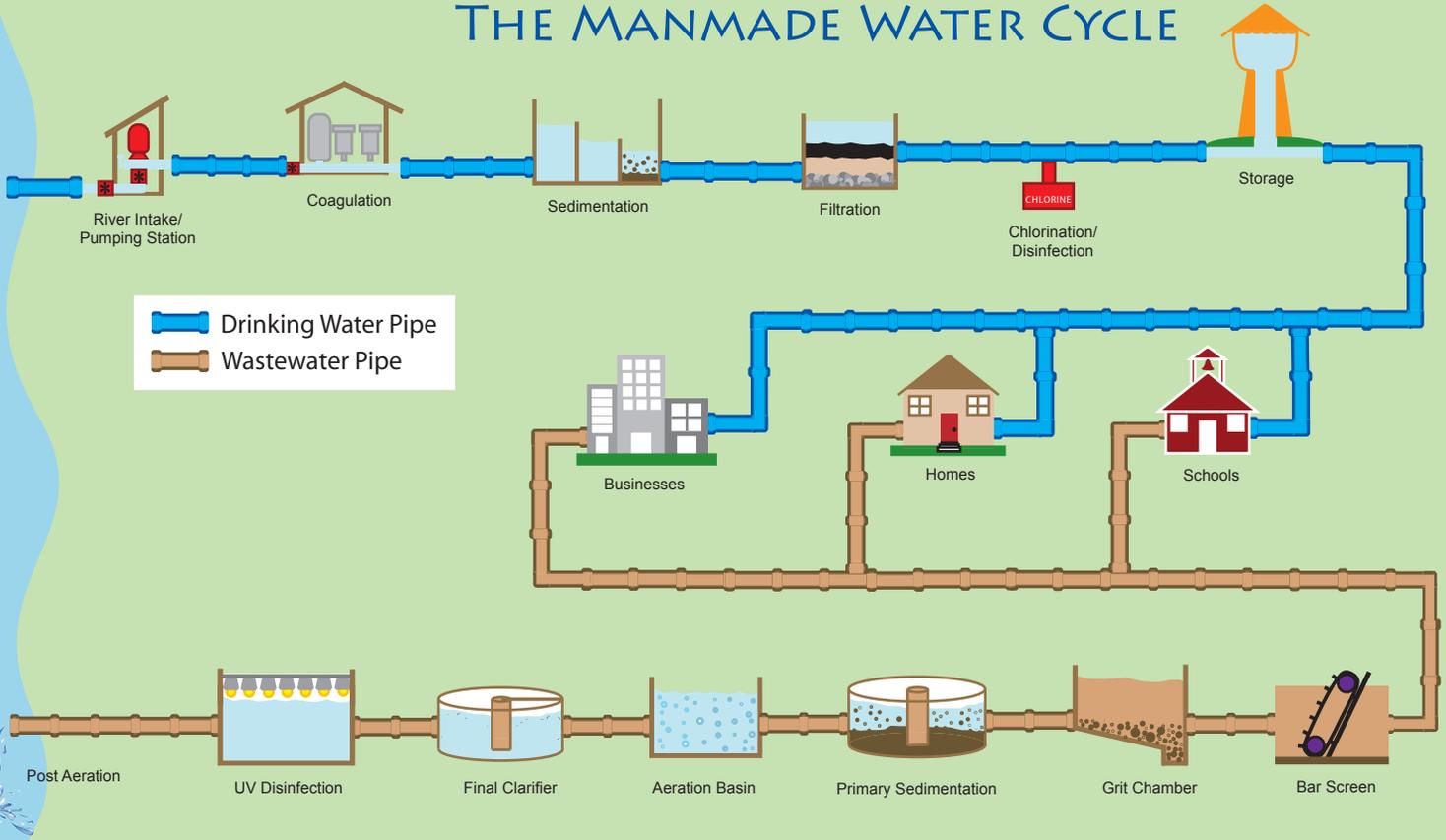


# River to River

## THE MANMADE WATER CYCLE

R  
i  
v  
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r



# DRINKING WATER TREATMENT

## River Intake/Pumping Station

Cobb County utilizes surface water sources, namely the Chattahoochee and Etowah Rivers. Some municipalities may rely on groundwater.

## Coagulation

Alum and other chemicals are added to water to form *floc*, which attracts dirt particles.

## Sedimentation

These heavy *floc* particles settle to the bottom of the tank and are removed. The cleaner water above moves to the next step.

## Filtration

The water passes through a filter of activated carbon and sand to remove organic compounds and other suspended solids.

## Disinfection

Chlorine and other chemicals are added to the water to kill bacteria and microorganisms.

## Storage

The water is stored in a tower or clear well where it is sent to the community through drinking water pipes.



## Connecting Community to Local Ecology

Cobb's Watershed Stewardship Program is housed in the Water Quality Laboratory of the Cobb County Water System in the Office of Environmental Compliance. We work closely with the staff from Cobb's Watershed Monitoring Program and Stormwater Management Water Quality Unit to ensure our outreach education programs are accurate and fulfill the needs of the community.

For more information about our programs:  
770-528-1482 or [water\\_RSVP@cobbcounty.org](mailto:water_RSVP@cobbcounty.org)

Visit our website: [www.cobbstreams.org](http://www.cobbstreams.org)



*Cobb County...Expect the Best!*

Sam Olens, Chairman

Helen Goreham, District One

Bob Ott, District Two

Tim Lee, District Three

G. Woody Thompson, District Four

David Hankerson, County Manager

This is an official publication of the Cobb County Water System,  
an agency of the Cobb County Board of Commissioners.

# WASTEWATER TREATMENT

## Bar Screen

This first step removes large objects (sticks, rags, toilet paper) that may cause blockages later.

## Grit Chamber

The water slows so heavy particles such as sand, grit, and gravel will settle to the bottom.

## Primary Sedimentation Tank

Smaller organic particles settle to the bottom of the tank and are removed. This is called *raw sludge*.

## Aeration Basin

Air is mixed into the wastewater to promote the growth of beneficial microorganisms that consume organic waste.

## Final Clarifier

The velocity of the water slows to allow the sludge to settle of the tank. The sludge is then removed and dehydrated for disposal.

## Effluent Filter

A sand filter removes any particles and sediments still remaining in the wastewater.

## UV Disinfection

An ultraviolet light is used to kill disease-causing organisms such as cryptosporidium and giardia.

## Post Aeration

The treated water is agitated to increase dissolved oxygen levels before it is released back into our surface water.