

Final Report

Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Form 3400-189A (R 05/19)

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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) | | |
| Grant Information | | |
| Grantee - Governmental Unit Name Waupaca County Land & Water Conservation Department | | Grant Number TMD68000AY18 |
| Project Name Little Wolf River - Ron Rieckmann Manure Management | | |
| Project Contact Name Brian Haase | Phone Number (715) 258-6482 | E-mail Address brian.haase@co.waupaca.wi.us |

| Site 1 - Location & Watershed Information | | Additional sites may be added to the project by clicking on the [+Loc] button | |
|---|--|---|-----------------------|
| Name of Cost-Share Recipient Rieckmann Family Irrevocable Trust | | Animal Units 199 | Latitude 44.4614 |
| County Waupaca | | 12-Digit HUC 040302021704 | Longitude -88.8669 |
| 12-Digit Watershed Name Bear Lake-Little Wolf River | | | |
| Nearest Receiving Waterbody Unnamed Tribute to Little Wolf River | | Primary Waterbody addressed by project Little Wolf River | |

| Site 1 - BMP & Load Reduction Information | | | | Additional BMPs for this site may be added by clicking on the [+] button | | | |
|---|----------|-----------------|--|--|-----------------|------------------|-------------------------|
| Best Management Practice Installed | Quantity | Unit of Measure | Performance Standard/Prohibition Addressed | Phosphorus lbs/yr | Nitrogen lbs/yr | Sediment Tons/yr | Total Installation Cost |
| Manure Storage Systems | 1 | No. | Code(s) 4,7,9 | 236.7 | | | \$189,346.27 |
| Manure Storage System Closure | 1 | No. | Code(s) 5,11,13 | | | | \$12,878.75 |
| Milking Center Waste Control Systems | 1 | No. | Code(s) 4,7 | 236.7 | | | \$23,941.46 |
| Diversions | 200 | Feet | Code(s) 8 | 0 | | | \$2,137.50 |
| Nutrient Management | 300 | acres | Code(s) 9 | 236.7 | | | \$0.00 |
| Waste Transfer Systems | 1 | No. | Code(s) 4 | 236.7 | | | \$124,192.42 |

Model(s)/Methods Used to Calculate Load Reduction (check all that apply)

☐ STEPL ☒ SNAP+ ☐ BARNY ☐ RUSLE 2 ☐ Other (specify) _____

| Site 1 - Compliance Requirements | | | | |
|--|---|-------------------------|----------------------|-----------------------------|
| Performance Standard or Prohibition Addressed | Chs. NR 151 or 243 Wis. Adm. Code Notice Type | Notice Letter Attached? | Compliance Achieved? | Compliance letter attached? |
| Manure storage facilities-new/significant alterations. | NR 151 | No | Yes | Yes |
| Manure storage facilities-closure | NR 151 | No | Yes | Yes |
| Process wastewater handling. | NR 151 | No | Yes | Yes |
| Clean water diversions. | NR 151 | No | Yes | Yes |
| Nutrient management. | NR 151 | No | Yes | Yes |
| Prohibit overflow from manure storage facilities. | NR 151 | No | Yes | Yes |
| Prohibit runoff from feedlot or stored manure into the state's waters. | NR 151 | No | Yes | Yes |

Check all of the true statements below.

☒ 1. A copy the compliance letter for site 1 has been placed in county files.

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2. The attached compliance letter for site 1:

- ☒ a. has been provided by the county to the landowner and cost-share recipient;
- ☒ b. identifies each of the performance standards & prohibitions (PS&Ps) on cropland and livestock facilities brought into compliance by the project, and listed in the table above;
- ☒ c. identifies the name and location of the facility where compliance has been achieved; and
- ☒ d. states that the landowner is obligated to maintain compliance with each PS&P addressed by the project in perpetuity regardless of future cost sharing.

Site 1 - Required attachments

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

- | | |
|---|--|
| <input checked="" type="checkbox"/> Photos of pre-and post-implementation of BMP(s) | <input checked="" type="checkbox"/> Load reduction modeling documents |
| <input checked="" type="checkbox"/> Aerial photo map of site with BMPs labeled | <input type="checkbox"/> Water quality monitoring results/summary, if applicable |

Site 1 - Information

Narrative space will expand to fit

An old undocumented earthen lagoon that continuously overflowed was abandoned. An existing small concrete storage structure that leaked was improved with a new section of wall and access ramp. An new concrete storage structure was also constructed and equipped with both a manure and milkhouse transfer system. This structure will give the operators enough long-term waste storage, eliminating the need for spreading on frozen ground. No load reduction modeling was conducted for the diversion because it was installed to divert stormwater from entering the manure pit.

- ☒ 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

There is no manner that we are aware of to create a load reduction or model a load reduction, above, for elimination of a constantly overflowing manure storage (the abandoned earthen structure), but it would be a lot if we could. DNR Stream Biologist Dave Bohla sampled the waterway at the next culvert downstream of the farm but those Phosphorous numbers would be strengthened or diluted by additional cropland watershed.

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 |
| Brian Haase | County Conservationist | 02/24/2020 |

For DNR Use Only

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

Comments about this project:

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

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For DNR Use Only

Name of Region Nonpoint Source Coordinator

Eric Evensen

Date

03/31/2020

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.

Waupaca County
Land & Water Conservation Department

811 Harding Street
Waupaca WI 54981
Fax: 715/258-6239

Phone: 715/258-6245



Brian Haase
County Conservationist
Ann Stearns
Program Assistant
Corey Schuelke
Engineering Technician
Greg Peterson
Engineering Technician
Dan McFarlane
Engineering Technician/GIS
Stefan Stults
Nutrient Mngmt. Specialist

January 23, 2020

Rieckmann Fam IR Trust
E7156 Garrity Rd
Manawa, WI 54949

Mr. Rieckmann,

Waupaca County is required to inform you in writing, as part of the TRM grant process, of your obligation to maintain compliance with the applicable state agricultural performance standards and prohibitions that were addressed by the TRM cost-share agreement for your farm located at T23N R13E Sec 13. These standards and prohibitions are outlined in Subchapter II (NR 151.02-NR 151.09) of Wisconsin Administrative Code NR 151 and are listed below. Keep in mind that you are now obligated to maintain compliance with each of the performance standards listed below in perpetuity regardless of future cost sharing. I encourage you to take the time to read them over carefully.

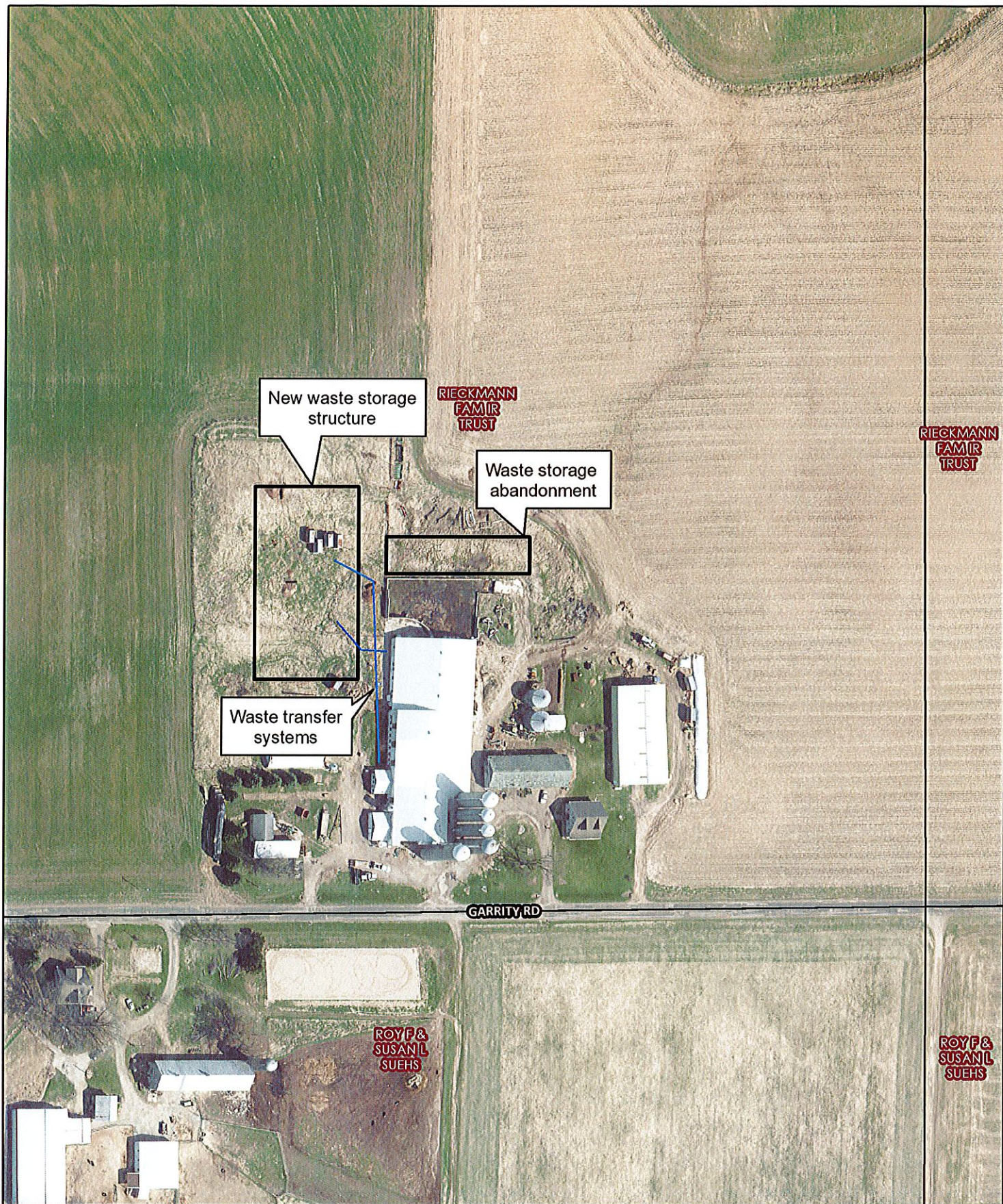
| | |
|---------------|---|
| NR 151.05(2) | Manure storage facilities performance standards (New Construction and Alterations) |
| NR 151.06(2) | Clean Water Diversion |
| NR 151.07 | Nutrient Management |
| NR 151.08(2) | Manure Management Prohibitions (A livestock operation shall have no overflow of manure storage facilities) |
| NR 151.08(4) | Manure Management Prohibitions (A livestock operation shall have no direct runoff from a feedlot or stored manure into waters of the state) |
| NR 151.055(2) | Processed Wastewater Handling (No significant discharge to waters of the state) |
| NR 151.05(3) | Manure Storage Facilities Closure |

Also, to further comply with NR 151.07 (Nutrient Management) and Section 51.08(4) of the Waupaca County Code of Ordinances, Waupaca County and the State of Wisconsin requires that you submit a copy of your Nutrient Management Plan (NRCS 590) to our office by April 15th of each year. Copies of your plan will be kept on file for potential review by DNR, DATCP or County staff.

If you have any questions regarding this issue or would like a full copy of Wisconsin Administrative Code NR 151, please feel free to call me at 715-258-6482.

Sincerely,

Brian Haase
County Conservationist
Waupaca County LWCD
715-258-6482



Imagery Date:
April, 2015



0 50 100
Feet



Area before new waste storage construction

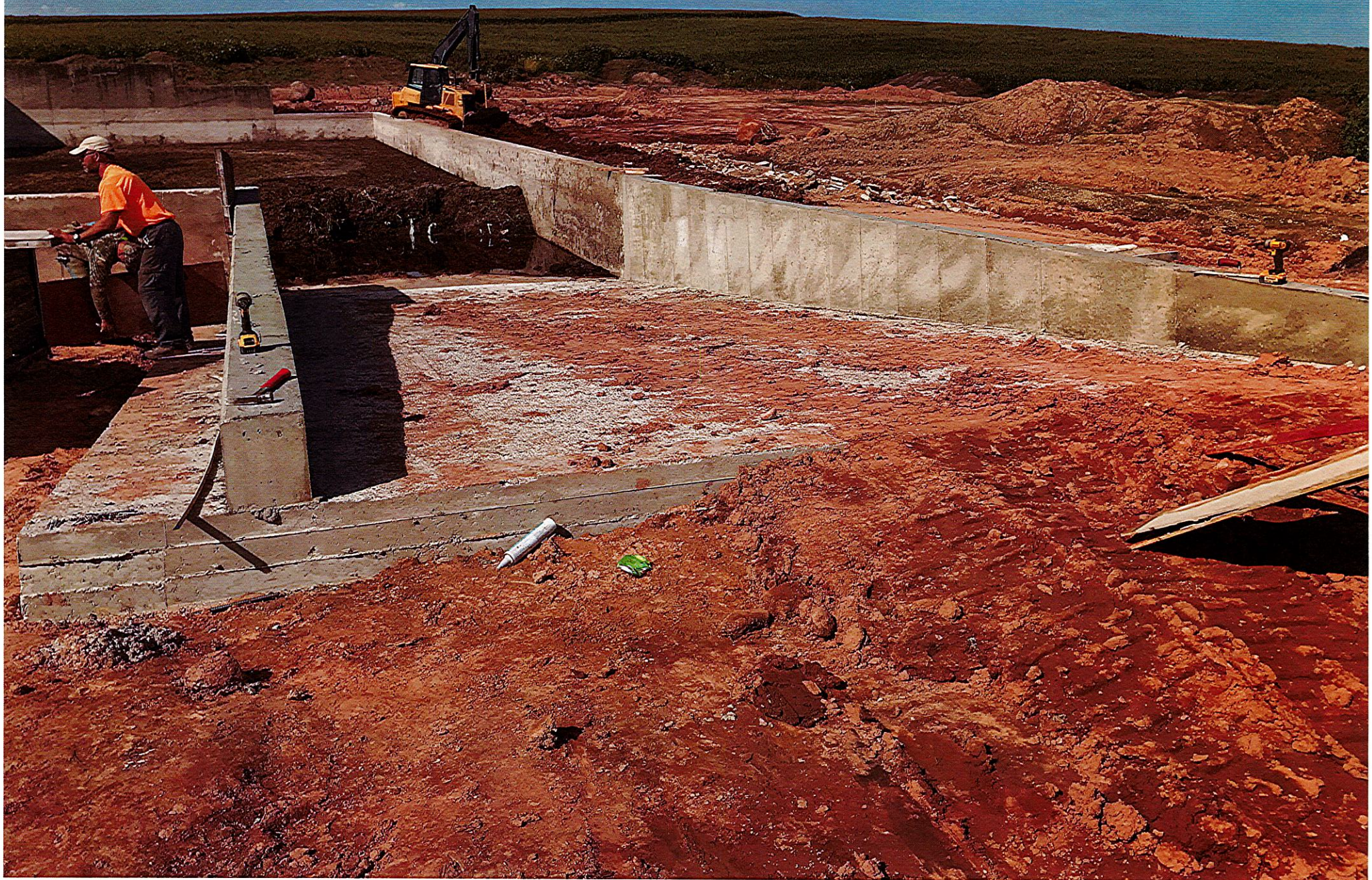
Final pit construction





**Existing concrete manure
pit before enhancement**

**Existing manure pit after
enhancement**





Overflowing earthen manure pit
before abandonment

Abandoned earthen pit







| FM10: Annual PI Report | | Rieckmann Farms | | Crop Rotation 2016 to 2022 - WSF built in 2019 | | | | | | | | <u>PI Difference</u> | <u>PI Difference x Field Acres</u> |
|------------------------|---------------|-----------------------------|---------|--|------|------|------|------|------|------|------|---|--|
| Field Name | Field Acreage | Field Rotational Average PI | P Index | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | "No WSF" - "Yes WSF" | Negative means P Loss Positive means P Loss reduction |
| | | | | | | | | | | | | Sum(2016-2019) minus Sum(2020-2023) | |
| H1 | 24.9 | 3 | Total | 7.8 | 5.1 | 3.5 | 3.2 | 6.1 | 3.9 | 1.9 | 1.8 | 5.9 | 146.9 |
| H2 | 31.7 | 4 | Total | 7.6 | 5.1 | 3.5 | 3.2 | 5.9 | 3.9 | 1.8 | 1.7 | 6.1 | 193.4 |
| H3 | 38.7 | 3 | Total | 7.4 | 4.9 | 3.3 | 3.1 | 5.7 | 3.7 | 1.8 | 1.7 | 5.8 | 224.5 |
| H4 | 11.7 | 5 | Total | 7.7 | 5.1 | 3.5 | 3.2 | 6.0 | 3.9 | 1.9 | 1.8 | 5.9 | 69.0 |
| H5 | 27.8 | 3 | Total | 8.2 | 5.3 | 3.6 | 3.3 | 6.6 | 4.2 | 2.1 | 1.9 | 5.6 | 155.7 |
| S01 | 10.3 | 4 | Total | 3.4 | 2.5 | 2.4 | 2.3 | 2.4 | 1.7 | 1.0 | 1.0 | 4.5 | 46.4 |
| S02 | 25.8 | 4 | Total | 3.9 | 2.9 | 2.4 | 2.3 | 2.8 | 2.0 | 1.2 | 1.2 | 4.3 | 110.9 |

Total = 946.8 (4yr)

946.8/4yr Rotation
= 236.7/yr

FM10: Annual PI Report

| | |
|--|---------------|
| Reported For | Rieckmann_TRM |
| Printed | 2020-02-03 |
| Plan Completion/Update Date | 2020-01-31 |
| SnapPlus Version 19.1 built on 2019-12-26 | |
| V:\LWCD\Nutrient_Management\TRM_Modeling\TRM_Modeling_Rieckmann\Rieckmann_TRM.snapDb | |

Prepared for:
Rieckmann_TRM
attn:Rieckmann_TRM

| Field Name | Soil Series & Symbol (critical) | Slope | Tillage | Rot Avg PI | PI | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------------|---------------------------------|-------|-------------------------------------|------------|---------------------------------|------|------|------|------|------|------|------|------|
| H1 | HORTONVILLE HrC2 | 9 | FCD-FCD-None-None-FCD-FCD-None-None | 4 | Total Particulate Soluble | 7.8 | 5.1 | 3.5 | 3.2 | 6.1 | 3.9 | 1.9 | 1.8 |
| | | | | | | 6.8 | 4.2 | 1.7 | 1.4 | 5.8 | 3.6 | 1.4 | 1.3 |
| | | | | | | 0.9 | 1.0 | 1.8 | 1.8 | 0.3 | 0.3 | 0.5 | 0.5 |
| H2 | HORTONVILLE HrC2 | 9 | FCD-FCD-None-None-FCD-FCD-None-None | 4 | Total Particulate Soluble | 7.6 | 5.1 | 3.5 | 3.2 | 5.9 | 3.9 | 1.8 | 1.7 |
| | | | | | | 6.7 | 4.1 | 1.7 | 1.4 | 5.7 | 3.6 | 1.4 | 1.2 |
| | | | | | | 0.9 | 1.0 | 1.8 | 1.8 | 0.3 | 0.3 | 0.5 | 0.5 |
| H3 | HORTONVILLE HrC2 | 9 | FCD-FCD-None-None-FCD-FCD-None-None | 4 | Total Particulate Soluble | 7.4 | 4.9 | 3.3 | 3.1 | 5.7 | 3.7 | 1.8 | 1.7 |
| | | | | | | 6.5 | 3.9 | 1.6 | 1.3 | 5.5 | 3.4 | 1.3 | 1.2 |
| | | | | | | 0.9 | 1.0 | 1.7 | 1.7 | 0.3 | 0.3 | 0.5 | 0.5 |
| H4 | HORTONVILLE HrC2 | 9 | FCD-FCD-None-None-FCD-FCD-None-None | 4 | Total Particulate Soluble | 7.7 | 5.1 | 3.5 | 3.2 | 6.0 | 3.9 | 1.9 | 1.8 |
| | | | | | | 6.8 | 4.1 | 1.7 | 1.4 | 5.8 | 3.6 | 1.4 | 1.3 |
| | | | | | | 0.9 | 1.0 | 1.8 | 1.8 | 0.3 | 0.3 | 0.5 | 0.5 |
| H5 | HORTONVILLE HrC2 | 9 | FCD-FCD-None-None-FCD-FCD-None-None | 4 | Total Particulate Soluble | 8.2 | 5.3 | 3.6 | 3.3 | 6.6 | 4.2 | 2.1 | 1.9 |
| | | | | | | 7.2 | 4.3 | 1.8 | 1.5 | 6.2 | 3.9 | 1.5 | 1.3 |
| | | | | | | 1.0 | 1.0 | 1.8 | 1.8 | 0.3 | 0.4 | 0.6 | 0.6 |
| S01 | HORTONVILLE HnB | 4 | FCD-FCD-None-None-FCD-FCD-None-None | 2 | Total Particulate Soluble | 3.4 | 2.5 | 2.4 | 2.3 | 2.4 | 1.7 | 1.0 | 1.0 |
| | | | | | | 2.6 | 1.6 | 0.7 | 0.6 | 2.2 | 1.4 | 0.6 | 0.5 |
| | | | | | | 0.9 | 0.9 | 1.7 | 1.7 | 0.2 | 0.3 | 0.4 | 0.4 |
| S02 | HORTONVILLE HnB | 4 | FCD-FCD-None-None-FCD-FCD-None-None | 2 | Total Particulate Soluble | 3.9 | 2.9 | 2.4 | 2.3 | 2.8 | 2.0 | 1.2 | 1.2 |
| | | | | | | 2.9 | 1.8 | 0.8 | 0.7 | 2.5 | 1.6 | 0.6 | 0.6 |
| | | | | | | 1.0 | 1.1 | 1.6 | 1.6 | 0.3 | 0.3 | 0.5 | 0.6 |