

Case Study: Canebrake Water Treatment System

When Great River acquired the Canebrake Water Treatment System, the facility was operating under significant capacity and reliability constraints. Of the system's two wells, only one remained in service following the failure of the second well, leaving the entire system dependent on a **single source operating beyond its intended capacity.** At the time of acquisition, the system was under a capacity limitation, restricting its ability to support additional demand and underscoring the need for immediate infrastructure investment.

To address these challenges, Great River worked in close coordination with the Mississippi State Department of Health to develop and implement a comprehensive modernization plan. The company **invested $1.5 million** to restore system reliability, increase capacity, and improve water quality for the community's 1,032 connections.

The project included modernization of the treatment equipment, system controls, and site infrastructure. Key improvements included new disinfection facilities, upgraded chemical feed systems. enhanced security and real-time monitoring capabilities, and expanded system redundancy. A central component of the project was the construction of a new, upsized well, restoring lost capacity and ensuring the system could reliably meet current demand and future growth requirements.

Completed in 2025, the improvements **lifted capacity constraints,** strengthened operational reliability, and enhanced overall system performance. With a restored multi-well configuration and modernized infrastructure, the Canebrake system is now positioned to provide stable, compliant, and sustainable water service.

Today, the upgraded facility reflects Great River's commitment to addressing critical infrastructure limitations, resolving long-standing system constraints, and investing in long-term reliable service for the communities it serves.