



WPLMN Interim Progress Report

Watershed Pollutant Load Monitoring Network (WPLMN)

Doc Type: Contracts Interim Report

Instructions on page 5

Due February 1, 2018

I. Project information

Project title: Mississippi Headwaters Board WPLMN Sampling

Contract number: 8627 SWIFT number: 103093 Purchase order number: 3000015740

Local partner information:

Organization name: Mississippi Headwaters Board

Street address: 322 Laurel Street

City: Brainerd State: MN Zip code: 56401

Primary contact name: Tim Terrill Phone: 218-824-1189

Email address: timt@mississippiheadwaters.org Fax: _____

Fiscal contact name: Tim Terrill Phone: 218-824-1189

Email address: timt@mississippiheadwaters.org Fax: _____

Field contact name: Joey Goeden Phone: 218-316-3685

Email address: joey.goeden@wsn.us.com Fax: 218-829-2517

Reporting period:

Start date: 1/1/2017 End date: 12/31/2017
(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): Mississippi River (Brainerd), Mississippi River (Sartell), and Long Prairie Hydrologic unit code(s): 07010104, 07070108, and 07010201

Name of eligible laboratory: Pace Analytical Laboratory-Minneapolis

How many full-time equivalents (FTEs) worked on this project in 2017 (total project hours/2,088 hours): 0.19 FTE

II. Activities completed

Table 1: Workplan activities

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

Objective and task	Description
1: Project Administration Task A	Mississippi Headwaters Board (MHB) Project Administrator tracked expenditures. Widseth Smith Nolting (WSN) compiled and submitted invoices on a monthly basis.
1: Project Administration Task B	WSN and MHB prepared the requested documentation for an in-person visit from MPCA on June 14, 2017 once fifty percent of the budget was used.
1: Project Administration Task C	The 2016 Interim Progress Report was submitted on 1/31/2017. In late December 2017, WSN began compiling information for this Interim Progress Report.
1: Project Administration	WSN Sampling Staff and MHB Project Administrator attended weekly check ins with the MPCA

Task D	Project Manager monthly from January 1, 2017 through February 2017, weekly from March 2017 through October 31, 2017 and monthly from November 1, 2017 through December 31, 2017.
1: Project Administration Task E	WSN Project Manager and MHB Project Administrator attended a WebEx training session in July of 2017 that covered invoicing and change orders.
2: River Sampling Task B	WSN contacted Pace Analytical Laboratory and requested bottles and coolers as needed throughout the Reporting Period. WSN purchased calibration solutions and distilled water throughout the reporting period.
2: River Sampling Task D	WSN Sampling Staff met with the DNR on June 21, 2017 and completed field training.
2: River Sampling Task E	WSN calibrated dissolved oxygen, pH, and specific conductance for the field meter prior to each sampling occasion (pH and specific conductance no more frequently than weekly). WSN documented all calibration and maintenance records on log sheets. WSN conducted a temperature sensor check with the NIST traceable thermometer. WSN maintained the field meter in good working order.
2: River Sampling Task F	Number of samples collected during the Reporting Period are as follows: Long Prairie: 27, Swan: 27, Two River: 23, Miss Royalton: 27, and Platte: 23. Two field duplicates were collected at the Long Prairie, Swan and Two River sites, one on April 11, 2017 and one on September 26, 2017. Two field duplicates were collected at the Platte site, one on April 19, 2017 and one on September 26, 2017. Three field duplicates were collected at the Miss Royalton site, one on January 24, 2017, one on April 19, 2017 and one on September 26, 2017. All field duplicates are included in the number of samples listed above. There was one equipment blank collected on October 17, 2017. Samples were shipped to Pace Analytical for laboratory analysis of: total phosphorus, total suspended solids, total Kjeldahl nitrogen, nitrate-nitrite nitrogen, and dissolved orthophosphate.
2: River Sampling Task G	WSN collected field meter measurements (dissolved oxygen, water temperature, pH, and specific conductance) in situ, using a properly calibrated field meter. WSN collected stream transparency using a 100 cm Secchi tube. WSN recorded visual observations and water level information at each site visit on WPLMN field sheets. WSN documented stream conditions and clarity through upstream, downstream, and bottle photos when samples were collected. WSN recorded datalogger readings, errors, control conditions and water level information using a wire weight gage or weighted tape.
3: Data Management Task A	WSN reviewed laboratory reports within five days of receiving to ensure all parameters were analyzed, the methods and reporting limits in the QAPP were followed, and there were no errors. November and December 2016 data was entered into an EQUIS template and submitted by January 4, 2017.
3: Data Management Task B	WSN submitted field sheets and field meter calibration logs to the MPCA Project Manager on October 31, 2017 for data collected from January 1, 2017 through October 31, 2017. All photographs were submitted through Canvas.
3: Data Management Task C	WSN submitted field data for the subwatershed and basin sites collected January 24, 2017 through October 31, 2017 into Canvas. WSN submitted field data collected from November 1, 2017 through December 31, 2017 into Canvas for the Miss Royalton site. All inspections were submitted by the February 1 and November 1, 2017 deadlines.
3: Data Management Task D	2015 water quality and flow data was inserted into FLUX32 to calculate loads and create the pollutant load models for the Long Prairie, Swan, Two River, Miss Royalton and Platte sites in 2017. WSN submitted the pollutant load models within 60 days of the received date. WSN Sampling Staff attended FLUX32 verification sessions on February 15, 2017 and March 21, 2017.
3: Data Management Task E	WSN Sampling Staff attended a statewide WPLMN training event in St. Cloud, MN on February 7, 2017. WSN Sampling Staff attended a WebEx training session for Canvas data entry on April 13, 2017.

2. Please answer the following questions relating to the deliverables for the project.

- a. Was the Quality Assurance Project Plan (QAPP) revised in 2017?
 Yes No If yes, approval date (mm/dd/yyyy): _____
- b. Were the field meter calibration logs, Canvas entries, and field notes submitted by November 1?
 Yes No If no, please comment: _____
- c. Were pollutant loads computed in a timely manner (within 60 days of receiving the .xml)?
 Yes No If no, please comment: _____
- d. Were you able to attend a majority of the weekly check in telephone conferences during the reporting period?
 Yes No If no, please comment: _____

e. 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:

Mike Bogart - Mike is trained to complete WPLMN sampling.

Sampling Dates: 04/21/2017, 06/15/2017, 08/04/2017, 08/22/2017, 08/30/2017, 09/26/2017, 09/29/2017 and 10/05/2017

3. Please answer the following questions and provide comments.

Were you comfortable with your level of training and current ability to:

a. Collect stream samples over the entire range of the hydrograph? Yes No

Comments:

We feel comfortable with our ability to collect stream samples over the entire range of the hydrograph.

b. Calibrate and use the field meter and equipment? Yes No

Comments:

We feel comfortable with our ability to calibrate and use the field meter and equipment.

c. Enter information into the Canvas application and submit the calibration log, field notes and additional photos?

Yes No

Comments:

We feel comfortable with our ability to enter data and information into the Canvas application and submit the calibration log, field notes and additional photos.

d. Use the FLUX32 model accurately and submit pollutant loads? Yes No

Comments:

We feel comfortable with our ability to create models in FLUX32.

e. Complete and submit invoices? Yes No

Comments:

We feel comfortable with our ability to complete and submit invoices.

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

Our Smartroll field meter needed maintenance in 2017 to fix connection issues, so we were unable to collect field meter measurements on 08/22/2017. We sent the Smartroll to the manufacturer to fix the issue and we were able to collect field meter measurements for the remainder of 2017.

5. Were there any change orders and/or amendments to the contract and work plan? If yes, summarize the changes.

Yes No

Comments:

There were three Change Orders completed during the Reporting Period and they are summarized below.

Change Order Number 1: The IRS mileage rate changed from \$0.54 to \$0.535 as of January 1, 2017. The budget was updated to reflect this new rate. The workplan was revised to document that local partners will need to have their field visits submitted in Canvas by the 1st and 15th of each month from March through October. The workplan was revised to state the EQUIS template will not be used in 2017 for field data submittal and sample tracking.

Change Order Number 2: The field meter needed repair and the cost for shipping was not included as a line item so funds were added to allow for shipping of the field meter for repair. There was \$120.00 moved from Objective 2 - Per Diem to Objective 2 - Shipping. There were no changes to the workplan.

Change Order Number 3: Additional funds were needed for staff time under Objective 2 - River Sampling. The transfer of funds were completed as follows. Move \$2,018.70 from Objective 3 - Personnel Staff 3 to Objective 2 - Personnel Staff 3. Move \$1,947.50 from Objective 3 - Personnel Staff 2 to Objective 2 - Personnel Staff 2. The total amount moved was \$3,966.20. There were no changes to the workplan.

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

We feel that the weekly and monthly check ins are a valuable use of time to stay updated on important project information and to assist with sampling. We feel that the amount of training that we receive is adequate to ensure we are completing project tasks as required.

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.

Objective	Line Item	MPCA Funds Awarded	MPCA Funds Expended prior to this Invoice	MPCA Funds Expended this Invoice	MPCA Funds Expended	Balance	Budget Expended (%)
1) Project Administration	Personnel	\$4,722.37	\$3,848.33	\$212.47	\$4,060.80	\$661.57	86%
1) Project Administration	Travel	\$67.50	\$64.20	\$0.00	\$64.20	\$3.30	95%
1) Project Administration	Per diem	\$33.00	\$10.00	\$0.00	\$10.00	\$23.00	30%
2) River Sampling	Personnel	\$15,627.70	\$13,274.42	\$175.28	\$13,449.70	\$2,178.00	86%
2) River Sampling	Laboratory	\$13,225.00	\$11,261.00	\$57.50	\$11,318.50	\$1,906.50	86%
2) River Sampling	Travel	\$3,855.60	\$3,190.94	\$48.15	\$3,239.09	\$616.51	84%
2) River Sampling	Shipping	\$120.00	\$51.53	\$0.00	\$51.53	\$68.47	43%
2) River Sampling	Equipment & supplies	\$4,966.00	\$4,770.19	\$0.00	\$4,770.19	\$195.81	96%
2) River Sampling	Per diem	\$474.00	\$195.37	\$0.00	\$195.37	\$278.63	41%
3) Data Management	Personnel	\$6,532.06	\$5,472.05	\$9.74	\$5,481.79	\$1,050.27	84%
3) Data Management	Travel	\$67.50	\$0.00	\$0.00	\$0.00	\$67.50	0%
3) Data Management	Per diem	\$22.00	\$0.00	\$0.00	\$0.00	\$22.00	0%
Total:		\$49,712.73	\$42,138.03	\$503.14	\$42,641.17	\$7,071.56	86%

Comments:

The budget information found above is for work completed through December 9, 2017. Additional work was completed between December 10 and December 31, 2017. The additional time and funds expended through December 31, 2017 are listed below.

Staff 1: Objective 1 Project Administration - 2.5 hours or \$108.45 expended, Staff 2: Objective 1 Project Administration - 2 hours or \$77.90 expended, Staff 2: Objective 2 River Sampling - 3.75 hours or \$146.06 expended, Staff 2: Objective 3 Data Management - 1.5 hours or \$58.43 expended

Total Additional Time Through December 31, 2017 - 9.75 hours

Total Additional Funds Expended Through December 31, 2017 - \$390.84

IV. Hydrographs

Comments:

The Long Prairie and Miss Royalton sites are plotted using stage because of missing flow data.





