



## New Jersey Coalition of Lake Associations

a chapter of North American Lake Management Society

### **NJCOLA Spring Meeting Agenda—April 23, 2022**

#### **at the Lake Mohawk Country Club**

#### **9:00 to Noon (Mohawk Room 1st Floor)**

#### **Light Breakfast to be Served**

- 1. Welcome / Introductions (Bill Sempier, President) (9:00 - 9:10 AM)**
- 2. Stephen J. Souza, Ph.D., Clean Waters Consulting, LLC and Paul Sutphen, Clear Lake Technologies, LLC “Why is Septic-Related Phosphorus Loading Bad for My Lake and What Can Be Done About It?” (9:15 - 10:30 AM)**

Many lake communities throughout New Jersey rely on septic systems to manage household wastewater. Although in general septic systems are effective, their functionality in lake community settings can be impacted by steep slopes, shallow depth to groundwater, shallow depth to bedrock and soil properties that may limit phosphorus removal. These natural limitations are further exacerbated by the evolution of many lake communities from summer homes to full time residences and the age and original design of some systems. As a result it is no surprise that lake community septic systems are often a major source of phosphorus loading, routinely attributable for > 30% of a lake’s annual phosphorus load. Making matters worse is that much of the septic-related phosphorus is in a form readily and easily assimilated by algae, especially the cyanobacteria responsible for HABs.

This presentation will review why managing septic-related phosphorus loading is so critical to maintenance of lake water quality and more importantly present details of a septic system modification Clear Lake Technologies capable of significantly reducing this source of phosphorus. System specifics, including recently collected performance data, will be provided for the Waste Water Conditioning System (WWCS). The WWCS is essentially a relatively inexpensive to install, operate and maintain alum dosing system that automatically introduces a given volume of liquid alum to the wastewater stream as based on household water use. The injected alum binds with phosphorus within the septic tank, thus limiting the amount of phosphorus discharged to the leach field and into the lake. Data collected over a summer of use of a WWCS installed at the Culver Lake

Clubhouse showed a significant (90%) reduction in phosphorus loading with only a small incremental increase in septic tank sludge buildup.

- 3. Break (10:30 - 10:40 AM)**
  
- 4. Richard D. Carlson, of the New Jersey Aquatic Safety Coalition will discuss the NJ Public Recreation Bathing Code and regulations related to the hiring of lifeguards and waterfront safety (10:40-11:30 AM)**
  
- 5. COLA Matters - Group Feedback / Board Actions (Bill Sempier) (11:00 – 11:30 AM)**  
**NALMS membership/other Legal Matters (Eileen Born)**  
**Website/Facebook Update (Tom Conway)**  
**Proposed Hybrid meetings**  
**Insurance information on website**  
**2022 Dues / Status – Kathy McHugh)**  
**General Q & A (11:30 – 11:45 AM)**
  
- 6. Meeting Closure /Next Scheduled COLA Meeting (May 14<sup>th</sup>); Closing Comments**