

CITY OF COLUMBIA WATER WORKS QUALITY AT YOUR TAP SINCE 1835

In 1818, attorney and part-time school teacher Colonel Abram Blanding was contracted to finance and construct the town's first water system. Springs in Seaboard Park, now known as Finlay Park, were originally used as the water source. Due to financial losses, Blanding sold the Water Works to the City in 1835.

Today, the City of Columbia Water Works consists of 2 water treatment plants that together produce an average of 60 million gallons per day. Water is furnished to approximately 375,000 people in Richland and Lexington counties. This water is delivered through more than 2,400 miles of underground pipeline.

DRINK GREEN: BOTTLE YOUR OWN WATER

Disposable water bottles are extremely wasteful. A better option is a reusable bottle that can be refilled often with tap water. Drinking tap water is just as safe and healthy as bottled water, much more cost efficient, and protects the environment.

Buying a single bottle of water at a convenience store for \$1 may seem cheap, but you can refill the same 16.9 oz. bottle over 3,000 times with City of Columbia water for the same price. **Only Columbia Tap Water Delivers!**



REFILL!

REFRESH!

REPEAT!



COLUMBIA CANAL WATER PLANT

- Source water = Broad River Canal
- Built in its present location in 1906
- The original facility used 12 miles of cast iron pipes, 6 rapid sand filters, 2 steam-driven pumps, and 2 water powered pumps
- Has undergone 6 major phases of expansion to meet increasing demand and more stringent regulations
- Present capacity is 85 million gallons per day
- Serves the area east of the Broad River and south of Interstate 20



LAKE MURRAY WATER PLANT

- Source water = Lake Murray
- Lake Murray was first suggested as an additional source of water in the early 1950s
- The plant provides an additional water source to keep up with increasing customer demand
- Construction began in 1980
- Water was first pumped into the distribution system in August 1983
- Present capacity is 75 million gallons per day
- Serves the area west of the Broad River and north of Interstate 20

THE CITY OF COLUMBIA WATER WORKS



The City of Columbia Water Works consists of 2 water treatment plants that together produce an average of 60 million gallons per day.

THE DRINKING WATER TREATMENT PROCESS

CITY OF COLUMBIA
Water Works
Quality At Your Tap Since 1835



1 RAW WATER INTAKE

As water is pumped into the treatment plant, intake areas screen out floating debris such as plants and fish.

2 PRE-TREATMENT

Chemicals are added to the raw water. Aluminum sulfate (alum) helps settle solids, carbon removes tastes and odors, and chlorine dioxide kills germs.

3 COAGULATION & FLOCCULATION

The alum is slowly mixed with the water. This process is called coagulation and causes impurities to cling to the alum forming larger particles called floc.

4 SEDIMENTATION

The water and floc flow into a sedimentation basin. The floc settles to the bottom, where it is removed and piped to our wastewater treatment facility.

5 FILTRATION

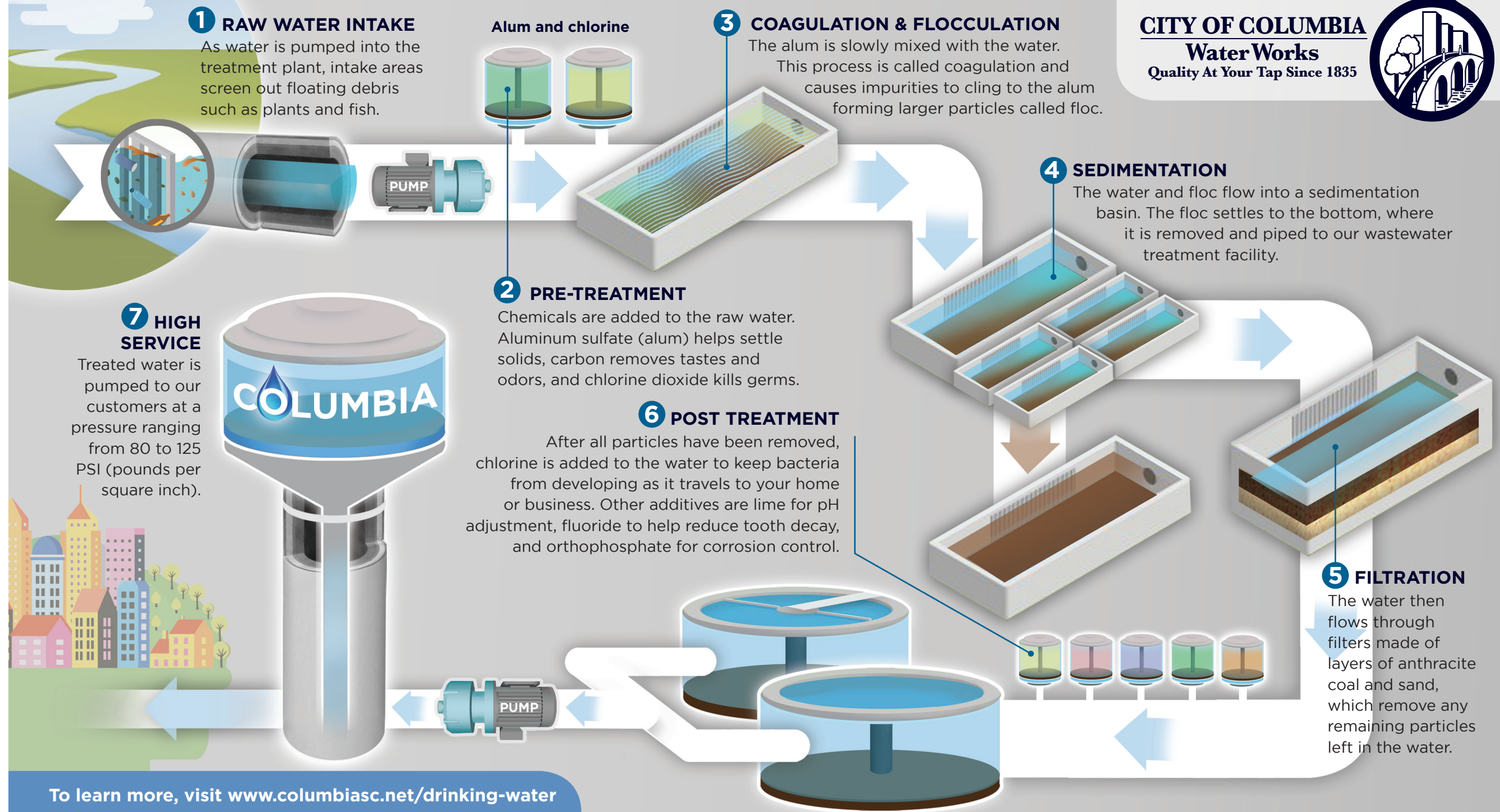
The water then flows through filters made of layers of anthracite coal and sand, which remove any remaining particles left in the water.

7 HIGH SERVICE

Treated water is pumped to our customers at a pressure ranging from 80 to 125 PSI (pounds per square inch).

6 POST TREATMENT

After all particles have been removed, chlorine is added to the water to keep bacteria from developing as it travels to your home or business. Other additives are lime for pH adjustment, fluoride to help reduce tooth decay, and orthophosphate for corrosion control.



To learn more, visit www.columbiasc.net/drinking-water