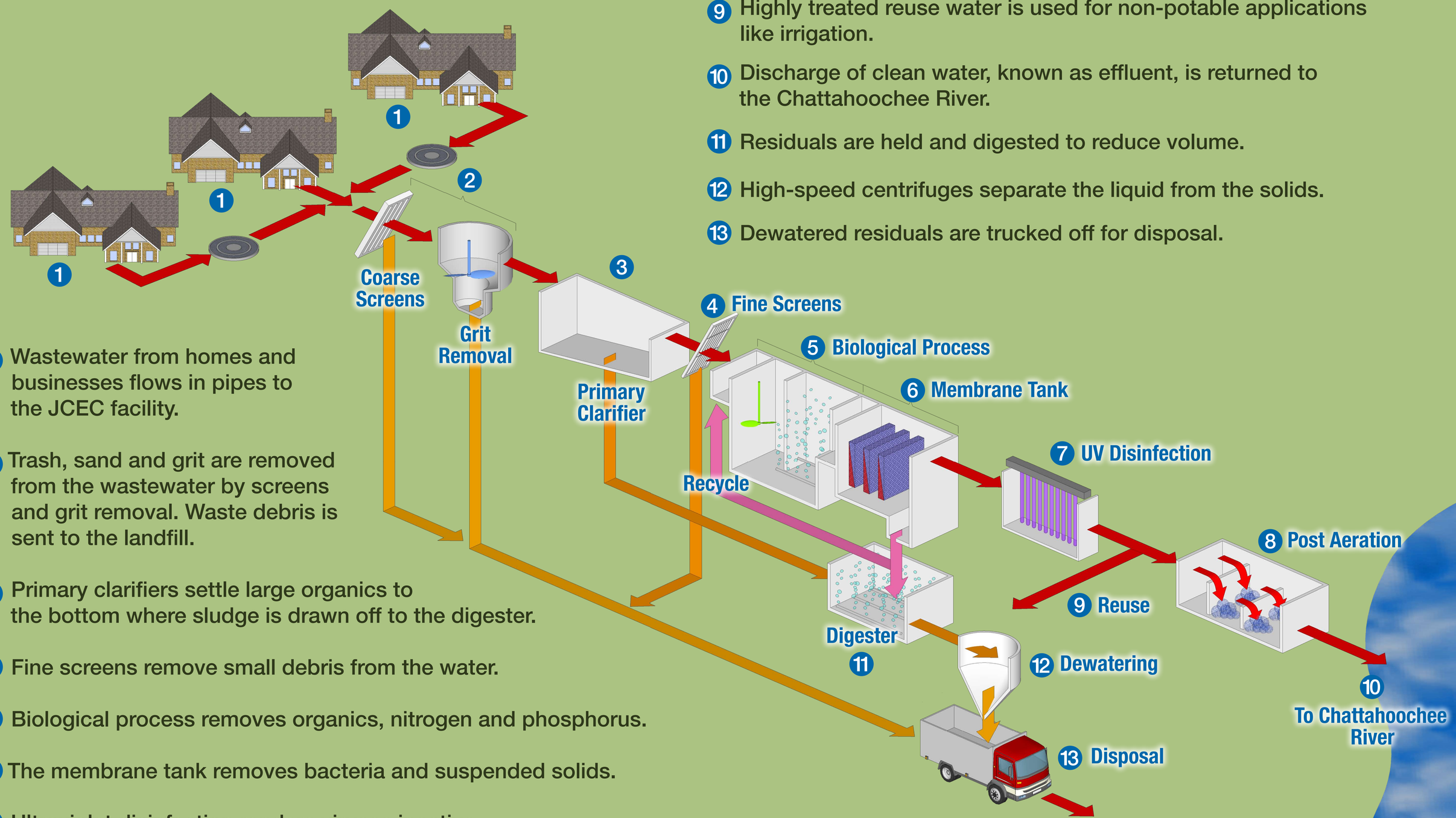
Treatment Process Overview

This figure shows the overall treatment process used at the JCEC.

Johns Creek Environmental Campus

FULTON COUNTY



1. Wastewater from homes and businesses flows in pipes to the JCEC facility.
2. Trash, sand and grit are removed from the wastewater by screens and grit removal. Waste debris is sent to the landfill.
3. Primary clarifiers settle large organics to the bottom where sludge is drawn off to the digester.
4. Fine screens remove small debris from the water.
5. Biological process removes organics, nitrogen and phosphorus.
6. The membrane tank removes bacteria and suspended solids.
7. Ultraviolet disinfection renders viruses inactive.
8. Water flows through post aeration to raise the oxygen level.
9. Highly treated reuse water is used for non-potable applications like irrigation.
10. Discharge of clean water, known as effluent, is returned to the Chattahoochee River.
11. Residuals are held and digested to reduce volume.
12. High-speed centrifuges separate the liquid from the solids.
13. Dewatered residuals are trucked off for disposal.

Brown AND Caldwell