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

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:	2.2. Grant Number:	
Mueller Manure Storage	**TRC-WR13-44000-13 B**	
2.3. Governmental Unit Name:	2.4. Primary Watershed Name:	2.5. Watershed Code:
Outagamie County Land Conservation Department	**Shic River**	**WR13**

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	Mueller				
Cost-Share Agreement Number (Agricultural only)	2013-TRM-01				
12-Digit Hydrologic Unit Code(s) (HUC) Where Work Was Completed	040302020804				
Nearest Surface Receiving Water Affected					
Name:	toad creek				
Waterbody Identification Code(s) (WBIC):	WR13				
Nearest Impaired Water Affected					
Name:					
Waterbody Identification Code(s) (WBIC):					
Pollutants Reduced					
Impairments/Impacts Addressed					

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Project Location(s) (cont.) →	A.	B.	C.	D.	E.
Project Coordinates:					
Town	24				
Range	17				
Section	16 11				
Quarter	ne				
Quarter-Quarter	nw SE				
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer (SWDV))	44.5596 Lat: 44.5685				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)	Long: -88.3891 -88.4314				

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**	
Manure Storage Facilities: New Construction/Alterations	Number of facilities	**1 facilities**	
	Number of animal units	**71.5 animal units**	
Manure Storage Facilities: Closure	Number of facilities	**0 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	**lbs.**	
	Number of farms with diversions	**farms**	
	Number animal units	**animal units**	
Nutrient Management on Agricultural Land	Acres planned	**215 acres**	
Prohibition: Manure Storage Overflow	Number of farms	**farms**	
	Number of animal units	**animal units**	
Prohibition: Unconfined Manure Pile in WQMA	Number of farms	**farms**	
Prohibition: Direct Runoff From Feedlot/Stored Manure	Pollutant load reduction	**lbs.**	
	Number of facilities	**facilities**	
	Number of animal units	**animal units**	
Prohibition: Unlimited Livestock Access	Feet of bank protected	**feet**	
	Number of farms	**farms**	

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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:	Units (use feet, acres or number as applicable)	0	
	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.			
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

Find Instructions at http://dnr.wi.gov/runoff/financial.htm

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planning product:	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? Yes	Satisfied? No	Date Letter Sent
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	

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

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

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) ↓	Title of Authorized Representative (type or print) ↓
Quint Krueger	**technician**

Signature of Authorized Representative	Date
Quint Krueger	12-9-13

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.

8.B. Comments about this project: See also Malveg Manure Storage Report.

Correct PLSS: SENE1124N17E
Correct Lat/Long: 44.5685, -88.3891
LES 8/26/15

8.C. Type or print Name of Regional NPS Coordinator →	Erin E. Hanson

8.D. Signature of Regional NPS Coordinator	8.E. Date
Erin E Hanson	07/31/15


SEP/ 6/2013


SEP/ 6/2013


SEP/27/2013


PATZ
SEP/27/2013

Appendix C
NUTRIENT MANAGEMENT PLAN CHECKLIST

V 8/01/05

For Wisconsin's NRCS 590 (September 2005) Nutrient Management Standard Requirements

County name: Outagamie Date Plan Submitted: 4/2013 Growing season year NM plan is written for 2013
Township (T. 24 N., S.) – (R. 17 E., W.) Initial Plan or Updated Plan (circle one) (from harvest to harvest)

Name of qualified nutrient management planner		Planner's business name, address, phone: Envirotrac 1212 Bay Lakes Rd Shawano WI 54166 (715) 524-8812
Circle the planner's qualification: 1. NAICC-CPCC 2. ASA-CCA 3. ASA-Professional Agronomist 4. SSSA-Soil Scientist 5. DATCP approved training course 6. Other credentials approved by DATCP	Cropland Acres (owned & rented) 25	Name of farmer receiving nutrient management plan: Clinton Mueller Circle relevant program requirement or regulation the plan was developed for: Ordinance, USDA, (DATCP,) DNR, NR 243 – NOD or WPDES

		Yes	No	NA
1.	**Are the following field features identified on maps or aerial photos in the plan?**			
a.	Field location, soil survey map unit(s), field boundary, and field identification number	X		
b.	Areas prohibited from receiving nutrient applications: Surface water, established concentrated flow channels with perennial cover, permanent non-harvested vegetative buffer, non-farmed wetlands, sinkholes, lands where established vegetation is not removed, nonmetallic mines, and fields eroding at a rate exceeding tolerable soil loss (T)	X		
c.	Areas within 50 feet of a potable drinking water well where mechanically-applied manure is prohibited	X		
d.	Areas prohibited from receiving winter nutrient applications: Slopes > 9% (12% if contour-cropped); Surface Water Quality Management Area (SWQMA) defined as land within 1,000 ft of lakes and ponds or within 300 ft of perennial streams draining to these waters, unless manure is deposited through winter gleaning/pasturing of plant residue and not exceeding the N and P requirements of this standard	X		
e.	Areas where winter applications are restricted unless effectively incorporated within 72 hours: Land contributing runoff within 200 feet upslope of direct conduits to groundwater such as a well, sinkhole, fractured bedrock at the surface, tile inlet, or nonmetallic mine	X		
f.	Sites vulnerable to N leaching: Areas within 1,000 feet of a municipal well, and soils listed in Appendix 1 of the Conservation Planning Technical Note WI-1	X		
2.	**Are erosion controls implemented so the crop rotation will not exceed T on fields that receive nutrients according to the conservation plan or WI P Index model?**	X		
3.	**Were soil samples collected and analyzed within the last 4 years according to UW Publication A2100 recommendations?**	X		
4.	**Using the field's predominant soil series and realistic yield goals, are planned nutrient application rates, timing, and methods of all forms of N, P, and K listed in the plan and consistent with UW Publication A 2809,** *Soil Test Recommendations for Field, Vegetable and Fruit Crops,* **and the 590 standard?**	X		
5.	**Do manure production and collection estimates correspond to the acreage needed in the plan? Are manure application rates realistic for the calibrated equipment used?**	X		
6.	**Is a single phosphorus (P) assessment of either the P Index or soil test P management strategy uniformly applied to all fields within a tract?**	X		
7.	**Are areas of concentrated flow, resulting in reoccurring gullies, planned to be protected with perennial vegetative cover?**	X		
8.	**Will nutrient applications on non-frozen soil within the SWQMA comply with the following?**			
a.	Unincorporated liquid manure on unsaturated soils will be applied according to Table 1 of the 590 standard to minimize runoff	X		
b.	One or more of the following practices will be used: 1) Install/maintain permanent vegetative buffers, or 2) Maintain greater than 30% crop residue or vegetative coverage on the surface after nutrient application, or 3) Incorporate nutrients leaving adequate residue to meet tolerable soil loss, or 4) Establish fall cover crops promptly following application	X		

I certify that the nutrient management plan represented by this checklist complies with Wisconsin's NRCS 590 nutrient management standard.
Signature of qualified nutrient management planner [signature] 13560

OPERATION AND MAINTENANCE PLAN FOR WASTE STORAGE FACILITY AND MANURE TRANSFER PUMP

OPERATION

SAFETY

See Manure Gas Safety Plan (attached) for important safety information!

MANURE TRANSFER AND WASTE STORAGE FACILITY

If extra water would help pumping, pump the milkhouse water to a tank next to the manure pump. Add the water as the piston pump is operating.
All manure transfer equipment should be operated according to manufacturer's recommendations.
Pipe outlet should be covered with manure by December 1st to prevent freeze-up.
After emptying the storage facility, check the end of the pipe for lime, sand or solids built up. If pipe appears to be blocked, clean out around the end with a backhoe.
Spread manure according to a Nutrient Management (590) Plan.

MAINTENANCE

Maintain all fences, gates, covers and signs.
Dikes shall be maintained in vegetative cover. Trees and brush shall be kept off the dikes.
Grass shall be mowed at least once per year after August 1st.

CONTINGENCY PLAN IF WASTE REACHES MAXIMUM OPERATING LEVEL

Daily haul manure to fields and spread according to your Nutrient Management (590) Plan or partially empy the facility and spread according to your Nutrient Management (590) Plan.
If this contingency plan is needed often, consider adding storage volume or reducing water used in the milking center.

EMERGENCY RESPONSE PLAN

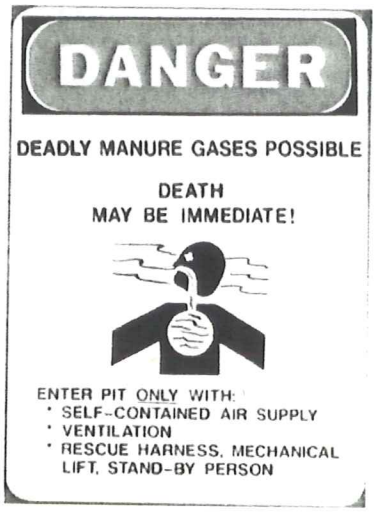
Clean up manure spills promptly and spread according to your 590 plan.
If the manure storage facility begins to overflow, clean up the overflow and implement the above Contingency Plan immediately.
If the spill is large, call the DNR spill hotline at 800.943.0003

I AGREE TO FOLLOW THIS OPERATION AND MAINTENANCE PLAN

SIGNATURE: Clint Mull **DATE:** 4-30-13

MANURE GAS SAFETY

SAFETY:



A sign such as shown to the right shall be posted near tanks, manholes, pump chambers, and anywhere people can enter an area where gases can collect. This sign is available from US Municipal Supply 800.331.3812 or Gemplers 800.382.8473

Reception Tanks contain poisonous gases that can kill humans. It is best not to enter tanks at all. If someone must enter the tank, follow ASABE Engineering Practice Standard EP470, Manure Storage Safety or preferably hire a person who specializes in entry into confined spaces to preform the needed maintenance for you. For companies see "Safety Consultants" and "Safety Equipment and Clothing" in the yellow pages. Further information on manure gas can be found in the National Farm Medicine Center brochure "Harvesting Health - Manure Gases", which is attached.

ASABE Engineering Practice Standard EP470, Manure Storage Safety can be found at:
ftp://ftp-fc.sc.egov.usda.gov/WI/cnmp/ASABE-ManureStorageSafety.pdf

Gates, fences, and covers must be closed unless maintenance operations are underway.

MAINTENANCE

Maintain all fences, gates, and covers.

All manure transfer equipment shall be maintained and operated according to manufacturer's recommendations, including safety requirements.

I UNDERSTAND AND AGREE TO FOLLOW THIS SAFETY PLAN

OWNER'S SIGNATURE: Chris Mull DATE: 4-30-13