CCMWA Water Treatment Process

“Raw” water is pumped in from the source, such as a lake or river.

Raw Water Meter

Chlorine Dioxide or Sodium Hypochlorite are added to aid removal of naturally occuring iron and manganese, which are stain-causing minerals. (OXIDATION).

The treatment process begins here with OXIDATION AND COAGULATION.

Aluminum Sulfate is added to help organic matter such as dirt and algae clump together (COAGULATION).

FLOCCULATION agitates the water so organic matter will continue to clump. Then the water is slowed down so the SEDIMENT can **settle** to the bottom of the basin.

Flocculation & Sedimentation Basins

CCMWA collects and treats the **Settled Solids** that come out of the sedimentation process and spreads these **Residuals** on nearby farmland to restore pH in the soil to an ideal agricultural level.

Filtration

The water is further filtered through anthracite coal and sand.

A portion of the filtered water gets additional treatment by flowing through **Granular Activated Carbon**, which removes natural, organic compounds that produce byproducts during the disinfection process.

All water that’s discarded during the treatment process is recycled, going through the treatment process again to become drinking water.

Sodium Hypochlorite is added for disinfection.

Fluoride is added, per state regulation.

Lime is added to control corrosion in pipes.

CCMWA’s water treatment plants use gravity, instead of pumps, as much as possible to move water through the treatment process, thus saving energy and money.

Mixing

COBB COUNTY-MARIETTA WATER AUTHORITY
REGIONAL WATER RESOURCE MANAGEMENT

“Finished” Water Meter: Water flow is measured at both ends of the treatment process.

Clearwells give the chemicals time to fully react and disinfect the water before it is distributed.

Clearwells

Clean, safe water goes through our transmission system to our customers’ systems.