



August 16, 2012

Portage Lake Association  
Attn: Mark Parks  
21030 M60  
Mendon, MI 49072

**PLM Lake & Land Management** will provide a lake management program for the control of exotic weeds and/or algae in **Portage Lake for the 2013-2017 seasons.**

This proposal is for the control of exotic species in specific areas of Portage Lake. Curlyleaf pondweed, Eurasian watermilfoil and Cabomba are the primary target species and we recommend focusing on developed areas of the lake first. We have estimated that there is ~ 40 acres of potential treatment located in developed shoreline and ~ 45 acres of potential treatment area at the north end. Since treatment of Cabomba at the north end would be extremely expensive, we have not included it in the budget below. We have also provided an option for thinning of susceptible native plant species in developed shoreline areas (near docks and swimming ares) using a combination of Clipper (100 ppb), Diquat, and algaecide. This would be a one time treatment with an estimated 22 ac of treatment.

Products to be applied: Navigate (granular 2,4-D), Renovate, Renovate Max G, Sculpin, Aquathol K, Hydrothol 191, Reward, Clipper and non-water restrictive products such as Nautique, Copper Sulfate, Chelated Copper, Cygnet Plus and shade as a tracer.

**2013 Unit cost per acre.**

**Systemic Herbicides**

Navigate:	\$450.00
Renovate 3:	\$550.00
Renovate OTF:	\$480.00
Renovate Max G:	\$425.00
Sculpin:	\$375.00

**Contact Herbicides**

Reward (exotics):	\$220.00
Reward (natives):	\$290.00
Clipper (200 ppb):	\$750.00
Clipper (100 ppb)/Diquat/Algae:	\$460.00
Aquathol K/Hydrothol 191(exotics)	\$195.00
Aquathol K/Hydrothol 191(natives)	\$295.00
Algaecides	\$45.00
Nautique	\$375.00

**Other Services**

AVAS Survey:	\$400.00
Water Quality Program:	\$600.00

**Estimate d Yearly Cost of Management:**

Exotic plant treatments of developed shoreline areas:	\$9,500.00
Native plant thinning of developed shoreline areas:	\$10,120.00
Eurasian watermilfoil treatment in north end (optional):	\$11,250.00
Additional fees:	\$1,800.00

**Note:** The above estimate is based on treating ~ 30 acres of the developed shoreline. Management at the north end is based on treating ~30 acres. Additional fees include MDEQ permit fee (\$800.00) and optional services (AVAS and Water Quality). These are “estimated” budgets only based on the possibility of exotic plant expansion. Actual treatment cost will be based on the amount of treatment performed at the unit cost per acre prices provided. Treatment recommendations will be based on a pretreatment survey and provided to the Friends of Portage Lake for approval.

**Water Quality Program:**

The water quality program consists of two samples, occurring in the spring, and late summer each season. Parameter such as secchi disc, pH, D.O., conductivity, alkalinity and nutrient sampling of total nitrogen and total phosphorus give us the ability to monitor lake trends more efficiently. This information will enable us to include the tropic status of your lake. The program also tests your water for Fecal bacteria (E. Coli), in mid-summer which can determine the condition of your lake and if the water is safe for swimming. Reports will be issued annually in the fall.

Cost for Water Quality Program: \$600.00

**Contract Period:**

**Multiple Year Treatment Program:** As an incentive to establish a multiple year agreement we will treat your lake or pond at the same price structure as 2012 for 2013!!! The remaining three years (2014, 2015 and 2016) will have cost increases of (3%) three percent per year or less. If total chemical cost increases 10% from the previous year a new agreement will have to be mutually acceptable. If during the life of the contract the DEQ or other regulatory agencies significantly change the approved treatment procedures, either party may terminate this agreement upon giving ninety (90) days advance written notice thereof.

**One Year Treatment Program:** Pricing is based on the type and the amount of vegetation or algae present at the time of treatment, as well as, the products applied. Unlike the multiple year program, an agreeable price structure is not contracted into a one-year program. Therefore, an increase in the cost of products, labor, or changes made by the DEQ or other regulatory agencies may have a drastic effect on the pricing for following years.

**Permit Fee:**

PLM Lake & Land Management is responsible for completing and submitting aquatic nuisance permit applications. PLM Lake & Land Management will send an invoice or statement for the yearly DEQ permit application fee. It is your responsibility to send a check made out to the “State of Michigan” to our office. We must include this check with the DEQ permit application. A non-refundable fee of \$200.00 will be applicable if lake is not treated after obtaining the DEQ permit.

**Posting of Treatment Areas:**

Posting of shoreline treatment areas is the responsibility of PLM Lake & Land Management and will be conducted according to MIDEQ regulations. Signs will be attached to thick barked trees, posts or other suitable fixtures already on site. If homeowners wish to have signs posted in designated areas or on specific fixtures they must notify PLM Lake & Land Management, providing lake address, location of property, and

where the signs are to be posted. Pictures are the most informative way to relay this information. Notification of alternate posting must be made at least 14 days prior to treatment and additional fees may apply. The removal of posting signs after the restrictions have expired is the responsibility of the homeowner.

**Notification of Treatments:**

It is your responsibility to notify each resident within **100 feet** of the treatment area **at least seven days** in advance, **but no more than forty-five days** prior to the first treatment date, that products will be applied to the lake. This notification requirement **must** be administered to each and every property owner within 100 feet of any treatment area. PLM Lake & Land Management will provide a tentative treatment schedule and the **Notice** of proposed products to be used during the spring of each year. We will also notify resident within 100 feet of the treatment areas on the day of treatment.

**Non-Target Species:**

Please be aware that we only control weeds and algae **present** at time of treatment. Emergent vegetation (cattails, bulrush, purple loosestrife), lily pads, eel grass and sago pondweed require separate programs for control and are not addressed unless specifically mentioned in the management program. We have no control over future weed or algae growth based on the current chemicals registered for aquatic use in Michigan.

**Invoicing and Payments:**

PLM Lake & Land Management will submit an invoice following treatment that will include the following information; lake and/or pond(s) treated, date of treatment and type of treatment or acres treated. Monies will be due net fifteen (15) days after each treatment. Interest of 1.25% will be added to your bill for each additional sixty (60) days that payment is not received.

**Liability Issues:**

We are responsible for workman's compensation and liability insurance for the duration of the contracted period.

PLM Lake & Land Management is not responsible for fish loss due to low oxygen levels caused during warm water conditions.

Please sign, check multiple or one year program and return one copy of this proposal as our contract.

For further clarification or modifications please contact.

Andy Tomaszewski, Ecologist  
Southern Regional Manager  
PLM Lake & Land Management

For **Portage Lake:**

Multiple-Year Program \_\_\_\_\_

One –Year Program \_\_\_\_\_

\_\_\_\_\_  
**Print Name**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature**