



# Grant All-Detail Report

## Accelerated Implementation Grant 2014

**Grant Title** - Yellow Medicine River Terrain Analysis Assessment Grant 2014

**Grant ID** - C14-9573

**Organization** - Yellow Medicine River WD

<b>Grant Awarded Amount</b>	<b>\$88,611.00</b>	<b>Grant Execution Date</b>	
<b>Required Match Amount</b>	\$22,152.75	<b>Grant End Date</b>	12/31/2016
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Emily Javens

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$88,611.00	\$88,611.00	\$0.00
Total Match Amount	\$22,153.00	\$15,024.32	\$7,128.68
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$110,764.00</b>	<b>\$103,635.32</b>	<b>\$7,128.68</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	Match
Contract with Water Resource Center	Planning and Assessment	Current State Grant	Yellow Medicine River Terrain Analysis Assessment Grant 2014	\$88,611.00	\$88,611.00	11/14/2016	N
administration/coordination	Administration /Coordination	Local Fund	Yellow Medicine River Watershed District	\$2,500.00	\$1,888.00	12/31/2016	Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Match
project development and training	Planning and Assessment	Local Fund	Yellow Medicine River Watershed District	\$19,653.00	\$13,136.32	1/9/2017	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 - Contract with Water Resource Center

## Description

This project will utilize the State of Minnesota LiDAR elevation datasets recently acquired for southern Minnesota. There is considerable interest in making use of the new LiDAR derived digital elevation models (DEM'S) in Minnesota for water resource projects, as they provide a very precise depiction of the land surface. However, LiDAR DEM's do not inherently include important information about subsurface water conveyance connections such as culverts, drain tiles, and storm sewers. As a result, bridges, roads and other structures on the landscape effectively act as virtual dams preventing terrain analysis algorithms from properly routing the flow of water across the DEM landscape. This project will create an inventory of burnlines and culverts for use in creating hydrologically corrected DEM's from Minnesota LiDAR data for long range use in improving water quality and quantity models in the Yellow Medicine River watershed. The various secondary datasets we will create are Critical Source Areas, Specific Catchment Areas, Stream Power Index, Compound Topographic Index, and Environmental Benefit Index. We will also be able to identify bluff and ravine areas using the LiDAR data. We are trained in the use of GIS Arc View programs, and intend to work with the WRC, GIS Specialist Rick Moore, for training and use, which will be offered to all project partners.

The project costs proposed are as follows:

Rick Moore salary and fringe \$73575.00

Water Resource Center assistant  
\$6400.00

Travel from Mankato, MN to Minneota, MN \$2000.00

Supplies and equipment \$750.00

Indirects \$ 5886.00

( Overhead, facilities and admin expense)

Total contract Costs - \$88611.00

See attached contract with Job items/milestones.

See also attached Rick Moore technical skills, credentials

Category	PLANNING AND ASSESSMENT		
Start Date	28-Mar-14	End Date	14-Nov-16
Has Rates and Hours?	No		
Actual Results	<p>7-14-2014 and 10-13-2014 :</p> <p>quarterly payments were made to Water Resources Center. A progress report was requested after the 7-14-2014 report, and that was received with the September request for payment.</p> <p>The progress report shows that the group who is working on this project, have been focusing on the first initial delineations of culverts/burnlines. They are going through each of the catchments from the DNR layer and are running it through the NRCS Watershed Delineation Tools. Details are written in the September 2014 progress report that is provided by WRC.</p> <p>Discussion with the Technical Service area 5 and Houston Engineering has led to a collaboration with Houston Engineering to utilize their terrain analysis tools to make the hydrologic conditioning from the YM watershed and TSA5 seamless. The culvert inventory will most likely be completed by December.</p> <p>see attached detailed report from Water Resources Center who is the contractor for this grant.</p> <p>12-31-2015: MSU has completed Tasks 1 and 2 which included the hydro-conditioning of the LiDAR data and computing the Stream Power Index (SPI) and the Compound Topographic Index (CTI).</p> <p>6-30-2016: MSU is near completion of all tasks Two of the three training sessions have been provided by the Water Resources Center to project partners.</p> <p>12-31-2016: all tasks are complete!</p>		

**Grant Activity - administration/coordination**

<b>Description</b>	The Yellow Medicine River Watershed District administrator Cindy Potz will be responsible for coordinating the project with the Water Resource Center at Minnesota State University Mankato, MN. Time tracking will be documented for all Water Resource Center milestone activities, and for all local in-kind activity. Potz will approve payment of invoices to the Water Resource Center. Potz will be responsible for all eLINK, interim and final reporting documentation for the project. Potz will pay all invoices and work with our web master to post reports on our website.		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	28-Mar-14	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>have been in contact with WRC and have used admin time to make payments on 7-14-2014 and 10-13-2014. Estimated time to do the administration is approximately 10 hours estimated billing rate of 21.00 equals 210.00.</p> <p>12-31-2015. Cindy Potz is no longer the Administrator at the YMRWD. Interim Administration services provided by Emily Javens, RESPEC Consulting. Time spent specifically on this grant was 2 hours at \$95/hour.</p> <p>6-30-2016 Emily Javens is now the Administrator of the YMRWD. Hours recorded during the past six months to coordinate trainings and administer the grant was 16 hours.</p> <p>12-31-2016 Grant work is completed and a final billing rate for 2016 was calculated using the overhead calculator. Billing rate for the YMRWD Administrator Emily Javens is \$62/hr.</p>		

## Grant Activity - project development and training

<b>Description</b>	The Yellow Medicine River Watershed District staff and the local project partner agency personnel (Lincoln, Lyon and YM Counties and SWCD's) will provide data and assistance towards the project, and will attend meetings in order to review and approve the data. The same partners will be given the opportunity for training on the use of the completed product, creating sessions in which the project partner agency personnel will have access and ability to use the completed product. In kind activity will include providing information as needed for development of analysis, culvert inventory data and field work during the ground truthing throughout the watershed. Other activities will include reviewing focus areas for accuracy of completed layers.		
<b>Category</b>	PLANNING AND ASSESSMENT		
<b>Start Date</b>	28-Mar-14	<b>End Date</b>	31-Dec-16
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>12-31-2014 no activity as yet. 12-31-2015 no activity as yet.</p> <p>12-31-2016: MSU held 3 training sessions on how to run terrain analysis tools using ArcGIS software. MSU was under contract to run the tools in a few priority subwatersheds and it was the hope that the technicians who attended the training could run the tools in the remaining subwatersheds. Due to time constraints, this was not feasible. Therefore the Watershed District hired MSU to complete the analysis for all subwatersheds. They also produced mapbooks that illustrated the results for every township section of the watershed.</p>		

## Grant Attachments

Document Name	Document Type	Description
<b>2014 Competitive Grant</b>	Grant Agreement	2014 Competitive Grant - Yellow Medicine River WD
<b>2014 Competitive Grant executed</b>	Grant Agreement	2014 Competitive Grant - Yellow Medicine River WD
<b>2016FinancialReport-YMRWD</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>40% Request Approval</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/27/2015
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/09/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/29/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 04/13/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 04/13/2016

Document Name	Document Type	Description
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 02/08/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/18/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/28/2015
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/27/2015
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/16/2015
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 10/04/2013
<b>FY2014 YMRWD CWF AIG email</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>July 30 2015 call with MSU-WRC</b>	Journal	Journal Dated - 07/30/2015
<b>SR_loc_10497.jpg</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>September 2014 progress report</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>Water Resource Center Contract</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 01/23/2014
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/14/2014
<b>Yellow Medicine River Terrain Analysis Proposal from Rick Moore, GIS specialist at Water Resource Center, MNSU, Mankato</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>background and credentials of Rick Moore</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014
<b>grantmap_10497_2013-10-04_04-06-41-PM.jpg</b>	Grant	Yellow Medicine River Terrain Analyis Assessment Grant 2014