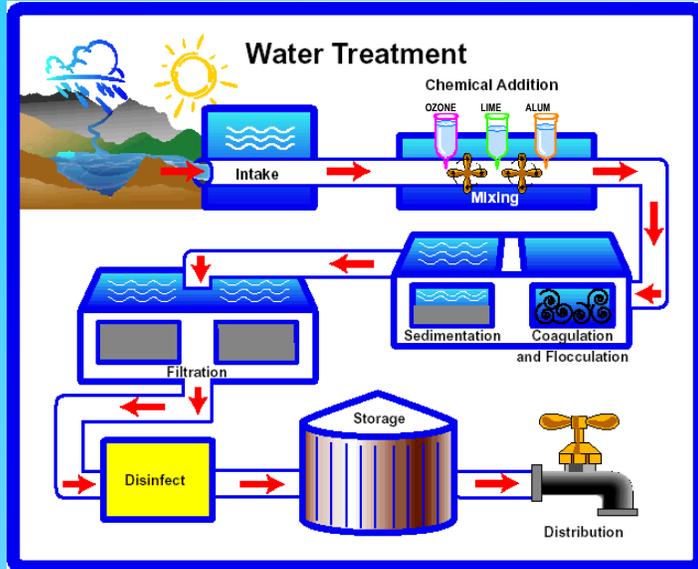


# Do You Know Where

# Your Water Comes From?



**Do** you know where your drinking water comes from? You might have poured it from a tap or bought it at the store, but it had to come from somewhere before that. Any guesses? The ocean? That would be a good guess because the oceans contain most of the earth's water, about 97%! But would you drink a glass of sea water? No! The salt would make you sick. We need fresh water but not just any fresh water though. Did you know that most of the world's fresh water is frozen solid? Nearly 80% is locked up in ice sheets and glaciers. We can't drink that. So where does your drinking water come from?

There are two main sources of drinking water: **surface water** and **groundwater**. **Surface Water** is found in lakes, rivers, and reservoirs. **Groundwater** lies under the surface of the land, where it travels through and fills openings in the rocks. The rocks that store and transmit groundwater are called **aquifers**. Groundwater must be pumped from an aquifer to the earth's surface for use.

Consumers receive their water from one of two sources: a private well, or a **community water system**. The Cape Fear Public Utility Authority (CFPUA) is a community water system that processes and distributes water collected from either surface water (from the Cape Fear River) or groundwater, depending on where you live. CFPUA operates two water treatment plants where water is pumped in and cleaned to make the water safe to drink.

The diagram above shows the water treatment process from a surface water source and the diagram to the right shows how ground water is stored below the earth's surface in aquifers and pumped out through wells. A specialized crew of Water Treatment Operators, Maintenance Technicians, and other utility workers ensure the water is cleaned, tested and distributed to your home so it's there when you need it. CFPUA performs a number of laboratory tests daily and sends out an annual water quality report to inform customers of substances tested and the test results. CFPUA is proud to provide you and your family with safe, clean drinking water 365 days a year.

## Learn about drinking water..

Water, from wells or the surface, often needs to be treated to make it safe to drink. Here are some words associated with drinking water.

### Aquifer

An aquifer is an area underground that holds water in the gaps between rock, sand, or gravel, sort of like an underground lake or stream.

### Community water system

A series of underground pipes and valves that deliver fresh, clean water to houses and businesses along the system.

### Groundwater

Any water that has trickled into the ground; usually part of an aquifer.

### Surface water

Any water on top of the earth, including lakes, rivers, and even puddles. We use surface water for fun things like swimming and boating - and sometimes its treated to make it safe to drink.

### Well

A hole in the ground fitted with pipes and pumps to draw water up from inside the earth.

### Well field

Any area containing one or more wells. Well fields help ensure enough water is pumped from the ground to supply everyone's demands.

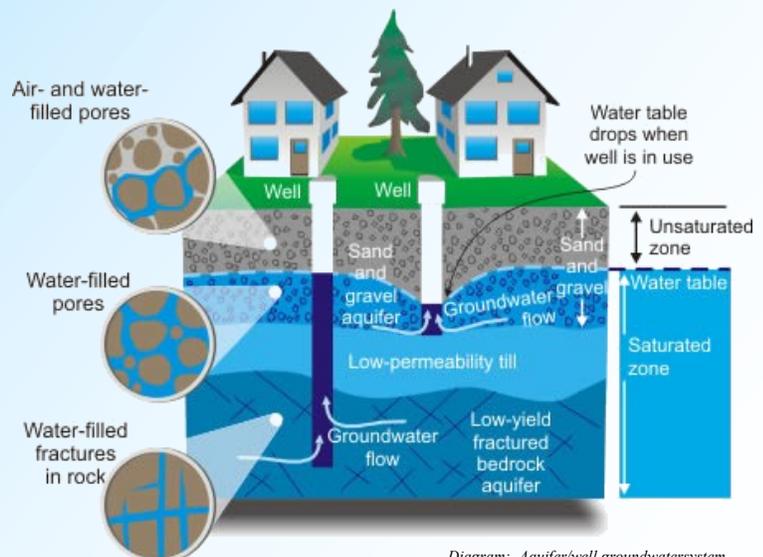


Diagram: Aquifer/well groundwater system