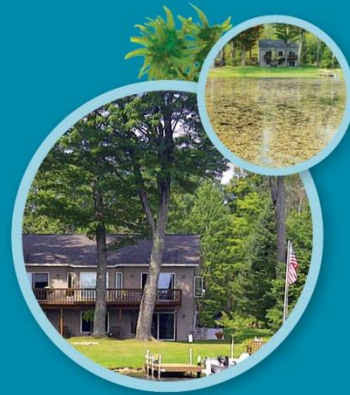


# RESTORATIVE LAKE SCIENCES

Winter Newsletter

February, 2016



## Message from the Owner:

It has been over 3 years now since RLS was formed as a result of a strong need for a riparian-focused lake restoration and management firm that engages local riparian communities with the most innovative scientific methods. The company has grown by over 200% and we are thrilled with the results that have occurred on all of these lakes! We now work with 6 professional scientists that regularly meet with riparians and who thrive on lake betterment.

What means the most to us is the wonderful relationships that we have cultivated with riparians like you! We care deeply about your lake and how you feel about your lake and want to provide all of you with the best tools possible so that future generations can enjoy the lakes.

RLS is in the process of many great things including development of a riparian book to help others better understand their lake. We are also actively developing peer-viewed publications on various topics such as aeration/bioaugmentation, whole-lake improvement methods, and biological control. RLS has recently developed a "research and development" department where we will actively conduct research on much-needed lake management tools and hopefully someday have even more to contribute to lake communities.

We value your feedback and aspire to provide the best lake restoration and management services to everyone. Please feel free to email us at: [info@restorativelakesciences.com](mailto:info@restorativelakesciences.com)

You can also visit our website that will soon be re-designed with interactive videos and more information on Michigan lake case studies. See you all on the lakes soon!

Cordially,

Jennifer L. Jermalowicz-Jones

### RLS Updates:

- RLS acquires the expertise of Dr. David Kamps, PhD limnologist to assist with lake technical issues
- RLS sponsored the annual North American Lake Management Society Conference in Saratoga Springs, NY
- RLS to present key milfoil control strategies at the upcoming Inland Lakes Convention in Boyne, MI

## What Makes Restorative Lake Sciences Unique?

- Niche company specializing in lake studies, management, and restoration
- Advanced-degree professional scientists with highest level of knowledge in the lake sciences
- Careful selection of the best contractors to attain the best results-all with continued oversight to guarantee positive results
- Candidates certified in watershed management, erosion control and best management practices, soft shoreline design, and community engagement
- Licensed professional engineers for feasibility studies
- Access to the most comprehensive lake resources from national partnerships.
- Professionally written annual reports for each project with all management activities and future management recommendations
- Actively involved in research for future lake management and restoration tools



## RLS Studies Aeration/Bioaugmentation on Lake Apopka in Florida:

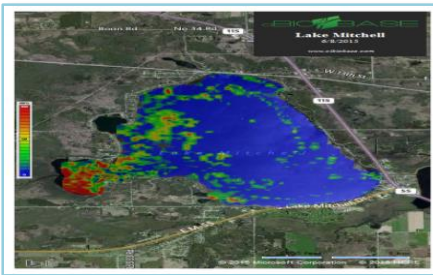


Lake Apopka is a 33,000-acre lake located near Orlando Florida. The lake appears a “pea soup” green due to its excessive nutrient load which has resulted in heavy growth of blue-green algae. The lake also suffered from low dissolved oxygen and a thick organic sludge on the bottom. Scientists from RLS were invited to study the lake and to independently evaluate the efficacy of a 250-acre aeration pilot project. Microbes and enzymes were also applied to the treatment area to assist in the breakdown of organic muck on the lake

bottom. The study will end in June 2016 and a final report will be compiled by RLS with future recommendations. An interim report developed by RLS in January of 2016 indicates that the technology holds promise for reducing nutrients, sediment muck, and improving overall water quality. The Lake Apopka community has tried multiple other technologies over the past few decades with minimal success. RLS will be sure to keep others updated on the project success so that other lakes may gain valued insight.

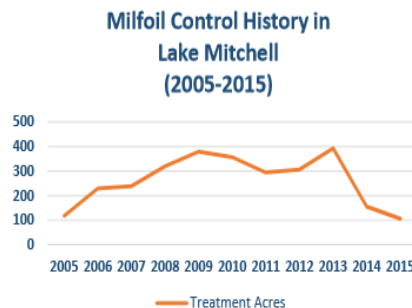


## Tedious Lake Mapping Leads to Excellent Results:



Lake Mitchell in Wexford County, Michigan is nearly 2,580 acres in size and once contained over 400 acres of hybrid watermilfoil. Scientists from RLS have been working with the Lake Mitchell Improvement Board since 2009 to reduce this watermilfoil and other invasives in the lake with great success. The latest survey in 2015 determined that only 20 acres of the watermilfoil colonized the entire lake. This is an amazing improvement over the past 7

years. What is behind this success? Hundreds of hours of detailed, whole-lake bottom-scanning surveys on the lake annually. RLS is able to find each plant, map it, confirm it with the GPS scanning technology, and direct lake contractors to each site for effective treatment. The graph below shows this dramatic reduction since RLS became lake manager in 2009 and saved the lake board over \$266,000!



### Remember:

As a riparian you are the “eyes” and “ears” of your lake and your observations are important! If you notice something awry or an aquatic plant that looks new, please let RLS know right away as we can then diagnose the outlier and recommend a preventive and/or remediation solution.

### Keep a Watch For...European Water Clover!

This clover-like aquatic plant was found along the shore of Lake Angelus in Oakland County, Michigan. The plant has a broad tolerance for environmental factors and habitat and can quickly invade shallow areas or mud flats. It can grow in thick stands and create a navigational hazard as well as aesthetic impairment when it grows in excess.

