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

- 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 t	he one that applies.							
☐ Targeted Runoff Management Grant – Agricultural			Targeted Runoff Management Grant – Urban					
			Urban Nonpoint Source & Storm Water Management Grant – Planning					
☐ Notice of Discharge Grant								
2. PROJECT NAME & LOCATION.								
2.1. Project Name:			2.2. Grant Number:					
9 th and Washburn Area Detention Basin			USC-U	JF04-70266-13A				
2.3. Governmental Unit Name:			2.4. Pr	rimary Watershed Name	:	2.5. Watershe	d Code:	
City of Oshkosh			Lake E	Butte Des Mortes-Fox F	River	UF04		
NOTE FOR SECTION 2.6 (which	h follows):		_					
Section 2.6. includes five (5) co discrete project locations, attach Hydrologic Unit Code (HUC), use	additional columns for S	ection 2.6 as de	escribed	in the instructions. If yo				
2.6 Site Location(s) →	A.	B.		C.		D.	E.	
Name of Cost-Share Recipient or Governmental Unit	City of Oshkosh	L						
Cost-Share Agreement Number (Agricultural only)								
12-Digit Hydrologic Unit Code(s) (HUC) Where Work Was Completed	040302011205	l						
Nearest Surface Receiving Water Affected								
Name:	Campbell Creek							
Waterbody Identification Code(s) (WBIC):	139700	_						
Nearest Impaired Water Affected								
Name:	Lake Winnebago							
Waterbody Identification Code(s) (WBIC):	131100	L						
Pollutants Reduced	TSS, Phosphorus							
Impairments/Impacts Addressed	Degraded Habitat, Excess Algal							

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Project Location(s) (cont.) →	A.	B.	C.	D.	E.
Project Coordinates:					
Town	18				
Range	16				
Section	28				
Quarter	NE				
Quarter-Quarter	NE				
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer (SWDV))	44 0 32				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)	88 35 9				

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 Number of facilities facilities Manure Storage Facilities: New Construction/Alterations Number of animal units animal units Manure Storage Facilities: Closure Number of facilities facilities Number of facilities facilities Manure Storage Facilities: Failing/Leaking Facilities Number of animal units animal units Pollutant load reduction lbs. Number of farms with Clean Water Diversions in WQMA farms diversions Number animal units animal units Nutrient Management on Acres planned acres Agricultural Land farms Number of farms Prohibition: Manure Storage Overflow Number of animal units animal units Prohibition: Unconfined Manure Pile in Number of farms farms **WQMA** Pollutant load reduction lbs. Prohibition: Direct Runoff From Number of facilities facilities Feedlot/Stored Manure animal units Number of animal units Feet of bank protected feet Prohibition: Unlimited Livestock Access Number of farms farms

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- Urban Nonpoint Source & Storm Water Management Grant Program (ch. NR 155)

Table A. Agricultural Projects. (continued)	Units of Measure	Quantity	Measurement Method Used
A.2. Other Management Measures			
Streambank & Shoreline Protection	Units (use feet, acres or number as applicable)		
Streambank & Shoreline Protection	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
outon.	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable) Pollutant load reduction (if		
Other:	method available) Units (use feet, acres or number as applicable)		
Other.	Pollutant load reduction (if method available)		
Table B. Urban Construction Projects Se	erving Developed Areas.		
B 1 Paguirod Management Meagures	Unite of Moseuro	Quantity	Massurament Mathed Head
B.1. Required Management Measures	Units of Measure	Quantity	Measurement Method Used
B.1. Required Management Measures 20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities	Units of Measure TSS reduced TSS reduction	49800 lbs.	Measurement Method Used WinSLAMM v10.1 WinSLAMM v10.1
20-40% Total Suspended Solids (TSS)	TSS reduced	49800 lbs.	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities	TSS reduced	49800 lbs.	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures	TSS reduced TSS reduction TSS reduced TSS reduced	49800 lbs. 84 %	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for	TSS reduced TSS reduction TSS reduced	49800 lbs. 84 % lbs. %	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities	TSS reduced TSS reduction TSS reduced TSS reduction Pre-development stay-on	49800 lbs. 84 % lbs.	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume	49800 lbs. 84 % lbs. %	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities Infiltration Peak flow discharge for 2 year/24 hour	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume Stay-on volume Change in cubic feet per	49800 lbs. 84 % lbs. % ft³/year	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities Infiltration Peak flow discharge for 2 year/24 hour design storm	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume Stay-on volume Change in cubic feet per second for design year	49800 lbs. 84 % Ibs. % ft³/year	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities Infiltration Peak flow discharge for 2 year/24 hour design storm Protective areas Fueling & maintenance areas	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume Stay-on volume Change in cubic feet per second for design year Bank protected	49800 lbs. 84 % lbs. % ft³/year ft³/sec feet	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities Infiltration Peak flow discharge for 2 year/24 hour design storm Protective areas	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume Stay-on volume Change in cubic feet per second for design year Bank protected Oily sheen presence reduced	49800 lbs. 84 % lbs. % ft³/year ft³/sec feet ☐Yes ☐ No	WinSLAMM v10.1
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities B.2. Other Management Measures 20-40% Reduction in TSS for non-NR 216 communities Infiltration Peak flow discharge for 2 year/24 hour design storm Protective areas Fueling & maintenance areas	TSS reduced TSS reduction TSS reduced TSS reduced TSS reduction Pre-development stay-on volume Stay-on volume Change in cubic feet per second for design year Bank protected Oily sheen presence reduced Bank erosion reduced	49800 lbs. 84 % Ibs. % ft³/year ft³/sec feet ☐Yes ☐ No tons	WinSLAMM v10.1

Table C. Urban Planning Projects.								
C.1. Governmental unit(s) involved (list by	name):							
C.2. Estimate total acres covered by the	Existing Developed Urban Areas	New Development	Total Acres					

number as applicable)

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planning product:		acres	acres		acres			
C.3. Products developed (check all below that app	ly)	Identify Documents by Name (if applicable)						
Storm Water Plan								
Construction or Erosion Ordinances								
Post-construction Stor Ordinances	rm Water							
Other Types of Storm Ordinances	Water Quality							
Financing Methods: ide	entified and							
Financing Methods: de implemented	eveloped or							
☐ I & E Plan								
☐ I & E Implementation	Activities							
Other:								
C.4. Identify the Storm Water addressed (check all that	er goals at apply)							
Reduce TSS								
Maintain infiltration		Comments:						
Control Peak Flow								
Protective Areas								
Control of Fueling & N Areas	Maintenance							
Remove Illicit Dischar	rges							
Other:								
4. Satisfaction of Not provide information for each	tice Require	ements. If cost sharing for this pro	oject was offered under a formal no	tice pursuant to c	hs. NR 151 or 243,			
Notice Information	1110000 111 1110 0	and bolow.		Notice Satisfa	action Information			
Chs. NR 151 or 243 Notice Type	Issue Date	From (Name)	To (Name)	Satisfied? Yes No	Date Letter Sent			
		•	•					

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- Urban Nonpoint Source & Storm Water Management Grant Program (ch. NR 155)

5. Additional Information. (Space will expand to fit your text.)						
		й				
*	H &					
2 86						
		-				
C. Comment of Deviced Challenges (C. W. C.						
6. Summary of Project Challenges. (Space will expand to fit y The project was delayed due to permit coordination on multiple project.)		of Engineers				
The project was assayed and to permit desirant on mattiple project	ooto man vibrar and Anny Gorpo	or Engineers.				
7. Grantee Certification.						
Checking here Coertifies that, to the best of your knowledge, the information	tion contained in this report is correc	t.				
× 0						
Name of Authorized Representative (type or print) Ψ	Title of Authorized Representative	(type or print) ψ				
John Ferris	Cilvil Engineer Supervisor					
Signature of Authorized Representative		Date				
(John fund	,	2-16-2016				
<i></i>						
8. For Departmental Use Only.						
Regional NPS Coordinator – Please complete the following:						
8.A. Check here \overline{X} if you have received the following from the project spo	nsor					
one (1) printed, signed, original Final Report + attachment						
one (1) electronic version of Final Report.						
Send the printed, signed original Final Report with attachments + electronic Community Financial Assistance will forward to Runoff Management Section		Assistance Grants Manager.				
8.B. Comments about this project:						
City plans to complete monitoring in 2016 after wetlan in annual MS4 report.	d planting completed. Cit	y will submit results				
Approximately 100 acres of drainage area was not connected to pond as planned due to conflict with						
sanitary sewer during construction. This area will be c	선생님들이 1일 부분들이 되었으면 하는 점점이시는 사람들은 살이 살아내는 작업을 받는 경험을 받았다.	Control of the second of the control				
submit revised WinSLAMM modeling.						
8.C. Type or print Name of Regional NPS Coordinator → Erin Ha						
8.D. Signature of Regional NPS Coordinator	noon	8.E. Date 03/01/16				

Pre-Construction Photographs

Location of Pre-Construction Photos





1. Southeast corner of the dry basin looking southeast



2. Middle of the dry basin looking due south



3. Southwest corner of dry basin looking southwest



4. Southwest corner of the dry basin looking west



5. View from wet basin looking south toward dray basin



6. View from wet basin looking toward the southwest corner of the dry basin



7. View from the middle of the wet basin looking north toward the outfall



8. East side of wet basin looking north toward outfall



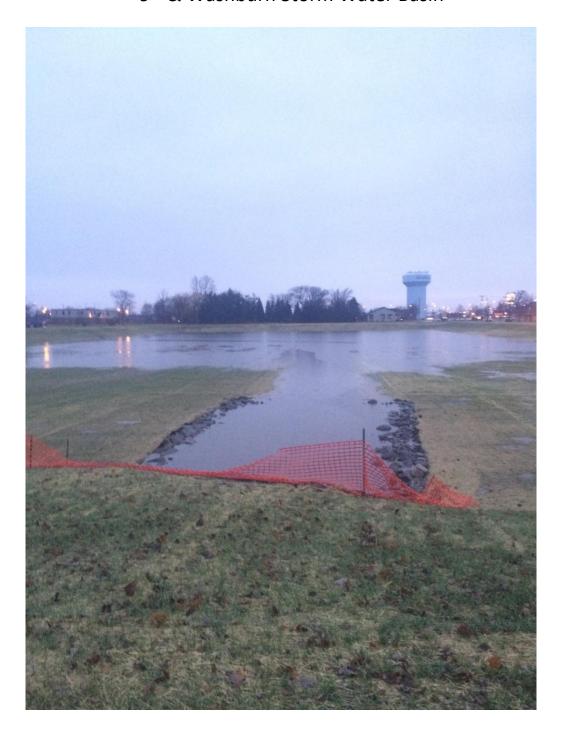
9. Northeast corner of wet basin looking east along the path of the discharge pipe from the basin



10. Southeast corner of the dry basin looking south along the east bank of the dry basin

Post-Construction Photographs

Post-Construction Photos City of Oshkosh, Contract 15-01 9th & Washburn Storm Water Basin



Picture 1 is taken from behind inflow structure at south end of the basin looking north. Picture was taken just prior to placement of guardrail and grate.



Picture 2 is the completed inflow structure at south end of the basin.



Picture 3 was taken from the Southeast corner of the dry basin looking west toward inflow structure.



Picture 4 was taken at the southeast corner of the basin looking south west toward to inlet structure. Smaller storm pipe discharging into the southeast corner of the dry basin is in the foreground.



Picture 5 was taken from the northwest corner of the wet basin looking east toward the outlet structure located in the northeast corner of the basin.



Picture 6 was taken from the northwest corner of the wet basin looking south along the west side of the wet basin. The dry basin is and large inlet structure is seen in the background.

WinSLAMM Output

9thandW_060115 - Output Summary

SLAMM for Windows Version 10.2.0 (c) Copyright Robert Pitt and John Voorhees 2012 ÀlÍ Rights Reserved

Data file name: C:\Doug\Oshkosh\9th and Washburn\400_Technical\423_WinSLAMM Anlysis\9thandWashburn_Chapter30\9thandW_060115. mdb Data file description:
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Green Bay WI 1969. RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GE003.ppdx
Start of Winter Season: 11/25 End of Winter Season: 03/29 Data file description:

Start of Winter Season: 11/25 End of Winter Season: 03/29
Model Run Start Date: 01/02/69 Model Run End Date: 12/28/69
Date of run: 06-01-2015 Time of run: 07:36:55
Total Area Model ed (acres): 355.840

Years in Model Run: 0.99

		Runoff Volume (cu ft)	Percent Par Runoff Volume Reduction	ticulate Pa Solids Conc. (mg/L)		Percent Parti cul ate Sol i ds Reducti on		
Total of all Land Uses witho Outfall Total with Controls: Annualized Total After Outfa		6. 998E+06 6. 958E+06 7. 055E+06	0. 57%	166. 6 19. 79	72783 8595 8714	- 88. 19%		
Pollutant Particulate Solids Particulate Phosphorus Filterable Phosphorus Total Phosphorus	Concentration - No Controls 166.6 0.4307 0.1690 0.5996	Concentration With Controls 19.79 0.05248 0.1565 0.2090			tant Yield ntrols	Pollutant Yield With Controls 8595 22.80 67.97 90.77	Pol. Yi Units Ibs Ibs Ibs Ibs	ield Percent Reduction 88.19 % 87.88 % 7.92 % 65.35 %