



Before



Case Study: Mapaville Meadows

After years of violations and aging equipment, Confluence Rivers brings overdue upgrades to Mapaville Meadows. Built in the early 1980s and serving just nine connections, the Mapaville Meadows wastewater system had long struggled with persistent compliance issues. For years, the facility recorded permit violations for BOD, E. coli, and ammonia—markers of ineffective treatment that posed a risk to public health and the environment. Despite having adequate capacity, the plant suffered from poor aeration design, unreliable disinfection, and deteriorating infrastructure that undermined its overall performance.

At the time of the acquisition, the system operated with a single blower, a non-functional chlorine tablet feeder, and undersized clarifiers that regularly experienced washout. All process piping was above ground, made of plastic vulnerable to sunlight and mechanical failure. These vulnerabilities left the system ill-equipped to meet regulatory standards or reliably serve its customers.

After



After acquiring the facility, Confluence Rivers initiated a focused rehabilitation effort to bring the system back into compliance. A new blower was installed to improve aeration, accumulated solids were removed from treatment units, and the aeration system was redesigned to support proper oxygen transfer. Plastic piping was replaced with durable stainless steel, and remote monitoring equipment was added to provide real-time performance data. Repairs and replacements were made to clarifier equipment to improve solids handling and prevent washout.

Further upgrades are currently underway, including the installation of a new chlorine tablet feeder and contact chamber to provide consistent disinfection—one of the system's most critical needs.

By prioritizing reliability, safety, and compliance, Confluence Rivers' improvements to Mapaville Meadows reflect a guiding principle: no matter the size, every community deserves clean water and responsible wastewater management.