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Notice: This final report is authorized by ss. 281.65 and 281.66, Wis. Stats., and chs. NR 153 and NR 155, Wis. Adm. Code. Personally identifiable information collected will be used for program administration and may be made available to requesters as required under Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

Instructions: Your grant agreement requires you to submit a Final Report 60 days after the end date listed in the grant agreement. 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. The DNR prefers that Final Reports be submitted in electronic format. If, however, printed copies of Final Reports are submitted, please submit three (3) complete originals to your regional Nonpoint Coordinator.

1. Grant Type: Please check one.

- Targeted Runoff Management Grant – Agricultural
 Targeted Runoff Management Grant – Urban
 Urban Nonpoint Source & Storm Water Management Grant – Construction
 Urban Nonpoint Source & Storm Water Management Grant – Planning

2. Grantee & Project Information

Project Name Pollutant Loading Analysis and BMP Prioritizing	Grant Number USP-CW05-71251-06
Governmental Unit Name City of Marshfield	Primary Watershed Name and Watershed Code Upper Yellow River, UW05-171; Mill Creek, UW11-171; Little Eau Pleine River, UW14-171
Nearest Water Body Name	Nearest Water Body Identification Code (WBIC) (if applicable)
DNR Water Management Unit (River System) Name Central Wisconsin	s. 303 (d) Listed Waterbody? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No. Mill Creek

What pollutant(s) were addressed by the project (e.g., nitrogen, phosphorus, sediment, thermal control, etc.)?

TSS

For **each** project site location provide the following: (attach additional sheets if necessary)

Location		A	B	C	D	E
Minor Civil Division Name (City, Township, Village, etc.)		City of Marshfield	City of Marshfield	City of Marshfield	City of Marshfield	
PLSS	Town	25N	25N	26N	26N	
	Range	2E	3E	2E	3E	
	Section	1,12	4,5,6,7,8,9,15,16,17,18,19,20	25,26,36	31,32,33	
	Quarter					
	Quarter-Quarter					
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer, SWDV)		44-39'-44" N				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)		90-10'40"W				
Property Owner(s)	Name	Chris Meyer, Mayor				
	Mailing address	630 S Central Ave PO Box 727 Marshfield, WI 54449				

Site address (Not mailing address)					
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3. Summary of Results

A. Performance Standards and Prohibitions and Other Water Resources Management Priorities

For grants issued in calendar year 2006 or later, complete Tables A and B (following) consistent with the entries on your grant application.

TABLE A. PERFORMANCE STANDARDS AND PROHIBITIONS (per ch. NR 151, Wis. Adm. Code, effective October 1, 2002)

Performance Standard or Prohibition	Units of Measure	Quantity	Measurement Method Used
Sheet, rill and wind erosion	Acres meeting T		
Manure Storage Facilities: New Construction/Alterations	Number of facilities		
	Number of animal units		
Manure Storage Facilities: Closure	Number of facilities		
Manure Storage Facilities: Failing/Leaking Facilities	Number of facilities		
	Number of animal units		
Clean Water Diversions in WQMA	Pollutant load reduction		
	Number of farms with diversions		
	Number animal units		
Nutrient Management on Agricultural Land	Acres planned		
Prohibition: Manure Storage Overflow	Number of facilities		
	Number of animal units		
Prohibition: Unconfined Manure Pile in WQMA	Number of farms		
Prohibition: Direct Runoff From Feedlot/Stored Manure	Pollutant load reduction		
	Number of facilities		
	Number of animal units		
Prohibition: Unlimited Livestock Access	Feet of bank protected		
	Number of farms		
Urban: 20-40% Reduction in Total Suspended Solids (TSS)	Pounds TSS reduced	571000	WinSLAMM
	% TSS reduction	40	

TABLE B. OTHER WATER RESOURCES MANAGEMENT PRIORITIES

Agricultural Areas	Units of Measure	Quantity	Measurement Method Used
Buffers	Feet of bank protected		
	Number of farms		
Streambank	Tons of bank erosion reduced		
	Feet of bank protected		
Other (specify)			
Developed Urban Areas	Units of Measure	Quantity	Measurement Method Used
Urban: 20-40% Reduction in TSS	Pounds TSS reduced		
	% TSS reduction		
Infiltration	% Pre-development stay-on volume		
	Cubic feet stay-on volume		
Peak flow discharge	Change in cubic feet per second		
Protective areas	Feet of bank protected		
Fueling & maintenance areas	Oily sheen presence		
Streambank	Tons of bank erosion reduced		
	Feet of bank protected		
Other (specify)			
Planning	Units of Measure	Quantity	Measurement Method Used
Quantify how implementation of the planning project decreased storm water impacts on state waters (i.e., storm water plan, I & E plan, etc.)	Municipalities planned for	1	Each
	Acres planned for	5159	Acres
Document/track progress made in implementing the planning product (i.e., ordinance, utility district evaluation/formation, storm water management plan information & education, etc.)	Municipalities planned for	1	Each
	Acres planned for	5159	Acres

Other (specify)			
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B. Project Results Narrative

WinSLAMM Version 9.2.5 was used to analyze existing pollutant loadings for City of Marshfield storm water runoff including the No Controls or Base Condition, Existing Conditions and Future Conditions. Various BMP's were then analyzed to identify actions that the city could take to reach the 20% and 40% TSS reduction goals in accordance with WDNR General WPDES Storm Water Discharge Permit. The No Controls loading is 714 tons/year. Existing Conditions loading is 557 tons/year and the Future Conditions loading is 428 tons/year. Since completion of this analysis in early 2008, the City of Marshfield has completed a dry pond to wet pond conversion which brings current TSS reduction to 157 tons/year or 22%. The final report identifies several BMP's that would allow the City to reach the 40% reduction goal with an estimated cost of compliance ranging from \$2.9 to \$4.0 million.

4. Satisfaction of Notice Requirements (if applicable)

If cost sharing for this project was offered under a formal notice to achieve compliance with performance standards or prohibitions, provide information for each notice in the table below.

Notice Type	Notice Information				Notice Satisfaction Information		
	Issue Date	From (Name)	To (Name)	Satisfied?		Date Letter Sent	
				Yes	No		
				<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. Summary of Project Challenges

Challenges associated with the project were not significant during the modeling stage but are anticipated during the implementation stage. In an effort to keep future costs down, BMP sites were identified on existing city-owned property when possible. Many of these locations include areas in public parks. As such, these proposals will be subject to public scrutiny and if construction is not approved, may lead to significantly higher costs to acquire nearby property. While the City of Marshfield now has a plan to meet the 40% TSS reduction goal, full implementation of the plan will be challenging. In addition, the City's ability to fund these projects to meet the 2013 deadline will be a major challenge, as it will be for many communities.

6. Additional Information about the Project (optional)

7. Final Product(s) - All Projects

A. Construction Projects

- A.1. Checking here indicates that a printed copy of project plans and specifications was sent to your DNR Regional Nonpoint Source Coordinator.
- A.2. Checking here indicates that photo-documentation of the project's construction is attached.

B. Planning Projects

- B.1. Checking here indicates that a printed copy of the planning product (e.g., plans, ordinances, analyses) was sent to your DNR Regional Nonpoint Source Coordinator.
- B.2. Checking here indicates that the Regional Nonpoint Source Coordinator has approved the final Planning Product(s).
- B.3. Checking here indicates that your governmental unit has adopted the final Planning Product(s).

Name of Planning Document(s) City-Wide Storm Water Pollution Loading and Best Management Practice Analysis - City of Marshfield, Wisconsin	Date(s) effective July 2008	Date Submitted to NPS Coordinator January 13, 2009
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8. Grantee Certification:

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

Type or print Name and Title of Authorized Representative certifying here.

Daniel G. Knoeck, Director of Public Works

Signature of Authorized Representative 	Date 4/21/09
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FOR DEPARTMENTAL USE ONLY

REGIONAL NONPOINT COORDINATOR -- Please complete the following:

- Checking here indicates that you received either planning or construction plans and specifications from the project sponsor, as appropriate. Attach a copy of the approval.
- Checking here indicates that you approved the final construction. Attach a copy of the final construction approval.
- Checking here indicates that you have approved the final Planning Product(s).
- Check here if two (2) signed, original copies of the Final Report and attachments have been sent to Runoff Management Section Grants Coordinator. Note: Regional Nonpoint Source Coordinator may retain one (1) copy of the signed, original Final Report.

Type or print Name of Regional Nonpoint Coordinator

Signature of Regional Nonpoint Coordinator

Date

Karen S. [Signature]

7-21-09