

## 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

Dax Manure Storage Systems

Grant Number

TRC-TK03-31000-13C

Governmental Unit Name

Kewaunee County

County

Kewaunee

Watershed Name

Kewaunee River

12-Digit HUC

040301020301

Project Contact Name

Davina Bonness

Phone Number

(920) 845-9743

E-mail Address

bonnessd@kewauneeco.org

☐ 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

Larry & Carolyn Dax

Animal Units

80

Nearest Receiving Waterbody

School Creek

Township

24

Range

23

E / W

E

Section

18

Quarter

SE

Quarter/Quarter

SW

Latitude

44

Longitude

-87

### Compliance Requirements - 1

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

NOI / NOD

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	Phosphorus lbs/yr	Nitrogen lbs/yr	Sediment Tons/yr
Manure Storage Systems	1	No.	Code(s) 4,9	\$50,027.87	51.4		0

### 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*

Larry Dax sold his milk cows and went to 27 beef cows in 2015. However, there was still a resource concern on the property with runoff, so a manure storage was built (62' x 78' x 4' walls) for the current beef animals. Construction on the manure storage started on 10/25/16 and finished in early November. The waterway which was degraded due to animal access was fenced off and seeded down. Manure will be stored over the winter months and no longer stacked in the back of the fields or spread on fields. And manure from animals will no longer drain into the adjacent waterway.

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

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### Additional Project Information and/or Comments

*Narrative space will expand to fit*

For 3 fields: 1-0 = 1 lbs P/acre x 39.5 acres = 39.5 lbs P reduced

For 1 field: 3-2 = 1 lbs P/acre x 6.9 acres = 6.9 lbs P reduced

For 1 field: 4-3 = 1 lbs P/acre x 5 acres = 5 lbs P reduced

39.5+6.9+5 = 51.4 lbs total P reduced

### 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
Davina Bonness	County Conservationist	12/05/2016

### For DNR Use Only

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

Comments about this project:

Before photos in NOD file. NOD satisfaction letter issued 01/09/17.

Lat: 44.54614

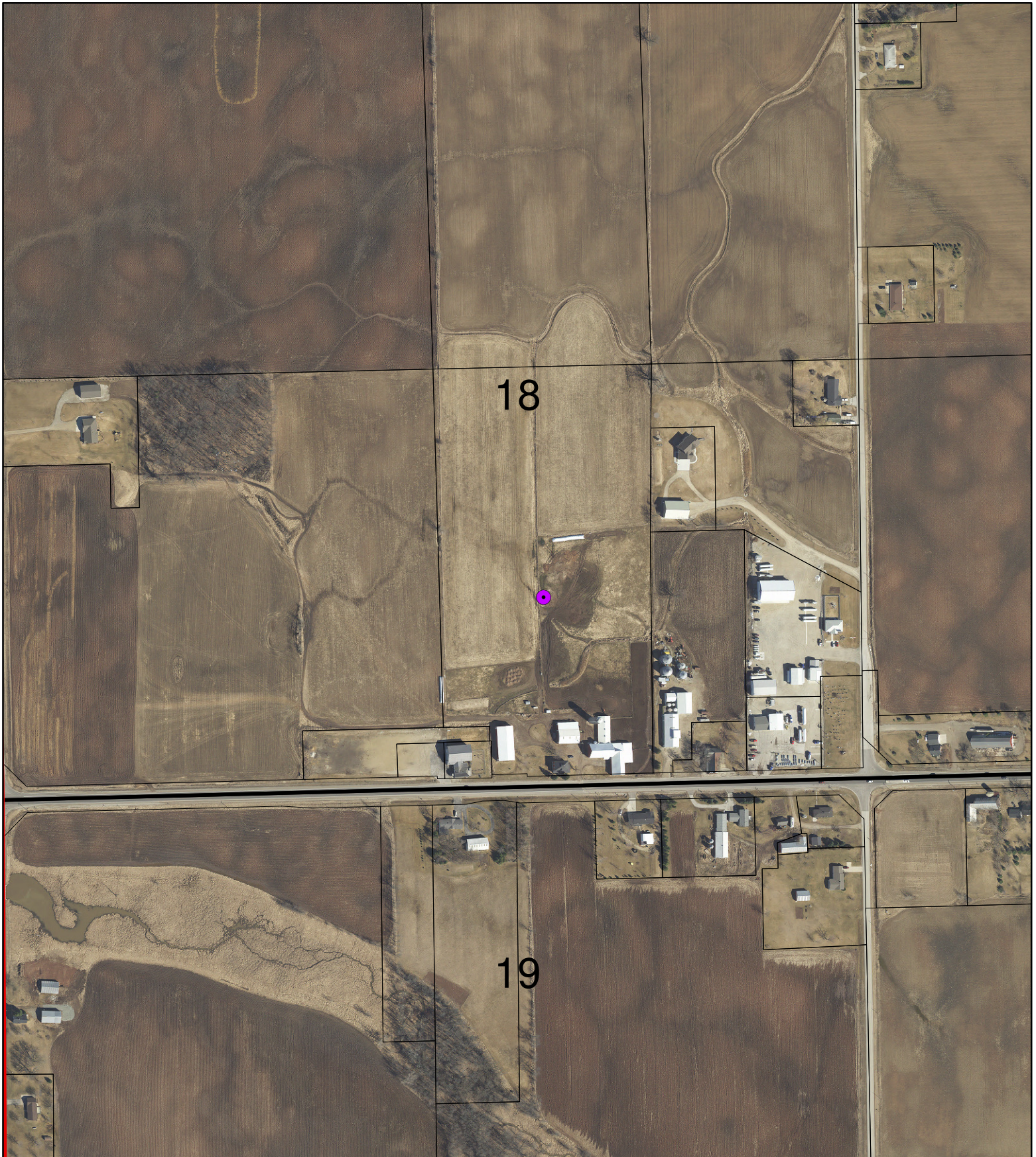
Long: -87.75707

Name of Region Nonpoint Source Coordinator	Date
Erin Hanson	01/11/2017

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.



# Dax Air Photo











## SnapPlus Field Data and 590 Assessment Plan

Reported For	Dax, Larry
Printed	2017-01-03
Plan Completion/Update Date	2001-01-01
SnapPlus Version 14.1 built on 2015-01-27	
C:\Users\hansoef\Documents\aaNonpoint-Ag\002 TRM Grants\Final Reports - Reimbursement Requests\Kewaunee\Dax\Dax without Storage.snapDb	

Prepared for:  
Dax, Larry  
attn:Dax, Larry

### Field Data: 64 Total Acres Reported.

Field Name	F. Grp	FSA Trct	FSA Fld	Ac.	County	Soil Series & Map Symbol (Critical)	F. Slp %	F.Slp Len ft	Below Field Slope To Water %	Dist.To Water ft	N/Fld Res	Contour/ Filters	Irrig	Tiled	Rotation	Tillage	Report Period	Field "T" t/ac	Rot Avg Soil Loss t/ac	SCI	Rot Avg Pl	Soil Test P ppm	Rot P2O5 Bal lb/ac	P2O5 Bal Target lb/ac
2				10.5	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	OgAs-OgAs-A	FP-FP-None	2014-2016	3	0.2	1.6	1	13	-99	-
8				8.5	Kewaunee	KEWAU NEE (KpC2)	9	150	0 - 2	0 - 300	S %	No / No	No	No	Cg-Csl-OgAs	FP-FP-FP	2014-2016	3	2.2	1.0	3	11	-87	-
9				11.3	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S %	No / No	No	No	A-A-A	None-None-None	2014-2016	3	0	1.2	1	20	-93	-
10				6.9	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	A-A-Csl	None-None-FP	2014-2016	3	1.1	1.0	3	29	-59	-
11				17.7	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	%	No / No	No	No	A-A-A	None-None-None	2014-2016	3	0	1.1	1	20	-129	-
12				5	Kewaunee	KEWAU NEE (KhB)	4	200	0 - 2	301 - 1000	S	No / No	No	No	A-A-Csl	None-None-FP	2014-2016	3	1.5	0.9	4	18	21	-
PASTURE				4.1	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	Prg-Prg-Prg	None-None-None	2014-2016	3	0	2.4	0	40	-60	-

Crop Abbreviations	
Abbreviation	Crop
A	Alfalfa
Cg	Corn grain
Csl	Corn silage
OgAs	Oats w/ Alfalfa Seeding Spring
Prg	Pasture, rotational stocking, grass

Tillage Abbreviations	
Abbreviation	Tillage
FP	Fall MB Plow
None	None

Restriction Legend	
Code	Description of Code
P	High permeability N restricted soils
R	N restricted soils with less than 20 inches to bedrock
W	N restricted soils with less than 12 inches to apparent water table
+	This map unit may have any of the N restrictive features, however an on-site investigation is needed to identify which restrictions may actually be present.
S	Field is in SWQMA
D	Drinking water well within 50 feet of field.
C	Conduit to groundwater within 200 feet upslope of field.
L	Local restrictions on nutrient applications.
%	Slope restriction for winter applications

## SnapPlus Field Data and 590 Assessment Plan

Reported For	Dax, Larry
Printed	2017-01-03
Plan Completion/Update Date	2001-01-01
SnapPlus Version 14.1 built on 2015-01-27	
C:\Users\hansoef\Documents\aaNonpoint-Ag\002 TRM Grants\Final Reports - Reimbursement Requests\Kewaunee\Dax\Dax with Storage.snapDb	

Prepared for:  
Dax, Larry  
attn:Dax, Larry

### Field Data: 64 Total Acres Reported.

Field Name	F. Grp	FSA Trct	FSA Fld	Ac.	County	Soil Series & Map Symbol (Critical)	F. Slp %	F.Slp Len ft	Below Field Slope To Water %	Dist.To Water ft	N/Fld Res	Contour/ Filters	Irrig	Tiled	Rotation	Tillage	Report Period	Field "T" t/ac	Rot Avg Soil Loss t/ac	SCI	Rot Avg Pl	Soil Test P ppm	Rot P2O5 Bal lb/ac	P2O5 Bal Target lb/ac
2				10.5	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	OgAs-OgAs-A	FP-FP-None	2014-2016	3	0.3	1.6	0	13	-99	-
8				8.5	Kewaunee	KEWAU NEE (KpC2)	9	150	0 - 2	0 - 300	S %	No / No	No	No	Cg-Csl-OgAs	FP-FP-FP	2014-2016	3	2.4	1.0	3	11	-87	-
9				11.3	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S %	No / No	No	No	A-A-A	None-None-None	2014-2016	3	0	1.2	0	20	-93	-
10				6.9	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	A-A-Csl	None-None-FP	2014-2016	3	1.2	0.9	2	29	-62	-
11				17.7	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	%	No / No	No	No	A-A-A	None-None-None	2014-2016	3	0	1.1	0	20	-129	-
12				5	Kewaunee	KEWAU NEE (KhB)	4	200	0 - 2	301 - 1000	S	No / No	No	No	A-A-Csl	None-None-FP	2014-2016	3	1.6	0.9	3	18	21	-
PASTURE				4.1	Kewaunee	KEWAU NEE (KpB2)	4	200	0 - 2	301 - 1000	S	No / No	No	No	Prg-Prg-Prg	None-None-None	2014-2016	3	0	2.4	0	40	-60	-



Crop Abbreviations	
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S	Field is in SWQMA
D	Drinking water well within 50 feet of field.
C	Conduit to groundwater within 200 feet upslope of field.
L	Local restrictions on nutrient applications.
%	Slope restriction for winter applications



January 9, 2017

Larry Dax  
E430 State Road 54  
Luxemburg, WI 54217

**Subject: Satisfaction of Notice of Discharge**

Dear Mr. Dax:

The Department of Natural Resources (Department) has received documentation confirming that you have completed all actions necessary to fulfill a Notice of Discharge issued to your operation. At this time, the actions of reducing animal numbers, fencing cattle out of the waterway, and installing manure storage satisfy the conditions of the Notice of Discharge.

Please be aware that any future discharges of polluted runoff into waters of the state will be in violation of Chapter NR 243, Wisconsin Administrative Code and subject to escalated enforcement action. To reduce this possibility, the Department recommends that you follow the operation and maintenance plan for the manure storage, keep cattle fenced out of the waterway, and land apply manure according to your nutrient management plan.

If you have any questions about this letter, please contact me at (920) 662-5419 or [ErinE.Hanson@wisconsin.gov](mailto:ErinE.Hanson@wisconsin.gov). Thank you for your cooperation and your efforts to protect water quality of the Kewaunee River.

Sincerely,

Erin E. Hanson  
Nonpoint Source Coordinator – Northeast Region

E-copy: Davina Bonness – Kewaunee County Land and Water Conservation Department  
Brad Holtz, Mike Gilbertson, Richard Stoll – DNR



November 16, 2016

Larry Dax  
E430 State Road 54  
Luxemburg, WI 54217

Subject: Performance Standards and Prohibitions

Dear Larry Dax,

Thank you for your most recent efforts to improve and protect our state's water resources. This letter is to acknowledge that you have successfully implemented nonpoint source pollution control best management practices on your farm under cost-share agreement TRM-20. Installing practices under this cost share agreement has brought you into compliance with performance standards and prohibitions as described in the table below.

Name and Citation of Standard/Prohibition	Identification of Parcel Where Compliance Was Achieved
Manure Storage Systems	31 012 18.126

In accordance with ch. NR 151, Wis. Adm. Code, any cropland practice or livestock facility that is brought into compliance with a state performance standard or prohibition must remain in compliance in perpetuity regardless of future cost sharing. Since you are now deemed in compliance with state standards and prohibitions as identified above, it is required that you and any future landowners or operators maintain compliance with the standards and prohibitions at the parcels identified.

This letter only addresses the compliance status on your farm resulting from practices installed under the cost share agreement identified above. There may be additional information on file for your farm concerning your compliance status with state performance standards and prohibitions. If you have any further questions, please contact Davina Bonness, County Conservationist at 920-845-9743.

Sincerely,

Davina Bonness

Cc: DNR Regional Coordinator  
DNR-Madison, CFA/2



October 27, 2015

Larry Dax  
E430 State Road 54  
Luxemburg WI 54217

**\*\*Certified Mail\*\***

**Subject: Notice of Discharge - Category II**

Dear Mr. Dax:

On September 8, 2015 the Department of Natural Resources (Department) met with you and inspected your livestock operation located at E0240 State Road 54, in the SE SW S18 T24N R23E, Town of Luxemburg, Kewaunee County. The operation, with an estimated 70 animal units, consists of a stanchion barn and earth exercise lots. A site inspection report is enclosed for your review.

During the site inspection the Department determined that livestock have unlimited access to, and feedlot runoff discharges into, a ditch which is connected to an unnamed tributary to the Kewaunee River. For this reason your operation is not in compliance with sections NR 151.08(5)(a) and NR 151.08(4), Wisconsin Administrative Code, which state that "A livestock operation may not allow unlimited access by livestock to waters of the state in a location where high concentrations of animals prevent the maintenance of adequate sod or self-sustaining vegetative cover" and "a livestock operation shall have no direct runoff from a feedlot or stored manure into waters of the state" respectively. The Department also determined that runoff from an unconfined manure pile has potential to impact waters of the state.

The Department has reason to believe that:

- Your operation has a Category II discharge under s. NR 243.24(1)(b), Wis. Adm. Code. Under this section, a Category II discharge is failure to comply with a livestock performance standard or prohibition in ss. NR 151.05 to NR 151.08 that results in a discharge of pollutants to waters of the state.
- Your operation is an "existing" livestock facility under s. NR 151.095(5)(b)

Through this letter the Department is issuing your operation a Notice of Discharge as a Category II unacceptable practice in accordance with s. NR 243.24(4), Wis. Adm. Code. State regulations require that cost share dollars be offered to implement best management practices (BMPs) to correct a Category II discharge at existing livestock facilities. The Kewaunee County Land Conservation Department is willing to provide you with technical assistance and has secured a Targeted Runoff Management grant (grant) on your behalf. **Please contact Paul Fredrich, 920-845-9744, for assistance.**

The grant award of \$67,430 is to provide 70% cost share for eligible BMPs that are estimated to total \$96,320. The eligible BMPs are: manure storage systems, waste treatment (milking center, feed leachate), underground outlets, and waste transfer systems. The grant was awarded from 1/1/13 through 12/31/14, and extended through 12/31/15. Kewaunee County is willing to ask for a variance from code to extend the grant until 12/31/16. No further extensions beyond 12/31/16 will be available to cost share best management practices to bring your operation into compliance with the Agricultural performance standards and prohibitions in ch. NR 151.



**To comply with this notice, please complete the following:**

1. By December 31, 2015 develop and implement an interim plan to minimize the risk of runoff from feedlots and unconfined manure into waters of the state. Possible options include fencing animals out of the ditch and relocating the unconfined manure pile to a location that meets appropriate technical standards. Contact Paul Fredrich for technical assistance in developing the interim plan. Submit the plan to me at [ErinE.Hanson@wisconsin.gov](mailto:ErinE.Hanson@wisconsin.gov) or by mail to the letterhead address.
2. By December 31, 2016 complete construction of best management practices to permanently reduce the risk of runoff from feedlots and stored manure into waters of the state. Options for best management practices include those identified in the 2013 Targeted Runoff Management grant application. The permanent practices should meet applicable technical standards and ensure a sufficient buffer is established between animal lots to adequately address feedlot runoff to the ditch. Contact Paul Fredrich for technical assistance.

During the site inspection you stated you intend to close the dairy in spring 2016 and no longer keep livestock at the operation, aside from a small number of beef cattle. The Department understands this may be your preferred option to permanently reduce the risk of runoff from your operation. However, it is important that you understand that if you do not install best management practices through the grant your operation must still be in compliance with the Agricultural Performance Standards and Prohibitions in Chapter NR 151, Wis. Adm. Code. The intent of this letter is to notify you of the availability of cost share funding for your operation. Also note that once a facility achieves compliance with a state performance standard or prohibition, that facility owner – including any future owners of that facility, must maintain compliance without regard to future cost share funding.

Non-compliance with this Notice of Discharge may also result in further enforcement actions by the state. Specifically, the Department may issue a citation for future discharges or take other appropriate elevated enforcement actions.

Your cooperation in addressing these discharges will improve water quality within the Kewaunee River Watershed. Contact me at 920-662-5419 if you have any questions about this letter.

Sincerely,



Erin E. Hanson  
Nonpoint Source Coordinator – Northeast Region

Encl: Site Inspection Report (10/16/15)

cc: Paul Frederick – Kewaunee County Land Conservation Department  
B. Holtz, C. Jones, R. Nyffeler, R. Stoll, L. Talbot, M. Teves – Wisconsin Depart. of Natural Resources

## **Inspection Report (10/16/15)**

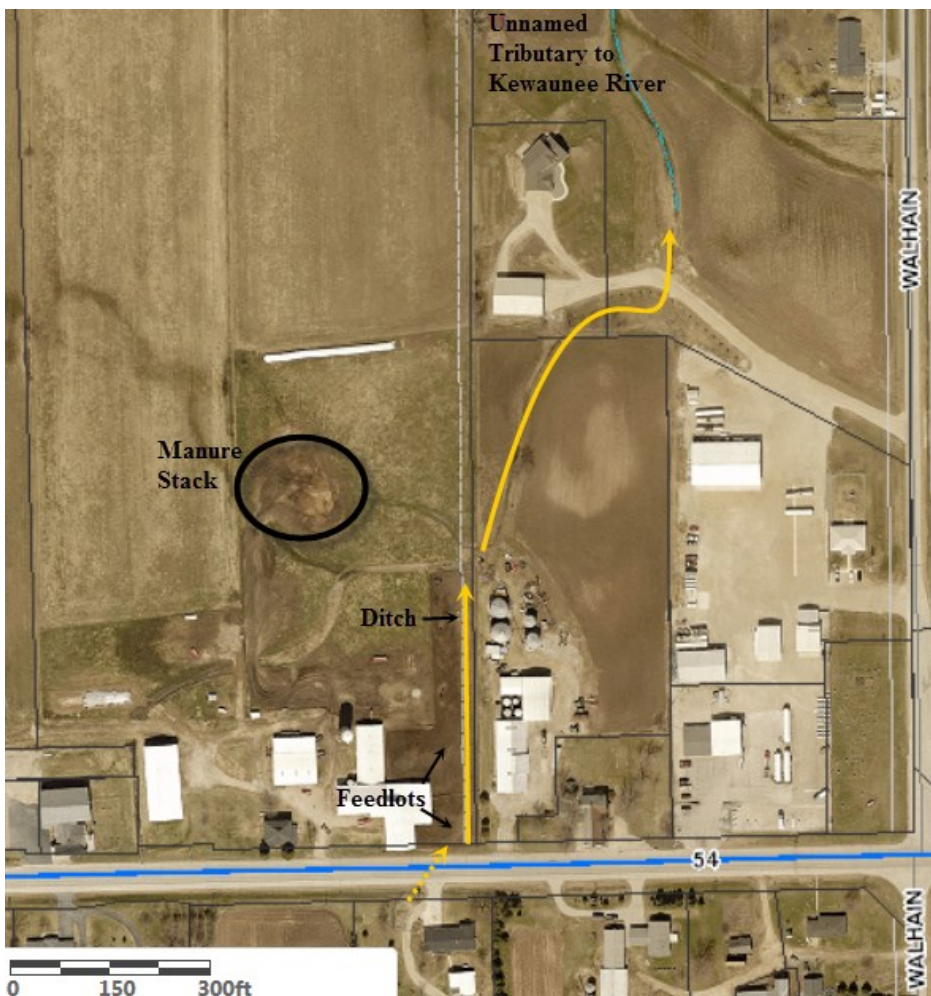
Inspection Date: September 8, 2015  
Inspection Type: Compliance - Small Farm  
Name: Larry Dax  
Site Address: E0240 State Rd 54, SE SW S18 T24N R23E  
Town of Luxemburg, Kewaunee County  
Report Drafter: Erin Hanson, DNR Nonpoint Source Coordinator

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On September 8, 2015 Hanson met with Larry Dax to inspect his dairy farm located at E0240 State Rd 54. Dax reported approximately 83 animal units (38 milking & dry cows, 11 calves, 25 heifers). A very heavy rain was falling at the time of the site inspection with 2.5" reported in Green Bay for 9/8/15 ([www.wunderground.com](http://www.wunderground.com)). Dax expressed frustration about a dispute with his neighbor, drainage problems, and the Wisconsin Dept. of Transportation easement on his land (from about 1980). Hanson directed Dax to the Kewaunee County Land Conservation Department (County) for a copy of the complaint. DNR has no authority over drainage issues or WDOT.

### **Resource Concerns**

A ditch runs along part of the east property line and carries water from the south across Dax's property, northeast onto adjacent parcels and into an intermittent unnamed tributary to the Kewaunee River (site overview below). Bare soil feedlots with no vegetation extend along the length of the ditch on Dax's land. Hanson discussed water quality concerns, specifically runoff from the feedlots and stored manure (NR 151.08(4)) and unlimited access by livestock to waters of the state (NR 151.08(5)). Hanson did not determine if milkhouse wastewater is a significant discharge, but it too runs into the ditch. Photos and further description on pages.



### **Cost Share**

Dax agreed to contact the County to identify a better location for stacking manure. No cost share is required for such a management change.

The Dax farm is an existing operation and cost share is required for best management practices to meet the performance standards and prohibitions in NR 151.

Kewaunee County LCD obtained a 2013 Targeted Runoff Management grant for the site. Practices were not installed and the County intended to close the grant. Dax said he plans to close the dairy in May 2016, but keep the site as a hobby beef farm. Dax is concerned about investing his own and tax payer funds into best management practices that will not be used long term.

Photo left: Site overview showing farm locations, generalized runoff paths (yellow) to an unnamed intermittent tributary to the Kewaunee River (green). 2014 photo from Kewaunee County.



## Ditch and Feedlots



Looking southwest at field runoff entering the culvert on the south side of State Road 54. A large volume of sediment-laden water was entering the Dax farm due to very heavy rain at the time of the site inspection.



Looking north at the feedlots on the Dax farm from State Rd 54. Fences keep a group of calves confined to the area along the road. Approximately 15 heifers use the second feedlot which runs east of the barn along with a strip approximately 60-70 feet wide along the north end of the ditch. There are no runoff controls in place to prevent feedlot runoff from entering the ditch. There appeared to be no vegetation in the ditch due to animal use of the lots.



Looking northeast at the north end of the feedlot with mobile feed wagon by flooded end of ditch. Dax also allows bred heifers and milking cows access to pasture north of the barn, weather permitting. Hanson and Dax discussed fencing young animals out of the ditch and relocating feedlots away from the ditch. Hanson directed Dax to consult the County before completing any work so they could assist in determining an acceptable location.