

KUSEL/WILSON/ROUND LAKES PROTECTION & REHABILITATION DISTRICT
MINUTES OF BOARD OF COMMISSIONERS MEETING
March 17, 2018

WHAT: Board of Commissioners Meeting of Kusel/Wilson/Round Lakes Protection & Rehabilitation District

WHEN: March 17, 2018 at 9:00 A.M.

WHERE: Springwater Town Hall, Wild Rose, Waushara County, Wisconsin

PRESENT: Paul Zimmer, Commissioner for Wilson Lake, Dan Mingus, Commissioner for Round Lake, Jeremy Gaboury, Commissioner for Kusel Lake.

Zimmer called the meeting to order at 9:00 A.M. Zimmer called the roll, Paul Zimmer, Dan Mingus, and Jeremy Gaboury answered "Present".

A. FINANCIAL REPORT

Mingus presented a financial report for the District and for each lake. Mingus reported the balances in the four accounts for the District were as follows:

1.	Administration Account	\$1,918.73
2.	Kusel Lake Account (includes CDs of \$11,006.00)	\$49,766.50
3.	Round Lake Account	\$2,432.76
4.	Wilson Lake Account (includes CDs of \$15,740.99)	\$28,375.99

B. UPDATE ON KUSEL LAKE

Per Wisconsin Lake & Pond Resource LLC. They will be doing a treatment for the Hybrid HWM in Kusel. There are also proposing a treatment of "Nuisance Species". Along with the proposed treatments they are also going to be doing a curly leaf pond weed survey, monthly site visits to monitor the treatment, water conditions etc, and a full Aquatic Plant Survey. See attached proposal from Wisconsin Lake and Pond for more information.

C. UPDATE ON WILSON LAKE

Per Wisconsin Lake & Pond Resource LLC. They will be doing a treatment for the Hybrid HWM in Wilson. There are also proposing a treatment of "Nuisance Species". Along with the proposed treatments they are also going to be doing a curly leaf pond weed survey, monthly site visits to monitor the treatment, water conditions etc, and a full Aquatic Plant Survey. See attached proposal from Wisconsin Lake and Pond for more information.

D. UPDATE ON ROUND LAKE

Mingus there are no updates for Round Lake.

E. ADJOURNMENT

The Board of Commissioners Meeting was adjourned at 9:46 A.M.

Respectfully submitted by:

A handwritten signature in black ink, consisting of a stylized 'J' followed by a series of loops and a long horizontal stroke.

Jeremy J. Gaboury, Chairman/Secretary

**Wisconsin
Lake & Pond Resource LLC**
"Providing Professional Resources for Management of Your Lake or Pond"

Professional Pond Management Products and Services
Aquatic Herbicide and Algaecide Applications
Lake Management Planning and Services
Pond Design and Development

February 9, 2018

Kusel, Wilson, Round Lakes Rehabilitation District
Wild Rose, WI 54948

Sent Via Email: JCGaboury@jjkeller.com
pszimmer1@hotmail.com

Re: Costs for 2018 Lake Management Activities

Dear Mr. Zimmer & Gaboury:

In response to your request, Wisconsin Lake & Pond Resource, LLC (WLPR), has prepared a cost estimate for comprehensive lake and aquatic plant management services for Kusel and Wilson Lakes, Waushara County. This scope of services briefly describes the proposed work plan, anticipated project schedule and estimated project costs. All work would be completed in accordance with applicable federal, state, and local regulations, as outlined below.

Work Scope

These costs include labor, equipment, chemical costs, and direct costs to complete the described work plan. If more than one mobilization is required because DNR does not allow the treatment or it is outside of the allowable label parameters because of weather or other environmental factors, multiple mobilization charges may apply. Chemical and equipment costs are based on the referenced products, application rates and acreages and those costs are fixed as proposed, per unit labor costs generally increase as the treatment area decreases and are subject to change based on the final DNR approved treatment areas and application rates.

TASK 1.0 PREPARE WDNR & NPDES PERMIT APPLICATIONS

WLPR will use the maps created in the preliminary aquatic plant survey for the permit application, if applicable. Data will be gathered from the WDNR and any other sources available. Once the permit application(s), riparian owner notification, and legal notices are completed, all will be submitted to the lake group for signature and the appropriate permit fees as well as any publishing requirements. It will be the lake group's responsibility to then forward to WDNR for approval. Permit fee will be covered by the District.

TASK 2.0 EDUCATIONAL MAILING (OPTIONAL)

A packet of information regarding the proposed treatment would be distributed to riparian property owners consistent with NR107.04 (3) that are located within or adjacent to the permitted application (150') areas. It is assumed that the Association will provide an Excel spreadsheet mailing list of all riparian property owners to WLPR. ***It is also assumed for the purposes of this proposal that this Task will be completed by the lake group,*** and it must be completed at least 15 days prior to the chemical treatment. Any local publishing requirements in local newspaper(s), if the treatment is in excess of 10 acres, will be the responsibility of the lake group. All pertinent information for notification will be provided by WLPR

TASK 3.0 EARLY-SEASON CURLY-LEAF PONDWEED SURVEY

Curly-leaf pondweed is an invasive species with a unique life cycle where it begins growing very early in the year, often prior to or during ice cover, and dies back by mid-summer. Because of this, CLP's true abundance is often misrepresented during aquatic plant surveys used to assess the entire community of the lake.

Curly-leaf pondweed is an invasive species that has been noted in both Kusel and Wilson Lakes at varying levels. To assure that dense populations of CLP are not present, WLPR will complete early-season surveys to more accurately assess current populations. Both lakes will be sampled with any populations of CLP noted and mapped and, if necessary, included for management in 2018.

TASK 4.0 HERBICIDE TREATMENT TARGETING HYBRID WATER-MILFOIL AND/OR CURLY-LEAF PONDWEED

Kusel and Wilson Lake both have Eurasian water-milfoil present, confirmed as a hybrid cross with native strains. Hybrid water-milfoil (HWM) has been actively managed on both lakes from small scale application (<5 acres) to whole-lake rates. Typically this has been completed with the active ingredient 2,4-D. While 2,4-D can be effective in controlling EWM, current research is showing that varying methods of control, including active ingredients, is necessary to see success. Some strains of HWM have shown tolerance to 2,4-D and resulted in failures of treatments.

Upon review of past treatments on Kusel and Wilson Lake and in order to achieve better control results we propose to vary the active ingredients used for HWM control in 2018. On both lakes we recommend using the herbicide Aquasrike, a combination of the active ingredients diquat and endothall. This mix has shown good success in controlling HWM. Application would be completed to areas of active HWM growth mapped during the 2017 surveys (Figures 2 & 4 attached). For areas that are adjacent to deeper water and/or small satellite locations, such as locations B & C in Kusel Lake and C in Wilson Lake, we recommend applying at higher rates of 1.625 gal/acre-foot. For areas nearer each other and in shallower water we recommend reduced rates of 1.25-1.5 gal/acre-foot.

Application is anticipated to take place in late April – early May. Proposed rates and overall product requirements are outlined by treatment areas in the table below.

Proposed Aquasrike Application Rates for HWM Control

Lake	Area	Size (ac)	Avg. Depth (ft)	Application Rate (gal/ac ft)	Aquasrike Required (gal)
Wilson	A	2.5	10	1.25	31.25
	B	1	8	1.25	10
	C	1.25	4	1.625	8
	TOTAL	4.75	---	---	49.25
Kusel	A	1	6	1.5	9
	B	1.25	8	1.625	16.25
	C	1.35	12	1.625	26.25
	TOTAL	3.6	---	---	51.5

The population of curly-leaf pondweed as noted during the 2017 point-intercept surveys was sporadic and not dense enough to require management. However, as noted above, an early-season survey is necessary to accurately assess the infestation of CLP. It is anticipated that no management of CLP will be needed in 2018. In the event that active management is necessary as found during Task 3.0 any associated costs will be provided to the District for approval prior to completion. If necessary, the herbicide Aquathol K, active ingredient endothall, would be applied at necessary rates for CLP control to locations of active growth.

Task 5.0 CHEMICAL TREATMENT TARGETING GENERAL NAVIGATIONAL NUISANCE SPECIES

Some locations of Kusel or Wilson Lake can see dense growth of native aquatic plant species that may cause a nuisance to navigation. In particular the west basin of Wilson Lake and channel into the Campground in Kusel Lake were noted as locations that may see a navigational nuisance from dense native aquatic plant growth. If either of these areas are noted to be experiencing dense growth during Task 6.0 below, the location and area of all treatment areas will be documented with global position system (GPS) technology. All products proposed are registered by the EPA, DATCP, and the WDNR for use in Wisconsin to remove populations of nuisance aquatic plant growth. Areas seeing nuisance growth from non-algal species will be treated with a 2:3 mixture of the active ingredients diquat and liquid copper.

Task 6.0 MONTHLY SITE VISIT

Under this task, WLPR will perform a site visit once per month on Kusel and Wilson Lake from May-September to assess conditions, results of past management, and/or plan for upcoming management requirements. When possible the monthly site visit actions will be coupled with other pre-planned tasks (treatment, aeration, etc.) to defray costs. During each site visit WLPR will:

- Sample select locations for aquatic plant diversity and density
- Assess current conditions for management recommendations
- Observe water quality conditions
- Visually assess and monitor the Wilson Lake outflow for obstructions or impairments
- Monitor for newly introduced AIS
- Submit a monthly health assessment report for each lake to the District

Task 7.0 AQUATIC PLANT SURVEYS AND MAPPING

Based on 2017 comprehensive survey results, a full repeat of that survey is not warranted at this time. WLPR will conduct limited late-season aquatic plant surveys on Kusel and Wilson Lake to assess 2018 management options and prepare for 2019. Approximate schedule for the survey is late August or early September, 2018 to ensure any aquatic plants present can be collected and identified. Data collected at each sample point will include species presence and density, depth, GPS location, and bottom substrate. This data will be compiled in the WDNR spreadsheet (WiAPMS.xl) and submitted to the District. Data collected will be used to create maps of any aquatic invasive species present and compared with historical data to assess ongoing results of AIS control and plan for potential management in 2019.

Task 8.0 AERATION MAINTENANCE ACTIVITIES & ASSESSMENT

WLPR will pull up and clean diffuser heads on the Wilson Lake aeration system in preparation for overwinter use. In addition, it is recommended that WLPR be allowed access to the aeration cabinets and compressors to accurately assess the current condition of the system.

During the fall, 2017 aeration maintenance of Wilson Lake performed by WLPR only 15 diffusers were located while there were potentially up to 18 within the lake. At this time three different types of diffusers were present. Each type of diffuser has different operating pressures that can labor the air supply and cause lines with higher pressure requirements to not work correctly if lower pressure diffusers are on running on the same compressor or manifold.

Due to this we recommend upgrading diffusers within Wilson Lake to ensure a properly working system. This can be completed all at one time or in multiple stages. If completed during multiple stages it is recommend to upgrade diffuser on aeration lines that are run into individual compressors or manifolds to ensure equal operating pressures within the sub-system.

Task 9.0 MISCELLANEOUS LAKE MANAGEMENT ACTIVITIES

Any activity not associated with the above tasks requested by the District will be billed on a time and material basis. Actions may include, but are not limited to, additional water quality sampling or associated lab costs, aquatic vegetation mapping, reporting, and others. Expected costs of any requested activity will be submitted to the District for approval prior to completing.

SCHEDULE AND ESTIMATED COST

Work can begin on this project once a signed contract is received. All field work will be coordinated with the Client and the WDNR. WLPR will work with the Client to ensure the treatment is completed and effective prior to significant use times such as weekends and holidays.

Task 1.0 Prepare WDNR Permit & NPDES Applications (no permit fees included) **\$250.00**

Task 2.0 Educational Mailing (*optional*) Base fee \$150 + \$1.50 each piece mailed = **\$Actual Costs**

Task 3.0 Early Season CLP survey and mapping – both lakes **\$1,685.00**

Task 4.0 Herbicide Treatment of HWM and/or CLP

HWM Treatment

Aquasatrike at varying rates to 4.75 ac (49.25 gal) – Wilson Lake	\$3,982.36
Aquasatrike at varying rates to 3.6 ac (51.5 gal) – Kusel Lake	\$4,164.29

Labor and Mobilization Costs – Both Lakes

Total Treatment area of 8.35 acres * \$175/acre	\$1,461.25
Mobilization, equipment, & vehicle/boat cost	<u>\$500.00</u>
Subtotal Cost	\$10,107.90

CLP Treatment – ONLY IF NECESSARY

Overall cost to be provided to District only if necessary	\$TBD
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Task 5.0 Chemical Treatment Targeting General Navigational Nuisance Species*

Liquid diquat at 2.0 gal/ac and liquid copper at 3.0 gal/ac	\$254.51/acre
Labor	\$175/acre
Mobilization, equipment, and vehicle/boat charge	<u>\$500.00/event</u>
Subtotal Cost	\$TBD as needed

Task 6.0 Monthly Site Visit and Lake Assessment Update

Monthly Site Visit May – September @ \$750.00 / visit	\$3,750.00
Subtotal Cost	\$3,750.00

Task 7.0 Aquatic Plant Surveys and Mapping

Labor Cost – survey of both lakes	\$1,200.00
Mobilization, equipment, and vehicle/boat charge	\$500.00
Mapping & data entry	<u>\$380.00</u>
Subtotal Cost	\$2,080.00

Task 8.0 Aeration Maintenance Activities and Assessment

Diffuser Cleaning - \$30/each, anticipated 15 total	\$450.00
Mobilization, equipment, and vehicle/boat charge	\$500.00
Diffuser head upgrade	\$190-230 ea
General equipment repair labor for two person crew	\$150/hr
Aeration maintenance and repair parts	\$TBD
Diffuser Cleaning Subtotal	\$950.00
System Repair or Upgrade	\$TBD

Task 9.0 Miscellaneous Lake Management Activities

General labor rate	\$95.00/hr
General mobilization, equipment, and vehicle/boat charge	\$500.00
Various lab costs for water quality sampling	\$TBD
Subtotal Cost	\$TBD

Total Costs Tasks 1.0-4.0, 7.0, and 8.0 (cleaning) only **\$18,822.90**

***Total estimated costs exclude any permit application fees** (\$20 base fee and \$25 per acre up to 50 acres – Max permit fee is \$1,270), or any residual samples or dyes. If multiple treatments are required or a treatment is canceled after the crew(s) are on-site, additional mobilization charges may apply.

TBD: To be determined. Tasks with this designation are ambiguous and may vary based on conditions or District desires at time of completion. Tasks will be completed only under authorization from the District. WLPR will submit a proposal outlying tasks prior to beginning.

WLPR offers our clients a complete package of insurance including statutory liability, comprehensive general liability, automobile liability, errors and omissions and pollution liability. A copy of which is available upon request, or execution of this contract. A copy of regulatory and/or lake client references is available upon request.

PAYMENT TERMS & CONDITIONS

Payment for services and expenses are due upon receipt, and will accrue interest after 30 days. Final reports will be withheld until all payments are made in full. Invoices for the services performed will be submitted either upon completion of such services or on a monthly basis. Refer to the attached Agreement for additional terms and conditions.

We are pleased to submit this proposal and trust this information meets your needs. The above-stated fee proposed for this scope of services is valid for 90 days from the date of this proposal and are subject to annual adjustments. Upon review and acceptance of the proposal and attached Standard terms and Conditions, please return a signed copy of this Agreement in its entirety via mail, fax or email, keeping one copy for your records.

 Wisconsin
Lake & Pond Resource LLC
"Providing Professional Resources for Management of Your Lake or Pond"

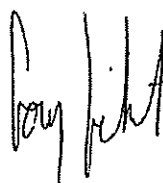
Professional Pond Management Products and Services
Aquatic Herbicide and Algaecide Applications
Lake Management Planning and Services
Pond Design and Development

If you have any questions, or require any additional information, please don't hesitate to contact us at (920) 872-2032 or via email at jim@wisconsinlpr.com. We thank you for this opportunity and look forward to working with you on this project.

Sincerely,



Jim Scharl
Aquatic Management Specialist



Cory Zickert
Senior Aquatic Manager/President