



Before



### Case Study: Terre Du Lac Three-Cell Lagoon

At the time of acquisition, the three-cell lagoon serving part of the Terre Du Lac community was in poor condition and facing a range of operational and environmental challenges. The first cell was nearly filled with sludge, and the facility was routinely exceeding permit limits for ammonia and E. coli. Inoperable aerators further limited treatment performance, and with stricter standards for BOD and TSS on the horizon, the lagoon's deteriorating condition posed an increasing threat to both public health and water quality.

Additional site concerns included damaged berms, deteriorating fencing, and the lack of flow monitoring or backup power—factors that further compromised the reliability of the system.

After



Confluence Rivers responded with a comprehensive plan to restore stability and bring the lagoon system back into compliance. Berms were repaired and reinforced with rock armoring to prevent erosion, and perimeter fencing was replaced following tree removal. A new electrical panel was installed, and an advanced attached growth treatment system was added to enhance biological treatment. Enzyme treatment was also used to reduce sludge levels by approximately six feet—dramatically increasing lagoon capacity and treatment effectiveness.

With these targeted improvements, the Terre Du Lac three-cell lagoon is now stabilized, significantly improved in performance, and positioned for long-term environmental compliance.