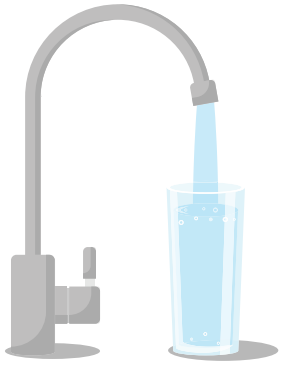
PROVIDING QUALITY IN EVERY DROP

THE WATER TREATMENT PROCESS

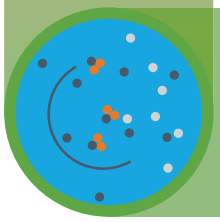


SOURCE WATER

SOURCE WATER

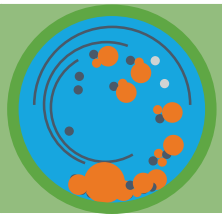
Water supply serving the area. In this case, it is a surface water supply, such as a river, lake or stream.

WATER TREATMENT



COAGULATION

Coagulation uses aluminum-based chemicals to form “sticky” particles that bind with dirt and organic matter in the water.



FLOCCULATION

Slow mixing is used to cause the coagulated dirt and organic particulates to collide and clump together to form larger “floc” particles that can settle out of the water during clarification/ sedimentation.

Water treatment process continues on reverse.

FILTRATION

The clarified water passes through filters made of layers of sand, gravel, and activated carbon, which help remove smaller particles.

DISINFECTION

During the final step of treatment, a small amount of chlorine is added to kill any potentially harmful pathogens that may remain in the water following the prior treatment stages. The water is stored temporarily in a clearwell to give the chlorine time for the disinfection process to occur.

CLARIFICATION/SEDIMENTATION

The large particles (floc) settle out and the clear water flows to filtration. The settled solids removed from the process often possess exceptional nutrient and water-retaining properties that allow them to be recycled and used to improve the quality of topsoils.

DISTRIBUTION

STORAGE

Pumps are typically used to “push” the water through pipes to homes and businesses in the community. Tanks are used to provide storage around the distribution system to help maintain pressure and enhance reliability of water service and fire protection.

TENNESSEE AMERICAN WATER

WE KEEP LIFE FLOWING™