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

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**Final Report**Targeted Runoff Management Grant Program and Urban Nonpoint Source and Storm Water Management Grant Program

Form 3400-189 (R 6/08)

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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 Ópen 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

submitted,	NR. The DNR prefer please submit three ype Please check o	(3) complete originals	e submitted in elect s to your regional N	ronic format. If, however onpoint Coordinator.	, printed copies of Fina	I Reports are	
				Targeted Runoff Mana	agement Grant – Urban		
<ul> <li>         ☐ Targeted Runoff Management Grant – Agricultural     </li> <li>         ☐ Urban Nonpoint Source &amp; Storm Water Management Grant –         Construction     </li> </ul>			nt Grant –	☐ Targeted Runoff Management Grant – Urban ☐ Urban Nonpoint Source & Storm Water Management Grant Planning			
2. Grantee	& Project Information	n e e					
Project Name				Grant Number			
Sand Cree	ek - NR151 Implemer	ntation (Adam Mikl)		TRC-LC07-09000-07B			
Governme	ental Unit Name			Primary Watershed Na	me and Watershed Code	•	
Chippewa	County			Pine Creek & Red Ced	dar River (Chippewa Co	unty); LC07	
Nearest W	ater Body Name			Nearest Water Body Id	entification Code (WBIC)	(if applicable)	
DNR Wate	er Management Unit (F	River System) Name		s. 303 (d) Listed Waterbody?			
What pollu	tant(s) were addresse	ed by the project (e.g., n	itrogen, phosphorus,	sediment, thermal control,	etc.)?		
Nitrogen,	phosphorus						
For <u>each</u> p	project site location pro	ovide the following: (atta	ch additional sheets	if necessary)			
	Location:	Α	В	С	D	E	
	Division Name nship, Village, etc.)						
PLSS	Town	T31N					
	Range	R10W					
	Section	Sect 4					
	Quarter	NW					
	Quarter-Quarter	sw					
seconds N	egrees, minutes, orth of Equator; use Surface Water Data VDV)	-91 37 25					
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)		45 11 56					
Property Owner(s)	Name	Adam Mikl					
	Mailing address	24523 30 <sup>th</sup> Ave					

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Cita address (Mat mailing			
Site address (Not mailing address)			
address)			

#### 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	87	Rusle 2
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	87	
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	83	
	Number of facilities	3	
	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		
	% TSS reduction		

#### TABLE B. OTHER WATER RESOURCES MANAGEMENT PRIORITIES

I. Agricultural Areas	Units of Measure	Quantity	Measurement Method Used
Buffers	Feet of bank protected	3198	
	Number of farms	1	
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	Municipalities planned for		
decreased storm water impacts on state waters (i.e., storm water plan, I & E plan, etc.)	Acres planned for		
Document/track progress made in implementing the	Municipalities planned for		
planning product ( <i>i.e.</i> , ordinance, utility district evaluation/formation, storm water management plan information & education, etc.)	Acres planned for		

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Other (specify)								
B. Project Results Narrative Attached.	Э							
4. Satisfaction of Notice Re	equirements (if app	licable)						
If cost sharing for this proje for each notice in the table		ler a formal notice to achieve	e compliance with perform	ance standards	or proh	bitions,	provide information	
Tor cacif floates in the table	I I	Notice Information			Notice Satisfaction Information			
Notice Type	Issue Date	From (Name)	To (Nan	ne)	Satis Yes	fied? No	Date Letter Sent	
House Type	10000 Buto	, rom (name)	10 (114.11	10)			Date Letter Cont	
5. Summary of Project Cha	llenges							
Note: The Mikl's barn w		ire on January 18, 2009.						
7. Final Product(s) All Pr	ojects							
A. Construction P  A.1. Checking here Coordinator.		inted copy of project plans a	nd specifications was sent	to your DNR Re	egional	Nonpoir	nt Source	
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 ( <i>e.g.</i> , plans, ordinances, analyses) was sent to your DNR Regional Nonpoint Source Coordinator.								
B.2. Checking here	indicates that the F	Regional Nonpoint Source Co	oordinator has approved th	ne final Planning	Produc	ct(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								
8. Grantee Certification:								
Checking here certific	es that, to the best	of your knowledge, the info	rmation contained in this re	eport is correct a	nd true			
Type or print Name and Titl	e of Authorized Re	presentative certifying here.						
Dan Masterpole, County C	Conservationist							
Signature of Authorized Rep	presentative			Da Z		1/09	-	

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Form	3400-189 (R 6/08)	Page 4				
9.	FOR DEPARTMENTAL USE ONLY					
	REGIONAL NONPOINT COORDINATOR Please complete the following:					
	Checking here indicates that you received either planning or construction plans and specifications from the Attach a copy of the approval.	ne project sponsor, as appropriate.				
	Checking here indicates that you approved the final construction. Attach a copy of the final construction	approval.				
	Checking here indicates that you have approved the final Planning Product(s).					
	Check here if two (2) signed, original copies of the Final Report and attachments have been sent to Runc Coordinator. Note: Regional Nonpoint Source Coordinator may retain one (1) copy of the signed, original					
Туре	or print Name of Regional Nonpoint Coordinator					
Signa	ature of Regional Nonpoint Coordinator	Date				
0.5						

FINAL REPORT - January 2009
TRM Grant Program (Form 3400-189 (R 6/08)
Chippewa County
Sand Creek - NR151 Implementation (Adam Mikl)
TRC-LC07-09000-07B

#### B. Project Results Narrative

#### **Background**

Sand Creek is a high quality (Class I) cold water sport fishery that has been intensively managed by the WDNR for over 30 years.

In the fall of 2005, WDNR fisheries staff observed direct discharge to Sand Creek (Creek 8-3) from a dairy operation's barnyard and cattle loafing area.

In response, the Chippewa County LCD staff performed an NR151 evaluation. The report concluded that changes in crop and livestock management were needed to gain compliance with the NR151 standards.

#### **Objectives and Results**

Objective 1. Achieve a soil erosion rate equal to, or less than, the tolerable rate established for that soil.

The NRCS and LCD have been assisting the landowner by evaluating crop rotations, tillage options and field management practices (i.e. contour farming and contour strip cropping). A resource conservation plan has been developed by NRCS.

An area of concentrated flow in Pasture 1 has been re-vegetated. Livestock access has been restricted in an effort to maintain adequate sod cover. Objective met.

Objective 2. Runoff shall be diverted away from contacting feedlots, manure storage areas and barnyard areas within water quality management areas.

The Mikl barnyard is located within a water quality management area (WQMA). A barnyard runoff management system was constructed in 2007 to limit direct discharge into the stream. Objective met.



Figure 1. Before: Mikl barnyard and feedlot area.



Figure 2. After: Mikl barnyard and feedlot area.

### Objective 3. Develop and implement a nutrient management plan..

The landowner has hired a crop consultant and filed a nutrient management plan with the county.

A manure storage system was constructed in the late fall of 2008 to assist the landowner in better manure management on his cropland and to limit winter spreading. Objective met.

## Objective 4. A livestock operation shall have no direct runoff from feedlots into waters of the state.

A barnyard runoff model (Barny) estimated an annual discharge of approximately 56 lbs. of phosphorous from the barnyard into the stream. A barnyard runoff management system was installed to limit direct discharge into the stream.

A barnyard runoff model (Barny) estimated an annual discharge of approximately 27 lbs. of phosphorous from Feedlot #1 into the stream. Livestock have been removed from Feedlot 1. The Mikl's have installed a concrete feeding alley. Manure from the feeding alley is scraped into a reception tank connected to the manure storage system. Feedlot 1 has been reshaped and reseeded.

A barnyard runoff model (Barny) estimated an annual discharge of approximately 15 lbs. of phosphorous from Feedlot #2 into the stream. Eligible land was enrolled in the Conservation Reserve Enhancement Program. Livestock have been restricted from this area except for a cattle lane constructed for pasture access.

An at grade concrete panel stream crossing was installed to reduce damage to the stream by livestock. Objective met.

Note: Figure 3 details the location of the barnyard, feedlots and stream crossing.

Figure 3.
Sand Creek-NR151 Implementation
Adam Mikl

# Chippewa County TRC-LC07-09000-07B









