

Cottage Lake, WA P mitigation to Improve Water Quality

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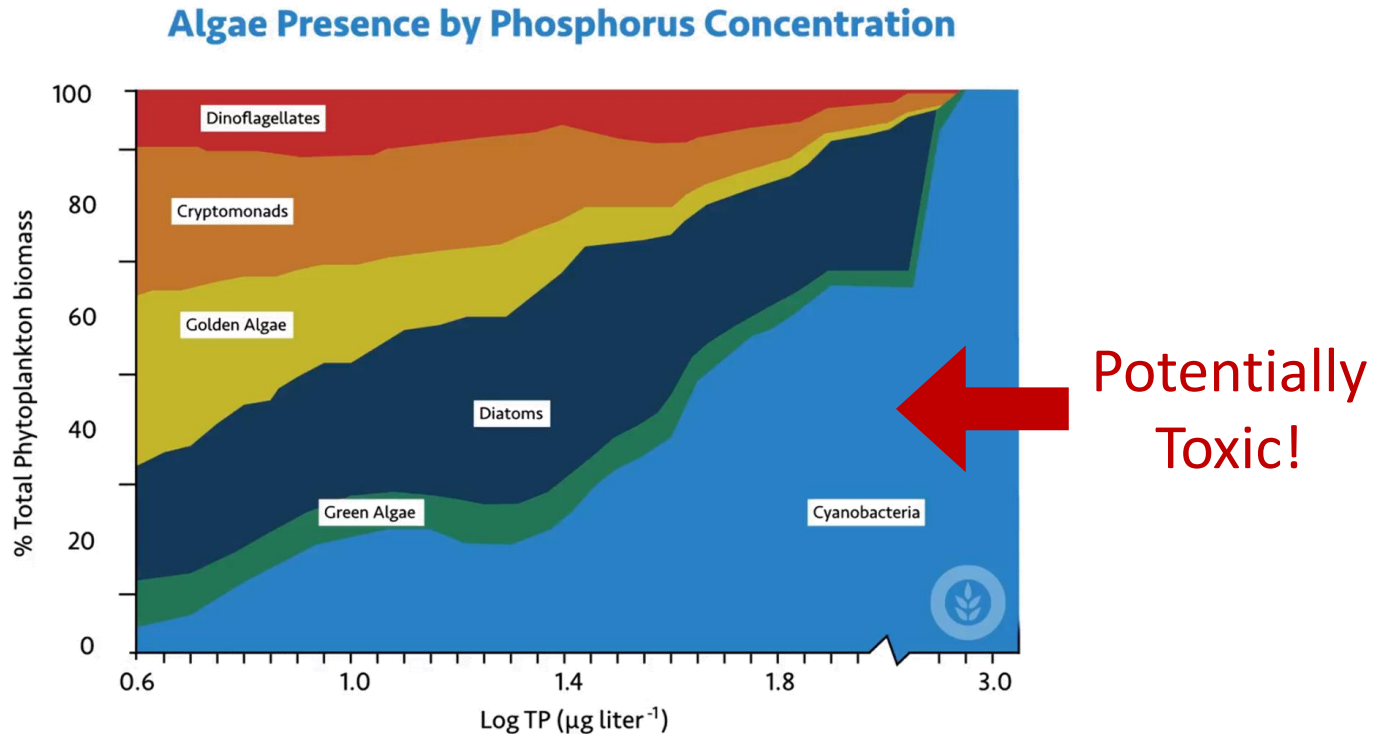
Terry McNabb, CLM – Aquatechnex

Kyle Langan - Aquatechnex

The AquaTechnex logo features the company name in a bold, sans-serif font. 'Aqua' is in blue and 'Technex' is in black. A large, thick orange swoosh curves around the text from the top left to the bottom right.

AquaTechnex

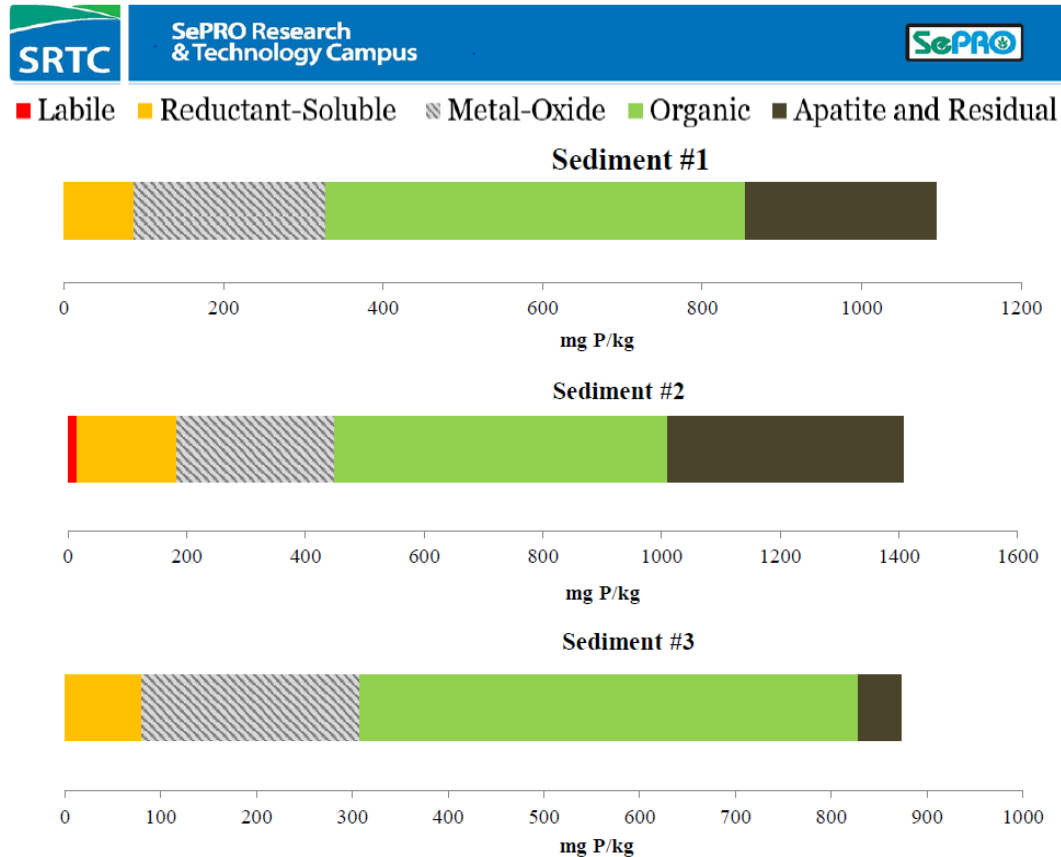
Algae assemblages influenced by nutrients



High TP = Low nitrogen to phosphorus ratios which support cyanobacteria growth

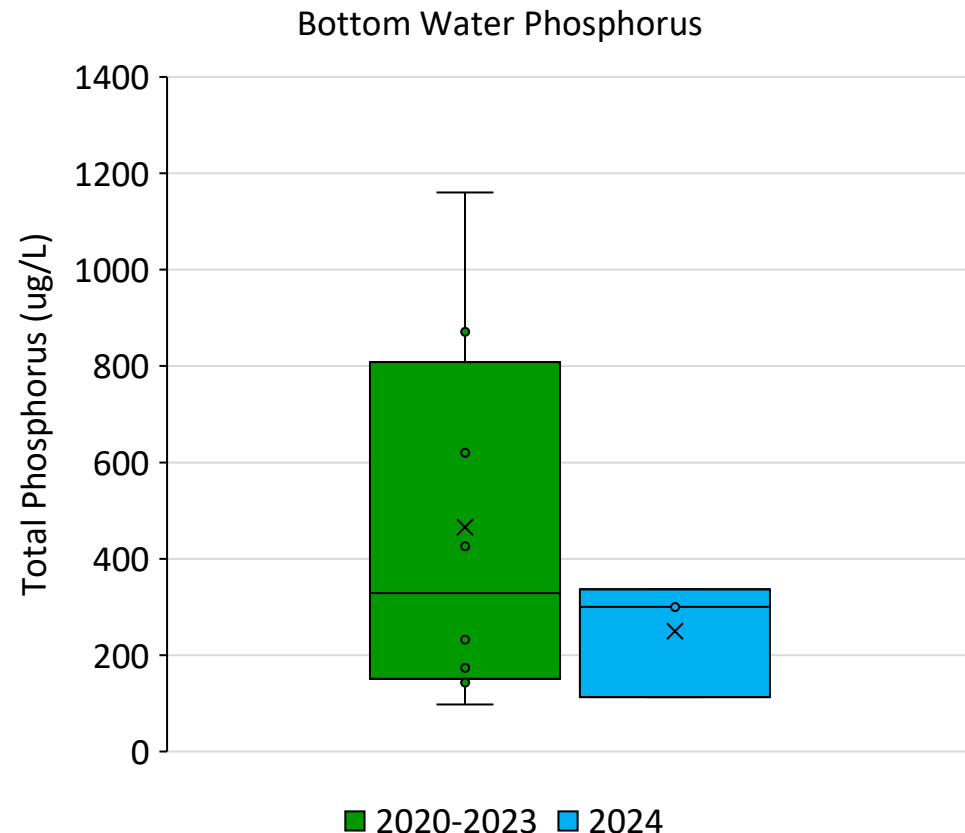
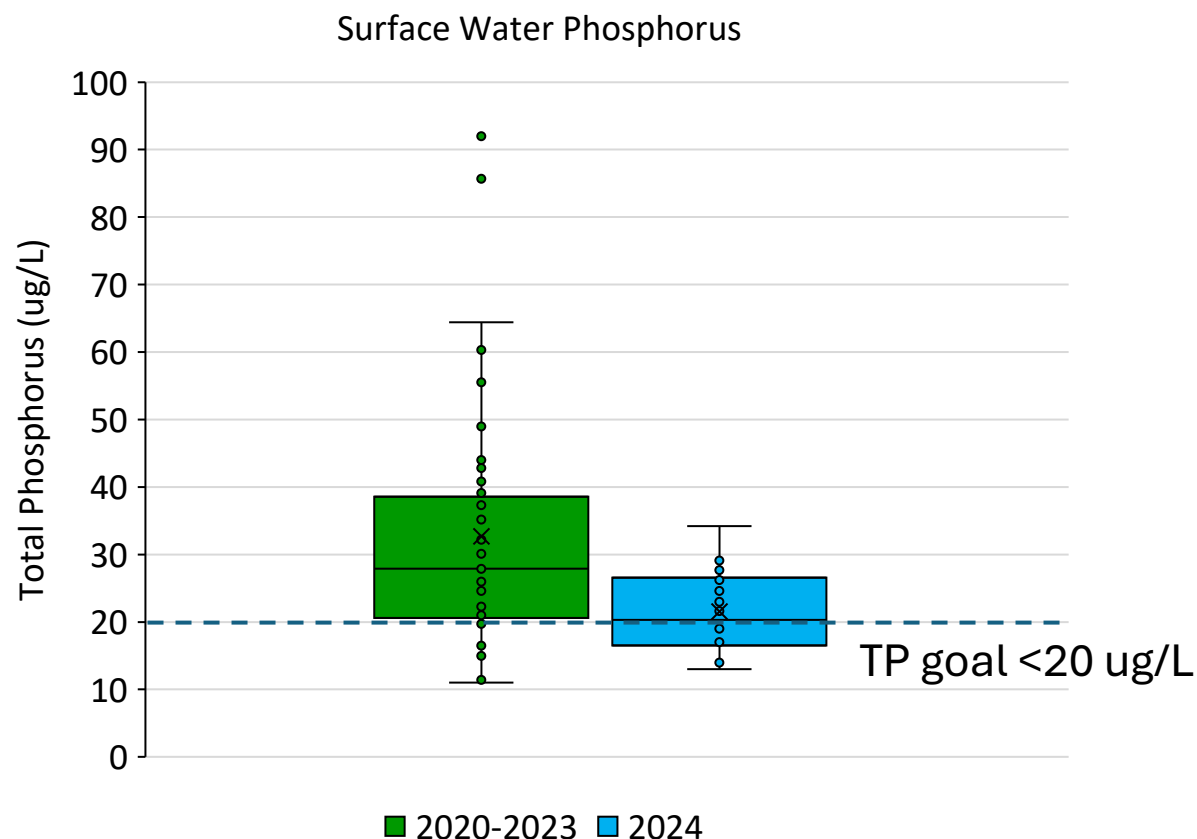
1 lb. of P can support 500 lbs. of algae!

Cottage Lake Assessment - P

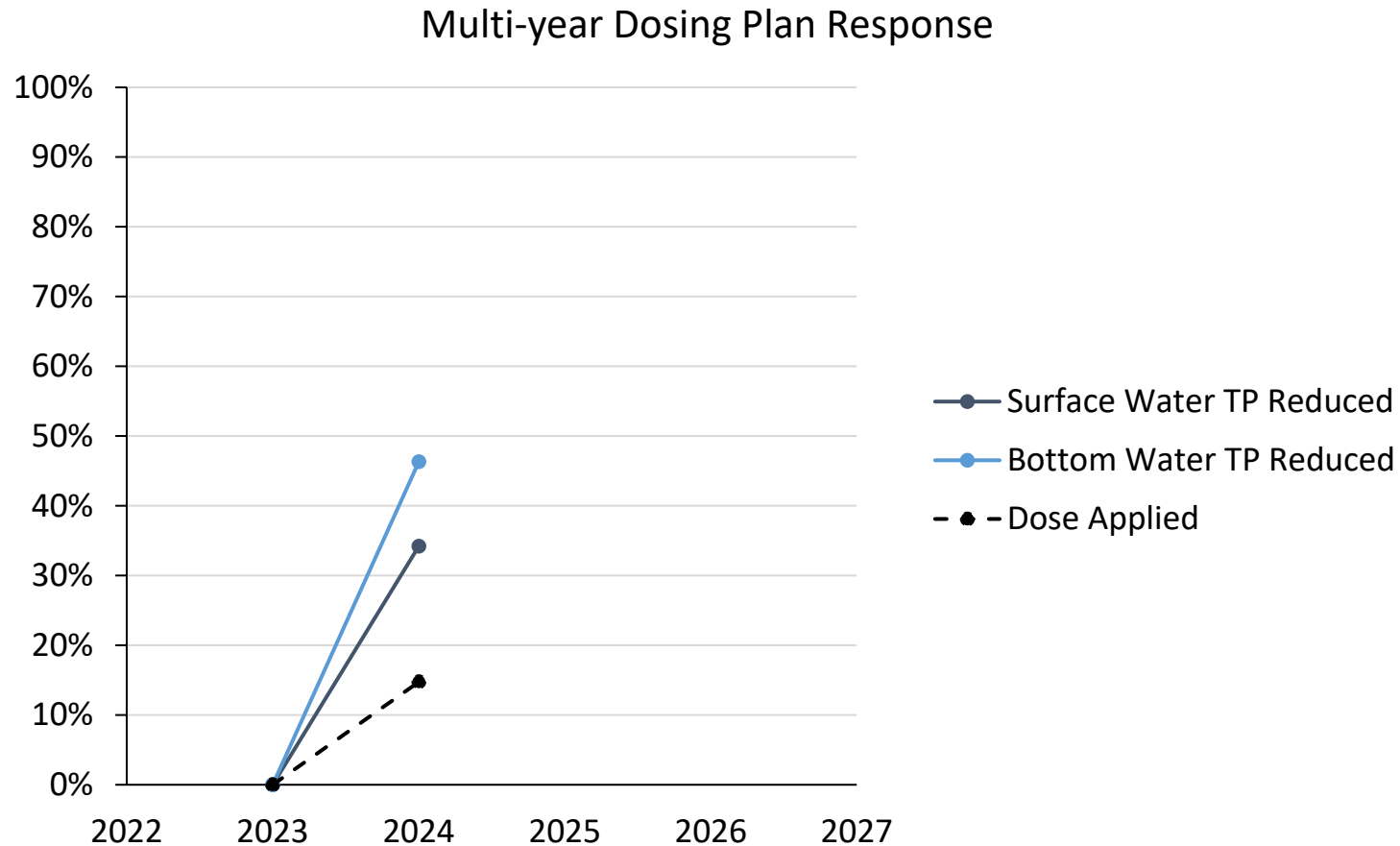


- Average 34% P is Mobile, 10 cm depth, 8% solids
- Average 28.8 lbs. Mobile P/acre
- 75ug/L TP at time of sampling = 200 lbs. P
- **1900 lbs.** Mobile Sediment P estimate whole lake (66 acres) to mitigate

EutroSORB G Dosing in 2024 reduced Surface Water TP ~34% and Bottom Water TP ~50%



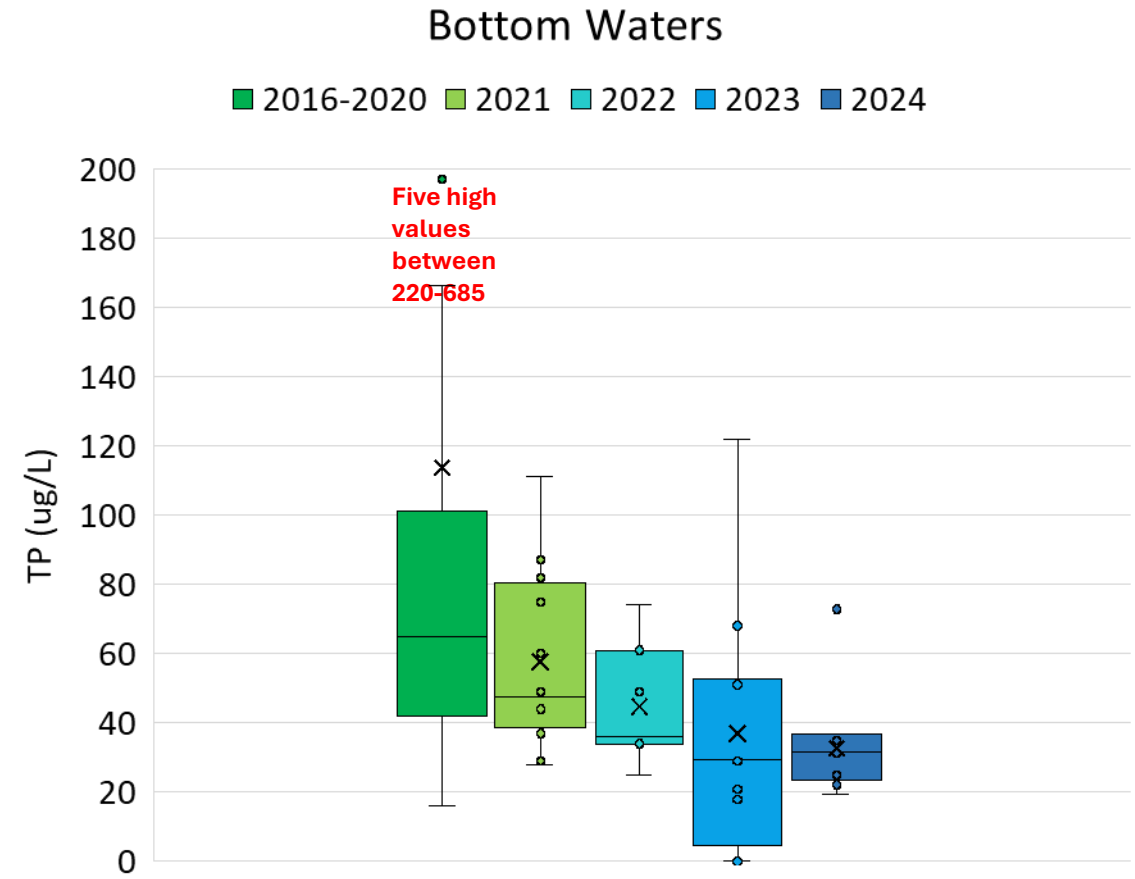
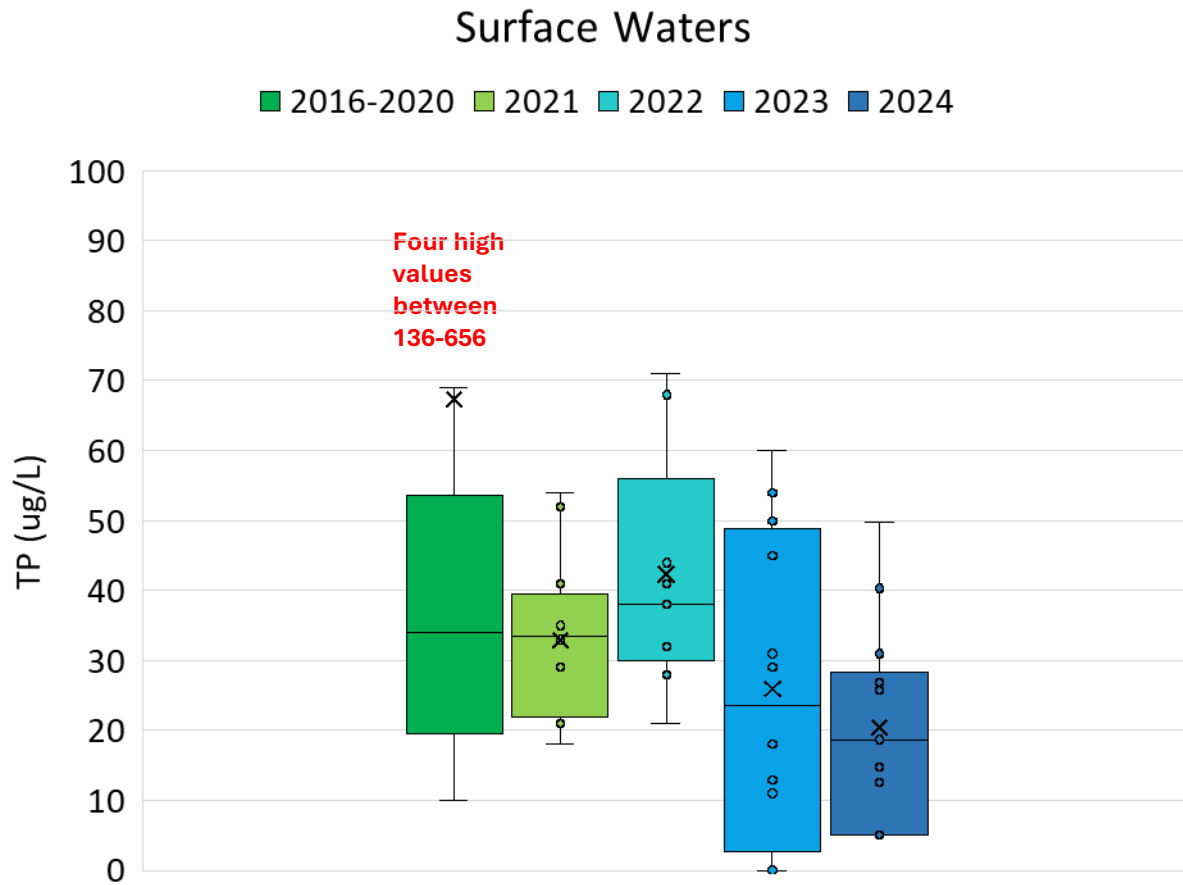
EutroSORB G Dosing in 2024 only 15% of total dose needed. Additional dosing is needed to meet water quality goals. (See Long Lake)



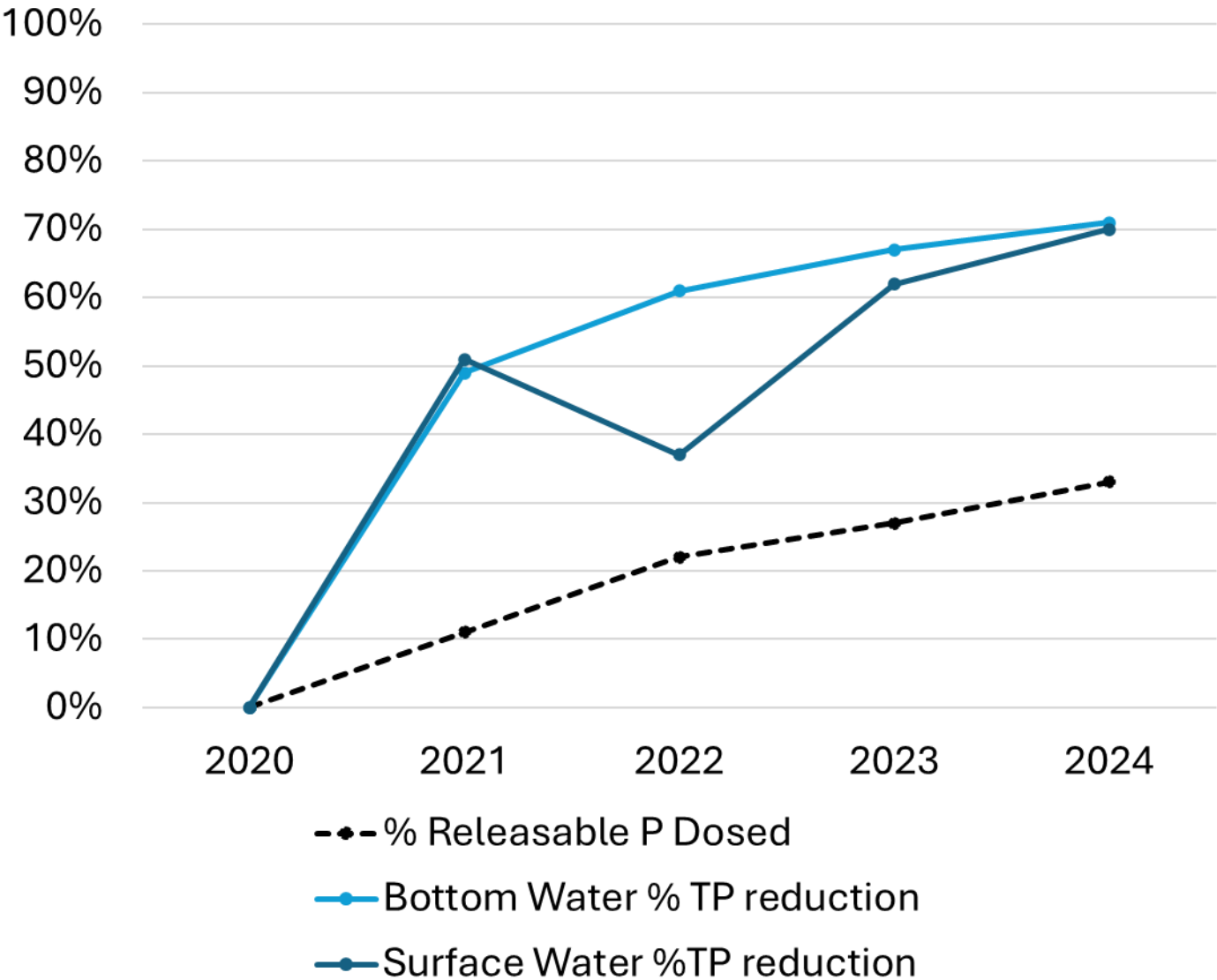
Long Lake , WA

- 330-acre lake, 2 basins
- 8,726 lbs. Mobile Sediment P to mitigate
- Internal P loading primary issue, external loading
- Annual treatment budget

Long Lake water quality steadily improved with partial P mitigation dosing. 2024 had great water quality, no HAB advisory.

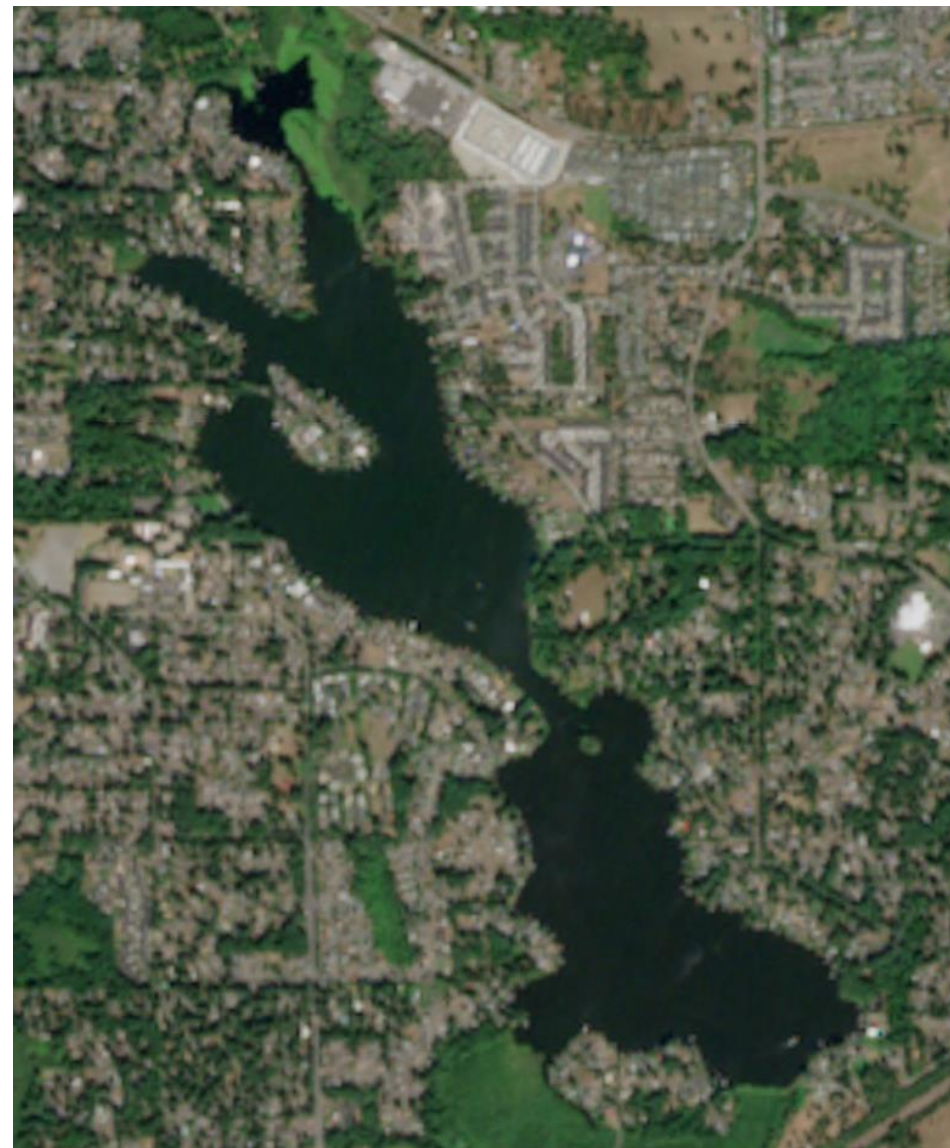


Multi-Year Dosing Response





Before: August 2020 HAB bloom



After: August 2024