

Minnesota Pollution Control Agency
Final Work Plan
FY 2009 CLEAN WATER LEGACY ACT
SURFACE WATER ASSESSMENT MONITORING GRANT

Section I: Work Plan

Grantee:

Organization/Grantee: Le Sueur County

Mailing address: 88 South Park Avenue

City: Le Center

State: MN

Zip code: 56057

Contact name: Lauren Klement

Title: Environmental Resources Specialist

E-mail: lklement@co.le-sueur.mn.us

Telephone: 507-357-8540

Grantee Web site address: www.co.le-sueur.mn.us

Fax: 507-357-8541

Project

Project title: **LE SUEUR CREEK ASSESSMENT PROJECT (LCAP)**

Project start date: Spring 2009

Project end date: Spring 2011

Grant amount: \$ 31,972

Section I: *Continued*

Project Description: brief, one-page description/summary of proposed project

Water quality assessment projects are listed as high priority in the Le Sueur County Local Water Management Plan. Le Sueur County is working on obtaining water quality data throughout all watersheds within the county. The Le Sueur Creek Assessment Project will contract with Minnesota State University Water Resources Center (MSU WRC) for stream monitoring, reporting and entry of collected data into the spreadsheet for STORET. The project includes two stream sampling sites and in-lake sampling on two lakes. In-lake sampling will occur on Clear and Greenleaf Lakes. Parameters that will be sampled in-lake include: Total Phosphorus (TP) and Chlorophyll a. Field measurements include DO/Temperature, Conductivity, pH and Secchi. Stream monitoring includes: Total Suspended Solids (TSS), Nitrite-Nitrate-N (N-N), Total Kjeldahl Nitrogen (TKN), Total Phosphorus (TP), Chlorophyll A-Pheophytin, and E Coli. Field measurements include DO/Temperature, Conductivity, pH, and transparency. Clear and Greenleaf Lakes are located in the Le Sueur Creek basin. Clear Lake is located in the sub watershed of Forest Prairie Creek and Greenleaf Lake is located in the Le Sueur Creek Watershed. Volunteers will be sought for stream and lake monitoring to continue after the project expires. Education will take place through news releases and an informational meeting with elected officials. Project administration will take place throughout the project length.

Section II: Work Plan detail

ISSUE:

There is lack of water quality data in the Le Sueur Creek watershed.

GOAL:

Obtain water quality data in the Le Sueur Creek Watershed (includes Forest Prairie Creek) located in the Lower Minnesota River Watershed.

OBJECTIVE 1: Conduct two years worth of stream monitoring at 2 sites (14 times per year) by November 2010. Duplicates will be covered under a different project.

Task A: Stream Sampling

Sub-task 1: Final determination of sampling sites

Sub-task 2: Collect 14 sets of samples per year (See Schedule in Section III), April –October. Parameters include: Total Suspended Solids (TSS), Nitrite-Nitrate-N (N-N), Total Kjeldahl Nitrogen (TKN), Total Phosphorus (TP), Chlorophyll A-Pheophytin and E Coli. Field measurements include DO/Temperature, conductivity, pH and transparency.

Sub-task 3: Lab analysis of water samples

Sub-task 4: Enter data into reports and spreadsheet for STORET entry

Time frame: Spring 2009-Fall of 2010.

Person(s) responsible: Scott Kudelka, Minnesota State University Water Resources Center

Budget: MPCA Grant Funds: \$21,349

TOTAL MPCA GRANT FUNDS OBJECTIVE 1: \$21,349

OBJECTIVE 2: Conduct two years of in-lake monitoring (10 times per year) on Clear Lake and Greenleaf Lake by October 2010.

Task A: In-Lake Sampling

Sub-task 1: Determine sampling locations

Sub-task 2: Collect samples twice a month May-September for two years. In-lake sampling includes TP, Chlorophyll a and clarity (Secchi), DO/Temperature, Conductivity, pH

Sub-task 3: Conduct lab analysis on water samples

Sub-task 4: Enter data into STORET

Time frame: Sub-tasks 1-3: May-September of 2009 and 2010. Sub-task 4: Fall of 2009 and 2010.

Person(s) responsible: Scott Kudelka, MSU-M Water Resources Center

Budget: MPCA Grant funds: \$ 9,623

TOTAL MPCA GRANT FUNDS OBJECTIVE 2: \$9,623

OBJECTIVE 3: Coordinate training for volunteer monitoring efforts for continued monitoring after LCAP is completed

Task A: Coordinate training for stream and lake monitoring volunteers

Sub-task 1: Locate volunteers throughout the watershed

Sub-task 2: Order supplies for the volunteers

Sub-task 3: Meet with each volunteer and discuss the protocol for monitoring

Sub-task 4: Follow up on submittal of information to the state volunteer monitoring programs

Time frame: Spring and summer of 2009

Person(s) responsible: Lauren Klement, Le Sueur County Environmental Services

Budget: MPCA Grant funds: \$ 0.00

TOTAL MPCA GRANT FUNDS OBJECTIVE 3: \$ 0.00

OBJECTIVE 4: Provide water quality education and dissemination of information through various media avenues to reach watershed residents and public officials by project end.

Task A: Publish three news releases on project progress and water quality throughout project length

Sub-task 1: Gather information

Sub-task 2: Write documents

Sub-task 3: Submit to local newspapers in the watershed (Le Sueur, Le Center and Montgomery)

Time Frame: Spring and Late fall of 2009, Fall of 2010

Person(s) Responsible: Lauren Klement

Budget: MPCA Grant funds: \$ 0.00

Task B: Conduct one informational meeting to local elected officials on project progress and results of water analysis

Sub-task 1: Gather information

Sub-task 2: Set date and time

Sub-task 3: Conduct meeting

Person(s) responsible: Lauren Klement

Budget: MPCA Grant funds: \$0.00

TOTAL MPCA GRANT FUNDS OBJECTIVE 4: \$0.00

OBJECTIVE 5: Provide required administration for project success throughout the length of the project

Task A: Administer grant agreement with MSU

Sub-task 1: Create PERT Chart

Sub-task 2: Work with MSU on the development of the project contract

Sub-task 3: Obtain proper signatures

Sub-task 4: Return signed contract to MSU

Sub-task 5: Complete QAPP paperwork

Sub-task 6: Contact MSU-WRC on a bi-monthly basis

Sub-task 7: Follow PERT chart

Sub-task 8: Submit semi annual reports and budget reports

Sub-task 9: Create claims from invoices

Sub-task 10: Submit claims to the auditor's office for payment

Time Frame: Sub-tasks 1-4 Late winter 2009; Sub-tasks 5-10 throughout project length

Person(s) Responsible: Lauren Klement

Budget: MPCA Grant funds: \$1,000.00

TOTAL MPCA GRANT FUNDS OBJECTIVE 4: \$1,000.00

Objective 1	\$21,349
Objective 2	\$9,623
Objective 3	\$0.00
Objective 4	\$0.00
Objective 5	\$1,000.00
Total	\$31,972

Section III. Waterbody/Site/Sample/Parameters

Waterbody	Site	Number of samples	Parameters	Date Range of Monitoring
Le Sueur Creek 1 (LSC 1)	Tentative site location at Le Sueur County Road 116 (Jay St) or Hwy 112. Site visit needed.	14 samples per year (includes storm events and baseline)	Total Suspended Solids (TSS), Nitrite-Nitrate-N (N-N), E Coli, Total Phosphorus (TP), Chlorophyll a, Pheophytin, Field measurements include DO/Temperature, Conductivity, pH and transparency	April to October for two years: Apr. - Oct. sample for TSS June - Sept. sample for TP, TKN, N-N, Chl. a, Pheophytin June - August sample for E-coli
Forest Prairie 1 (FPC 1)	Le Sueur County Road 116 (Jay St) or a site to be determined.	14 samples per year (includes storm events and baseline)	TSS, N-N, E Coli, TP, Chlorophyll a, Pheophytin, Field measurements include DO/Temperature, Conductivity, pH and transparency	April to October for two years: Apr. - Oct. sample for TSS, June - Sept. sample for TP, TKN, N-N, Chl. a, Pheophytin June - August sample for E-coli
Clear Lake (40-0079)	Deep hole near center of lake	10 samples (twice per month)	TP, Chlorophyll-a and Field measurement for clarity-Secchi, DO/Temperature, Conductivity, pH	May-September
Greenleaf Lake (40-0020)	Deep hole near center of lake	10 samples (twice per month)	TP, Chlorophyll-a and Field measurement for clarity-Secchi, DO/Temperature, Conductivity, pH	May-September

Section IV. Evaluation Plan

The success of this project will be evaluated with the following plan. The budget and task details are itemized in the work plan, and the results will be included in the final progress report.

Measures for success: The success of the project will be based on completion of the project within the projected time frame and budget, data will be entered into STORET, and project reports will be submitted on a timely basis. The goal of the project will be reached.

Methods: Follow PERT chart, collect samples following the QAPP, and maintain good quality records, data will be entered in the spreadsheet that the MPCA uses for STORET entry.

Section V. Budget and Expenditures

Reference **Attachment B**: Budget Detail for FY2009 Project

(Please note travel reimbursement is .55 per mile)