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 8/15)

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: Small Scale Non Total Maximum Daily Load (TMDL)

Project Name & Location

Project Name		
Jerome, Hwy EE		
Grant Number	**Governmental Unit Name**	
TRC-UF15-11000-14B	Columbia County Land & Water Conservation Dept.	
County	**Watershed Name**	**12-Digit HUC**
Columbia	Lower Grand River	040302010503
Project Contact Name	**Phone Number**	**E-mail Address**
Kurt R. Calkins	(608) 742-9670	kurt.calkins@co.columbia.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
Shawn & Jenifer Jerome	410	Belle Fountain Creek

Township	Range	E / W	Section	Quarter	Quarter/Quarter	Latitude	Longitude
13	10	E	12	SE	NW	43.62339	-89.260994

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
NR 151	☒	◉ 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
Milking Center Waste Control Systems	1	No.	Code(s) 7				
Manure Storage Systems	1	No.	Code(s) 4		150		
Waste Transfer Systems	1	No.	Code(s) 4				
Feed Storage Runoff Control Systems	1	No.	Code(s) 7				
Roof Runoff Systems	1	No.	Code(s) 8	$2,117.30	62		
Critical Area Stabilization	1	Acres	Code(s) 1		47.5		

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
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101 S. Webster Street
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Narrative space will expand to fit

This project is located in the Lower Grand River (UF11) is part of the Upper Fox River Basin. This watershed is ranked High relative to NPS. The Fox River Upper is impacted by Phosphorous. This entire farmstead sits at the base of an intermittent drainage. Cattle feeding areas exist throughout this intermittent drainage area. There was a make shift old sediment basin that was suppose to collect animal lot runoff and milkhouse waste. This basin area was connected to the drainage ditch system that allows discharge to surface water and most likely also ground water, based on soils investigations and during rain events the basin discharges across an animal lot and travels about 400 feet into a drainage ditch that outlets into the creek. Soils directly adjacent to the animal lot have seasonal high water table 1-3 feet of surface. These area impacts have been minimized with roof gutters and a planned diversion for 2016. Also a previously heavily used feeding area has been moved and the area has been reseeded. Manure and processed waste water systems have been installed to properly transfer waste to a new manure storage structure. This will allow proper application of waste to the landscape utilizing the farms NMP. Value of 150 lbs of P reduction from MS assigned to practice thru NMP controls.

☐ 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

This site was very hard to predict P delivery from existing BARNY model one reason is the site is located directly in the flow path of a 40 Acre intermittent drainage path which ends at the barnyard, then the drainage fans out across a pasture for 400' and re channelized into a drainage ditch. The model appears not to be designed to assess this type of pre and post comparison. We saw ranges of 400lbs of P down to 200lbs annual to less. The implementation of these practices, has resulted in what most likely was a tremendous large reduction in P delivery by containing manure runoff, getting cattle out of drainage area and seeding down the bare soil but true estimates were hard to quantify.

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
Kurt Calkins	Director of Land & Water Conservation	02/29/2016

For DNR Use Only

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

Comments about this project:

Name of Region Nonpoint Source Coordinator	Date
Mike Gilbertson	03/09/2016

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.

Shawn & Jennifer Jerome
Project Map

Jerome Hwy EE grant # TRC-UF15-11000-14B
Photo Documentation

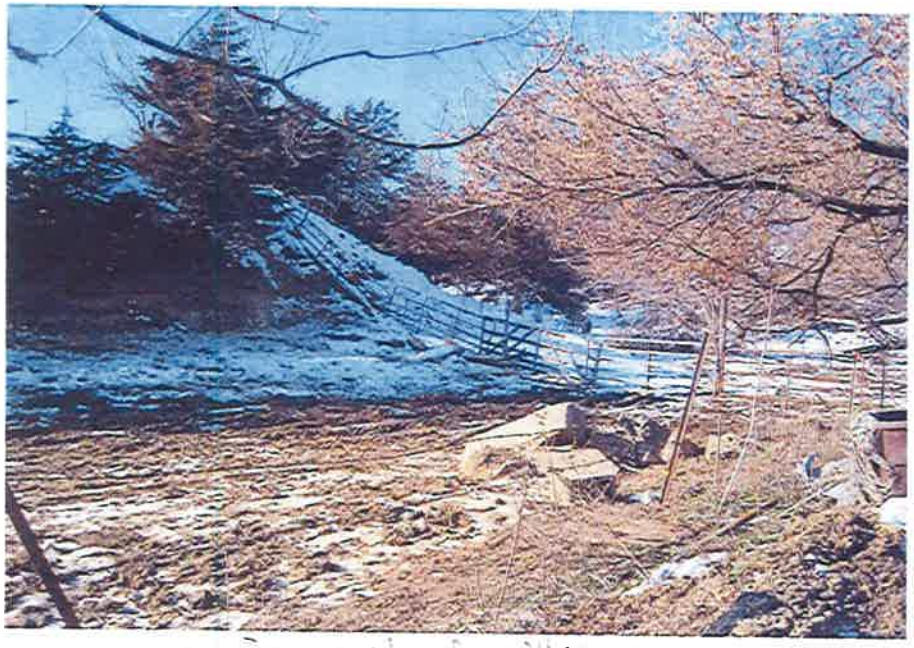
New manure storage


New manure storage


Roof gutters


Feed leachate waste transfer tank, pump

"milk house waste ditch"



Ravine north of milk house

East Pasture

North side of milk house

West End of milk house

BUFFER DESIGN USING BARNY

OWNER: Jerome | DESIGNER: TAR | DATE: 1/0/1900
CHK BY: | DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:	2,100		sq ft
Earth lot area:			sq ft
Animal Lot size:		2,100	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2

Animals on lot:	20	number	number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	600	lbs	lbs
Lot Use:	1		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:		sq ft	sq ft
Runoff Curve Number:			
Roof area:	2,100	sq ft	

Calf Barn Lot Before Roof Gutters

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	ft (See Note Below)
	Slope:	
	"c" :	→
Second Buffer	Length:	ft
	Slope:	
	"c" :	

P (lbs) after the buffers: 31.2 lbs P per year

NO GOOD - Too much P released

"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

BUFFER SIZING

		3,150 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width	feet		
		0 feet	Min. Bfr. Len. Based on BARNY
		#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length	feet	#DIV/0!	

BUFFER DESIGN USING BARNY

OWNER: Jerome DESIGNER: TAR DATE: 1/0/1900

CHK BY: DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:	2,100		sq ft
Earth lot area:			sq ft
Animal Lot size:		2,100	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2
Animals on lot:	20 number		number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	600 lbs		lbs
Lot Use:	1		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:	sq ft	sq ft
Runoff Curve Number:		
Roof area:	0 sq ft	

Calf Barn Lot After Roof buffers

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	ft (See Note Below)
	Slope:	
	"c" :	→
Second Buffer	Length:	ft
	Slope:	
	"c" :	

P (lbs) after the buffers: 12.2 lbs P per year

NO GOOD - Too much P released

"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

BUFFER SIZING

	3,150 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width	feet	
	0 feet	Min. Bfr. Len. Based on BARNY
	#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length	feet	#DIV/0!

BUFFER DESIGN USING BARNY

OWNER: Jerome | DESIGNER: TAR | DATE: 1/0/1900
CHK BY: | DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:	9,000		sq ft
Earth lot area:			sq ft
Animal Lot size:		9,000	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2

Animals on lot:	50	number	number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	1,200	lbs	lbs
Lot Use:	2		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:		sq ft	sq ft
Runoff Curve Number:			Barn Holding Area lot Before
Roof area:	5,600	sq ft	

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:		ft (See Note Below)
	Slope:		
	"c" :		→
Second Buffer	Length:		ft
	Slope:		
	"c" :		

P (lbs) after the buffers: 87.6 lbs P per year

NO GOOD - Too much P released

"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

BUFFER SIZING

		13,500 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width		feet	
		0 feet	Min. Bfr. Len. Based on BARNY
		#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length		feet	#DIV/0!

BUFFER DESIGN USING BARNY

OWNER: Jerome | DESIGNER: TAR | DATE: 1/0/1900
CHK BY: | DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:	9,000		sq ft
Earth lot area:			sq ft
Animal Lot size:		9,000	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2

Animals on lot:	50	number	number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	1,200	lbs	lbs
Lot Use:	2		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:	sq ft	sq ft
Runoff Curve Number:		
Roof area:	0 sq ft	

Basin Holding Area Lot After

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	ft (See Note Below)
	Slope:	
	"c" :	→
Second Buffer	Length:	ft
	Slope:	
	"c" :	

P (lbs) after the buffers: 44.5 lbs P per year

NO GOOD - Too much P released

"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

BUFFER SIZING

		13,500 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width		feet	
		0 feet	Min. Bfr. Len. Based on BARNY
		#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length		feet	#DIV/0!

BUFFER DESIGN USING BARNY

OWNER: Jerome DESIGNER: TAR DATE: 1/0/1900

CHK BY: DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:			sq ft
Earth lot area:	16,000		sq ft
Animal Lot size:		16,000	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2
Animals on lot:	50	number	number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	1,200	lbs	lbs
Lot Use:	1		1= Heavy; 2= Medium; 3= Light)

TRIBUTARY AREAS

Tributary area:	sq ft	sq ft
Runoff Curve Number:		
Roof area:	0	sq ft

Heifer – Youngstock Feeding Area
Dry Cow
Before

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	ft (See Note Below)
	Slope:	
	"c" :	→
Second Buffer	Length:	ft
	Slope:	
	"c" :	

P (lbs) after the buffers: 47.5 lbs P per year

NO GOOD - Too much P released

"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

BUFFER SIZING

		16,000 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width	feet		
		0 feet	Min. Bfr. Len. Based on BARNY
		#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length	feet	#DIV/0!	

BUFFER DESIGN USING BARNY

OWNER: Jerome DESIGNER: TAR DATE: 1/0/1900

CHK BY: DATE:

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	1		3 Wausau
			4 Eau Claire
Paved lot area:			sq ft
Earth lot area:	16,000		sq ft
Animal Lot size:		16,000	sq ft
Is there a DESIGNED settling basin	2		Yes= 1; No= 2
Animals on lot:	0 number		number
Type of animal:	1		(Dairy = 1; Beef=2)
Ave. Animal Weight:	1,200 lbs		lbs
Lot Use:	1		1= Heavy; 2= Medium; 3= Light)

Dry Cow Heifer
Relocation of youngstock feeding Area

TRIBUTARY AREAS

Tributary area:	sq ft	sq ft
Runoff Curve Number:		
Roof area:	0 sq ft	

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

Maximum permissible P Output that can be released: lbs

Your choice based on impacted resources- Max is 15

BUFFERS - Size by trial and error

First Buffer	Length:	ft (See Note Below)	→
	Slope:		
	"c" :		
Second Buffer	Length:	ft	
	Slope:		
	"c" :		

"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

P (lbs) after the buffers: 0.0 lbs P per year

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

BUFFER SIZING

		16,000 sq ft	Min. Acceptable Buffer Area
Chosen Buffer Width	feet		
		0 feet	Min. Bfr. Len. Based on BARNY
		#DIV/0! feet	Min. Bfr. Len. Based on Area
Chosen Buffer Length	feet	#DIV/0!	

COLUMBIA COUNTY

Land & Water Conservation

608-742-9670
FAX: 608-742-9840
E-MAIL: land.conservation@co.columbia.wi.us
WEBSITE: www.co.columbia.wi.us

120 West Conant Street
P.O. Box 485
Portage, WI 53901

January 20, 2016

Shawn & Jennifer Jerome
N9451 County Rd EE
Dalton, WI 53926

RE: Satisfaction of NR151 Water Quality Performance Standard Issue's

Shawn & Jenny,

This letter is to inform you that your livestock operation has satisfied the notices of violations regarding the State of Wisconsin NR 151 Water Quality Performance Standards. Through your cooperation we were able to use Targeted Runoff Management funding to address issues related to **NR 151.05** (*Manure Storage Structure Performance Standards*), NR **151.055** (*Process Wastewater Handling Performance Standard*), **NR151.06** (*Clean Water Diversion Performance Standard*), **NR 151.07** (*Requirement to develop and land apply nutrients in accordance with a 590 Nutrient Management plan*), and **NR 151.08** (*Manure Management Prohibitions*). You are required to keep your facility in compliance with these provisions.

Should any questions come up or you see some challenges of management changes on the horizon, I urge you to contact our office as soon as possible so we can work with you to maintain compliance.

Thank you for your cooperation and financial input into this project. These projects are successful because of the collaboration between existing financial programs to assist farmers with these projects and commitment from landowners like you.

If you have questions feel free to contact me at 608-742-9675.

Sincerely,

Todd Rietmann

Todd Rietmann, Conservation Specialist
Columbia County Land & Water Conservation Dept.

COLUMBIA COUNTY

Land & Water Conservation

608-742-9670
FAX: 608-742-9840
E-MAIL: land.conservation@co.columbia.wi.us
WEBSITE: www.co.columbia.wi.us

120 West Conant Street
P.O. Box 485
Portage, WI 53901

January 20, 2016

Shawn & Jennifer Jerome
N9451 County Rd EE
Dalton, WI 53926

SUBJECT: Cost Sharing per (TRM) Targeted Runoff Management Grant

Shawn & Jenny,

Enclosed is the cost share reimbursement for the Waste Storage Management Systems, Roof Runoff Management Systems, and Milkhouse/Feed leachate Systems that you just completed. Total eligible TRM construction bills submitted was $476,578.63 so the enclosed cost share reimbursement is for $150,000.00 which is the maximum the grant allows.

You are required to follow all the operation and maintenance plans per each conservation practices installed. Per Columbia Animal Waste Management Ordinance you are required to maintain all safety features for your manure storage structure and also submit your nutrient management checklist yearly for your operation. Submittal of this checklist also allows you to maintain your eligibility for the Farmland Preservation Program.

If you have any more conservation needs for other conservation practices or questions, please call me at (608) 742-9670.

Thanks

Todd Rietmann

Todd Rietmann, Conservation Specialist
Columbia County Land & Water Conservation Dept.