ENTEX Technologies

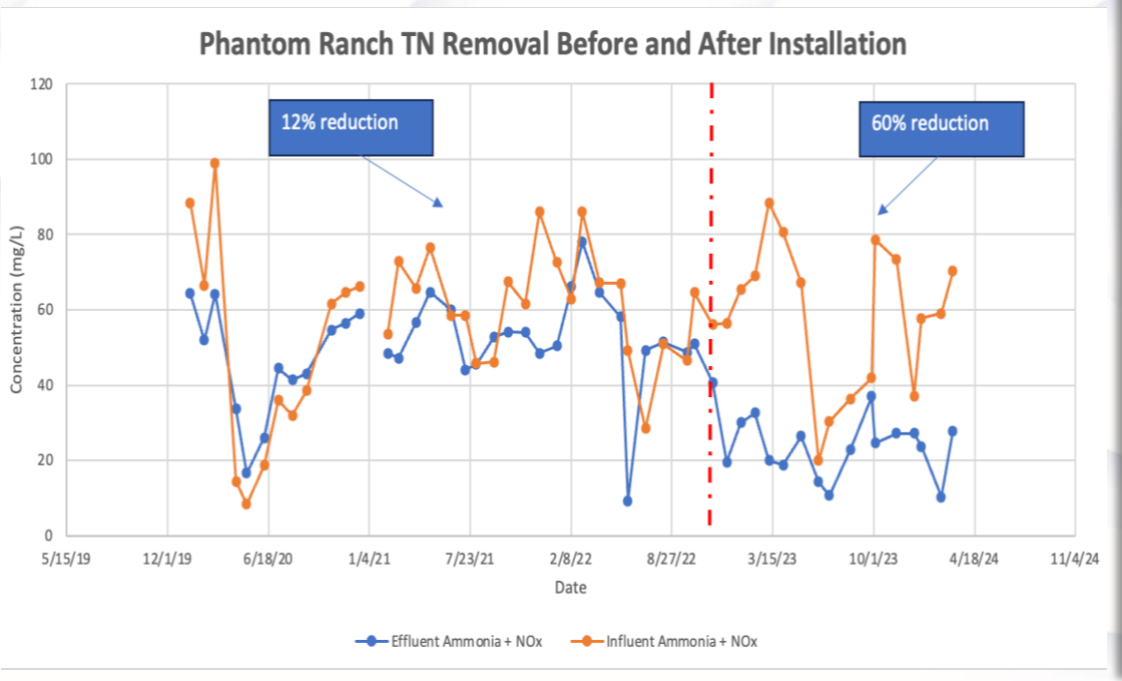
Engineering Clean Water Solutions

WavTex™ Case Study

Phantom Ranch, AZ

The Phantom Ranch facility in the Grand Canyon, AZ (5,400 gpd) when faced with increased flowrates, was upgraded with two of Entex's IFAS WavTex™ modules. This provided the necessary microbiology for removing BOD and ammonia while eliminating the need for new tankage at the remote facility. The WRF effluent targets are ≤ 2 mg/L NH_3-N and ≤ 5 mg/L BOD_5.

Though only nitrification was required for this upgrade, increased levels of simultaneous denitrification in a single aerobic basin were observed. The graph below illustrates the significant reduction in total nitrogen (TN) levels achieved at the Phantom Ranch WRF before and after the installation date, shown visually on the graph via the red vertical line. The increased reduction of nitrogen levels by 60% highlights the potential for TN removal retrofits in a single aerobic basin using hybrid media systems, such as WavTex.



Application

Highly space-constrained and remote retrofit in Grand Canyon for increased ammonia removal

Entex Solution

Two WavTex™ modules installed in existing tank

Results

60% reduction of TN in single-aerated tank!

No ongoing maintenance required onsite