



Grant All-Detail Report Accelerated Implementation Grant 2015

Grant Title - Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters

Grant ID - C15-7650

Organization - Rock SWCD

Original Awarded Amount	\$68,500.00	Grant Execution Date	3/27/2015
Required Match Amount	\$17,125.00	Original Grant End Date	12/31/2018
Required Match %	25%	Grant Day To Day Contact	Douglas Bos
Current Awarded Amount	\$68,500.00	Current End Date	12/31/2018

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$68,500.00	\$68,500.00	\$0.00
Total Match Amount	\$17,760.00	\$17,760.00	\$0.00
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$86,260.00	\$86,260.00	\$0.00

**Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Existing Inventory	Planning and Assessment	Local Fund	Compile an inventory from existing conservation practices	\$3,500.00	\$3,500.00	12/31/2018	Y
Final Report and Training Workshop	Education/Information	Current State Grant	Accelerating BMP Implementation in Rock County Watersheds fo..	\$8,500.00	\$8,500.00	12/31/2018	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Generate Hydrologically Conditioned DEM and Terrain Analysis Products	Technical/Engineering Assistance	Current State Grant	Accelerating BMP Implementation in Rock County Watersheds fo..	\$22,000.00	\$22,000.00	10/6/2016	N
Generate Water Quality Datasets	Technical/Engineering Assistance	Current State Grant	Accelerating BMP Implementation in Rock County Watersheds fo..	\$8,500.00	\$8,500.00	7/27/2017	N
Grant Administration and coordination	Administration /Coordination	Local Fund	Administration, coordination and facilitation of the AIG Grant	\$14,260.00	\$14,260.00	12/31/2018	Y
Measure BMP Effectiveness	Technical/Engineering Assistance	Current State Grant	Accelerating BMP Implementation in Rock County Watersheds fo..	\$3,500.00	\$3,500.00	12/20/2018	N
Target Sources and BMP Placement	Technical/Engineering Assistance	Current State Grant	Accelerating BMP Implementation in Rock County Watersheds fo..	\$26,000.00	\$26,000.00	1/31/2019	N

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
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Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
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Final Indicators Summary

Indicator Name	Total Value	Unit
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Grant Activity

Grant Activity - Existing Inventory			
Description	Rock County SWCD/Land Mgt staff with assistance from Pipestone SWCD PF position will compile an inventory of existing conservation practices by requesting information from NRCS, reviewing Elink information, aerial photos and site visits.		
Category	PLANNING AND ASSESSMENT		
Start Date	27-Mar-15	End Date	31-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>2016 -</p> <p>Technician 1: Inventoried existing practices 13 hours $13 \times 29.62 = 385.06$</p> <p>Technician 2: Inventoried existing practices 9 hours. $9 \times 29.37 = 264.33$</p> <p>2017:</p> <p>Assistant Director - review of drainage area scenarios: $10 \times 54.91 = 549.10$</p> <p>Technician - utilized GIS to develop drainage area scenarios; review of scenarios $20 \times 39.35 = 787.00$</p> <p>Total Staff Time: \$1,336.10</p> <p>2018:</p> <p>Technician 1 - Reviewed existing practices effects and analyzed new data scenarios for conservation practice prioritization. $33 \times 43.36 = 1430.88$</p> <p>Technician 2 - Reviewed existing practice sites for accuracy of placement. $4 \times 36.30 = 145.60$</p> <p>Total Staff Time: 1576.48</p>		

Grant Activity - Final Report and Training Workshop

Description	Houston Engineering will compose a final report of results of the reconditioned LiDAR data. Houston Engineering will also provide a Prioritize, Targeted, and Measured Implementation Plan for the identified watersheds along with the Rock River Watershed. Houston Engineering will provide onsite training workshop and follow-up webinar to Rock County SWCD/Land Management along with a refresher course to Pipestone, Nobles, and Murray SWCDs.		
Category	EDUCATION/INFORMATION		
Start Date	27-Mar-15	End Date	31-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>Houston Engineering composed a final report of results of the reconditioned LiDAR data provided a Prioritized, Targeted, and Measured Implementation Plan for the identified watersheds along with the Rock River Watershed.</p> <p>Houston Engineering has developed materials for an onsite training workshop and follow-up webinar for Rock County SWCD/Land Management, Pipestone, Nobles, and Murray SWCDs. The actual workshop will be held in 2019 and funded by the Nobles County AIG Grant.</p> <p>\$8500.00 of Invoice 42012 - remainder of invoice paid in Target Sources & BMP Placement. Actual invoices attached in grant documents.</p>		

Grant Activity - Generate Hydrologically Conditioned DEM and Terrain Analysis Products

Description	Houston Engineering will generate hydrologically conditioned DEM and Terrain Analysis products for Mud Creek, Beaver Creek, Split Rock Creek and remainder of unnamed watersheds in Western portion of Rock County by removing digital dams such as roads and correct loading capacity of tiled basin areas . Approx. 200 sq. miles		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	27-Mar-15	End Date	06-Oct-16
Has Rates and Hours?	No		
Actual Results	<p>2015 - Houston Engineering started the process of hydrologically conditioning the DEM maps. Invoices 26818 and 26264 See expenditures for details. Actual invoices attached in grant documents.</p> <p>2016 - Houston Engineering finished the hydro-conditioning process on the DEM maps. See expenditures for details. Invoices 29890, 29236 and 31672 Actual invoices attached in grant documents.</p> <p>Outcome of activity resulted in hydro-conditioned DEM for Mud Creek, Beaver Creek, Splitrock Creek as well as the remainder of unnamed watersheds in the western area of Rock County.</p>		

Grant Activity - Generate Water Quality Datasets

Description	Creation of Surficial TN, TP, Sediment and Hydrologic Loading GIS datasets by Houston Engineering using the existing Water Quality Decision Support Application (WQDSA) tools.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	27-Mar-15	End Date	27-Jul-17
Has Rates and Hours?	No		
Actual Results	<p>2016 - Houston Engineering started to develop water quality products through PTMApp Invoice 31672 - See expenditures for details. Actual invoices attached in grant documents.</p> <p>2017 - Houston engineering continued to develop water quality data products QC PTMApp, made revisions to PTMApp products, drafted a final report and correspondence related to the report. Invoices 33600 and 35152 - See expenditures for details. Actual invoices attached in grant documents.</p> <p>Outcome of the activity resulted in creation of GIS datasets for Surficial TN, TP, Sediment and Hydrologic Loading using the Water Quality Decision Support Application Tools. Outcome of the activity resulted in creation of GIS datasets for Surficial TN, TP, Sediment and Hydrologic Loading using the Water Quality Decision Support Application Tools. These datasets will be used to assist Rock County as well as the Missouri River Watershed in accelerating implementation for targeted and measurable approaches to implementing BMPs to improve water quality for priority resources.</p>		

Grant Activity - Grant Administration and coordination			
Description	Administration, coordination and facilitation of the AIG grant will be completed by Rock County SWCD/Land Management Staff.		
Category	ADMINISTRATION/COORDINATION		
Start Date	27-Mar-15	End Date	31-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>2015 - Assistant Director: communication and coordination for beginning work on the hydro-conditioning of the DEMs (digital elevation maps). 20 x 54.44 = 1,008.80 Office Manager: Administration of the grant agreement and financial tracking. 3 x 23.16 = 69.48</p> <p>2016 - Asst. Director: communication and coordination for continuing work on the hydro-conditioning of the DEMs (digital elevation maps). 37.5 hours x 55.06 = 2,064.75 Technicians 1 & 2: Reviewed and coordinated hydro-conditioning process. 11 hours x 40.57 = 446.27 1 x 31.14 = 31.14 Office Manager: Financial tracking. (job share position) 5.5 hours: 4.5 x 23.48 = 105.66 1 x 26.83 = 26.83</p> <p>2017: Assistant Director: communication and coordination for continuing work on the hydro-conditioning of the DEMs (digital elevation maps). 30 x 54.91 = 1647.30 Office Manager: Interim reporting, payment of Houston invoices and financial tracking. 1.5 x 24.82 = 37.23 Total Staff Time: \$ 1,709.35</p> <p>2018:</p>		

	<p>Assistant Director: Communication and coordination to utilize additional data to better prioritize conservation practice placement. 120 x 60.25 = 7242.00</p> <p>Office Manager: ELINK reporting, payment of Houston invoices and financial tracking. 13 x 27.59 = 358.67</p> <p>Technician: GIS coordination to utilize additional data to better prioritize conservation practice placement. 29 x 43.36 = 1257.44</p>
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Grant Activity - Measure BMP Effectiveness

Description	Houston Engineering will utilize the developed data sets along with cost estimates of specific conservation practices to identify cost-effectiveness (\$/mass of TN, TP, Sediment and hydrology) of pollutant reduced by BMPs.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	27-Mar-15	End Date	20-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>2016 - Houston Engineering began development of water quality products through PTMApp. Invoice 31672 - See expenditure for details. Actual invoices attached in grant documents.</p> <p>2018 Houston Engineering analyzed existing practices to aide in the prioritization of targeting future practices and projects. Invoice 41711 - See expenditure for details. Actual invoices attached in grant documents.</p> <p>Outcome of activity resulted water quality products through PTMApp. HEI digitized conservation practices for 5 watersheds and began PTMAPP analysis to TN loads. Work on final deliverables began. Final deliverables will provide the amount of runoff that infiltrates down to tiled areas, the inorganic N load that infiltrates and is delivered to the BMP, benefits of subsurface BMPs and groundwater inorganic N Load. It will also provide the fraction of the TN load that would actually reach subsurface BMPs.</p>		

Grant Activity - Target Sources and BMP Placement

Description	Houston Engineering will generate loading to resources of concern and BMP suitability GIS datasets to utilize in prioritizing and cost effectiveness of the proposed conservation practices.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	27-Mar-15	End Date	31-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>2018 - Coordination with Houston Engineering to determine remainder of work.</p> <p>Houston Engineering analyzed existing practices to aide in the prioritization of targeting future practices and projects. The task did also further analyze estimates for TN load reaching subsurface BMPs. This task also developed these data sets for the entire Missouri River Basin.</p> <p>Invoices 39412, 41711 \$10,343.44 of 42012 - remainder paid from Final Report and Training Workshop. Actual invoices attached in grant documents.</p>		

Grant Attachments

Document Name	Document Type	Description
2015 Competitive Grant	Grant Agreement	2015 Competitive Grant - Rock SWCD
2015 Competitive Grant executed	Grant Agreement	2015 Competitive Grant - Rock SWCD
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/04/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/14/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/14/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/31/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/27/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/27/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/21/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/20/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/22/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/28/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/31/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/22/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/26/2017

Document Name	Document Type	Description
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/03/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/23/2016
Application	Workflow Generated	Workflow Generated - Application - 09/26/2014
C15-7650 Reconciliation B Checklist	Journal	Journal Dated - 01/02/2019
Expenses	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters
Financial Report	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters
Financial Report	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters
Invoice 42012	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters
Invoices	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters
Rock SWCD CY17 eLINK Reporting Needs	Journal	Journal Dated - 02/28/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 11/21/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/18/2015
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/28/2015
Work Plan Approval email	Journal	Journal Dated - 03/19/2015
grantmap_12785_2014-09-25_03-22-13-PM.jpg	Grant	Accelerating BMP Implementation in Rock County Watersheds for Turbidity Impaired Waters