



## Grant All-Detail Report Accelerated Implementation Grant 2017

**Grant Title** - Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration

**Grant ID** - C17-6916

**Organization** - Nobles SWCD

Original Awarded Amount	<b>\$102,500.00</b>	Grant Execution Date	<b>3/30/2017</b>
Required Match Amount	\$25,625.00	Original Grant End Date	12/31/2019
Required Match %	25%	Grant Day To Day Contact	John Shea
Current Awarded Amount	\$102,500.00	Current End Date	12/31/2019

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$102,500.00	\$96,301.98	\$6,198.02
Total Match Amount	\$26,500.00	\$10,000.00	\$16,500.00
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$129,000.00</b>	<b>\$106,301.98</b>	<b>\$22,698.02</b>

*\*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
Administration, Coordination and Grant Reporting	Administration /Coordination	Current State Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analy..	\$0.00			N
Administration, Coordination and Grant Reporting	Administration /Coordination	Local Fund	Funds will be provided from in kind hours from participating organizations in the grant.	\$5,000.00			Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Hydrologic Conditioning	Inventory/Mapping	Current State Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analy..	\$78,500.00	\$78,319.48	6/26/2018	N
Hydrologic Conditioning	Inventory/Mapping	Local Fund	partner cash match	\$10,000.00	\$10,000.00	2/23/2018	Y
Prepare Final Report and Instructional Workshop	Education/Information	Current State Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analy..	\$6,000.00			N
Prepare Inputs and Run PTMApp Analysis	Planning and Assessment	Current State Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analy..	\$18,000.00	\$17,982.50	8/24/2018	N
Review and Verification	Project Development	Current State Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analy..	\$0.00			N
Review and Verification	Project Development	Local Fund	Funds will be provided as in kind hours by participating organizations in the grant.	\$11,500.00			Y

### 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 - Administration, Coordination and Grant Reporting

Description	Nobles County SWCD will serve as the primary agency for the management of grant funds and coordination of project activities. This activity includes administration, coordination, facilitation and contracting for technical assistance with Houston Engineering for the remaining tasks. In-Kind of approximately 150 Hrs@ \$33.83= \$5,074.50		
Category	ADMINISTRATION/COORDINATION		
Start Date	31-Mar-17	End Date	
Has Rates and Hours?	Yes		
Actual Results	No Local funds have been spent as of 12/31/17.		

## Grant Activity - Hydrologic Conditioning

Description	<p>Houston Engineering will complete intensive hydrologic conditioning for approximately 1,000 square miles in the Missouri River Basin. This area includes portions of Upper Big Sioux River, Lower Sioux River, Kanaranzi Creek, Little Rock River watersheds. Previously hydro conditioned watersheds within the Missouri River Basin will be incorporated into the new DEM and the result will produce a hydrologic condition DEM for the 1W1P Missouri River Basin boundary. The hydrologically conditioned DEM (hDEM) will be used for local planning to delineate watersheds, flow paths and other derived products. The hDEM will also be one of the primary inputs into the PTMApp analysis task. The hDEM is a fundamental building block towards accelerating the planning and targeting of BMPs in the watershed.</p> <p>The estimated cost of the Hydro Conditioning is \$88,500.00 so the partners involved are using a cash match to meet the needs of the engineer.</p> <p>\$10,000.00 break down</p> <p>Lincoln county has 8.4% of intensive hydrologic conditioning needed in county = \$840.00</p> <p>Pipestone county has 27.4% of intensive hydrologic conditioning in county = \$2,740.00</p> <p>Rock county has 2% of intensive hydrologic conditioning in county = \$200.00</p> <p>Nobles county has 41.4% of intensive hydrologic conditioning in county = \$4,140.00</p> <p>Jackson county has 20.8% of intensive hydrologic conditioning in county = \$2,080.00</p>		
Category	INVENTORY/MAPPING		
Start Date	31-Mar-17	End Date	
Has Rates and Hours?	No		
Actual Results	<p>Houston Eng Worked with staff on the following:</p> <p>May 22, 2017 - Project Kick-Off meetings, Gathered and assembled data for hydro conditioning and began the hydro conditioning process.</p> <p>July 6, 2017 - Hydro conditioning was performed by Houston Eng. Staff</p> <p>August 8, 2017 - Hydro Conditioning was performed by Houston Eng. Staff</p> <p>September 19, 2017 - Hydro conditioning was performed and Houston Eng. Staff began to prepare PTMApp Inputs.</p> <p>November 2, 2017 - The Draft of the Hydrocondition DEM was created and</p>		

	<p>November 29, 2017</p> <p>HEI is 90% complete on the hydro conditioning task of the project. This including making three passes of digitizing burnlines to accurately depict the overland flow of water. This burnlines were then incorporated into a DEM to create a hydroconditioned DEM. From the DEM HEI derived draft catchments that were then used to conduct a quality control review of the hydro condition DEM. HEI anticipates finalizing the hydrocondition DEM to reflect the work along the State boundary in January.</p> <p>Invoices were sent out for the cash match January 2018.</p> <p>2/23/18 -- Cash match was used as Hydro Conditioning was finalized around the state boundaries. PTMApp Inputs were also prepared.</p>
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Grant Activity - Prepare Final Report and Instructional Workshop			
Description	Houston Engineering will compose a final report of the reconditioned DEM and PTMApp analysis results and data products. The report will serve as documentation of methods and deliverables. Houston Engineering will provide an onsite training workshop and follow-up webinar to Nobles County SWCD and other SWCD and WD project partners.		
Category	EDUCATION/INFORMATION		
Start Date	31-Mar-17	End Date	
Has Rates and Hours?	Yes		
Actual Results	<p>Final report has not been started 12-31-2017</p> <p>final report has not been started 12-31-18</p>		

## Grant Activity - Prepare Inputs and Run PTMApp Analysis

Description	Houston Engineering will work with project partners to gather and prepare the required inputs for PTMApp. This includes priority resource points, project boundary, travel time grids and other basemap GIS data. Once the hydrologic condition DEM and PTMApp inputs are completed then PTMApp will be ran to produce final datasets. The final data products and analysis will be used to accelerate the 1W1P process and for local parts to use the data to assist in BMP targeting and planning activities. It is envisioned the PTMApp analysis will be performed in conjunction with the 1W1P plan development to assist with producing a targeted implementation plan.		
Category	PLANNING AND ASSESSMENT		
Start Date	1-Jul-17	End Date	
Has Rates and Hours?	No		
Actual Results	<p>PTMApp Inputs were prepared.</p> <p>November 29, 2017</p> <p>Currently HEI is working on fine tuning the burn lines along the State boundaries of Iowa and South Dakota in order to aggregate nitrogen, phosphorus and sediment loads when using the data for PTMApp analysis. This involved a conference call with project partners to describe the challenges along the state boundaries with small direct drainages that go in or out of the state. HEI has also begin created input datasets that are need for PTMApp tool. This included working with the local partners to create the priority resource point layer.</p> <p>2/23/2018 - Hydro conditioning was completed around the state boundaries and PTMApp Inputs were prepared.</p> <p>8/24/18 - PTMApp process and QC outputs</p>		

## Grant Activity - Review and Verification

<b>Description</b>	<p>Nobles County SWCD and partners for this project will provide provide existing inventory data such as culvert inventories, aerial photos, ditches and other GIS data to support the hydrologic conditioning tasks. Upon completion of the hydrologic conditioning local SWCD and WD staff members will review the hydrologic conditioned DEM and provide comments back to Houston Engineering. Project partners will also supply information to Houston Engineering to develop the data inputs to PTMApp and review the PTMApp results.</p> <p>In- Kind Staff time of approximately 230 Hrs at an estimated \$50.00 = \$11,500.00</p>		
<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	31-Mar-17	<b>End Date</b>	
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>No Funds have been spent as of 12/31/17</p> <p>No Funds have been spent as of 12/31/18</p>		

## Grant Attachments

Document Name	Document Type	Description
<b>2017 Competitive Grant</b>	Grant Agreement	2017 Competitive Grant - Nobles SWCD
<b>2017 Competitive Grant executed</b>	Grant Agreement	2017 Competitive Grant - Nobles SWCD
<b>40% Payment Notice</b>	Journal	Journal Dated - 12/01/2017
<b>AIG INV - 0038040</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 10/16/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/11/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 03/05/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 02/09/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/25/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 12/01/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 12/01/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 11/27/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 02/19/2019
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/08/2016

Document Name	Document Type	Description
<b>C17-6916 Checklist</b>	Journal	Journal Dated - 11/30/2017
<b>Financial Report - 50% Spent</b>	Progress	Progress Dated - 10/16/2017
<b>Houston Eng. INV: 0037284</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>INV 0038327</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>INV 0040187</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>INV 034643 - Houston Eng</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>INV 35140 Houston Eng.</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>INV: 0039410</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Inv 0036223 Houston Eng.</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Inv. 0038679</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Inv: 0036730 Houston Eng.</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Inv: 35642 Houston Eng.</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Missouri River Basin Hydro Conditioning Map</b>	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration
<b>Nobles SWCD CY2017 ELink Repoting Needs</b>	Journal	Journal Dated - 02/09/2018
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/15/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/14/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/15/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/10/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/09/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/03/2017



Document Name	Document Type	Description
grantmap_17064_2016-08-05_05-42-47-PM.jpg	Grant	Missouri River Basin Hydro Conditioning, BMP Targeting Analysis and 1W1P Acceleration