



Grant All-Detail Report Projects and Practices 2015

Grant Title - Watkins Area Stormwater Treatment

Grant ID - C15-1978

Organization - Clearwater River WD

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

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$351,906.00	\$11,154.65	\$340,751.35
Total Match Amount	\$231,909.00	\$86,626.15	\$145,282.85
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$583,815.00	\$97,780.80	\$486,034.20

*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
Administration/Management - Watkins Area Stormwater Treatment	Administration /Coordination	Local Fund	Local Match Watkins Stormwater, CRWD	\$14,663.00	\$3,767.01	1/4/2017	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	Match
Construction - Watkins Area Stormwater Treatment	Urban Stormwater Management Practices	Current State Grant	Watkins Area Stormwater Treatment	\$351,906.00	\$11,154.65	1/10/2017	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	\$82,859.14	12/5/2016	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	10 AC	0 AC

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Construction - Watkins Area Stormwater Treatment	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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PHOSPHORUS (EST. REDUCTION)	796.00	LBS/YR
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Grant Activity

Grant Activity - Administration/Management - Watkins Area Stormwater Treatment

Description	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.		
Category	ADMINISTRATION/COORDINATION		
Start Date	1-Apr-15	End Date	
Has Rates and Hours?	No		
Actual Results	In progress		

Grant Activity - Civic Engagement - Watkins Area Stormwater Treatment

Description	Activities will be developed using this project to promote water quality improvement in the District via civic engagement.		
	Civic engagement activities will likely include:		
	1. School-age children outreach (teach the teacher, field trips, workshops, curriculum, etc.)		
	2. General public outreach (press releases, tours, attendance at events and expos, brochures and flyers, signage, etc.)		
	Third-party may be used to assist with implementation of this activity. Administrator Dennis Loewen will oversee this activity.		
Category	EDUCATION/INFORMATION		
Start Date	1-Apr-15	End Date	
Has Rates and Hours?	No		
Actual Results	Not yet active.		

Grant Activity - Construction - Watkins Area Stormwater Treatment

Description	<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">1. Pre-treatment cell to allow for sediment deposition and easy cleaning2. Treatment pond will infiltration and filtration elements (limestone berm and/or sand/iron filter)3. Excavated channels and berms to connect treatment works to existing stream		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	1-Jan-16	End Date	
Has Rates and Hours?	No		
Actual Results	<p>Project Manual has been upload to eLink, and will be posted to CRWD website once project is completed.</p> <p>Treatment components to be constructed include a sheet pile weir, a pre-treatment sedimentation basin, a limestone filter and channels to connect treatment train to target stream. Site restoration will include native plantings as budget allows.</p> <p>Project out to bid. Bid opening scheduled for February 8, 2017.</p>		

Activity Action - Treatment Train			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Treatment train process: 1) Sheet-pile in north-south stream to create necessary head to drive flow into treatment train. 2) Channel directing flow from north-south stream to sedimentation basin. 3) Sedimentation basin to provide treatment of particulates. 4) Limestone filter to provide treatment of dissolved phosphorus 5) End-of-train channel to return treated flows back to north-south stream below sheet pile weir. Entire area around treatment train is restored using native seed mixes.		
Proposed Size / Units	10.00 AC	Lifespan	30 Years
Actual Size/Units	AC	Installed Date	
Mapped Activities	1 Point(s)		

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

Grant Activity - Design & Permitting - Watkins Area Stormwater Treatment

<p>Description</p>	<p>Design & Permitting focuses on four things:</p> <ol style="list-style-type: none"> 1) Processing existing data and project concepts to provide backbone of design. 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. 3) Based on input from TAC and BOM, complete final design. 4) Acquire all necessary permits to complete construction based on final design. Having TAC involved early in the process will minimize permitting issues. <p>Construction engineering support & 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>		
<p>Category</p>	<p>TECHNICAL/ENGINEERING ASSISTANCE</p>		
<p>Start Date</p>	<p>1-Apr-15</p>	<p>End Date</p>	<p>30-Dec-16</p>
<p>Has Rates and Hours?</p>	<p>No</p>		
<p>Actual Results</p>	<ol style="list-style-type: none"> 1. Conceptual work completed. 2. TAC review completed. 3. Final design completed. 4. All necessary permits acquired. <p>Project manual has been uploaded to eLink, and will be posted to CRWD website once project is completed.</p>		

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

Description	Post-construction data collection and analysis will be conducted to assist with determining effectiveness of the stormwater treatment project.	
	Both CRWD staff and Wenck Associates, Inc. will work together to complete this activity.	
Category	MONITORING/DATA COLLECTION	
Start Date	1-Jan-16	End Date
Has Rates and Hours?	No	
Actual Results	Not yet active.	

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

Description	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).	
Category	MONITORING/DATA COLLECTION	
Start Date	1-Jan-16	End Date
Has Rates and Hours?	No	
Actual Results	Not yet active.	

Grant Attachments

Document Name	Document Type	Description
2015 Competitive Grant	Grant Agreement	2015 Competitive Grant - Clearwater River WD
2015 Competitive Grant executed	Grant Agreement	2015 Competitive Grant - Clearwater River WD
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/20/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/03/2016
Application	Workflow Generated	Workflow Generated - Application - 09/25/2014
Preliminary Limestone Filter Figure	Grant	Watkins Area Stormwater Treatment
Preliminary Plan Figure	Grant	Watkins Area Stormwater Treatment

Document Name	Document Type	Description
Project Manual for WAST	Grant	Watkins Area Stormwater Treatment
Watkins Area Stormwater Treatment Map	Grant	Watkins Area Stormwater Treatment
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/28/2015
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/31/2015
grantmap_12661_2014-09-12_02-24-12-PM.jpg	Grant	Watkins Area Stormwater Treatment