



# NEW YORK: RESTORATION OF UNIVERSITY POND - PHOSPHORUS CHANGES

## STONY BROOK UNIVERSITY MAIN CAMPUS, STONY BROOK, NY

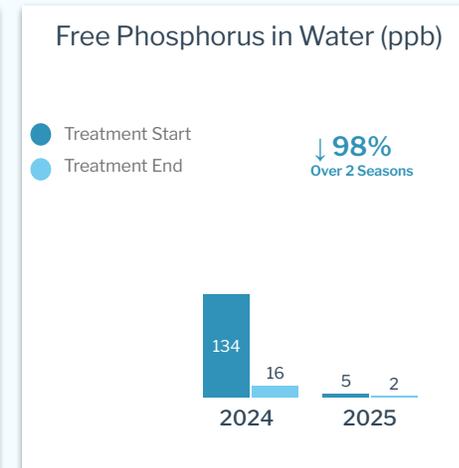
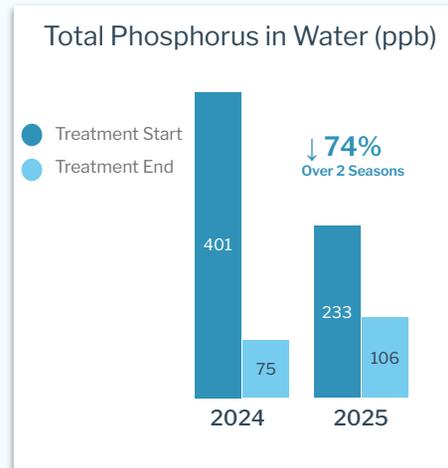
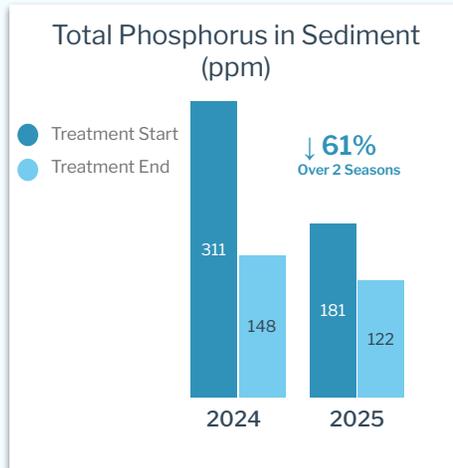
### BACKGROUND

In conjunction with Dr. Christopher Gobler, Distinguished Professor, Endowed Chair of Coastal Ecology and Conservation at Stony Brook University, the effects of TryMarine treatment on a hypereutrophic pond on Stony Brook's campus, have been intensively studied over the 2024 and 2025 seasons.

### KEY DETAILS

- ▶ Location: Central Campus , Stony Brook University, NY
- ▶ Size: 0.5 acre pond
- ▶ Period: 6/24 - 11/25 (seasonal breaks, Dec-April)
- ▶ Program: Rapid Muck Reduction

### KEY METRICS AND RESULTS



All phosphorus levels in sediment and water indicate significant reduction over the 2 treatment seasons. Changes were mostly sustained through a 6-month seasonal break, indicating persistent reduction in system phosphorus, not seasonal variation.

### TRYMARINE IMPACT

- ▶ Significant volume increase enhances capacity to naturally process high nutrient loads.
- ▶ TP Sediment: ↓ **61%**
- ▶ TP Water: ↓ **74%**
- ▶ Water Volume: ↑ **29.7%**

### BUBBLING EVIDENCE OF TRYMARINE WORKING



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### BATHYMETRIC SURVEY

- ▶ HYCAT sonar was used to map the bottom of the water body
- ▶ Relative water height was adjusted such that the water volume change is solely due to reduced sediment depth

### DEPTH MAPPING

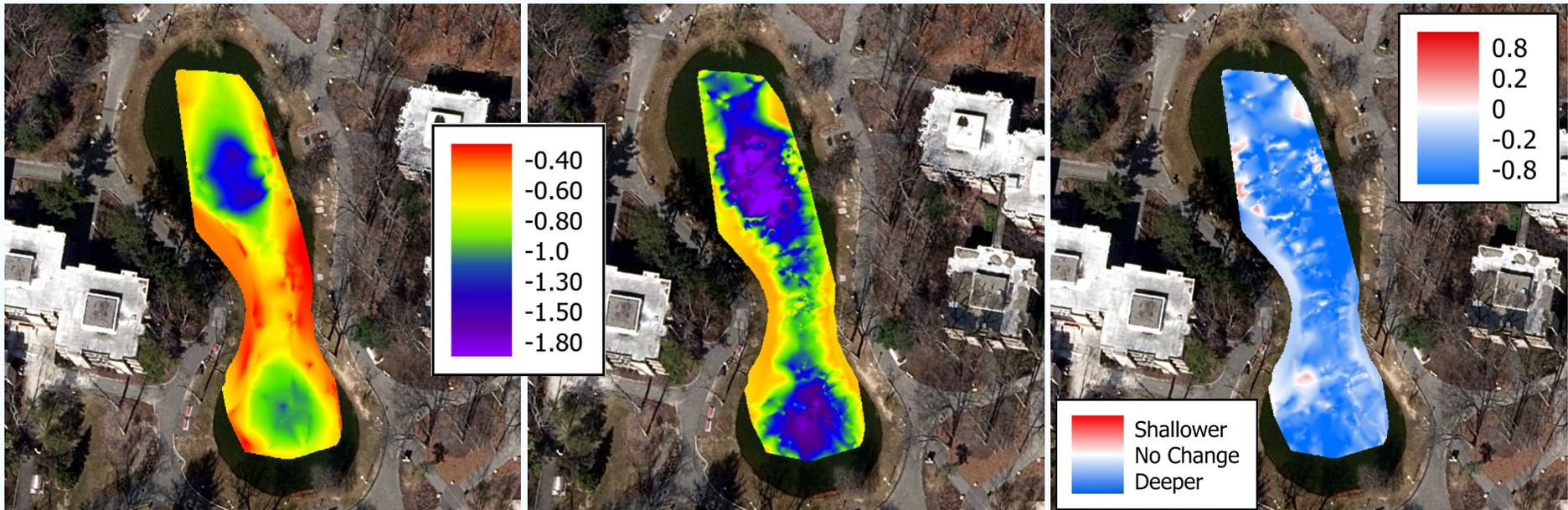
Over 2 Treatment Seasons\*:

- ▶ Pond Volume Increase: **+29.7%**
- ▶ Average Depth Increase: **+26 cm = 10.2"**

July 2024

October 2025

Change



Volume = 1641 m<sup>3</sup>  
Area = 1876 m<sup>2</sup>

Volume = 2129 m<sup>3</sup>  
Area = 1876 m<sup>2</sup>

Volume Change = +488 m<sup>3</sup>  
= **129,000 gallons**

\* Data collection and analysis performed by Stony Brook University