

Observed Water Quality Improvements Since The Construction Of The Lake County Water Authority's Nutrient Reduction Facility And Future Facility Upgrades

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Apopka – Beauclair Canal & NuRF

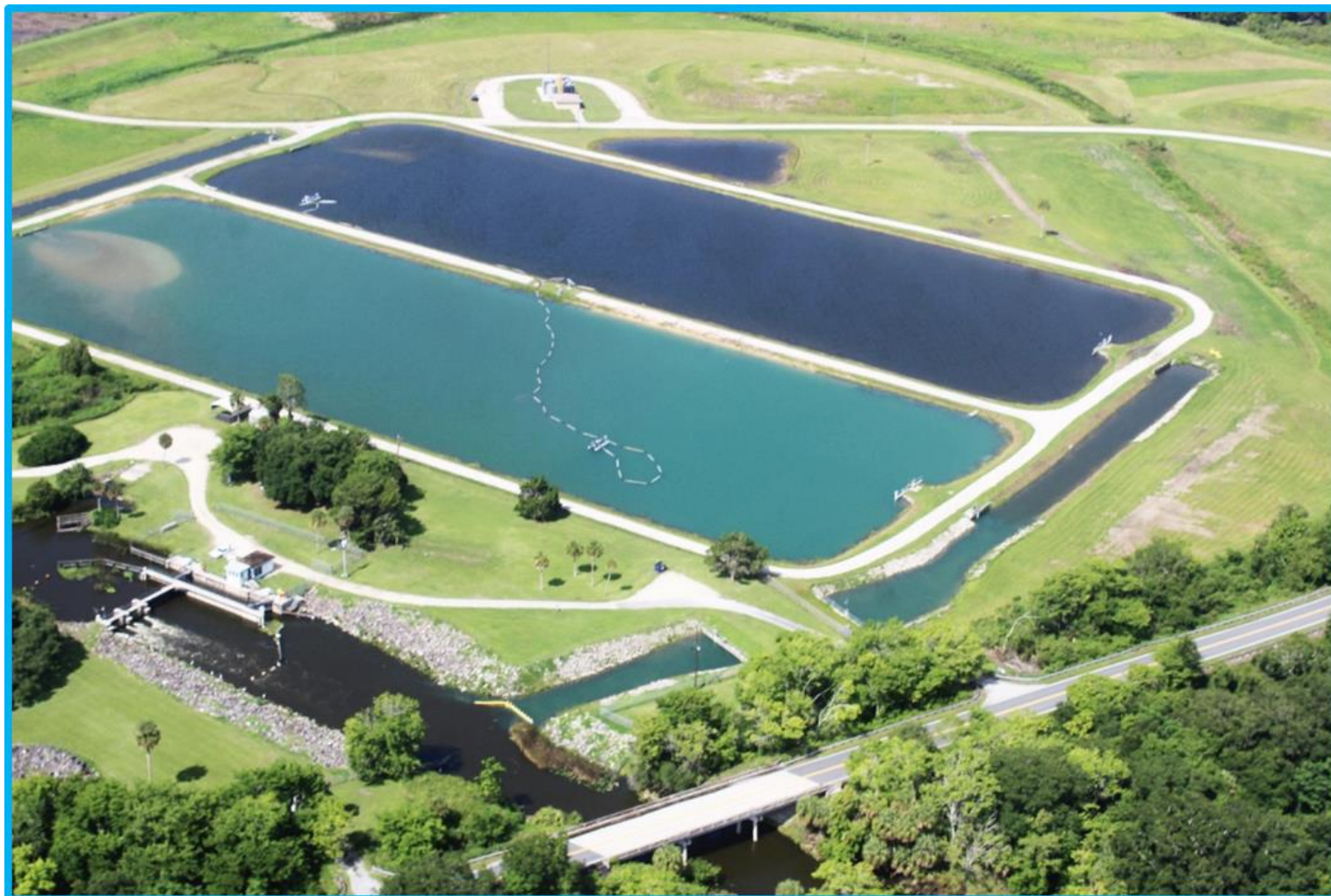


Major Technology/Processes On-Site

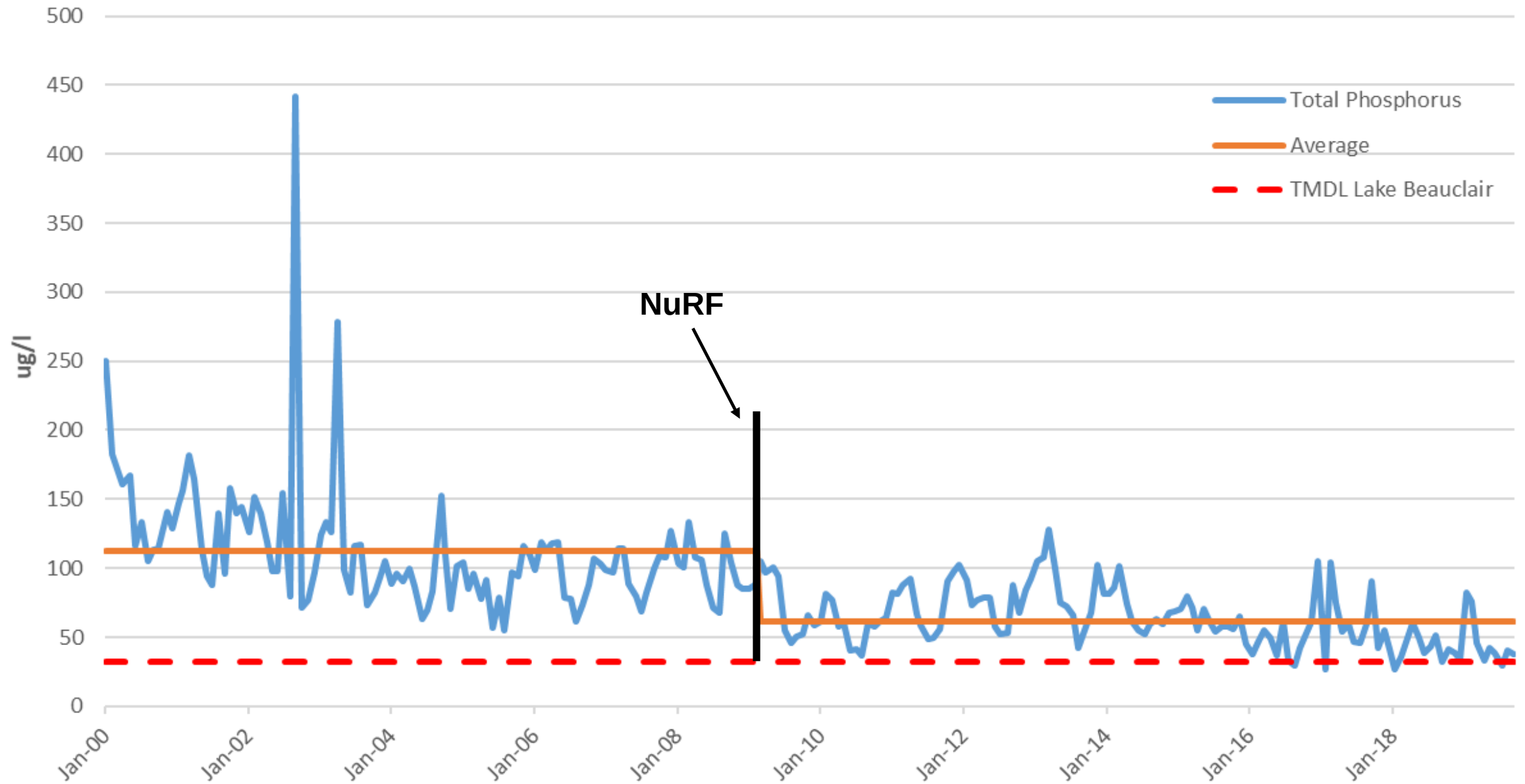


NuRF Treated Flow

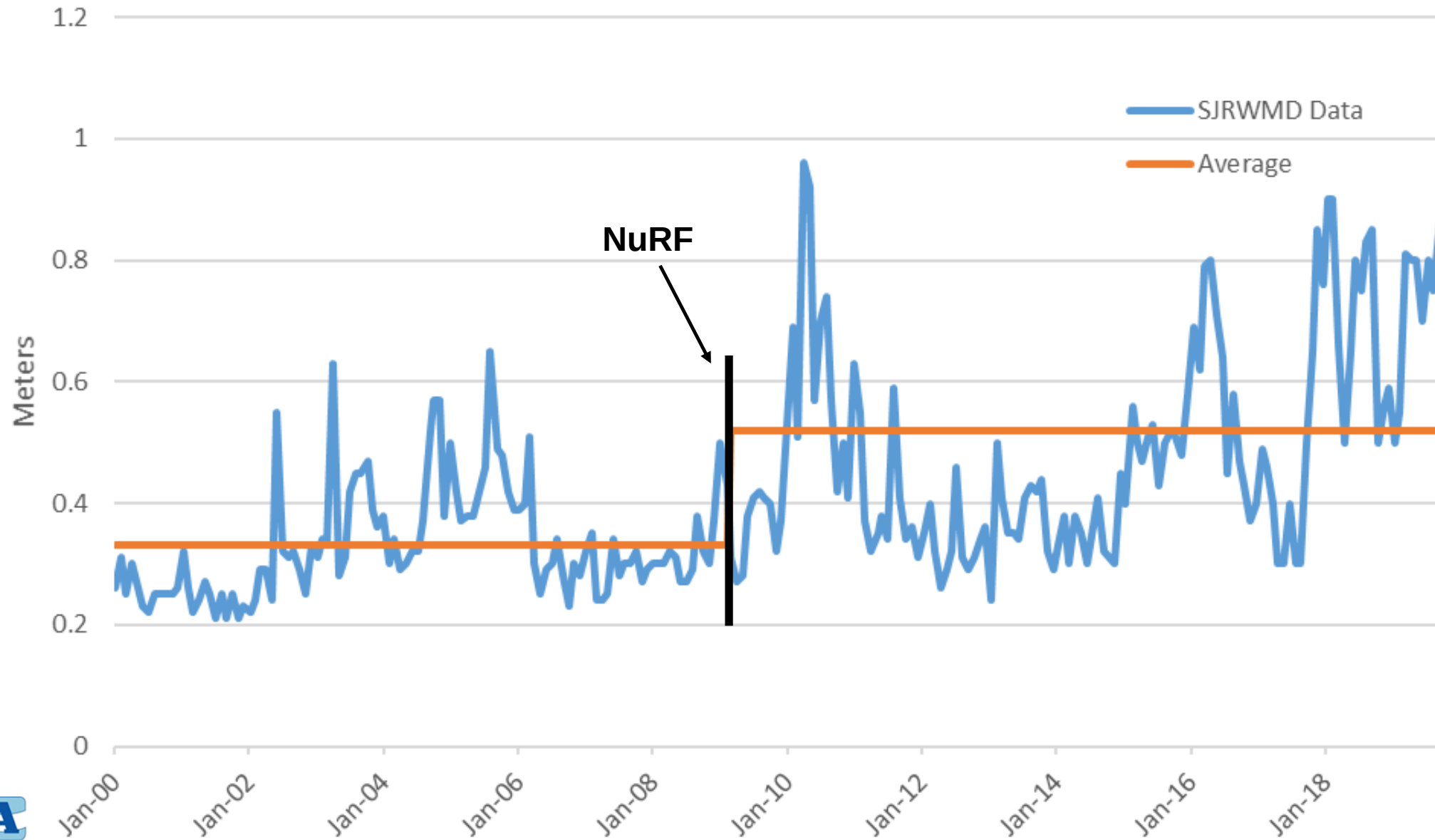
- Pond dimension (each)
 - 6.5 surface acres
 - 18 feet deep
- Since March 2009
 - Water Treated
 - 68 billion gallons
 - Total Phosphorus removed
 - 35,000 pounds
- Total Phosphorus
 - Lake Apopka 90 ppb
 - NuRF outflow 37 ppb
 - 2020
 - NuRF outflow 22 ppb
 - Lake Beauclair TMDL 32 ppb



Total Phosphorus



Secchi Depth



Summary

- Lake Apopka flood discharge
 - Water quality parameters trends improving
- Combined efforts
 - Local governments
 - SJRWMD
 - LCWA
- Lake Apopka TMDL 55 ppb TP
- Lake Beauclair TMDL 32 ppb TP
- What's this mean?
 - NuRF will need to remain operational for the foreseeable future
 - 'NuRF 2.0' upgrade
 - Treatment technologies
 - Process technologies
 - Dewatered solids storage capabilities



Capital Improvements and Estimated Costs

Location	Description	Costs
Settling Ponds	Dredges & Pipeline	\$687,000
Dewatering Facility	Tank Rehabilitation	\$100,480
Dewatering Facility	Drainage Improvement	\$70,875
Dried Solids Area	Access Improvement	\$324,885
Dewatering Facility	Additional Centrifuge	\$1,575,000
Dewatering Facility	New Centrifuge Building	\$618,150
Dewatering Facility	Additional Floc Tank	\$335,000
Inflow Channel	Debris Entering Facility	\$391,640
Inflow Channel	Alum Injection	\$146,350

- Estimated capital improvement costs currently total \$4.5 million
- LCWA Board has approved approximately \$1.4 million in improvements
- LCWA searching for cost-sharing opportunities to support upgrades