

MEETING DATE: May 28, 2014

TITLE: Authorization to Hire RMB Environmental Laboratories, Inc. to Perform a Biological Assessment of Selected MCWD Stream Sites

RESOLUTION NUMBER: 15-046

PREPARED BY: Yvette Christianson, Water Quality Manager

E-MAIL: ychristianson@minnehahacreek.org

TELEPHONE: 952-641-4514

REVIEWED BY: Administrator Counsel Program Mgr. (Name): Craig Dawson
 Board Committee Engineer Other _____

WORKSHOP ACTION:

<input type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date):_____	<input type="checkbox"/> Refer to taskforce or committee (date):_____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input checked="" type="checkbox"/> Other (specify): <u>Not reviewed at a workshop</u>	

PURPOSE or ACTION REQUESTED:

Authorization to execute an agreement with RMB Environmental Laboratories, Inc. to complete a biological assessment (macroinvertebrate survey) at 25 stream sites on Minnehaha Creek, Six Mile Creek, and Schutz Creek for amount not to exceed \$12,000.

PROJECT/PROGRAM LOCATION:

Minnehaha Creek, Six Mile Marsh, and Schutz Lake subwatersheds

PROJECT TIMELINE:

Stream sampling will occur in August-September 2015 (depending on conditions). Lab work will occur from September 2015 – April 2016. Final report will be complete by April 1, 2016.

PROJECT/PROGRAM COST:

Funding for macroinvertebrate analysis was included in the 2015 workplan and budget which was approved by the Board.

Fund name and number: Hydrological Data Monitoring and Research, 2201-500-4520

2015 budget: \$119,453 (macroinvertebrate analysis is part of Monitoring, Data and Laboratory Analysis Costs)

Requested amount of funding: \$12,000

Is a budget amendment requested? No

Is additional staff requested? No

PAST BOARD ACTIONS:

April 25, 2013 Resolution 13-049 Authorization to Execute a Contract with RMB Environmental Laboratories, Inc. to Complete a Macroinvertebrate Survey.

SUMMARY:

The E-Grade program was developed to promote greater understanding of the overall health of our waterbodies within the District. Under this new program, waterbodies and other ecological features will be evaluated for their performance of ecosystem functions. Two of these functions are biodiversity and habitat diversity. As part of the development of this program, it was identified for biodiversity to use Macroinvertebrate Index of Biotic Integrity, and for habitat diversity, the Minnesota Stream Habitat Assessment. Both are well-established metrics and supported by MPCA and DNR. They will be primary components of the overall stream health score.

To fulfill this component, a survey of macroinvertebrates (e.g. insects, sponges, crayfish, and snail) will be completed late summer of 2015 on Six Mile Creek, Schutz Creek, and lower Minnehaha Creek subwatersheds. Staff included additional funds to be allocated to macroinvertebrate surveys during the 2015 sampling season in the Hydrodata 2015 budget and workplans and approved by the MCWD Board of Managers.

RMB Environmental Laboratory's quote includes the cost to process and identify the macroinvertebrate samples to genus level, and a subcontract with Dr. Leonard Ferrington from the UMN to identify chironomidae to genus level and taxa verification for quality control, calculate the metrics per stream class, and provide a final project summary with recommendations.

Staff is recommending to hire RMB Environmental Laboratories to conduct the biological assessment (macroinvertebrate) on samples collected from stream sites in Minnehaha Creek, Six Mile Creek, and Schutz Creek. The information obtained from the macroinvertebrate surveys will be used to identify any changes in the stream's system over the past years, help assess the impacts of anthropogenic stress in the aquatic system, and provide information on future sampling locations and frequencies. This information will also be submitted to the Minnesota Pollution Control Agency's (MPCA) Index of Biological Integrity (IBI) database that could be used for long-term condition monitoring, problem investigation monitoring, TMDL investigation, and effectiveness monitoring.

See attached scope/proposal for more detail on specific tasks.

RESOLUTION

RESOLUTION NUMBER: 15-046

TITLE: **Authorization to Hire RMB Environmental Laboratories, Inc. to Perform a Biological Assessment of Selected MCWD Stream Sites**

WHEREAS, As part of the E-Grade Program it was identified that an evaluation should be performed on streams functions for biodiversity and habitat assessment; and

WHEREAS, There will be a macroinvertebrate index of biological integrity and Minnesota stream habitat assessment completed on select stream sites as primary components of the overall stream health score; and

WHEREAS, RMB Environmental Laboratories, Inc. submitted a proposal that details specific tasks necessary to complete biological assessment (macroinvertebrate analysis) at 25 locations with assistance of the University of Minnesota and thereby accomplish the goals of the macroinvertebrate assessment; and

WHEREAS, RMB Environmental Laboratories, Inc. has proven their ability to provide excellent service and expertise to analyze and provide feedback on the macroinvertebrates communities within the District's waters; and

WHEREAS, RMB Environmental Laboratories' established partnership with University of Minnesota's Entomology Department provides a unique opportunity for Minnehaha Creek Watershed District to perform biological assessments to genus level; and

WHEREAS, This information will help access the impacts of anthropogenic stress in the aquatic system, provide information on future sampling locations and frequencies, and could be used for long term condition monitoring, problem investigation monitoring, TMDL investigation, and effectiveness monitoring; and

WHEREAS, The cost for services is consistent with the 2015 Hydrological Data Monitoring and Research workplan and budget; and

WHEREAS, MCWD's Research and Monitoring staff recommends the approval of executing an agreement with RMB Environmental Laboratories, Inc., to perform biological assessments on selected stream sites on Minnehaha Creek, Six Mile Creek, and Schutz Creek; and

NOW, THEREFORE, BE IT RESOLVED, that the Minnehaha Creek Watershed District Board of Managers; hereby authorizes the District Administrator to execute an agreement with RMB Environmental Laboratories, Inc., to perform biological assessments on selected Minnehaha Creek Watershed District streams not to exceed \$12,000.

Resolution Number 15-046 was moved by Manager _____ seconded by Manager _____
Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: _____.

Secretary Date: _____

Attachment 1

February 10, 2015

Price Quote

CLIENT

Minnehaha Creek Watershed District
Attn: Yvette Christianson

PROJECT DESCRIPTION

Tasks

This quote is for a biological assessment of selected Minnehaha Creek Watershed District sites. This project will be completed through a collaboration between RMB Environmental Laboratories, Inc, Dr. Leonard C. Ferrington Jr, and the Minnehaha Creek Watershed District.

Fieldwork

The field sampling will be conducted by Minnehaha Creek Watershed District staff.

Taxon Identification

The laboratory processing will be conducted by RMB Lab. The price includes picking and sorting 300 organism subsamples following MPCA SOPs, identification of Chironomidae to family, identification to genus level for all other taxa where possible. At the end of the project, organisms could be returned to MCWD upon request or stored at the lab for one year and then disposed of.

Chironomidae Identification to genus

The identification of Chironomidae to genus will be conducted by a subcontractor, Dr. Leonard C. Ferrington Jr.

Taxa Verification

The taxa verification for quality control will be conducted by a subcontractor, Dr. Leonard C. Ferrington Jr. One representative of each taxon up to 100 taxa will be verified for correct identification.

Metric Calculation and Final Report

A final project summary with recommendations will be completed by RMB Environmental Laboratories, Inc. Results from 2015 will be compared with results from 2013, and IBIs will be calculated using the MPCA's IBI calculator and compared to the TALU standards.

Deliverables

- Raw data in Microsoft Excel (2007)
- Voucher specimen set for the project (representative of each taxon at each site)
- Calculated metrics to provide to MPCA for IBI calculation
- Final summary report and recommendations

Timeline

If the samples are provided to RMB Lab by the end of September 2015, results and final report would be provided to MCWD by April 1, 2016.

ESTIMATED PROJECT COST

Number of sites	Lab processing/site ¹	Total
25	\$350.00	\$8,750.00

Quality Control Verification	Verification/taxon ²	Total
Up to 100 taxa	\$10.00	\$1,000.00

Identification of Chironomidae to genus	Identification/sample ²	Total
Up to 200 specimens/sample	\$60.00	\$1,500.00

Metric Calculation, data summarization and final report ³	Total
\$750	\$750.00

Project total	\$12,000.00
----------------------	--------------------

¹ Lab processing price includes picking and sorting 300 organism subsamples following MPCA protocols, identification of Chironomidae to family, identification to genus level for all other taxa where possible.

²The fieldwork, quality control verification, and Chironomidae identification to genus will be completed by a subcontractor, Dr. Leonard C. Ferrington, Jr.

³The final report will compare the results from 2013 to 2015 data. IBIs will be run through the MPCA's IBI calculator and compared to the TALU Standards.

LABORATORY QUALIFICATIONS

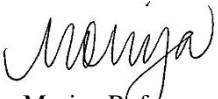
Macroinvertebrate identifications will be done by Moriya Rufer. Moriya has a M.S. in Entomology from the University of Minnesota, Twin Cities (Advisor: Dr. Leonard C. Ferrington, Jr), and is taxonomically certified by the Society for Freshwater Science (<http://www.freshwater-science.org/>).

COMPANY PHILOSOPHY

We are confident that our services and competitive pricing will benefit your monitoring program. In the event that our pricing and services do not meet your budget, please allow us to discuss necessary changes to meet your needs. It is a company policy to provide competitive pricing without compromising our services.

We look forward to the opportunity to work with you on this project.

Sincerely,



Moriya Rufer
Director of Client Services
218-846-1465 (office)
612-384-4913 (mobile)
moriyar@rmbel.info