



# Grant All-Detail Report Projects and Practices 2015

**Grant Title** - Watkins Area Stormwater Treatment

**Grant ID** - C15-1978

**Organization** - Clearwater River WD

<b>Grant Awarded Amount</b>	<b>\$351,906.00</b>	<b>Grant Execution Date</b>	<b>4/7/2015</b>
<b>Required Match Amount</b>	\$87,976.50	<b>Grant End Date</b>	12/31/2018
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Dennis Loewen

## Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$351,906.00	\$7,656.00	\$344,250.00
Total Match Amount	\$231,909.00	\$37,366.67	\$194,542.33
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$583,815.00</b>	<b>\$45,022.67</b>	<b>\$538,792.33</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/Management - Watkins Area Stormwater Treatment	Administration /Coordination	Local Fund	Local Match Watkins Stormwater, CRWD	\$14,663.00	\$897.74	12/31/2015	Y
Civic Engagement - Watkins Area Stormwater Treatment	Education/Information	Local Fund	Local Match Watkins Stormwater, CRWD	\$6,000.00			Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Construction - Watkins Area Stormwater Treatment	Urban Stormwater Management Practices	Current State Grant	Watkins Area Stormwater Treatment	\$351,906.00	\$7,656.00	12/31/2015	N
Construction - Watkins Area Stormwater Treatment	Urban Stormwater Management Practices	Local Fund	Land Conversion, Local Match Watkins Stormwater, CRWD	\$100,000.00			Y
Design & Permitting - Watkins Area Stormwater Treatment	Technical/Engineering Assistance	Local Fund	Local Match Watkins Stormwater, CRWD	\$88,246.00	\$36,468.93	12/31/2015	Y
Follow-up Monitoring - Watkins Area Stormwater Treatment	Monitoring/Data Collection	Local Fund	Local Match Watkins Stormwater, CRWD	\$8,000.00			Y
Operation & Maintenance (1 yr) - Watkins Area Stormwater Treatment	Monitoring/Data Collection	Local Fund	Local Match Watkins Stormwater, CRWD	\$15,000.00			Y

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
155M - Storm Water Retention Basins	1	1	20 AC	0 AC

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Construction - Watkins Area Stormwater Treatment</b>	PHOSPHORUS (EST. REDUCTION)	796 LBS/YR	Lake Betsy, Clearwater River	P8 Urban Catchment Model	

### Final Indicators Summary

Indicator Name	Total Value	Unit
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<b>PHOSPHORUS (EST. REDUCTION)</b>	796.00	LBS/YR
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### Grant Activity

#### Grant Activity - Administration/Management - Watkins Area Stormwater Treatment

<b>Description</b>	Administration and management activities associated with the Watkins Area Stormwater Treatment Project. This initiative includes: tracking costs, filing required reports, updating eLink, providing oversight and guidance to all project participants, etc.		
	Initiative will be performed by Administrator Dennis Loewen.		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	1-Apr-15	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

#### Grant Activity - Civic Engagement - Watkins Area Stormwater Treatment

<b>Description</b>	Activities will be developed using this project to promote water quality improvement in the District via civic engagement.		
	Civic engagement activities will likely include:		
	<ol style="list-style-type: none"> <li>1. School-age children outreach (teach the teacher, field trips, workshops, curriculum, etc.)</li> <li>2. General public outreach (press releases, tours, attendance at events and expos, brochures and flyers, signage, etc.)</li> </ol>		
	Third-party may be used to assist with implementation of this activity. Administrator Dennis Loewen will oversee this activity.		
<b>Category</b>	EDUCATION/INFORMATION		
<b>Start Date</b>	1-Apr-15	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

**Grant Activity - Construction - Watkins Area Stormwater Treatment**

<b>Description</b>	<p>Labor and materials to install a series of treatment practices to treat runoff from the 6,500 acre urban and agricultural drainage area that would typically flow in the Clearwater River and Lake Betsy (and subsequently the rest of the Clearwater River Chain of Lakes). These practices are estimated to result in a 796 lbs. reduction in annual phosphorus loads by targeting the 1.25 inch rain event.</p> <p>In 2006, the CRWD purchased approximately 20 acres of agricultural parcel for the purpose of constructing a water quality improvement project to address the stormwater from this drainage area. The purchase price for this land was \$101,143.02. The land continued to be actively farmed for row crop production from 2006-current. This land is now being converted from row crop production to this water quality improvement project.</p> <p>The project components that may be installed (further design will occur as part of this project) include:</p> <ol style="list-style-type: none"> <li>1. Pre-treatment cell to allow for sediment deposition and easy cleaning</li> <li>2. Treatment pond will infiltration and filtration elements (limestone berm and/or sand/iron filter)</li> <li>3. Excavated channels and berms to connect treatment works to existing stream</li> </ol>		
<b>Category</b>	URBAN STORMWATER MANAGEMENT PRACTICES		
<b>Start Date</b>	1-Jan-16	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

Activity Action - Treatment Practices			
<b>Practice</b>	155M - Storm Water Retention Basins	<b>Count of Activities</b>	1
<b>Description</b>	Yet to be designed, current conceptual form has low-flow, off-line pre-treatment basin(s) and filters (such as limestone and/or iron-sand).		
<b>Proposed Size / Units</b>	20.00 AC	<b>Lifespan</b>	30 Years
<b>Actual Size/Units</b>	AC	<b>Installed Date</b>	

Final Indicator for Treatment Practices			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	796
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	P8 Urban Catchment Model
<b>Waterbody</b>	Lake Betsy, Clearwater River		

### Grant Activity - Design & Permitting - Watkins Area Stormwater Treatment

<b>Description</b>	<p>Design &amp; Permitting focuses on four things:</p> <ol style="list-style-type: none"> <li>1) Processing existing data and project concepts to provide backbone of design.</li> <li>2) Complete majority of project concept and schedule review by technical advisory committee (TAC) and CRWD Board of Managers (BOM) before further work is conducted.</li> <li>3) Based on input from TAC and BOM, complete final design.</li> <li>4) Acquire all necessary permits to complete construction based on final design. Having TAC involved early in the process will minimize permitting issues.</li> </ol> <p>Construction engineering support &amp; observation services will be provided under this item once construction is underway.</p> <p>Work will be completed primarily by Wenck Associates, Inc. under contract with the CRWD. They are known in MN for their excellence in water resource management, and their staff provides depth of experience and credentials necessary to complete this project. CRWD staff will provide assistance.</p>		
<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	1-Apr-15	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

### Grant Activity - Follow-up Monitoring - Watkins Area Stormwater Treatment

<b>Description</b>	<p>Post-construction data collection and analysis will be conducted to assist with determining effectiveness of the stormwater treatment project.</p> <p>Both CRWD staff and Wenck Associates, Inc. will work together to complete this activity.</p>		
<b>Category</b>	MONITORING/DATA COLLECTION		
<b>Start Date</b>	1-Jan-16	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

**Grant Activity - Operation & Maintenance (1 yr) - Watkins Area Stormwater Treatment**

<b>Description</b>	Perform any necessary operation & maintenance work once construction of the stormwater treatment project is complete (for one year).		
	CRWD staff and Wenck Associates, Inc. will work together to complete this action (if necessary).		
<b>Category</b>	MONITORING/DATA COLLECTION		
<b>Start Date</b>	1-Jan-16	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>			

**Grant Attachments**

Document Name	Document Type	Description
<b>2015 Competitive Grant</b>	Grant Agreement	2015 Competitive Grant - Clearwater River WD
<b>2015 Competitive Grant executed</b>	Grant Agreement	2015 Competitive Grant - Clearwater River WD
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/20/2016
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 09/25/2014
<b>Preliminary Limestone Filter Figure</b>	Grant	Watkins Area Stormwater Treatment
<b>Preliminary Plan Figure</b>	Grant	Watkins Area Stormwater Treatment
<b>Watkins Area Stormwater Treatment Map</b>	Grant	Watkins Area Stormwater Treatment
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/31/2015
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 01/28/2015
<b>grantmap_12661_2014-09-12_02-24-12-PM.jpg</b>	Grant	Watkins Area Stormwater Treatment