

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

Submittal date: 1/20/2021  
(mm/dd/yyyy)

Approval date: 4/30/2021 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: 03/22/2020 End date: 12/31/2020  
(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): 0.19

### 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	The Water Resources Tech met DNR at the Rapid River at Clementson station on 5/28/2020 to assist in resetting and surveying staff gages that were damaged by ice. Both Rapid River sites have been visited with DNR in the past to familiarize sampling staff with control conditions, flow measurements, and data logger operations. In addition, the Water Resources Tech participated in WebEx meetings relating to the COVID-19 pandemic
Task B	Two invoices were submitted during the reporting period to the MPCA Project Manager.
Task D	The primary water sampling staff, Water Resources Technician, attended most of the scheduled one-hour calls with MPCA.
Task E	Sampling staff was already familiar with sampling locations and had bottles, coolers and monitoring equipment on hand from previous years of monitoring.

Task E	A pH probe kit and batteries were purchased during this reporting period.
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 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.
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. One temperature check, using a NIST thermometer, was performed during the reporting period on 7/29/2020.
Task G	All calibrations were recorded on log sheets and submitted to the project manager on 10/30/20.
Task H	Thirteen water quality samples were collected at the Tier one, subwatershed site: East Fork Rapid River (S007-611). Sixteen water quality samples were collected at the Tier 1, major watershed site: Rapid River at Clementson (S000-184) and sixteen 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 6/11/2020 and an equipment blank was collected 7/21/2020. Two field replicates were collected at the major watershed site (S000-184), the first on 6/9/2020 and the second on 9/2/2020. Two field replicates were collected at the basin site (S006-897), the first on 6/18/2020 and the second on 9/21/2020.
Task H	All samples were shipped to RMB Labs for analysis via Spee-Dee Delivery. Most of the time, samples arrived at the lab within 24 hours of collection, but in some instances for whatever reason they did not which resulted in exceedance of hold times for DOP on occasion. When this occurred RMB Labs usually contacted LoW SWCD to get permission to run the analysis and permission is always granted. 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, datalogger readings were recorded and compared to on site stage measurements via wire weight gage or staff gage.
Task I	There were issues with the pH probe towards the end of the year which resulted in omitting a few pH measurements due to questionable readings. The pH probe has since been replaced. Secchi measurements are often left out in the winter months due to below freezing temperatures which cause water to gel up in the secchi tubes rendering the measurements to be inaccurate.
Task I	Field data sheets were submitted before the 11/1/2020 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: 3/25/20
- b. Was the QAPP revised during this reporting period?  Yes  No  
 Revised date: 11/12/20 Reason for revision(s): RMB added an additional analytical method for TKN.
- c. Was the field meter calibration log submitted by January 1?  Yes  No  
 If no, submittal date: \_\_\_\_\_ Comments: Calibration log was submitted 10/30/20.
- 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: \_\_\_\_\_ Comments: NA

Deadline May 1.	Submittal date: _____	Comments: <u>NA</u>
Deadline August 1.	Submittal date: _____	Comments: <u>NA</u>
Deadline November 1.	Submittal date: <u>10/30/20</u>	Comments: _____

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

- Rarely  Sometimes  Almost Always  Always

Comments: Although FLUX work was removed from the workplan MPCA did offer FLUX work in lieu of field work due to Covid-19 restrictions. LoW SWCD did perform FLUX work on 2018 and 2019 load calculations for the basin and major sites in April of 2020.

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:

*A summer MCC apprentice who was trained in WPLMN SOPs did assist the primary sampler multiple times.*

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?

*Due to the covid-19 pandemic and the stay at home orders that were enacted for the state, MPCA advised local partners to suspend field work until the orders were lifted. Unfortunately during that time period ice out occurred in the Rapid and Rainy River watersheds and the spring runoff event went unsampled. It just so happened that this event was the major event of 2020 and the vast majority of the annual load was not captured.*

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):

*The new workplan has altered the deadlines for submittal of data which need to be remembered moving forward. In the past, calibration logs from January through October were submitted with field sheets on November 1 and November and December's logs were submitted February 1 of the following year. Now all copies of extra photos and field sheets need to be submitted by January 1, May 1, August 1, and November 1, annually. All calibration logs for the year need to be in by January 1 of the following year. Not really an issue just requires some change in habits.*

*The Lake of the Woods Soil and Water Conservation District (SWCD) Board has concerns with the current way MPCA contracts with local units of government for the Watershed Pollutant Load Monitoring Network (WPLMN). The SWCD is concerned is with the 10% retainage when combined with the intent to amend contracts from two years to four years. By extending these contracts to four-year contracts, the SWCD must carry the liability for 10% of the budget over four years before getting reimbursed. This can cause hardship and cash flow issues for local partners.*

*Our experience with amending a contract from a two-year contract to a four-year contract was that it was cumbersome and inefficient. There may be multiple change orders and amendments that take place during the life of a contract. These changes can include billable rate changes, staff turnover, mileage rates, workplan revisions, reporting and more. During the two-year contract amendment/extension and the contract closeout process there were multiple hours spent rectifying numbers. This time spent on contracting and amendments by our SWCD was not able to be charged to the contract.*

### 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	\$7,539.52	\$3,568.32	\$11,107.84	\$21,629.76	34%
Laboratory	\$9,443.00	\$2,965.00	\$589.00	\$3,554.00	\$5,889.00	38%
Mileage	\$2,500.10	\$593.40	\$170.20	\$763.60	\$1,736.50	31%
Shipping	\$950.00	\$257.65	\$64.00	\$321.65	\$628.35	34%
Equipment and supplies	\$1,034.50	\$20.79	\$357.00	\$377.79	\$656.71	37%
<b>Total:</b>	<b>\$46,665.20</b>	<b>\$11,376.36</b>	<b>\$4,748.52</b>	<b>\$16,124.88</b>	<b>\$30,540.32</b>	<b>35%</b>

Comments:

## IV. Hydrographs

Please note hydrographs are provisional.

### Comments:

Hydrographs included below shown by discharge and water level at each site.







