

City of Marshfield  
City Hall Plaza  
630 S. Central Avenue  
P.O. Box 727  
Marshfield, Wisconsin 54449-0727



**MARSHFIELD**  
The City in the Center

Daniel G. Knoeck, P.E.  
Director of Public Works  
(715) 486-2034  
Fax (715) 384-7631  
E-mail: dank@ci.marshfield.wi.us

**DEPARTMENT OF PUBLIC WORKS**

December 29, 2014

Scott Watson  
DNR Service Center  
5301 Rib Mountain Road  
Wausau, WI 54401

RE: City of Marshfield  
Grant No. USP-CW11-71251-12  
Final Report

Dear Mr. Watson:

Enclosed please find the final report associated with the above grant.

This document is being submitted to you to complete the project close out. If you have any questions, please feel free to contact me at 715.486.2034.

Sincerely,

*Daniel G. Knoeck*

Daniel G. Knoeck, P.E. *(mba)*  
Director of Public Works

mba

Enclosures

**Director of Public Works**  
(715) 486-2034  
Fax (715) 384-7631

**Building Services**  
(715) 486-2016  
Fax (715) 384-7631

**Engineering**  
(715) 486-2034  
Fax (715) 384-7631

**Street**  
(715) 486-2081  
Fax (715) 387-8669

**Wastewater**  
(715) 591-2022  
Fax (715) 591-2027

- Targeted Runoff Management Grant Program (ch. NR 153)
- Notice of Discharge Program (ch. NR 153)
- Urban Nonpoint Source & Storm Water Management Grant Program (ch. NR 155)

**NOTICE:** This Final Report is authorized under ss. 281.65 and 281.66., Wis. Stats., and chs. NR 153 and NR 155, Wis. Admin. Code. Personally identified information collected will be used for program administration and may be made available to requesters as required under Wisconsin Open Records Law [ss. 19.31-19.39, Wis. Stats.].

**INSTRUCTIONS:** Your grant agreement requires you to submit a Final Report with your final reimbursement request. This Final Report form must be used in conjunction with the "FINAL REPORT INSTRUCTIONS." The instructions detail how to complete and submit the report to DNR as described in the instructions.

**1. GRANT TYPE.** Check the one that applies.

<input type="checkbox"/> Targeted Runoff Management Grant – Agricultural	<input type="checkbox"/> Targeted Runoff Management Grant – Urban
<input type="checkbox"/> Urban Nonpoint Source & Storm Water Management Grant – Construction	<input checked="" type="checkbox"/> Urban Nonpoint Source & Storm Water Management Grant – Planning
<input type="checkbox"/> Notice of Discharge Grant	

**2. PROJECT NAME & LOCATION.**

2.1. Project Name: <b>BMP Feasibility Analysis</b>	2.2. Grant Number: <b>USP-CW11-71251-12</b>	
2.3. Governmental Unit Name: <b>City of Marshfield</b>	2.4. Primary Watershed Name: <b>Mill Creek</b>	2.5. Watershed Code: <b>CW11</b>

**NOTE FOR SECTION 2.6 (which follows):**  
 Section 2.6. includes five (5) columns (A. through E.) for recording data about five (5) discrete site locations. If your grant has more than five (5) discrete project locations, attach additional columns for Section 2.6 as described in the instructions. If your project occurs in more than one 12-digit Hydrologic Unit Code (HUC), use the space in adjacent columns to record other HUC numbers.

2.6 Site Location(s) →	A.	B.	C.	D.	E.
Name of Cost-Share Recipient or Governmental Unit	<b>Marshfield, City</b>	<b>Marshfield, City</b>	<b>Marshfield, City</b>		
Cost-Share Agreement Number (Agricultural only)	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>		
12-Digit Hydrologic Unit Code(s) (HUC) Where Work Was Completed	<b>070700030201</b>	<b>070700031103</b>	<b>070700021703</b>		
Nearest Surface Receiving Water Affected					
Name:	<b>Mill Creek</b>	<b>East Branch Yellow River</b>	<b>Squaw Creek</b>		
Waterbody Identification Code(s) (WBIC):	<b>1398600</b>	<b>1373200</b>	<b>1420700</b>		
Nearest Impaired Water Affected					
Name:	<b>Mill Creek</b>	<b>Yellow River</b>	<b>Wisconsin River</b>		
Waterbody Identification Code(s) (WBIC):	<b>1398600</b>	<b>1352800</b>	<b>1179900</b>		
Pollutants Reduced	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>		
Impairments/Impacts Addressed	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>		



- Targeted Runoff Management Grant Program (ch. NR 153)
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Project Location(s) (cont.) →	A.	B.	C.	D.	E.
Project Coordinates:					
Town	25N 26N 25N 26N				
Range	3E 3E 2E 2E				
Section	4,5,6,7,8,9,15,16,17, 18,19,20 31,32,33 1,12 25, 26, 36				
Quarter					
Quarter-Quarter					
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer (SWDV))	44-66-36				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)	90-17-27				

### 3. SUMMARY OF RESULTS.

Table A. Agricultural Projects. – Ch. NR 151 Performance Standards and Prohibitions and Other Water Resources Management Priorities

A.1. Management Measures	Units of Measure	Quantity	Measurement Method Used
Sheet, rill and wind erosion	Acres meeting "T"	acres	
Manure Storage Facilities: New Construction/Alterations	Number of facilities	facilities	
	Number of animal units	animal units	
Manure Storage Facilities: Closure	Number of facilities	facilities	
Manure Storage Facilities: Failing/Leaking Facilities	Number of facilities	facilities	
	Number of animal units	animal units	
Clean Water Diversions in WQMA	Pollutant load reduction	lbs.	
	Number of farms with diversions	farms	
	Number animal units	animal units	
Nutrient Management on Agricultural Land	Acres planned	acres	
Prohibition: Manure Storage Overflow	Number of farms	farms	

- Targeted Runoff Management Grant Program (ch. NR 153)
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	Number of animal units	animal units
Prohibition: Unconfined Manure Pile in WQMA	Number of farms	farms
Prohibition: Direct Runoff From Feedlot/Stored Manure	Pollutant load reduction	lbs.
	Number of facilities	facilities
	Number of animal units	animal units
Prohibition: Unlimited Livestock Access	Feet of bank protected	feet
	Number of farms	farms

<b>Table A. Agricultural Projects.</b> (continued)			
<b>A.2. Other Management Measures</b>			
	Units of Measure	Quantity	Measurement Method Used
Streambank & Shoreline Protection	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		

<b>Table B. Urban Construction Projects Serving Developed Areas.</b>			
<b>B.1. Required Management Measures</b>			
	Units of Measure	Quantity	Measurement Method Used
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities	TSS reduced	lbs.	
	TSS reduction	%	
<b>B.2. Other Management Measures</b>			
20-40% Reduction in TSS for non-NR 216 communities	TSS reduced	lbs.	
	TSS reduction	%	
Infiltration	Pre-development stay-on volume	%	
	Stay-on volume	ft <sup>3</sup> /year	
Peak flow discharge for 2 year/24 hour design storm	Change in cubic feet per second for design year	ft <sup>3</sup> /sec	
Protective areas	Bank protected	feet	
Fueling & maintenance areas	Oily sheen presence reduced	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Streambank & Shoreline Protection	Bank erosion reduced	tons	
	Bank protected	feet	
Other:	Pollutant load reduction (if method available)		
	Units (use feet, acres or number as applicable)		

- Targeted Runoff Management Grant Program (ch. NR 153)
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**Table C. Urban Planning Projects.**

C.1. Governmental unit(s) involved (list by name):  
**Marshfield, City**

C.2. Estimate total acres covered by the planning product:	Existing Developed Urban Areas	New Development	Total Acres
	acres	acres	8,568.7 acres

C.3. Products developed (check all below that apply)	Identify Documents by Name (if applicable)
<input checked="" type="checkbox"/> Storm Water Plan	Stormwater Quality Plan, City of Marshfield, June 2014
<input checked="" type="checkbox"/> Construction or Erosion Ordinances	Revisions to Chapter 25 of the Municipal Code were adopted by the Marshfield Common Council, June 2014.
<input checked="" type="checkbox"/> Post-construction Storm Water Ordinances	Revisions to Chapter 25 of the Municipal Code were adopted by the Marshfield Common Council, June 2014.
<input type="checkbox"/> Other Types of Storm Water Quality Ordinances	
<input type="checkbox"/> Financing Methods: identified and evaluated	
<input type="checkbox"/> Financing Methods: developed or implemented	
<input checked="" type="checkbox"/> I & E Plan	Resolution 2014-44 adopted by the Common Council to continue with a cooperative Agreement to continue the working arrangement with the North Central Wisconsin Stormwater Coalition group.
<input type="checkbox"/> I & E Implementation Activities	
<input type="checkbox"/> Other:	

C.4. Identify the Storm Water goals addressed (check all that apply)	
<input checked="" type="checkbox"/> Reduce TSS	<b>Comments:</b>  This planning study was intended to update an earlier city-wide Stormwater Pollution Loading and BMP analysis that was completed in 2008.
<input type="checkbox"/> Maintain infiltration	
<input type="checkbox"/> Control Peak Flow	
<input type="checkbox"/> Protective Areas	
<input type="checkbox"/> Control of Fueling & Maintenance Areas	
<input type="checkbox"/> Remove Illicit Discharges	
<input type="checkbox"/> Other:	

**4. Satisfaction of Notice Requirements.** If cost sharing for this project was offered under a formal notice pursuant to chs. NR 151 or 243, provide information for each notice in the table below.

Notice Information				Notice Satisfaction Information		
Chs. NR 151 or 243 Notice Type	Issue Date	From (Name)	To (Name)	Satisfied?		Date Letter Sent
				Yes	No	

- Targeted Runoff Management Grant Program (ch. NR 153)
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N/A				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	

**5. Additional Information.** (Space will expand to fit your text.)

While completing this model there were some issues with WinSlamm version 9.4.0 that shut off catch basins once they were 1/2 full. These issues were fixed in the version 10.0.3 for the final plan as submitted. Note the information had to be manually re-entered into the new version which was done at an additional expense.

**6. Summary of Project Challenges.** (Space will expand to fit your text.)

Funding - As with any of the proposed improvements recommended by the current study, the challenge will be the ability to obtain the necessary funding. The City's stormwater improvements compete against all other capitol improvements for limited tax dollars. Stormwater projects are considered new infrastructure and are typically the first projects to be delayed as opposed to existing facilities like sanitary sewer or roads, which must be maintained.

**7. Grantee Certification.**

Checking here  certifies that, to the best of your knowledge, the information contained in this report is correct.

Name of Authorized Representative (type or print) ↓ Daniel G. Knoeck		Title of Authorized Representative (type or print) ↓ Director of Pubic Works	
Signature of Authorized Representative <i>Daniel G. Knoeck</i>			Date 12-26-14

**8. For Departmental Use Only.**

Regional NPS Coordinator – Please complete the following:

8.A. Check here  if you have received the following from the project sponsor:

- one (1) printed, signed, original Final Report + attachments
- one (1) electronic version of Final Report.

Send the printed, signed original Final Report with attachments + electronic version to the Community Financial Assistance Grants Manager. Community Financial Assistance will forward to Runoff Management Section Grants Coordinator.

Wisconsin Department of Natural Resources  
Bureau of Watershed Management (WT/3)  
101 S. Webster St.  
Madison, WI 53703  
PO Box 7921  
Madison, WI 53707-7921

**Final Report Form 3400-189** (rev. 7/30/09)

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8.B. Comments about this project: *WINSLMM modeling results indicate that the City of Marshfield's current TSS reduction is 32.4% (min. required is 20%). BMP feasibility analysis of 13 new wa BMPs & modification of 8 existing BMPs at removing TSS could result in an estimated TSS reduction of an additional 99 tons/yr. (current annual loading is 319.4 tons/yr). This information is necessary as the city prepares for Wisc. River TMDL waste load allocations.*

8.C. Type or print Name of Regional NPS Coordinator → *Terence M. Kafka*

8.D. Signature of Regional NPS Coordinator *Terence M. Kafka* 8.E. Date *01/09/2015*