

**Instructions on page 5
Due February 1, annually**

Submittal date: 1/12/2022
(mm/dd/yyyy)

Approval date: 8/31/2022 Minnesota Pollution Control Agency (MPCA) approver: Kelli Nerem
(mm/dd/yyyy)

I. Project information

Project title: Lake of the Woods SWCD WPLMN FY20

TEMPO Agency Interest ID: 206936 TEMPO Activity ID: PRO20200004

SWIFT number: 173245 Purchase order number: 300026067

Local partner information:

Organization name: Lake of the Woods Soil and Water Conservation District

Primary contact name: Mike Hirst Phone: 218-634-1842 Email address: mike.hirst@mn.nacdnet.net

Reporting period:

Start date: 01/01/2021 End date: 12/31/2021
(mm/dd/yyyy) (mm/dd/yyyy)

Project location:

Basin (check all that apply):

Red River Rainy River Lake Superior Minnesota Lower Mississippi St. Croix Upper Mississippi

Major watershed(s): Rainy River - Baudette, Rapid River Hydrologic unit code(s): 09030008, 09030007

Name of eligible laboratory: RMB Environmental Laboratories, Inc

How many full-time equivalents (FTEs) worked on this project in the report period (hours/2,088 hours): 0.21

II. Activities completed

Table 1: Workplan activities

- Please list activities completed during the report period under the current contract. Include task level detail as appropriate. Refer to the instructions on the last page for an example. (Insert more rows as needed by hitting the tab key in the last row/column.)**

Objective/task	Description
Task A	All trainings offered by the MPCA and DNR were offered virtually over this reporting period. Water resource technician viewed the recorded training on 03/10/2021 and attended a virtual field visit with the DNR and project manager on 04/29/2021.
Task B	Three invoices were submitted during the reporting period to the MPCA Project Manager.
Task C	An interim progress report for 2020 was submitted 01/20/2021 and approved by the MPCA on 04/30/2021.
Task D	The primary water sampling staff, Water Resources Technician, attended most of the scheduled one-hour calls with MPCA. A mid project meeting was held virtually on 11/19/2021 and an amendment kickoff meeting was attended 12/21/2021.

Task E	Sampling staff was already familiar with sampling locations and had bottles, coolers, and monitoring equipment on hand from previous years of monitoring. A new 8'-24' swing sampler was purchased on 02/22/2021 and a pair of waders were purchased on 04/14/2021.
Task E	LoW SWCD obtained a DNR permit to take and transport water. Permit number INF-20-002, valid through 12/31/2024. Copies of the permit are kept in both district vehicles that could be used for sampling.
Task E	A copy of MPCA's WPLMN 2018 SOPs for AIS is kept with the field data and all SOPs are followed while monitoring in AIS designated waters i.e., the Rainy River.
Task F	Multiple websites are utilized for weather forecasting and past observations, but most reliable information comes from the NOAA. The HADS and CSG websites, as well as the USGS NWIS website are used to monitor hydrographs and determine sampling events.
Task F	Typically, all lab results are reviewed immediately after receiving them from RMB. Sampling Staff did request RMB Labs to rerun of a sample collected on 8/4/2021 due to questionable results. The original results were confirmed by rerunning the sample.
Task G	LOW SWCD currently uses a 6920 Series YSI Sonde SN: 08E100535 Hand Pad SN: 08F101766. Calibrations for conductivity and pH were conducted on average every two weeks during the open water season and at least once a month over winter. The field meter is calibrated for dissolved oxygen before every sampling event. Two temperature checks, using a NIST Thermometer, were performed during the reporting period on 01/28/2021 and 07/23/2021.
Task G	A new pH probe was installed on the field meter on 01/08/2021. Early in the sample season the optical DO probe started to malfunction. A back up optical DO probe was on hand from retiring an older Sonde. That probe was then used to replace the malfunctioning one on 05/06/2021 and performed well through 2021.
Task G	All calibrations are recorded on log sheets and submitted to the project manager. 2021 calibration logs were submitted on 12/28/2021.
Task H	Fifteen water quality samples were collected at the Tier one Subwatershed site East Fork Rapid River (S007-611). Twenty three water quality samples were collected at the Tier 1 major watershed site Rapid River at Clementson (S000-184) and twenty samples were collected at the Tier 1 basin site Rainy River at Manitou (S006-897).
Task H	Two QA/QC water quality samples were collected at the Subwatershed site (S007-611). One field replicate was collected on 09/22/2021 and a second field replicate was collected 10/25/2021. Three field replicates were collected at the major watershed site (S000-184), the first on 06/29/2021, the second on 9/20/2021 and the third on 12/13/2021. Two field replicates were collected at the basin site (S006-897), the first on 04/14/2021, the second on 08/30/2021 and an Equipment Blank was collected on 10/05/2021.
Task H	All samples were shipped to RMB Labs for analysis via Spee-Dee Delivery. In 2021, most samples did not arrive at the lab within 24 hours of collection which resulted in regular exceedance of hold times for DOP for the major and basin sites. Sampling staff has always granted permission to the lab to analyze samples that are past hold times for DOP. All lab data is submitted to Lab MN using an EDD format.
Task I	Field meter measurements (dissolved oxygen, temperature, pH, specific conductance) were collected with nearly every sample visit along with secchi readings, photos, and general stream conditions. All data and photos were entered in GoCanvas after each sample run. When applicable, data Logger readings were recorded and compared to on site stage measurements via wire weight gage or staff gage.
Task I	Field sheets were submitted on (or prior to) each quarterly deadline.

2. Please answer the following questions relating to the deliverables for the project. If deadlines were missed, please provide comments. Dates should be entered in the mm/dd/yy format.

- a. Quality Assurance Project Plan (QAPP) approval date: 11/12/20
- b. Was the QAPP revised during this reporting period? Yes No
 Revised date: _____ Reason for revision(s): _____
- c. Was the field meter calibration log submitted by January 1? Yes No
 If no, submittal date: _____ Comments: _____
- d. Were GoCanvas submissions completed by the 1st and 15th of each month (check one)?

Rarely (9+ missed deadlines) Sometimes (3-8 missed deadlines)

Almost always (1-2 missed deadlines) Always

Comments: _____

e. Please list the submittal dates for the field sheets, field books, and extra pictures.

Deadline January 1. Submittal date: 12/28/21 Comments: submitted 2020 calibrations on 1/5/2021

Deadline May 1. Submittal date: 4/30/21 Comments: _____

Deadline August 1. Submittal date: 7/30/21 Comments: _____

Deadline November 1. Submittal date: 11/1/21 Comments: _____

f. If applicable, were pollutant loads submitted by deadline (within 60 days of receiving the .xml)?

Rarely Sometimes Almost Always Always

Comments: _____

g. Were project staff able to attend the check in telephone conferences during the reporting period?

Rarely (9+ missed meetings) Sometimes (3-8 missed meetings)

Almost always (1-2 missed meetings) Never missed a meeting

Comments: _____

3. Was a backup sampler used to collect any of the samples? Yes No

If yes, please describe when, who, if they were trained, and any other details:

Back up samplers were only used to assist primary sampler during the winter months. An intern also assisted the primary sampler multiple times over the summer.

4. Were you comfortable with your level of training and current ability to complete the obligations of your workplan?

Yes

5. Describe in detail any problems, delays, or difficulties that occurred in fulfilling the requirements of the workplan. How did you resolve these problems?

2021 ended up being a drought year and water levels around the state dropped to historic lows. Determining when and how to sample during these lows flows was challenging. These issues were resolved by utilizing good judgment and following guidance from the project manager.

6. Were there any change orders and/or amendments to the contract and workplan? Yes No

If yes, summarize the changes:

7. Please provide any constructive feedback regarding the WPLMN (training, deliverables, deadlines, program directives):

III. Budget Information

Please copy the information on the Invoice tab from the Microsoft Excel Invoice workbook and paste into this Interim Progress Report template. See Instructions for details. If budget information does not encompass all expenditures through December 31, please provide the date in the Comments. The documented amounts should be within 30 days of December 31.

Line item	MPCA funds awarded	MPCA funds expended prior to this invoice	MPCA funds expended this invoice	MPCA funds expended	Balance	Budget expended (%)
Personnel	\$32,737.60	\$25,101.92	\$4,192.80	\$29,294.72	\$3,442.88	89%
Laboratory	\$9,443.00	\$7,309.00	\$1,268.00	\$8,577.00	\$866.00	91%
Mileage	\$2,500.10	\$1,560.48	\$216.16	\$1,776.64	\$723.46	71%
Shipping	\$950.00	\$676.97	\$121.39	\$798.36	\$151.64	84%
Equipment and supplies	\$1,034.50	\$706.76	\$0.00	\$706.76	\$327.74	68%
Total:	\$46,665.20	\$35,355.13	\$5,798.35	\$41,153.48	\$5,511.72	88%

Comments:

IV. Hydrographs

Please note hydrographs are provisional.

Comments:





