



SCAPMSNEWS

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Ecofriendly Innovations to (Almost) Instantly Transform the Health and Appearance of a Waterbody

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We live in a budget driven world. With every decision we make, we strive to maximize the value of our dollar—sometimes to the point that quality becomes diminished. But when it comes to the management of lakes, stormwater ponds and irrigation sources, neither quality nor budget can be comprised without threatening water quality or turf health. Thankfully, new technologies and innovative solutions are making it faster and more cost-effective for aquatic management professionals to reclaim eroded shorelines, eradicate undesirable vegetation and maintain the beauty and function of their aquatic resources all season long.

Eliminate Algae

Does the waterbody have odor issues or poor water clarity? Does it produce excessive algae blooms in the hottest months of the year? These symptoms may indicate insufficient oxygenation and an overabundance of pond nutrients. The introduction of floating, decorative fountains or submersed diffused aeration systems can help circulate and oxygenate the stagnant body of water, facilitating the conversion of existing nutrients to forms that cannot sustain algae as food. Aeration also helps improve other water quality parameters to enhance the growth of healthy green phytoplankton while reducing nuisance and potentially toxic algae species like cyanobacteria and golden algae.

For long-term oxygenation benefits, nanobubble aeration technology is becoming a game-changer in the industry. Nanobubble systems pump extremely small oxygen bubbles into lakes and ponds suffering from poor water quality. These bubbles are so small that they do not escape to the surface like those created by traditional aeration solutions. After the temporary system is shut down, the oxygen remains in the water column, providing benefits for 2-3 months. Due to their unique properties, nanobubbles help eliminate nutrients and algal toxins within the water column. The speed at which nanobubbles restore the health and appearance of a waterbody can depend on a variety of environmental factors, though in many cases results can be seen within a few days—or even overnight!



No matter the aeration solution you choose, the benefits can be enhanced with the application of eco-friendly nutrient remediation products that safely and naturally remove undesirable nutrients like phosphorous and nitrogen from the water column before they can fuel nuisance algae growth. A variety of natural purification products and application styles are available for waterbodies of all types, making nutrient remediation a truly custom water quality solution.

Remediate Shoreline Erosion

Aquatic management professionals know that the interface of a pond and the shoreline is often a difficult area to manage. Balancing aesthetics and functionality while remaining ecofriendly can be a challenge. A pond's edge should be well vegetated with native plants to ensure no sediment is exposed. If sediment is left exposed over time, banks may become completely eroded around the shoreline, threatening aesthetics and causing dangerous conditions for the public. Shoreline erosion can also lead to an increase in sediment and nutrient-rich stormwater runoff that enters your lake or pond, reducing overall water capacity until costly dredging is the only solution to restore the water resource to its original volume.



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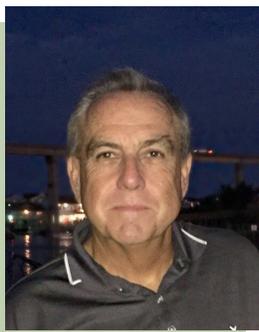
A new cutting-edge technology for shoreline erosion control is a bioengineered living shoreline. Using a patented degradable woven mesh system, aquatic management professionals can quickly create a long-lasting sediment containment barrier around lakes and ponds. Once in place, turf, native vegetation, and deep-rooted flowering plants can be installed directly into the mesh, creating a beautiful natural buffer. In addition to being ecologically-friendly, these erosion control systems provide a custom solution for every property, and can also be filled with local sediment or dredged materials from the project site. Bioengineered shorelines can be walked on and mowed within a few days of installation, making them an excellent solution for properties in need of fast, long-lasting restoration.



Prevent Vegetation & Enhance Aesthetics

On most landscaped areas, green or muddy water detracts from the entire appearance of the property. Likewise, sites with multiple waterbodies know that pond colors can vary greatly. Whether you desire to transform or standardize undesirable colors, an instant solution is environmentally-friendly pond dye. A mix of blue and black colorants can almost immediately enhance the look of a pond. In addition to enhancing aesthetics, pond dye helps shade out the sun, thus preventing photosynthetic nuisance aquatic weeds from receiving adequate levels of sunlight. After the colorants have dispersed, dyed water is non-staining and may be used for recreation and turf irrigation. Over time, continued pond dye may help reduce the frequency of treatments needed to control unwanted vegetation.

Fast, tangible results are desirable, but they cannot replace the long-lasting, ecologically-friendly benefits produced through proactive management. Algae, bad odors, and poor water quality are often signs of a bigger issue like excess nutrient loading, imbalanced pH, chronic erosion or the presence of an invasive species. Masking the symptoms is sometimes necessary to achieve our short-term goals, but, more importantly, it's crucial to take steps that ensure the long-term health, beauty and function of the waterbody is maintained for many years to come!



Tommy Bowen June 2, 1954 - October 8, 2018

Tommy was born in Williamston, NC where he was raised and later graduated from Martin Community College. He was hired by Duke Energy in 1974 where he worked for 44 years as a biologist. His love for his job and fellow coworkers was incomparable; truly his second family. He was very active in everything his sons did, particularly sports, and had a passion for East Lincoln athletics where he worked in the press box every football Thursday and Friday night. Annual beach trips to Holden Beach were a special time of year for him and the family where he enjoyed fishing, beach games putt-putt, ice cream and good seafood. He truly was a water child whether it be driving the Duke Energy airboat surveying for aquatic plants or trolling along the Holden Beach coastline fishing with his sons. Tommy bled Carolina blue and loved cheering on the Tar Heels and Panthers every game of the season. It was, and will continue to be a loud living room every week as in spirit he will be with his family as they continue to watch the games. As we all who knew Tommy, the SCAPMS family was family for him too. He will be missed for sure.