



Stantec Consulting Services Inc.
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Stevens Point WI 54481
Tel: (715) 344-9480
Fax: (715) 344-9481

March 19, 2015

George Lake Rehabilitation District
Jeff Coultrip

Sent via email to: jcoultrip@frontier.com

Re: Revised Proposal and cost estimate for 2015 Aquatic Plant Management, Lake George, Kenosha County, Wisconsin

Dear Mr. Coultrip and other Boardmembers:

In response to your request for costs Stantec has prepared a cost estimate for chemical treatment of AIS on Lake George (Lake). This proposal briefly describes the proposed workplan, anticipated project schedule, and estimated project costs. We not have only licensed herbicide applicators on our staff but, numerous water resource experts including hydrologists, engineers, scientists and fisheries biologists. All of our application equipment is designed and custom built by our staff internally. All work would be completed in accordance with applicable federal, state, and local regulations.

BACKGROUND INFORMATION

Current problems on the lake include the presence of the aquatic invasive species, Eurasian water-milfoil (EWM) and/or Curly-leaf Pondweed (CLP), which have been documented and mapped, a whole lake 2,4-D treatment of 300 PPB occurred in 2013, with limited success. From the SEWRPC plan for George Lake based on residency time of 66 days and a total water volume of 390 acre/feet, we have calculated the average outflow from the lake at 2.9 CFS. Additional data received from Kathy Papp suggests the total volume is closer to 439 acre feet of water, and that is the number that will be used on this revised proposal.

WORKPLAN

The proposed workplan consists of the following major tasks, some items labeled as "*optional*" may be completed by the District, and are assumed as such:

Task 1.0 Prepare WDNR, NPDES Permit Application and Liaison with WDNR

Existing background information from previous investigations including chemical, biological, and physical data, and other pertinent information would be collected, reviewed, and used to better direct subsequent tasks and prepare the WDNR and NPDES (which Stantec does have statewide coverage for all clients through 2016) permit application for chemical control. We would use the maps created in the preliminary aquatic plant survey and previous years EWM and/or CLP assessments for the permit application. Data would be gathered from the District, WDNR and any other sources available. Once the permit application is completed, it would be submitted to the District for the appropriate signatures, the District would be responsible for forwarding the permit with the appropriate fees to the WDNR for approval.

Task 2.0 Educational Mailing (optional)

A packet of information regarding the proposed treatment will be distributed to members of the District consistent with NR107.04 (3) that are located within or adjacent to the permitted application areas. This is a requirement of NR 107. It is assumed that the District will provide an Excel spreadsheet mailing list of all riparian property owners to Stantec. This task can be completed by the

Design with community in mind



District, but must be completed at least 15 days prior to the chemical treatment; Stantec will provide all necessary materials electronically, if that option is chosen. Any local publishing requirements, if the treatment is in excess of 10 acres in local newspaper(s), will be the responsibility of the District, Stantec will provide a copy of the legal notice to the District.

Tasks 3.0 Chemical Treatment Targeting AIS

Stantec would selectively treat areas of the Lake for AIS (14 acre physical treatment for cost estimate purposes) consistent with the permitted application areas. The contact herbicide endothall which would be applied in May, based on water temperatures, to minimize impacts to more desirable native aquatic plants at rates outlined below. The herbicides will be applied with Stantec's custom designed directional forced air blower application system for granular, and trailing hose dual herbicide subsurface injection for all liquids.

All treatments will utilize Trimble GeoXT submeter GPS. Basic water quality parameters would also be collected at the time of site surveys and chemical control. Stantec would provide and post yellow warning signs within 200' of any treatment areas and at all improved public boat landings at the time of treatment as required under NR 107.

The WDNR required treatment record (form 3200-111) documenting the total area treated and chemical(s) used on the project would be completed and submitted to the WDNR and the Water Resource Management Specialist for the County, if any.

SCHEDULE

Work could begin on this project once a signed contract is received. The treatment is anticipated to take place in May depending on water temperatures and flows. All fieldwork would be coordinated with the District and the WDNR.

ESTIMATED COST

Stantec will complete the services described above on a time & materials basis for labor and a fixed fee for chemical costs, not to exceed the costs outlined below, unless the acreages or application rates change beyond what was proposed in the RFP by either the client or the client's consultant. At that time a revised cost estimate will be provided to the client. Probable costs for completion of the described workplan are presented below and assumed the treatments would be dosed as shown in the proposal based on WDNR's recommendations, please note Stantec would recommend either Option C, to be applied during reduced flows between water temps of 65 and 70 degrees;

AIS Herbicide Treatment

- *Task 1.0** Prepare WDNR, NPDES Permit Application & Liaison with WDNR **\$250.00***
- Task 2.0** Educational Mailing \$150 base fee + \$2.00 each piece(optional) **\$actual cost**
- Task 3.0** Chemical Treatment Targeting AIS

Cost estimate for assumed 14 acre treatment area;

Option C Chemical Cost 300 PPB 2,4-D and 750 PPB endothall:

Aquathol K cost per gallon \$82.17 * 210 gallons	\$17,255.70
DMA-4 cost per gallon \$21.93 * 95 gallons	\$2,083.35

Labor and Mobilization Costs:



Total treatment area of 14 acres * \$120/acre for labor/equipment cost	\$1,680.00
Mobilization, equipment, and vehicle/boat cost	\$600.00
Total Cost for EWM treatment items under Task 3.0 Option C	\$21,619.05
Task 4.1 Pretreatment PI survey of AIS only and mapping on day of treatment	\$600.00
Task 4.2 Post-treatment full PI survey and mapping at least 90 days after treatment	\$1,000.00
Total Project Costs Tasks 1.0, 3.0, 4.1 and 4.2	\$23,469.05

***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). Assay costs after treatment and/or any residual sampling are not included, if required by the WDNR or the District.**

Total Estimated Costs include labor, equipment, chemical costs, and direct costs to complete the described workplan and are based on a minimum treatment area described above. The **optional** Tasks will not be completed unless initialed on this proposal and specifically directed by the District to perform.

Please Note: Task budgets are estimates and we reserve the right to reallocate budget between tasks but will not exceed the total contract amount without prior approval.

PROJECT SCHEDULE

Stantec will initiate and schedule this project immediately following acceptance and receipt of a signed agreement. A Stantec representative will contact you to coordinate and schedule a time to proceed with the fieldwork. Fieldwork schedules are dependent on site access and weather conditions. We will continue to work closely with you, your consultant, and project team members to prepare the deliverables in a timely manner and will work to meet your project's schedule.

EXTRA SERVICES

Extra services are those services that are not part of the base scope of services provided above, but could potentially be needed for a project of this type. Extra services may include, but are not limited to the following:

- Fieldwork beyond that identified in the Scope of Services
- Collecting and/or providing additional information requested by regulatory agencies
- Project team and regulatory agency meetings/coordination beyond that identified in the Scope of Services
- Permit applications beyond those identified in the Scope of Services
- Expert witness testimony

QUALIFICATIONS AND REFERENCES

Stantec is a publically traded engineering and environmental consulting company (STN NYSE) with over 200 offices throughout North America, and over 15,000 employees. We have over 130 staff in Wisconsin located in 6 offices throughout the State with over a dozen licensed applicators. Stantec



provides a complete line of engineering, planning, and scientific services designed to fill the needs of utilities and other lake management organizations. Relevant or related services that we can provide include:

- Grant Writing
- Aquatic Plant Inventories and Management Plans
- Water Quality Studies
- Comprehensive Resource Inventory
- Evaluation of Lake Physicochemical Characteristics and Morphology
- Aquatic Invasive Species (AIS) control
- Watershed and Nutrient Assessments
- Lake Sediment Assessments
- Long-term Strategic Management Plans
- Hydraulic and Hydrologic Modeling
- Public Surveys and Educational Programs

We work one-on-one with the client, and yet have enough staff to provide fast, convenient service. We will constantly keep you informed, and will be available to respond to questions or concerns. Over the past fifty plus years, Stantec has made great strides because we have always maintained excellent communications with our client.

Stantec is just as committed and concerned as you to protect and manage Wisconsin's lakes. We realize that increased recreational use and development have placed tremendous pressure on some of our most valuable resources. We sincerely appreciate the opportunity to assist you in managing and protecting such a valuable resource. A copy of client and/or regulatory references is available upon request.

OTHER CONSIDERATIONS

In conjunction with the necessary technical expertise, Stantec offers our clients a complete package of insurance including statutory liability, comprehensive general liability, automobile liability, engineer's errors and omissions and engineer's pollution liability. Together our E&O and EPL policies complete the coverage loop to offer our clients the best professional liability coverage available on the market today. A copy of which is available upon request, or execution of this contract.

PAYMENT TERMS & CONDITIONS

Payment for services and expenses are due within 30 days of invoicing. 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.

***Please remit payments for invoices to:
Stantec Consulting Services Inc.
13980 Collections Center Drive
Chicago, IL 60693***



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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 to the address shown on the letterhead, keeping one copy for your records.

If you have any questions, or require any additional information, please don't hesitate to contact me Mark Kordus, directly at (715) 781-9976 or mark.kordus@stantec.com. Thank you for this opportunity, we look forward to working with you on this and future projects.

Regards,

STANTEC CONSULTING SERVICES INC.
Commercial Application Business Lisc. #93-020291-011079

Mark Kordus, Associate
Senior Project Manager
WI Lisc. #258412-CA



The Terms and Conditions, and referenced Proposal scope of services and fees are agreed upon:

Consultant: Mark Kordus Date: 3/19/2015

Mark E. Kordus, Associate
Stantec
2841 Stanley Street
Stevens Point, WI 54481

Client Signature: _____ Date: _____

Client Contact Name (Printed): _____

Email: _____ Phone Number: _____

Client Billing Address:

