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From Disease to Pristine: The Magic of Wastewater Treatment Facilities

As tears are bravely held back, a companion floats freely—the sound of flushing reverberating within the room. Though it is the end for the fish, the journey of water is just beginning, where wastewater goes through treatment to be recycled. Returning the treated water is essential for the region's natural water systems and must be returned to reservoirs or sources of origin.

An average metro-Atlantan uses 50 gallons of water daily inside their home for their needs, producing wastewater. This contaminated water is unsuitable for usage, but is cleanable. Water is first obtained from a river, sent to a facility for cleaning, then to homes via underground pipes. There is a medium that all water must return to: the treatment facility. A multistep process occurs to ensure cleanliness. Water is brought into a chamber where larger pieces of debris are filtered through coarse screens, the finer remains of sediment are sent to landfills before the water moves to a settling tank to separate greases and solids. Afterwards, microorganisms clean the organic matter residue. Then water is disinfected with ultraviolet light, killing remaining harmful bacteria, before being post-aerated to flow back into the river.

The region's water systems consist of infrastructures that manage water resources, one of which being wastewater treatment critical for water throughout our great state. From fishing at Lake Peachtree to the pond at Planterra Ridge Golf Course that I pass everyday, these local waters are supplied by our region's water systems. First, the water in rivers is more voluminous. The clean wastewater naturally slips back into the stream without the need for assimilation. Because the water is pristine, it helps regulate the quality of water. This provides protection against diseases and ensures safe water for wildlife. Wastewater treatment facilities promote water sustainability and public water safety, making it an essential part of our region's water systems.

The value of water can never be underestimated, but we can put it into perspective: it is important for us and all life. The volume of water on Earth is absolute, but through water treatment, water can be returned through outfalls and diffusers. This ensures that the water returns steadily, not suddenly, building river and reservoir resiliency during droughts and normalizing their volumes during hotter seasons. Returning water from the

wastewater facilities keeps the Chattahoochee River Basin flowing full of laughter and filled with memories through recreational activities, such as tubing, the highlight of my summers.

Wastewater management systems, as trivial as they may seem, are actually a world of vitality for everything water. The treatment process is one that is thought out with the highest consideration, and they should be prioritized because they benefit our region's water systems and the water sources they use.

In conclusion, wastewater management systems are crucial to our water, playing an essential part of our lives.