



SOXPRO

Improved Water Quality

soxproflorida.com

Developed, Manufactured & Distributed by
SOX Erosion Solutions & SePRO Corporation



New permitted development projects must adhere to updated regulations that mandate the reduction of phosphorus (P) and nitrogen (N) in stormwater runoff to prevent contamination of public waterways.

The Requirements



Permitted development falls into several categories defined by FL-DEP.
Minimum reduction before entering public waterways:

Must be less than, or equal to, predevelopment OR...

	All Sites Not Impaired	Outstanding FL Waters	Impaired Waters	Impaired OFWs	Redevelopment
P PHOSPHORUS	80% REDUCTION	90% REDUCTION	80% REDUCTION	95% REDUCTION	80% REDUCTION
N NITROGEN	55% REDUCTION	80% REDUCTION	80% REDUCTION	95% REDUCTION	45% REDUCTION



The Impact



The new rule forces all audiences to recognize environmental responsibility.



Elected Officials

- Benefit from new BPs and bipartisan bill approval.
- Constituents may be unhappy about costs.
- Balancing environmental concerns with economic development.

Agency Officials

- Enforceability and compliance with requirements.
- Developing REMEDY guidance for noncompliance.
- Managing resources and addressing technical challenges.

Engineers

- Educate staff on new rules.
- Develop multiple engineered choices and systems.
- Communicate plans to clients and permitting authorities.

Builders/Contractors

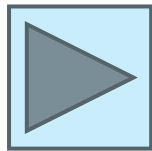
- Collaborate with engineers on cost-effective solutions.
- Assess and adjust practices and design standards.
- Address fines for non-compliance and permit issues.

Stakeholders





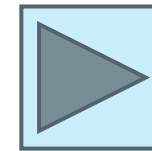
Erosion Control



SOX Erosion Solutions™ develops, manufactures and distributes a suite of environmentally focused, innovative, patented, bioengineered erosion control systems that immediately halt shoreline and hillside erosion.



Water Quality



SePRO Corporation is an **environmental restoration** company dedicated to **protecting, preserving, and restoring** nature. They provide water diagnostics and restoration technologies because everyone deserves clean, safe and enjoyable water.



SOXPRO

SOX Erosion Solutions and **SePRO Corporation** have partnered to develop a new technology, **SOXPRO**, in anticipation of the implementation of the new Florida Clean Waterways Act, Stormwater Rule.

5 Part System & How it Works



Bioengineered living shoreline and hillside stabilization



Formulated active agent to bind phosphorus & nitrogen



Regenerative system, making nutrients bioavailable



Lab Testing | SePRO Research Campus



SOXPRO underwent rigorous and controlled bench testing at SePRO's dedicated research campus in North Carolina, where testing was performed on both control and activation ponds.

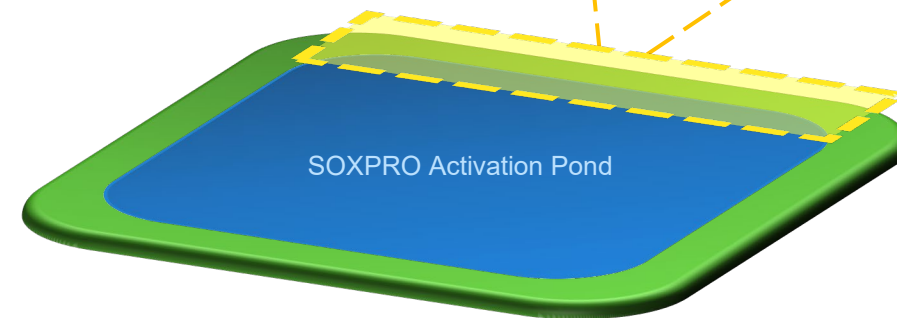


Lab Testing | SePRO Research Campus



A control pond was utilized, while **SOXPRO** was installed on the activation pond.

25%
of the activation
pond received
SOXPRO protection

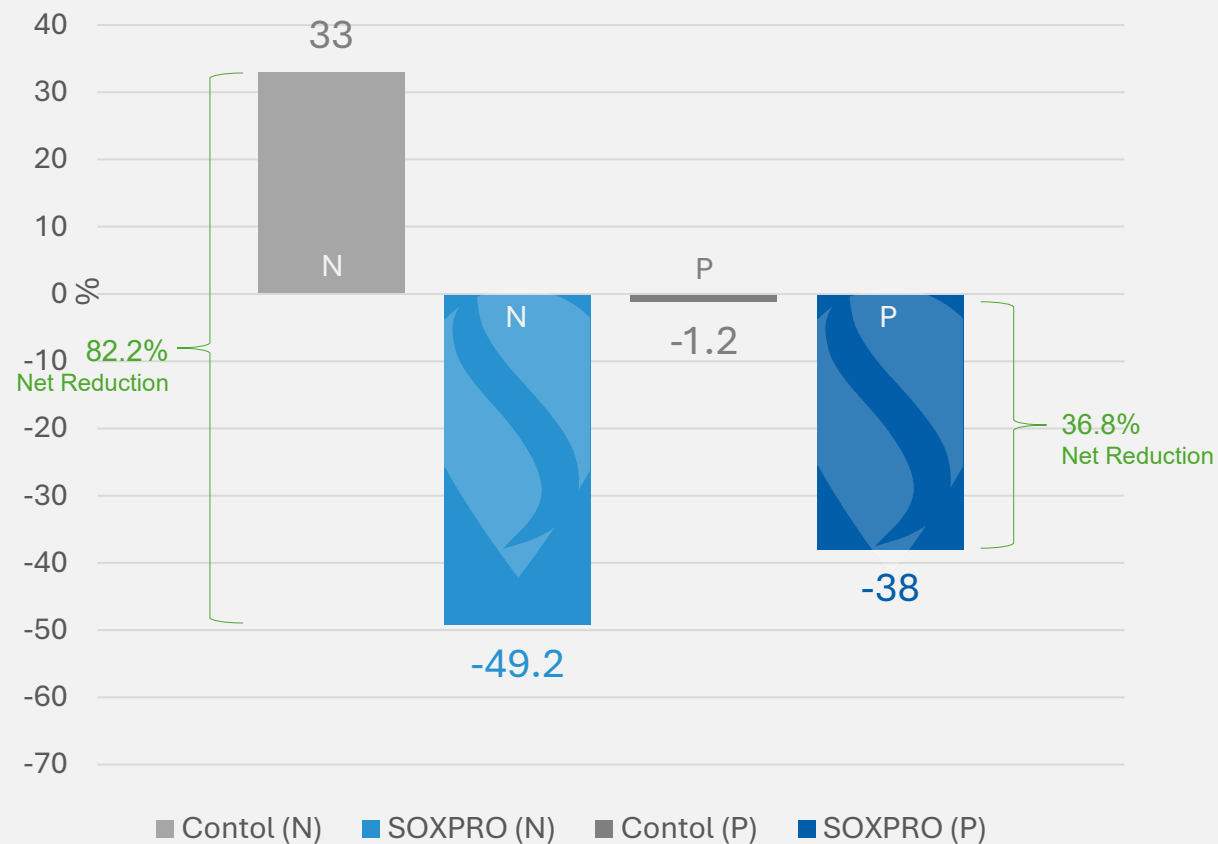


Lab Testing | SePRO Research Campus

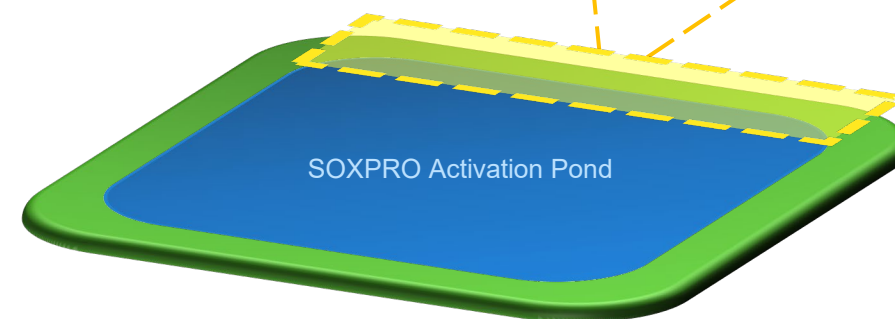


% of Change in Total Phosphorus & Nitrogen Load (lb/ac)

120 Days

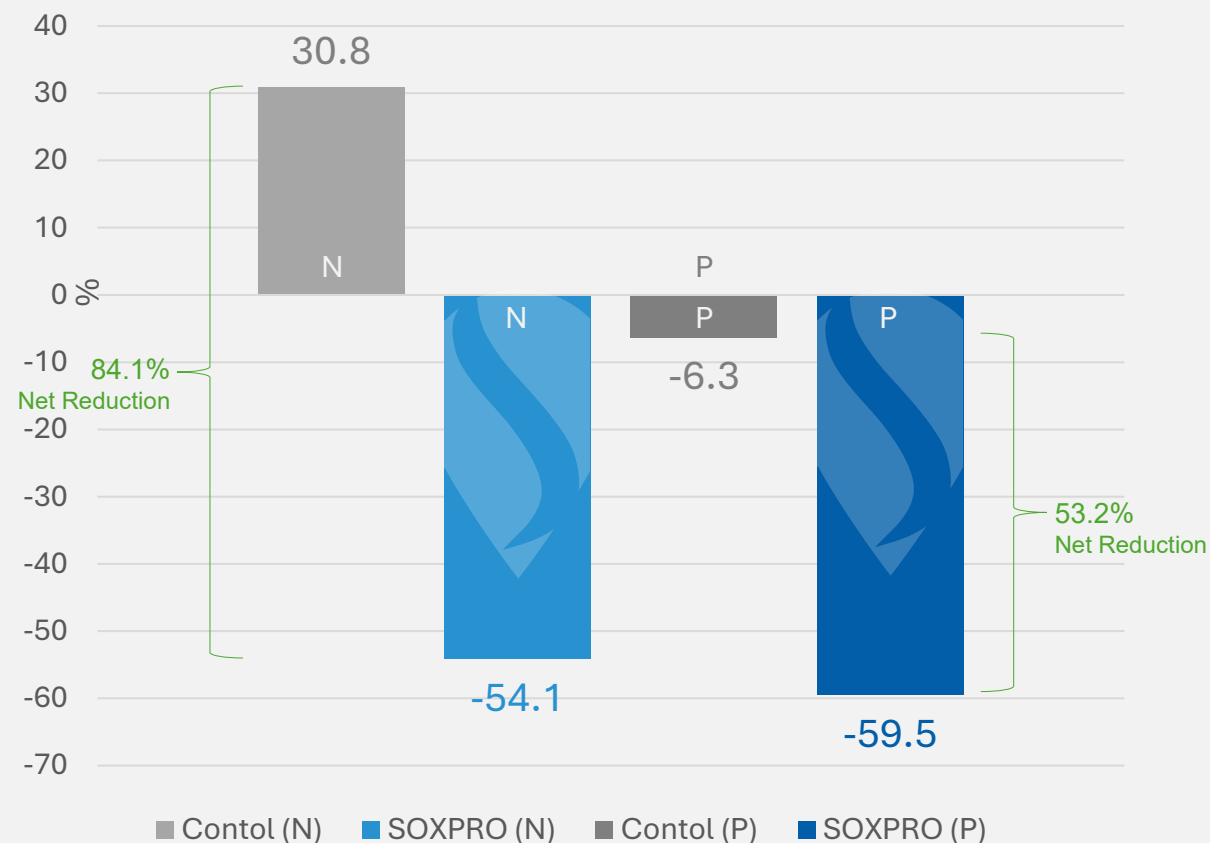


25%
of the activation
pond received
SOXPRO protection

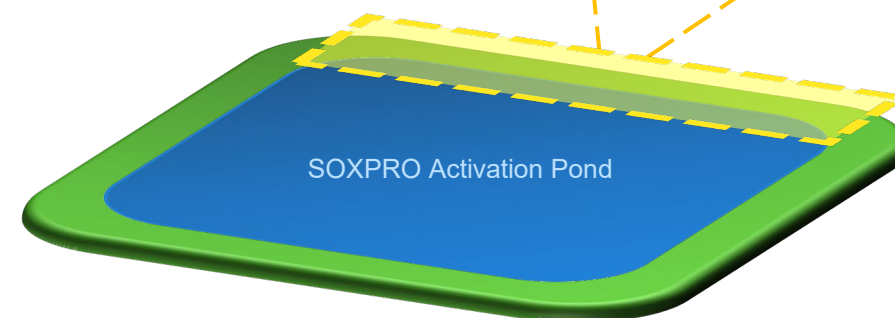


% of Change in Total Phosphorus & Nitrogen Load (lb/ac)

150 Days



25%
of the activation
pond received
SOXPRO protection



Field Testing | Active Construction Site



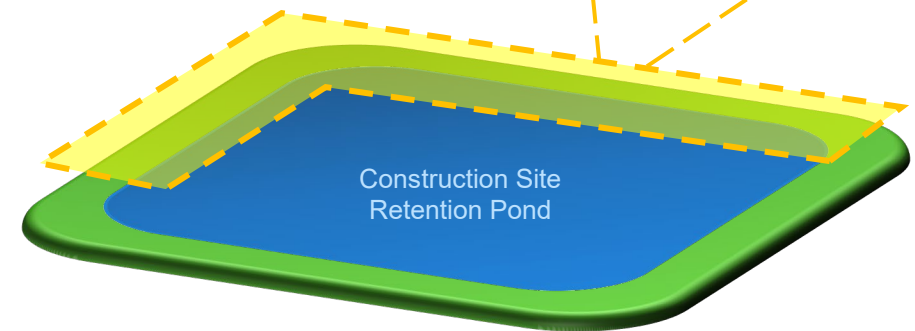
Following the lab tests in North Carolina, **SOXPRO** was field tested in Boca Raton, Florida, in collaboration with a new development under construction.

Field Testing | Active Construction Site



SOXPRO was installed on the site's retention pond during active construction of the new development.

50%
of the retention
pond received
SOXPRO protection

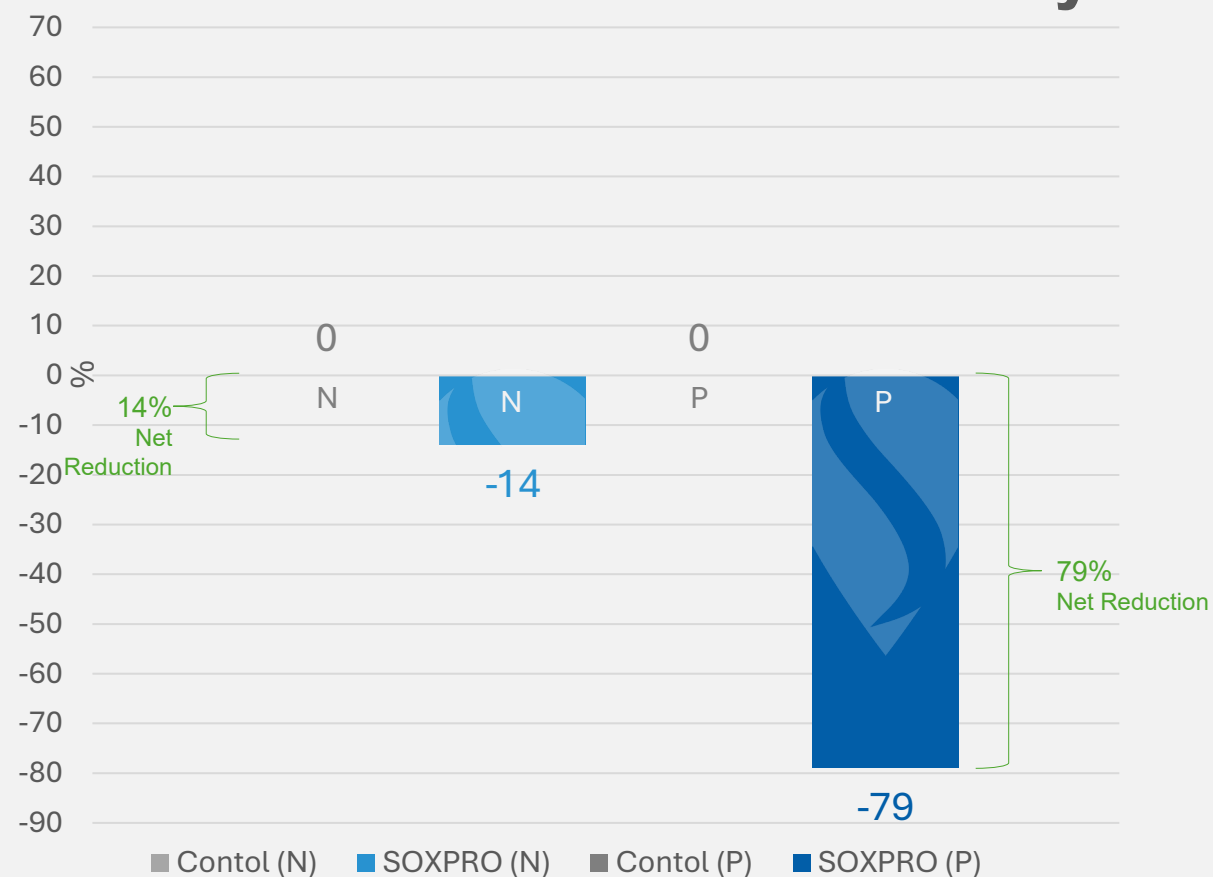


Field Testing | Active Construction Site

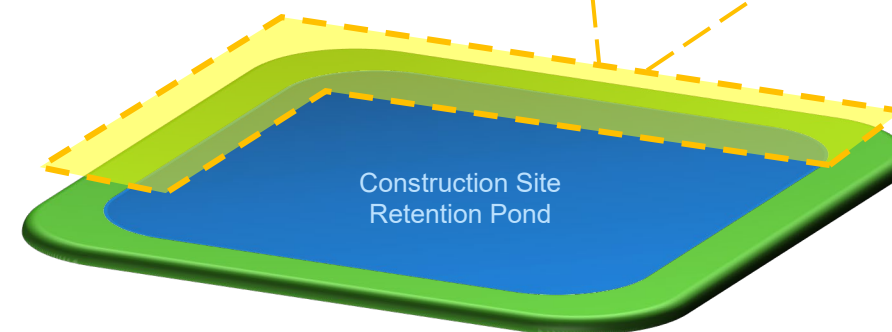


% of Change in Total Phosphorus & Nitrogen Load (lb/ac)

28 Days



50%
of the retention
pond received
SOXPRO protection

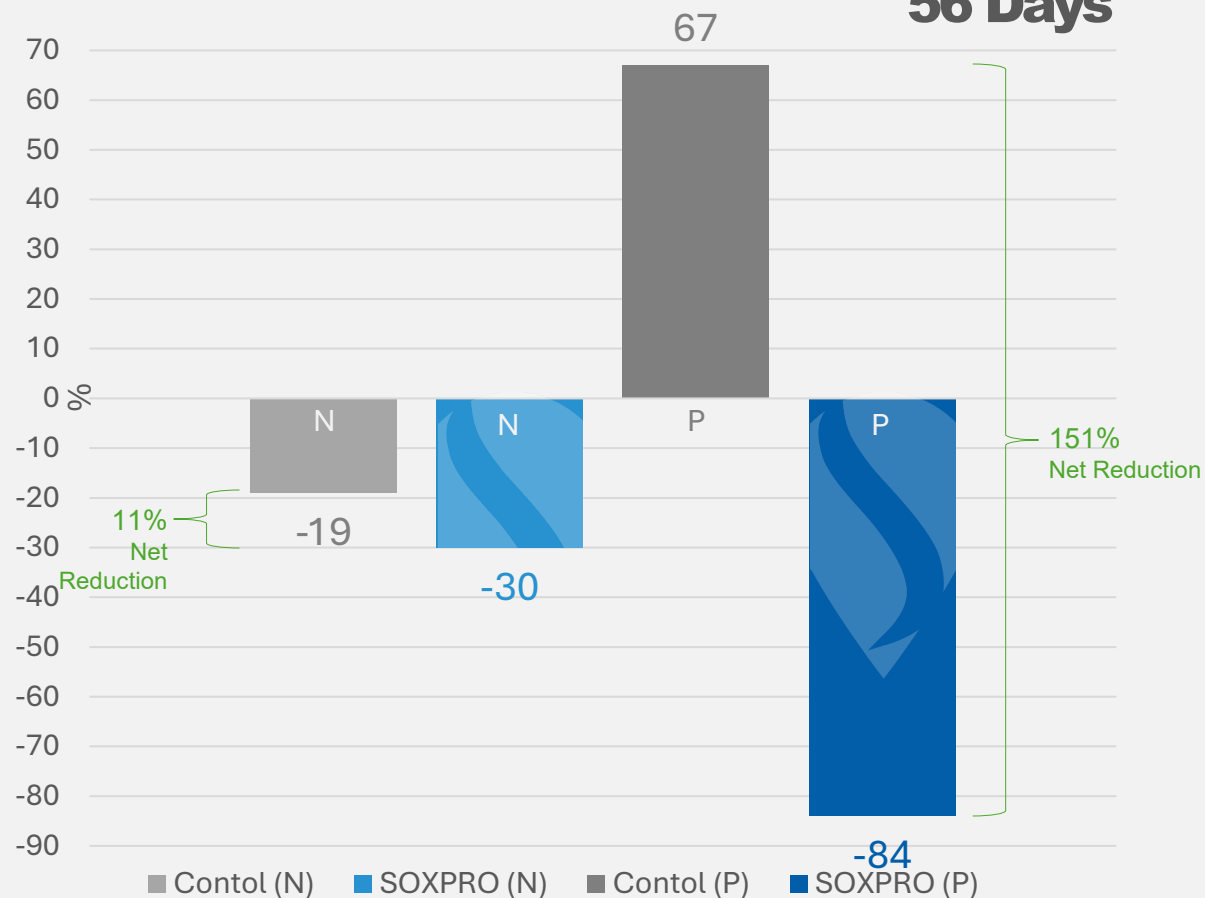


Field Testing | Active Construction Site

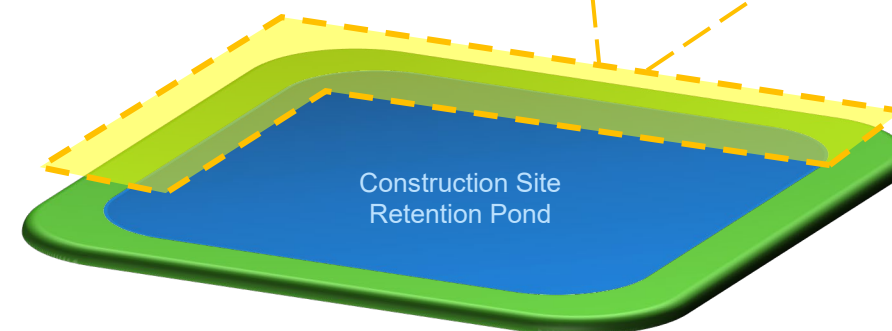


% of Change in Total Phosphorus & Nitrogen Load (lb/ac)

56 Days



50%
of the retention
pond received
SOXPRO protection



SOXPRO Meets FDEP Standards

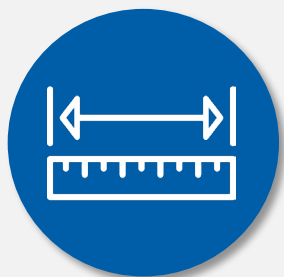


Total P BMP Train Calculation	
SOXPRO Load Reduction	0.617
Detention Time (221d)	0.8072
TOTAL LOAD REDUCTION: $(1 - ((1 - 0.617) * (1 - 0.8072))) * 100$	
92.6%	

Total N BMP Train Calculation	
SOXPRO Load Reduction	0.27
Detention Time (221d)	0.4290
TOTAL LOAD REDUCTION: $(1 - ((1 - 0.27) * (1 - 0.4290))) * 100$	
58.3%	

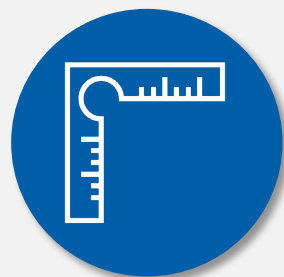
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Experience



1 MILLION+

Linear feet of **SOX** solutions installed



5 MILLION+

square feet of reclaimed land in the United States



44 STATES

served by **SOX** Regional Technical Experts



150+

Certified Service Providers in the **SOX** network.



410 ACRE

Campus with 32 ponds for product innovation & discovery



2200+

Water samples processed in the Algae Center of Excellence



50 STATES

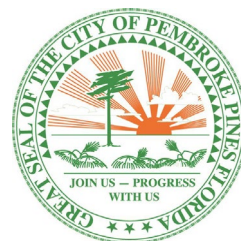
Served by **SePRO** Technical Specialists



1 MILLION+

Additional acres of land and water protected in 2024

Experience



SOX Project

St. Johns River Water Management District, FL
8,000 Linear Feet



PROBLEM



SOLUTION



OUTCOME



SOX Project | Olde Florida Golf Club, FL

Lakeside Shoreline Restoration



PROBLEM

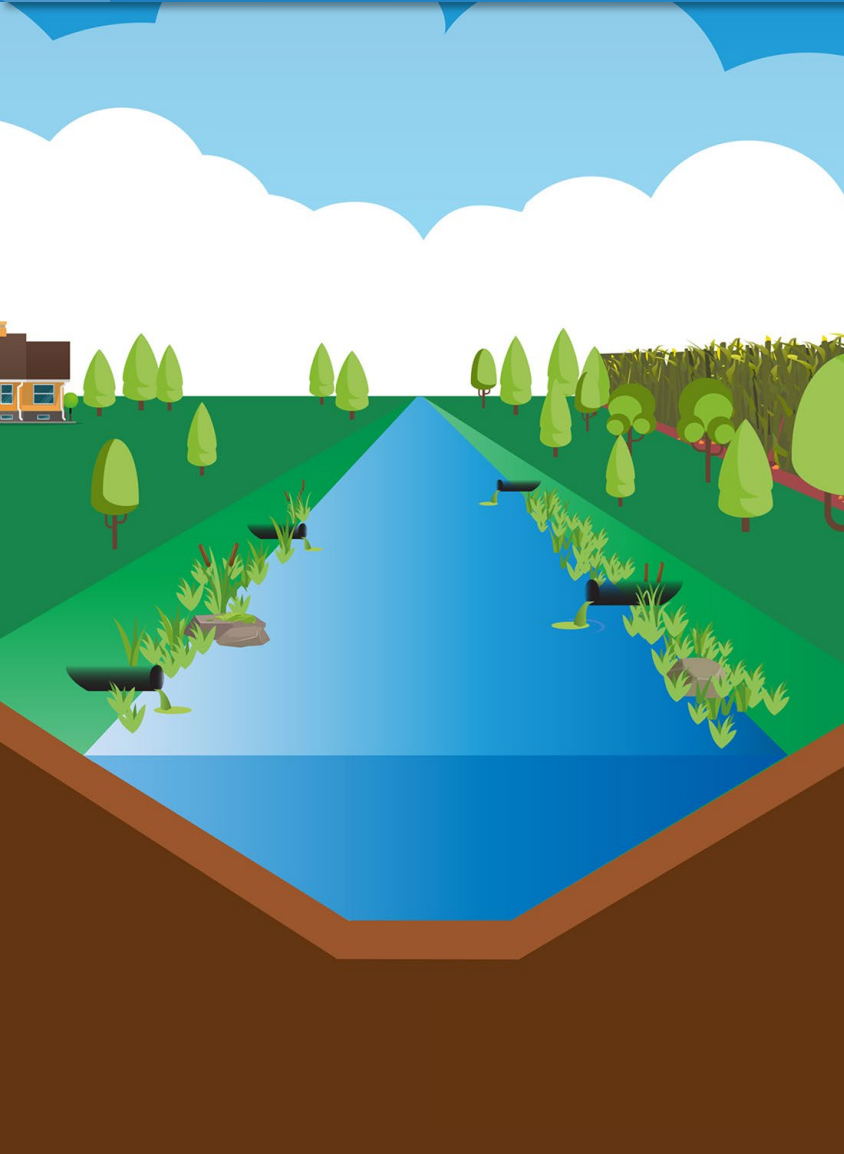


SOLUTION



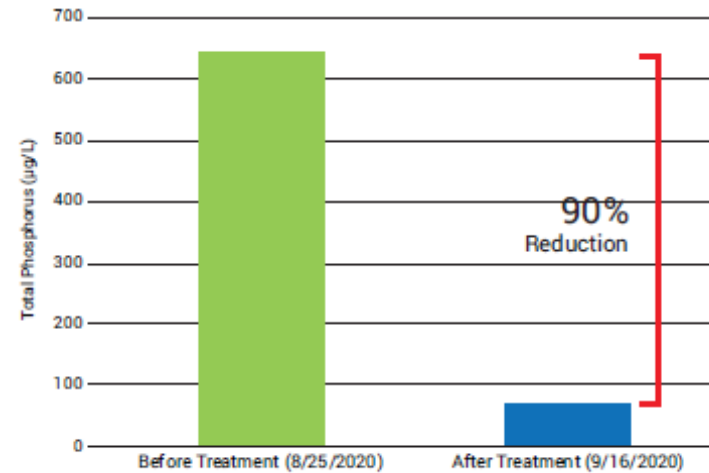
OUTCOME





Kitsap Lake, WA - Hypolimnetic Phosphorus

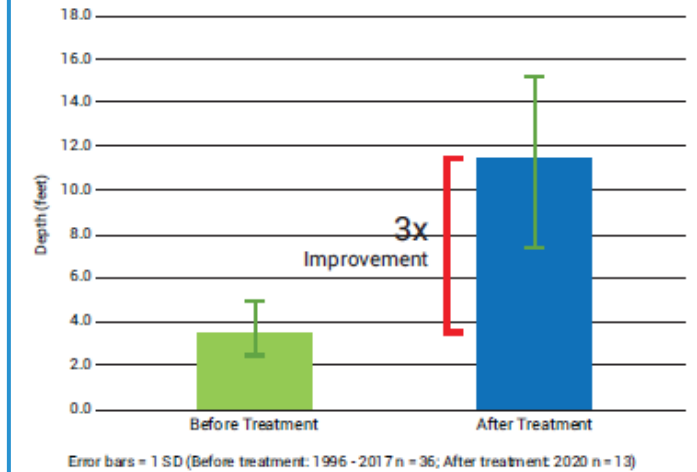
Before & After Phosphorus Mitigation Application



90% Reduction in Phosphorus

Kitsap Lake, WA - Average Water Clarity (secchi disc)

Before & After Phosphorus Mitigation Application



3x Improvement in Water Quality









SOXPRO

Improved Water Quality

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