



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 | Cole Loewen |

Budget Summary

| | Budgeted | Spent | Balance Remaining* |
|--------------------|---------------------|---------------------|--------------------|
| Total Grant Amount | \$351,906.00 | \$320,723.56 | \$31,182.44 |
| Total Match Amount | \$231,909.00 | \$255,205.09 | \$-23,296.09 |
| Total Other Funds | \$0.00 | \$0.00 | \$0.00 |
| Total | \$583,815.00 | \$575,928.65 | \$7,886.35 |

**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 | \$7,120.66 | 1/22/2018 | Y |
| Civic Engagement - Watkins Area Stormwater Treatment | Education/Information | Local Fund | Local Match Watkins Stormwater, CRWD | \$6,000.00 | | | Y |
| Construction - Watkins Area Stormwater Treatment | Urban Stormwater Management Practices | Current State Grant | Watkins Area Stormwater Treatment | \$351,906.00 | \$320,723.56 | 1/22/2018 | N |

| Activity Name | Activity Category | Source Type | Source Description | Budgeted | Spent | Last Transaction Date | Matching Fund |
|--|---------------------------------------|-------------|---|--------------|--------------|-----------------------|---------------|
| Construction - Watkins Area Stormwater Treatment | Urban Stormwater Management Practices | Local Fund | Land Conversion, Local Match Watkins Stormwater, CRWD | \$100,000.00 | \$100,000.00 | 11/9/2017 | Y |
| Construction - Watkins Area Stormwater Treatment | Urban Stormwater Management Practices | Local Fund | Local Match Watkins Stormwater, CRWD | \$0.00 | \$31,648.55 | 1/22/2018 | Y |
| Design & Permitting - Watkins Area Stormwater Treatment | Technical/Engineering Assistance | Local Fund | Local Match Watkins Stormwater, CRWD | \$88,246.00 | \$115,733.22 | 3/2/2017 | Y |
| Follow-up Monitoring - Watkins Area Stormwater Treatment | Monitoring/Data Collection | Local Fund | Local Match Watkins Stormwater, CRWD | \$8,000.00 | \$702.66 | 1/22/2018 | 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 |
|------------------------------------|-------------|--------|
| PHOSPHORUS (EST. REDUCTION) | 796.00 | LBS/YR |

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 cleaning 2. 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 bank tie-in 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> <p>1/22/2018: Construction was substantially completed in November 2017. Additional work will occur pending seeding growth in 2018. Construction contract retainage will be paid out in 2018. Signage installation forthcoming.</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 tie-in to return flow from filter to stream below sheet-pile 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 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

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|-----------------------------|--|-----------------|--|
| Description | Post-construction data collection and analysis will be conducted to assist with determining effectiveness of the stormwater treatment project. | | |
| Category | Both CRWD staff and Wenck Associates, Inc. will work together to complete this activity. | | |
| Start Date | 1-Jan-16 | End Date | |
| Has Rates and Hours? | No | | |
| Actual Results | 1/22/2018: Monitoring in 2017 is complete. Results sent to MPCA via EQUIS. Monitoring in 2018 will continue, with focus on pre- and post-treatment monitoring. | | |

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). | | |
| Category | CRWD staff and Wenck Associates, Inc. will work together to complete this action (if necessary). | | |
| 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 - 08/03/2017 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 08/03/2017 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 07/19/2017 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 03/06/2017 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 01/25/2017 |

| Document Name | Document Type | Description |
|--|--------------------|--|
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 02/03/2016 |
| Application | Workflow Generated | Workflow Generated - Application - 09/25/2014 |
| C15-1978 Reconciliation Checklist | Journal | Journal Dated - 08/02/2017 |
| Preliminary Limestone Filter Figure | Grant | Watkins Area Stormwater Treatment |
| Preliminary Plan Figure | Grant | Watkins Area Stormwater Treatment |
| Project Manual for WAST | Grant | Watkins Area Stormwater Treatment |
| Signed Financial Report- 08012017 | Grant | Watkins Area Stormwater Treatment |
| Watkins Area Stormwater Treatment Map | Grant | Watkins Area Stormwater Treatment |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 03/31/2015 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 01/28/2015 |
| grantmap_12661_2014-09-12_02-24-12-PM.jpg | Grant | Watkins Area Stormwater Treatment |
| interim 40% approval | Grant | Watkins Area Stormwater Treatment |