MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

WPLMN/IWM Interim Progress Report

Watershed Pollutant Load Monitoring Network (WPLMN)
Intensive Watershed Monitoring (IWM)

Doc Type: Contracts Interim Report

Instructions on page 6.
Due February 1, annually

Submittal date: 1/17/2025 *(mm/dd/yyyy)*

Approval date: 10/19/2025 *(mm/dd/yyyy)* WPLMN Project Manager approver: Kelli Nerem

For joint WPLMN/ IWM projects: Approval date: _____ *(mm/dd/yyyy)* IWM Project Manager approver: _____

I. Project information

Project title: Lake of the Woods SWCD WPLMN FY24

TEMPO Agency Interest ID: 206936 TEMPO Activity ID: PRO20240001

SWIFT number: 245048

Local partner information:

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

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

Reporting period:

Start date: 5/1/2024 *(mm/dd/yyyy)* End date: 12/31/2024 *(mm/dd/yyyy)*

Additional Details:

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): 0.14

II. Activities completed

1. **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	No trainings were offered by the MPCA or any other agency over the course of this reporting period. Through multiple years of participation, LoW SWCD staff are familiar with WPLMN standard operating procedures (SOPs), and all three monitoring sites operated by either the MN Department of Natural Resources (DNR) or US Geological Survey (USGS).
Task B	The current contract did not begin until May 2024 so, only the second and third quarter invoices of 2024 were submitted during this reporting period. The fourth quarter invoice will be submitted in early January 2025 after the current reporting period.
Task D	The primary water sampling staff, Water Resources Technician, attended most of the scheduled one-hour calls with MPCA and NE group of local partners.

Task E	Sampling staff was already familiar with sampling locations and had bottles, coolers, and sampling equipment on hand from previous years of monitoring. RMB Environmental Labs is familiar with this project and have all the information needed through several years of the district's participation with the WPLMN program. LoW SWCD did request and receive a new 5L Van Dorn from the MPCA and returned two smaller Van Dorns back to the MPCA.
Task E	LoW SWCD obtained a DNR permit to take and transport water. Permit number INF-20-002, valid through the end of this reporting period, 12/31/2024. Copies of the permit are kept in both district vehicles that could be used for sampling. A new permit will be acquired for transporting water into 2025 and beyond.
Task E	A copy of MPCA's 2018 SOPs for monitoring in AIS infested waters is kept with the field data and all SOPs are followed while monitoring in AIS designated waters i.e., the Rainy River. LoW SWCD has a separate set of equipment designated for use in AIS invested waters which includes a secchi tube, photo bottle and sample bottle.
Task E	Multiple websites are utilized for weather forecasting and past observations, but most reliable information comes from the National Oceanic and Atmospheric Administration (NOAA). The MN DNR's Cooperative Stream Gaging (CSG) website, as well as the USGS's National Water Information System (NWIS) website are used to monitor hydrographs and determine when it's appropriate to sample.
Task F	YSI provides KOR software for the ProDSS that LoW SWCD utilizes to perform calibrations. Calibrations for conductivity and pH are conducted, on average, every two weeks during the open water season and at least once a month over winter. The field meter is also calibrated for dissolved oxygen before every sampling event. One temperature check, using a digital NIST Thermometer, was performed during the reporting period on 11/05/2024 and the other required temp. check would have been done prior to the May 1st start of the new contract.
Task F	The pH sensor module and Dissolved Oxygen (DO) sensor cap for ProDSS 22J103189 were both replaced on 6/25/2024. All calibrations are recorded by the KOR software and exported into a .csv file for submission to the MPCA project manager. Calibrations for conductivity and pH are also recorded on log sheets that include calibration solution information and are submitted annually to the project manager. 2024 calibration logs were submitted on 12/26/2024.
Task G	Fifteen water quality samples were collected at the Tier one Subwatershed site East Fork Rapid River (S007-611). Twenty 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 G	Two field replicates were collected at the Subwatershed site (S007-611) on 06/11/2024 and 07/29/2024. Two field replicates were collected at the major watershed site (S000-184), the first on 05/22/2024 and the second on 10/28/2024. An Equipment Blank was also collected on 07/29/2024 in place of the third field replicate for (S000-184). Three field replicates were collected at the basin site (S006-897), the first on 07/01/2024, the second on 09/26/2024 and the third was collected on 11/20/2024.
Task G	All samples were shipped to RMB Labs for analysis via Spee-Dee Delivery and most samples arrive at the lab the next day. A sample collected at the peak of the largest event of 2024 happened to fall on the day before the fourth of July holiday which was a Wednesday. Samples collected that day had to wait until the following Monday to ship to the lab resulting in some hold time exceedances. 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 Electronic Data Delivery (EDD) format.
Task H	Field meter measurements (dissolved oxygen, temperature, pH, specific conductance) were collected with every sample visit. Secchi tube measurements, photos, stream conditions and current weather conditions are also collected. All data and photos were entered in GoCanvas after each sample run. When applicable, datalogger readings were recorded and compared to onsite stage measurements via wire weight gage or staff gage. Lathe was used to mark water levels on a couple of occasions at (S000-184) when the water overtopped the staff gages. Stage and secchi measurements are rarely collected during the winter months due to ice impacts and below freezing conditions.
Task H	Field sheets were submitted to project manager on (or prior to) each deadline January 1st, May 1st, August 1st and November 1st.
Task I	Typically, all lab results are reviewed immediately after receiving reports from RMB. There was one instance in which lab results for Dissolved Orthophosphate (DOP) were very high resulting in an exceedance of MPCA trigger values for that parameter at that site. Analysis of a sample and of a QA/QC field replicate collected at S000-184 on 10/28/2024 resulted in high DOP concentrations and results were even greater than the Total Phosphorus (TP) concentration. LoW SWCD requested RMB reanalyze these samples for DOP/TP shortly after receiving the lab report in November.

Task J	Over the reporting period, LoW SWCD completed 2022 load calculations for two WPLMN sites. East Fork Rapid River received on 09/17/2024, submitted on 10/18/2024 and verified on 12/11/2024. Rapid River at Clementson received 12/06/2024, submitted 12/20/2024 and has yet to be verified.

2. **If SWAG monitoring was included in this contract, describe any missed sampling details and any noteworthy site conditions that would be helpful when assessing the data.** 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.)

EQuIS ID	Sampling requirements fulfilled? Type **Yes** or **No** below:	**Comments**

3. **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/yyyy format.*

a. Quality Assurance Project Plan (only applies to state university labs)

Approval date: _____

Was the QAPP revised during this reporting period? ☐ Yes ☐ No

Revised date: _____ Reason for revision(s): _____

b. Was the WPLMN field meter calibration log submitted by January 1? ☒ Yes ☐ No

If no, submittal date: _____ Comments: _____

c. Were WPLMN 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: _____

d. Please list the submittal dates *(in the reporting year)* for the WPLMN field sheets, field books, and extra pictures. Put 'NA' in Comments if there are no records or pictures to submit.

Deadline January 1: Submittal date (mm/dd/yyyy): _____ Comments: Previous contract

Deadline May 1: Submittal date (mm/dd/yyyy): _____ Comments: Previous contract

Deadline August 1: Submittal date (mm/dd/yyyy): 7/30/2024 Comments: Field sheets

Deadline November 1: Submittal date (mm/dd/yyyy): 10/31/2024 Comments: Field sheets

e. Were pollutant loads submitted by deadline (within 60 days of receiving the .xml)?

☐ Rarely ☐ Sometimes ☐ Almost Always ☒ Always ☐ Not Applicable

Comments: _____

f. 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: _____

g. Please list the submittal dates *(in the reporting year)* for the SWAG deliverables.

Field data Submittal date (mm/dd/yyyy): Comments:

Laboratory data	Submittal date (mm/dd/yyyy):	Comments:
Photos	Submittal date (mm/dd/yyyy):	Comments:
Calibration log	Submittal date (mm/dd/yyyy):	Comments:

4. 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 trained back up sampler did collect samples on 06/20/2024 with assistance from a summer intern. Interns are trained with the current WPLMN SOPs as well as SOPs for AIS. LoW SWCD also utilizes two samplers during the winter months for additional safety.

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

Yes

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

The spring freshet of 2024 was a little lackluster due to the minimal snow pack after a very mild winter season. This turned out to be a good thing due to a delay in the start of a new local partner contract and the inability to collect samples in April 2024. The largest event in 2024 did not occur until early July.

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

If yes, copy the change order or amendment language here:

8. 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	$42,398.10	$9,263.16	$4,612.78	$13,875.94	$28,522.16	**33%**
Laboratory, Equipment/Supplies, Shipping	$18,335.00	$6,590.81	$1,541.12	$8,131.93	$10,203.07	**44%**
Travel (Mileage, Lodging & Meals)	$2,669.28	$942.69	$223.78	$1,166.47	$1,502.81	**44%**
Total:	**$63,402.38**	**$16,796.66**	**$6,377.68**	**$23,174.34**	**$40,228.04**	**37%**

Comments:

IV. Hydrographs

Please note hydrographs are provisional.

Comments: