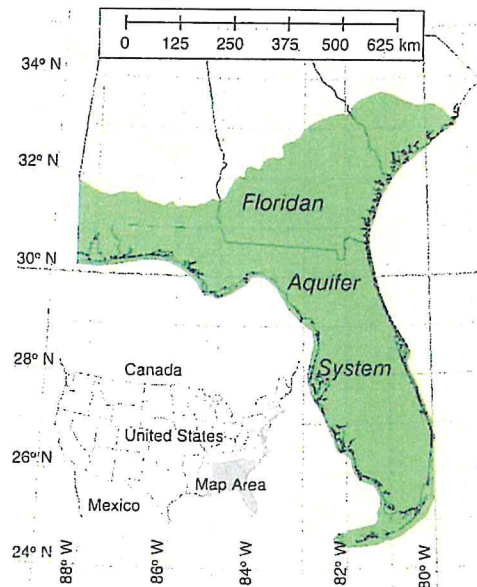


WATER TREATMENT CHALLENGES

The water source for Lowndes County is the Floridan aquifer, a large underground water body embedded in limestone hundreds of feet below the ground surface. The aquifer is expansive and covers parts of Georgia, Alabama, South Carolina, and all of Florida.



There are areas in Lowndes County along the Withlacoochee and Alapaha Rivers where the river waters seep through fractures in the limestone allowing naturally occurring organic matter in the rivers to reach the Floridan aquifer. Groundwater in these areas is referred to as “groundwater under direct influence” (GWUDI) of surface water.

When public drinking water wells are drilled into these areas, there are often problems where the naturally occurring organics react with chlorine injected into the water system for disinfection purposes resulting in the formation of trihalomethanes (TTHMs) and halo-acetic acids (HAAs). These chemical compounds at certain concentrations and temperatures in drinking water can be health hazards.

