

Final Report

Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Form 3400-189A (R 05/16)

Page 1 of 2

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

West Jacksonport Source Water Protection Project

Grant Number

TRC-TK06-15000-14

Governmental Unit Name

Door County Soil and Water Conservation Department

County

Door

Watershed Name

Upper Door County

12-Digit HUC

040301020106

Project Contact Name

Dale Konkol

Phone Number

(920) 746-2362

E-mail Address

dkonkol@co.door.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

B&B Dairy Farms Inc - William Bley

Animal Units

247

Nearest Receiving Waterbody

Hibbards Creek

Township

29

Range

27

E / W

E

Section

16

Quarter

SW

Quarter/Quarter

NW

Latitude

44.98674

Longitude

-87.23056

Compliance Requirements - 1

Chs. NR 151 or 243 Wis. Adm. Code
Notice Type

NR 151

Notice letter
attached

☒

Compliance achieved? If no,
explain in site information

☒ Yes ☐ No

Compliance determination
letter attached

☒

☒ 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) 4,11,12	\$101,770.27	217.9	968.3	
Barnyard Runoff Control Systems	1	No.	Code(s) 12	\$67,790.73	138		
			Code(s)				

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

Narrative space will expand to fit

The BMPs installed as part of this project were selected to address items that were not compliant with Agricultural Performance Standards and Manure Management Prohibitions and also take advantage of existing facilities.

Final Report

The existing facilities consisted of a Roofed Manure Storage and a Filter Strip that were insufficient to accommodate barnyard runoff and process wastewater from the milkhouse. Fence line feeding on the barnyard and lack of manure storage overtaxed the filter strip and runoff control system. Effluent from these facilities discharged to waters of the state via channelized flow into wetland areas feeding Hibbards Creek. The existing facilities also did not provide suitable protection of groundwater resources in a highly sensitive area, and they also did not allow for efficient management of the feeding and manure handling for this operation. Insufficient storage capacity lead to stacking of manure on site and the need for winter application of manure in many areas was not suitable for this practice, as they are situated in highly sensitive groundwater recharge areas within the Hibbards Creek and Logan Creek basins as well as in close proximity to numerous private and public drinking water supplies.

Funding from this grant was applied to the structural Manure Storage and Barnyard BMPs. Roofs were added to shed water and avoid additional storage and a change in manure consistency, these were paid for by the landowner. Additionally, a Milkhouse Wastewater Infiltration system was installed and was cost-shared with a Soil and Water Resource Management Grant through the Wisconsin Department of Agriculture, Trade and Consumer Protection.

All Agricultural Performance Standards and Manure Management Prohibitions have been addressed and proper notification has been made to ensure that the landowner understands future management changes will have to be addressed without cost-share assistance to ensure continued compliance.

☒ 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

While this project has resulted in a significant reduction in the amount of phosphorus discharged from the barnyard facilities, a portion of the barnyard still outlets to the repaired vegetative filter strip; consequently, the model still shows a nominal value for phosphorus output. The portion of the barnyard that outlets to the filter is not used for feedlot or manure stacking purposes. This area is used for animal traffic only, a connection between the roofed feedlot and housing and the pasture area. Manure deposited in this area is scraped and placed in the long-term manure storage.

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
Erin Hanson	County Conservationist	01/11/2018

For DNR Use Only

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

Comments about this project:
None

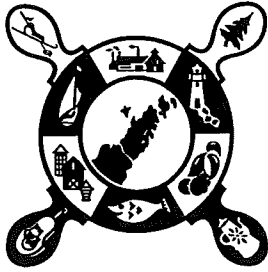
Name of Region Nonpoint Source Coordinator	Date
Erin Carviou	01/16/2018

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.

West Jacksonport Source Water Protection Project Final Report

Attachments:

- Notification Letter
 - January 22, 2015 Notice of Noncompliance with Offer of Cost-Share
 - January 2, 2018 Notice of Achieved Compliance
- Orthogonal Photo with Installed BMPs Identified
- Model Results
 - Project Watershed Map Used in STEPL Calculations
 - STEPL Results
 - Pre Project BARNY Results
 - Post Project BARNY Results
- Photos of Pre and Post Implementation of BMPs



County of Door
SOIL & WATER CONSERVATION DEPT

County Government Center
421 Nebraska Street
Sturgeon Bay, WI 54235

Phone: (920) 746-2214

Fax: (920) 746-2369

swcd@co.door.wi.us

January 22, 2015

William Bley
B&B Dairy Farms, Inc.
3520 County Hwy V
Egg Harbor, WI 54209

Certified Mail Receipt: 7012 3460 0002 1856 4953

Mr. Bley:

This letter is to inform you that an inventory has been performed on March 19, 2013, of property that you own or operate to make a determination of compliance with Agricultural Performance Standards and Manure Management Prohibitions. Compliance with these standards is a requirement for agricultural land and activities in Door County per Door County Chapter 23, *Agricultural Performance Standards and Animal Waste Storage Ordinance*.

An inventory of compliance for the following activities has been conducted on the following property:

- ☒ Cropped Lands
- ☒ Livestock Operation

- ☒ Manure Handling, Storage and Application
- ☒ Applications of Manure, Commercial
Fertilizers and other Nutrients to Agricultural Lands

Property Location (Parcel #):	0160016292732A	0160016292733A1	0160016292731
	0160016292723C		

The following Agricultural Standards and/or Prohibitions were inventoried on the above property:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Sheet, Rill and Wind Erosion | <input checked="" type="checkbox"/> Clean Water Diversions in a WQMA* |
| <input checked="" type="checkbox"/> Tillage Setbacks | <input checked="" type="checkbox"/> Nutrient Management |
| <input checked="" type="checkbox"/> Phosphorus Index | <input checked="" type="checkbox"/> No overflow of Manure Storage Facilities |
| <input checked="" type="checkbox"/> Manure Storage Facilities (New Construction) | <input checked="" type="checkbox"/> No unconfined Manure Pile in WQMA* |
| <input checked="" type="checkbox"/> Manure Storage (Significant Alteration) | <input checked="" type="checkbox"/> No direct runoff from Feedlot or Stored
Manure into Waters of the State |
| <input checked="" type="checkbox"/> Manure Storage (Abandoned Facilities) | <input checked="" type="checkbox"/> No unlimited access of Livestock to
Waters of the State |
| <input checked="" type="checkbox"/> Manure Storage (Existing Facilities) | |
| <input checked="" type="checkbox"/> Process Wastewater Handling | |

* Water Quality Management Area

The above listed property has been determined to be compliant with the requirements of the following agricultural performance standards and/or manure management prohibitions:

- Sheet, Rill and Wind Erosion
- Phosphorus Index
- Nutrient Management
- Manure Storage (Significant Alterations)
- Manure Storage (Abandoned Facilities)
- Manure Storage (Existing Facilities)
- Clean Water Diversions in a WQMA
- No overflow of manure storage facilities
- No unconfined Manure Pile in WQMA
- No unlimited access of livestock to waters of the state

If any cropland or livestock operation is meeting a cropland or livestock performance standard or prohibition on or after October 1, 2002, the performance standard or prohibition shall continue to be met by the existing owner or operator, heirs or subsequent owners or operators. If an owner or operator alters or changes management in a manner that results in noncompliance, the owner or operator shall return the cropland or livestock facility to compliance regardless of the availability of cost-sharing. Items determined to be compliant in this notification that fall out of compliance will be subject to enforcement without the requirement of an offer of cost-sharing.

The above listed property has been determined to be non-compliant with the requirements of the following agricultural performance standards and/or manure management prohibitions:

- Tillage Setbacks
- Manure Storage Facilities (New Construction)
- Process Wastewater Handling
- No direct runoff from feedlot or stored manure into waters of the state

It has been determined that the above listed activities on this property are:

☐ New ☒ Existing

It has been determined that installation of the following Best Management Practices and/or corrective measures will be necessary to achieve compliance with the above listed agricultural standards and/or prohibitions and address water quality needs at the above listed property:

- Tillage Setbacks
 - No tillage operation that negatively impacts stream bank integrity or deposits soil directly in surface water
 - Tillage setback distance greater than 5 feet but no more than 20 feet
 - Maintain the area within that tillage setback in adequate sod or self-sustaining vegetative cover that provides 70% coverage
- Installation of a Barnyard Runoff Control System
- Installation of Manure Storage
- Installation of Milkhouse Waste Collection System
- Installation of Bunker Leachate Collection System

The Door County Soil and Water Conservation Department is available to provide or coordinate technical assistance for the planning, design and installation of all best management practices necessary to achieve compliance with the agricultural performance standards and prohibitions. If you choose to address these issues on your own, consultation with the SWCD will be necessary to ensure compliance with agricultural performance standards and prohibitions.

Cost-sharing is available for eligible costs and is being offered to you to achieve compliance with the agricultural performance standards and prohibitions and address water quality issues at your operation.

The total estimated cost to install the minimum, required components associated with the above listed structural best management practices is \$235,725.00. Total cost-sharing for all eligible costs associated with installation of necessary best management practices to achieve compliance is \$162,007.50.

As paraphrased from Section 1.34 (3) (b) (1) of Chapter 23 of the Door County Code: **An owner or operator that receives a notice shall install or implement best management practices and corrective measures to meet a performance standard or prohibition in the time period specified in the notice if cost-sharing is available.**

Accordingly, installation of the corrective measures that address the manure management issues on your farm that will address the above-listed items and achieve compliance shall be accomplished no later than **December 31, 2015**. However, keep in mind the deadline of December 31, 2015 is a deadline to completely correct everything; to meet this deadline the planning and commencement of the construction work must begin well before December.

To accept this offer of cost-sharing for structural practices, the owner must sign the proposed cost-share agreement by September 9, 2015. Failure to accept and sign the offered cost-share agreement will result in a loss of this offer of cost-sharing and you will still need to address noncompliance with the standards and prohibitions.

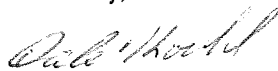
It will be your responsibility to work with the SWCD to develop practices that will enable your operation to meet the minimum state agricultural performance standards and manure management prohibitions. Your input and cooperation will be vital to produce a design that meets the required standards and also fits your management and needs for your operation.

Noncompliance after the established compliance period will result in enforcement. If, after the above mentioned compliance period has elapsed, you do not attain compliance on your agricultural operation with items determined to be noncompliant, Door County may: issue a citation pursuant to and in accordance with Section 66.0113 Wisconsin Statutes and Chapter 35 Door County Code; issue a cease and desist order for all operations on the above listed property that are out of compliance; institute other proceedings in court including a civil forfeiture or injunction. Non-compliance after the above mentioned period will also result in the loss of offered cost-sharing.

An appeal may be filed for a final compliance determination made in writing by the Soil & Water Conservation Department. Please see the attached Appeals Procedure for more information.

If you have questions regarding this letter or wish to review copies of the statutes or ordinance mentioned in this letter please contact the Door County Soil and Water Conservation Department at (920) 746-2214.

Sincerely,



Dale Konkol
Conservationist

Enc. CERTIFIED MAIL
CC. Frank Bley

Appeals Procedure

The final compliance determination or best management practices required to attain compliance stated in this letter can be appealed by the person aggrieved by the decision or a person aggrieved by the decision if such adversely impacts the substantial interests of that person by the following procedure.

1. Payment of \$300 for filing a Notice of Appeal.
2. Filing a Notice of Appeal with the Board of Adjustment (BOA), with a copy to the Soil and Water Conservation Department (SWCD).
3. Notice must identify appellant, specify the decision sought to be reviewed, and designate the factual and legal bases for the appeal.
4. Fee must be paid and Notice of Appeal filed within thirty (30) days from issuance of this letter, or an appeal is barred.

The appeal, ordinarily, stays all proceedings in furtherance of the decision appealed from. The appeal does not stay all proceedings if, after the appeal is filed, SWCD certifies to the BOA that a stay would pose an imminent threat to the environment, public health or public safety.

The burden of proof rests with the appellant. The appellant must submit evidence sufficient to support granting the appeal.

BOA shall fix the time for and location of hearing an appeal. The hearing shall commence within forty-five (45) days of the fee being paid and Notice of Appeal being filed.

The following process shall occur at the appeal hearing.

1. Opening Remarks by Appellant and then by SWCD. These opening remarks are intended to acquaint the BOA with the case and set out, in a general way, each side's case.
2. Appellant presents real and testimonial evidence first.
3. SWCD presents real and testimonial evidence second.
4. Appellant may offer rebuttal real and testimonial evidence.
5. Closing remarks by appellant and then by SWCD. These closing remarks are intended to be a brief summation of each side's position on the contested issues and the reasons each is entitled to prevail.
6. Appellant and SWCD may cross-examine witnesses of the other side.
7. BOA may swear witnesses.
8. BOA will mark and preserve exhibits.
9. BOA may cause the proceedings to be taken by a stenographer or by a recording device. The expense thereof to be paid by the parties to the proceeding. Any record of hearing will be retained by BOA.
10. The rules of evidence should be adhered to, but do not strictly apply.
11. The hearing shall be informal in nature.

The final determination/judicial review will occur by the following process. The BOA may affirm or reverse in whole or part or it may modify the decision on review. Within forty-five (45) days of completion of the hearing BOA shall mail or deliver to each side its written determination stating the reasons therefore. This determination shall be a final determination. Any party to the proceeding may seek judicial review thereof pursuant to and in accordance with Section 68.13 Wisconsin Statutes.

If the Appellant prevails and at the BOA's sole discretion, the filing fee may be refunded in whole or part. Otherwise, each party must pay its own costs and fees.

County of Door
SOIL & WATER CONSERVATION DEPT

County Government Center
421 Nebraska Street
Sturgeon Bay, WI 54235

Phone: (920) 746-2214

Fax: (920) 746-2369

swcd@co.door.wi.us

January 2, 2018

William Bley
B and B Dairy Inc.
3520 County V
Egg Harbor, WI 54209

Mr. Bley,

This letter is being sent as a follow up to the Agricultural Performance Standards and Animal Waste Storage Ordinance notification letter sent to you on November 19, 2013 and changes in management that you have made to your operation.

Property Location (Parcel #): 0160016292732A
0160016292733A1

With the recent construction of long-term manure storage, barnyard runoff control system, milkhouse waste infiltration system, continued proper management of your feedlot and manure handling and continued successful implementation of an approved nutrient management plan; you will meet all of the requirements of the statewide agricultural performance standards and manure management prohibitions. **You are currently in compliance with all items associated with Chapter 23 of the Door County Code. There is nothing that you are required to do at this time.**

If in the future you intend to install a feed pad, it must be installed with appropriate runoff controls to protect ground and surface water. This is a requirement to stay in compliance with Agricultural Performance Standards and Animal Waste Storage Ordinance. Compliance must be maintained without future cost sharing.

Thank you for your cooperation and please remember, once compliance with a cropland performance standard and/or livestock performance standard or prohibition is attained, compliance shall be maintained by the existing landowner or operator and heirs or subsequent owners. If, after the date of this letter, you fall out of compliance with any of the statewide agricultural performance standards and/or manure management prohibitions that have previously been determined to be compliant, Door County may: issue a citation pursuant to and in accordance with Section 66.0113 Wisconsin Statutes and Chapter 35 Door County Code; issue a cease and desist order for all operations on the above listed property that are out of compliance; institute other proceedings in court including a civil forfeiture or injunction. Items determined to be compliant in this notification that fall out of compliance will be subject to enforcement without the requirement of an offer of cost-sharing.

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Sincerely,

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Erin Hanson

Erin Hanson
County Conservationist

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If the Appellant prevails, at the BOA's sole discretion, the filing fee may be refunded in whole, or in part. Otherwise, each party must pay its own costs and fees.

West Jacksonport Source Waster Protection Project

150

Feet



Milkhouse Waste
Infiltration System

Vegetated Treatment Strip
Reestablished

Pasture Removed
from Flow Channel

Pasture
Reestablished

Roofed Manure Storage/
Barnyard/Feed Lot

Animals Removed
from Manure Storage



West Jacksonport Source Waster Protection Project

500

Feet



 Project Watershed

 Project Location

Total Load This is the summary of annual nutrient and sediment load for each subwatershed. This sheet is initially protected.

1. Total load by subwatershed(s)

Watershed	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)	N Reduction	P Reduction	BOD Reduction	Sediment Reduction	N Load (with BMP)	P Load (with BMP)	BOD (with BMP)	Sediment Load (with BMP)	%N Reduction	%P Reduction	%BOD Reduction	%Sed Reduction
	lb/year	lb/year	lb/year	t/year	lb/year	lb/year	lb/year	t/year	lb/year	lb/year	lb/year	t/year	%	%	%	%
W1	3610.6	762.7	5270.6	107.5	968.3	217.9	0.0	0.0	2642.3	544.8	5270.6	107.5	26.8	28.6	0.0	0.0
Total	3610.6	762.7	5270.6	107.5	968.3	217.9	0.0	0.0	2642.3	544.8	5270.6	107.5	26.8	28.6	0.0	0.0

2. Total load by land uses (with BMP)

Sources	N Load (lb/yr)	P Load (lb/yr)	BOD Load (lb/yr)	Sediment Load (t/yr)
Urban	47.42	7.51	166.47	1.15
Cropland	1821.14	475.23	3010.24	100.23
Pastureland	144.51	16.37	447.35	5.57
Forest	7.12	3.37	16.99	0.51
Feedlots	242.08	24.21	1613.89	0.00
User Defined	0.00	0.00	0.00	0.00
Septic	3.84	1.50	15.67	0.00
Gully	0.00	0.00	0.00	0.00
Streambank	0.00	0.00	0.00	0.00
Groundwater	376.20	16.65	0.00	0.00
Total	2642.30	544.83	5270.61	107.46

PRE PROJECT PHOSPHORUS OUTPUT (Based on BARNY)

Farmer: B. Bley

Planner/Designer: Konkol

Date: 1/10/18

	Input	Output	
Closest City of similar climate:	<input type="text" value="2"/>		1 Madison 2 Appleton 3 Wausau 4 Eau Claire
Paved lot area:	<input type="text" value="13,430"/>		sq ft
Earth lot area:			sq ft
Animal Lot size:		13,430	sq ft
Is there a designed settling basin?	<input type="text" value="2"/>		Yes= 1; No= 2
Animals on lot:	<input type="text" value="145"/>	<input type="text"/>	number number
Type of animal:	<input type="text" value="1"/>		(Dairy = 1; Beef=2)
Ave. Animal Weight:	<input type="text" value="1,400"/>		lbs lbs
Lot Use:	<input type="text" value="1"/>		1= Heavy; 2=Med; 3= Light

TRIBUTARY AREAS

Tributary area: sq ft

Runoff Curve Number:

Roof Trib. area: sq ft

sq ft

See RCN tab below
for typical values

146.4 lbs P per year
at downstream lot edge

Enter Existing Buffer Data:

Length: ft

Width: ft

Buffer area:

Slope: %

c value For c values see table below

P Output:

lb

POST PROJECT PHOSPHORUS OUTPUT (Based on BARNY)

Farmer: **B. Bley**

Planner/Designer: **Konkol**

Date: 1/10/18

	Input	Output	
Closest City of similar climate:	<input type="text" value="2"/>		1 Madison 2 Appleton 3 Wausau 4 Eau Claire
Paved lot area:	<input type="text" value="8,830"/>		sq ft
Earth lot area:	<input type="text"/>		sq ft
Animal Lot size:		8,830	sq ft
Is there a designed settling basin?	<input type="text" value="1"/>		Yes= 1; No= 2
Animals on lot:	<input type="text" value="145"/>	<input type="text"/>	number number
Type of animal:	<input type="text" value="1"/>		(Dairy = 1; Beef=2)
Ave. Animal Weight:	<input type="text" value="1,400"/>	<input type="text"/>	lbs lbs
Lot Use:	<input type="text" value="3"/>		1= Heavy; 2=Med; 3= Light

TRIBUTARY AREAS

Tributary area: sq ft

Runoff Curve Number:

sq ft



See RCN tab below
for typical values

Roof Trib. area: sq ft

16.5 lbs P per year
at downstream lot edge

Enter Existing Buffer Data:

Length: ft

Width: ft

Buffer area:

Slope: %

c value For c values see table below

P Output:

8.4 lb



Feedlot with no Runoff Collection



Earth Feedlot with no Runoff Control – Discharge to Channelized Flow













