

Alpha NutriFilter Filtration System - Removal Rates and O&M

Demonstration Started: July 2013
 Demonstration Completed: August 2013

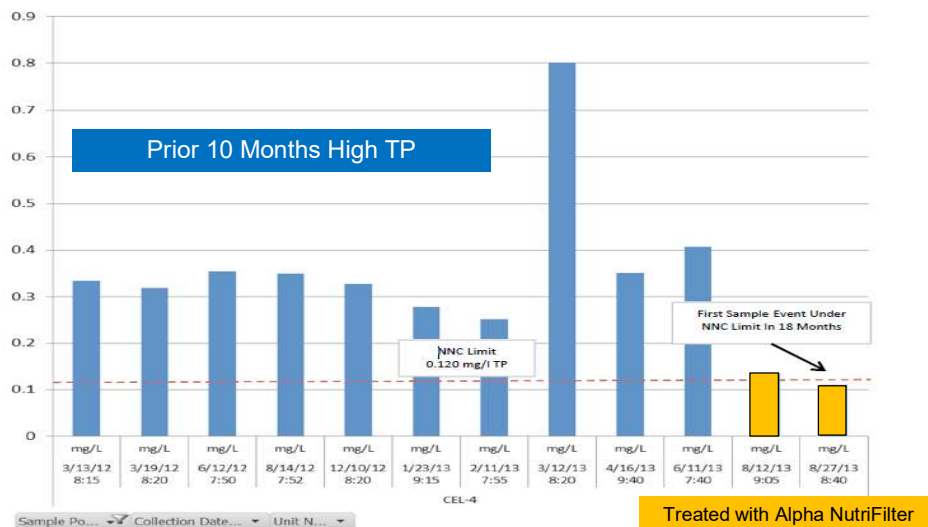
Celebration, Florida - RCID Testing - CEL - 4 Pond Removal History & Projections

Approx 1 Acre - 1.35 mm gallons - Average Depth Approx 4 ft - Max Depth 7.4 ft

Calculation of Annual Load and Removal Rates	
Amount of Water Treated Annually	78,840,000
TP Concentration (mg/l) - Avg Pre-Existing Condition	0.374
Annual TP load (lbs per year)	244.7
TP Concentration - Reduction Acheived (mg/l)	0.120
Reduction Percent	68%
Projected Annual TP to be Removed (lbs)	166.4

Description	Qty/Yr	Each	Total
Filter Replacement (All Chambers)	2	\$199	\$398
Monthly Electricity	12	\$129	\$1,548
TOTAL			\$1,946
TOTAL Operational Cost (5 Year)		\$9,730	
Average Annual Cost (5 Year)		\$1,946	
Average Monthly Cost		\$162	
Average Annual Cost/Pound of TP Removed		\$11.69	

Year1	Year2	Year3	Year4	Year5
\$398	\$398	\$398	\$398	\$398
\$1,548	\$1,548	\$1,548	\$1,548	\$1,548
\$1,946	\$1,946	\$1,946	\$1,946	\$1,946



Field Trials of PhosFilter Adsorption System For Reduction Of Total Phosphorus (TP) In Residential Stormwater Pond. Numerous Modifications/Adjustments Were Made To The Intake Screen (Algae/Debris Ingestion Issues) Over Several Months. System Fully Operational In Late July 2013. August 27, 2013 Sample Was In Compliance With NNC For First Time In 18 Months. Samples Collected From Pond Outfall To Canal Receiving Water.