**JARRETT CERTIFICATION REQUEST REQUIRED DOCUMENTATION**

The Jarrett Farm, now legally known as Lost Brook Farm, has a crop rotation of alternating years of no-till corn grain and no-till soybeans. Lost Brook Farm has started using poultry manure and planting winter covers when the weather allows. This is to help them build their soil organic matter up since they had not applied manure or planted cover crops of any type for the past several years since they transitioned from a dairy and cash crop operation to just a cash crop farm. They have also started to plant shorter season crop varieties to lengthen their cover crop planting window.

**CERTIFICATION REQUEST DOCUMENTATION RQUIREMENTS**

1. **Baseline and Threshold (25 Pa Code 96.8)**

Lost Brook Farm meets baseline requirements of 025 PA Code 96.8 by having the following required items:

1. Manure Management Plan for all tracts receiving manure (025 PA 83 Subchapter D)
2. Conservation Plans for all tracts (025 PA 102)

Lost Brook Farm is in full compliance of the requirements of its Conservation Plans and Nutrient Management Plan.

Lost Brook Farm meets the threshold needed to generate credits by the requirement states as, “Manure is not mechanically applied within 100 feet of a perennial or intermittent stream with a defined bed or bank, a lake or a pond”. Lost Brook Farm also applies commercial fertilizer at or below agronomic rates contained in the current *Penn State University Agronomy Guide* published by Pennsylvania State University.

**Credit Generation**

Lost Brook Farm is a no-till operation. In addition to tillage credits, Lost Brook Farm generates credits by planting cover crops on all corn grain acres and as many soybean acres as it can every year. RUSLE2 calculations were run for each field over the entire operation. All credits generated by Lost Brook Farm are generated by going beyond the baseline tillage and/cover cropping requirements to meet the tolerable soil loss rate.

**Credit Calculation Method**

All credits for this certification request will be for Nitrogen (N) credits only. To do this, the current version of the Nonpoint Source Nitrogen Calculation Spreadsheet found on the PA DEP Nutrient Trading Webpage was used. The manure figures used include the manure application rates and manure analysis found in the original certification.

 All cropland associated with this certification lies within Watershed Segment 70. The watershed segment has a Nitrogen delivery ratio of 0.941. The Nitrogen Edge of Stream Ratios for this watershed is 45% for conventional tillage, 45% for conservation tillage, 86% for hay, and 13% for pasture.

1. **Location Maps of the Proposed Prevention Reduction Activity (PRA)**

The following maps have been submitted to show the locations of the proposed PRA for each tract:

1. An FSA map showing the farm boundaries, the field boundaries of fields that generate credits, adjacent or nearby road names, and any visible receiving streams. Latitude and Longitude coordinates are included on each map.
2. **Details on the Timing of Credits**

Credits will be verified twice annually. The first time credits will be verified is as soon after April 15th as possible for fields that had a cover crop. To receive credit for having a successful cover crop, there must be a minimum of 50% ground cover by April 15th of that year. The second verification will take place after the spring crops have been planted. Manure application information will also be obtained during the second verification check.

1. **Water Quality Uses Under Chapter 93**

|  |  |  |  |
| --- | --- | --- | --- |
| Tract number(s) and field(s) | Local Watershed Name | Watershed Name | Major Basin |
| 37 F 12561 F 1 | White Deer Hole Creek | White Deer Hole Creek | Susquehanna River |
| 182 F 1 & 4-6191 F 12610 F 13209 F 1-53350 F 1-3 | Spring Creek | White Deer Hole Creek | Susquehanna River |

The receiving stream segments for Tracts 37 and 2561 are listed in Chapter 93 as having a designated use of HQ-CWF (High Quality- Cold Water Fishes). The receiving streams for Tracts 182, 191, 2610, 3209, and 3350 have a designated use listed as TSF (Trout Stocked Fisheries). The receiving stream segments for Tracts 37,182, 191, 2561, and 3350 are all listed as having an impairment for recreational use. The Source and Cause for the impairment are listed as Source Unknown- Pathogens.

1. **Funding Source Information**

Lost Brook Farm has not received public funding sources to generate these credits.

1. **Risk Reduction Plan**

Provisions have been put into place to minimize the operator from not producing the credits through a contract with him, the Lycoming County Conservation District, and the County of Lycoming. The contract states that if the operator is under contract for future credits, he must supply them or provide the money required to pay the Lycoming County Nutrient Trading Program the amount it would cost to buy the amount of credits he did not generate. In most cases, we recommend that our producers sign one year contracts for practices that are not permanent like the CREP BMPs. In addition to this provision, the Lycoming Nutrient Trading Program has a fund set aside equal to 25%-30% of all previously sold credits in case there is a credit generator who defaults on contracted credits by no fault of his own. This fund could also be used to produce contracted credits for a generator instead of having a generator purchase them if he defaults depending on the circumstance of the credit default.

1. **Preservation and Conservation Easement Information**

Tracts 182, 2610 and 3209 are enrolled in the Washington Township Ag Security Program. Tract 182 is enrolled in the Lycoming County Ag Preservation Program.

1. **Confidential Business Information**

N/A

1. **Submitting Person and PRA Participants**

**Submitter’s Information**

Submitting Agency: Lycoming County Conservation District

Address: 542 County Farm Road, Suite 202

 Montoursville, PA 17754

Contact Name: Rod Morehart, Chesapeake Bay Technician

Contact Phone #: 1(570) 329-1619

**PRA Participants Information**

Operation Information: Lost Brook Farm

Address: 4854 Elimsport Road, Montgomery, PA 17752

Contact Name: Nancy Jarrett

Other PRA Participants: None

1. **Professional Qualifications**

Rod Morehart received a B.S.in Wildlife Management from Delaware State University in 2001. He has worked in the conservation field full time since May 2001. He has been nutrient management certified in Maryland, Delaware or Pennsylvania since 2002. He is also a certified conservation planner through the NRCS’s training program. Rod has been involved with the Lycoming County Nutrient Trading Program since its inception. He has written most of the proposals that have been submitted to date. He has completed all of the annual field verification and credit verification submission work since the program started selling credits.

1. **Verification Plan**

Credit verification will start with a cover crop field check in the spring of every year. Successful cover crop fields will have their credits generated and sent in once all of the cover crop credit work is completed for all program participants. Another field verification visit will be made to inspect the tillage used on all fields that can generate tillage related credits after the spring planting has occurred. This visit will also be used to collect animal numbers and pasture rotation information. The tillage and pasture credits will be sent in as a separate verification request after the credit calculation work is completed.

**Attachments to Supplement the Certification Request Form and**

**Certification Request Required Documentation**

1. **Maps Folder**

**This folder contains one aerial map, one soil map and one topographic map (three maps) for the following tracts and fields:**

T 37 F 1 T 182 F 1 & 4-6 T 191 F 1

T 2610 F 1 T 3209 F 1-5 T 3350 F 1-3

1. **RUSLE2 Folder:**

**This folder contains the following PDFs.**

Lost Brook T 37 F 1 Lost Brook T 182 F 1 Lost Brook T 182 F 4-6

Lost Brook T 191 F 1 Lost Brook T 2561 F 1 Lost Brook T 2610 F 1

Lost Brook T 3209 F 1 Lost Brook T 3209 F 2 Lost Brook T 3209 F 3

 Lost Brook T 3209 F 4 Lost Brook T 3209 F 5 Lost Brook T 3350 F 1-3

1. **Spreadsheet Folder**

**This folder contains the following spreadsheets:**

Lost Brook T 37 F 1 Lost Brook T 182 F 1 Lost Brook T 182 F 4-6

Lost Brook T 191 F 1 Lost Brook T 2561 F 1 Lost Brook T 2610 F 1

Lost Brook T 3209 F 1 Lost Brook T 3209 F 2 Lost Brook T 3209 F 3-5

 Lost Brook T 3350 F 1-3

1. **BMP Summary Spreadsheet**
2. **Spreadsheet Summary**