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Water Treatment Essay

Most of the water used in metro Atlanta comes from the Chattahoochee River, which gives drinking water to millions of people. After we use this water for things like washing dishes, taking showers, or flushing the toilet, it turns into wastewater. When water leaves out of our homes it travels through underground pipes to a wastewater treatment plant where it gets cleaned before being put back into nature. This is a cycle that pretty much happens every single day.

The Johns Creek Environmental Campus is one of Georgia's most advanced wastewater treatment places. It shows how new technology and science works together to protect the rivers. The cleaning process happens in a few main steps. First, big stuff like trash and sand gets taken out in screening and grit removal. Next, in the first treatment, heavier solids fall to the bottom and grease floats to the top, and both get taken away. Then, during the next step, good bacteria is added to eat up the rest of the waste. Last, the water goes through filters and gets disinfected using UV light or chlorine to kill any germs before going back into the Chattahoochee River.

Across metro Atlanta, people depend on water treatment to keep rivers like the Chattahoochee healthy and clean. This process matters because it keeps fish and animals safe, stops pollution, and makes sure the same water can be reused by other towns downstream. Wastewater treatment reminds us that water is something we all share and that what we do at home, even what we flush, can make a big difference to the environment we live in.

If I could improve one part of the water cycle, I would work on the disinfection stage. I think there should be a way to clean the water with more natural things, like sunlight or special plants, instead of just chemicals. That could make it safer for the animals living in the rivers and help save energy too. Maybe one day I can help invent a new way to make Georgia's water even cleaner for everyone.

In the end, I learned that cleaning water is a lot more important than I ever thought. It's cool how the water we use doesn't just disappear—it gets cleaned and comes back again. The Chattahoochee River gives water to so many people, so we should all help keep

it clean. If everyone does their part and doesn't waste water or flush the wrong stuff, we can make sure there's always clean water for us and for the animals that live in it too.