



**Instructions on Page 5**

## Grantee Information

Grantee name: Aitkin County Soil and Water Conservation District Contact name: Janet Smude  
 Contact phone number: (218) 927-6565 ext 110 Grant award: \$5,973.00  
 Contact e-mail: smude.aitkinswcd@gmail.com  
 Project title: Monitoring of Cedar Lake in Aitkin County  
 Grant budget period: Start date (mm/dd/yyyy): 4/1/2013 End date (mm/dd/yyyy): 6/30/2015  
 Project time period covered by this report: Start date (mm/dd/yyyy): 4/1/2013 End date (mm/dd/yyyy): 2/6/2015

## Section I - Work Plan

1. **Have you worked with Minnesota Pollution Control Agency (MPCA) Environmental Quality Information System (EQiS) staff to establish all sites listed in your grant work plan?**

Yes  No Date submitted (mm/dd/yyyy): 6/24/2013

2. **Was monitoring data for these established sites submitted for storage into EQiS annually?**

Yes  No Last submittal date (mm/dd/yyyy): 10/22/2014

3. **If applicable, were stream photos submitted with this report and labeled according to directions specified in the stream monitoring Standard Operating Procedures (SOP)?**

Yes  No Date submitted (mm/dd/yyyy): \_\_\_\_\_

Describe in detail the monitoring that has been conducted during the entire grant period. Please be specific by completing Table 1. The table should reflect all sites in your grant work plan, their site identifications (IDs), the number of samples to be collected according to the work plan and the number of samples actually collected (include Quality Assurance/Quality Control [QA/QC] sampling). If you were not able to meet your sampling obligations, describe in the comments section what sampling was missed and why. Refer to the instructions found at the end of this report for an example of the completed table.

**Table 1. Monitoring summary**

Waterbody	Site ID#	Planned sampling		Actual sampling		Comments
		Parameter	No.	Parameter	No.	
Cedar Lake	01-0065-00	Total Phosphorus	11	Total Phosphorus	11	
Cedar Lake	01-0065-00	Chlorophyll a	11	Chlorophyll a	11	
Cedar Lake	01-0065-00	Temperature	10	Temperature	10	
Cedar Lake	01-0065-00	Dissolved Oxygen	10	Dissolved Oxygen	10	
Cedar Lake	01-0065-00	Conductivity	10	Conductivity	10	
Cedar Lake	01-0065-00	pH	10	pH	9	The pH probe was not working correctly and no readings were taken in May 2014. This was OK'd by the Project Manager.

4. Please indicate if there were any noteworthy events or conditions that may have affected the parameter results. Some examples may be upstream construction, drought or low flow conditions, feedlot activity, beaver impoundments, or waterfowl management areas. There were no unusual events or conditions noted during this grant period.

**Table 2. Monitoring conditions**

Waterbody	Site ID #	Comments

5. Please describe progress in successfully carrying out aspects of the grant work plan:

Objective Objective 1: Volunteer Coordination & Equipment Preparation:Volunteers were sought to assist with the monitoring. Annual review of the SOP for lake monitoring was undertaken at the beginning of each monitoring season. The appropriate site on Cedar Lake was located and needed equipment provided for the sampling.

Objective 2: Sample Collection and Shipment to the Lab: The planned number of lake samples and profile measurements were taken, with the exception of pH measurements in May of 2014. Field data sheets and laboratory chain of custody forms were completed each time. UPS was hired to ship the samples to ERA Laboratories in Duluth.

Objective 3: Laboratory Analysis: Laboratory analysis was provided by ERA Laboratories, Inc. in Duluth

Objective 4: Data Submission & Management: Necessary Project, Lab, and Station Establishment Forms were completed. Data was compiled and submitted to the MPCA for inclusion in EQulS. Summary reports of the collected data were prepared and shared with volunteers and other interested parties.

Objective 5: Project Tracking & Reporting: Grant related expenses were tracked and invoices paid. Interim reports were completed in a timely manner.

6. Describe in detail any problems, delays, or difficulties that have occurred in fulfilling the grant work plan. How did the grantee resolve these problems? Were there any change orders and/or amendments to the grant contract and/or work plan? If yes, list.

There were no difficulties in fulfilling the grant workplan. The biggest change was in the volunteer assistance.. In writing the workplan, one volunteer to assist throughout the entire grant was envisioned. This was changed as we were unable to locate one volunteer, but relied on numerous volunteers who each assisted with one sampling event. There were no change orders and/or amendments.

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

- A. Field meter calibration records (submit only those not previously submitted with an Interim Report).
- B. A list of narrative descriptions that highlight specific data points for which adverse field conditions, field meter malfunctions, errors, excess holding time (quantify), lab result qualifiers, or other factors that may have affected the results, and would be beneficial to a data user. *For example*, a description might be included of the cross-section location of sampling chosen on a day when a stream is out of banks, and the main flow is inaccessible due to floating debris.
- C. 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*). Please 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.

**Table 2. Quality control sample results and analysis**

Date (mm/dd/yyyy)	Site ID#	Analyte	Sampler blanks		Field duplicates			Comments
			Result	Detection limit	Sample result	Duplicate result	RPD	
07/29/2013	01-0065-00	Total Phosphorus			0.025	0.025	0%	This is below the maximum expected RPD of 30%
07/29/2013	01-0065-00	Chlorophyll a			13	11	17%	This is below the maximum expected RPD of 30%

A: All field meter calibration records have been submitted.

B: In preparation for the May 2014 samples, I was not able to calibrate the pH probe on the SONDE. This was communicated to the MPCA Project Manager, who advised proceeding with the samples minus this parameter. A new probe was installed and the meter was functioning properly before the next sampling date.

## Section II - Participants in Project

8. **Have there been any changes in project staff or contractors or has participation by companies or units of government changed? How many volunteers participated in monitoring activities during this project? Complete Table 3 by listing the contact information for your volunteers. Once your grant ends, the MPCA Citizen Lake/Stream Monitoring Program coordinators plan to contact these volunteers to see if they are interested in continuing to collect transparency data at their assigned sites.**

There were no changes in project staff or contractors. Three volunteers assisted with the monitoring. One landowner on the lake volunteered access through his property.

**Note:** *You do not need to complete the volunteer table below if your volunteers have not changed from those you identified on your last interim report.*

### Table 3. Volunteer contact information

**Tennessen warning:** Pursuant to Minn. Stat. § 13.43, some of the information that you are being asked to provide in the above table 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, but if you do the MPCA plans to use this information to invite volunteers to join their Citizen Lake/Stream Monitoring Programs (CMPs) after your grant project has ended. All private volunteer information is kept in a secure location and is never released to anyone outside of our SWAG or CMPs.

Organization name: Aitkin County Soil and Water Conservation District

Grantee contact: Janet Smude, District Technician Telephone number: (218) 927-6565

Waterbody	Site ID#	Contact name	Address	Telephone	E-mail address

9. **Please describe training that you and/or an outside trainer provided to your project participants throughout the course of this grant. Include details on what the training covered, who administered this training and when it was offered (i.e., at the start of the grant, at the beginning of each field season, etc.).**

Training was provided by Janet Smude, Aitkin County SWCD District Technician, utilizing materials provided by the MPCA. Training was presented verbally to project staff at the beginning of each season. Written and hands on instruction was also shared with each volunteer. Use and care of the equipment, and proper sample handling was discussed. Each volunteer was provided with a copy of the "Citizen Lake Monitoring Program: Minnesota's Volunteer Lake Monitoring Handbook". All volunteers were advised of DNR Boat and Water Safety recommendations.

## Section III - Evaluation Plan Results

10. **Was the project a success? Did you achieve your goals?**

This project was successful. We were able to collect the planned baseline water quality data on Cedar Lake. We were also able to build a relationship with a landowner on the lake. This will hopefully spark an interest in and awareness of water quality issues that may affect the lake in the future.

**11. What would you recommend to others interested in attempting a project like yours?**

I would recommend trying to have a bit of flexibility in the sampling schedule. This will allow for any needed changes due to adverse weather conditions or conflicts that may arise.

**12. Distribution of the project information is a legislative requirement for all SWAGs. How do you plan to distribute project information to interested parties (the media, businesses, Local Unit of Government [LUGs] etc.)? Is this information to be posted on your Web site? Is so, please supply the link to your Web site.**

A summary report has been mailed to the landowner we worked with on Cedar Lake, and to volunteers who assisted with the monitoring. Information will be shared with the Aitkin County Water Planning Task Force, Mille Lacs Lake Watershed Management Group, and Aitkin County SWCD Board of Supervisors. The summary report will be posted to the Aitkin County SWCD Website, located at [www.aitkincountyswcd.org](http://www.aitkincountyswcd.org).

**Section IV - Budget**

**13. Fill in Table 4. List below and identify any time extensions or any additional dollars incorporated into your project budget through an amendment and/or any dollars reallocated from one task to another through a change order after the original grant award.**

There were no changes to the original budget.

**Table 4. Project expenditures**

Project budget	MPCA grant funds available	Total MPCA funds expended	Total remaining balance	Percent of budget expended
<b>Objective 1: (Title) Volunteer Coordination &amp; Equip. Prep.</b>				
Task: A1: Volunteer Recruitment Staff Time	\$160.00	\$80.00	\$ 80.00	50 %
Task: A2: Vol. Training Materials /Recognition Event	\$38.50	8.07	\$ 30.43	21 %
Task: B1: Equipment Prep Staff Time	\$80.00	\$80.00	\$ 0.00	100 %
Task: B2: Equipment Prep Materials	\$30.00		\$ 30.00	0 %
<b>Objective 2: (Title) Sample Collection &amp; Shipment</b>				
Task: A1: Sample Collection Staff Time	\$3,130.00	\$3,010.00	\$ 120.00	96 %
Task: A2: Travel Reimbursement	\$734.50	\$589.74	\$ 144.76	80 %
Task: A3: Sample Shipping	\$200.00	\$150.37	\$ 49.63	75 %
Task: A4: Monitoring Supplies	\$360.00	\$334.96	\$ 25.04	93 %
<b>Objective 3: (Title) Laboratory Analysis</b>				
Task: A1: Lab Analysis of Lake Samples	\$400.00	\$324.00	\$ 76.00	81 %
Task: A2: Lab Analysis of QA/QC Samples	\$40.00	\$36.00	\$ 4.00	90 %
Task:			\$ 0.00	%
Task:			\$ 0.00	%
<b>Objective 4: (Title) Data Submission &amp; Mgt</b>				
Task: A1: Submit Data to MPCA	\$200.00	\$200.00	\$ 0.00	100 %
Task: A2: Data Analysis & Report Prep	\$200.00	\$200.00	\$ 0.00	100 %

<b>Project budget</b>	<b>MPCA grant funds available</b>	<b>Total MPCA funds expended</b>	<b>Total remaining balance</b>	<b>Percent of budget expended</b>
Task:			\$ 0.00	%
Task:			\$ 0.00	%
<b>Objective 5: (Title) Project Tracking &amp; Reporting</b>				
Task: A1: Track Project Exp. Staff Time	\$200.00	\$200.00	\$ 0.00	100 %
Task: B1: Annual & Final Reporting	\$200.00	\$200.00	\$ 0.00	100 %
Task:			\$ 0.00	%
Task:			\$ 0.00	%
<b>Objective 6: (Title)</b>				
Task:			\$ 0.00	%
Task:			\$ 0.00	%
Task:			\$ 0.00	%
Task:			\$ 0.00	%
<b>Column Total</b>	<b>\$5,973.00</b>	<b>\$5,413.14</b>	<b>\$ 559.86</b>	<b>91 %</b>