

→ Jim Parson CFA/8 - M. Hask.
Final Report

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

Form 3400-189 (R 11/05)

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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: The grant agreement requires grantees 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.

1. Grant Type

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

2. Grantee & Project Information

Project Name Municipal Services Building Mechanical Separator Device	Grant Number USC-LF01-44201-06B
Governmental Unit Name City of Appleton	Governmental Unit Type (city, village, town, etc.) City
Watershed Name Fox River/Appleton	Watershed Code LF04
DNR Water Management Unit (River System) Name Lower Fox	Water Body Identification Code (WBIC) (if applicable) 117900

s. 303(d) Waterbody? ☒ Yes ☐ No

What pollutant(s) were addressed by the project?

Total suspended solids, nutrients, grease and oil/floatable, and metals

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

Location:		A	B	C	D	E
Minor Civil Division Name		Outagamie County, City of Appleton				
PLSS	Town	21N				
	Range	18E				
	Section	19				
	Quarter	SW				
	Quarter-Quarter	NE				
Latitude		88 D 21' 57"W				
Longitude		44 D 16' 45"N				
Property Owner(s)	Name	City of Appleton				
	Mailing address	Department of Public Works, 100 N. Appleton Street, Appleton, WI 54911				
Site address (if different than mailing)		2625 E. Glendale Avenue, Appleton				

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.
For grants issued prior to calendar year 2006, complete Tables A and B, *to the best of your knowledge*, 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	1000(12%)	WinSLAMM vs 9.2.4
	% TSS reduction	0	

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		
	Acres planned for		
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		
	Acres planned for		
Other (specify)			

B. Project Results Narrative

1. Project Accomplishments

a. Post Project summary - This project targeted TSS, nutrients, metals, and grease and oil/floatables. The mechanical separator is also pre-treatment to a regional stormwater pond (Pershing Pond). A Stormceptor device, as approved by WDNR, was installed in August 2006 in the southeast corner of the Muncipal Services Building property.

b. The grant application was submitted using SLAMM version 8.7 which showed 3600 pounds per year (40%) of TSS removal for the tributary area. By the time the grant was awarded and final plans were being prepared, the SLAMM model had changed and the effectiveness was less than 40%. However, WDNR allowed the project to continue under the updated SLAMM model. Modeling in SLAMM version 9.2.4 for the 2007 city-wide plan update shows 1000 pounds (12%) of TSS removed per year for the tributary area.

2. A variety of city staff, including engineers, technicians, foremen, and the sewer cleaning crew, were on site during the installation of the device to learn how it was made and installed. This was also to help plan maintenance activities for the device.

3. The Pollution Prevention I & E program during the grant period included: In both 2006 and 2007, city staff participated in the planning, advertising, and event days for the special Household Hazardous Waste Clean Sweep Program. The program was sponsored by a state grant and included Calumet, Winnebago and Outagamie counties as well as the cities of Appleton and Menasha and the Town of Menasha. Brochures and information were distributed by various city departments and at polling places. The Health Department talked about the event on Hmong radio. In 2006 an alderperson participated on collection day. In 2007 the Department of Public Works provided a staff person to assist on collection day. In 2007 a small business brochure was also developed and distributed.

The AppleSource newsletter is printed and mailed twice a year. The city has done this for many years and expects to continue. It includes information for residents regarding proper trash and recycling activities, general household hazardous waste information, and proper yard waste handling.

In 2007 the city hired consultants to prepare the Pollution Prevention Program as required in Section 2.6 of the NR 216 Permit. One consultant is preparing five individual site Stormwater Management Plans (Section 2.6.6) and another consultant is preparing the remainder of the document. In addition to Public Works staff, the individual site stormwater plans include other city departments such as Fire and Park and Recreation. Stormwater training for staff in these departments is included in the scope of services. Most of the Operations Foremen have been involved in the plan development to date and have had the opportunity to think through current policies and procedures and their effectiveness toward pollution prevention.

Staff training has occurred for five individual site Stormwater Management Plans that were prepared in 2005 for Public Works Operations, the Utilities Department (Water Plant and Wastewater Plant), and Valley Transit.

The city believes that staff training is the first step in Pollution Prevention Education. It is important for the city to not only provide correct verbal and written information to the community, but also to demonstrate proper pollution prevention techniques in daily work. The city will continue to build on the steps already taken as it continues to implement an on-going pollution prevention education program.

A Turf Management Policy that covers most city owned properties and includes nutrient management has been in place since 1999. An updated policy will be presented to the Common Council by the end of 2007.

Stormwater permits are tracked on an Excel spreadsheet which show the project name, the date of the submittal, iterations of review comments, status of conditions of approval, and general comments. The Permit Tracking spreadsheet was developed similar to the Site Plan Log used by the city and is a work in progress. The system also includes pages for subdivision development. The stormwater permit spreadsheet tracks back to January 1, 2004, the effective date of the ordinance. Older data is entered into the spreadsheet as time allows.

Samples of documents referenced in Item 3 above are included in the hard copy submittal of this report. Also included with the hard copy submittal are photographs of Stormceptor installation and the site after construction.

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		
Notice Type	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

One major challenge was deciding which proprietary device to use. Considerable time and effort was spent selecting an appropriate device that would achieve the maximum removal at a reasonable cost per pound, and fit in the restricted area between a 42 inch sanitary sewer interceptor and rail road tracks. Following that effort, the WDNR policy regarding the SLAMM effectiveness for proprietary devices was issued. This became a problem again after contract award, when many vendors tried to convince the city to change our specifications to allow their device. This problem will hopefully be reduced once the technical standard for proprietary devices is available. Another challenge was the shipping of the device. It was large and heavy, requiring multiple shipments that could only occur during daylight hours. The city would not change how our part of the project was done.

The city would recommend the following to other municipalities: ensure an adequate budget to react to changes outside of the city's control during the long life of a project and evaluate the value of the grant against the costs to administer the grant at the local level. The paperwork associated with a grant is rather cumbersome. There was confusion regarding the Environmental Assessment documents for the project. No written response, other than email, to the documents were ever received. We were unable to find the fill-able version of the final report form on the WDNR forms page of the website. We do not understand the purpose of repeating information contained in the grant application. We are uncertain how to complete Tables A and B in item 3. As long as major changes aren't made at frequent intervals, the paperwork associated with the grant process should become easier for all parties to work with over time.

6. Additional Information about the Project (optional)

The grant application showed berms to be installed on the south and east sides of the Municipal Services Building. These berms were installed by city operations staff in the fall of 2006 after the sewer and Stormceptor were in place. The purpose of the berms is to direct runoff into the storm sewer system and to the device for treatment rather than letting it flow off-site. The berms are shown in the photographs attached to the hard copies of this report. A native seed mix was planted on the berms.

7. Planning Product (UNPS&SW - Planning Projects only)

☒ Check here if a printed copy of the planning product (e.g., plans, ordinances, analyses) was sent to your DNR Regional Nonpoint Source Coordinator.

Name of Document	Date(s) effective	Date Submitted to NPS Coordinator
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8. Grantee Certification:

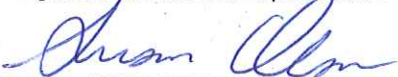
☒ Check here to certify that, to the best of your knowledge, the information contained in this report is correct and true.

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

Sue Olson, Project Engineer

Signature of Authorized Representative

Date



7/31/07





