CASE STUDY - GLEN MEADOWS SEWER SYSTEM

Confluence Rivers acquired the Glen Meadows wastewater system in December 2022, along with the neighborhood's drinking water system, bringing both under regulated, professional operation. The neighborhood's extended aeration treatment plant, built from precast concrete tanks and designed to treat 80,000 gallons per day, serves 226 connections and approximately 650 residents and discharges treated effluent to a tributary of Crooked Creek. At acquisition, key parts of the treatment process needed attention. The aeration system, which supplies the oxygen essential to biological treatment, needed to be rebuilt, and the plant's valves and ventilation were worn. Wipes and other debris entering the system were also clogging the plant's air lifts, which move wastewater through the treatment process. The plant also had no remote monitoring and no way to keep treating wastewater during a power outage.

Confluence Rivers moved quickly to strengthen oversight and treatment. Within weeks of acquisition, remote monitoring was installed, giving operators real-time visibility into plant performance around the clock. Crews then rebuilt key aeration equipment, installing new blowers and rebuilding the diffusers and return-sludge piping to restore consistent, effective treatment. Influent grinder pumps were installed as an interim measure to break up debris and keep the air lifts from clogging, valves were replaced, and new ventilation was added. A new flow meter and V-notch weir now accurately measure every gallon of wastewater the plant treats.

Confluence Rivers has invested over $1.9 million in the Glen Meadows wastewater system through acquisition, system improvements, and ongoing operations. A major improvements project now underway builds on that work. A new bar screen will permanently remove debris before it enters the treatment process, the influent and aeration systems will be further upgraded, and a new pump station will allow the plant to keep treating wastewater through power outages. With these upgrades, the Glen Meadows plant is positioned to protect Crooked Creek and provide safe, reliable service to the neighborhood for years to come.

Facility at Acquisition



Original aeration tanks and air piping, showing corrosion



Blower building before ventilation upgrades