



# REQUEST FOR PROPOSAL FOR 2017 WATER MONITORING SERVICES

The Bassett Creek Watershed Management Commission (BCWMC) is seeking proposals from firms in its Engineering Pool for three water quality monitoring projects being considered for 2017.

## BACKGROUND:

Three separate but related water monitoring projects are being considered by the BCWMC for 2017.

## 1. Routine Lake Monitoring

The BCWMC Monitoring Plan calls for monitoring its priority lakes once every three years. Lakes scheduled for regular monitoring in 2017 include Twin Lake and Sweeney Lake in the City of Golden Valley and Lost Lake in the City of Plymouth.

Lake monitoring includes monitoring two locations on Sweeney Lake, and one location each at Twin Lake and Lost Lake on six occasions for selected parameters (total phosphorus, soluble reactive phosphorus, total nitrogen, pH, chlorophyll a, and chloride), sample analysis, phytoplankton and zooplankton collection and analysis, an aquatic plant survey (two occasions), submission of data to the State's EQIS database (sites are already established), and preparation of a final report. Full details on the monitoring methods and data expected can be found in the BCWMC Monitoring Plan, Appendix A of the 2015 BCWMC Watershed Management Plan at: http://www.bassettcreekwmo.org/application/files/7914/4676/6436/Appendix A Monitoring Pl an.pdf.

Deliverable: All raw data and a report that includes trend analyses using past data (supplied by the BCWMC)

## 2. Sweeney Lake Aeration Study

The Homeowners Association of Sweeney Lake in Golden Valley uses multiple aerators in the lake to keep it mixed during the summer. The Association believes this helps improve the water quality of the lake. During the development of the 2011 Sweeney Lake TMDL, the aerators were turned off for the 2007 and 2008 monitoring seasons but effects on water quality were found to be inconclusive. The BCWMC seeks to perform a more vigorous study and one that involves turning off the lake aeration system and monitoring during 2017, followed by detailed lake water

quality modeling calibrated to aerated and non-aerated conditions. The scope includes using the detailed lake model to further evaluate the best in-lake management strategies that should be considered for TMDL attainment. It's expected that some additional lake water quality monitoring would be needed to supplement the Schaper Pond (see #3) and baseline Sweeney Lake monitoring program (see #1) for 2017.

This study relies upon the results of the Schaper Pond effectiveness monitoring and the detailed Sweeney Lake water quality monitoring.

Deliverable: Results should be analyzed and discussed in a project report.

## 3. Schaper Pond Effectiveness Monitoring

The <u>Schaper Pond Diversion Project</u> was completed by the BCWMC as a Capital Improvement Project in late 2015. The project included the installation of a floating baffle and curtain (typically only used in wastewater treatment plants) to direct flows through the pond to the northwest lobe of the pond, thereby keeping water in the pond for a longer period of time and allowing for more treatment. Schaper Pond is tributary to Sweeney Lake. This project is estimated to remove 81 - 156 pounds of total phosphorus each year. The BCWMC wishes to monitor the effectiveness of the project by repeating monitoring that was performed during the <u>feasibility study</u> for the project including monitoring of two major inlets to Schaper Pond and the pond outlet to analyze changes in treatment capacity since the completion of the pond improvements.

Deliverable: Results should be analyzed and discussed in a project report.

## RESPONSES:

To submit a proposal for the services outlined in this Request for Proposal, please provide 5 paper copies and one electronic copy of the proposal **no later than 4:30 p.m. on Thursday April 28, 2016 to** BCWMC Administrator Laura Jester (contact information below). The BCWMC reserves the right to accept a bidder's proposal in part or in whole, depending on the BCWMC's desire to move forward with one or more of the three projects in 2017.

## PROPOSAL CONTENT:

Provide an example (preferably a link to an example) of the type/format of monitoring report that would be developed for #1. Please note that past reports of BCWMC water quality monitoring activities should not necessarily be used as examples. The BCWMC is seeking a more refined, summarized report with data presented for a lay audience. Methods and more technical analyses can be included in appendices or referenced in other documents.

Firms will submit a proposal that outlines the scope of work and estimated budget for <u>each</u> of the three projects as indicated below and company/staff qualifications with a total proposal length of no more than 15 pages.

#### Scope of Work

- Describe the tasks and activities to carry out each of the projects along with methods, timeline, and budget for each major task including costs for field labor, lab analyses, data analyses, report generation, and final presentation to BCWMC at a regular meeting.
- Include one total estimate for <u>each</u> of the projects separately (understanding that projects #2 and #3 rely on some data gathered in project #1).
- Include a list of subcontractors and/or laboratories to be used for each project.
- Provide a list deliverable(s) after the completion of each task within each project.
- Define the information that will be needed from BCWMC staff, and when it will be needed.

#### Qualifications and Experience of Staff

- Describe similar or related past projects and references.
- Provide qualifications of staff to be assigned to these projects.
- Provide links to examples of reports or other deliverables similar to those proposed here.

In addition, the proposal should meet the following requirements:

- Proposal will address items under Proposal Content in a complete and concise fashion;
- Proposal will not contain non-applicable promotional materials and should include only information that addresses the project outlined for this project; and
- Proposal will be submitted electronically in PDF format along with 5 (five) paper copies by 4:30 p.m. on Thursday April 28, 2016 to BCWMC Administrator Laura Jester.

## Please direct proposals and other inquiries regarding this project to:

Laura Jester, BCWMC Administrator Laura.jester@keystonewaters.com 952-270-1990 c/o 16145 Hillcrest Lane Eden Prairie, MN 55346