

The Importance of the Wastewater Treatment Process

Have you ever wondered what happens to the water that you flush down the toilet or swirl down the sink? Most people don't think about it, although they use almost 50 gallons of water a day in their home. This water doesn't just disappear; it goes through a multi-step wastewater treatment process, one that is an important part of our lives, although most people have no clue.

The first step of the wastewater treatment process is preliminary treatment; all solids are removed from the water, so pipes don't get clogged. We don't want constipated pipes now, do we? I've assigned the technical name for this stage, the 'Kindergarten Stage.'

Then it's off to Elementary School (officially known as primary treatment), which involves a more advanced settling tank that removes the 'floaties' or solids that float on top of the water or settle at the bottom.

Middle School comes up quickly - a confusing time for sure, I can say that from experience! In the WWT World (Wastewater Treatment), this stage is called 'secondary treatment.' Highly controlled artificial environments are involved, grumpy ELA teachers, and questionable outfits. Hold on, that is what I saw at school today. In this environment, microscopic creatures feed on the leftover waste in the water- also something that I saw at school today during lunch!

High School, a place where I can keep my good subjects and get rid of my hated ones, is much like the fourth step of the wastewater treatment process, 'tertiary/advanced treatment.' This step improves the quality of the water even more by removing any toxic substances. Care to hazard a guess at similarities?

College, the final stage. The WWT knows it as ‘disinfection’. It happens right before the water is released back into the environment, much like how a college student is released into the world. This step is the final check for removing any extra bacteria and to protect the public from exposure to unhealthy micro-organisms. Is that what happens when you go to college?

Freshwater is a limited resource. We have to make sure that we reuse and replenish it so that we don't harm the environment and so that we have enough. Returning healthy and treated water back into the environment is critical because freshwater needs to be well-stocked while water reservoirs stay stable and consistent.

It also supports aquatic ecosystems by limiting the amount of pollutants in the water. By using these sustainable and eco-friendly processes, the world's water supply stays consistent.

The wastewater treatment process is a vital part of a sustainable world. This process can remove harmful micro-organisms from water, release it back into the environment, and stay consistent. As the demand for freshwater rises, the WWT process will become more important in our lives. I hope we're on track for a passing grade in sustainable practices, just like I'm on track for a passing grade.