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2 June 2017

Mr. Kenzie Phelps

Three Lake Improvement District
4480 115th Ave
Clear Lake, MN 55319

Dear Mr. Phelps:

Thank you for the opportunity to meet with you and the Board of the Three Lake Improvement District to discuss the issues facing Briggs Lake, Lake Julia and Rush Lake. We are excited to partner with you to achieve your goals.

From that conversation we understand that the three priorities of the Three Lake Improvement District are:

1. AIS
2. Water Quality
3. Water Level Stabilization

The Three Lake Improvement District's first priority, and the focus of the study proposed here, is Water Level Stabilization. The outcome of the proposed feasibility study is to identify alternatives for managing lake levels to reduce frequency and duration of periods where the No Wake Ordinance is in effect on the lake. Based on our discussion, changing the No Wake Ordinance elevation is not an alternative the board wishes to pursue. This study will focus on hydrologic and hydraulic solutions to capture and manage water upstream, and/or improve outlets downstream. The study will also quantify water quality and habitat benefits and impacts of the proposed solutions and leverage these to expand funding alternatives and position the Three Lake Improvement District for grant funding.

The proposed tasks, associated costs and schedule are described below.

Scope of Work

Task 1. Compile and review existing hydrology and hydraulic data including the USACE study, flood studies, lake levels, USGS flow records, hydrological atlases, published regional groundwater elevations, DNR records and LiDAR elevation data. We will also compile existing water quality data collected since the TMDL study, any updated lake response and watershed models. If additional field data is required we propose to collaborate with county SWCD staff for data collection. If that is not possible, we included an optional task for field data collection.

Task 2. Using the data collected above, compute a water balance for the Briggs Lake Chain and surrounding area quantifying groundwater, surface water and upstream inputs to the lake and outputs. To keep costs low, use of existing data and model findings is recommended. Water quality models will be evaluated in the context of the new data available as well so that the potential lake response to hydrologic and nutrient load reductions can be predicted.

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Task 3. Identify three hydrologic/ hydraulic alternatives to improve water level stabilization and improve the lake outlets. List their costs and benefits and potential funding sources. Benefits quantified will not be limited to recreational benefits afforded by managing water levels. We will quantify water quality, AIS and habitat management benefits as well. Wenck will present these alternatives to the board. Board feedback from this work session will be used to finalize the report.

Task 4. Finalize report and present findings at the August Annual Meeting. This report will summarize the hydrologic, hydraulic and water quality data available, make recommendations on data needed going forward to facilitate final design, funding alternatives, costs, water quality benefits, impacts on habitat and AIS.

Schedule & Cost:

The proposed schedule and cost are shown in the table below.

Tasks	Cost	2018							
		Jan	Feb	March	April	May	June	July	Aug
1 Review & Compile Data	\$2,428		x						
2 Water Balance	\$5,616			x					
Identify Alternatives & 3 Board Presentation	\$4,266					x			
Finalize Report & Annual 4 Meeting Presentation	\$3,538						x	x	x
= meeting	\$15,848								

Optional Task	Cost
Field data collection/ day	\$1,290

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with the Three Lake Improvement District. Should you have any questions, or need clarification of anything presented here, please do not hesitate to call me at 763-252-6824 or e-mail rcarlson@wenck.com.

Sincerely,

Rebecca Carlson

Rebecca Carlson, PE (MN)
 Wenck Associates, Inc.
 Principal

Chris Meehan

Chris Meehan, PE (MN)
 Wenck Associates, Inc.
 Principal