Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

SWAG Final Report

Surface Water Assessment Grant (SWAG)
Appendix C

Doc Type: Grant Application

Instructions on Page 4

Grantee information

Grantee name: Le Sueur County
Contact name: Joshua Mankowski
Contact phone number: 507-357-8538
Grant award: $21,859.40
Contact email: jmankowski@co.le-sueur.mn.us
Project title: Le Sueur County Lower Minnesota Assessment Project (LCLMAP)
Reporting time period: Start date (mm/dd/yyyy): 3/24/2014 End date (mm/dd/yyyy): 12/8/2015

Section I – Workplan

1. Were the following deliverables submitted to the Minnesota Pollution Control Agency (MPCA) by the due dates listed within your workplan?

Quality Assurance Project Plan	☒ Yes ☐ No	Date submitted (mm/dd/yyyy):	4/22/2014
Field and Laboratory Data	☒ Yes ☐ No	Date submitted (mm/dd/yyyy):	11/4/2015
Stream Photos (If applicable)	☒ Yes ☐ No	Date submitted (mm/dd/yyyy):	11/5/2015
Interim Progress Report	☒ Yes ☐ No	Date submitted (mm/dd/yyyy):	2/1/2015

2. Describe progress monitoring each of your stream and/or lake sites over the course of the entire grant period. Complete Table 1 describing the number of scheduled samples, by parameter, and indicate the number of samples actually collected (include QA/QC sampling).

In the comments field of Table 1, provide details regarding missed sampling events, noteworthy or adverse site conditions (i.e. drought or low flow, upstream construction, high waterfowl activity, beaver impoundments, or feedlot activity), field meter malfunction, sampling errors, or flagged laboratory samples (holding time or temperature exceedances). Add rows as necessary by placing cursor in the last row and of last column and hit tab.

Table 1. Monitoring summary

Site ID#	Scheduled sampling		Actual sampling		Comments
	Parameter	No.	Parameter	No.	
40-0027-00-201	TP, Chl-a, Sechi	10	TP, Chl-a, Sechi	10	
S001-376	TP, TSS, DO, pH, Conductivity	20	TP, TSS, DO, pH, Conductivity	20	
S007-900	TP, TSS, DO, pH, Conductivity	20	TP, TSS, DO, pH, Conductivity	20	
S007-876	TP, TSS, DO, pH, Conductivity	20	TP, TSS, DO, pH, Conductivity	20	8/15/14 no water flow, make up sample collected 8/10/15

3. Were you successful in fulfilling the measures for success using the methods detailed within your workplan?

Yes. A Gantt chart was used to meet project timelines. Budget sheets were reviewed and updated to track expenses. The project manager assisted with sampling multiple times. Correct QA/QC methods were followed. The required datasets were created with data obtained from the samples that were collected during the project period. Duplicate samples and field blanks were collected. There was an issue with one of the sample sites drying up before the last sample was collected in the 1st year. One extra sample was collected in your 2 to make up for this missing sample.

4. Were there any changes to your workplan that were specific to staff and/or monitoring locations? If yes, describe and list the related change order.

Due to culver construction, the Forest Prairie monitoring location S001-376 was relocated to S005-722 (Change order Number 1).

Due to retirement there was staff change. The contact person for the original Grant was Lauren Klement. When she retired, Kathy Brockway administered the Grant until Joshua Mankowski was hired and took over administrative responsibilities..

5. Provide an annual quality assurance assessment that includes the following elements.

A. Submit field meter calibration records as an attachment to this report (records not previously submitted with Interim Report).

B. Complete Table 2 presenting quality control sample results with columns showing comparison to lab method detection limit for sampler blanks, and the relative percent difference (RPD) for field duplicates (see the *SWAG Quality Assurance Project Plan*). Use the "maximum expected relative percent difference" values presented on page 24 in Appendix D of the *Volunteer Surface Water Monitoring Guide* (http://www.pca.state.mn.us/yhiz8f0) to assess RPD on field duplicates. Field duplicates with values in excess of the expected RPD may be an indication of high variability within the stream, which is useful for data interpretation. Use the comment field to note RPD or sampler blank results outside of expectations.

Note: Add rows as necessary by placing cursor in the last row and of last column and hit tab.

Table 2. Quality control sample results and analysis

			Sampler blanks		Field duplicates			
	Site ID#	Analyte	Result	Detection limit	Sample result	Duplicate result	RPD	Comments
07/24/2014	S007-900	TSS	5	2	4	2	66.7%	
07/24/2014	S007-900	E. coli	161.6	1	110.0	1	196.4%	
07/24/2014	S007-900	Chloride	24.7	3	24.6	3	156.5%	
07/24/2014	S007-900	Nitrate	6.71	0.20	6.96	0.20	188.8%	
07/24/2014	S007-900	Nitrogen Ammonia	<0.16	1.16	<0.16	0.16	0%	
07/24/2014	S007-900	Phosphorus	0.143	0.005	0.141	0.005	186%	
07/24/2014	S007-900	Solids, Suspended Volatile	4	2	3	2	40%	
07/24/2014	S007-900	Calcium	95.60	0.500	94.00	0.500	197.9%	
07/24/2014	S007-900	Magnesium	30.00	0.500	29.40	0.500	189.9%	
07/24/2014	S005-F22 FP2	TSS	14	2	12	2	142.9%	
07/24/2014	S005-F22 FP2	E. coli	1732.9	1.0	1986.3	1.0	199.8%	
07/24/2014	S005-F22 FP2	Chloride	21.4	3.0	21.7	3.0	151.4%	
07/24/2014	S005-F22 FP2	Nitrate	10.8	0.20	10.6	0.20	192.6%	
07/24/2014	S005-F22 FP2	Nitrogen Ammonia	<0.16	0.16	<0.16	0.16	0%	
07/24/2014	S005-F22 FP2	Phosphorus	0.214	0.005	0.223	0.005	1.9%	
07/24/2014	S005-F22 FP2	Solids, Suspended Volatile	5	2	4	2	66.7%	
07/24/2014	S005-F22 FP2	Calcium	100.0	0.500	102.0	0.005	200%	
07/24/2014	S005-F22 FP2	Magnesium	29.06	0.500	29.30	0.005	199.9%	
07/24/2014	S007-876	TSS	3	2	5	2	85.7%	
07/24/2014	S007-876	E. coli	248.1	1	172.3	1	197.7%	
07/24/2014	S007-876	Chloride	39.9	3.0	40.0	3.0	172.1%	
07/24/2014	S007-876	Nitrate	10.8	0.20	10.6	0.20	192.6%	

07/24/2014	S007-876	Nitrogen Ammonia	<0.16	0.16	<0.16	0.16	0%	
07/24/2014	S007-876	Phosphorus	0.239	0.005	0.240	0.005	191.8%	
07/24/2014	S007-876	Solids, Suspended Volatile	3	2	5	2	85.7%	
07/24/2014	S007-876	Calcium	121.0	0.500	116.0	0.500	198.3%	
07/24/2014	S007-876	Magnesium	34.10	0.500	33.90	0.500	194.2%	

Section II – Participants in project

6. Complete Table 3 if volunteers were involved with lake and/or stream monitoring.

Tennessen warning: Pursuant to Minn. Stat. § 13.43, information you are asked to provide is classified as private data on individuals as described in Minn. R. 1205.0200, subp. 9, Minn. R. 1205.0400 and Minn. Stat. § 13.02, subd. 12 (home contact information). You are not legally required to provide this private data however, should you choose to provide this information the MPCA will contact and invite volunteers to join the Citizen Monitoring Program (CMP) at the conclusion of your grant. All private volunteer information is kept secure and is not released to parties or individuals outside of SWAG or CMP.

Table 3. **Volunteer contact information**

Waterbody	Site ID#	Contact name	Address	Telephone	Email address

Section III – Budget

7. Were there any changes to your budget or equipment and supplies list? If yes, describe and list the related change orders and/or amendments.

No change orders or amendments were filed

Complete Table 4 and indicate expenditures from the entire grant period.

Table 4. Project expenditures

Project budget	MPCA grant funds available	Total MPCA funds expended	Total remaining balance	Percent of budget expended
Staff 1: Monitoring Technician	$6,400.00	$5,760.00	$ 640.00	90%
Staff 2: Project Manager	$4,200.00	$4,200.00	$ 0.00	100%
Staff 3: Title			$ 0.00	
Staff 4: Title			$ 0.00	
Staff 5: Title			$ 0.00	
Staff 6: Title			$ 0.00	
Laboratory streams	$5,202.80	$5,202.80	$ 0.00	100%
Laboratory lakes	$483.00	$483.00	$ 0.00	100%
Travel reimbursement	$1,125.60	$1,125.60	$ 0.00	100%
Shipping			$ 0.00	
Training materials			$ 0.00	
Equipment and supplies	$4,448.00	$4,029.29	$ 418.71	91%
Per diem			$ 0.00	
Column total	$21,859.40	$20,800.69	$1,058.71	95%