

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 the one that applies.

- | | |
|--|--|
| ☒ 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 |
| ☐ Notice of Discharge Grant | |

2. PROJECT NAME & LOCATION.

2.1. Project Name: Arber Lake Headwaters Protection Project	2.2. Grant Number: TRC-TK06-15000-11J	
2.3. Governmental Unit Name: Door County	2.4. Primary Watershed Name: Upper Door County	2.5. Watershed Code: TK06

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	Sawyer, Tom				
Cost-Share Agreement Number (Agricultural only)	13-SAW-01				
12-Digit Hydrologic Unit Code(s) (HUC) Where Work Was Completed	040301020107				
Nearest Surface Receiving Water Affected					
Name:	Unnamed				
Waterbody Identification Code(s) (WBIC):	5011088				
Nearest Impaired Water Affected					
Name:	Arbert Lake				
Waterbody Identification Code(s) (WBIC):	92600				
Pollutants Reduced	Sediment, Bacteria, Nitrates and Phosphorus				
Impairments/Impacts Addressed	Clean Water Diversions in a WQMA Unconfined Manure Pile in WQMA				

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	Direct Runoff from Feedlot and Manure Storage Failing or Leaking Manure Storage Elimination of Winter Spreading				
Project Location(s) (cont.) →	A.	B.	C.	D.	E.
Project Coordinates:					
Town	Town of Sevastopol				
Range	27				
Section	17				
Quarter	NW				
Quarter-Quarter	SE				
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer (SWDV))	44d54m10s				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)	87d14m41s				

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"	91 acres	RUSLE-2
Manure Storage Facilities: New Construction/Alterations	Number of facilities	1 facilities	Count
	Number of animal units	32.4 animal units	Count
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	23 lbs.	BARNY Model
	Number of farms with diversions	1 farms	Count
	Number animal units	32 animal units	Count
Nutrient Management on Agricultural Land	Acres planned	91 acres	Count
Prohibition: Manure Storage Overflow	Number of farms	farms	
	Number of animal units	animal units	
Prohibition: Unconfined Manure Pile in WQMA	Number of farms	farms	

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Prohibition: Direct Runoff From Feedlot/Stored Manure	Pollutant load reduction	23.7 lbs.	BARNY
	Number of facilities	1 facilities	Count
	Number of animal units	32.4 animal units	Count
Prohibition: Unlimited Livestock Access	Feet of bank protected	feet	
	Number of farms	farms	

Table A. Agricultural Projects. (continued)			
A.2. Other Management Measures	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: Elimination of Winter Spreading	Units (use feet, acres or number as applicable)	91	Count
	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)		

Table B. Urban Construction Projects Serving Developed Areas.			
B.1. Required Management Measures	Units of Measure	Quantity	Measurement Method Used
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities	TSS reduced	lbs.	
	TSS reduction	%	
B.2. Other Management Measures			
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 ³ /year	
Peak flow discharge for 2 year/24 hour design storm	Change in cubic feet per second for design year	ft ³ /sec	
Protective areas	Bank protected	feet	
Fueling & maintenance areas	Oily sheen presence reduced	☐ Yes ☐ 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)		

Table C. Urban Planning Projects.

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C.1. Governmental unit(s) involved (list by name):

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

C.3. Products developed (check all below that apply)	Identify Documents by Name (if applicable)
☐ Storm Water Plan	
☐ Construction or Erosion Ordinances	
☐ Post-construction Storm Water Ordinances	
☐ Other Types of Storm Water Quality Ordinances	
☐ Financing Methods: identified and evaluated	
☐ Financing Methods: developed or implemented	
☐ I & E Plan	
☐ I & E Implementation Activities	
☐ Other:	

C.4. Identify the Storm Water goals addressed (check all that apply)	
☐ Reduce TSS	Comments:
☐ Maintain infiltration	
☐ Control Peak Flow	
☐ Protective Areas	
☐ Control of Fueling & Maintenance Areas	
☐ Remove Illicit Discharges	
☐ 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	
Local Regulation	10/21/2013	Door County SWCD	Tom Sawyer	☒	☐	11/11/2014
				☐	☐	

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				☐	☐	
				☐	☐	

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

The primary benefit of this project was eliminating direct runoff of nutrients from this operation as well as providing adequate storage to prevent the need for winter application of manure in sensitive areas. An equally important benefit of this project is the protection of groundwater, wetlands and other crucial recharge areas within the watershed. The ability to properly implement a nutrient management plan will ensure that resource needs will be addressed.

BMPs installed at the Sawyer site included barnyard runoff controls and necessary modifications to the existing manure storage facilities. The repair of existing facilities resulted in an efficient, no-runoff system where all potential impacts from bacteria, nitrates, phosphorus and sedimentation are controlled through storage of all waste and associated runoff and proper application in appropriate areas through an approved nutrient management plan.

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

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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) ↓

William F. Silbert

Title of Authorized Representative (type or print) ↓

Cow Conservationist

Signature of Authorized Representative

William F. Silbert

Date

11/9/15

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

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8.B. Comments about this project:		
8.C. Type or print Name of Regional NPS Coordinator →		
8.D. Signature of Regional NPS Coordinator	8.E. Date	

Arbter Lake Headwaters Protection Project



Direct Runoff from Feedlot and Stored Manure

Arbter Lake Headwaters Protection Project



Direct Runoff from Feedlot and Stored Manure

Arbter Lake Headwaters Protection Project



Existing Manure Storage Filled with Debris

A photograph showing a pond or waterway heavily covered in bright green algae. In the background, there is a red barn with a white window and two large grey silos. A concrete wall runs along the back of the pond, and a concrete pillar is visible on the right side. A yellow caution tape is stretched across the foreground. The sky is clear and blue.

Arbter Lake Headwaters Protection Project

Direct Runoff from Feedlot and Stored Manure

Arbter Lake Headwaters Protection Project



Direct Runoff from Feedlot and Stored Manure

A photograph of a farm scene. In the background, there is a tall, cylindrical metal silo with a domed top and a red barn with a white roof. The farm is situated on a grassy hill. In the foreground, there is a large, dark brown pile of manure on the left side. A concrete wall runs across the middle ground, and a small, rectangular concrete structure is visible on the right. The ground in the foreground is covered with green grass and some dry leaves. The sky is blue with some white clouds.

Arbter Lake Headwaters Protection Project

Unconfined Manure in WQMA

Arbter Lake Headwaters Protection Project



Direct Runoff from Feedlot and Stored Manure

Arbter Lake Headwaters Protection Project



07/01/2014
Modifications to existing Manure Storage

Arbter Lake Headwaters Protection Project



Modifications to existing Manure Storage

Arbter Lake Headwaters Protection Project



07/14/2014
Modifications to existing Manure Storage

Arbter Lake Headwaters Protection Project



07/24/2014
Modifications to existing Manure Storage

Arbter Lake Headwaters Protection Project



08/07/2014
Modifications to existing Manure Storage

Arbter Lake Headwaters Protection Project



08/07/2014
Installation of Barnyard Runoff

Arbter Lake Headwaters Protection Project



Installation of Barnyard Runoff

08/07/2014

Arbter Lake Headwaters Protection Project



08/12/2014
Installation of Barnyard Runoff

Arbter Lake Headwaters Protection Project



08/20/2014
Completion of Barnyard Runoff

Arbter Lake Headwaters Protection Project



Completion of Barnyard Runoff

Arbter Lake Headwaters Protection Project



Completion of Barnyard Runoff

Arbter Lake Headwaters Protection Project



Completion of Modifications to Manure Storage