

Five L Farms Nutrient Bank

Nutrient Reduction Implementation Plan

Westmoreland County, VA 22469

November 8, 2018

Sponsored by:

Five L Farms, LLC
316 Bancton Rd
Kinsale, VA 22488

Prepared for: Virginia Department of Environmental Quality

c/o Derick Winn
Nonpoint Source Trading Coordinator
Office of VPDES Permits
P.O. Box 1105
Richmond, VA 23128

Agent: Balzer and Associates, Inc.

15871 City View Drive, Suite 200
Midlothian, VA 23113

Prepared by: S. Taylor Goodman, P.E., CNMP



ENCLOSURES:

- ❖ EXHIBIT 1: NUTRIENT REDUCTION IMPLEMENTATION PLAN NARRATIVE
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- ❖ EXHIBIT 3: PROJECT LIMITS MAP
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 - EXHIBIT 5-A: 2005 AERIAL
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- ❖ EXHIBIT 6: USGS MAP
- ❖ EXHIBIT 7: SOILS MAP
- ❖ EXHIBIT 8: FORESTRY STEWARDSHIP PLAN
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EXHIBIT 1:

**NUTRIENT REDUCTION IMPLEMENTATION PLAN
NARRATIVE**

**FIVE L FARMS NUTRIENT BANK
NUTRIENT REDUCTION IMPLEMENTATION PLAN**

I. Project Description

A. Purpose – This Nutrient Reduction Implementation Plan describes the governance, establishment, use, operation and maintenance of all activities related to nutrient offset generation and transfer within the project location known as the Five L Farms property (the “Property”). Upon authorization by the Virginia Department of Environmental Quality (“DEQ”), this document will provide the operational status to the Five L Farms Nutrient Banks nutrient reduction projects described herein. This project is submitted on behalf of the property owners by *Five L Farms* (the “Sponsor”) by *Balzer and Associates, Inc.* (the “Agent”).

B. Project Goals

- a. Convert approximately one hundred and eighteen and 57/100 (118.57) acres of crop land and twenty and 60/100 (20.60) acres of pasture land into forested conditions.
- b. Reduce nutrient (nitrogen and phosphorus) and sediment loading into the Chesapeake Bay through tributaries (Potomac River) located near the property limits through the discontinuation of all agricultural activities within the limits of the Nutrient Bank and conversion of agricultural land to forest;
- c. Improve the water quality, in-stream habitat, bank stability and riparian vegetation conditions of the stream reaches located near the Property as well as downstream reaches;
- d. Generate nonpoint nutrient offsets for transfer under existing and future federal, state and local programs, regulations and guidance. These offsets will be generated from alteration of land uses resulting in the reduction of nitrogen, phosphorus and total suspended solids leaving the Property.
- e. Generate a DEQ-authorized pre-certification process and resulting Nutrient Reduction Certificate valid for transfer within participating local, state and federal programs.

- Property Description – The Property, associated with Tax Map #38-177 consists of approximately 426.15 acres located to the east and west of Mt Pleasant Road in Westmoreland County, Virginia. The parcel is bounded in the east by Route 612/Coles Point Road, in the south and west by farmlands and undeveloped forest land, and in the north by Mount Pleasant Branch. The Property can be accessed utilizing two driveways along Mt Pleasant Road. The Property is located in the Eastern Piedmont Physiographic Province and drains to Mount Pleasant Branch and Lower Machodoc Creek and eventually the Potomac River-Nomini Creek sub-watershed, which is part of the Lower Potomac River watershed (HUC: 02070011). The Property is owned by *Lester Taylor Lewis Et Al.* and there are overhead power easements shown on Exhibit 12 that will not be planted and would not interfere with the nutrient-reduction objectives of this project. The Sponsor will provide title documentation upon request. The Farm Service Number is Farm 2538, Tract Number 6020, fields 2, 3 (part), 6,11,12,14 (part), and other unlabeled fields. The USDA tract map is located in Exhibit 4.

C. Five L Farms Nutrient Bank – The parcel is bounded in the east by Route 612/Coles Point Road, in the south by farmlands and Route 612/Cople Highway, in the west by Lower Machodoc Creek, and in the north by farmland. The general vicinity of the property is otherwise surrounded by undeveloped forested land and farmlands. Access to the parcel is via Mt Pleasant Road, off of

Route 612/Coles Point Road. The areas to be reforested are ±139.17 acres of gently sloping uplands draining to Mount Pleasant Branch and Lower Machodoc to the Potomac River. The entire ±118.57 acres of crop land and ±20.60 acres of pasture land comprising the proposed nutrient bank was in crop condition in 2005. The remainder of the property has been historically croplands and forested areas and will remain as forest, open field, or large lot residential parcels.

Within the project limits, the following soil types comprise the majority:

- 1) Tetotum loam (22A) – not flooded, moderately well drained
- 2) Rumford soils (16B/17E) – not flooded, well drained
- 3) Bibb and Levy soils (2) – very frequently flooded, poorly drained
- 4) Lumbee loam (10) – rarely flooded, poorly drained
- 5) Bohicket silty clay loam (3) – very frequently flooded, very poorly drained
- 6) Nansemond fine sandy loam (12)– not flooded, moderately well drained
- 7) Leaf silt loam (8) – Rarely flooded, poorly drained
- 8) Suffolk sandy loam (21B) – not flooded, well drained

Soil types 1-5, 7 are listed as hydric. No other soil types are listed as hydric.

- D. Property Conditions – The Property is a mix of crop land and forest land. The Property has been historically used for agricultural crop production. The land within the limits of the proposed Five L Farms Nutrient Bank has been in crop condition for at least the past 20 years. This is evident in historical aerials (Exhibit 5).

A total of ±139.17 acres of land are planned to be reforested with Phase I of this nutrient reduction plan. The remainder of the property is to continue its residential use.

The property has been consistently managed for agricultural crop production since before 1994. The landowner is not participating in any federal, state or local cost-share program or other landowner assistance program. The landowner will provide documentation upon request to authorize the United States Department of Agriculture (USDA) to release information regarding any past or present cost-share information to DEQ for verification.

- E. Project Description – In accordance with this Nutrient Reduction Implementation Plan, the Sponsor will initiate land use conversions and will maintain those conversions in perpetuity for nonpoint offset generation and transfer within the Property upon tentative approval from DEQ. Initial project activities target the conversion of crop land to forest. All converted lands used for the generation of nutrient offsets will be placed into a restrictive covenant prior to the transfer of those offsets. Any portion of the parcel outside the land conversion area which is returned to agricultural production in the future shall be subject to the baseline requirements in effect at the time.

The Sponsor plans to convert approximately one hundred and eighteen and 57/100 (118.57) acres of crop land and approximately twenty and 60/100 (20.60) acres of pasture land to forest. The future nutrient reductions generated from these land use conversions will create nonpoint offsets to be used as compensation for regulated entities unable to meet federal, state or locally mandated caps on nutrient loads. Implementation of the land conversion activities will be

verified through multiple site visits by Balzer and Associates, Inc. Additional documentation of land conversion including ground-level photographs, elevated photographs and tree installation invoices will be included with the Nutrient Reduction Implementation Plan.

A table summarizing the proposed land activities and resulting offset generation is located in Exhibit 9, and a completed Draft Nutrient Reduction Certificate is located in Exhibit 10. These documents provide the field identifiers, acreage, current land use, proposed land conversion activity, current nitrogen and phosphorus loading rates and proposed nutrient reductions. Loading reductions presented in the table were derived from Appendix A of the draft nutrient trading guidance provided by DEQ on January 2, 2008, entitled, "Trading Nutrient Reductions from Nonpoint Source Best Management Practices in the Chesapeake Bay Watershed: Guidance for Agricultural Landowners and Your Potential Trading Partners" ("the Guidance").

II. Operational

- A. Evidence of Baseline Practices – According to The Guidance, "The requirement for implementing baseline BMPs before an entity can generate offsets does not apply to land conversions." The Five L Farms Nutrient Bank, as it pertains to the generation of nutrient offset credits is exempt from the following baseline requirements since there is no land remaining in agricultural use:
- a. Soil Conservation Plan – The Sponsor has provided a soil conservation plan for the fields to remain in production.
 - b. Nutrient Management Plan – The Sponsor has provided a copy of the Nutrient Management Plan for this property. The Sponsor is not responsible for the further implementation of the existing Nutrient Management Plan after completion of all phases. All cropland within the limits of the proposed nutrient bank may be converted to forest or taken out of crop production.
 - c. Cover Cropping - The Sponsor will plant cover crops on all areas of crop field not reforested.
 - d. Livestock Stream Exclusion – Livestock have been excluded from the streams onsite.
 - e. Riparian Buffer – In accordance with The Guidance, "It is not necessary to implement baseline requirements before land conversion on agricultural lands; however, during the land conversion process, all applicable local, state, and federal storm water and erosion and sediment control laws and regulations must be followed."
- B. Land Conversion Activities – Land conversion installation and implementation will commence on the entirety of the ±139.17 acre land conversion area. Details will be provided once implementation on the total land conversion area is performed and included in the Nutrient Reduction Implementation Plan, which includes ground-level photographs. The reforested areas shall not receive fertilizer applications.
- C. Acquisition of necessary permits – At this time, the project Sponsor does not have any permit requirements in order to implement the proposed land conversion activities within the Property. The Sponsor will acquire any permits necessary for these activities should they become required by state or local regulatory agencies.

- D. Service Area – The nutrient offsets generated within the Property will be used to offset nutrient loadings in excess of state or local regulations within the Potomac River watershed. The transfer of offsets within the watershed will follow all applicable legislation, regulations and guidance governing the trading of nutrient credits within the Commonwealth of Virginia.

Five L Farms Nutrient Bank can provide nutrient credits for stormwater or TMDL compliance to the following areas: [Lower Potomac](#), [Middle Potomac-Anacostia-Occoquan](#) Watershed

- E. Restrictive Covenant – The Sponsor will record a restrictive covenant for those portions of the Property generating nutrient offsets prior to transfer of those offsets. The restrictive covenant will remain in perpetuity and will address the level of allowable development, timber management, agricultural activity, maintenance of existing access roads and trails and other commercial and private uses as needed to secure the availability of the offsets. The draft restrictive covenant for land conversion areas used for offset generation has been provided in Exhibit 12.
- F. Schedule of Offset availability – Offsets will be available for transfer following the completion of land conversion activities and compliance with the terms herein including the issuance and terms of the nutrient certificate.
- G. Offset Derivation Methodology – Projected nutrient reductions following land conversion activities are located in the table in Exhibit 9. Land conversion nutrient removal rates were provided by DEQ and DCR in The Guidance, dated January 2, 2008.

III. Monitoring, Maintenance and Reporting

- A. Monitoring Criteria – The Sponsor will provide elevated and/or ground-level photographs on an annual basis sufficient to document the ongoing establishment of forested conditions within the land conversion areas. The Sponsor will undertake periodic site visits and collect relevant data including photo documentation to assess the site conditions.
- B. Maintenance Criteria – The Sponsor will maintain the land conversion areas as needed to ensure that conversion activities are providing the nutrient reductions as detailed in this document. If the Sponsor identifies any areas during the periodic site inspections that require remediation, the Sponsor will undertake activities necessary to bring these areas into compliance.
- C. Reporting Criteria – The Sponsor will maintain all records regarding nutrient offset generation and transfer within the Property. Monitoring data and other site-specific documentation will be provided to DEQ and/or the offset purchaser as necessary to verify that the Property is providing the offset reductions.

IV. Accounting/Financial

- A. Financial Assurances – The Sponsor will maintain a level of financial assurances sufficient to supply offset purchasers with nutrient reductions in the event that part or all of the nutrient offsets acquired by the purchaser fail to achieve the agreed-upon reductions detailed in the terms of the Purchase and Sale Agreement. These Assurances will take the form of a letter of credit,

bond or assignment of a CD as allowed under current guidance. This financial assurance will include the sum of \$15.08 per pound for supply of nutrient credits held for five (5) years, \$78 per acre planted for reforestation held for five (5) years, \$5,000 for monitoring and maintenance held for ten (10) years and will be in favor of DEQ. The Sponsor will continue to maintain the land conversion for the duration of offset generation and transfer.

- B. Offset Creation and Transfer Ledger – The Sponsor will maintain an offset ledger for the Property that will detail information regarding offset generation and transfer. This information will be made available to DEQ at a quarterly basis and will include relevant data regarding offset availability and transactions. Transaction documents and financial information will be restricted to the Sponsor, purchaser and landowner.

V. Miscellaneous Information

- A. Access/Inspection Terms – The Sponsor and landowner will provide access to the Property for the purposes of verifying the implementation and maintenance of offset generating activities. Access will only be granted to representatives of DEQ and the offset purchaser. These representatives will be required to provide forty-eight (48) hours notice prior to any onsite inspection, and any other parties wishing to enter the Property must consent to a waiver of liability provided by the Sponsor.
- B. Alteration Terms – The Sponsor may need to make adjustments to agreed-upon offset amounts based on actual on-the-ground conditions or other factors prior, during and after land use alteration. The Sponsor agrees to provide financial assurances to ensure that the offset purchaser will be provided with agreed-upon nutrient reductions and associated offsets. Any alterations to the offset transfer documents must be agreed to in writing by the Sponsor, DEQ and the offset purchaser.
- C. Documentation to Verify Purchase – The Sponsor will provide the purchaser with documentation regarding the generation and transfer of offsets necessary to fulfill the purchaser’s regulatory obligations. A notarized Affidavit of offset transfer will be delivered to DEQ following each transfer.
- D. Rights of the Sponsor – The Sponsor retains the right to obtain additional land, in accordance with the Guidance, for the purposes of generating additional nutrient offset credits. The future additions of land will be added into the Five L Farms Nutrient Bank. The Sponsor is responsible for all baseline requirements and regulations set forth by the Guidance, as provided by DEQ and DCR. A revised Nutrient Reduction Implementation Plan, or an addendum to the current plan, will be submitted to DEQ prior to the generation of additional nutrient offset credits. The Sponsor will be responsible for the appropriate increases in Financial Assurances and short-term and long-term Management Funds.
- E. Timbering Operations – The Sponsor retains the right to conduct silvicultural activities within the limits of the Five L Farms Nutrient Bank in accordance with an approved Virginia Department of Forestry Forest Stewardship Plan. The sponsor will maintain the land conversions related to nutrient offset generation and transfer within the project known as the Five L Farms Nutrient Bank.

EXHIBITS 2-7:

**MAPS (VICINITY, PROJECT LIMITS, USDA/FSA,
AERIALS, USGS, SOILS)**



FIVE L FARMS NUTRIENT BANK VICINITY MAP

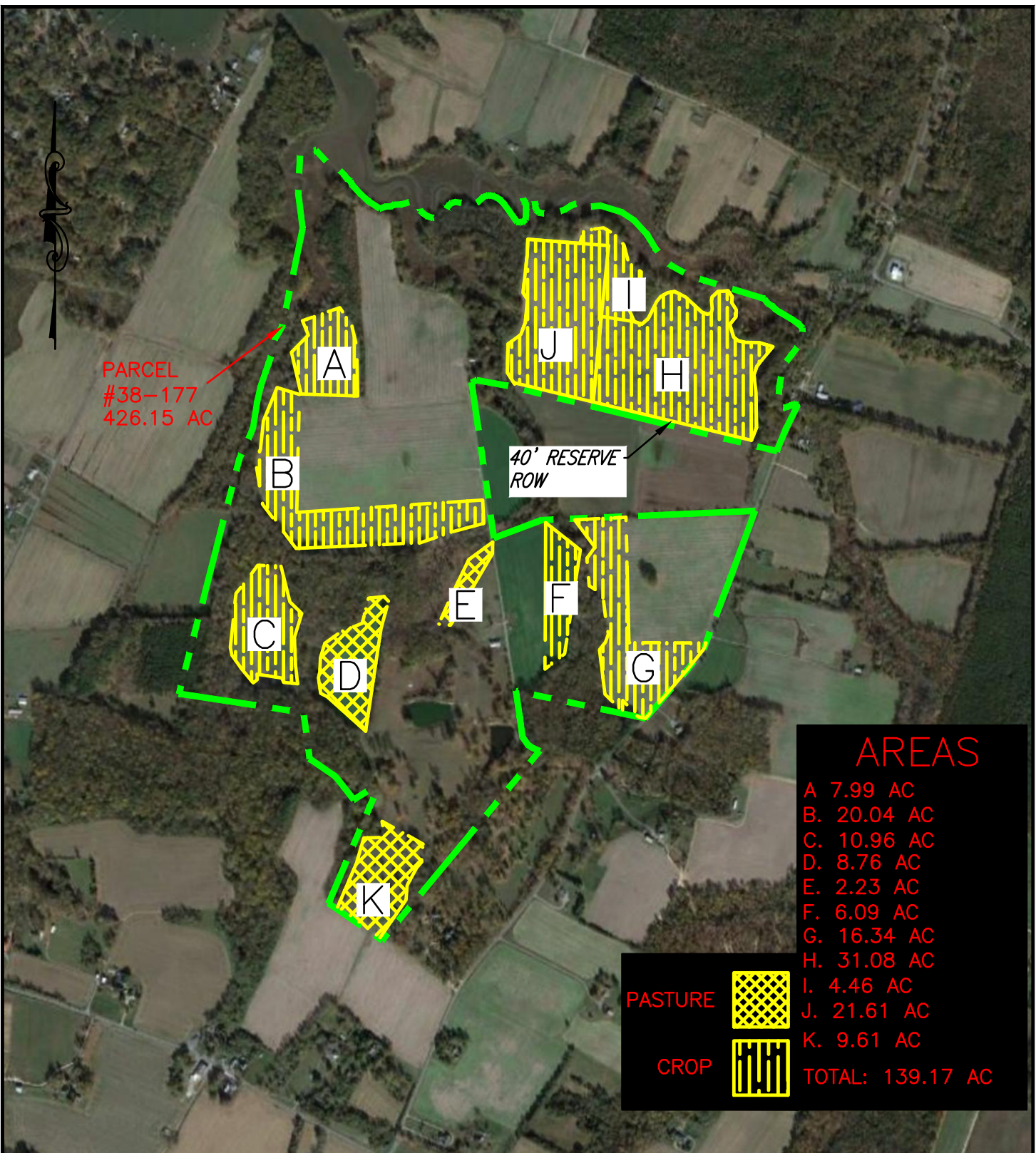
DATE: 1-31-17
 SCALE: 1"=2000'
 JOB NO: 59160043.00
 SOURCE: GOOGLE EARTH

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15871 City View Drive • Suite 200 • Midlothian, Virginia 23113 • Phone (804) 794-0571 • Fax (804) 794-2635



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PARCEL
#38-177
426.15 AC

40' RESERVE
ROW

AREAS

- A. 7.99 AC
- B. 20.04 AC
- C. 10.96 AC
- D. 8.76 AC
- E. 2.23 AC
- F. 6.09 AC
- G. 16.34 AC
- H. 31.08 AC
- I. 4.46 AC
- J. 21.61 AC
- K. 9.61 AC
- TOTAL: 139.17 AC**

PASTURE 

CROP 

FIVE L FARMS NUTRIENT BANK NUTRIENT BANK PLAN

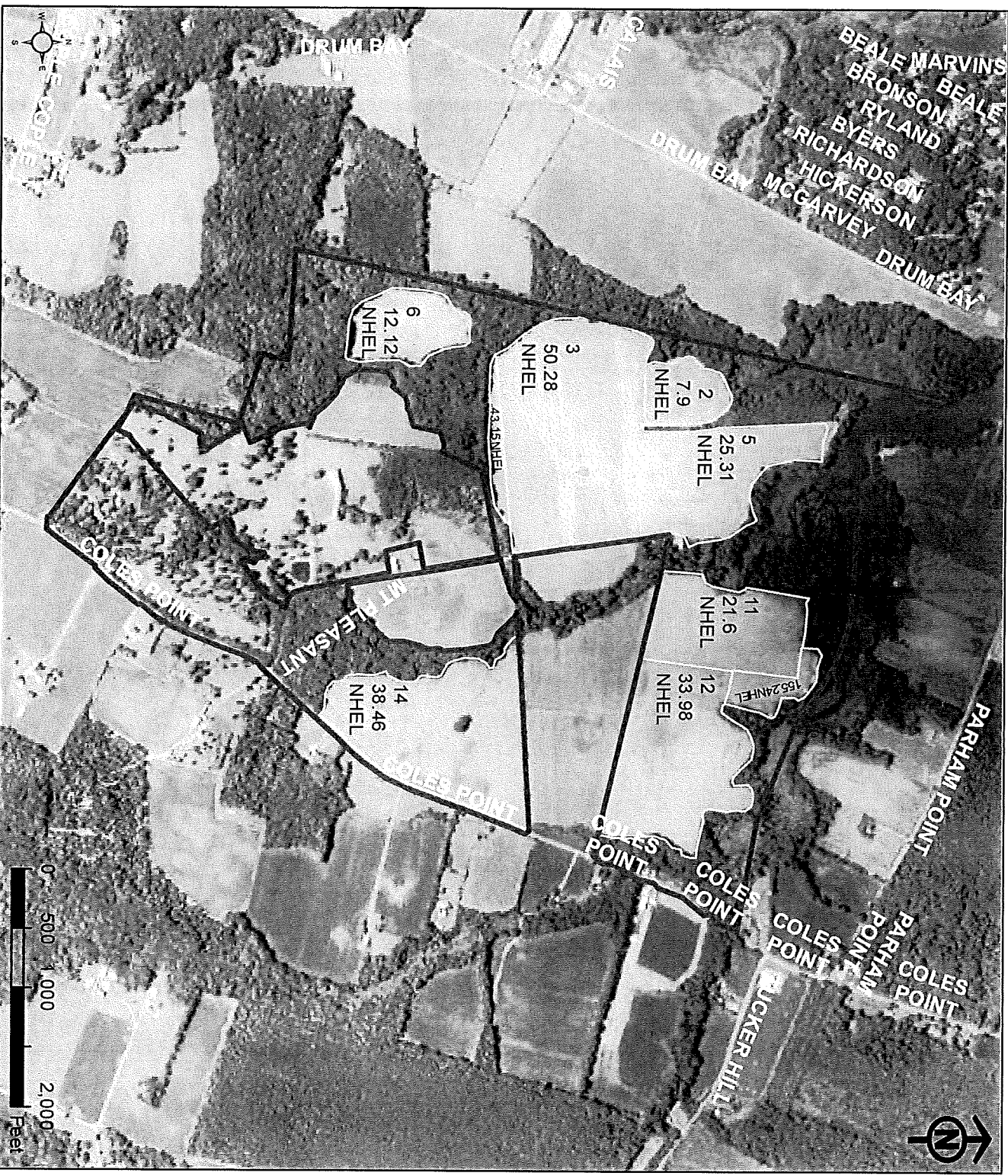
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SOURCE: GOOGLE EARTH

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AND ASSOCIATES INC.
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Farm 2538
Tract 6020



2016 Program Year

Map Created August 13, 2016

Legend

- Common Land Unit
- Wetland Determination Identifiers**
- Restricted Use
- ▽ Limited Restrictions
- Exempt from Compliance Provisions

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data "as is" and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



FIVE L FARMS NUTRIENT BANK

2005 AERIAL

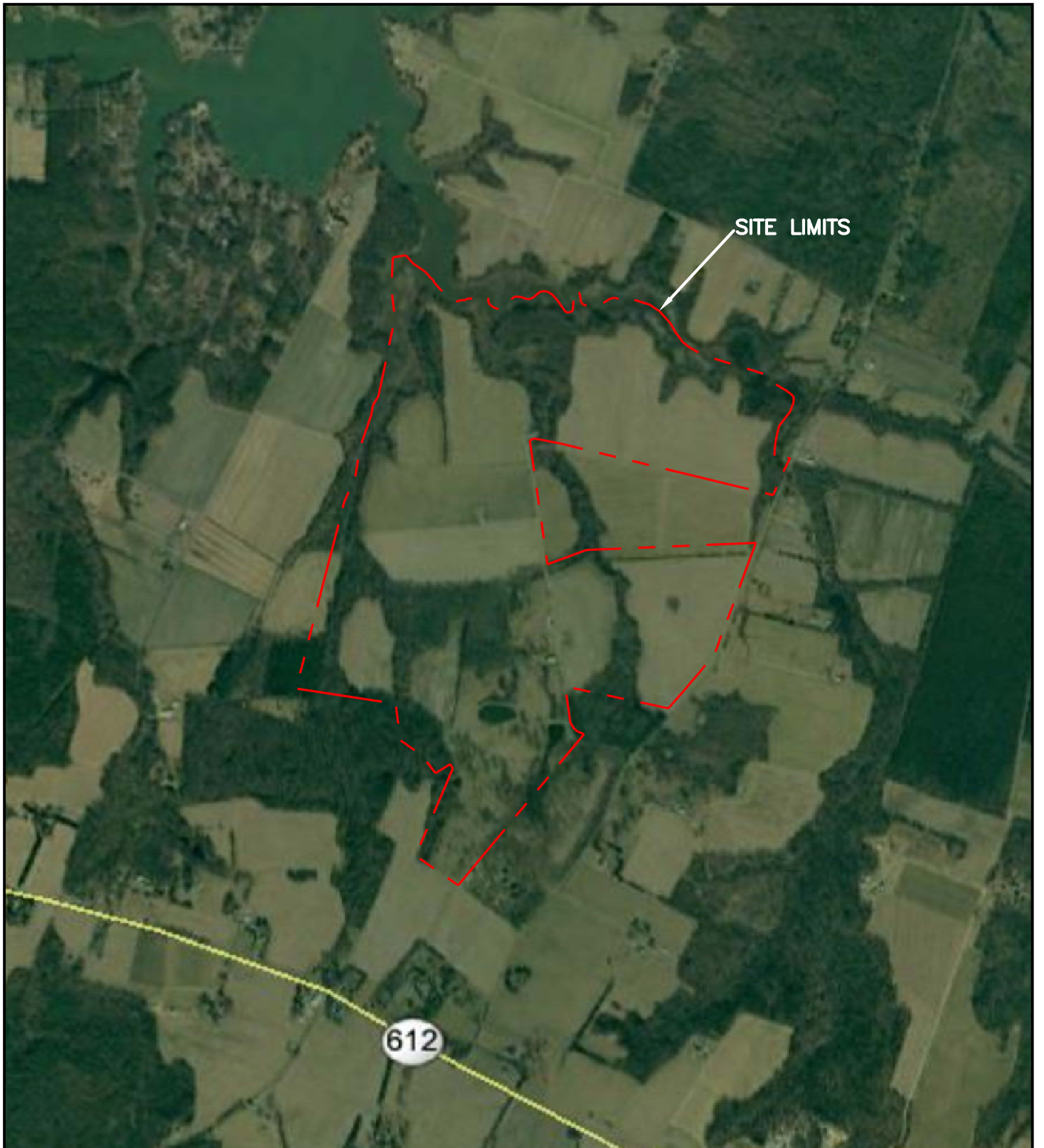
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SCALE: 1"=1500'
JOB NO: 59160043.00
SOURCE: GOOGLE EARTH

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SITE LIMITS

612

FIVE L FARMS NUTRIENT BANK

2009 AERIAL

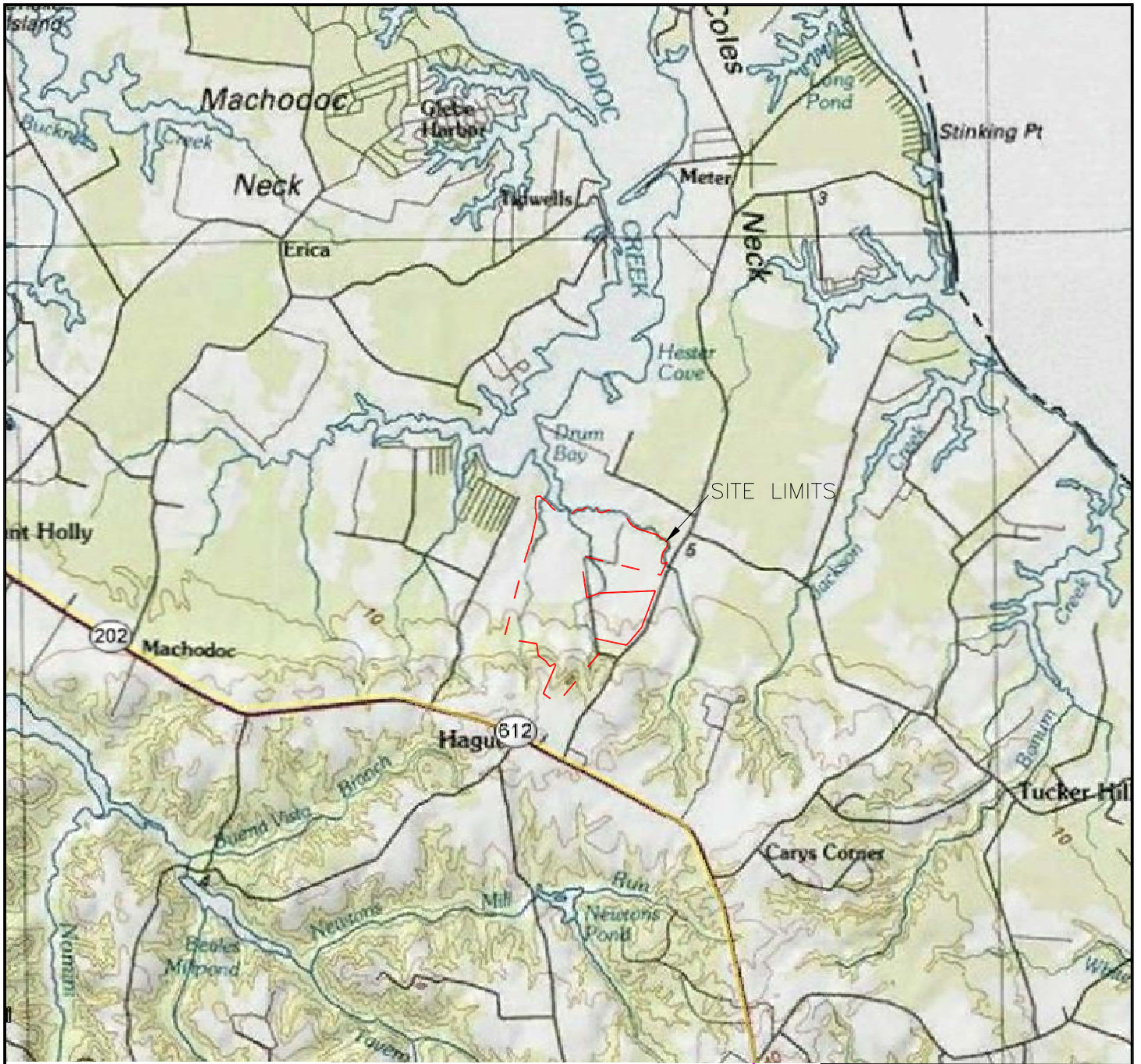
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JOB NO: 59160043.00
SOURCE: GOOGLE EARTH



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FIVE L FARMS NUTRIENT BANK

USGS MAP

DATE: 1-30-17
 SCALE: 1"=5000'
 JOB NO: 59160043.00
 SOURCE: GOOGLE EARTH

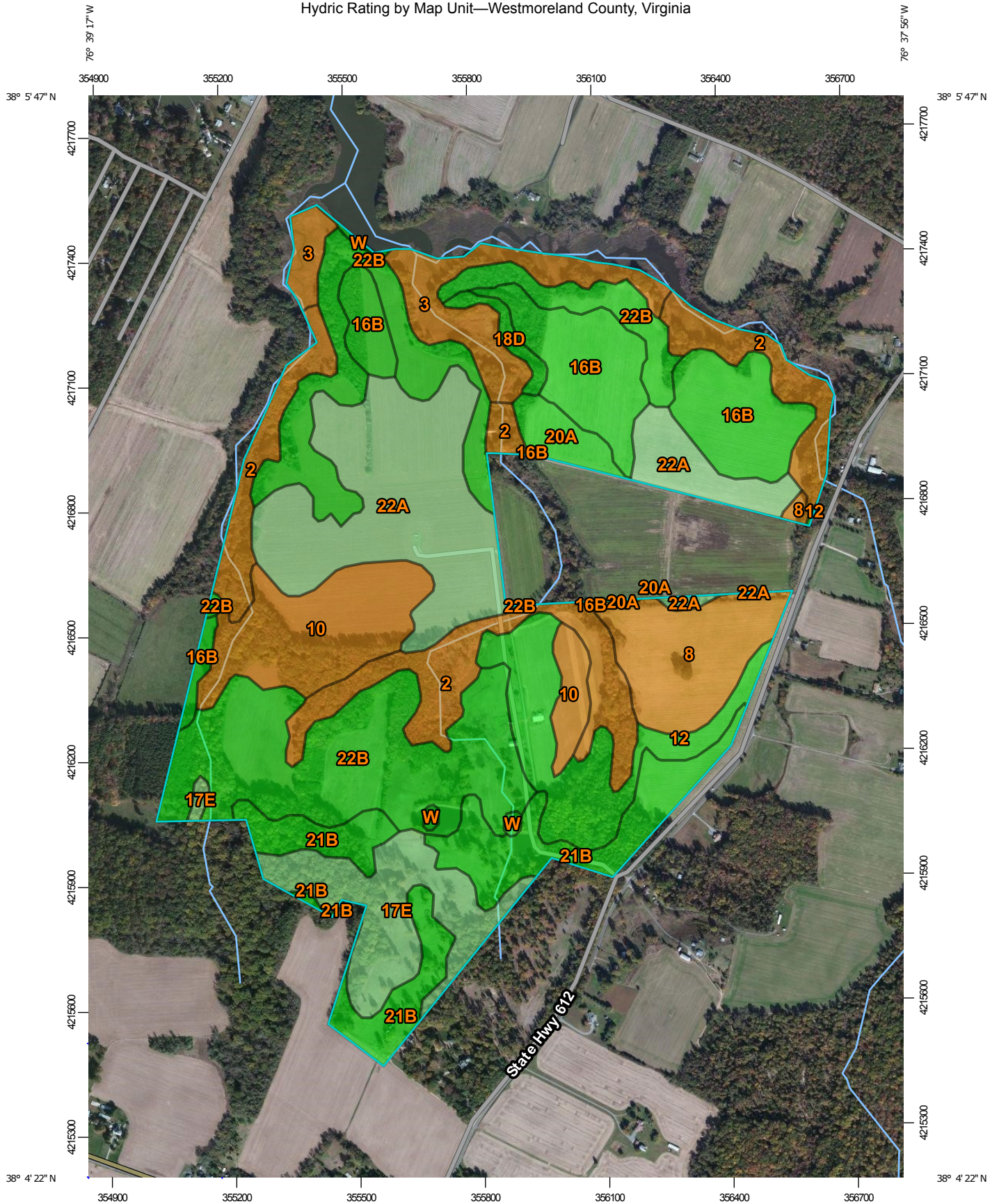
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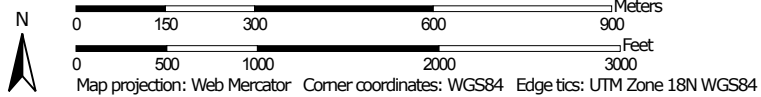


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Hydric Rating by Map Unit—Westmoreland County, Virginia



Map Scale: 1:12,700 if printed on A portrait (8.5" x 11") sheet.




Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/30/2017
Page 1 of 5







MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils







Soil Rating Polygons

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available


Soil Rating Lines

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available






Soil Rating Points

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westmoreland County, Virginia
 Survey Area Data: Version 9, Dec 13, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 14, 2011—Nov 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Westmoreland County, Virginia (VA193)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
2	Bibb and Levy soils	90	50.7	11.2%
3	Bohicket silty clay loam	90	23.4	5.2%
8	Leaf silt loam	90	25.3	5.6%
10	Lumbee loam	93	34.8	7.7%
12	Nansemond fine sandy loam	0	27.4	6.1%
16B	Rumford fine sandy loam, 0 to 6 percent slopes	0	46.6	10.3%
17E	Rumford soils, 15 to 50 percent slopes	5	28.7	6.4%
18D	Rumford and Tetotum soils, 6 to 15 percent slopes	0	3.1	0.7%
20A	State fine sandy loam, 0 to 2 percent slopes	0	6.8	1.5%
21B	Suffolk sandy loam, 2 to 6 percent slopes	0	39.2	8.7%
22A	Tetotum loam, 0 to 2 percent slopes	3	67.5	14.9%
22B	Tetotum loam, 2 to 6 percent slopes	0	96.9	21.4%
W	Water	0	1.4	0.3%
Totals for Area of Interest			451.7	100.0%

EXHIBIT 8:

FORESTRY STEWARDSHIP PLAN

Pine View Forestry, LLC
P. O. Box 130
Capron, Va. 23829
757-377-8693

January 19, 2017

FOREST STEWARDSHIP MANAGEMENT PLAN

Landowner: Five L Farms, LLC
Tract Number 6020 (Farm 2538)
Location: Mt Pleasant Rd – Hague, VA 22469
Forested Acres: 139.17
Prepared by: William W. Day

This plan is to be used as a guideline for the management of the natural resources on your property. The recommendations are based on the goals and objectives expressed by the landowner for this property:

1. Nutrient Credit program
2. Maximize timber production
3. Recreation, wildlife and aesthetics
4. Soil and water conservation

INTRODUCTION:

This Forest Stewardship Plan was developed for the 426.15 acre tract in Westmoreland County, known as the Five L Farms property. Management recommendations are given on the following pages. Boundaries are marked in white paint. A tract map is attached to this plan.

DESCRIPTIONS & RECOMMENDATIONS

Stand 1

Acres:	139.17
Forest Type:	Loblolly Pine
Present Species:	old field
Age:	planted in 2017
Timber Size:	sapling
Stocking:	± 484 trees per acre planted
Growth Rate:	good to very good
Soil Type:	sandy loam
Topography:	gently sloping uplands
History:	old field converted to a loblolly pine stand

Recommendation: Stands will be converted from old field to a loblolly pine stand in the winter of 2017. The stands will be hand planted with hoe dad's on a 9x10 spacing or 484 trees per acre. The stands will need to be grass controlled sprayed in the early spring of 2017 with oustar to eliminate as much competition as possible. The stands will need to be reevaluated in the winter of 2018 for seedling survival and also to determine if any other silvicultural practice will be needed. I would recommend no fertilizer be applied on these stands as this would promote heavy grass competition that would suppress tree growth. Consider a commercial thinning in 2032 and thin the stands down to approximately 200 trees per acre. A second thinning would be recommended +/- 8 years after the first thinning and reduce the stocking down to 130 trees per acre. A final harvest should be considered around 2052 or when timber markets are inflated.

RECOMMENDATION ACTIVITY SUMMARY

- 2017: -- Plant stand
- 2017: -- Spring grass control
- 2018: -- Seedling survival and any other silvicultural practice as needed
- 2019: -- Monitor stand for health and growth
- 2020: -- Monitor stand

WILDLIFE CONSIDERATIONS

Borders

Borders can be established along field edges, fence rows, major drainages and woodland open areas. Borders should consist of primarily woody plants with low to intermediate height. They should extend 20+ feet into the non-timbered area. Depth and diversity are critical to provide sufficient cover and food for wildlife. If suitable natural borders are not present, they can be created by allowing field edges to grow up into woody plants or by creating a woodland opening of at least 40 feet wide. Shrubs can be planted to speed-up and improve the establishment.

Hedgerows

Hedgerows are similar to borders in that they provide travel corridors and food supply. They consist usually of a row of trees in the center of the strip with brush and grass areas on both sides. As with borders, they can be created if they do not already exist. Pine and red cedar trees make good hedgerow centers, as the crowns are smaller than most hardwoods.

Snags

Snags, dead trees and hollow trees are an important for wildlife in providing cover, perches, roosting and nesting sites. When snags are not present, they can be created by girdling trees of poor health or quality.

Power Line and Gas Line Right of Way

Most power line and gas line companies will allow landowners to plant low vegetation for wildlife benefit in the right of way. Some will help with the cost of establishment as it reduces their maintenance cost. Warm season grasses, clover, lespedeza etc. are excellent food sources that can be planted.

PRESCRIBED BURNING

Understory burning in pine stands following a thinning can be a very beneficial tool in controlling competition from hardwoods, maintaining a semi-open understory for wildlife benefits and reducing the potential of a wildfire. Under story burning is usually done in December through February 14th. The state burning ban goes into effect on February 15th. Care must be taken to contain the fire within the designated area and to control the intensity of the fire to accomplish the desired results.

LOGGING ROADS

Soil erosion is a major concern on woods roads following logging activity. Erosion can be minimized or eliminated by water diversion devices and ground cover. Broad-based dips, water turn-outs and water bars limit the volume and speed of the flow of rainwater run-off. Perennial vegetation cover provides soil protection as well as an excellent source of wildlife food. Closing or restricting traffic will greatly increase the possibility of water control structures functioning as intended.

WILDFIRE

Wildfire has the potential to be extremely destructive to timber as well as wildlife. Prescribed understory burning in the winter periodically in pine stands greatly reduces the risk of a damaging wildfire. Outdoor fires should be well protected or avoided during dry periods. Special care should be taken following a commercial or pre-commercial thinning for at least two years to protect against a wildfire. Following these activities, the fuel load in a pine stand is extremely high and the threat of a destructive wildfire is very high. Use of winter or spring prescribed fire will significantly reduce this risk.

THREATENED or ENDANGERED SPECIES

No threatened or endangered species are known to exist on the property. For more information regarding these species of plants and animals, contact the Virginia Department of Game and Inland Fisheries at 4010 W. Broad Street, Richmond VA. 23230-1104.

CULTURAL and HISTORICAL RESOURCES

Historical and cultural resources are a vital link to past land-use in Virginia. Old home sites, old grist mill sites, abandoned farm buildings etc. all have the potential of having historic value. While no such sites were identified on this tract, old records for the area may exist. To request information, contact the Department of Conservation and Recreation, Natural Heritage Division at 217 Governor Street 2nd Floor, Richmond, VA. 23219 phone # 804-371-2708

RECREATION

Use of forested areas as places for outdoor recreation is an increasing activity and priority for many landowners. Old logging roads and fire-breaks can be

maintained as hiking or horse riding trails. Rivers, creeks and ponds can be used as places to fish or boating/canoeing.

ASTHETICS

The future of forest management activities will be determined by the public perception of them. Management activities should keep this in mind and planned to make the desired activity as appealing to the public as possible. Roadside buffers can be used along state roads to improve the appearance of clear-cutting. The buffer can be harvested in a few years after the clear-cut area has reforested. Buffers along navigable waterways can be left with the same impact. These buffers are not left to try to hide forest activity, just to lessen the visual impact to the general public that has limited knowledge of forest management activity.

WETLANDS

Wetlands are wet areas that have been classified as such by a state and/or federal agency. These areas may be open or woodlands. Forest management and harvest is allowed in these areas but precautions must be taken to not damage or change the wetland nature of the site. For more information on these areas, contact the local Virginia Department of Forestry office.

BEST MANAGEMENT PRACTICES

Best Management Practices are a set of voluntary guidelines set-up by the Virginia Department of Forestry for conducting activity on woodland areas within the state. The primary goal of these guidelines is to maintain and improve water quality. The guidelines cover all aspects of forest activity from road building, logging, log deck location, streamside management zones, reforestation etc. in relation to their impact on water quality. The management activities within this stewardship plan are in compliance with these guidelines.

Invasive Species

All landowners must be aware of the ever expanding invasive species that are very prevalent in the state of Virginia. A land inspection should be done periodically with a county forester or consulting forester to determine if any invasive species are growing on the property and what methods are best suited to eliminate the plants.

EXHIBIT 9:
OFFSET GENERATION TABLE



FIVE L FARMS NUTRIENT BANK

OFFSET GENERATION TABLE

Prepared by: STG

Location: WESTMORELAND COUNTY, VA

FSA TRACT NUMBER	FIELD IDENTIFIER	LATITUDE/ LONGITUDE (UTM)	LAND CONVERSION IMPLEMENTED	No. OF ACRES	N REDUCTION/ACRE (LBS/YEAR)	P REDUCTION/ACRE (LBS/YEAR)	TOTAL NITROGEN REDUCTION (DELIVERED LBS/YR)	TOTAL PHOSPHORUS REDUCTION (DELIVERED LBS/YR)
TRACT 2538 FIELD 2	A	38-05-20 N 76-38-54 W	CROP TO FOREST	7.99	11.58	0.74	92.52	5.91
TRACT 2538 FIELD 3 (PT)	B	38-05-12 N 76-39-00 W	CROP TO FOREST	20.04	11.58	0.74	232.06	14.83
TRACT 2538 FIELD 6	C	38-04-58 N 76-39-01 W	CROP TO FOREST	10.96	11.58	0.74	126.92	8.11
-	D	38-04-55 N 76-38-51 W	PASTURE TO FOREST	8.76	2.85	0.85	24.97	7.45
-	E	38-05-02 N 76-38-39 W	PASTURE TO FOREST	2.23	2.85	0.85	6.36	1.90
-	F	38-04-60 N 76-38-28 W	CROP TO FOREST	6.09	11.58	0.74	70.52	4.51
TRACT 2538 FIELD 14 (PT)	G	38-04-55 N 76-38-20 W	CROP TO FOREST	16.34	11.58	0.74	189.22	12.09
TRACT 2538 FIELD 12	H	38-05-20 N 76-38-15 W	CROP TO FOREST	31.08	11.58	0.74	359.91	23.00
TRACT 2538 FIELD 15	I	38-05-27 N 76-38-22 W	CROP TO FOREST	4.46	11.58	0.74	51.65	3.30
TRACT 2538 FIELD 11	J	38-05-21 N 76-38-29 W	CROP TO FOREST	21.61	11.58	0.74	250.24	15.99
-	K	38-04-36 N 76-38-48 W	PASTURE TO FOREST	9.61	2.85	0.85	27.39	8.17
Total				139.17			1431.75	105.25

EXHIBIT 10:

**LAND CONVERSION DOCUMENTATION – OFFSET
GENERATING AREAS**

EXHIBIT 11:
RESTRICTIVE COVENANT

DECLARATION OF RESTRICTIVE COVENANTS

PROPERTY OF
Five L Farms, LLC.
(Owner)
Westmoreland County, VIRGINIA

THIS DECLARATION OF RESTRICTIVE COVENANTS, is made this _____ day of _____, 2018, by Five L Farms, LLC. (“Declarant”).

WHEREAS, Declarant is the owner of the Property duly recorded in the Clerk’s Office of the County of Westmoreland, Virginia, represented as Tax Parcel 38-177, and recorded at Deed Book 752, Page 850 and Deed Book 846, Page 0165.

WHEREAS, Declarant desires to comply with the respective conditions and terms of the Five L Farms Nutrient Bank Nutrient Reduction Implementation Plan dated November 8, 2018 (as the same may be amended from time to time, the “**Nutrient Reduction Implementation Plan**”) approved by the Virginia Department of Environmental Quality (“DEQ”) pursuant to that certain Nonpoint Nutrient Offset Generation Certification – Certificate No. Potomac 024 (as the same may be amended from time to time, the “**Certification**”) by imposing this Declaration on the Land Conversion Areas (as such term is defined below); and

WHEREAS, as of the date hereof, the Land Conversion Areas consist of crop lands which shall be converted to forested conditions for the purpose of generating and transferring nutrient offsets in accordance with the Nutrient Reduction Implementation Plan, the Certification and this Declaration (the “**Land Conversion Activities**”); and

WHEREAS, the Land Conversion Activities may provide nutrient offsets for discharges into “state waters” permitted by DEQ; and

WHEREAS, in light of the aforementioned potential for nutrient offsets for such permitted discharges, the DEQ shall be a beneficiary of this Declaration, entitled to enforce the terms hereof as provided herein; and

WHEREAS, Declarant desires to impose on said Land Conversion Area, (the term “Land Conversion Areas” shall mean collectively, those certain ±139.17 acres of the Property which are labeled as “Land Conversion Area” and which are shown on Exhibit A, attached hereto and by this reference incorporated herein, entitled “Five L Farms Nutrient Bank Land Conversion Area Map” prepared by Balzer and Associates, Inc. dated November 8, 2018) the terms and conditions of this Declaration so as to preserve the Land Conversion Areas, for such period of time as to match the duration of nutrient offset generation and transfer by Declarant within the Land Conversion Area in accordance with the Nutrient Reduction Implementation Plan and the Certification (the “Term”), all as more particularly set forth below;

Five L Farms, LLC
Five L Farms Nutrient Bank

THEREFORE, the Declarant, for and in consideration of the Land Conversion Areas and the covenants herein, does hereby declare, covenant and agree, for itself and its successors and assigns, that said Land Conversion Areas shall be hereafter held, leased, transferred, and sold subject to the following conditions and restrictions which shall run with the land in perpetuity and be binding on all parties and persons claiming having any right, title or interest in the Land Conversion Areas or and part thereof, and their successors and assigns, during the Term;

Covenants and Restrictions:

The Land Conversion Areas shall be preserved for the Term in accordance with the Nutrient Reduction Implementation Plan and the Certification, and by prohibiting the following activities:

1. Destruction or alteration of the Land Conversion Areas, except the following activities, within the Land Conversion Areas:
 - (a) Alteration necessary to convert the Land Conversion Areas to forested conditions and associated improvements;
 - (b) Alteration necessary to implement the terms of the Nutrient Reduction Implementation Plan and ensure the success of the planned nutrient reductions and associated nutrient offsets and in conjunction with the construction, reconstruction, enhancement or maintenance of the Land Conversion Areas;
 - (c) Alteration to construct structures such as walkways, boardwalks, foot trails, wildlife observation or management structures, benches, observation decks, picnic tables, fence posts, improvements relating to ecological, biological, hydrological and/or chemical monitoring, and observation and/or management equipment, including, without limitation, monitoring wells, water control weirs and/or interpretive stations, or other structures and/or facilities, provided that any such structures and/or facilities are constructed and maintained in accordance with all applicable federal and state laws;
 - (d) Addition of signs constructed in public right of ways by or on behalf of the Virginia Department of Transportation or other governmental agencies;
 - (e) Removal of vegetation (where not precluded by federal or state law) when conducted for:
 - i) removal of noxious or invasive plants; or
 - (ii) limited aesthetic modifications not involving clearing or removal of trees or limbs greater than three (3) inches in caliper unless dead, dying or diseased; or

- (iii) silvicultural activities associated with a forest stewardship/management plan approved by the Virginia Department of Forestry.
 - (f) Planting of native species of plants by hand for aesthetic landscaping or screening purposes;
 - (g) Alteration authorized by the Nutrient Reduction Implementation Plan and other activities pursuant to all applicable legislation, regulations and guidance governing the generation and trading of nutrient offsets within the Commonwealth of Virginia;
 - (h) Alteration as reasonably necessary to comply with state or federal law or appropriate court order;
 - (i) Maintenance and use of existing trails and access roads crossing the Land Conversion Areas as long as such activities do not materially, negatively affect the associated nutrient reductions; and
 - (j) Subsistence livestock for personal use will be limited to domestically raised animals on privately held portions of the Property outside the Land Conversion Areas. Any domestic livestock will be fenced from the Land Conversion Areas and access to stream watering locations or paddock crossing will be restricted to limited access points.
2. Except as expressly permitted by Item (1) of this Section above, the construction, maintenance and/or placement of any structures or fills including but not limited to buildings, and mobile homes, other than those, which currently exist;
 3. Ditching, draining, diking, damming, filling, excavating, grading, plowing, flooding/ponding, mining, drilling, placing of trash and yard debris, removing/adding topsoil, sand, or other materials (except as may be necessary on a case-by-case basis) other than any authorized under the Nutrient Reduction Implementation Plan;
 4. Permitting livestock to graze, inhabit or otherwise enter the Land Conversion Areas; and
 5. Harvesting, cutting, logging, and/or pruning of trees and plants, or using fertilizers and spraying with biocides other than what is authorized by the Nutrient Reduction Implementation Plan (except as may be necessary on a case-by-case basis) and approved by DEQ.

Amendment, Vacation, Release or Modification:

During the Term, this Declaration and the covenants contained herein shall not hereafter be altered in any respect without the express written approval and consent of the Declarant or its successor in interest and the DEQ. The Declarant or its successor may

apply to the DEQ for vacation or modification of this Declaration; however, after recording, these restrictive covenants may only be amended or vacated by a recorded document signed by the DEQ and the Declarant or its successor in interest. After the expiration of the Term, this Declaration may be amended, vacated, released or otherwise modified by the Declarant or its successor in interest. Any amendment to or vacation, release or modification of this Declaration shall be recorded in the Clerk's Office for the Circuit Court of Westmoreland County, Virginia (the "Clerk's Office").

DEQ shall be provided with a 60-day advance written notice of any legal action concerning this Declaration or of any action to extinguish, void or modify this Declaration in whole or in part. This Declaration is intended to survive foreclosure, bankruptcy, condemnation or judgments affecting the Land Conservation Areas.

The Declarant or its successor in interest does specifically reserve the right to seek approval from DEQ for the release or modification of the Land Conversion Areas by purchasing credits from an approved nutrient bank to offset any credits purchased from Five L Farms Nutrient Bank. Such approval shall not unreasonably be withheld.

Compliance Inspections and Enforcement:

The DEQ and its authorized agents shall have the right to enter and go on the Land Conversion Areas to inspect and take actions necessary to verify compliance with this Declaration. For safety reasons, DEQ shall notify the Declarant in advance of any such inspections.

The restrictive covenants herein shall be enforceable by any proceeding at law or in equity or administrative proceeding by the DEQ. Failure by the DEQ or Declarant to enforce any covenant or restriction contained herein shall in no event be deemed a waiver of the right to do so thereafter.

Severability:

The provisions hereof shall be deemed individual and severable and the invalidity or partial invalidity or unenforceability of any one provision or any portion thereof shall not affect the validity or enforceability of any other provision thereof.

Nutrient Reduction Implementation Plan:

The terms and conditions of the Nutrient Reduction Implementation Plan May be made available upon written request to Declarant, in Declarant's sole and absolute discretion.

Five L Farms, LLC
Five L Farms Nutrient Bank

In addition, document copies may be obtained, subject to Declarant's approval, in its sole and absolute discretion, from:

Balzer & Associates Inc.
15871 City View Drive, Suite 200
Midlothian, Virginia 23113

The Nutrient Reduction Implementation Plan is also available from the DEQ in Richmond, Virginia.

[Remainder of page left intentionally blank; signatures to follow on next pages.]

[Counterpart signature page 1 of 1]

WITNESS the following signature and day and year first above written.

Five L Farms, LLC.

BY: _____

Print Name

Commonwealth of Virginia, County of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that _____ whose name was signed on _____, 20__ in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

Given under my hand and notarial seal this _____ day of _____, 20__.

Notary Public

My commission expires _____

[Counterpart signature page 2 of 5]

WITNESS the following signature and day and year first above written.

Paul Van Lewis

BY: _____

Print Name

Commonwealth of Virginia, County of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that _____ whose name was signed on _____, 20__ in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

Given under my hand and notarial seal this _____ day of _____, 20__.

Notary Public

My commission expires _____

[Counterpart signature page 3 of 5]

WITNESS the following signature and day and year first above written.

Clay Baker Lewis

BY: _____

Print Name

Commonwealth of Virginia, County of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that _____ whose name was signed on _____, 20__ in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

Given under my hand and notarial seal this _____ day of _____, 20__.

Notary Public

My commission expires _____

[Counterpart signature page 4 of 5]

WITNESS the following signature and day and year first above written.

John Lee Lewis

BY: _____

Print Name

Commonwealth of Virginia, County of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that _____ whose name was signed on _____, 20__ in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

Given under my hand and notarial seal this _____ day of _____, 20__.

Notary Public

My commission expires _____

[Counterpart signature page 5 of 5]

WITNESS the following signature and day and year first above written.

Linda Lewis Hudnall

BY: _____

Print Name

Commonwealth of Virginia, County of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that _____ whose name was signed on _____, 20__ in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

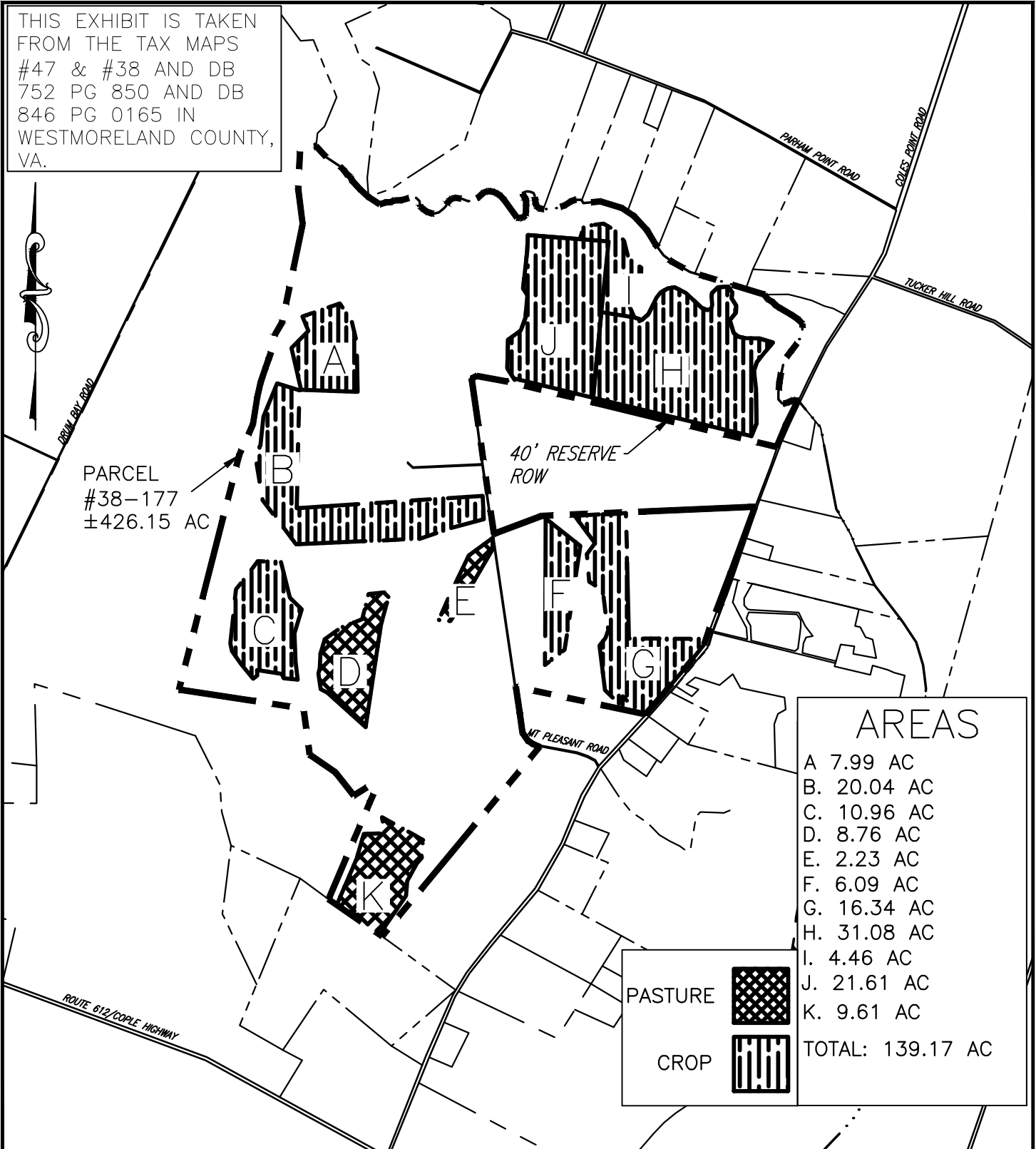
Given under my hand and notarial seal this _____ day of _____, 20__.

Notary Public

My commission expires _____

Exhibit A
Land Conversion Areas


THIS EXHIBIT IS TAKEN FROM THE TAX MAPS #47 & #38 AND DB 752 PG 850 AND DB 846 PG 0165 IN WESTMORELAND COUNTY, VA.




PARCEL #38-177 ±426.15 AC

AREAS

- A. 7.99 AC
- B. 20.04 AC
- C. 10.96 AC
- D. 8.76 AC
- E. 2.23 AC
- F. 6.09 AC
- G. 16.34 AC
- H. 31.08 AC
- I. 4.46 AC
- J. 21.61 AC
- K. 9.61 AC
- TOTAL: 139.17 AC

PASTURE 

CROP 

FIVE L FARMS NUTRIENT BANK
LAND CONVERSION AREA MAP

DATE: 11-8-18
SCALE: 1"=1200'
JOB NO: 59160043.00
SOURCE: GOOGLE EARTH

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