State of Wisconsin
Department of Natural Resources-WT/3
101 S. Webster St.
Madison, WI 53707

dnr.wi.gov

Final Report

Targeted Runoff Management Grant Program and Urban Nonpoint Source and Storm Water Management Grant Program

Form 3400-189 (R 6/08)

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	Grant Number
Storm Water Management Plan	**USP-FX06-67153-06**
Governmental Unit Name	Primary Watershed Name and Watershed Code
Village of Mukwonago	**Mukwonago River (FX06-20) / Middle Fox River Illinois (FX04-20)**
Nearest Water Body Name	Nearest Water Body Identification Code (WBIC) (if applicable)
Mukwonago River / Phantom Lake	
DNR Water Management Unit (River System) Name	s. 303 (d) Listed Waterbody? ☒ Yes ☐ No.
Mukwonago River / Middle Fox River	**Fox River**

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

Sediment and phosphorus.

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.)		**Village of Mukwonago**				
PLSS	Town	**4N, 5N**				
	Range	**18E**				
	Section	**4N: 1, 2, 3, 11, 12** **5N: 22-27, 35, 36**				
	Quarter	**All**				
	Quarter-Quarter	**All**				
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer, SWDV)		**42° 51' 30" N**				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)		**88° 21' 20" W**				
Property Owner(s)	Name	**Mr Paul Moderacki, Village of Mukwonago Administrator**				
	Mailing address	**PO Box 206** **Mukwonago, WI**				

		53149				
Site address *(Not mailing address)*		**NA**				

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	**391807**	**SLAMM**
	% TSS reduction	**62**	**SLAMM**

TABLE B. OTHER WATER RESOURCES MANAGEMENT PRIORITIES

I. 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)			
II. 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)			
III. 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**	
	Acres planned for	**5165**	
Document/track progress made in implementing the	Municipalities planned for	**1**	

planning product (*i.e.*, ordinance, utility district evaluation/formation, storm water management plan information & education, *etc.*)	Acres planned for	**5165**	
Other (specify)			

B. Project Results Narrative

The Village of Mukwonago has completed a comprehensive, Village-wide storm water management plan. The plan covers all 5,165 acres within the Village borders and contains the following water quality recommendations: construction of four water quality management facilities; modification to the Village's current street sweeping program; erosion control, storm water management and illicit discharge ordinance modifications; development of intermunicipal storm water agreements with neighboring communities; deicing management program modifications; future development of a conservation development ordinance; and NR 216 permit compliance activities (public education, public participation, illicit discharge detection and elimination, construction site pollutant control, post-construction storm water mangement, pollution prevention / storm water quality mangement and updates to the official storm water system map). The plan provides a roadmap for compliance with the Village's WDPES storm water permit, including a plan to meet the 40% sediment reduction goal. The Source Loading and Management Model (SLAMM) was used to quantify the pollutant reduction from the recommended activities.

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 Information				Notice Satisfaction Information		
				Satisfied?		
Notice Type	Issue Date	From (Name)	To (Name)	Yes	No	Date Letter Sent
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	

5. Summary of Project Challenges

The Village developed the plan in conjunction with an advisory committee made up of residents, business owners, non-profits, elected officials and Village staff. The committee met every 2 months throughout the project and provided invaluable guidance and insight into the plan. However, getting the committee formed was extremely difficult, leading to significant project delays. More community education on the benefits to clean water prior to the start of the plan may have helped to generate initial interest.

6. Additional Information about the Project (optional)

Formal adoption of the plan is expected to occur by the Village Board during the fall of 2009.

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)	Date(s) effective	Date Submitted to NPS Coordinator
Village of Mukwonago Storm Water Management System Plan	**August, 2009**	**Draft Version: Dec, 2008** **Final Version: August 11, 2009**

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.

VILLAGE CLERK

Signature of Authorized Representative	Date
	8-6-09

9. FOR DEPARTMENTAL USE ONLY

REGIONAL NONPOINT COORDINATOR -- Please complete the following:

- [x] 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.
- [x] Checking here indicates that you have approved the final Planning Product(s).
- [x] 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

Maureen McBroom

Signature of Regional Nonpoint Coordinator	Date
Maureen McBroom	8/13/09