



September 28, 2020

Fremont Lake SAD
c/o Sheridan Township
PO Box 53
Fremont, MI 49412

Thank you allowing me to submit a proposal to work with your Township, the City of Fremont and the Fremont Lake Association on Fremont Lake. I am sure that you will find this proposal extremely competitive and to include all the services you may be interested in using. PLM Lake & Land Management Corp. will provide lake management services for Fremont Lake. The following proposal is for your review for Fremont Lake for the 2021 season and can be extended as a five-year multiple year contract. To highlight a few of the advantages to working with PLM: All billings are post service/treatment with itemized billing details (if this is not the preferred method, please contact me immediately so we can work out another arrangement. We are here to make your program suit your needs). Reports and follow up information is readily available following service. In addition to any scheduled service, PLM is always available via phone call for treatment/lake evaluation if something changes unexpectedly. Please review the following proposal and if any changes, additions, or modifications are required to suite your specific program needs, please contact me without hesitation.

Over the last few years, PLM has been working to reduce the presence of exotic plants in Fremont Lake, while promoting a healthy and diverse native plant community. Targeting exotic species with systemic herbicides allows for longer, residual control and offers the ability to have less milfoil long term. Milfoil has extensive root systems and often times larger infestations (as seen on Fremont Lake) have taken years to grow. The root systems can re-surge at any time; supporting the long term requirement of a management program. Over the last few years, the population of EWM in the lake has decreased, an excellent sign of the management program. Seasonal variances will occur and it is recommended to continue to prepare for annually management.

Based on some growing concern from some residents in the lake and with the decrease in budget funds used for milfoil management the last few years, it is recommended to explore the options of having a fish survey/study done in the lake. Although some reports of good fishing of both predator and prey fish have been received, other reports are contrary to that. With the extensive water quality monitoring and watershed studies performed over the last decade on Fremont Lake, it seems time to have a thorough fish survey of the lake performed. I am happy to explore those goals and costs, if you would like to look into this in the future. Without knowing how in depth or the goals your group may want, it is difficult to budget at this time. Further, the growing population of Carp in Fremont Lake is likely having a direct negative impact on the rest of the fishery.

Management program goals for 2021: Aggressively controlling exotic and invasive species throughout Fremont Lake utilizing systemic herbicides when appropriate. Treating for algae growth in residential areas only if required. Native plant growth will be promoted and can be incorporated into the program overtime and if approved. Management will also include performing surveys (AVAS Surveys when required), pre/post treatment surveys, water quality analysis (optional). Please note that board members can accompany PLM in the field for surveys if pre-arranged.

Products to be applied: Restrictive products such as Diquat, Triclopyr, Aquathol K, Triclopyr, Clipper, Fluridone, Hydrothol 191, 2,4-D and nonrestrictive products such as copper sulfate, chelated copper products, shade and any new products approved for use through MI EGLE.

Proposed Timeline

Winter 2020: Apply for DEQ Permit

Spring 2021: Notification to residents; schedule for season

May/June: Spring Survey, Water Quality optional

May/June: Potential initial herbicide/algaecide application

June/July: Potential herbicide/algaecide application. Pre/post survey, WQ testing optional

August/September: Potential herbicide/algaecide application. Fall AVAS survey, Water Quality optional

Note: PLM schedules every 3 to 4 weeks for pre/post surveys and applications and performs services only based on approval and set management programs.

Unit Costs Per Acre

Systemic Herbicides:	Cost:	Application Rate:
2,4-D (Navigate):	\$350.00	@100lbs/acre
2,4-D (Sculpin G):	\$345.00	@120lbs/acre
Renovate OTF:	\$450.00	@120lbs/acre
Renovate 3	\$250.00	@2.5gals/acre

Contact Herbicides:

Diquat:	\$175.00	@1gal/acre
Diquat:	\$190.00	@2gals/acre
Aquathol K:	\$180.00	@1gal/acre
Clipper:	\$375.00	@100ppb + contacts
Clipper:	\$475.00	@200ppb

Other Services:

Nautique (wild celery):	\$375.00	@7-9gals/acre (liquid)
Algaecides (per acre):	\$40.00	Fil. Algae @5-6lbs/acre + chelated copper
Algaecides (per acre):	\$45.00	Chara/SSW @13lbs/acre (copper only)
Algaecides (per acre):	\$90.00	SSW @13lbs/acre copper + hydrothol
SeClear G (per acre):	\$150.00	SSW/Fil. Algae @20lbs/acre
Phycomycin (per acre):	\$125.00	Fil. Algae @50lbs/acre
Phragmites:	\$300.00	per acre
AVAS Survey (annual):	\$850.00	Optional
Mid-Summer Surveys:	No Charge	
Water Quality Program:	\$650.00	Optional (per sampling site)
Mechanical Harvesting	\$250/hour	(\$4,000.00 minimum)
DEQ Permit:	\$1,500.00	

Proposal for 2021: All proposals are comprised using the unit costs per acre listed above and estimated acres. It is extremely difficult to predict how many acres will require service. All treatments will be done within your available funds as established by the SAD. This proposal is designed to include a variety of management options and services, some of which may not fit within your available funding, but are given as example of other services available.

	Low	Expected	High- worst case/expansive program
Permit:	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00
Algae Control:	\$ 000.00	\$ 2,500.00	\$ 3,500.00
Weed Control (Exotics):	\$15,000.00	\$20,000.00	\$40,000.00
Weed Control (Natives):	\$ 000.00	\$ 000.00	\$18,000.00
Management Services:			
WQ Program:	\$ 650.00	\$ 3,150.00	\$ 3,150.00 (optional)
Surveys (2/year):	\$ 850.00	\$ 850.00	\$ 850.00 (optional)
Total:	\$18,000.00	\$28,000.00	\$67,000.00*

All treatments will be performed only as required and approved by the township and their available funds.

*Note: The high end budget is itemized so all parties involved realize that additional services are available and that some services may not be part of the program. The main priority on the lake is to manage exotic plants, specifically EWM and CLP. The expected budget allows for that to occur. In the future, if the expense of managing EWM decreases, other services can be explored. It is important to note that native plants will still be present.

Optional Management Services:

Water Quality Program: The water quality program consists of two samplings, occurring in the spring and late summer each season. A profile is taken that includes the following parameters such as secchi disc, pH, D.O., conductivity, ammonia, and alkalinity. Nutrient sampling is taken for total nitrogen and total phosphorus. Nutrient sampling is recommended on Fremont

Lake at the surface, at thermocline depth and a deep water sample, below the thermocline. E.Coli testing will be done during the summer months, consisting of three samples for an overall lake average. Reports are issued annually in the fall.

Fremont Lake Recommended Water Quality Program:

Deep Hole 1:

Spring: Profile plus Nutrient @ surface, thermocline & deep water;

Fall: Profile plus Nutrient @ surface, thermocline & deep water: \$ 825.00

Deep Hole 2:

Spring: Profile plus Nutrient @ surface, thermocline & deep water;

Fall: Profile plus Nutrient @ surface & deep water: \$ 825.00

Inlet 1:

Spring: Profile plus Nutrient @ surface;

Fall: Profile plus Nutrient @ surface: \$ 375.00

Inlet 2:

Spring: Profile plus Nutrient @ surface;

Fall: Profile plus Nutrient @ surface: \$ 350.00

Chlorophyll a testing: \$75.00/test. Recommended 8 samples/year: \$ 625.00

Ecoli: \$125.00 for one time, mid summer testing of 3 locations: \$ 150.00

Total: \$3,150.00

Surveys: Performing surveys is a vital part of any lake management program. PLM surveys a lake in the spring and fall as well as surveying for pre/post treatments. Lake representatives are welcome to arrange joining PLM for a Survey. Depending on the type of Survey performed, a cost may apply. An AVAS Survey is a more specific Survey performed for specific reasons. Performing Spring and fall AVAS surveys of the lake will allow for all vegetation within the lake, native and exotic, to be recorded along with density. This data is important in determining management plans and treatment areas. A full understanding of the vegetation growing within the lake can indicate problems within an aquatic environment. AVAS surveys are also a requirement from the MI EGLE prior to a Sonar treatment. Surveys will be supplied to the lake board upon completion with a break down of what the survey indicates. Cost per AVAS Survey: \$850.00

Management Plan/Updates: A formal management plan can be compiled in the fall of every season that includes all treatment specifics, survey information, water quality testing, plant trends and recommendations for the following season. The update gives property owners an overall scope of the activities performed and what should/may follow in seasons to come. Cost per Plan/Update: \$750.00

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 2021 for 2022! The remaining three years (2023, 2024, 2025) 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 MI EGLE 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 MI EGLE or other regulatory agencies may have a drastic effect on the pricing for following years.

Permit Fee: PLM Lake & Land Management Corp. is responsible for completing and submitting aquatic nuisance permit applications. PLM Lake & Land Management Corp. will send an invoice or statement for the yearly MI EGLE 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 MI EGLE permit application.

Posting of Treatment Areas: Posting of shoreline treatment areas is the responsibility of PLM Lake & Land Management Corp. and will be conducted according to MI EGLE regulations. Due to MI EGLE guideline changes and specific residential concerns, posting fees may apply. 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 Corp., 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, of the products that may 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 Corp. will provide a tentative treatment schedule and the **Notice** of proposed products to be used for the notice. PLM will also notify resident within 100 feet of the treatment areas on the day of treatment with a posting sign. PLM can assist with the distribution of this notice (mailing) with an updated address list, postage fees may apply, if required.

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 Corp. 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 thirty (30) 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. All invoices may be subject to a fuel surcharge of up to 1.5% of the total service cost. If changes, amendments or modifications need to be made to these payment terms, please contact PLM to discuss.

Liability Issues:

We are responsible for workman's compensation and liability insurance for the duration of the contracted period. PLM Lake & Land Management Corp. is not responsible for fish loss due to low oxygen levels caused during warm water conditions. Please sign, check optional mutli year program, or one-year program and water quality programs, if you would like to participate. Return one copy of this proposal by December 31, 2020.

For further clarification or modifications please contact.



BreAnne Grabill, Environmental Scientist
Northern Lakes Manager
PLM Lake & Land Management Corp.

For Fremont Lake
Please Check which Program you are participating in
Multiple Year Program _____

Lake Representative to contact:

Name

Please check optional services you are participating in
Water Quality Program _____
AVAS Survey Program _____

Address

Print Name

Home Phone / Cell Phone

Signature **Date**

Email Address