

What to Know About White Lake

It is small and shallow so can change relatively quickly

Source water = rainfall



Recent rainfall pH change = +1 unit
Normal lake pH now 6-7

Water chemistry does not provide a buffer against pH change
Algae blooms can increase pH up to 2 units

Nutrients

Total Phosphorus levels similar to historic values

At low pH and high pH, phosphorus from sediments can be released = internal P loading, which can sustain algae blooms

At pH range 6-8, P is bound (not available to algae) to naturally-occurring aluminum in sediments

Aluminum also found in groundwater and acidic swamp water

Total Nitrogen levels much higher now

Same for other Bay Lakes

Rainfall is the primary source of nitrogen

Five-fold increase in ammonia deposition, which can be rapidly utilized by algae



Big rains more frequent due to climate change

Algae blooms can result from big rains