Wisconsin Department of Natural Resources
Bureau of Watershed Management (WT/3)
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921
dnr.wi.gov

Final Report

Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Form 3400-189A (R 05/16)

NOTICE: This document is required under s. 281.65, Wis. Stats., and chs. NR 153 and 154, Wis. Adm. Code. A final project report must be submitted as part of the final reimbursement request. Personally identifiable information contained in this form will be used for determining reimbursement eligibility in the Targeted Runoff Management and Notice of Discharge Grant Programs and will not be used for any other purpose.

INSTRUCTIONS: Send the completed, electronic copy of this form and all attachments to the Department of Natural Resources (DNR) Region Nonpoint Source Coordinator. Please read all instructions prior to completion.

Grant Type

Select Grant Type: Notice of Discharge

Project Name & Location

Project Name		
Smits Bros. Heavy Use Protection & Manure Storage		
Grant Number	**Governmental Unit Name**	
UF10-24000-N15	Green Lake County	
County	**Watershed Name**	**12-Digit HUC**
Green Lake	Buffalo & Puckaway Lakes	040302010605
Project Contact Name	**Phone Number**	**E-mail Address**
Todd Morris	(920) 294-4051	tmorris@co.green-lake.wi.us

☐ For a project with multiple site locations, an aerial photo map is attached with each site location labeled.

Site Location - 1

Name of Cost-Share Recipient					Animal Units	Nearest Receiving Waterbody	
Smits Bros LLC					361	Lake Puckaway	
Township	**Range**	**E / W**	**Section**	**Quarter**	**Quarter/Quarter**	**Latitude**	**Longitude**
15	12	E	9	SW	NE	43.781998	-89.077269

Compliance Requirements - 1

Chs. NR 151 or 243 Wis. Adm. Code Notice Type	Notice letter attached	Compliance achieved? If no, explain in site information	Compliance determination letter attached
NOI / NOD	☒	◉ Yes ○ No	☒

☒ Attached is a copy of the written statement the County provided to the landowner and cost-share recipient of the landowner's obligation to maintain compliance with performance standards & prohibitions on cropland and livestock facilities addressed by the cost-share agreement. Compliance at these sites must be maintained in perpetuity regardless of future cost sharing. The County has also placed a copy of this written statement in the County files.

Summary of Results - 1

Best Management Practice Installed	Quantity	Unit of Measure	Performance Standard/Prohibition Addressed	Total Installation Cost	Load Reduction		
					Phosphorus lbs/yr	Nitrogen lbs/yr	Sediment Tons/yr
Manure Storage Systems	1	No.	Code(s) 4	$141,289.00			
Heavy Use Area Protection	0.55	Acres	Code(s) 12	$235,228.00	43.4		37.4
Wastewater Treatment Strips	1	Acres	Code(s) 12	$13,525.00	128.8		
Livestock Fencing	1,862	Feet	Code(s)	$28,447.00			
Roof Runoff Systems	4	No.	Code(s) 8	$8,870.00			

Site Location Attachment - 1

Check the box if the required information for the site is attached:

☐ Photos of pre-and post-implementation of BMP(s)
☒ Load reduction modeling documents
☒ Aerial photo map of site with BMPs labeled
☐ Water quality monitoring results/summary, if applicable

Site Information - 1

Wisconsin Department of Natural Resources
Bureau of Watershed Management (WT/3)
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921
dnr.wi.gov

Final Report
Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Narrative space will expand to fit

This site consisted of large earthen lots that the cattle were fed on. The runoff from this site either went into the ground or to an earthen basin that was periodically cleaned out. With the BMP's installed the manure from the site can be collected using the heavy use area protection and then stored in the waste storage structure. The runoff from the lots is now treated with a wastewater treatment strip. Fencing was installed to confine the cattle to the heavy use protection area. The runoff from the new building will be treated with grass infiltration swales keeping the clean water clean.

☐ DNR may use this site as a success story to meet state and federal reporting needs.

Additional Project Information and/or Comments

Narrative space will expand to fit

Grantee Certification

A responsible government official (authorized signatory) must authorize and date the final report form prior to submittal to DNR.

I certify that, to the best of my knowledge, the project is complete and the information contained in this final report and attachments are correct and true.

Name of Authorized Government Official	Title of Authorized Government Official	Date
Paul Gunderson	County Conservationist	06/09/2016

For DNR Use Only

☒ Received complete reports with all attachments ☒ Practices implemented were consistent with the grant agreement

Comments about this project:
None.

Name of Region Nonpoint Source Coordinator	Date
Erin E. Hanson	07/25/2016

Send the Final Report and attachments to the Community Financial Assistance Grants Manager and to the Runoff Management Grant Coordinator. Keep a printed copy for the Region file.

Compliance Report – Medium Size Farm (11-20-12)

Inspection Date: October 5, 2012

Inspection Type: Compliance

Operation Name: Smits Bros LLC

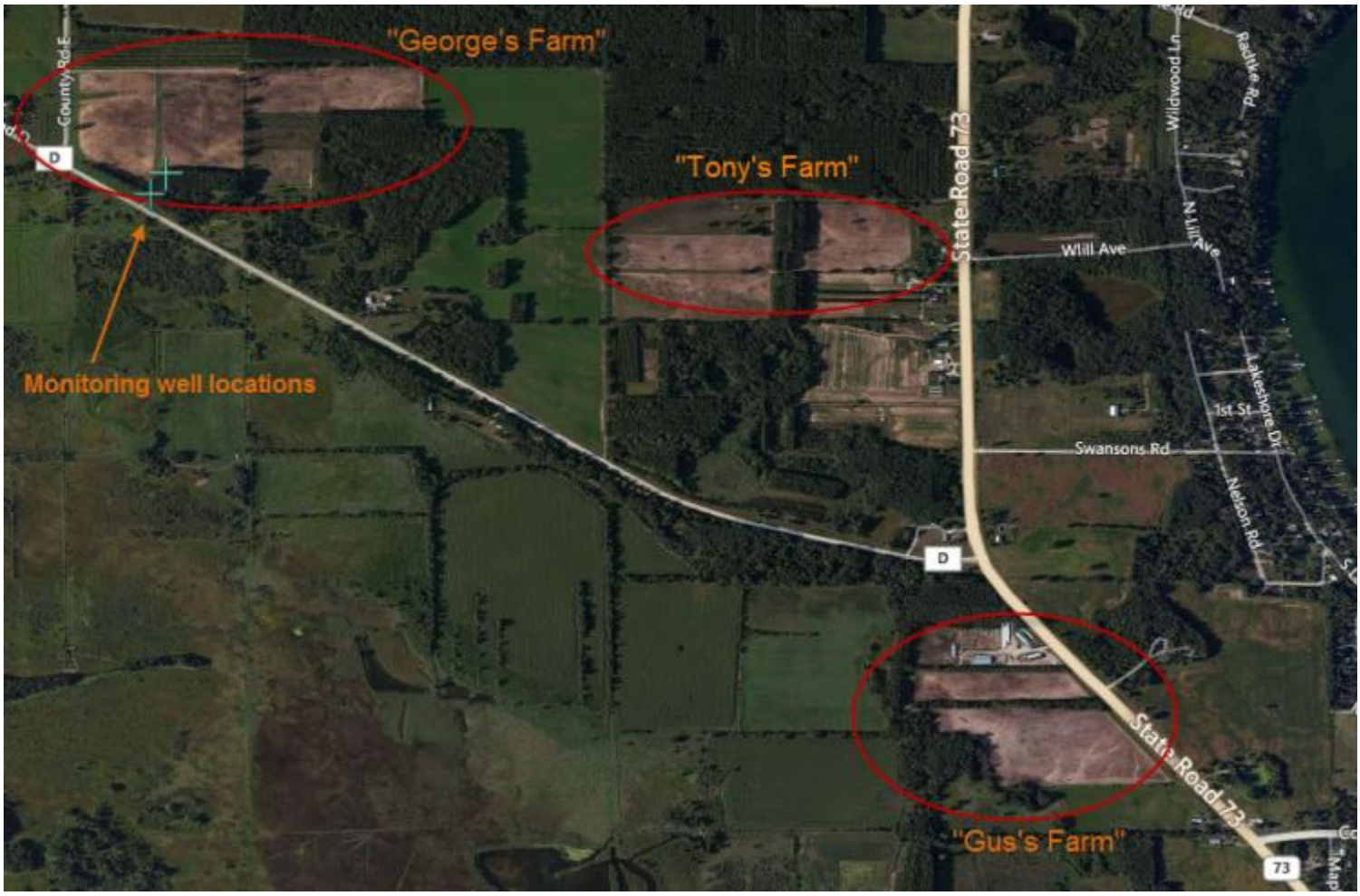
Operation Addresses: "Gus's Farm," N4247 Hwy 73, Princeton
"Tony's Farm," N4543 Hwy 73, Princeton
"George's Farm," N4596 County D, Princeton

On-Site Representatives: Dan and Mark Smits (Co-owners)

DNR Staff: Casey Jones, Agricultural Runoff Management Specialist

---

On October 5, 2012 Jones met with Dan and Mark Smits onsite to discuss their heifer raising operation. Also present at inspection were Erin Hanson (DNR Nonpoint Specialist) and Todd Morris (Green Lake County Soil Conservationist). The purpose of the inspection was to determine if the operation was a satellite of Double S Dairy LLC (large CAFO) and to determine if there were any discharge problems from the large outdoor animal lots. Below is an overview of the site operation showing the locations of the feedlot areas.



Satellite Facility Determination
Based on NR 243 definition of “Animal Feeding Operation (AFO),” the heifer farm owned and managed by the same entity as Double S Dairy is not considered a satellite to the permitted large CAFO. The reason the dairy and heifer operations are not considered one AFO is because the operations are not adjacent (separated by about 18 miles); do not share landspreading acreage; nor share common waste storage. On its own, the heifer farm is also not considered a large CAFO as according to Smits, it currently has less than 1000 animal units.

Inspection Summary
Site One
The location referred to as “Gus’s Farm” was purchased by Smits in 2006. This facility has some open sided heifer barns and drive-by feeding lanes, but heifers are primarily kept on earthen lot areas. The northern side of the farm has a small staging area for manure scraped from feed lanes. The private well onsite is upgradient of all outdoor lot areas. Photos shown below are the northern area of this farm.

Feed is stored onsite in silage bags; some feed is also brought from dairy location.

South of the area with buildings are two large open earthen lots where cows are kept year round and fed with feed wagons. These lots have sparse to no vegetation present and soils are well drained and sandy. Surface drainage flows toward west; there is an intermittent stream west of lots.

Photos above show the smaller of the two lots. Left photo is low area where runoff ponds and some solids settle out; cows are fenced out of this area. Smits said it is scraped out each fall. Photo right is looking east at lot.

Photo above looking toward west from Hwy 73 at second larger lot at site.

Site Two

The location referred to as “Tony’s Farm” was purchased in 2008 and consists of four large earthen lots. Smits stated each pen holds about 80 heifers. A well was installed onsite in 2008 for the cattle waterers.

Looking northwest towards lot; well in foreground.

Photos above show views of lot areas; some areas had sparse vegetation but most areas were bare soil. Photo on right shows areas with some standing water present.

Photo left showing cows eating at feeder wagons. Smits said these are moved around to different locations regularly.

Site Three

The location referred to as “George’s Farm” was purchased in 2008. Site consists of open earthen lots that have bred heifers and dry cows onsite year round. The well onsite was installed in 2008 and also serves a residence (location marked with “W” below). This site also has two monitoring wells onsite that were initially installed for a study to monitor cropland activities’ impacts on groundwater (“Xs” mark locations). Both of these wells are directly downgradient of the outdoor lot areas.

Looking northwest at accumulated sand that had ran off lots earlier in the year. Area is between southern edge of lot and Hwy D.

Photo left is monitoring well GL1-2. Photo above is looking northwest at earthen lot area 1 from well location.

Photo above well GL1-1, either well has settled or runoff from lot shown on right has filled in ground around well. Photo right is looking northeast at lot 2.

Photo left looking south at private well onsite for residence and to service watering cattle.

Looking north at lot labeled as number 4 on air photo overview. Smits said this is an overflow area but cows are not typically kept on this lot. Surface flow of this lot would drain south toward wetland area.

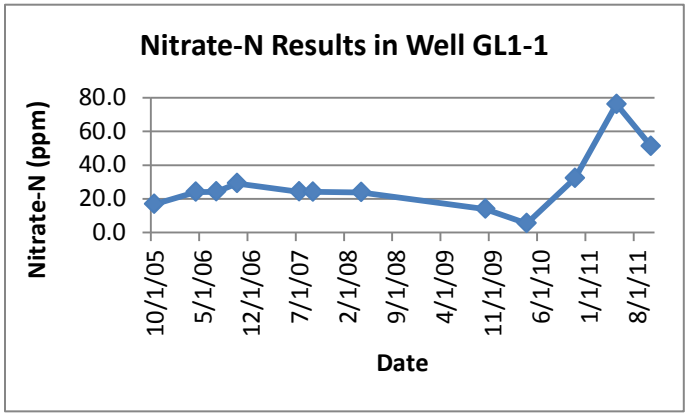
Looking southeast at Lot 2. No vegetation present on lot.

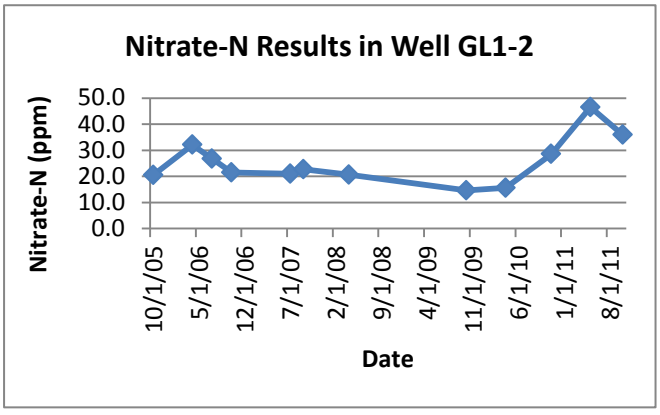
Looking southwest at Lot 1. No vegetation present on lot.

Compliance Summary

Based on site inspection conditions and monitoring well results, the Department concludes that the feedlots are unlawfully discharging to groundwater which is considered waters of the state.

A summary of well results are shown in tables below for each well. Trends show increase in nitrate levels after cattle were added to lot areas.





Management of lot areas needs to be modified to adequately handle the nutrients being deposited by the cattle. Some options include: 1) Lots must be managed in pasture where vegetation can uptake nutrients and prevent erosion problems that can result in surface water discharges; 2) Manure should be scraped from heavy use areas where vegetation cannot be maintained and applied to cropland under a nutrient management plan; 3) Animals removed from lots and housed under roof.

SnapPlus Annual PI Report

Reported For **Smits Brothers LLC:George's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

* used exercise lot years for PI

Field Name	Soil Series & Symbol	Slope	Tillage	Rot Avg PI	PI	2012	2013	2014	2015
24 George E of trailer	BOYER BpB	4	None-None-None-None	1	Total	1.2	1.2	0.6	0.8
					Particulate	0.6	0.3	0.0	0.0
					Soluble	0.6	0.9	0.6	0.8
27 George Corner	OSHTEMO OmB	4	None-SFC-None-None	2	Total	3.0	1.9	1.1	0.9
					Particulate	2.3	1.0	0.4	0.2
					Soluble	0.8	0.9	0.7	0.7
28 George Center	OSHTEMO OmB	4	None-SFC-None-None	3	Total	6.3	3.8	1.6	1.4
					Particulate	4.8	2.1	0.2	0.1
					Soluble	1.5	1.7	1.4	1.3
29 George East	OAKVILLE OaB	4	None-None-SFC-None	0	Total	0.6	0.8	0.2	0.1
					Particulate	0.3	0.4	0.1	0.0
					Soluble	0.3	0.4	0.2	0.1

11.1 3.2

Phosphorous Load Reduction.

Total PI

	Before	After	
Georges	11.1	3.2	
Gus's	14.6	1.6	
Tony's	27.7	5.2	Reduction
Total	53.4	10.0	43.4

SnapPlus Annual PI Report

Reported For **Smits Brothers LLC:Gus's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

* used exercise lot years for PI

Field Name	Soil Series & Symbol	Slope	Tillage	Rot Avg PI	PI	2013	2014	2015	2016
25 South Pasture Gus	OSHTEMO OmB	4	None-None-SFC-SFC	**4**	Total	4.9	6.9	3.0	1.6
					Particulate	3.9	5.5	2.1	0.5
					Soluble	1.0	1.4	1.0	1.1
26 North Pasture Gus	OSHTEMO OmC2	9	None-None-None-None	**7**	Total	3.1	7.7	12.8	5.7
					Particulate	2.4	6.6	11.4	0.6
					Soluble	0.6	1.1	1.4	5.1
Back 80 Far South	GRANBY Gf	1	SFC-SFC-SFC-SFC	**1**	Total	0.4	0.7	0.8	1.0
					Particulate	0.2	0.2	0.2	0.2
					Soluble	0.1	0.4	0.6	0.8
First Marsh & North Marsh	HOUGHTON Ho	1	None-None-None-None	**0**	Total	0.0	0.2	0.5	0.1
					Particulate	0.0	0.0	0.0	0.0
					Soluble	0.0	0.2	0.5	0.1
Second Marsh West	HOUGHTON Ho	1	SFC-SFC-SFC-SFC	**1**	Total	0.5	0.6	2.0	1.2
					Particulate	0.2	0.1	0.1	0.2
					Soluble	0.3	0.5	1.9	1.0

Building site - no longer pastured

14.6 1.6

SnapPlus Annual PI Report

Reported For **Smits Brothers LLC:Tony's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

* Used exercise last years for PI

Field Name	Soil Series & Symbol	Slope	Tillage	Rot Avg PI	PI	2013	2014	2015	2016
20 Tony NE	BOYER BpC2	9	None-SFC-None-SFC	3	Total	7.1	1.8	0.8	1.0
					Particulate	6.4	1.2	0.2	0.2
					Soluble	0.7	0.6	0.6	0.8
21 Tony SE	BOYER BpB	4	None-SFC-None-SFC	3	Total	7.3	2.4	1.4	1.7
					Particulate	5.8	1.1	0.2	0.2
					Soluble	1.5	1.3	1.3	1.5
22 Tony NW	BOYER BpB	4	SFC-None-SFC-None	3	Total	1.6	8.0	1.9	1.5
					Particulate	0.7	6.7	0.9	0.4
					Soluble	1.0	1.3	1.0	1.0
23 Tony SW	BOYER BpB	4	SFC-None-SFC-None	2	Total	0.9	5.3	1.1	1.0
					Particulate	0.5	4.7	0.7	0.3
					Soluble	0.5	0.6	0.5	0.7

27.7 5.2

SnapPlus Annual Soil Loss Report

Reported For **Smits Brothers LLC:George's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

*Compared the dirt exercise lots to the planned crops - for all farms.

										Annual Soil Loss t/ac			
Field	Soil Series & Symbol	Slope	Slope Len	Contour/ Filters	Rotation	Tillage	Field "T" t/ac	Rot Avg Soil Loss t/ac	Avg Sed Del Total	2012	2013	2014	2015
24 George E of trailer	BOYER BpB	4	200	No / No	Pdl-GH-GH-GH	None-None-None-None	4	0.2		0.4	0.3	0.0	0.0
27 George Corner	OSHTEMO OmB	4	200	No / No	Pdl-As-AG-AG	None-SFC-None-None	5	0.7		1.4	1.0	0.3	0.2
28 George Center	OSHTEMO OmB	4	200	No / No	Pdl-AGs-Pl-Pl	None-SFC-None-None	5	0.8		1.9	1.1	0.1	0.0
29 George East	OAKVILLE OaB	4	200	No / No	Pdl-Pdl-OPfAGs-AG	None-None-SFC-None	5	0.1		0.1	0.3	0.0	0.0
										3.8			0.2

Crop Abbreviations

Abbreviation	Crop
As	Alfalfa Seeding Spring
AG	Alfalfa/Grass
AGs	Alfalfa/Grass Seeding Spring
GH	Grass hay
OPfAGs	Oat-Pea Forage w/ Alfalfa/Grass Seeding Spring
Pdl	Pasture, dry lot, exercise area
Pl	Pasture, variable stocking, managed continuous, grass/legume

Tillage Abbreviations

Abbreviation	Tillage
None	None
SFC	Spring Cultivation

Soil Loss Reductions
Totals (tons/Ac/yr)

	Before	After
Georges	3.8	0.2
Gus's	14.4	1.2
Tony's	21.3	0.7
Total	39.5	2.1

Reductions
37.4

SnapPlus Annual Soil Loss Report

Reported For **Smits Brothers LLC:Gus's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

										Annual Soil Loss t/ac			
Field	Soil Series & Symbol	Slope	Slope Len	Contour/ Filters	Rotation	Tillage	Field "T" t/ac	Rot Avg Soil Loss t/ac	Avg Sed Del Total	2013	2014	2015	2016
25 South Pasture Gus	OSHTEMO OmB	4	200	No / No	Pdl-Pdl-AGs-OPfAGs	None-None-SFC-SFC	5	2.9		4.1	6.0	1.2	0.5
26 North Pasture Gus	OSHTEMO OmC2	9	150	No / No	Pdl-Pdl-Pdl-AG	None-None-None-None	5	4.2		3.1	8.4	4.6	0.7
Back 80 Far South	GRANBY Gf	1	250	No / No	Cg18-Cg18-Cg18-Cg	SFC-SFC-SFC-SFC	5	0.1		0.1	0.1	0.1	0.1
First Marsh & North Marsh	HOUGHTON Ho	1	250	No / No	GH-GH-GH-GH	None-None-None-None	2	0.0		0.0	0.0	0.0	0.0
Second Marsh West	HOUGHTON Ho	1	250	No / No	Cg18-Cg18-Csl-Csl	SFC-SFC-SFC-SFC	2	0.0		0.1	0.0	0.0	0.0

14.4 1.2

Crop Abbreviations

Abbreviation	Crop
AG	Alfalfa/Grass
AGs	Alfalfa/Grass Seeding Spring
Cg	Corn grain
Cg18	Corn grain, 18 inch rows
Csl	Corn silage

Tillage Abbreviations

Abbreviation	Tillage
None	None
SFC	Spring Cultivation

SnapPlus Annual Soil Loss Report

Reported For **Smits Brothers LLC:Tony's**

Printed **2016-07-25**

Plan Completion/Update Date **2015-03-22**

SnapPlus Version 15.1 built on 2015-12-18

S:\FarmPlans\Princeton\Smits Bros LLC\Nutrient Management\Smits Brothers LLC.snapDb

Prepared for:
Smits Brothers LLC
attn:Mark, Dan & Steve Smits
35 Birdie Boulevard
Waupun, 53963

										Annual Soil Loss t/ac			
Field	Soil Series & Symbol	Slope	Slope Len	Contour/ Filters	Rotation	Tillage	Field "T" t/ac	Rot Avg Soil Loss t/ac	Avg Sed Del Total	2013	2014	2015	2016
20 Tony NE	BOYER BpC2	9	150	No / No	Pdl-OPfAGs-Pl-OPfAGs	None-SFC-None-SFC	4	2.7		8.6	1.7	0.1	0.2
21 Tony SE	BOYER BpB	4	200	No / No	Pdl-OPfAGs-Pl-OPfAGs	None-SFC-None-SFC	4	1.1		3.4	0.7	0.1	0.1
22 Tony NW	BOYER BpB	4	200	No / No	AGs-Pdl-OPfAGs-AG	SFC-None-SFC-None	4	1.5		0.5	4.7	0.7	0.2
23 Tony SW	BOYER BpB	4	200	No / No	AGs-Pdl-OPfAGs-AG	SFC-None-SFC-None	4	1.5		0.5	4.6	0.7	0.2

21.3 0.7

Crop Abbreviations

Abbreviation	Crop
AG	Alfalfa/Grass
AGs	Alfalfa/Grass Seeding Spring
OPfAGs	Oat-Pea Forage w/ Alfalfa/Grass Seeding Spring
Pdl	Pasture, dry lot, exercise area
Pl	Pasture, variable stocking, managed continuous, grass/legume

Tillage Abbreviations

Abbreviation	Tillage
None	None
SFC	Spring Cultivation

BUFFER DESIGN USING BARNY

OWNER: Smits Bros LLC | DESIGNER: TM | DATE: 10/1/2015
CHK BY: | DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:	22,220		sq ft
Earth lot area:			sq ft
Animal Lot size:		22,220	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2
Animals on lot:	403 number	0 number	
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	1,000 lbs		lbs
Lot Use:	1		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:		sq ft		sq ft
Runoff Curve Number:				
Roof area:		sq ft		

129.1 lbs P per year at D.S. Lot edge:

Maximum permissible P Output that can be released: 5 lbs — Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	325	ft (See Note Below)
	Slope:	2	%
	"c" :	0.59	→
Second Buffer	Length:		ft
	Slope:		
	"c" :		

P (lbs) after the buffers: 0.3 lbs P per year

"c" Value Table	
Permanent Meadow	0.59
Woods, Heavy Litter	0.59
Woods, Lt Ltr	0.29
Well managed grazing	0.44
Fair managed grazing	0.29
Good Pasture	0.22
Fair Pasture	0.15
Small Grain	0.29
Legume	0.29
Contoured Row Crop	0.29
Non-contoured row crop	0.05

GOOD - Buffer length, slope, and type is OK; proceed with final area sizing calcs below.

BUFFER SIZING

33,330 sq ft — Min. Acceptable Buffer Area

Chosen Buffer Width: 117 feet

325 feet — Min. Bfr. Len. Based on BARNY

325 feet — Min. Bfr. Len. Based on Area

Chosen Buffer Length: 368 feet — Good Design

GREEN LAKE COUNTY
Land Conservation Department

571 County Road A
PO Box 3188
Green Lake, WI 54941-3188

Phone: 920-294-4051
FAX: 920-294-4056
Email: lcd@co.green-lake.wi.us

June 6, 2016

Smits Bros LLC
35 Birdie Blvd
Waupun, WI 53963

RE: Compliance Determination

Dear Smits Bros. LLC,

On November 26, 2012 the Department of Natural Resources issued a Category III Notice of Discharge – Feedlot Impacts to Groundwater. This determination was made based on the facts that the outdoor lots were not being managed as pasture so they had no vegetation present to uptake the nutrients deposited by cattle.

In November 2015 you constructed a new building to house the cattle and remove them from the outdoor lots. Along with this new building you have installed many practices to control the manure runoff from this site. A waste storage facility was installed to store the manure from the housing area along with the concrete lot area. Heavy Use Protection was installed where the cattle are fed to allow the manure to be scraped up and land applied. This manure can also be put into the waste storage pit when application is not practical. To address the runoff from the concrete lot a concrete spreader and vegetated buffer treatment area was installed. The clean water from the roof is being addressed with infiltration swales. The outdoor lots were brought back into crop production and a nutrient management plan has been developed for this land.

As a result of your actions you are now in compliance with the NR 151 Agricultural Performance Standards. The performance standard applicable to the Notice of Discharge is NR151.08 Manure Management Prohibitions. Attached is the Farmland Preservation Program Farm Inspection Report that was used to determine compliance status. You are obligated to maintain compliance with the performance standard addressed by the cost sharing.

Thank you for your attention to this matter. If you have any questions please give me a call.

Sincerely,

Paul Gunderson
County Conservationist

Farm Inspection Report

V 4-11-14

Farm Inspection Requirements

Farm inspections are required to determine compliance with the soil and water conservation standards for NR151 Compliance.

County: Green Lake Inspection date: 05/31/2016

Name of inspector: Todd Morris Phone: 920-294-4051

Signature of inspector: _____ Date: _____

Landowner Information

Name(s): Smits Bros. LLC

Phone: 920-382-5386 E-mail: smitsceo@gmail.com

Property Information Location(s) of land for which inspection was completed:

TOWNSHIP	RANGE	SECTION	TOWN, VILLAGE, CITY	PARCEL TAX ID #'S
15N	12E	16	TOWN OF MARQUETTE	014-00548-0000
15N	12E	16	TOWN OF MARQUETTE	014-00551-0000
15N	12E	04	TOWN OF PRINCETON	016-00390-0000
15N	12E	04	TOWN OF PRINCETON	016-00391-0100
15N	12E	05	TOWN OF PRINCETON	016-00409-0000
15N	12E	05	TOWN OF PRINCETON	016-00414-0200
15N	12E	05	TOWN OF PRINCETON	016-00416-0000
15N	12E	09	TOWN OF PRINCETON	016-00523-0000
15N	12E	09	TOWN OF PRINCETON	016-00524-0000
15N	12E	09	TOWN OF PRINCETON	016-00525-0000
15N	12E	09	TOWN OF PRINCETON	016-00526-0000
15N	12E	09	TOWN OF PRINCETON	016-00529-0000
15N	12E	09	TOWN OF PRINCETON	016-00531-0100
15N	12E	09	TOWN OF PRINCETON	016-00532-0000
15N	12E	09	TOWN OF PRINCETON	016-00533-0400

Inspection Certification

By signing this farm inspection report, the landowner(s) acknowledge the findings of the farm inspection and certify that the acres listed on this inspection report are either a part of a farm that is in compliance with the applicable conservation standards or that compliance with the standards will be achieved by the timeframe indicated in the conservation compliance checklist.

_____ _____

Landowner signature Date

_____ _____

Landowner signature Date

If you were not available at the time of the farm inspection, please sign and return the report to the Green Lake County Department of Land Conservation.

Questions about the inspection can be directed to: Todd Morris.

Farm Inspection Report

Conservation Compliance Checklist

Landowner(s): Smits Bros. LLC Inspection Date: 05/31/16

FPP participants continuously claiming tax credits are not required to implement the *italicized* standards until after January 1, 2016.

Cropland &Pasture Standards	In Compliance	Will Achieve Compliance (Season, Year)	Does not Apply
A current nutrient management plan (NM) has been developed and implemented according to NRCS 590 standard which may be submitted to the county conservation office as a NM Plan Checklist form.	☒		☐
• Fields must have initial soil tests conducted by 2016 and follow crop management practices that are planned to comply with the 590 standard across the crop rotation. The NM plan must include current soil tests conducted by DATCP certified lab. Fields in a NM plan must: 1. Be updated when cropping systems change, 2. Include maps identifying NRCS 590 nutrient application restriction areas, 3. Have phosphorus applications planned over the entire rotation, and 4. Show no visible signs of gully erosion.			
• Pastures are exempt from NM plan requirements if the pasture is a feedlot, or when the pasture's average stocking rate is 1 AU/acre or less during grazing season and no nutrients are mechanically applied [ATCP 50.04(3)(b)]. When the pasture's average stocking rate is more than 1 AU/acre over the grazing season, a planner may assume soil test values of 150 ppm P and 6% organic matter content [ATCP 50.04(3)(d) and (de)].			
Cropped fields and *pastures* meet tolerable soil loss "T".	☒		☐
Method used to calculate "T": SnapPlus ☒ RUSLE 2 ☐ WEPS ☐			
• Fields must follow crop management practices that are planned to comply with the 590 standard across the crop rotation. Soil erosion rates should be estimated using the latest prediction models: Soil Nutrient Application Planner, Revised Universal Soil Loss Equation 2 and Wind Erosion Prediction System [ATCP 50.04(2)Note].			
Cropland and pasture areas average a phosphorus index of 6 or less over the accounting period and do not exceed a phosphorus index of 12 in any individual year within the accounting period.	☒		☐
• All cropland and pastures must comply with the Phosphorus Index (PI) standard [NR 151.04] [ATCP 50.04(1)]. A NM plan meeting the standard in ATCP 50.04(3) may be used to demonstrate compliance with DNR's PI standard.			
No tillage conducted within a minimum of 5 feet of surface water.	☒		☐
• Cropland must be managed to include a minimum setback of 5 feet from the top of the channel of surface waters. No tillage can occur and 70% vegetative cover must be maintained in that tillage setback zone to ensure bank integrity. Cost-sharing is not required to implement this practice [ATCP 50.04(4)(a); NR 151.03]. When establishing the setback width, start with 5 feet. If it is determined that 5 feet may not be adequate to maintain bank stability, county land conservation staff should [ATCP 50.04(4)(b)].			
▪ Use best professional judgment to increase setback width based on factors including bank materials, height, slope, cause of bank erosion, and soil type.			
▪ Increase the tillage setback width by smallest increment necessary to maintain bank stability.			
▪ Follow a consistent approach when making setback width determinations by consulting with NRCS or DATCP engineers or technicians.			
▪ Consider enrolling riparian areas in the Conservation Reserve Enhancement Program (CREP) can achieve compliance with the tillage setback standard. [ATCP 50.04(4)(b) Note]			

Livestock Standards	In Compliance	Will Achieve Compliance (Season, Year)	Does Not Apply
How many of the following facilities or structures are located in a Water Quality Management Area (WQMA)? Feedlots: 0 Barnyards: 0 Manure storage: 0 • The clean water diversion from feedlots and unconfined manure pile standards reference a water quality management area (WQMA). A WQMA is 1,000 feet from a lake, pond, or flowage or 300 feet from a stream, or in areas susceptible to groundwater contamination [NR 151.015].			☐
There are no unconfined manure piles in a WQMA.	☐		☒
Runoff is diverted away from all feedlots, manure storage areas, and barnyards within WQMAs.	☐		☒
There is self-sustaining sod or vegetative cover adequate to preserve streambank or lakeshore integrity in areas where livestock have access. • This does not apply to properly designed, installed and maintained livestock or farm equipment crossings.	☐		☒
How many manure storage facilities are located on the entire farm? 1			☐
Facilities have no visible signs of leakage or failure.	☒		☐
Facilities are maintained to prevent overflow.	☒		☐
Each storage facility that has not had manure added or removed from the facility for a period of 24 months has either been closed in a manner that will prevent future contamination of ground or surface water or has been approved by DNR for continued use.	☐		☒
Facilities constructed or substantially altered after 2002 meet the NRCS 313 standard.	☒		☐
There are no significant discharges of process wastewater to waters of the state from feed storage or other sources.	☒		☐
There are no channels or other visible signs of significant discharge from a feedlot or stored manure into waters of the state. • Livestock operators must prevent a "significant" discharge from manure and feed storage, feedlots, and process wastewater. A "significant" discharge is based on factors such as volume, frequency, receiving waters, and slope. DATCP grant funds may be used to provide cost-sharing for a feed storage runoff control system as long as the system meets applicable standards including NRCS technical guide waste treatment standard 629 [ATCP 50.705]. • Livestock operators may consider low cost options for removing "significant" direct feedlot runoff such as: 1. Grazing cattle on nearby fields. 2. Collecting lot manure on a consistent basis and field applying in accordance with a nutrient management plan. 3. Removing channels with roof gutters, clean water diversions, or rock spreader diversions with harvested vegetative runoff filters.	☒		☐

Inspection Report – Medium Size Farm (June 8, 2016)

Inspection Date:	May 31, 2016
Owners:	Smits Bros LLC
Site Addresses:	"Gus' Farm": N4247 Hwy 73, Princeton "Tony's Farm": N4543 Hwy 73, Princeton "George's Farm": N4596 County D, Princeton
DNR Staff:	Erin Hanson, Nonpoint Source Coordinator - NER

On May 31, 2016 Hanson met with Mark Smits, Todd Morris (Green Lake County Department of Land Conservation) and Lisa Schultz (DNR Nonpoint Source Coordinator – SER) to inspect the Smits Bros Heifer operation NOD grant project.

Summary

Smits have established vegetation on all of the former earthen lots and reduced animal numbers at the heifer farm. Green Lake County was awarded a NOD grant in 2015 and project installation was complete at Gus' farm. All animals are fed on concrete, manure scraped to storage, and a vegetated treatment area installed in fall 2015 to address surface runoff from the concrete feed lanes.

Hanson reviewed the conditions of the NOD grant and Addendum 2 which has additional conditions specific to the grant. These include a requirement that all pastures are to be maintained in vegetated condition and animal feeding may only occur in designated areas identified in the facilities O&M plan (to be submitted to the County for review and approval).

Photo 1: Looking east at completed concrete feed lanes in the former Pen 26 at Gus' farm.

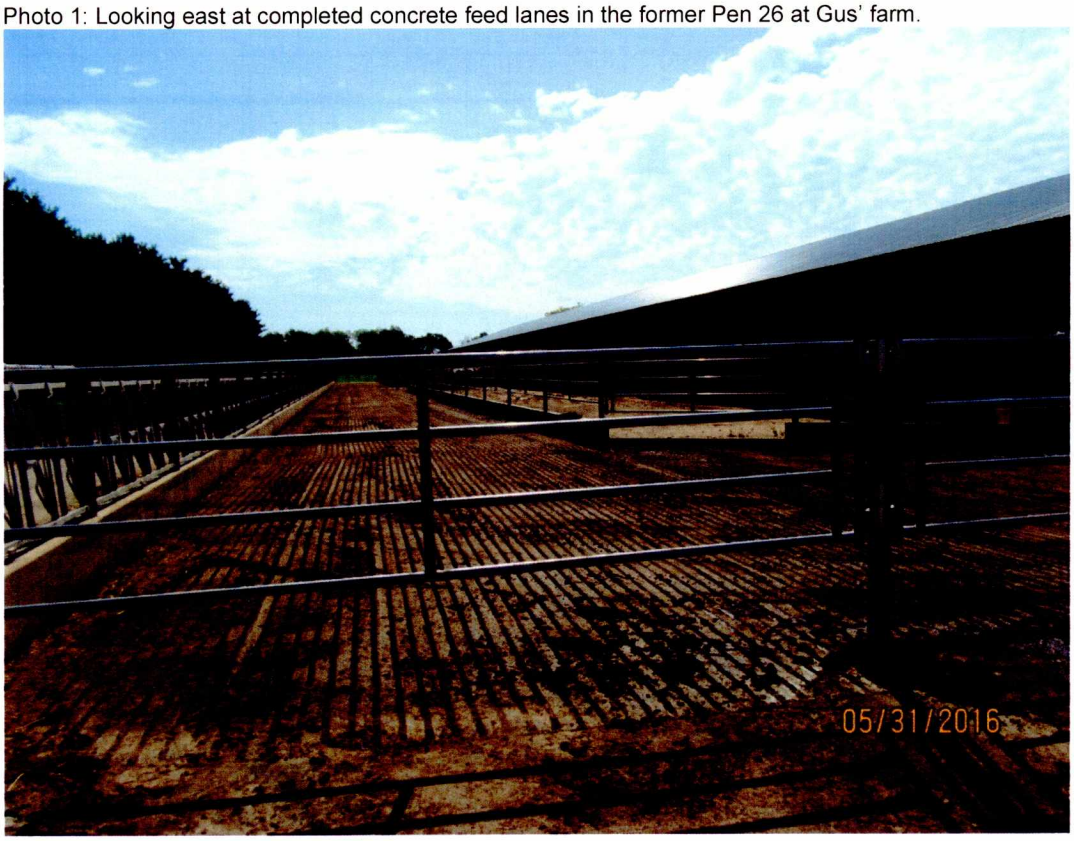


Photo 2: Manure storage and vegetated treatment area on west end of former Pen 26 at Gus' farm. Smits will continue to monitor vegetation growth and ensure the area remains fully vegetated without channelized flow paths. Brief animal use is allowed following the O&M plan provided it is during suitable times and the area remains vegetated.

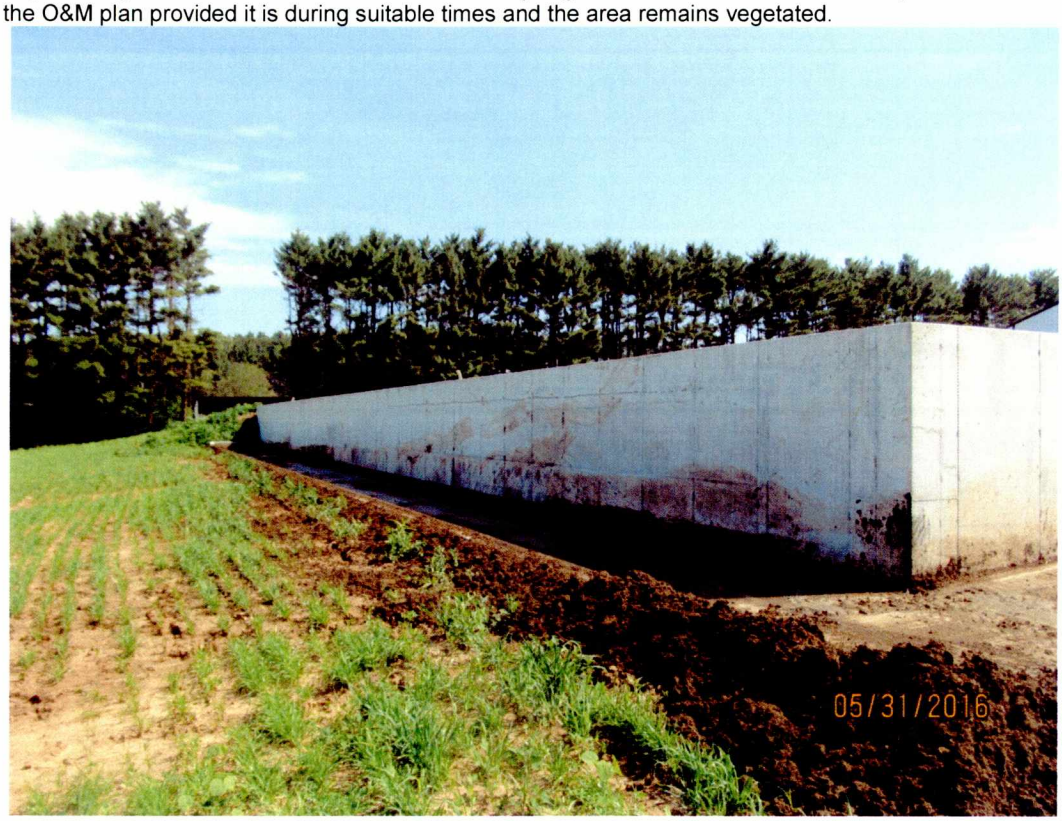


Photo 3: View of one of the lots at Tony's farm. All former earthen lots at George's, Tony's, and Gus's farm were in similar vegetated condition (planted with peas, oats, and grasses).