



MinnesotaCorn

RESEARCH & PROMOTION COUNCIL

PROGRESS REPORT

PROJECT TITLE: Vegetative cover crops as a nitrate reduction strategy for tile drainage.

PROJECT NUMBER: MCR&PC / 4121-16SP, (CON00000060901)

REPORTING PERIOD: July 1 – September 30, 2018

PRINCIPAL INVESTIGATOR: Jeffrey Vetsch

ORGANIZATION: Univ. of Minnesota, Southern Research and Outreach Center

PHONE NUMBER: 507-837-5654

EMAIL: jvetsch@umn.edu

- 1.) PROJECT ACTIVITIES COMPLETED DURING THE REPORTING PERIOD. **Activities for this quarter were to perform procedures as outlined in the research protocol (proposal) including: broadcast seed cover crops at R6, measure tile flow, collect water samples, take volumetric soil water content measurements weekly, and submit quarterly report.** All tasks have been performed in a timely fashion.
- 2.) IDENTIFY ANY SIGNIFICANT FINDINGS AND RESULTS OF THE PROJECT TO DATE. Very little tile flow in July and August but considerable flow in September (> 10 inches of rainfall in Sep). Nitrate concentrations in tile drainage water averaged ~ 2.5 ppm across all treatments in September of 2018. These concentrations are VERY low for tile drainage water.
- 3.) CHALLENGES ENCOUNTERED. Poor growth of cover crops in September (too wet).
- 4.) FINANCIAL INFORMATION. Expenses during the period were for lab services (tile water NO₃-N analyses, cover crop nutrient content and soil samples) and labor (salary and fringe). The budget table and invoice are attached. All other categories are within or less than quarterly budget projections.
- 5.) EDUCATION AND OUTREACH ACTIVITIES. No outreach activities during this period.

Budgeted and spent funds for each quarter during project year 2016.

Category	Budgeted	Spent	Apr-Jun 16	Jul-Sep 16	Oct-Dec 16	Jan-Mar 17
			-----\$-----		-----\$-----	
Salary		8,250.09	2,359.25	3,754.84		2,136.00
Fringe		1,312.37	344.27	412.74		555.36
Salary+fringe	12,300	9,562.46	2,703.52	4,167.58	-	2,691.36
Supplies	700	2,402.46	200.00	1,104.42	1,082.86	15.18
Services	2,800	3,402.75	-	1,743.75	975.00	684.00
Travel	400	27.00	-	-	27.00	-
Total	16,200	15,394.67	2,903.52	7,015.75	2,084.86	3,390.54

Budgeted and spent funds for each quarter during project year 2017.

Category	Budgeted	Spent	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18
			-----\$-----		-----\$-----	
Salary		11,875.64	7,696.62	2,020.54	279.00	1,879.48
Fringe		3,140.59	2,003.88	549.59	75.89	511.23
Salary+fringe	26,600	15,016.23	9,700.50	2,570.13	354.89	2,390.71
Supplies	800	29.96	-	-		29.96
Services	6,950	4,448.04	2,394.00	235.25	702.79	1,116.00
Travel	500	405.90	89.35	245.57	41.20	29.78
Total	34,850	19,900.13	12,183.85	3,050.95	1,098.88	3,566.45

Budgeted and spent funds for each quarter during project year 2018.

Category	Budgeted	Spent	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18	Jan-Mar 19
			-----\$-----		-----\$-----	
Salary		13,818.46	6,372.15	7,446.31		
Fringe		3,847.97	1,733.20	2,114.77		
Salary+fringe	26,600	17,666.43	8,105.35	9,561.08	-	-
Supplies	800	18.37	-	18.37		
Services	6,750	4,056.75	1,880.00	2,176.75		
Travel	500	85.57	85.57	-		
Total	34,650	21,827.12	10,070.92	11,756.20	-	-

Total Budgeted and spent funds from grant inception through current budget.

Category	Total Budgeted	Total Spent
Salary	51,849	33,944.19
Fringe	13,651	8,300.93
Supplies	2,300	2,450.79
Services	16,500	11,907.54
Travel	1,400	518.47
Total	85,700	\$57,121.92



UNIVERSITY OF MINNESOTA
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INVOICE

Invoice No. 2010603959

REGENTS OF THE UNIVERSITY OF MINNESOTA

PAYABLE WITHIN 30 DAYS

MN CORN RES AND PROMOTION COUN
PAUL MEYERS, PHD, RESEARCH DIRECTOR
738 1ST AVE E
SHAKOPEE MN 56378-1647

Invoice Date: 10/26/2018
Contract No: CON00000060901
Agency No: 4121-16SP
Federal Tax ID: 41-6007513

Invoicing Period	Description	Previously Billed Expenses	Current Expenses	Cumulative Total
07/01/2018 - 09/30/2018	Salaries and Wages	26,497.88	7,446.31	33,944.19
	Fringe Benefits	6,185.16	2,114.77	8,300.93
	Consulting and Prof. Services	0.00	0.00	0.00
	Supplies and Services	12,163.21	2,195.12	14,358.33
	Participant Expenses	0.00	0.00	0.00
	Travel	518.47	0.00	518.47
	Student Assistance	0.00	0.00	0.00
	Subcontracts	0.00	0.00	0.00
	Repairs&Maintenance/Rent&Lease	0.00	0.00	0.00
	Equipment	0.00	0.00	0.00
	Other Expenses	0.00	0.00	0.00
	Indirect Costs	0.00	0.00	0.00
	Total \$	45,365.72	11,756.20	57,121.92
	Program Income and TIP	0.00	0.00	0.00
<p>Title: Vegetative cover crops as a nitrate reduction strategy f</p> <p>Principal Investigator: Jeffrey Vetsch</p>				
	Cost Share \$	0.00	0.00	0.00

For questions please contact: Angela Lane
E-Mail: laner134@umn.edu
Telephone: 612/624-8265

Total Amount Due: \$ 11,756.20

I certify that to the best of my knowledge and belief, all expenditures reported (or payments requested) are for appropriate purposes and were made in accordance with the agreements set forth in the application and award documents.

Regents of the University of Minnesota

Make Remittance Payable To: REGENTS OF THE UNIVERSITY OF MINNESOTA
Mail To: NW 6867
PO Box 1450
Minneapolis, MN 55485-6867

Nicole Pilman
Director
Sponsored Financial Reporting

Customer: 6006221
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PLEASE REFERENCE ABOVE INVOICE NUMBER ON REMITTANCE