



### Proactive Algae Management

PLM continues to advance our approach and technologies to improve your ponds, lakes and reservoirs. As water bodies age, you experience more algae, tougher algae and potentially toxin forming algae threatening our most precious natural resource, water. PLM is taking a MODERN approach to algae and water quality management by incorporating an innovative technology.

Over the past two years, we have been evaluating a new technology, **SeClear** Algaecide and Water Quality Enhancer®. This technology provides the primary objective of other algaecides, algae control, but it also provides "water quality enhancement". **SeClear** is the first and only product registered by USEPA and MIDEQ with this dual capability.

A comprehensive program that includes **SeClear** gets to the root of the problem by removing phosphorus and controlling algae with each application. The results are longer lasting control, improved water quality and reduced maintenance through time. Water treated with **SeClear** may be used for drinking, swimming, fishing, watering livestock and irrigation during and after treatment. **SeClear** is also ANSI / NSF Standard 60 certified for use in drinking water resources.

#### Benefits of incorporating **SeClear**:

- \* Proactive algae management
- \* Removes phosphorus with each application
- \* Improves water quality
- \* Reduces cyanobacteria (blue green algae) occurrences
- \* Reduce unsightly algae blooms and densities



PLM will be incorporating the use of **SeClear** in most of our algae programs during the 2016 season. Although the cost of this unique technology is greater than the old algaecide products, we plan to keep your cost similar to historic treatment programs. In water bodies with higher phosphorous levels, a higher rate of **SeClear** may be recommended by your PLM representative. Ultimately we are trying to reduce the amount of algae growth and density through out the season. In the past we would treat once a bloom occurred, with **SeClear** we are protectively working to minimize the potential for nuisance and potentially harmful algae blooms (Proactive Algae Management). Please contact your PLM representative for additional details

#### CONTACT US:

PO Box 132  
Caledonia, MI 49316

*In the Grand Rapids Area:*  
8865 100 St SE  
Alto, MI 49302

*In the Lansing Area:*  
10222 Rose Blvd.  
Morrice, MI 48857

*In the Evert Area:*  
250 South Industrial Dr.  
Evert, MI 49631

Phone: 800-382-4434  
Fax: 616-891-0371  
E-mail: [servicegl@plmcorp.net](mailto:servicegl@plmcorp.net)

*...Thirty years of invasive plant management*



*Follow us on  
Facebook*

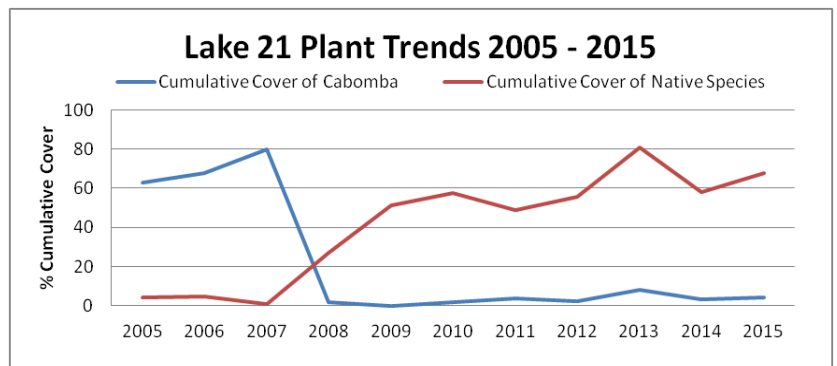
PLM Lake & Land Management, Great Lakes Region has a Facebook page! This page is a great way to provide our customers with up to date information on exciting things happening within our company and the aquatics industry.

### Spotlight Lake: Lake 21, Barry County MI

Lake 21 is a 60 acre private lake located in Barry County Michigan. The lake is largely undeveloped with roughly 23 homes/seasonal cottages. What is surprising is that this private, secluded little lake had one of the first known infestations of Cabomba on the west side of the state. Cabomba (aka Fanwort) is an extremely invasive, exotic species which can grow very much like Eurasian watermilfoil (i.e. grows densely from the bottom to the surface). While we have been seeing it more in recent years, it is not a widespread problem around the state. Lake 21 residents had begun to observe Cabomba 25-30 years ago, but by the early 2000's it nearly made the lake unusable. For the most part, the lake had nearly no native vegetation left.

In 2003, PLM was contacted to help solve this problem. Unfortunately, being a seldom seen species, we really did not have a defined prescription. We contacted several herbicide manufacturers and regulatory people to try to find a solution. Several strategies were attempted, but none seemed to provide adequate results. After all conventional options were exhausted, PLM started to look outside the box. In cooperation with MDEQ and SePRO Corp, PLM developed a plan using Sonar A.S. (fluridone) at a higher rate while sustaining concentrations over a 90 day period. An evaluation treatment was performed in 2008 and had successfully controlled the Cabomba.

In the years following, Lake 21 saw a significant resurgence of native species. The graph below shows both the trends for Cabomba and submerged native vegetation. Unfortunately, there was not a suitable tool to address the minimal regrowth that we were seeing in 2009 and 2010. However, that all changed when the herbicide Clipper was approved for use in 2011. Clipper provides excellent control of Cabomba and has enabled PLM to keep regrowth under control for the past 5 years. Lake 21 has made a complete turn around and the residents couldn't be happier!



PLM is excited to welcome Jim Chatel, Northern MI Regional Assistant Manager and Casey Shoaff, Northern MI Field Technician, to our team. Both Jim and Casey joined PLM in 2015 and are working in our Evert office. Jim attended Michigan State University and Northern Michigan University and holds a B.S and M.S in Science Education with a minor in Fisheries and Wildlife studies. Jim has worked for over a decade teaching students as well as interning with the Michigan DNR. He also spent time working on environmental cleanups and remediation in North Dakota. Jim is married with three daughters and is very active in his community. Jim's experience is a great asset to our team! Welcome Jim.

Casey (Jonathon) Shoaff is a graduate of Cornerstone University with a B.S in Environmental Biology. Casey has spent time working with the Au Sable Institute as well as an internship with the Michigan DNR. Casey is engaged to be married in June 2016 and is a great asset to our northern office. Welcome Casey and congrats on your engagement.



## Did you Know?

- PLM is approaching 40 years in the Aquatic Industry, established in 1979!*
- PLM has three regional offices in Michigan (Alto, Morrice, Evert)*
- PLM employees over 12 individuals with environmental degrees in Michigan.*
- PLM successfully manages thousands of acres of water around the state each year*
- PLM is a member and/or supports:*
  - \* Michigan Aquatic Manager Association (MAMA)*
  - \* Midwest Aquatic Plant Management Society (MAPMS)*
  - \* Michigan Inland Lakes Partnership (MILP)*
  - \* Michigan Chapter of North American Lake Management Society (McNALMS)*
  - \* Michigan Lakes & Streams Association (MLSA)*
- PLM has been leading the industry evaluating new herbicides protocols*
  - \* Sonar treatments based on actual thermocline depths*
  - \* The use of numerous granular herbicides to improve control of target species*
  - \* Successful field trials controlling Zebra Mussels*
  - \* Implementation of Proactive Algae Management techniques (\*See article on pg 1)*
- PLM utilizes new technology to ensure efficient management of your water-body*
  - \* BioBase mapping, creating new bathometric maps, sediment hardness, plant densities*
  - \* Lowrance and Garmin GPS units*
  - \* Calibrated Granular and liquid spray equipment*
  - \* Auto Cad and ARC view GIS programs*
- PLM has additional offices in Minnesota, South Carolina and North Carolina*
- PLM is licensed to conduct business in 15 different states!*
- PLM is truly a diverse, educated and experienced professional company, dedicated to You!*

## Announcement- "All in One"

PLM continues to listen to our customers desires. Over the years PLM has earned the trust of our clients, maintaining service contracts for decades. Many times the client has requested a simplified management program or at least simplified for your eyes.



Having to pay invoices after each treatment, obtaining board's approval for each invoice, additional paperwork for paying the State of Michigan the annual permit fee can be cumbersome and not necessary for all clients. Basically PLM would like to simplify this process by offering an "All In One" program. A streamlined contract "not ala carte", that provides all the same management goals yet provides services for the entire season at one flat cost. This flat cost would include everything from treatment cost, lake management plans, water quality program, permit fees for the entire season, period. The only requirement PLM has, is that you must have been a client for three or more years. This will ensure that we have a history of managing your water body while providing you the time to have the history to entrust your needs in PLM hands. Please contract your PLM representative for additional details. This 'All In One' option is for you!

## Michigan Invasive Species Coalition

The Michigan Invasive Species Coalition was designed to bring support to regional and local efforts to control invasive species in Michigan. By providing additional networking capabilities and bringing different groups together, they have been making resources available to individuals, groups, and associations across the state. This has allowed the ability to increase effectiveness of control, address challenges, educate and ultimately control exotics that may have been overlooked previously. Are you looking for a way to get involved with your local fight against invasive species? Or become more aware of what is hiding in your backyard? The coalition has divided the state into 8 regions with over 17 individual CISMA programs. A Cooperative Invasive Species Management Area or CISMA program is local to your area and allows direct resources to you. The CISMA programs have education and training seminars as well as many community awareness programs and volunteer opportunities to aide in the fight to protect Michigan from invasive species. Please go to; [michiganinvasives.org](http://michiganinvasives.org) to get involved!

## Structure Scan HD

PLM is excited to incorporate the use of StructureScan® 3D imaging to our lake surveys this summer. StructureScan scans underwater terrain and weed beds and fish-holding structure to create a high-resolution, 180-degree, three-dimensional view beneath our boats.

